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December 13, 2012

To: Chairman Ted Spraker and Board of Game Members Re: Comments on Regulation Proposals 18, 19, 20, 32, 35, and 36

Dear Chairman Spraker and Board Members,

I appreciate the opportunity to make comment on the following proposals. I also appreciate the service that you are providing to our state which gives the public input to the management of local, regional, and state wildlife Please note my comments on the following regulation proposals.

Proposal #18 Support I support this proposal which would prohibit the snaring of bears in all of SE Alaska. Following are my reasons:

- 1. Bear snaring presents public safety issues in that it habituates bears to human food creating' problem' bears. It also increases the possibility of adult cubs and predators ranging in the area of a snared bear, to be of risk to humans who are hunting and recreating in the field.
- 2. Bear snaring is inhumane as bears suffer in snares for up to 3 days, which is when snares legally need to be checked, prior to the bear being dispatched. If hunters are weathered out a bear could suffer longer than the 3 day period.
- Snaring entails indiscriminate catch. Young sows and sows with cubs can be snared. This method can catch bears indiscriminately which promotes unsound scientific, biological, and ecological management of this species. These unsound management practices do not lend to maintaining population sustainability.
- 4. Bear snaring is economically bad for ecotourism and wildlife viewing. Both residents and non-residents desire to see bears in their natural habitats. The negative impact on bear populations that snaring would elicit is unacceptable and incompatible with the growing economy related to wildlife viewing and ecotourism in SE Alaska. In addition many Alaskans and visitors believe that bear snaring is inhumane. To legalize snaring in SE will promote bad publicity and negativity regarding how Alaska manages its wildlife.
- Snaring will be problematic for law enforcement. Alaska's State Troopers are already overburdened; there are fewer than 100 troopers to cover the entire sate. Legalizing snaring will place more burden on enforcement resources and staff.

Proposal #19: Support Please refer to the 5 reasons that I support Proposal #18.

Proposal #20: Support I support the prohibition of the hunting/trapping season for wolves from March 1 to November 1. The reasons that I support shortening the current SE Alaska harvest season are as follows:

Female wolves are apt to be pregnant in SE Alaska in early March. Subsequent to March are the denning and pupping seasons. Adult wolves are needed to care for, feed, protect, and teach developing pups to feed themselves so that they can survive independently. This process takes place during the summer months and early fall. Pelts of wolves during this time are not prime and therefore have little trophy or economic value. To allow wolves to be hunted and trapped in SE Alaska from March

1 to November 1 is not a sound scientific, biological, or ecological method of managing this species for sustainability.

Proposal #32: Oppose Proposal modifications are recommended I agree with the conclusions of this proposal, but I recommend that a modification of this proposal be considered. I believe that the best way to promote sustainability of brown bears in GMU 4 is to develop a fair and equitable 'drawing permit hunt' for the ABC Islands. This draw hunt permit would address the concerns of the proposal's submitter by reducing the human caused mortality rate of brown bears in Unit 4 to a sustainable level. This draw permit hunt would also address the submitter's concern of high female bear mortality harvest as it would be more apt to keep harvests at or below guideline levels versus the current E.O. system in which guideline levels are often met or exceeded. The draw permit hunt would also reduce 'crowded' bear hunting areas in Unit 4 as the permit would be designed to designate specific geographic areas where hunts would take place. Over crowded hunting areas were another concern of the submitter.

It is important to note that a bear population survey in GMU 4 has not been done for decades. A current survey is essential to manage sustainable bear populations on the ABC Islands.

Proposal #35: Oppose: I strongly oppose any increase in the 4% annual harvest, averaged over 3 years, for brown bears. Four percent is a guideline harvest specified in the Brown Bear Management Strategy. This percentage was based on the best population estimates available from ADFG at the time as well as acknowledging the low reproductive rates of brown bears in Unit 4. In light of this it would be unwise to allocate a higher harvest allocation to residents or to non-residents at this time.

Proposal #36: Oppose Wounding loss is entirely justified and reasonable to take into account as part of human-caused bear mortality numbers especially when target harvest levels are being reached or have been exceeded as they currently have been in Unit 4. During the formulation of the Brown Bear Management Strategy there was information that estimated that for every 7 bears killed during a guided hunt; 1 bear was wounded. Regarding unguided hunters it was estimated that for every bear killed 1 bear was wounded. Those estimates re wounded bears are significant in managing for sustainable brown bear populations in Unit 4.

I thank you for your time and attention to my comments pertaining to proposals 18, 19, 20, and 32, 35, and 36.

JENNY PURSELL Jenny Pursell P.O. Box 33578 Juneau AK 99803

PP0001



ATTN: Board of Game Comments

Proposal 21-5AAC 84.270 Furbearer Trapping

The proposal is to open all furbearer trapping on Nov. 10

I would like to see the wolf trapping continue to open on Nov. 1. From Nov 1 and when roads are blocked with Snow is not very long. Roads are usually blocked by early December if not sooner. Most of my successful wolf trapping occurs before the roads close to 4 wheel drive pickup truck traffic. I have never caught any furbearing animals incidentally out of season in any of my wolf snares.

This proposal will shorten my successful wolf trapping season by 10 days if approved the way it is.

> Otis Marsh Petersburg Ak 99833

# 2012/2013 proposed changes SE, S. Central, Centr



Proposal 2. I am against this proposal. I oppose regulations that set up special user groups regardless of how well intended. Regulations for deer in Unit 5 are among the most restrictive in the state, 1 buck and a 30 day season. The herd population is low compared to other units, and increasing the length of the season would be detrimental to the herd. If enacted this proposal would also have negative impacts on hunters who are not in the special user group. Early season success could result in emergency closures or a shortening of the general season.

Proposal 11. I am against this proposal. This proposal appears to be structured to meet the needs of a few non-resident hunters who do not wish to employ a guide. The current permit structure was established in 2012 and provides an opportunity for non-residents to hunt black bear without a guide. I do not view the current requirements as onerous. The proposer would would have the season reduced from six months to one because it is too difficult to plan and be sure of work schedules so far in advance, however, changing to a one month season would make this more challenging not less. Contrary to the opinion in the proposal the reason for this drawing hunt is not because the population is low, but, rather it is an attempt to allow non-residents to hunt a healthy population without a guide. The current requirements are a good compromise on the part of the Board.

Proposal 12. I am against this proposal. I would recommend that the Department increase enforcement action for permit hunt RM038 as a number of hunters do not know the definition of the term point.

Proposals 25. I am for this proposal. However, I would amend the proposals in that 100% of the permits be allotted to residents. There is no justification to allowing non-residents access to permits when demand from residents cannot be met. Non-residents should only be allowed to hunt a game population that can support a general season.

Proposal 26. I am for this proposal.

Proposal 27. I am for this proposal.

Proposal 28. I am for this proposal.

Proposal 48. I am against this proposal.

Proposal 64. I am against this proposal. I oppose creating special user groups that are given an advantage over other hunters. There are no regulations that prohibit youth from hunting. Creating this special user group would take permits away from other hunters. Current regulations allow for 10 antlerless moose permits in this area, as such, creating a special season and permits for youth hunters is not reasonable. I also do not agree that youth need a special season solely because they would have to miss a few days of school. How many days do these students miss for sports or vacations? This is an issue of priorities from individuals who seem to what it all.

Proposal 65. I am against this proposal. The eight communities currently within the community harvest area are long established communities. Numerous communities have been created in the region over the last 40 years. These communities did not exist 40 years ago and therefore have no subsistence tradition. If the precedent is set that any community regardless of past existence can establish a community harvest it will not be long before hunting in Alaska is based only on where a person resides. As the population of the state expands more and more communities will spring up and all will clamor for a community harvest. How then could these new communities be denied? Hunting opportunities for urban users will be continually squeezed. I am a true subsistence user. I can truthfully state that my



PP003

dependance on subsistence hunting and fishing is equal to or greater than that of anyone in this state yet because my home is in Anchorage, and has been for almost 50 years, people think that I cannot possibly rely on subsistence.

Proposal 66. I am for this proposal.

Proposal 67. I am for this proposal.

Proposal 68. I am against this proposal. It is unclear how this proposal would affect the number of communities included within a community harvest program. I oppose any increase in the number of communities within this program, as such, I oppose this proposal.

Proposal 69. I am against this proposal. The number of animals allocated to a community needs to be based on past use, otherwise as the population of the community increases no other user group will be able to participate in the harvest. Management of the game populations must be for all residents. Not all subsistence users reside in these select communities. If this proposal is enacted as the populations of these communities increase they will continually be allocated more of the harvest to the detriment of all other users. The state must recognize that the largest number of people in the state living below the poverty line reside within the municipality of Anchorage. The state census statistics bear this out. The subsistence needs of this group must be considered, just because they live in Anchorage does not mean that they can afford to buy fish and meat at the store.

Proposal 70. I am against this proposal. Permits for non-residents should be eliminated as there are not enough animals to meet the needs of resident hunters.

Proposal 71. I am against this proposal. Permits for non-residents should be eliminated as there are not enough animals to meet the needs of resident hunters.

Proposal 74. I am for this proposal. Increasing the harvest of brown/grizzly bears is beneficial.

Proposal 75. I am for this proposal. Increasing the harvest of brown/grizzly bears is beneficial.

Proposal 76. I am for this proposal. Increasing the harvest of brown/grizzly bears is beneficial.

Proposal 77. I am for this proposal. Increasing the harvest of brown/grizzly bears is beneficial.

Proposal 78. I am for this proposal. Increasing the harvest of brown/grizzly bears is beneficial.

Proposal 79. I am against this proposal. This would be burdensome to the Department and hunters.

Proposal 81. I am in favor of this proposal.

Proposal 84 I am in favor of this proposal.

Proposal 85. I am in favor of this proposal.

Proposal 86. I am in favor of this proposal. The loss of too many large predators will have an adverse effect on moose and caribou populations.



PP2003 330683

Proposal 87. I am against this proposal. If enacted this would set up regulations open to abuse and impossible to enforce. There are numerous 4-wheeler trails in Unit 13 that are available for use additional acreage does not need to be opened up.

Proposal 88. I am for this proposal.

Proposal 89. I am against this proposal. I oppose the creation of special user groups. Most sheep hunting in south-central is currently managed through permits. Adding additional restrictions by creating a special primitive weapons hunt would be detrimental to all sheep hunters. Additionally, there is no regulation that forbids someone from employing primitive weapons on a hunt. I fail to see why a special hunt needs to be created to allow something which is not prohibited.

Proposal 91. I am for this proposal. If a population is so low that only permit hunting is allowed then non-resident hunting should be eliminated.

Proposal 101. I am for this proposal. This will have positive affects on the moose population.

Proposal 102. I am against this proposal. The state should not be in the business of guarantying the viability of a business venture.

Proposal 123. I am against this proposal. I oppose the creation of special user groups. There is no need for a special archery or muzzle loader season as these weapons are not prohibited in the general season. I fail to see the logic that these hunters deserve special consideration to increase their odds of a successful season. These individuals are not out for meat, they are out for sport. There are numerous areas that they can hunt where the hunting pressure is low. The Dalton Highway corridor also exists for the exclusive use of bow hunters.

Proposal 125. I am against this proposal. Once again I oppose establishing a special user group. Additionally, opening this hunt to youth hunters in a special season will effectively eliminate all other hunters from this hunt. Caribou are so accessible in zones 1 and 3 early in the season that the start date was moved to August 29 to allow for more than a one or two day season. This has not been successful and for the last two years the hunt has closed after the first day. Zones 2 and 4 open on August 10, if the proposer is truly looking for unique hunting opportunities for youth hunters they should take advantage of this hunt. These remote areas offer a fantastic hunting experience.

Submitted By Brian West 1000 OCEANVIEN DR ANCH AK 99515

## COMMENTS ON PROPOSAL # 21



These comments support the changes in trapping season dates proposed for various furbearers taken in Southeast Alaska as given in **Proposal # 21.** For the following reasons, I support opening the season on November 10<sup>th</sup>:

- Aligning all the trapping season dates will help eliminate confusion on when to start trapping and will help simplify the regulation booklets distributed to trappers.
- 2. The current opening date has been in effect for a long time. Presumably, the season started later in SE because some people felt the fur did not become prime here as early as it did up North. To my knowledge, there is no written information supporting this hypothesis.
- 3. Currently, all marten taken in SE must be sealed by an ADF&G representative. Because of this requirement, there is an opportunity to examine all marten pelts for primness'. Opening the season 3 weeks earlier will allow the collection of real data to support or refute this hypothesis. Also, a discussion with the trapper will reveal any misgivings about pelt primness' when the animals were skinned. The regulation, if passed, should include a 5 year sunset clause to give ADG&G sufficient time to collect these data and report back to the Board. Also, if the trapper receives any negative comments from the buyer when the pelts are sold, this information can be relayed back to ADF&G the next fall.

4. Many salt water bays in northern SE freeze over in early December because of a freshwater lens on top of the saltwater. This prevents the trapper from making sets in these areas because the area becomes unavailable for checking with a skiff. Opening the season three weeks earlier will allow access to these areas for at least a limited time. PP004

5. Many deer hunters like to hunt in SE during the Thanksgiving Holidays. They are often plagued by marten eating on the hanging carcasses. Allowing these animals to be legally trapped during this part of the deer season will benefit both the trapper and the hunter.

Respectfully submitted,

Steven R. Peterson

ASKA NGS OF

DECEIVE DEC 2 1 2012 BOARDS

To Whom It May Concern:

The community of Gustavus would like the Board of Game to oppose the reauthorization the antlerless hunt in Unit 1(c). There is no reason to have this even as an option right now. Not only is the herd just now recovering from the last 5 antlerless hunts but the predator sightings and numbers in the Gustavus area have increased over the past 5 years and calf recruitment is still unacceptably low. The moose here does not need to compete with hunters killing the reproductive animals as well as the naturally occurring predators that are thriving in the area now. This board of game meets every two years so if the population every does recover to a point of needing an antlerless hunt there is adequate time to get board approval. Therefore we the people of Gustavus oppose proposal 9 and urge the board to reject it.

Print Here Sign Here TEVE PETT Waguestac 100 Bascher 20 16NATURES SON NORVAI hase Gloria

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P12005 3306#14 Rec EC DEC 2 1 2012 BOARDS the Davis bis lis Heidi Herter TOM BERNER Lenning Zach Fran Kells 20 ma atvu Manner Pitterd Omitry Platt Larry hase Mattso J Sead Todd & Richards ou CACIODOO ie oël Farevaad anera 16prh anah ulvia Martinez Lugan Kerdle ERNEST KING Rebekah K. King King € 70 Rachel weaver 0 Howel JON ONITE Julie Young Howell Karen Platt Scott Lesh own Melanie Berg

Page 3

P12005 4406#14 ECEIVE DEC 2 1 2012 eot eelc Vancy BOARDS BER FARIA tarris ells topul Mitc Paulett P IC.H Pod cer en Moll Kelh WADE Tuaau Jarvis TTRAM ram Rycks rupp ppn Pen Tant ern Diana Berry anaberr

Page 4

PG 1/3 proposal = 7 Support create a limited Fisher season in IC to coincide with the Marten season. Timit it by take. proposal # 11 Support & like the idea of the ADF+G having to use a more responsible approach to the permit issuing policip, proposal 15 o position The last time a similar proposal come out of Petersburg Southeast alaska lost two and a half months of our Walverine season. Proposal 16 the states of the galaxies of the states of Jo there a biological consern in O prosition all of Unit 1 and Unit 4? I think Not

PG 2/3 Proposal 17 opposition In the areas & hunt, the apportunity to shot her Blue Trouse at anytime of the season is vil. proposals 18+19 Opposition The real agenda here is to declassify Black Bears as furbearers, Proposal 20 Opposition Opposition You many years now wolf predation has been the major factor in the plummeting deer numbers in many of the coastal areas of Unit 1A you know it and I know it. Wolf trapping is the major management tool left for triing to control this problem. Until the ADF+G openly and logistically apports these guys we weed all the season we can get. Please don't shorten any wolf season.

PG 3/3 Proposal 21 O pposition 24 mbearing seasons should viewer be set by a policy of convenience but by a policy relations to the circumstances surrounding every operific specie In the last several years this Name Board has shortened the closure time for both our Beaver season and our Walvering season, This was done in Unit 1A by aligning them with other specie closures. This was also done with NO biological concern for either in Unit 14. In one case the trappers lost over two weeks of the spring season and in the other we lost two and a half arbitrary decisions without sound background have lasting and sometimes for reaching effects, Having local public forums can help understand the history of local issues too. With that in mind check out the Ketchikan advisory Committee minutes on this years saures 42 yRS RESIDENT UNITIA RODERT JAHNKE



PP2007

14 December 2012

ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

CERTIFIED MAIL/RETURN RECEIPT 7007 0710 0000 2449 8182

- Re: Support for Proposals 13 and 14 2012/2013 Proposed Changes to Regulations for the Southeast Region
- 1. My name is Charles E. Wood and I am providing comments on Proposals 13 and 14.
- 2. I have been a resident of Southeast Alaska since 1954, and Petersburg since 1961. Through the years, I have extensively hunted the areas affected by Proposals 13 and 14. I was also witness to the near total collapse of the area's deer population in the late 1960's - early 70's which resulted in nearly 20 years without a deer harvest. I believe that proactive measures by the Alaska Department of Fish and Game (Proposal 14) are necessary to prevent a reoccurrence.
- 3. I support Proposal 14 as a minimum necessary measure to provide for sustained yield of the area's deer population. I have hunted the Lindenberg Peninsula, and Portage Bay for decades. The road system makes the deer population easily susceptible to hunting pressure and is a traveling corridor for wolves which, I believe, has already subjected the area to probable over-harvest.
- 4. The Lindenberg Peninsula road system is scheduled to be intensively managed for timber harvest. It's difficult to visualize a scenario that would provide for a sustainable deer harvest under the current bag limit/season length especially when considering the significant forthcoming permanent loss of remaining winter habitat along miles of the Lindenberg Peninsula road system. I also believe an urgent need for predator control exists at this time in Unit 3 on Mitkof Island and Lindenberg Peninsula.
- 5. I urge the Board to adopt Proposal 14, and to support predator control measures in the area to provide for a sustainable deer harvest for present and future generations.
- I support Proposal 13. I have drawn an elk tag on several occasions when it was Permit Hunt DE322 (now DE321/DE323), and successfully harvested a bull elk on Zarembo Island on one of these hunts.

- 7. It is my opinion that the Zarembo elk herd will not recover as long as the neighboring islands of Bushy, Shrubby, and the Kashevarof Islands remain open for elk harvest under a general hunt because of the high potential for poaching on Zarembo Island.
- 8. I urge the Alaska Board of Game (Board) to adopt Proposal 13 as written, or failing that, to modify Proposal 13 to retain the current status quo on Zarembo Island where Zarembo remains in regulation as an elk drawing hunt closed by emergency order, and permanently close Bushy, Shrubby, and the Kashevarof Islands to elk harvest.

Respectfully,

Chil Sund

Charles E. "Ed" Wood P.O. Box 383 Petersburg, AK 99833-0383 907.518.0480

Board of Game Comments Alaska Department of Fish and Game Boards Support Section

Comments in Opposition to Board of Game Proposal 5-5 AAC 85.020 Hunting seasons and bag limits for brown bear Unit 5.

My name is Gary Gray and I am a 27 year resident of Yakutat, Alaska as well as a Registered Guide who has sport hunting concessions in GMU 5 on the Tongass National Forest, Glacier Bay National Park and Preserve and Wrangell/St. Elias National Park and Preserve. I also serve, by appointment of the Governor, to the Trans Boundary River Panel of the US Pacific Salmon Commission. I would like to comment in opposition to this proposal.

I have three challenges to this proposal. First is that the State of Alaska is in the process of studying the brown bear population in the Yakutat area and it would be to the advantage of this resource to wait until those findings are completed to make any significant changes to the "hunting seasons and bag limits." Second, is the contention that Alaska residents, especially those residing in Yakutat, have inadequate opportunity to hunt brown bear and third is the assertion that this change will not substantially increase the number of brown bears taken.

In the proposal, the statement "Some will look at like we are already harvesting about as many bears as we should be, and would be less inclined to have more bears taken" is true. Since 2009 (FY-10) *Attachments 1& 2* the State of Alaska Department of Fish and Game, Division of Wildlife Conservation and other entities have GPS radiocollared 77 bears and spent in excess of \$127,000 and are projecting to spend another \$60,000 this year conducting a multi-year study cited as "Flynn, R. W., L. R. Beier and S. B. Lewis. 2012. Spatial relationships and harvest vulnerability of brown bears in the Malaspina Forelands of Southeast Alaska. Interim wildlife research report. Alaska Department of Fish and Game, Juneau, AK. USA." *Attachment 3*.

The Introduction to this report states in part: "Brown bears (Ursus arctos) are important large mammals, both ecologically and economically, in Southeast Alaska. Currently, little biological information is available to guide brown bear management on the northern mainland coast near Yakutat" and "...the hunter harvest is at or exceeds the guideline harvest. Brown bear managers are concerned that current harvest levels may not be sustainable because population numbers, seasonal movements, and hunter vulnerabilities are poorly known. In addition, nonhunting mortality (i.e. defense of life and property kills and nuisance bears) has been substantial in some years. Thus, total mortality has often exceeded the guideline harvest...The results from this study will be analyzed and reported to provide managers with appropriate information with which to develop management strategies for brown bears in the area."

As stated above, in the past the Yakutat area has lacked any meaningful study of our brown bear population for either numbers or health. The statement in the proposal "Our bear population seems to be extremely healthy" is anecdotal at best and I feel that it would be to the advantage of Yakutat residents, not to mention the Yakutat bear population, to forego any substantial changes to the hunting seasons and bag limits until PC0<del>0</del>8 1 of 15 this study is finished and can be used as a scientific basis for discussions of any changes in the future.

My other issues with the proposal are under the section titled: "What will happen if nothing is done?" First is the statement "There will continue to be an unnecessarily long waiting period for Alaskan residents between brown bear hunts in 5A and 5B (the Yakutat area)". Although there would remain a 4-year waiting period for Alaska residents from other parts of the state, this is not exactly true for those residing in Yakutat itself. Yakutat residents have the ability, every year, to take a brown bear and dispose of the usable parts of the carcass, under subsistence rules. The members of the Yakutat Advisory Committee, who introduced this proposal, as residents of Yakutat, have this ability to hunt brown bears every year under subsistence rules. I don't believe that the residents of Yakutat, or the other residents of Alaska, are being subjected to "an unnecessarily long waiting period between brown bear hunts."

Third, the statement "the reality of it is, this change likely won't amount to more than one or two extra resident bears per year, and absolutely no more risk of too many bears being taken than already exists now with the current open registration hunt" is not "reality" at all. There are numerous Alaska resident hunters every year who come from other parts of the state to hunt for brown bears in the Yakutat area under the current 4year system. This number could increase substantially, and possibly double, as stated in the proposal, under a 2-year system.

I personally think the current 4-year system is working and, considering the State of Alaska is studying our brown bear population right now, we should wait until the study is completed and recommendations are made before any significant changes are made in either the season or the bag limit for brown bears in GMU 5.

Davy Dray

http://us-mg6.mail.yahoo.com/neo/launchanon/

3 of 15

| Subject | Brown Bear Expenses                       |
|---------|-------------------------------------------|
| From:   | Scott, Ryan (DFG) (ryan.scott@alaska.gov) |
| To:     | alsekriverlodge@yahoo.com;                |
| Date:   | Monday, December 17, 2012 8:37 AM         |

|    | Ĩ.   | State   |   | Park Se | ervice   |
|----|------|---------|---|---------|----------|
| 1. | FY10 | \$6.4 k |   | 16.0 K  |          |
| 2. | FY11 | 65.0    |   |         |          |
| 3. | FY12 | 40.0    |   |         |          |
| 4. | FY13 | 60.0    |   |         |          |
|    |      |         | 2 |         |          |
|    |      | 171.4   | ÷ | 16.0    | \$187.0K |

Gary,

.....

Above are the estimated expenses for Unit 5 Brown Bear work. The expenses are broken down by year and agency. The research staff indicated there were additional park service funds provided but they were not exactly sure how much it was at this point. Again, let me know if you have any questions.

Ryan

## Alaska Department of Fish and Game

Project Title: Spatial relationships, harvest vulnerability, and harvest rates of brown bears on the northern mainland coast of Southeast Alaska
Project Reporting Duration: April 25, 2012 – October 31, 2012
Principal Investigators: Rod Flynn, Anthony Crupi, LaVern Beier
Cooperators: Wrangell-Saint Elias National Park & Preserve, USFS
Work Location: Mainland coast of Southeast Alaska from Glacier Bay National Park to Icy Bay, including the Yakutat and Malaspina Forelands

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### Capture bears, deploy GPS radiocollars

Accomplishments: We captured 16 brown bears (7 males, 9 females) in Unit 5A during the reporting period. The bears were processed and outfitted with GPS equipped radiocollars. Fourteen bears (6 males, 8 females) were caught on the Yakutat Forelands near the beach. Five of the captured bears had been previously radiocollared; we retrieved their old collars and deployed new GPS radiocollars. Two bears (1 female with 3 cubs and one male) were captured in 5A at the Yakutat landfill in 2012.

In Unit 5B, we captured 2 brown bears and deployed GPS equipped radiocollars. One bear was a large adult male and the other was a female.

We are currently tracking 45 collars with VHF radio telemetry, of which 5 are on the ground awaiting retrieval.

Since the inception of the research project in summer 2009, we have captured 80 individual bears and radiocollared 77; 42 in the Yakutat Forelands (GMU 5A), 17 in the Yakutat Landfill (GMU 5A) and 18 on the Malaspina Forelands (GMU 5B). Our sample is well distributed between sex and age classes (Table 1).

#### Table 1. Brown bear radiocollared in Units 5A and 5B, 2009-2012.

|                                       | Individuals Collared<br>Male Female |          |       |          |       |           |
|---------------------------------------|-------------------------------------|----------|-------|----------|-------|-----------|
|                                       |                                     |          |       |          |       |           |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Adult                               | Subadult | Adult | Subadult | Total | Mortality |
| Yakutat Forelands                     | 8                                   | 9        | 18    | 7        | 42    | 3         |
| Yakutat Landfill                      | 8                                   | 3        | 5     | 1        | 17    | 12        |
| Malaspina Forelands                   | 8                                   | 2        | 6     | 2        | 18    | 2         |
|                                       | 24                                  | 14       | 29    | 10       | 77    | 17        |

\*some ages estimated

#### Retrieve collars

By the end of the reporting period we had retrieved 50 GPS radiocollars from 44 individual bears.

Spatial relationships, harvest vulnerability, and harvest rates of brown bears on the northern mainle coast of Southeast Alaska FY13 Interim Report

#### Download and analyze location data

The data from the retrieved brown bear GPS radiocollars have been downloaded and entered into geographical databases. We performed a preliminary analysis of location data according to seasonal movement patterns, animal home range size, and den site selection. As well, we were able to remotely download 8 radiocollars that transmit the stored data to a receiver when in close proximity. PC008 5 of 15

#### Collect DNA samples

Accomplishments: We collected DNA from 13 captured brown bears and 14 harvested bears. The DNA samples have been processed and archived. They will be sent to Wildlife Genetics International for individual and population level analyses.

Prepared by: Anthony Crupi

Date: 11/14/2012

Wildlife Research Interim Report

# Spatial relationships and harvest vulnerability of brown bears in the Malaspina Forelands of Southeast Alaska

Rodney W. Flynn, LaVern R. Beier, and Stephen B. Lewis





Alaska Department of Fish and Game

Division of Wildlife Conservation

PC008 6 of 15 Interim Wildlife Research Reports are progress reports detailing the objectives, methods, and

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prelimary data collected of a particular research project undertaken by ADF&G Division of Wildlife Conservation staff and partners. These reports should be citied without the approvial the authors.

Interim Wildlife Research Reports are available from the Alaska Department of Fish and Game's Division of Wildlife Conservation, PO Box 10024, Juneau, Alaska 99811; phone (907) 465-4265; or from the author.

This document should be cited as:

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Cover Photo: Beach habitats along the mouth of Osar Stream, Unit 5B, Southeast Alaska. ©2011 ADF&G/photo by Rod Flynn.

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# Spatial relationships and harvest vulnerability of brown bears in the Yakutat area of Southeast Alaska

Rodney W. Flynn, LaVern R. Beier, and Stephen B. Lewis<sup>1</sup>

Interim Report

Alaska Department of Fish and Game Division of Wildlife Conservation P. O. Box 110024 Juneau, AK 99811

February 2012

<sup>1</sup> Current address: Juneau Field Office, USFWS, 3000 Vintage Blvd., Suite 201, Juneau, AK 99801



## Introduction

We initiated this project in 2009 in conjunction with staff of Wrangell-St. Elias National Park and Preserve (WRST). We have completed three years of field work for this project. This annual progress report was prepared to meet the reporting requirements of Cooperative Agreement COOP-09-128 between the WRST and the Alaska Department of Fish and Game (ADF&G). Also, this report satisfies the reporting requirements of Scientific Research and Collecting Permit No. WRST-2009-SCI-011.

Brown bears (Ursus arctos) are important large mammals, both ecologically and economically, in Southeast Alaska. Currently, little biological information is available to guide brown bear management on the northern mainland coast near Yakutat, particularly portions of WRST, Glacier Bay National Park and Preserve (GLBA), and the Tongass National Forest (TNF) along with state and private lands within ADF&G Game Management Unit (GMU) 5. Recently, brown bear studies have been completed on Admiralty and Chichagof Islands (Schoen and Beier 1990, Titus et al. 1999, Flynn et al. 2007). In 2004, the first brown bear study on the mainland coast was initiated (Flynn et al. 2006) and a subsequent study on the central coast (Berners Bay) was started in 2006 (Flynn et al. 2008). These studies are now near completion. In contrast, no research has been attempted on brown bears along the northern mainland Gulf coast. WRST and GLBA share a park office in Yakutat, AK, overseeing almost 5,000,000 acres of coastal wilderness including the Malaspina Forelands and Icy Bay, and the Outer Coast of Glacier Bay, areas encompassing extensive Alaska shoreline. Current condition of many WRST coastal resources is poorly known. The parks' core operations plans identify a failure in protecting natural resources in these areas. Tourism, subsistence use, and sport hunting appears to be increasing in the area.

Brown bear hunting provides an important economic resource to the residents of the Yakutat area. The maintenance of healthy populations is critical to providing for long-term sustained human use (Miller 1993). The State of Alaska, ADFG manages the state hunting seasons and bag limits for brown bears while the U.S. National Park Service (NPS) and U.S. Forest Service (FS) manages subsistence hunting and guide/outfitter special use permits on federal lands. Currently, the hunter harvest is at or exceeds the guideline harvest. Brown bear managers are concerned that current harvest levels may not be sustainable because population numbers, seasonal movements, and hunter vulnerabilities are poorly known. In addition, nonhunting mortality (i.e. defense of life and property kills and nuisance bears) has been substantial in some years. Thus, total mortality has often exceeded the guideline harvest. Furthermore, information is needed on seasonal spatial relationships in order to design an extensive population survey because a valid population estimate, based on mark-recapture models, is dependent on meeting specific assumptions. The location and movement data will allow us to design a sampling scheme that will meet the appropriate assumptions.

The objective of this project is to provide information on the spatial relationships and harvest vulnerability of the brown bear population in a portion of the northern mainland coast of Southeast Alaska. By capturing brown bears and deploying global positioning system (GPS) collars in GMU 5B within WRST, this project will provide detailed gender-specific information on spatial use of brown bears including seasonal movements, seasonal habitat selection, and hunting vulnerability. With GPS data, the exact movements of bears will be recorded including important seasonal foraging areas, travel routes, and denning areas. Hunting vulnerability will be



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evaluated by comparing seasonal probability use distributions with hunting patterns. Because timing of den emergence and use of coastal and riparian areas have an important influence on hunting vulnerability, these factors will be documented and evaluated. Brown bear spatial relationships will be used to design a more intensive population survey for future implementation. Furthermore, the spatial use data will provide a basis to develop a sampling scheme for a more extensive population assessment study of brown bears in GMU 5. The results from this study will be analyzed and reported to provide managers with appropriate information with which to develop management strategies for brown bears in the area.

## **Study Area**

The study area is located along the eastern Pacific Gulf Coast of Alaska and extends 120 km from Disenchantment Bay (59° 56' N–139° 38' W) in the east to the Centani River (59° 59' N–141° 16' W) in the west within Unit 5B that includes the Malaspina Forelands (Fig. 1). The village of Yakutat (59° 30' N–139° 50' W) is approximately 30 km to the southwest, across Yakutat Bay. The landscape is characterized by sandy beaches, tidal mudflats, deciduous shrub lands, spruce forests, and muskegs. The forelands are transected by a series of relatively short, clear streams and large, glacial rivers, and are backed by the receding Malaspina Glacier. The un-glaciated landscape varies in width from < 1 km to 20 km along the forelands. Most of the forelands are managed by the National Park Service as part of WRST or by private landowner such the Chugach Alaska Corporation. We focused our capture efforts on a 16 km stretch of beach from the mouth of Sudden Stream to the mouth of Mamby Stream within WRST Preserve (Fig. 1).

## Methods

### **BROWN BEAR CAPTURES**

We captured brown bears during the summer of 2009, 2010, and 2011 to attach GPS radiocollars. We set foot snares along trails near the beach during 2009 and 2010. We used a 4-wheeler to access the approximately 16 km snare line. The snares were checked daily. For beach sets, we used filleted salmon carcasses to attract bears near the snares. Once snared, bears were darted for immobilization using Telazol<sup>®</sup> (Fort Dodge Animal Health, Fort Dodge, Iowa, USA) at a dosage of 7–10 mg/kg estimated body weight (Taylor et al. 1989). We deployed GPS collars (Telonics Inc., Mesa, AZ) on all adult bears. Other captured bears were processed, marked with ear tags, and then released. The GPS collars were set to collect a position fix every 20, 30, or 60 minutes. For most of the collars, the location data was stored within the collar, so the collar needed to be retrieved to download the data. These collars were set to self-release on 31 August 2010. The GPS collars deployed on bears contain a mortality signal that allows us to determine if either a mortally has occurred or a collar has fallen off a bear. In 2010 and 2011, we used a type of collar that could be remotely downloaded to a personal computer operated from an aircraft.

In 2011, we used a helicopter to capture brown bears (Titus et al. 1999). We determined that the bears would be vulnerable to helicopter capture in early summer when they are using the beach zone. In addition, we had several bears that the radiocollar did not release properly. Once a brown bear was located, we approach to within darting distance and darted the bear with



Telazol<sup>®</sup>. Once immobilized, usually with 10–25 minutes, we landed nearby and processed the animal using the protocol as the ground captures.

For all captures, samples of ear tissue resulting from the insertion of the ear tag were collected for DNA analysis. The tissue samples were placed in 95% ethanol for storage. Also, hair samples with intact roots were collected. Hair specimens were air dried, placed in a paper envelope, and then stored in a dry environment. We followed capture protocols approved by the Department's Animal Care and Use Committee (ACUC Protocol #07-14).

#### LOCATION DATA

In the office, we downloaded the stored GPS fix locations on the collar to a personal computer using Telonics software. The output files was then converted to geographical information system (GIS) databases using ArcGIS software (ArcGIS, ESRI, Redlands, CA) and prepared for data display and analysis. We plotted the spatial distribution of all GPS locations to determine the spatial extent of brown bear activity.

## **Results and Discussion**

#### BROWN BEAR CAPTURE AND COLLARS

We picked up seven GPS collars during late July and early August 2011 that had been deployed on brown bears in 2009-2010 (Table 1; bear numbers #706, 708, 709, 711, 713, 724, 725). Also, we captured 2 bears that still had their expired collars (bear numbers #711, 713) during late June. We have another three bears that the collars did not release properly (bear number #705, 707, and 715). These bears were not accessible from a helicopter. Two bears stayed within the trees. We were unable to locate the VHF signal for the third bear. Due to failure of the release mechanisms, we may not be able to retrieve all the collrs. It's expensive to go after them with a helicopter, and the bears need to cooperate. We expect the VHF signal from the collars will fail in 2012. The bears seemed to be near the beach during the late two weeks of July, probably feeding on strawberries (*Fragaria cuneifolia*) and scavenging on fish washed up on the beach.

We determined the fate of all of the collars, except one. This collar (#710) came off the bear early in August 2009. The VHF transmitter is no longer working.

We caught an additional 5 bears (3 males, 2 females) on the Malaspina Forelands during early August (brown bear number #724, 731, 732, 733, 734). One male bear was a recapture (#724) from last year; he dropped his collar prematurely. We have captured and deployed GPS collars on 8 brown bears (4 males, 4 females) in 2011 (2 are recaptures from 2009 and 1 is from 2010). These collars are all remote downloadable. We chose this type of collar because of the problem we had with the release mechanism. These collars are programmed to collect fixes every hour over the next 2 years. Thus, we met our original objective of capturing at least 12 brown bears over 2 years on the Malaspina Forelands. To date, we have collared 18 brown bears.

#### LOCATION DATA

We have downloaded and processed the data from nine collars and prepared it for storage, display, and spatial analysis (Fig. 1). To date, the GPS data have only been examined cursorily, primarily as displayed locations on a base map using the GIS. Unfortunately, some of these collars didn't perform very well. We only collected good fixes from bear #406 from



7/21/09-10/17/09, bear #409 from 7/24/09-8/08/09, and bear #710 from 8/06-9/11/09. Also, we discovered that the two collars deployed in 2010 released prematurely. We collected fixes from bear collar #724 from 8/10/10-9/13/10 and bear #725 from 8/10/10-04/27/11.

Male brown bear #708 travelled the most from his capture location (Fig. 1). He was captured in 07/24/2009 near Schooner Beach. By 09/12/2009, he was located near the Chaix Hills (about 87 km to the northwest). He denned in the Chaix Hills and dropped his collar there in April 2010.

We recorded one interesting movement from other collared bears in the Yakutat area (Fig. 1). Brown bear #722 (adult male) was captured on 10/10/2009 at the Yakutat Landfill. This bear left the Yakutat vicinity on 05/02/2010, moving north along Yakutat Bay. On 05/11/2010, he crossed Disenchantment Bay at Point Latouche. He spent the next five weeks in the eastern Malaspina Forelands area, and then he swam back across Disenchantment Bay near Bancas Point on 07/18/2010. On 07/20/2010, he was back at the Yakutat Landfill.

## **Future Work**

Our plans for 2012 include making an attempt to capture bears #705, 707, and 715, probably during June and July when the bears are near the beach. Otherwise, we will download the 8 GPS collars every month beginning in April to November by using an airplane and the remote downloader receiver.

## Acknowledgements

This project was funded cooperatively by the United States Department of Interior, National Park Service and the State of Alaska, Alaska Department of Fish and Game. We thank Judy Putera, WRST, for obtaining funding from the NPS and Eric Veach for assistance with obtaining the research permit. Jim Capra (NPS Yakutat) allowed us to use the Park Service hanger and loaned us ATV parts. Department of Fish and Game staff in Yakutat and Doulas greatly facilitated the field work, especially Rhonda Coston, Nicole Zeiser, Keith Pahlke, Anthony Crupi, and Ryan Scott. We thank local aircraft charters (Alsek Air Service, Les and Debra Hartley and Yakutat Coastal Airlines, Hans and Tonya Munich) for assistance with field logistics and telemetry flights. Mitch Horton (Temsco Helicopters) piloted the helicopter for the brown bears captures.

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Figure 1. GPS locations for nine brown bears captured on the Malaspina Forelands during summer 2009-2011. Also, the locations of one brown bear (#722) captured at the Yakutat Landfill that travelled to the Malaspina Forelands is shown. This brown bear swam across Yakutat Bay on two occasions, returning to the Yakutat Landfill.



| Table 1. Brown bears captured on the 2009-2011, with details about collars | e Malaspina Forelands study area, Southeast Alaska, during status. |
|----------------------------------------------------------------------------|--------------------------------------------------------------------|

4.5 

| Bear<br>number | Sex | Age<br>group | Capture<br>date | Collar<br>status | Comments                            |
|----------------|-----|--------------|-----------------|------------------|-------------------------------------|
| 705            | F   | Adult        | 07/21/2009      | On bear          | Did not release; found on 6/20/2011 |
| 706            | М   | Adult        | 07/21/2009      | Retrieved        | Collar released early; download     |
| 707            | F   | Adult        | 07/24/2009      | On bear          | Did not release; found on 6/20/2011 |
| 708            | М   | Adult        | 07/24/2009      | Retrieved        | Collar released; download           |
| 709            | М   | Adult        | 07/24/2009      | Retrieved        | Collar released early; download     |
| 710            | М   | Adult        | 07/25/2009      | Retrieved        | First heard off bear on 8/8/2009    |
| 711            | F   | Adult        | 07/25/2009      | Retrieved        | Downloaded the collar               |
| 711            | F   | Ault         | 06/17/2011      | On bear          | Recaptured                          |
| 712            | F   | Subadult     | 07/25/2009      | No Collar        | 1 yr old cub.                       |
| 713            | F   | Adult        | 07/26/2009      | Retrieved        | Downloaded the collar               |
| 713            | F   | Adult        | 06/19/2011      | On bear          | Recaptured;                         |
| 714            | М   | Adult        | 07/26/2009      | Retrieved        | Killed by hunter on 10/07/2009      |
| 715            | F   | Adult        | 07/26/2009      | On Bear          | Did not release; found on 6/20/2011 |
| 718            | F   | Subadult     | 08/08/2009      | No Collar        | Cub of the year.                    |
| 724            | М   | Adult        | 08/10/2010      | Retrieved        | Downloaded the collar               |
| 724            | М   | Adult        | 08/04/2011      | On bear          | Recaptured                          |
| 725            | М   | Adult        | 08/12/2010      | Retrieved        | Downloaded the collar               |
| 731            | Μ   | Adult        | 06/18/2011      | On bear          |                                     |
| 732            | М   | Adult        | 08/03/2011      | On bear          |                                     |
| 733            | F   | Adult        | 08/02/2011      | On bear          |                                     |
| 734            | F   | Adult        | 08/04/2011      | On bear          |                                     |
|                |     |              |                 |                  |                                     |


IN REPLY REFER TO:

1.A.1(AKRO-SUB)

# **United States Department of the Interior**

NATIONAL PARK SERVICE Alaska Region 240 West 5<sup>th</sup> Avenue, Room 114 Anchorage, Alaska 99501

DEC 2 1 2012

Mr. Ted Spraker, Acting Chairman Alaska Board of Game Board Support Section P.O. Box 115526 Juneau, Alaska 99811-5526

Dear Chairman Spraker:

The National Park Service (NPS) appreciates the opportunity to comment on the proposals being considered by the Alaska Board of Game (BOG) at the Southeast Region meeting on January 11-15, 2013, in Sitka. There are a number of proposals before the BOG that affect or have the potential to affect NPS areas. We appreciate your consideration of our comments.

In addition, regarding the recently announced meeting on January 10<sup>th</sup>, we would like to reaffirm NPS support for having a buffer closed to wolf hunting and trapping abutting Denali National Park.

As you have heard from the NPS in the past, our mission and mandates differ from the State of Alaska and other Federal agencies, and may require different management approaches consistent with NPS enabling legislation and the Alaska National Interest Lands Conservation Act (ANILCA). We recognize and support the State's fundamental role in wildlife management while at the same time we must assure that the laws and regulations of the National Park Service are upheld.

Our specific comments on proposals follow:

Proposal 5 - NPS recommendation: Do not adopt

This proposal requests changes to 5 AAC 85.020. Hunting season and bag limits for brown bear. This proposal would change the resident brown bear bag limit from one brown bear every four years to one bear brown bear every two years in Unit 5.

The proposed regulatory changes have the potential to create a conservation concern in national preserves within Unit 5. Brown bear population size and mortality rates need to be identified before considering regulatory changes that could result in higher bear harvest. Should the Board adopt regulations liberalizing the bag limit, NPS lands need to be excluded.

Proposal 6 - NPS recommendation: Adopt

This proposal requests changes to 5 AAC 92.44. Permit for hunting black bear with the use of bait or scent lures. This proposal would decrease the black bear baiting season from 12 weeks (April 15-June 15) to 4 weeks (June 1-30) in Unit 1D adjacent to Glacier Bay National Park. The NPS has a long history of trying to prevent habituation of bears to food rewards both to protect bears and for visitor safety. The NPS also has concerns about bait stations attracting non-targeted species as well as the potential impact to behavior, distribution, and site restoration/cleanup when the hunt is completed.

Proposals 18 and 19 - NPS recommendation: Adopt

The proposals request changes to 5 AAC 84.270. Furbearer trapping, and 5 AAC 92.125 Intensive management plans. Prohibit snaring bears in the Southeast Region in Units 1-5.

The use of traps and snares to take bear is only allowed under Intensive Management Plans adopted by the Board of Game and is currently not allowed in any NPS areas. The NPS in past letters to the Board has consistently asked that NPS lands be excluded from any regulations allowing bears to be snared or trapped. General wildlife conservation practices have for many years prohibited this method of taking bears. This method can result in the taking of other nontargeted wildlife species. In addition to conservation concerns, bear trapping in National Park areas may lead to visitor safety issues where there is the potential for high use of an area by nonhunters. Also, where the intent of regulations is to reduce bear populations for the benefit of other species, these regulations are inappropriate on NPS lands.

Again, we appreciate the opportunity to provide you with comments on these important regulatory matters and look forward to working with you on these issues. Should you or your staff have any questions please contact Debora Cooper at (907) 644-3505 or Dave Mills at (907) 644-3508.

Sincerely ebora R.

Associate Regional Director of Resources and Subsistence

cc: Cora Campbell, Commissioner, ADF&G Kristy Tibbles, ADF&G Pat Pourchot, Special Assistant to the Secretary for Alaska Geoff Haskett, Regional Director, FWS Chuck Ardizzone, FWS Susan Boudreau, Superintendent, GLBA Rick Obernesser, Superintendent, WRST Dave Mills, Subsistence Team Leader Sandy Rabinowitch, Subsistence Manager Chris Pergiel, Chief Law Enforcement Officer, NPS-Alaska Region PC09 2 of 2



December 26, 2012

Attn: Board OF Game Comments 907-465-6094

Alaska Department of Fish and Game Boards Support Section PO Box 115526 Juneau, AK 99811

Dear Department of Fish and Game,

In honor of the children lost in Connecticut please stop the future plans of bear snaring and year-round wolf hunting. Perhaps to some they are only animals, but in the end they are living beings. Instead of supporting death, let's fund educational programs. Children will learn and grow to be compassionate human beings.

Furthermore, such vile actions instigate hate that can transcend into other type of murders for example the Connecticut incident. As a parent, I would hate for my child to witness the killing of any life. I want my child to experience the goodness in life and learn to appreciate nature. Please stop bear snaring and year-round wolf hunting. These animals deserve to exist wild and we can learn so much from them. Scientists devote hours and we need to appreciate education. Please don't allow greedy uneducated folks win.

All in all, I am not a crazy animal activist. I am a parent of a child that seeks a better world for her child. I want my child to grow up appreciating life not killing it. I want my child to hold a book and not a gun. I want the new generation to grow up educated and compassionate toward the weak.

In the end, it will benefit all of us. We will create a better society and perhaps create a conscious generation that will think it twice when pulling a trigger. Men used to hunt for food, today men hunts for fun teaching their kids it's ok to kill for no reason. Please remember there is no difference between men or animal except the justice system. However many disturbed individuals fail to fear the law and end up taking innocent lives away. Please stop the plans for bear snaring and year round wolf hunting.

Thank you,

Christy Vilchez PO Box 173313 Hialeah, FL 33017 305-450-1416

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# Alaska Trappers Association PO Box 82177 Fairbanks, AK 99708

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ATTN: BOG COMMENTS Alaska Department of Fish & Game Boards Support Section PO Box 115526 Juneau, AK 99811

December 17, 2012

Dear Chairman & Members of the Board:

On behalf of the more than 900 members of the Alaska Trappers Association, we wish to share our opinions on several proposals which you will be considering during your January 2013 Region I meeting in Sitka.

Proposal #7 – The ATA SUPPORTS the proposal of implementing a Fisher trapping season, allowing a bag limit of one fisher per trapper per year and requiring that all fisher hides be sealed. This system would ensure the proper documentation of catch location and any other data ADF&G may require.

Proposal #16 – The ATA OPPOSES the restriction of motorized vehicles by trappers on the Tonka Road system. Trappers are required to have marten hides scaled in this area. The scaling information will allow ADF&G to monitor harvest numbers. ADF&G can use this data to determine sustainability of harvest of the marten population and propose regulatory changes based on biological data.

Proposal #18 & #19 - The ATA OPPOSES these proposals. It is already lilegal to snare bears in the Southeast Region. Thus, these proposals are redundant.

Proposal #20 -- The ATA OPPOSES the prohibition of wolf harvest between the dates of March 1 and November 1. Trappers are required to have wolf hides sealed. During the sealing process, ADF&G collects data. This data allows ADF&G to establish sustainable harvest rates for wolves in the Region. The current trapping/hunting seasons have yet to have a negative impact on the wolf populations. Thus, the closure recommended in this proposal is unnecessary.

Proposal #21 - The ATA SUPPORTS the alignment of trapping season dates. We defer to the judgment of the Board of Game regarding specific opening and closing dates.

Proposal #22 – The ATA SUPPORTS (WITH AMENDMENT) the extension of the coyote trapping season. We support the alignment of trapping season dates, when possible.

Proposal #37 –The ATA SUPPORTS (WITH AMENDMENT) the extended trapping season for otter. If the Board of Game and ADF&G believe there is a risk of over-harvest of the otter resource, we recommend that shooting be prohibited after February 15<sup>th</sup>.

Proposal #38 – The ATA SUPPORTS the extended trapping season for mink and marten, keeping with the continued support of aligning trapping season dates.

Proposal #39 - The ATA SUPPORTS the extended trapping season for furbearers on Chichagof Island, keeping with the continued support of aligning trapping season dates.

We appreciate the opportunity to participate in the regulatory process.

Sincerely,

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Joe Letarte, president

From: Mary Willson

Date: Sunday, November 11, 2012, 8:38 PM

I favor any proposal that limits the killing of wolves, but especially those that forbid killing wolves in seasons when reproduction and family life occur. Any pelts taken outside of the prime winter months are not worth much anyhow, so that constitutes wanton waste. I'd like to see stable wolf populations with established territories, and with stable family life. Wildlife viewing is improved if wolves are part of the scene: I spoke with several tourists last summer who were utterly thrilled to have watched wolves catch salmon in Glacier Bay these folks were more excited about that than about whales! PC12 1 of 1 DEC-28-2012 FRI 01:06 PM PETERSBURG FISH AND GAME FAX NO. 907 772 9336



Wolf Control Proposal for Management Area 3

Fax: 907.465.6094

To: Alaska Board of Game: Southeast Region, Management Area 3.

Comments:

12.28.2012

From: Mike Stainbrook PO 2052 Petersburg, Alaska 99833

Regarding possible Feasibility Analysis on Wolf Control in Area 3 in Southeast Alaska:

I believe better science and current data from this place (area 3) is not only needed, but required, before any wolf control program is considered.

I believe it is necessary to get the science first. Accurate data is needed on:

- Present deer population numbers for Area 3
- Accurate deer harvest numbers for Area 3
- Wolf population numbers for Area 3

ADF&G needs to have discussions and impact on USFS permitted logging in Area 3 to put habitat for deer and game as a priority.

Sincerely,

huke Stankook

Mike Stainbrook

DEC-28-2012 FRI 01:06 PM PETERSBURG FISH AND GAME FAX NO. 907 772 9336



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Wolf Control Proposal for Management Area 3

Fax: 907.465.6094

To: Alaska Board of Game: Southeast Region, Management Area 3.

Comments:

12.28.2012

From: Karin McCullough PO 707 Petersburg, Alaska 99833

In considering wolf control measures please consider:

There have not been adequate studies regarding:

- The effects of habitat degradation on deer populations (and how to mitigate);
- The deer populations, longitudinally (considering, weather, habitat, hunting pressure);
- Wolf populations and the dynamics of wolf packs in Southeast Alaska.

Before any proposal for wolf control is implemented it is important to have the results from comprehensive studies so that if an action is put into place it can be effectively evaluated.

Increased pressure on the Forest Service for managing habitat for deer populations in the Tongass is vital. Alaska Department of Fish and Game should make this a priority.

Sincerely,

Karin McCullough

FROM :

FAX NO. :

Dec. 28 2012 02:42PM P1

ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

28 December 2012

Re: Support for Proposal #14 Decrease season length and bag limit for deer in Unit 3, Lindenberg Peninsula, Southeast Alaska.

Re: Opposition to Intensive Management of wolf populations as defined in ADFG's "Feasibility Assessment for Increasing Sustainable Harvest of Sitka Black-tail Deer in a Portion of Game Management Unit 3"

My name is David Beebe and I support decreasing the season and bag limits for Sitka black-tailed deer on Lindenberg Peninsula as recommended by ADFG.

I have been a resident of Lindenberg Peninsula and neighboring Mitkof Island since 1984 and have hunted these areas throughout my residency. I am well acquainted with the history of the once abundant deer population of Mitkof Island. Biologists attribute this crash in the deer population primarily to the combination of hard winters and the elimination of the low elevation habitat crucial for deer winter survival, combined with the isolating effects of habitat fragmentation.

Habitat fragmentation created by extensive even age timber management and logging roads in low elevation (800 ft. or less) valley bottoms have serious consequences to deer survival in winter. Connectivity to winter forage areas is essential, without which, deer become stranded during deep snow events increasing deer vulnerability to both starvation and predation by wolves.

A crash in the deer population occurred over 40 years ago on nearby Mitkof Island. We have yet to see a recovery in that population. Despite long periods of restricted deer harvest, Mitkof Island still has the most restricted deer season in Southeast. This is a deeply troubling demonstration of a state and federal resource management failure, which by all accounts, is recurring on the nearby Lindenberg Peninsula of Kupreanof Island.

The State of Alaska is obligated to manage our fish and wildlife for the maximum benefit of its people, on a sustained yield basis as defined in Alaska's Constitution:

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#### § 2. General Authority

The legislatura shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people.

#### § 3. Common Use

Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.

#### § 4. Sustained Yield

Fish, forests, wildlife, grasslands, and all other reptenishable resources Han, or esta, manne, grasalarea, and an onter representative resolutes belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

I do not wish to see this management disaster repeated on Lindenberg Peninsula just a half-mile west of Mitkof Is. There is plenty of evidence indicating this is happening though. I do not wish to see a permanent decline in the opportunity to locally harvest subsistence deer on Lindenberg Peninsula, which is locally important because it can be accessed by skiffs during fall and winter weather.

ADFG reports that there have been dramatic declines in Sitka black-tailed deer populations as measured by pellet-group transects and hunter harvest reports on Lindenberg Peninsula following three decades of clearcutting and roading in low elevation valley bottoms and toe slopes there. Recent hard winter weather events including record snow depths, in combination with the loss of crucial low elevation deer winter habitat is clearly implicated here. I believe Proposal 14 is a regrettable but important measure necessary to allow deer populations to recover by reducing hunter effort. Please adopt Proposal 14.

#### Re: Opposition to Intensive Management of wolf populations

I cannot support the implementation of an Intensive Management predator control program for wolves at this time due to the failure of the State of Alaska to provide the resources necessary to conduct a science based predator control program on Lindenberg Peninsula. Without baseline data and specific deer population assessments which must include population target goals, such a program would be scientifically irresponsible and indefensible. The area residents deserve a responsible approach to wildlife management, and the State of Alaska must provide its biologists with sufficient resources to accomplish these Constitutional obligations.

Sincerely, David Beebe

POB 148 Petersburg, AK 99833



#### 27 December 2012

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ATTN: Board of Game Comments

Alaska Department of Fish and Game, Boards Support Section

vla FAX: 907-465-6094

**Board Members:** 

I strongly urge you to **RESCIND YOUR MORATORIUM** on considering proposals to re-establish the notrapping and hunting buffer zone in the Wolf Township adjacent to Denali National Park. As you know from the many proposals to re-create and expand this buffer, and from the precipitous decline of Denali's eastern wolf packs, this moratorium, and your refusal to create an adequate buffer, is causing the decline of these wolves, and a subsequent decline in visitor's wolf-viewing.

I SUPPORT Proposals 18 and 19, and urge you to approve them. Please prohibit bear snaring in Southeast Alaska. Such methods are not only about as far from "fair chase" as one can get, but are inhumane, indiscriminate, unscientific, and opposed by people across a broad spectrum of interests.

I very strongly **SUPPORT Proposal 20** and urge you to approve it. Wolves should not be hunted or trapped after March 1, when pregnant females might be killed—as was the case last April in the former buffer zone adjacent to Denali National Park, thus causing the disintegration of the Grant Creek pack and a 70 percent drop in visitor's wolf viewing during the summer of 2012. Wolves should not be hunted or trapped before November 1, as the summer's pups are entirely reliant on adult wolves until at least November. Therefore, hunting and trapping wolves after March 1 or before November 1 essentially kills not just the wolf that is shot or trapped, but also jeopardizes, and often kills as in the case of the Grant Creek female, the entire pack's pups for the year. Without pups, as was seen with the Grant Creek female, the entire pack is put at risk. As well, dependant pups that don't survive aren't included in the "harvest" statistics; this is a very unscientific and unsustainable method of wildlife management.

I also strenuously **object to the ADF&G's Feasibility Assessments** calling for predator control on the Alexander Archipelago wolves in order to increase deer numbers for human hunters. This is the same subspecies that is currently being considered for endangered status under the ESA. This proposed "management experiment" is very ill-advised considering there is no data on the actual numbers of wolves, and very little science even indicating that the wolves are the primary cause of low deer numbers. Obviously, ADF&G hasn't even begun to do their research on this one.

I would appreciate you considering my comments, and I look forward to the day that you as a Board realize that you are supposed to represent ALL Alaskans, and begin acting as such.

Sincerely,

Marybeth Holleman

9138 Arlon Street, Suite A, Box 666, Anchorage, AK 99507



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**ATTN: Board of Game Comments** 

Alaska Department of Fish and Game

**Boards Support Section** 

P.O. Box 115526

Juneau, AK 99811-5526

Fax: 907-465-6094

# **RE: FEASIBILITY ASSESSMENT FOR MAINTAINING OR INCREASING** SUSTAINABLE HARVEST OF SITKA BLACK-TAILED DEER IN A PORTION OF GAME MANAGEMENT UNIT 1A

To Whom It May Concern:

I would like to voice my opinion on the management "strategies" presented in order to enhance deer populations in Southeast Alaska, specifically Unit 1a.

Strategy 1: a careful plan or method 2: an adaption or series of adaptations that serves or appears to serve an important function in achieving evolutionary success.

I am familiar with the scientific process as I am a registered nurse and have lived in unit 1A since 1977. I have also lost a dog to the wolves. However after reading the proposal I would have to surmise that the board of game is treating the symptom i.e. loss of deer numbers and has targeted one possible causative factor, wolves.

It is similar to seeking medical intervention following the development of a cough, and without any testing the physician prescribes large doses of potent antibiotics-those medications specifically developed to target bacteria. Well, unfortunately there were no blood tests taken and no x-rays, so that tumor in your lung will go undiagnosed until it is no longer operable and



has metastasized. Oh, and those potent antibiotics? They eradicated beneficial bacteria so now you have a yeast infection and kidney damage from such large doses since no labs were taken that would have signaled a decreasing kidney function. Hopefully you get the picture..

- 1. Could your data be flawed from the start? Are those numbers accurate? Is the deer model adequate? I would venture not. The years 1994-1999 used in the model were the highest kill rates on record and are not sustainable given ever increasing clear-cutting, roaded access, and record snowfalls to name just a few causative agents.
- 2. You have not adequately addressed the loss of habitat. I live on Gravina and only noticed the presence of wolves on our end of the island following the large scale clear-cutting in the heart of the island, driving both predator and prey to both ends. Why did you not heed the warnings when these timber sales were proposed? The dense second growth leads to not only loss of forbes but the ensuing snarl in second growth corrals deer for easier predation by wolves, bears and the ultimate predator-humans. As one hunter put it "the trees grow back so tight you can't even drive a snake through it."
- 3. There is nothing that ADFG can do about the weather except recognize that this also plays a large part in deer decline and goes hand in hand with diminishing habitat and winter refuge areas.

This proposal is an affront to anyone who is fiscally conservative. Spending over a quarter of a million dollars to address one symptom does little other than to line the pockets of a few. Tourism contributes significantly to our economy. What are the ramifications of such an eradication program when this reprehensible plan becomes public?

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Thank you for your time and consideration in this matter.

Sincerely,

war E. Walse

Susań Walsh 1252 Upper Millar Ketchikan, AK. 9901



ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526 Fax: 907-465-6094

RE: Feasibility Assessment for Maintaining or Increasing Sustainable Harvest of Sitka Black-Tailed Deer in a Portion of GMU 1A and GMU3

**Dear Reviewer:** 

I am a lifelong resident of Ketchikan. I've been hunting deer and other game since about 1960. My first and many subsequent deer were taken on Gravina Island. Due to residing on Gravina since 1956, I've probably participated in more deer hunting seasons on that island than 95% of deer hunters. I've also taken deer from the mainland as well as every major island in SE AK with the exception of Annette, Long, Douglas, and Kuiu Islands. That being said, my comments arise primarily from my own anecdotal observations and whatever I've gleaned in talking with other hunters or ADFG biologists over the years.

The following observations are not necessarily chronological or grouped in any coherent way that may support or refute the data in the assessments.

While cross-country skiing over a decade ago on two or three feet of accumulated snow at Wasta Creek in Spacious Bay on the Cleveland Peninsula I noticed that virtually all of the deer



tracks were concentrated in the shallower snow depressions under the largest spruce trees.

On a Gravina Island hike from Ketchikan Airport to Vallenar Bay I noticed a distinct darkening of the forest and realized I had entered the regenerating clearcuts of ~1950s in Vallenar Bay. I've documented that dense dead understory with photos from before and after that hike.

My brother and I in the early 1980s thrashed our way through a dense thicket of second growth on a south-facing slope in Neets Bay, a slope that some eighteen years earlier was an open recent clearcut that exploded with several deer bounding in all directions when my hunting partner and I motored up in our small boat.

I've hiked through and photo-documented the slashed-choked pockets of Mental Health timber lands on Gravina that were helicopter-logged several years ago, places I hiked through and hunted as a teenager. The myopic comment from Ketchikan's borough manager was something like; "You can't even see where they've logged when viewing it from Tongass Narrows or the road system", as though there are no profound unseen negative consequences of that logging.

I've spoken in the last couple of months with several individuals who state with tones of conviction a similar refrain, "There are too many wolves."

So I guess I shouldn't be surprised that ADFG is getting pressured to do something, even if it's treating a symptom rather than the deeper underlying causes.

Gravina Island has been subjected to a several mile-long clearcut a half dozen decades ago to the west of California Ridge bordering Vallenar Bay. The west side of Dall Ridge above Nelson Cove on Gravina's west shore bordering Clarence



Strait was also logged, I believe in the era of transition from hand saws to chain saws.

Piled upon that loss to deer are the mile-plus beach fringe habitat now occupied by the fenced off area around the Ketchikan Airport that separates Tongass Narrows from the muskegs and uplands; the Lewis Reef road and its associated logging spurs and recent private development west of the airport; the more recent Bostwick Lake logging road and associated spurs to clearcuts on State, Mental Health and BLM lands; the Mental Health helicopter logging of old growth winter habitat spanning the whole east side of California Ridge, and most recently, the boondoggle Murkowski road to nowhere that heads off southeast of the airport.

And then there's the profound alteration by roads and logging of the west Revilla Gigedo landscapes from Hassler Pass through Shrimp Bay, Gedney Pass, Neets Bay, Traitors Cove, Traitors Creek valley, Margaret Creek valley, Francis Cove, Indian Point, Carroll Creek and Inlet, Thorne Arm, George Inlet, Leask Lakes, White River, Ward Creek valley, and the huge Native corporation clearcuts between Second Waterfall Creek and Whipple Creek, the Slide Ridge clearcuts, and the more recent Mental Health helicopter cuts between Signal Mountain and Bear Valley. It's no wonder that predator/prey dynamics around Ketchikan are messed up and that besides fewer deer we're experiencing wolves killing our pets.

Speaking of pets, from when my mother began homesteading Vallenar Point on the north end of Gravina in 1956 until a couple years ago, with a single exception we'd never had a problem with large predators. We kept chickens, goats, cats, dogs, and even a few orphaned fawns that ADFG would bring to my mother to raise. All roamed at large. The one exception occurred in the early seventies at our airport farm shortly after

FAX NO. 9072259014

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airport construction began when my mother had to kill a young black bear attacking her chickens. Only recently have wolves seemed to become a problem for pets. People need to recognize that when we encroach upon wilderness we need to keep our pets separated from the wild predators, not exterminate the wild predators.

In conclusion, given the widespread alterations of Southeast Alaska landscapes from logging and the boom/bust nature of the human economy due to the scale of that logging, my assessment is that predator/prey dynamics also suffer a similar boom/bust fate.

While trapping of wolves might be pretty benign, (not withstanding ASPCA's likely heartburn over trapped wolves being drowned on tidelands), compared to aerial gunning or worse, poisoning, some of the fatal flaws of this proposal are its expense, the lack of solid data on predator and prey numbers, and that the proposed areas are not closed systems, meaning that wolves will simply swim across water bodies and necessitate repeating the treatment every decade.

I'd rather see my tax dollars go into restoration of habitat screwed up by previous mismanagement. The USFS and Native Corporations should be shouldering the majority of the cost of that restoration and the State should cease its attempts to charge onward with timber development modeled after the failed USFS's conspiracy of optimism.

michol fella

Mike Sallee PO Box 7603 Ketchikan, AK 99901 Chairman Ted Spraker & Board of Game Members c/o Alaska Board of Game Support Section Alaska Department of Fish & Game P.O. Box 115526 Juneau, AK 99811

Dec. 28, 2012

Dear Chairman Straker and Board of Game Members

I want to add my personal endorsement to the Friends of Admiralty Island comments and recommendation for a GMU 4 development of a permitted hunt proposal.

I want to emphasis the value of the 2000 Brown Bear Management Strategy and the way it was crafted by a divers working group of stakeholders. While it did not rely on total consensus it was a model of a synergistic effort with serious discussion of the issues and compromises. This, I believe has resulted in a broader and stronger support for the resulting bear management strategy.

In developing a proposed Unit 4 permitted hunt it would be important to engage the same mix of stakeholders. It is especially important to include the US Forest Service as they are the permitting agency for operation of Outfitter Guides on National Forest Land (the greatest land percentage of Unit 4).

Sincelery,

K.J. Metcalf PO Box 20221 Juneau, AK 99802

# Alaska Professional Hunters Association, Inc.

Governmental Affairs Office HC 60 Box 299C Copper Center, Alaska 99573 (907) 822-3410

December 26, 2012

Alaska Department of Fish and Game Boards Support Section PO Box 115526 Juneau, Alaska 99811-5526

# WINTER 2013 SOUTHEAST REGION I CYCLE BOARD OF GAME MEETING PROPOSALS WRITTEN COMMENTS

Dear Alaska Board of Game Members,

Please find the following comments for your consideration regarding proposals you will be addressing at your Southeast Region I meeting in Sitka. The Alaska Professional Hunters Association, Inc. (APHA) has serious concerns with the scope of several of the proposals you will be addressing at this meeting. We have conducted several meetings with the SE Members of APHA beginning in November of 2011to discuss proposals you have before you. We have also worked diligently with ADF&G and the US Forest Service to address concerns related to brown bear and black bear conservation challenges. The professional guide industry represents a significant and important rural economy in Alaska which is dependent upon prudent stewardship and conservation of Alaska's wildlife, fair allocation and access provisions.

APHA is often working at the forefront of challenges related to wildlife conservation and hunting opportunities for all hunters, not just guides or APHA members. By doing this, we are often the "first line of defense" and advocacy for Alaska and all hunters.

Several of the proposals you will be considering at this meeting seek to eliminate or restrict existing non-resident hunter opportunity in some manner. There are numerous reasons for APHA to urge caution and restraint in regards to support of these proposals related to balance for the whole considerations.

First and foremost in relation to these proposals is that they have been submitted for your Region I meeting and the fact that they have little or no bearing to current hunting opportunities in SE Alaska. They have been presented to you here in selfish mannerism by a certain group of people without having any idea of how the proposals will affect hunting in SE Alaska as a whole. They are being presented to you in a statewide effort without due consideration and we ask for your understanding of this fact. Please consider our additional comments shown below within our specific proposal comments when addressing these proposals here in Region I and again when you deliberate the same proposals at your Region II and IV meetings.

# Specific Proposal Recommendations

# PROPOSALS THAT APHA OPPOSES: 5, 11, 20, 24, 25, 26, 26, 27, 28, 32 PROPOSALS THAT APHA SUPPORTS: 3, 4, 34, 35, 36

# INDIVIDUAL PROPOSAL COMMENTS

**PROPOSALS 3 and 4: SUPPORT** As this same proposal and concerns have now come before the Board of Game for several cycles and we have heard the cry from the public for better stewardship of the wildlife in this particular region for many years now, we support the proposals as written and would recommend that the BOG define the June closing date. We do not support random changes of brown bear harvest opportunity from one bear every four years to one every year. However, in this isolated instance, in which the bears are actually an isolated population, and the predator prey imbalance concerns have now been before the Board of Game several times, and the Board of Game cycle is once every two years and can effectively address change if needed, and the Department has EO authority if needed, we support the proposals for their overall conservation basis.

**PROPOSAL 5: OPPOSE** for conservation based concerns. Recommend status quo. There is a substantial and ongoing ADF&G brown bear study being conducted within this GMU and we would like to see it summarized for consideration prior to any changes.

**PROPOSAL 11: OPPOSE** We strongly urge status quo and support the new black bear hunting regulations developed in 2010 and continued monitoring of black bear conservation concerns. This proposal works against all of the work and conservation goals addressed in 2010.

**PROPOSAL 20: OPPOSE** We ask you to listen carefully to the testimonies of our members who live a very close walk with the wildlife and the wild places in SE Alaska. There are some very alarming existing predator prey concerns relative to wolves and deer populations.

As a State, Alaska has begun the long recovery of rebuilding and re-establishing our stewardship mandates regarding our precious wildlife populations. This momentum has been achieved primarily because of a number of like-minded conservation organizations and individuals involved with public policy making, have worked hard to establish the tools to help you respond to important biological and conservation based concerns. Please know that your programs are working and are generating the much needed relief and better stewardship for Alaska's wildlife.

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APHA feels that it is very important that you consider the whole of the achievements that have been made and what the benefits have been to our wildlife in these regions as well as what we can do to assist with these type of efforts in other needed regions such as here in Region I. It is important to note that there have been numerous dynamics that have been implemented on this road to recovery, so to speak, regarding our wildlife conservation enhancement.

What we do know is these dynamics are working to a certain degree and have stood the test of legal challenge and to a certain degree, public acceptance, especially of the results.

APHA asks for your support in developing expansion of management programs intended to grant relief to predator and prey imbalances. We urge your support for these initiatives where and when possible in keeping with maintaining the whole of the programs statewide. Management programs provide that provide for development of our constitutional mandates of sustained yield, abundance and maximum benefit provides for the best interest of Alaska's wildlife, and all people who depend on or enjoy the results of good stewardship.

We often hear the cry for consideration of our wolf populations which we hope that all Alaskans appreciate. We rarely, if ever, hear the cry for consideration of the heartbeats or the suffering of hundreds of thousands of moose, sheep, deer, caribou and mountain goats that have fallen as prey to be consumed alive until death overtakes them or the female survivor of these species who in many regions of Alaska has to live her whole life without being able to see one of her offspring live to recruitment age. Nor do we hear any cry about the low cow/calf, doe/fawn or ewe/lamb, nanny/kid ratios and overall low population density equilibriums which are often due to the inability for us to be the good stewards we are mandated to be and manage for the best interest of the whole.

What we can tell you as we travel and listen to other states and other countries wildlife management challenges, is that preservation and natural diversity concepts of wildlife management are not working; conservation, on the other hand, does work.

You are developing great science to help support conservation. As you do, you will be subject to additional efforts to stop this development.

# PROPOSALS 24, 25, 26, 27, 28: OPPOSE

- By eliminating non-resident hunters or by giving special season dates for resident-only hunters we further fragment the hunter/conservationist fraternities. The perceived conflicts will not disappear from the field, rather they will continue to be replaced and possibly escalated within different user groups. Let's turn together as hunter conservationists before we turn away from each other. Every time we turn away from each other as hunters we give success to those who work to eliminate our way of life.
- 2. If we can encourage the turning together and work together as the hunter conservationists we are, Alaska can and will continue to be one of the greatest places for all people to enjoy wildlife. As subsistence hunters, general resident hunters' or non-resident hunters we have a common bond; "wildlife conservation measures that provide for abundance, for sustained

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yield and maximum benefit provides for the best interest of the whole." We encourage this board to continue to do the great job they have been doing to help provide that balance.

- 3. APHA has no support for any of these reduce, eliminate or restrict nonresident opportunity proposals as written. None of them have been submitted from a conservation based or best interest of the whole concern but rather from a self serving aspect.
- 4. Many long established professional guide businesses will be negatively impacted and/or put out of business if any of these proposals were to pass. In many cases, there are very few resident hunters that hunt in the regions where many guides operate. To impact their businesses with preferential resident hunter privileges and thus provide a commercial transporter incentive to fill the void goes strongly against our constitutional mandate of maximum benefit.
- 5. Several of these proposals express concern over perceived crowding of guided hunting activity on public lands. Please understand that eliminating non-resident hunting activity will not eliminate transporter or other hunting parties. The perceived conflicts will continue or even be enhanced as the transporter industry has no conservation basis.
- 6. Alaska Statutes 08-54-720 clearly defines unlawful acts related to the guiding industry and of the 19 items listed therein, #2 states that it is "illegal for a person licensed as a guide to intentionally obstruct hinder or attempt to obstruct or hinder lawful hunting engaged by a person who is not a client of the person".

Additionally, AS 16-05-790 defines similar protection of hunters through the Hunter Harassment Law. If there are bad things going on within this scope, let's first turn to existing law, and enforcement of it before we start eliminating an important industry, hunting opportunities, meat sharing and allot of peoples ways of life.

We would encourage you to look at the number of complaints received from the public and that exist related to these two laws and the related conflict between nonresident and resident hunters to help you understand better the actual extent of the perceived problems.

- 7. According to ADF&G reports, approximately six percent of the annual human harvest of caribou, ten percent of the human harvest of moose and forty percent of the human harvest of Dall's sheep are harvested by nonresident hunters during general State regulated hunting opportunities. If the Federal harvest and unreported harvest factors are considered as well, the percentages of nonresident harvest drop several points even lower.
- 8. Nonresident license fees are added to by multiplying times three with the matching Pitman-Robertson funds which make up the majority of ADF&G Wildlife Conservation Division budget. Nonresident annual harvest percentage of moose, caribou and sheep is low in comparison with the wildlife conservation funding (approximately eighty percent) they provide. Eliminating nonresident opportunity as many of these proposals request will result in an immediate and large shortfall of important conservation funding for ADF&G which will eventually result in overall resident hunter opportunity loss as well.

- Also important to this equation is that Alaska's annual human harvest of these wildlife resources represents something near six percent of the annual mortality of these species while predation accounts for approximately eighty-four percent.
- 10. Intensive management increases actual costs to achieve prudent wildlife conservation goals that provide for the best interest of our wildlife and all people who enjoy or depend on them. When you eliminate non-resident opportunity, you eliminate vital funding needed to enhance and conserve wildlife for the best interest of the whole.
- 11. When non-resident hunting opportunity is reduced or eliminated, a substantial part of the annual predator harvest which occurs during the ungulate hunts is also reduced or eliminated. When you eliminate this non-resident harvest, you eliminate in most cases, the most significant annual predator harvest as well.
- 12. Few if any of these proposals are generated from concerns related to Federal lands where guide industry *concessions or special use permits* are incorporated which limit the number of guides per geographical region. Currently, the proposed DNR/ADF&G/BGCSB Guide Concession program development is in its final stages and implementation of the program will help dispel the perceived conflicts.
- 13. Over sixty percent of Alaska's lands are federal domain. Nonresident sportsmen and women pay for upward of 80% of our wildlife conservation funding. Alaska represents by far the greatest divide between resident and non-resident licensing fees of any state. Nowhere else in the US do residents pay so little for so much in relation to hunting privileges. Alaska needs additional funding for wildlife conservation in a very serious way and the only tool we can find support for is increasing non-resident hunting license and tag fees. As our economy and especially our rural economy needs as much bolstering as possible, these proposals are pushing the envelope in a manner that will result in much greater adverse consequences.
- 14. The Board of Game has a policy related to basing nonresident and resident hunter opportunity when implementing a drawing permit program due to conservation and or allocation concerns. This policy requires the Board to look at the previous ten year history of effort between nonresident and resident hunters and to make the drawing permits available on that defined basis. This is a fair mechanism and should be continued.
- 15. It has been proven within the guide industry throughout the Western US States that when a limit of ten percent of hunting opportunity is provided to nonresident hunters, and guides have to compete with other guides to secure the hunters as clients, that a viable guide industry cannot survive. The broad overhead cost of maintaining a viable business cannot be supported on the "luck of the draw" concept.
- 16. Alaska is different than the rest of the US where we often hear comparisons. It is important to note that Alaska's "Guide Required Law" is vitally important to the resident hunter. One of the key points is its application to wildlife conservation by restricting non-resident opportunity. Compare all of the other states that do not have this law and see what challenges

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exist for quality big game hunting opportunities. They are nearly 100 % allocated by very restrictive drawing permits and many residents who live in the heart of these areas compete for a lifetime without ever receiving a permit to hunt in these hunts.

- 17. Montana recently underwent a loss of nonresident hunter opportunity due to a ballot initiative that did away with private landowner tags because a small group of residents felt that these permits should not be going to nonresident hunters. The result was a catastrophic loss of funding to Montana Fish Wildlife and Parks for important wildlife conservation programs. Alaska cannot afford this.
- 18. When looking at the affluence of guides in relation to user groups as criteria for support of these proposals we would encourage you to consider the resident hunter in this group as well in comparing hunter prowess and success. Of course, nonresident hunters have a higher success rate as they are required to secure the services of a professional guide and they hunt for more days than the average Alaska resident.
- 19. The number of resident hunters who use airplanes to find and then harvest animals, or that have mechanical means to access what used to be hard to access remote regions are growing in number. They also contribute substantially to the perceived conflicts in the field. Professional guides are already restricted by law (with the exception of some spring bear seasons) from using an airplane to find an animal with the intent to harvest that animal. Resident hunters are not thus restricted. Again, if problems do exist, allow for existing law to be applied.
- 20. APHA strongly supports the data and comments previously provided to the BOG by Dr. Wayne Heimer, Mr. Joe Want and the Wild Sheep Foundation regarding many of these proposals.. We urge you to review their comments.
- 21. APHA has concerns about the nature of these proposals which lack any proof of issue and have no biological or conservation basis. We urge you to explore the actual documented problem to define if it is real.
- 22. There does exist the serious question of "Can the Board of Game in such a serious manner legally separate one user group from another." Certainly, related to wild sheep or mountain goat populations which are not covered under the Intensive Management Law, the question is raised about how a preference would be provided without addressing the Tier I or Tier II hunt aspect and qualify them as an Intensive Management Species and then develop C&T and ANS findings statewide? These proposals have broad sweeping changes and impacts on the future of hunting and wildlife conservation in Alaska, none of which we view as beneficial to the whole.

**PROPOSAL 32: OPPOSE** We oppose this proposal because we do not feel that we are at the threshold level that this proposal indicates. There are many of the aspects of the SE Brown Bear Management Strategy (BBMS) which we feel have not been considered within the proposal such as:



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1. We strongly oppose the existing wounding loss penalty factor which for several years now has been calculated into the annual harvest counting every wounded bear reported as a dead female bear being applied in any manner within the recommendations of the BBMS. Wounded bears are not always dead bears and they are not always dead female bears. Both of these aspects of the existing tabulation of harvest, especially sow harvest are unreasonable and should be eliminated. Recalculation of harvest for recent years without the wounding loss included should be done. The BBMS specifically identifies and deals with wounding loss as a whole. Nowhere in the BBMS plan does it say that a harvest penalty should be applied.

2. As the BBMS states that increased harvest can occur only if the bear population density increases. An exceptional ADF&G brown bear population survey done on NE Chichagof Island showed that there has been an increase in bear numbers on NE Chichagof and that increased bear harvest can occur from within this region. This great work has never been applied to the BBMS and should have been.

3. The BBMS also allows for a limited amount of second degree of kindred brown bear hunting for non-resident hunters. In recent years the impact of this activity has grown substantially. We propose that second degree of kindred guiding be brought back in line with the BBMS by limiting the number of non-resident hunters to be guided by relatives to 4.

4. The BBMS is full of recommendations for communities to work on reducing DLP brown bear harvest. There has been some very good success's in this regard but also some continued failure. It is not fair that conservation based hunting opportunity should be reduced for human caused DLP mortality. This DLP calculation should not continue to be included within calculations to reduce conservation based hunting opportunity.

5. Brown bear harvest on private lands within SE has become an important ingredient to the BBMS. We recognize the necessity to accommodate harvest of brown bears from private lands within the BBMS. One way of better controlling this topic we believe, is to manage brown bears by the four major island groups listed in the BBMS, rather than the three currently used. In parallel with that, we propose that the more recent population density work for NE Chichagof Island performed by Jack Whitman be used to determine the mortality guideline for the fourth island group. The resulting increase in mortality guideline would be applied to offset the harvest on private lands. The BBMS recognizes that the plan is a working document and that as newer information becomes available, parts of the plan may need to be modified. The population density work on NE Chichagof fits this concept and should be applied.

In summary for this proposal, APHA has a real concern and respect for the brown bears of SE Alaska and are not looking for additional allocation or opportunity outside of the BBMS recommendations but also want to be respectful of protecting the conservation based hunting opportunities provided by the BBMS.

**PROPOSAL 34: SUPPORT** Based on it's given merits except that we defer the hunter penalty aspect of this proposal to the consideration of the BOG. This proposal will work well to reduce

female brown bear harvest by guided hunters and by unguided hunters and should be adopted into the BBMS.

PROPOSAL 35: SUPPORT Based on it's given merits.

PROPOSAL 36: SUPPORT Based on it's given merits.

End of APHA comments.

Respectfully Submitted on behalf of the Alaska Professional Hunters Association Inc.,

Rober t Fithiai

Governmental Affairs Director

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DEFENDERS AND FRIENDS OF ADMIRALTY ISLAND AND TONGASS WILDLANDS WATCH

P.O. Box 20791 Juneau, AK 99802 Ph/fax (907)586-6738 www.friendsofadmiralty.org Admiralty friends@Yahoo.com

Dec. 28, 2012

Chairman Ted Spraker & Board of Game Members c/o Alaska Board of Game Support Section Alaska Department of Fish & Game P.O. Box 115526 Juneau, AK 99811

Dear Chairman Spraker and Board Members, Re: proposals 32, 33, 34, 35 and 36.

# Addressing intent of proposal 32

Summary: There is increasing concern and evidence that unit 4 brown bear harvest is exceeding target numbers of bears harvested and ratio of females taken. Since 2008 harvest levels and number of sows killed have exceeded prescribed levels on some islands or over the entire unit, resulting in four Emergency Closures to the bear season.

Friends of Admiralty Island is proposing that the Board of Game direct the Department of Fish and Game to devise a Drawing Permit Hunt System for Brown Bear in Unit 4, with the goal of bringing it to the Board for its consideration at the 2014/2015 Region I Board meeting.

The Juneau Douglas Fish and Game Advisory Committee endorsed the concept of exploring options, including a permitted hunt in a December 20, 2012 letter to the Board of Game.

**Background**: The 2000 ADF&G report, Brown Bear Management Strategy (BBMS) represented an extraordinarily successful effort of diverse stake holders to develop a set of recommendations addressing the brown bear hunting issues in Unit 4 (recommendations attached). This effort was the basis on which the department has relied upon for their Unit 4 bear management strategy.

Unfortunately, after 12 years, key components of these guidelines are not being met. The proposal for some form of a permitted hunt is an effort to preserve the good work of the

Page 1 of 6 Friends of Admiralty Island comments to 2012/2013 Board of Game Proposals GMU #4



BBMS, yet address the overharvest and the overcrowding of hunters in some bays of the unit.

From 2008 to 2010, the 3 year harvest guideline of 166 bears for Unit 4 was exceeded, with 171 killed. The maximum allowable mortality established for Fall 2011 was either met or exceeded for all 3 islands in Unit 4, resulting in season closures by Emergency Order (Admiralty on Oct 12, 2011, Baranof on Oct 6,2011 and Chichagof on Oct 5,2011. A 4th Emergency Order Closure was made in the Fall of 2012 for Baranof, when the maximum mortality for females climbed from 2 to 9. If the present trend continues, it is only a matter of time before Emergency Closures will be made to the more heavily hunted Spring hunting seasons.

Emergency closures, especially in the fall may reduce the taking of sows, but they can be a significant economic hardship on booked guided trips. Emergency closures are a "red-flag" that signals the biological health of the bear population is at some risk as is the economic well-being of the guiding industry.

The BBMS guidelines further recommended capping the non-resident hunting effort at approximately 2000 levels and rolling back commercial hunting guide levels to 1995 levels. Neither of these measures has occurred, raising serious concerns about hunting pressure and crowding. In addition, resident bear hunting effort is also uncontrolled, contributing to a disproportionate distribution of hunter effort throughout Unit 4.

In the BBMS (P.10), it was stated that " harvests that approach or exceed 4 percent overall and 1.5 percent female mortality guidelines provide "triggers to indicate when permits or other management actions may be necessary. Crowding of hunters and others is another possible trigger for permits." We believe current harvests are providing the triggers mentioned in the BBMS. The Kodiak island drawing permit hunt system offers guidance and is a precedent for a system for large islands such as Admiralty, Baranof and Chichagof.

The BBMS recognized the problem of geographic scale of management and stated that "ADFG could proportionately assign harvest levels to guide areas using such information as geographic information systems, harvest data, and habitat information." We believe harvest levels should be assigned to hunt areas created on Admiralty, Chichagof and Baranof islands, similar to the Kodiak island system.

Master guide Tim Booch who is a 31 year resident of Kodiak Island, and who is registered to hunt there, in comments pertaining to the proposed State and BLM Guide Concession Program, stated in April of 2012 "...the most effective tool in the conservation and allocation toolbox is the well established and precedent setting limited drawing permit hunt allocation system manifest in the Kodiak brown bear drawing permit allocation guidelines. These fair, equitable and logical allocation guidelines have effectively and positively addressed every problem that is inherent when too many consumers are in competition with too few resources."



We feel that it is especially important to establish a drawing permit system for Admiralty island as a key component of Unit 4 given the special status of the island as a National Monument. Admiralty's special status was acknowledged in the BBMS in 2000 (p. 8).

Finally, in recognition that no population studies have been conducted on brown bears in certain key parts of Unit 4 for decades, and that harvest guidelines are based on percentages of the population of each island as a whole, we believe that immediate current population surveys are warranted, at least in the most intensively hunted regions. Again, this is especially critical for portions of Admiralty island given its special status as a National Monument.

From the Drawing Permit Hunt System on Kodiak, we know that such a system will stabilize the harvest of brown bear so that maximum allowable harvest levels are not exceeded, either island-wide or within specified Hunt Areas. It also distributes the resident and non-resident hunting effort, avoiding crowding and excessive pressure on certain preferred areas. With Emergency Closure Orders no longer necessary, all hunters will be spared the significant disruption and loss of revenue that those orders bring. Overcrowding is a significant issue on the southern portion of Admiralty.

Given these realities, we believe that it is timely to initiate Board consideration of a Drawing Permit Hunt management option and that ADFG is the best entity to evaluate and devise a fair and equitable system for all users that best assures the sustainability of the resource and a quality hunting experience. Such a Proposal would then be presented to the Board for its consideration at the next Region 1 meeting in 2014/2015.

We ask for your support for this course of action.

# Comments on other Unit 4 related proposals

# Proposal #33

## Oppose

We believe that establishing the bear hunting season one week earlier, from September 15 to September 8, will result in more bears taken in the Fall season than under the current season, due to more salmon available in fish streams. Target harvest levels are already being exceeded in parts of Unit 4. Relatively few bears are taken by non-resident hunters from October to December, thus removing that period would have little impact on the overall harvest.

## Proposal #34

## Oppose

We believe this requirement is too difficult to implement and would not achieve the desired reduction of female bear harvest. The most practical way to achieve target goals for females is to close seasons by emergency order when target levels have been reached or exceeded, or,

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Friends of Admiralty Island comments to 2012/2013 Board of Game Proposals GMU #4

more appropriately, accomplish the goal by assigning harvest levels to specific hunt areas in a drawing permit hunt system.

## Proposal #35

#### Oppose

We strongly oppose any increase in the 4 percent annual harvest for brown bears in Unit 4 (averaged over 3 years), that has been the management standard for decades and is firmly established as a guideline in the BBMS. This is based on the best population estimates available from ADFG and in recognition of the low reproductive rate of brown bears in Unit 4. Given the fact that no current population surveys exist for Unit 4, it would be entirely unjustified to consider any harvest allocation to residents or non-residents above 4 percent at this time.

#### Proposal #36

#### Oppose

Wounding loss is entirely appropriate and reasonable to consider as part of the human-caused bear mortality, particularly when target harvest levels are being reached or exceeded. While the number of bears lost to wounding is uncertain, information before the BBMS variously estimated one loss for every 7 bears shot in guided hunts to one loss for each bear killed by unguided hunters. This is a significant mortality and must be accounted for in the best way that ADFG can determine it. In 2004, Board of Game action directed that wounded bears be considered as part of the mortality. We also understand from ADFG that this proposal is in error in asserting that all wounded bears are being counted as female bears.

Sincerely,

K.J. Metcalf Board President, Friends of Admiralty Island

Following are recommendations from 2000 ADF&G report, Unit 4 Brown Bear Management Strategy as stated in Chairman Greg Streveler's introductory statement:

#### Dear Reader,

#### May 2000

During its fall 1998 meeting in Ketchikan, the Board of Game was presented with a variety of issues concerning brown bears of Admiralty, Baranof, and Chichagof islands. Given their complexity and effect on the interests of many people, the Board, along with the Alaska Department of Fish and Game's Division of Wildlife Conservation (ADF&G/DWC), decided to sponsor a broad group of citizens and agency representatives, and charge them with wrapping these issues into a Brown Bear Management Strategy. To make a two-year, multi-meeting story short, we did it. The attached document is the result.

Page 4 of 6 Friends of Admiralty Island comments to 2012/2013 Board of Game Proposals GMU #4



I refer you to the summary for an overview of the entire document, but here is the general gist of its main features:

• We recommend the most conservative human-caused mortality cap of any Alaskan bears, and have made this especially stringent for females, the reproductive heart of the population. This lessens the amount of regulatory restriction necessary on the average hunter, and allows more reliance on voluntary compliance.

 We've developed a win/win model for management zones that avoids habituation of bears and facilitates viewing without disallowing hunting.

- We recommend a roll-back of hunting guide numbers to about 1995 levels, and capping nonresident hunter effort at approximately present levels.
- We've recommended road management concepts, and applied them to Northeast Chichagof.

• We've put together a protective strategy for estuaries and fish streams particularly important to bears and people.

# Continued from recommendations of the 2000 ADF&G report, Unit 4 Brown Bear Management Strategy:

We've developed guidelines for a wide variety of human uses that affect bears.
We recommend bear population research for Northeast Chichagof and encourage ADF&G to seek funding for the same on south Admiralty.

These recommendations will eventually be sent to all management and political entities that have a stake in their implementation. But prior to that step, we now turn the management strategy over to you for review. If you have comments, please send them to Tom Paul by July 21, 2000. ADF&G/DWC, PO Box 240020, Douglas, Alaska 99824 Email: tom\_paul@fishgame.state.ak.us.

All comments received will be compiled and disseminated along with the main document.

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Friends of Admiralty Island comments to 2012/2013 Board of Game Proposals GMU #4

Thanks for your time and interest,

Greg Streveler, Chair for the Unit 4 Brown Bear Management Team

# Alaska Professional Hunters Association Inc.

HC 60 Box 299C Copper Center, Alaska 99573 (907) 822-3755

March 6, 2012

Phil Mooney Sitka Area Management Biologist Alaska Department of Fish & Game 304 Lake Street, Room 103 Sitka, AK 99835

Re: GMU4 Brown Bear Harvest Solution Concepts

Phil:

On behalf of the Alaska Professional Hunters Association, I want to express our appreciation for your continued diligence and oversight in managing the GMU4 brown bear resource. We also very much appreciate your open door management style and willingness to solicit input and opinions from all users.

As you know, since November 2011 the guides who operate in GMU4 have held a series of meetings to develop a set of solution concepts relating to the GMU4 brown bear harvest concerns which you brought forward in your letters of January 21, 2011; August 24, 2011; and January 31, 2012. We have used the Unit 4 Brown Bear Management Strategy (BBMS) to guide our discussions, which we believe remains a very valid management tool.

We are respectful and dependent of the long term conservation of brown bears in SE Alaska and were very involved within the development of the BBMS. We also feel that with consideration of our comments and solution concepts defined below, when compared with the conservation guidelines identified within the BBMS, that it would be hard to support any Emergency Closures of the spring or fall 2012 hunting opportunity based on a true biological concern related to harvest.

We are very much looking forward to working with you and your staff as well as the Board of Game to further the conservation of these great bears during the January 2013 Region I meeting. As you consider our comments, please be thinking of ways that we may be able to work together to help provide the Board of Game with some concensus recommendations in this important regard.

Within the BBMS, one of the first considerations given for brown bear mortality in excess of the island guidelines is a mandatory reduction in guide allocation. We have discussed many different ways in which to effect a reduction in guided allocation which would also result in the desired harvest reduction. An across-the-board type of allocation

reduction was thoroughly discussed and although this would perhaps be the simplest option it very likely would fall short of the harvest reduction desired. A guide that had a reduction of, say, one hunt per year would obviously drop his least successful hunt. The actual harvest reduction through that type of mandatory allocation reduction would likely be far less than desired.

A different option for allocation reduction which we would like you to consider would be tied to harvest of sows. This is similar to the Kodiak skull size penalty for brown bears. We propose that any female brown bear harvested by a guided non-resident hunter with a skull size less than a minimum standard, to be determined by ADF&G biologists, would result in a mandatory allocation reduction of one bear for the contracting guide, or guiding operation for one year. We believe that this one-bear reduction should be taken either the following year, or the year thereafter, at the discretion of the Guide/Outfitter and not be postponed beyond that period. Every sow harvested below the standard would result in a lost allocation.

The benefit of this type of system is two-fold. The first benefit is the obvious one for one reduction in allocation. The second, and equally important, benefit is the increased care that will occur to avoid harvest of sows. This second benefit will result in an immediate reduction in guided hunter success, particularly in regard to harvest of sows, and bring guided hunter success more in line with the estimates made in the BBMS.

Implementing this allocation reduction option is obviously not as simple as an across-theboard reduction but we are committing to undertake the effort needed to seek the support of the Forest Service for this concept.

We are also prepared to work with the Forest Service to reduce the overall brown bear hunt allocation for GMU4. The BBMS allows an overall guided brown bear hunt allocation of 144 hunts but discussions within that working group at that time found that 120 hunts was the desired level of guided hunt effort. Currently, there is a total hunt allocation of 135 bears because of hunts lost through enforcement actions, guides going out of business, and the 1/3 hold-back policy used by the Forest Service when guiding businesses are sold. When the overall Forest Service hunt allocation is reduced through these means, those hunts go into a "pool" for potential re-issuance. We propose working with the Forest Service to insure that the overall hunt allocation be allowed to reduce to below 120 hunts before any held back hunts be re-issued and that the total allocation not be allowed to exceed 120.

Another solution concept which was thoroughly discussed relates to wounding loss. The BBMS recognizes that wounding loss occurs but states that it is an indeterminate number and likely does not significantly impact overall number of bears. Although there is a mechanism for keeping track of wounded bears on the Hunt Report, there remains no way to accurately translate that number to wounding loss, i.e. bears, especially female bears that actually died from their wounds. The conclusions reached in the BBMS regarding wounding loss, we believe, remain as valid today as when they were written. We therefore propose that estimates of wounding loss not be included in the brown bear

mortality calculation. This would apply to bears wounded by sport hunters, but not recovered, as well as bears wounded in DLP situations, but not recovered.

The BBMS also allows for a limited amount of second degree of kindred brown bear guiding for non-resident hunters. In recent years the impact of this activity has grown substantially. We propose that second degree of kindred guiding be brought back in line with the BBMS by limiting the number of non-resident hunters to be guided by relatives to 4. We have recently become aware that you have taken steps in this direction.

As you know, brown bear harvest on private lands has become an important concern. We recognize the need to allow for a fair harvest of brown bears on private lands. However, such harvest needs to recognize the conservation-based objectives of the BBMS and must fit within those objectives. One way of better controlling this concern, we believe, is to manage brown bears by the four major island groups listed in the BBMS, rather than the three currently used. In parallel with that, we propose that the more recent population density work for NE Chichagof Island performed by Jack Whitman be used to determine the mortality guideline for the fourth island group. The resulting increase in mortality guideline would be applied to offset the harvest on private lands. The BBMS recognizes that the plan is a working document and that as newer information becomes available, parts of the plan may need to be modified. The population density work on NE Chichagof fits this concept and should be applied.

As an additional recommendation that may help would be to consider the annual harvest on an "annual" instead of a regulatory year basis such as you currently do on Kuiu Island. This would move any potential Emergency Closures to fall seasons which represents the majority of the historic sow harvest.

In conclusion, I want to thank you again for this opportunity to provide our ideas on addressing the overall mortality of GMU4 brown bears. As mentioned earlier, we are willing and prepared to assist in any way we can to help address this concern.

Most Respectful,

Robert Fithian Executive Director

CC:

Cora Campbell Doug Vincent-Lang Doug Larson Neil Barton Forrest Cole Bill Tremblay


# FAX TRANSMITTAL FORM

TO: Board of Game Comments Boards Support Section Alaska Department of Fish and Game FAX: (907) 465-6094

FROM: Alaska Wildlife Alliance

PHONE: (907) 277-0897 EMAIL: connie@akwildlife.org

Pages including this cover sheet: 3

ATTACHMENTS:

John Hyde comment letter for Board of Game Southeast Region meeting (Sitka).

907 258 7329 ;



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## Comments for the Alaska BOG concerning predator control in GM Units 1A and 3:

Predator Control is an archaic, dangerous, inhumane and unnecessary method of wildlife management. The most effective, humane, and nondestructive wildlife management policies prioritize People Control over any other "device".

Our natural systems are much more efficient at managing wildlife populations by themselves when they are allowed to maintain a natural order of species and numbers.

Problems only occur when our species thinks it can influence and manage these systems for our short term benefit. Every issue concerning the health of a wild animal population occurs primarily because we can't control our greed and lack the patience to wait for these systems to adjust themselves. And/or because we have destroyed the ability of a natural habitat to support healthy populations.

The deer and wolf populations in these GM units will adjust to the carrying capacity of each if we let them. All we need to do is adopt a hands-off policy by refraining from hunting deer and trapping/shooting wolves.

Once the balance has returned we can evaluate whether or not the deer population is capable of withstanding additional pressure from hunting.

For instance - closing these units to the hunting of deer for the next three or even five years would not impact any human needs to any significant degree. There are many other options for those who wish to hunt deer in those areas.

If the deer populations in these areas are in decline then the only way to obtain unbiased research information on the possible causes of such a decline is to remove as many human influences as possible.

The easiest of these influences to eliminate first is hunting. Others such as habitat destruction are not so easily repaired but must be considered when we make decisions regarding resource management.

If we have effected a decline in one wildlife population by reducing the ability of an area to support any specific species as well as by hunting that species beyond its ability to recuperate following severe weather patterns is it really a smart idea to try and offset those negative influences by attempting to eliminate another species - especially one that keeps the balance of ungulates in check with the ability of the environment to support them? Without any interference by us or at any expense?

No, it is not. Anyone can see that - if they allow themselves to look beyond their own personal interests.

The time is long overdue for Alaska's Wildlife managers to adopt more of a "hands off" policy of wildlife management by monitoring and studying the effects of how our actions - both direct and indirect - affect the balance of wildlife populations and carrying capacity. Research efforts should be directed towards the primary goals of monitoring our wildlife populations, rehabilitating habitat we have destroyed and controlling people instead of attempting to control nature.



Alaska is one of the last places on this planet where such a policy could be truly effective because most of its wildlife populations are relatively intact and adequate areas of natural habitat still exist to support these wild populations.

Wildlife managers here could achieve worldwide recognition and respect for implementing such policies, rather than worldwide regard in an opposite vein for not taking advantage of such a situation. You still have the chance to be the hero - rather than the clown.

Be the hero.

Sincerely,

John Hyde PO Box 34517 Juneau, AK 99803



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Greater SE Alaska Conservation Community • Alaska Wildlife Alliance •
 Tongass Conservation Society • Greenpeace • Center for Biological Diversity •

Alaska Board of Game c/o ADF&G, Boards Support Section by FAX: 907-465-4094 December 28, 2012

Subj: Unit 3: Comments on "Feasibility Assessment ... Black-tailed deer"

Dear Board Members;

These are jointly submitted comments of five organizations on the Alaska Department of Fish & Game's October 2012 Feasibility Assessment for Maintaining or Increasing Sustainable Harvest of Sitka Black-tailed Deer in a Portion of Game Management Unit 3, hereafter called the "Assessment."

**ADF&G's proposal** in the Assessment is to eradicate 80% of the wolves in a 415,000 acre (648 sq-miles) "treatment area" comprising 22% of Game Management Unit 3. (Assessment at 6, 25). The goal of the proposal is to reduce by 45% the wolf population on four islands (Kuiu, Kupreanof, Mitkof and Woewodski), which at about 1.3 million acres (2,205 sq-miles)<sup>1</sup> comprise 68% of Unit-3.<sup>2</sup> (Assessment at 25, 16). The removal project is claimed to be an experiment, and has a control area on western Kupreanof Island of 304,000 acres (475 sq-miles). (Assessment at 6, 16).

The commenting organizations are: Greater Southeast Alaska Conservation Community (GSACC), Alaska Wildlife Alliance (AWA), Tongass Conservation Society, Greenpeace, and Center for Biological Diversity (CBD). Although we have differing policies or outlooks on whether or not the harvest of wolves is appropriate in general, we are united in commenting that the intensive management (IM) proposed in the Assessment should not be pursued. In summary, we believe that pursuit of the program of wolf eradication proposed in the Assessment is unwise and unsupported by the facts.

<u>GSACC</u> is a Southeast Alaskan conservation non-profit organization, formed in 2011, which seeks to foster protection of Southeast Alaska's fish, wildlife and their habitats. Its membership uses public lands throughout the region.

<u>AWA</u>, founded in 1978 and with a board composed entirely of Alaskans, is the only Alaskan-based group dedicated entirely to the sound management of Alaska's wildlife. AWA promotes an ecosystem approach to wildlife management with an emphasis on the non-consumptive values of wildlife.

TCS, based in Ketchikan, has a long been involved in land management planning processes throughout Southeast Alaska. The membership is primarily Alaskans who use the region's lands, fish and wildlife and have interests in the management of these natural resources. The membership includes commercial fishermen, Alaska Natives, tourism and recreation business owners, hunters and guides and citizens who use the region for business, recreation, scientific research and subsistence.

<sup>&</sup>lt;sup>1</sup> The Assessment does not specify the area of the four-island group. If the "treatment area" is 648 mi<sup>2</sup>, the island group is 2,025 mi<sup>2</sup> or 1.3 million acres.

<sup>&</sup>lt;sup>2</sup> Unit-3 is 3000 sq-miles. (Assessment at 16).



<u>Greenpeace</u> is a non-profit environmental organization whose mission is raising public awareness of environmental problems and promoting changes for a green and peaceful future. Involvement in the natural resource issues of the Southeast date to the early 1990s, and the long-time staffer here is a 36-year resident of the region. Work has included reducing the impacts of logging and associated road construction on ecosystems, toward the perpetuation of opportunities to fish, hunt and observe wildlife.

<u>CBD</u> is a non-profit environmental advocacy organization with more than 300,000 members and online activists dedicated to conservation and recovery of species at risk of extinction, and their habitats. Center members, activists and staff maintain long-standing interests in clean water and biological diversity in Southeast Alaska.

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## I. Our Recommendations and Requests

For the reasons provided in the sections below, we recommend and request that the Board of Game:

(1) declare that the Unit-3 Feasibility Assessment is incomplete, based on information and deer objectives that are outdated, and does not present a basis for intensive management of wolves; and

(2) direct ADF&G to propose new deer population and harvest objectives for consideration at the next meeting of the Board, and that the department not reconsider IM objectives for deer in Unit-3 until new population and harvest objectives have been established by the Board.

## II. The Feasibility Assessment Evaluates the Proposal at an Inappropriate Scale.

Both the concept of the proposed wolf reduction project and justifications the Assessment gives for the project are based on an inappropriate geographic scale.

The concept of the project is to eradicate 80% of the wolves in a contiguous area that comprises about one-fifth of Unit-3, located near the communities of Petersburg and Kupreanof. (Assessment at 25). This "treatment area" is remote both from the other communities in Unit-3 (Wrangell and Kake), and from four of the Unit's major islands (Etolin, Wrangell, Zarembo and Kuiu). Unit-3 spans 110 miles in its greatest extent (Deer Island to northwest Kuiu Island) and has 3,000 square miles of land. The plentiful statistics and other information in the Assessment about Unit-3 are not representative of the particular circumstances for habitat, wildlife and hunters in the treatment area, and there is little content in the Assessment that is specific to that area.

Unit-3 is comprised of 24 WAAs (wildlife analysis areas, which are land areas designated by ADF&G for use in wildlife evaluations). See <u>Attachment-A</u> to these comments, which is a map of Unit-3 and its WAAs. The Assessment presents no information at a WAA scale for habitat quality, deer or wolf populations, or deer or wolf harvest history. However, the WAA scale is most appropriate for evaluating the proposal, because of the great geographic extent of Unit-3, the varying habitat conditions and wildlife populations (and population dynamics) across it, and varying historic harvests of predators and deer. In no way can the project have an effect across the full extent of Unit-3 for its intended purpose, increasing the number of harvestable deer. Also, it will not have an effect across all the four islands area (Kuiu, Kupreanof, Woewodski and Mitkof Islands) to which it does devote limited attention. Kuiu Island and most of western Kupreanof Island are simply too far away.

## III. The Deer Objectives Are Outdated and Therefore Do Not Support Wolf IM.

The current objectives for deer population and deer harvest in Unit-3 are outdated because they are based on older deer modeling which produced over-estimates of the carrying capacity of winter habitat.

#### A. The current deer objectives for Unit-3, and how they were determined.

The current deer population and harvest objectives for Unit-3 were adopted by the Board of Game in 2000, setting them at 15,000 and 900 respectively. (Assessment at 8). They are based in large part on the Forest Service's 1997 deer model, which was used to estimate the winter carrying capacity of the habitat for deer, and on harvest rates from 1994 to 1999 which were the peak years for the Unit. (Id.). As recognized in the companion Assessment for Unit-1A that the Board is reviewing, the objectives set in 2000 are "unrealistically high" because of the data used to set them. (See: companion Assessment for Unit-1A at 7, 18). The



same factors invalidate the Unit-3 deer population and harvest objectives, namely that the basis was years among those with the highest deer population and harvest, and the use of a version of the deer habitat capability model that is now outdated and which over-estimated carrying capacity.

Moreover, we note that the Unit-3 deer harvest rebounded by 2010 to 73% of the current harvest objective after a decline following successive severe winters, two years after the low year. (Assessment Fig. 8).

## B. Problems with the deer model results that the harvest objective was based upon.

The Board of Game, in its 2000 determination of Unit-3 deer population and harvest objectives, relied upon deer carrying capacity data from the Forest Service's 1997 deer model. (Assessment at 8). The model estimates carrying capacity over winters of average intensity. The Forest Service updated the model for the 2008 Tongass Forest Plan, and the new model<sup>3</sup> makes significantly lower carrying capacity estimates.

Three corrections that have been made to the model since 2000 were substantial:

(1) In its FY-2000 Monitoring & Evaluation Report (published April 2001),<sup>4</sup> the Forest Service corrected the conversion factor (called the Deer Multiplier) used to change the model's non-dimensional output to carrying capacity in deer per square mile, from 125 to 100.<sup>5</sup> The Deer Multiplier is based on deer pellet transect data, and is the carrying capacity of best quality habitat (of which very little exists). The older model results in over-estimated carrying capacity by 25%. From the information in the Assessment we don't know which multiplier had been used when the Board of Game set the Unit-3 objectives.

(2) In 2008 the Forest Service made a further correction to use of the Deer Multiplier.<sup>6</sup> From 1997 through 2007 the scale for the non-dimensional habitat value outputs was a range "habitat suitability index (HSI)" of from zero to 1.3. The value 1.3 represents best quality habitat. However, the way the Deer Multiplier was used during those years, it corresponded to a value of 1.0 in that range, which is incorrect and results in a 30% overestimation of carrying capacity. If these and the previous error were both present in the data the Board considered in setting the objectives, the total error was a 62.5% carrying capacity over-estimation.

(3) The vegetative dataset used in the 1997 deer model was later found by a Forest Service statistical study to be uncorrelated to habitat quality. (Caouette et al. 2000).<sup>7</sup> An adequate

<sup>&</sup>lt;sup>3</sup> When we speak here of a "version" of the model, this encompasses the core of the model and the vegetative data and directives for some external settings that are used when carrying capacity in deer per square mile is calculated from the model's non-dimensional output. The core of the model has not changed over the years, only the other factors in its application.

<sup>\*</sup> USFS R10-MB-431, at 2-155.

<sup>&</sup>lt;sup>5</sup> The multiplier represents the winter carrying capacity of the highest quality habitat type; however, this kind of habitat is scarce.

<sup>&</sup>lt;sup>6</sup> 2008 Tongass Forest Plan (TLMP) FEIS, at 3-266: "HSI values were standardized to range from 0 to 1.0, by dividing all values by 1.3, because outputs from such models represent a range from 0 to 100 percent habitat suitability, with higher values indicating higher habitat capability." Also at 3-284 in footnote 2: "Habitat capability in terms of deer density calculated using a multiplier of 100 deer persquare mile equating to a habitat suitability index score of 1.0."

<sup>&</sup>lt;sup>7</sup> Caouette, J.; Kramer, M.; & Nowacki, G. (2000). Deconstructing the Timber Volume Paradigm in Management of the Tongass National Forest. USDA Forest Service, Pacific



dataset was not used until adoption of the 2008 Tongass Forest Plan. The new dataset "results in an overall reduction in average HSI<sup>®</sup> values because fewer stands would be classified as high and medium volume strata and more stands would be classified as low volume strata compared to the old volume strata mapping used in the 1997 Forest Plan Revision Final EIS." (2008 Forest Plan FEIS at 3-265 to 266). This change resulted in significantly lower carrying capacity estimates by the new model, nearly everywhere in the Tongass, but because the previous dataset's non-correlation to habitat quality had made the amount of error erratic the changes were not the same everywhere and in a small minority of WAAs the results were a higher carrying capacity.<sup>9</sup>

## C. The Amount of Deer Modeling Error, As Incorporated in the Unit-3 Objectives.

The 2008 corrections made by the Forest Service to its 1997 modeling of deer winter habitat carrying capacity indicate that the 1997 modeling made these over-estimations:

| Unit 3 (overall)                 | 20%  | Over-estimation |
|----------------------------------|------|-----------------|
| "Treatment Area"                 | 1.2% | Over-estimation |
| Western Kupreanof Isl.           | 11%  | Over-estimation |
| Kuiu Island                      | 16%  | Over-estimation |
| Wrangell-Etolin-Zarembo,<br>etc. | 42%  | Over-estimation |

| ig. | 1: | Over-estimations of | of the | earlier                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | model.                                                                                                          |
|-----|----|---------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|     | _  |                     |        | and the second se | The second se |

[See calculations in Fig. 2, next page.] But percentages don't tell the whole story. The Tongass Forest Plan has a standard and guideline of providing a deer habitat carrying capacity of at least 18 deer per square mile (where possible), in order to sustain both wolves and deer hunters. ADF&G has advocated the use of this standard and guideline (S&G), and the department played a major role in its adoption by the Forest Service. Note in Fig. 2 that according to the 1997 modeling, among the four major segments of Unit-3 three were above the S&G and one was somewhat below (at 17). This<sup>10</sup> was a basis for the 2000 deer population and harvest objectives. However according to the corrected 2008 model, for the current condition (in 2006) these three WAAs all scored below the S&G and two of them (including the treatment area) were significantly below that level, at 15.1 and 15.2 deer per square mile. The causes of these low scores (with the improved modeling) are partly the natural condition of the habitat and partly the destruction of old-growth deer winter range by widespread logging.<sup>11</sup> Further, it is important to note that the future stem exclusion condition of second growth which was less than 25 years old in 2006 (or not yet created by

Northwest Station. PNW-GTR-482. 20p. <u>http://tongass-</u> fpadjust.net/Documents/Caouette\_eta\_%202000\_GTR482.pdf

<sup>9</sup> These effects can be seen in the "1995 Over-estimation" column of our Fig. 2.

<sup>10</sup> Or a similar run made with the same model, just before the objectives were set in 2000.

<sup>&</sup>lt;sup>8</sup> HSI is habitat suitability index, the non-dimensional output of the model that was mentioned in a previous footnote.

<sup>&</sup>lt;sup>11</sup> Part of the difference between results in Fig. 2 is from the 1997 and 2008 models is the from the progression of second-growth succession during the 11-year interim. The model estimates that canopy closure occurs in 25-year old second-growth, at which point the winter habitat value drops to near zero, and some stands reached that age during the interim between this two model runs.

Fig. 2: Unit-3 Deer Model Carrying Capacities by WAA, for 1997 vs. 2008 models

Edwards (27Dec12, for BoG comments)

|                            |               | 1997<br>Model                | 2008<br>Model                | Model<br>Comparison     |                         |                         | 1997<br>Model                 | 2008<br>Model                 | 1997<br>Model        | 2008<br>Model        |             |
|----------------------------|---------------|------------------------------|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------------|-------------------------------|----------------------|----------------------|-------------|
| WAA Location               | WAA<br>Number | 1995<br>Carrying<br>Capacity | 2006<br>Carrying<br>Capacity | 1995<br>Over-estimation | Land<br>Area<br>(sq-mi) | Land<br>Area<br>(sq-mi) | Area-<br>Weighted<br>Capacity | Area-<br>Weighted<br>Capacity | Carrying<br>Capacity | Carrying<br>Capacity |             |
| N Etolin Island            | 1901          | 23                           | 16.0                         | 44%                     | 207.2                   | 223                     | 4766                          | 3315                          |                      | 1                    | 1           |
| Deer Island                | 1902          | 25                           | 16.2                         | 54%                     | 14.9                    |                         | 373                           | 241                           | 1. 1.                |                      | 1.1.1.1     |
| Wrangell Island            | 1903          | 18                           | 12.2                         | 48%                     | 176.9                   | 774 5                   | 3184                          | 2158                          | 24 5                 | 15.2                 | Wrangell /  |
| Stikine Islands            | 1904          | 25                           | 16.7                         | 50%                     | 36.2                    | 114.0                   | 905                           | 605                           | 21.0                 | 10.2                 | Etolin Area |
| Zarembo Island             | 1905          | 19                           | 14.8                         | 28%                     | 180.9                   |                         | 3437                          | 2677                          |                      |                      | 1.1.1       |
| S. Etolin Island           | 1910          | 25                           | 17.3                         | 45%                     | 158.4                   |                         | 3960                          | 2740                          |                      |                      |             |
| Mitkof Island              | 2007          | 17                           | 14.3                         | 19%                     | 170.2                   |                         | 2893                          | 2434                          |                      |                      |             |
| Weewodski Island           | 2008          | 50                           | 26.6                         | 88%                     | 16.6                    |                         | 830                           | 442                           |                      |                      | Treat       |
| Bohemia                    | 5135          | 12                           | 13.2                         | -9%                     | 86.6                    | 642 6                   | 1039                          | 1143                          | 17.0                 | 45.4                 | mont        |
| Mission Peaks / Scott Peak | 5136          | 20                           | 13.7                         | 46%                     | 93.6                    | 042.0                   | 1872                          | 1282                          | 17.5                 | 15.1                 | Aroa        |
| Petersburg Creek           | 5137          | 19                           | 16.0                         | 19%                     | 79.0                    |                         | 1501                          | 1264                          |                      | 1.00                 | Area        |
| Lindenberg Peninsula       | 5138          | 11                           | 17.1                         | -36%                    | 96.5                    | A                       | 1062                          | 1650                          | (                    | La provincia de la   |             |
| W. Kupreanof Island        | 5130          | 26                           | 19,1                         | 36%                     | 144.5                   |                         | 3757                          | 2760                          |                      | 1.000                |             |
| S. of Kake                 | 5131          | 19                           | 17.0                         | 12%                     | 109.8                   |                         | 2086                          | 1867                          |                      | 1.11.111             | West        |
| Kake                       | 5232          | 7                            | 14.7                         | -52%                    | 57.9                    | 639.3                   | 405                           | 851                           | 19.5                 | 17.6                 | Kupreanof   |
| Westside Duncan Canal      | 5133          | 18                           | 16.6                         | 8%                      | 168.3                   |                         | 3029                          | 2794                          |                      |                      | Island      |
| SW Kupreanof Island        | 5134          | 20                           | 18.8                         | 6%                      | 158.8                   |                         | 3176                          | 2985                          | 1.0                  | 1.1                  | 14          |
| NW Kuiu Island             | 5012          | 27                           | 20.9                         | 29%                     | 225.8                   |                         | 6097                          | 4719                          | 1                    |                      | 1           |
| Bay of Pillars/Port Camden | 5013          | 29                           | 23.8                         | 22%                     | 99.0                    |                         | 2871                          | 2356                          |                      | 1.1                  | A started   |
| E. Kuiu                    | 5014          | 36                           | 29.0                         | 24%                     | 62.5                    | 765.6                   | 2250                          | 1813                          | 28.5                 | 24.5                 | Kuiu        |
| Tebenkof Bay               | 5016          | 36                           | 30.2                         | 19%                     | 108.4                   | 100.0                   | 3902                          | 3274                          | 20.0                 | 24,5                 | Island      |
| Aflak Canal                | 5017          | 31                           | 26.4                         | 17%                     | 193.5                   |                         | 5999                          | 5108                          |                      |                      |             |
| Three-mile Arm             | 5018          | 9                            | 19.7                         | -54%                    | 76.4                    |                         | 688                           | 1505                          |                      |                      |             |
| Coronation Island          | 5015          | 51                           | 20.6                         | 148%                    | 29.8                    | 29.8                    | -                             |                               | 51.0                 | 20.6                 | Coronation  |
| UNIT-3 TOTAL               |               |                              |                              |                         |                         | 2751.7                  | 60081.5                       | 49983.9                       | 21.8                 | 18.2                 |             |

| Overall deer carryin | ig capacity <u>over-estimati</u> | ons of the 1997 model: |
|----------------------|----------------------------------|------------------------|
|                      | Wrangell / Etolin Area           | 42%                    |
|                      | "Treatment Area"                 | 12%                    |
|                      | West Kupreanof                   | 11%                    |
|                      | Kulu Island                      | 16%                    |
|                      | Coronation Island                | 148%                   |
|                      | ALL OF UNIT                      | F-3: 20%               |

Data Sources: 1997 model results are from the 1997 TLMP FEIS, Table 3-112. 2008 model results and WAA land areas are from 2008 TLMP planning record document 0935 (0935.xls).

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clearcutting) is not reflected in Fig. 2 but has or unavoidably will in the foreseeable future be subtracted from the winter habitat capability shown.

The point here is that the deer modeling basis for the current deer population and harvest objectives that were set by the Board of Game in 2000 is no longer valid. An urgently needed action by the Board is to update those objectives. It is not valid to initiate a program of wolf intensive management on the basis of the outdated objectives.

#### IV. Whether Available Deer Winter Habitat is Currently a Limiting Factor

After assessing the model results for Unit 3 it seems unsurprising that the harvest of deer and the amount of hunter effort have declined and that deer numbers are low (Assessment at 1, 3, 13, 17), particularly after recent hard winters. However, the Assessment <u>wavers</u> on whether the reduced amount of winter habitat combined with some hard winters are the culprit or whether deer numbers are low enough that habitat availability is not a factor.

"Unit 3 deer are at <u>such low density that populations are not currently limited by the</u> <u>availability of winter habitat</u>. On the other hand, it is also possible that reductions in the amount of winter habitat exacerbated the effects of the severe winters experienced in Unit3 during 2006-2009 thereby causing deer numbers to decline further than they might have had the habitat remained intact." (Assessment at 1, emph. added).

"We believe the observed declines in both pellet-group densities and estimated hunter harvest reflect actual declines in deer numbers. Factors potentially contributing to the decline in the Unit 3 deer population and harvest in recent years include 3 consecutive deep snow winters, predation by wolves, and reductions in deer carrying capacity resulting from the harvest of productive old growth stands important for overwinter survival. Additionally, second growth forest stands entering stem exclusion further reduce carrying capacity for deer." (Assessment at 2, emph. added).

"If deer numbers are high, the reduction in preferred winter range caused by logging could result in food competition among the remaining deer. In addition, the more concentrated deer could also be more vulnerable to predation by wolves. As a practical matter, in Unit 3, deer numbers are now so low that the influence of habitat on deer numbers is likely to be of very little import for many years." (Assessment at 3, emph. added).

"Maintenance of old growth forest has the potential to keep carrying capacity of deer winter range high and perhaps to mitigate the effects of severe winters, especially when deer numbers are high. However, based on deer pellet data and hunter harvest, deer appear to be so far below carrying capacity in Unit 3 that habitat is unlikely to be limiting deer numbers at this time." (Assessment at 13, emph. added).

"Severe winter weather has perhaps the greatest impact on Unit 3 deer populations, often resulting in high levels of mortality. ... Past, present and anticipated future reductions in important deer winter range (productive old growth forest) remain a management issue as it affects the ability of the landscape to support deer. On this larger scale, the ability of the habitat in Unit 3 to support deer will decline, but deer numbers are so low in the unit that carrying capacity issues are unlikely to be a concern at the present time." (Assessment at 17, emph. added):

"Although we do not have quantitative measures of body condition for deer in Unit 3, hunters report that deer are in excellent condition with large reserves of body fat during the hunting season in October. At present this is the best measure we have for insight into the fitness of deer in Unit 3." (Assessment at 22).



The message here is clear that ADF&G believes deer numbers are low enough that winter habitat does not matter — at the moment. But these bald statements with no evidence to support them raise significant questions, particularly in view of the accompanying statements that can be contradictory. The first question is, how was it determined that the ratio of deer population to available winter habitat is such that there is a habitat surplus at the moment? A corollary to that is, did a shortage of winter habitat play a major role in the population crash in the first place? Also, which winter habitat characteristics have been most crucial for deer in the area during recent winters - those affecting mobility, thermal cover or food? The Assessment seems to be focused primarily on the food aspect. What winter mortality studies have been done on deer in the area, for example looking at bone marrow, and has it been possible to separate predation mortality from scavenging during these studies? And there are other questions along those lines. Regarding the last block quote above, fat deer in Fall are a good sign. Have deer commonly been equally fat in the Falls preceding the hard winters when the population declined? What has been the condition of surviving deer in March or April over the past decade, and what periodic trends have been found? Do the fat deer of this October perhaps indicate a rapid up-trend coming in the deer population? The harvest estimates (to the extent they can be an indicator) for all of Unit-3 and for Kupreanof and Mitkof Island all show a rapid up-tick since 2008 or 2009 which, even though the initial values are low. Over one year (2009 to 2010) the Mitkof Island harvest was up by a factor of 2.7x and the Kupreanof Island harvest was up 56%. For Unit-3 the harvest over the two years 2008 to 2010 was up 74%. In fact, at 656 deer the Unit-3 harvest for 2010 was 73% of the Board of Game's harvest objective of 900 deer. That seems to be a good recovery in progress.

It is also worth noting that Kupreanof and Mitkof Islands, where the proposed wolf eradication would occur, have acre-for-acre produced by far more deer harvest than the rest of Unit-3, except since the hard winters beginning in 2006/2007. The Petersburg area had the highest snowfalls in the region during that period. The acre-for-acre production of the two islands appears to be catching back up quickly. This is shown in our Figure 3, which applies data from Assessment Tables 6, 7 & 8. Looking at the plots of actual data in the figure, it seems that whenever the population is such that the combined harvest for Kupreanof and Mitkof reaches about 500 deer, something happens and the population declines for a number of years. Similarly, at three points the Unit-3 harvest curve approaches or somewhat exceeds 1000 deer, and then there is a decline. During the buildup of the harvest from 1982 to 1995 there were was only one insubstantial decline, but as population gets higher decline sets in. Of course a hard winter may be a trigger, but it appears from these plots that a carrying capacity limitation may be involved. Importantly for Unit-3, the limitation appears be right about the 900 level of the current harvest objective. This suggests that the objective should be lowered. And, as ADF&G recognizes in the Assessment, future reductions in carrying capacity are coming from the "succession debt"12 that has not yet been paid from past logging, and the Tonka timber sale on the Lindenberg Peninsula of Kupreanof (in the treatment area) is under contract and ready to be logged.

In summary, we believe winter habitat capability for deer is a limiting factor in the area, even if the deer population may have momentarily been too last year for it to matter, and that it has played a big role in creating the current situation of low population and low harvests.

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<sup>12</sup> A term coined by ADF&G research biologist Dave Person.



Deer Harvest in Unit 3 and on Kupreanof & Mitkof Islands (from ADF&G data in Tables 6, 7 & 8 of the 2012 Unit-3 iM Feasibility Analysis)

of Kupreanof + Mitkof is 22% of Unit-3.)

# Fig. 3



## V. The Habitat & Ecosystem Situation Is Such That Wolf IM Is not Feasible in Unit-3.

## A. Current model results for Unit-3 show that low original deer habitat capability and subsequent loss of old-growth habitat are the problem.

The deer habitat capability results in Fig. 2 from the 2008 deer modeling indicate that, in times of average winters (which is what the model predicts) or worse, Unit-3 is incapable of supporting a large harvest of deer. A large harvest may be possible in multi-year periods of mild weather if the browse recovers adequately from harder winters, and the peak years of harvest upon which the current harvest objective was set may be indicative of such a situation. However, since that time in the mid-1990s many then-recent clearcuts have reached the stem exclusion stage and additional clearcuts have been created that in the years ahead will also reach stem exclusion – a "succession debt" that will be paid in a further reduction of deer carrying capacity. Thus, the current deer population and harvest objectives adopted in 2000 are no longer valid, and it would be a mistake to base the adoption of wolf intensive management measures on trying to meet those objectives.

We believe realistic deer population and harvest objectives for Unit-3 need to be adopted by the Board based on consideration of all the factors involved, and ADF&G needs to reconsider its Assessment on the basis of those new objectives.

#### B. The use of Unit-4 in the "Feasibility Assessment" actually contra-indicates wolf IM.

The Assessment states that, "For comparison, on northeast Chichagof Island (part of Unit 4) where there has been extensive clear-cut logging and winters are even more severe than in Unit 3, but where wolves are absent, deer numbers have remained at much higher numbers than in Unit 3 and have recovered quickly following severe winters." (Assessment at 1, 9). The statement is not well-informed. Although other parts of Unit-4 have milder winter conditions and have recovered quickly, northeast Chichagof Island has not. Other documentation shows that the deer population on this most heavily affected part of Unit 4 was at carrying capacity at the time the heavy winters began occurring. (<u>Attachment-B</u>, ADF&G statements in Juneau Empire, 16 Sept 2007). The high deer population affected the condition of winter browse. If Unit 4 had had wolves, we posit that the ensuing lower deer population would have left the winter range in better condition. (See also <u>Attachment-C &</u> <u>Attachment-D</u>, ADF&G statements of August 2007). With that the case, the impact of hard winters in the following years may then have been less catastrophic and allowed the population to begin recovering. To date, the deer season on northeastern Chichagof Island in Unit 4 is still not back to normal and hunting restrictions remain in place.<sup>13</sup>

In sum, the point in the Assessment regarding Unit 4 and its absence of wolves provides no support for the proposed wolf intensive management in Unit-4, and if anything it contraindicates the proposal because, if present, wolves would have moderated the deer population, leaving the winter range in better condition.

#### C. The Assessment over-simplified the matter of severe winters.

It is the years with extreme winters that matter most and how closely they follow one another, not the long-term average climate statistics on snowfall and temperature. The likelihood of future severe winters was not accurately presented.

<sup>&</sup>lt;sup>15</sup> The statements on p.2 about Unit-4 bag limits and ability to take either sex are not true for northeast Chichagof.



The Assessment attributes the occurrence of severe winters to cycles of the Pacific Decadal Oscillation (PDO). (Assessment at 17, 22). The PDO has a 20 to 30 year cycle between warm and cold phases, of which we are presently perhaps half way through a cold phase. (NOAA).<sup>14</sup> However, in reporting this the Assessment overlooks other climate factors that interact with the PDO and which operate on different time scales. These include El Niño/Southern Oscillation (ENSO),<sup>15</sup> and the interaction of the Arctic Oscillation (AO) and the Madden-Julian Oscillation (MJO).<sup>16</sup> An interaction of these oscillations, and predominantly the latter three which operate on shorter time scales that the PDO results, as one example, in what is called the Pineapple Express, which brings high moisture to the coasts of the Pacific Northwest and Gulf of Alaska.<sup>17</sup> All it takes is such moisture encountering a body of cold air from the Arctic or interior of the continent to make a lot of snow in our region.

Frontal systems (apart from those of the Pineapple Express) also make snow. Climate models indicate that generally higher moisture and precipitation can be expected along the west coast and Gulf of Alaska as a consequence of warming caused by on-going climate change. (<u>Attachment-E</u>, Salathe 2006). Again, all it takes is moist air encountering a body of cold continental or Arctic air to create extreme snowfall. As also shown by recent very cold or deep snow winters in the US east coast, the UK and Europe, very problematic or recordsetting winter conditions should continue to be expected across the upper northern hemisphere despite global warming (Seager et al. 2010; Guan et al. 2010; Boos 2011). Annual snowfall records have been set throughout Alaska, up through the winter of 2011/2012. (<u>Attachments F & G</u>, Ak Dispatch 2012(a,b).<sup>18</sup> After snow depth records were set in Southeast Alaska (and Petersburg in particular) in 2006/2007, the following winter set the second highest records, including Petersburg. (<u>Attachment H</u>, KFSK 2008).<sup>19</sup>

We believe it is likely that global warming effects on the Pacific Ocean, leading to higher atmospheric moisture commonly reaching Southeast Alaska, is causing more snowfall (and higher rainfall in the non-snow months) in contemporary years than the PDO alone can account for. Thus, we challenge the conclusion in the Assessment's Appendix B section I.B.3 (Assessment at 23) that "[t]here is no evidence that climate change will result in lower deer numbers in this portion of Southeast Alaska." To the contrary, we believe climate change is already playing a role in keeping deer numbers low in Unit-3 and the islands is question here, and that it will continue to do so even though the deer population will increase for a time during periods of mild years. We expect these changes will not coincide with the PDO cycle, although the PDO will have an influence on the overall weather at all times.

<sup>18</sup> (1) Alaska Dispatch, 2012a. Snow records near-bursting across Alaska as accumulation mounts. (Concerning Anchorage, Barrow, Kodiak, Cordova). 5 Mar 2012. [Attachment -5.]

http://www.alaskadispatch.com/article/snow-records-near-bursting-across-alaska-accumulation-mounts. (2) 2012b. Anchorage, Alaska breaks seasonal snowfall record. 7 Apr 2012. [Attachment-6.] http://www.alaskadispatch.com/erticle/anchorage-alaska-breaks-seasonal-snowfall-record.

<sup>&</sup>lt;sup>14</sup> NOAA (undated (a)). Pacific Decadal Oscillation (PDO). On the NOAA NW Fisheries Science website, http://www.nwisc.poaa.gov/rescarch/divisions/fed/oeip/ca-pdo.cfm.

<sup>&</sup>lt;sup>15</sup> NOAA (undated (b)). El Niño/Southern Oscillation (ENSO). NOAA Earth System Research Laboratory website. <u>http://www.esrl.noaa.gov/psd/enso/</u>

<sup>&</sup>lt;sup>16</sup> Wikipedia (2012). Madden-Julian Oscillation (MJO). http://cn.wikipedia.org/wiki/Madden-Julian\_oscillation

<sup>&</sup>lt;sup>17</sup> NOAA (2005). NOAA catches a culprit behind western storms. NOAA Magazine, 12 Jan 2005. http://www.noaanews.noaa.gov/stories2005/s2367.htm

<sup>&</sup>lt;sup>19</sup> KFSK, 2008. Snowpack 2nd-Highest on Record in Southeast Alaska. 17 Apr 2008. [Attachment-7.]



## VI. Facts in the "Feasibility Assessment" Show That Wolf IM Is not Feasible in Unit-3.

#### A. The Intensive management project is not feasible because of cost.

The Assessment considers only the technical feasibility of reducing the number of wolves in part of Unit-3, but not whether the project is economically feasible. The Assessment provides indicators of the proposed project's cost, but they are scattered throughout the report. Pulling those cost estimates together, the project will cost <u>more than</u> the range of \$396,000 to \$456,000,<sup>20</sup> with an increase to both ends of that range from providing food and fuel to the contract trappers. In addition, we note that the similar Feasibility Assessment for Unit-1A (Unit-1A Assessment at 18) estimates an additional \$20,000 for administrative costs. If there is such a cost for the Unit-3 project too, the cost rises to \$416,000 to \$476,000.

These costs leave out one very expensive item:

"... it is important that we have some understanding of how many wolves there are in both the removal and experimental areas prior to embarking on wolf removal. It is currently only possible to develop crude population estimates for Unit 3 wolves based on average home range and pack sizes derived from extensive radio-telemetry studies conducted on Prince of Whales Island during the 1990s (Person 2001). Wolf numbers would have to be monitored for the life of the IM action to help evaluate the failure or success of the program to meet the specified objectives. ... <u>Determining wolf numbers and monitoring them over a period of several years would only be feasible through the marking of animals with radio collars</u>." (Assessment at 5, emph. added).

Regardless of which of the above costs becomes reality, this large expense could be for naught or nearly so. The project has only a "moderate" likelihood of success (Assessment at 19, 22), and "severe winter weather could or confound recovery of deer, and if deer numbers are low enough, predation on deer fawns by black bears could also prevent deer recovery. Severe weather can not be effectively mitigated." (Assessment at 13).

The Assessment is incomplete because it does not estimate how much the deer population and the deer harvest would be increased as a result of the program. However, it seems that those increases will be quite small. If each wolf takes 26 deer over a year (Assessment at 24) and if the intended 50 wolves are eliminated (Assessment at 25), the population would increase by about 1300 deer. Applying the 900:15,000 ratio of the current deer harvest to deer population objectives, this could potentially result in as many as 78 additional deer harvested per year, during the short life of the project. However, because the treatment area is large, six WAAs totaling about 650 square miles, it should be assumed that all of the potentially additional harvestable deer won't be accessible or locatable.

If we therefore assume that the harvest will be increase by 50 deer yearly,<sup>21</sup> the cost per deer would range from \$8,000 to \$9,000, <u>each</u>. If the project is not wholly successful, the cost per deer will be much higher. And as mentioned, significant costs have been left out of the estimate in the Assessment. Finally, when the project eventually ceases, wolves will soon find their way back into the area since the area is not a closed system, and even the project's costly benefit will not continue to pay off.

<sup>&</sup>lt;sup>20</sup> This includes contracts for the trappers, DNA population estimate work, and \$20,000 in administrative costs.

<sup>&</sup>lt;sup>21</sup> Or as the Assessment put it, the project "may ... allow for a few deer to be reallocated from wolf predation to hunter harvest ..." (Assessment at 13).



We believe the proposed intensive management project is a bad gamble, and no investment at all. The project is not economically feasible or a wise use of State fiscal or staff resources. The Assessment does not address at all the feasibility of using state funds and staff resources for a project with such exorbitant cost per unit (each deer) of benefit.

## B. Key questions in the application form for the Feasibility Assessment were dodged or inaccurately answered.

## 1. ADF&G's response on the biological rationale for the IM objectives.

Section I.B.2 of the Feasibility form (Assessment at 8) asks the question: "Briefly review biological rationale of IM objectives ... or other objectives for prey species." No rationale is presented for the IM objectives. First, the Board of Game's deer population and harvest objectives are mentioned, but with an acknowledgement of one of the reasons that the objectives are outdated. Namely, that the "objectives were set based on peak harvest years with mild winters." In other words, the objectives exist, but they no longer serve as a reasonable rationale for IM objectives, or at least must be questioned.

Next, the response discusses methods for estimating deer population. But technical methods are not a rationale for the IM program, and are merely something that would have to be incorporated in the program. The third response recites factors that influence deer populations, but these are not objectives either. The final response focuses on facts about severe winters, and speculatively and inaccurately makes statements about Unit-4 winters.

None of these responses provide the information the form requested. What is the rationale for IM or other prey objectives?

## ADF&G's response on how data from the project's control area will be collected and evaluated is inadequately answered.

Section I.C.3 of the Feasibility form concerns the "Recommended Management Strategy" (heading, Assessment at 9) and asks, "Provide a brief explanation for collecting or evaluating data from untreated areas for comparison to areas treated under the management program as evidence in a scientific study design ..." (Assessment at 11). More succinctly, this asks how data from the project's control area will collected and evaluated, particularly in a strategic sense. Three responses were given, which answer inadequately or state the use of techniques that are inadequate.

The first response is that pellet transects will be used, and the response notes that these are "not sensitive to anything short of broad and marked changes in deer abundance." These will be supplemented with deer hunt reports, but these are not highly reliable either. The next response is that ADF&G will recommend "that deer hunting remain open for bucks-only within both the treatment and comparison areas," and that data from deer harvest report cards will be used. This, too, fails to show how adequate population data will be obtained and evaluated. The final response is that "surveys of deer in untreated alpine areas" on three large islands "will be used as an indicator of deer presence and relative abundance." It is not stated whether these will be aerial surveys (as noted elsewhere in the Assessment) or on foot. Two of the islands are Mitkof and Kuiu, which are outside of the project's designated "control area." (See "comparison area" in Assessment Fig. 2). Moreover, Kuiu Island is far from the treatment area, physiographically and ecologically different, and subject to different hunting pressure.

We conclude that strategically or otherwise, the control built into the proposed IM project is inadequate to accurately gauge the project's success or failure or to what degree.

## The response regarding "potential to reduce moderate hunting conflicts" takes undue credit.

Section II.D. of the Feasibility form asks whether the "potential to reduce or moderate hunting conflicts" is low, moderate or high. The answer is "high," but should have been "not applicable" because few if any conflicts exist or are anticipated from the IM project.

## C. Technical feasibility of the intensive management project has not been demonstrated, nor is the proposal legally actionable by the Board of Game.

The proposed intensive management project is fraught with a cascade of uncertainties, as well as a dearth of needed information.

## 1. Uncertainties in the proposal, and lack of evidence supporting feasibility:

"There remains some uncertainty about whether or not 1-2 hired trappers can reduce wolf numbers sufficiently, and maintain their numbers at low enough levels long enough to achieve the desired increase in deer numbers." (Assessment at 4).

"... the department believes there is at least a moderate likelihood that wolf numbers may be reduced given the experience these trappers have. However, whether they can consistently maintain the wolf population at or below 55% of pretreatment levels long enough to measurably improve deer survival and harvest remains uncertain." (Assessment at 19).

"Our assessment of a "moderate" potential of increasing the deer harvest through wolf removal stems from our uncertainty about whether wolf numbers can be effectively reduced to the point where deer will respond. In addition, we don't know the importance of black bear predation on deer fawns, or the impacts of severe winter weather or habitat loss on these deer populations." (Assessment at 3).

The form asks: "Potential to mitigate biological limitations in proposed IM area ... Low/Moderate/High." The answer is: "Low: Continued or periodically severe winter weather could negate or confound recovery of deer, and if deer numbers are low enough, predation on deer fawns by black bears could also prevent deer recovery. Severe weather can not be effectively mitigated." (Assessment at 13).

"Severe winter weather has the potential to confound or prevent recovery of the deer population, even if wolves are successfully reduced in the treatment area." (Assessment at 22).

"At this point, we are uncertain whether or not the DNA-based approach to estimating deer numbers will work in areas such as Unit 3, where deer occur at low density. Data analysis is still ongoing to determine the utility of this method in measuring deer population size, <u>which is necessary</u> to measure changes should we implement wolf removal through IM." (Assessment at 11, emph. added). It this determination should have been made this first, before preparing this Feasibility Assessment. Feasibility cannot be assessed yet.

The form asks, "Evidence of inherent habitat limitation (e.g., nutrient deficiency) manifested in low reproduction, body weight, or survival? Yes/No." The answer is: " Unknown. We do not have any information on deer condition, pregnancy rates, fecundity, recruitment, mortality or survival. However, we have no evidence indicating that deer are nutritionally stressed in this area." (Assessment at 22). But the absence of evidence is not a proof, no statement was made about what efforts, if any, were made and how extensive they were to find such evidence. Also, no information was provided concerning evidence if any for the opposite possibility, that deer nutrition has been adequate, particularly over harsh winters.



The form asks, "Is effect of predation by individual predator species known for the ungulate species of interest in the proposed area? Yes/No[by predator species]." The answer is: "To some extent. While little area-specific information is available regarding predation on deer in Unit 3, research conducted on deer, wolves, and black bears in neighboring Unit2 (Prince of Wales Island) provides useful information on the predator/prey relationship of these species in a similar environment." (Assessment at 23-24).

It is to ADF&G's credit that uncertainties have been noted; however, a significant flaw of the Assessment is that it has not consolidated this information to "assess" the merit of the proposed project. It is clear from these statements, which cover a range of key topics, that there is cloud of uncertainty over this proposal. The uncertainties are fundamental to the project — concerning: basic factors of ungulate biology and ecosystem function; technical feasibility of the intensive management method that would be used; and a crucial aspect of weather and climate.

For the Board of Game to approve an intensive management program, the board must "determine]] that ... enhancement of abundance or productivity of the big game prey population is feasibly achievable utilizing recognized and prudent active management techniques." (AS 16.05.255(e)). "Feasibility" has not been demonstrated with the scientific information – and actually there is a lack of some important scientific information – that ADF&G has presented, and also in view of the scientific and other information that we have presented in these comments.

In addition, the proposed program fails the statute's requirement of being "prudent." The program far too expensive per unit of potential benefit (i.e. per additional surplus deer that may be subject to harvest) even in best case, as we have demonstrated. Any of the several uncertainties that break the wrong way, and any surplus deer that hunters are unable to access will drive the costs higher and the realized benefits lower.

#### VIII. Conclusions

For the reasons we have expressed in the above discussions we recommend that the Board of Game find that the proposed intensive management of wolves in Unit-3 is unwarranted, not supported by the available scientific and other evidence, and not prudent.

Further, we request that the Board of Game direct ADF&G to recommend revised population and harvest objectives for deer in Unit-3 at the earliest possible date. It is obvious from the content of the department's Assessment and our comments that the current objectives are outdated and no longer valid for guiding the management of deer and their predators in Unit-3.

Finally, we request the Board of Game to do everything it can within its powers to pressure ADF&G (and more broadly the State) to strongly resist further loss of deer habitat in Unit-3 due to logging. This is in the best long-term interest of good hunting. We are particularly concerned about the State's "one voice" policy by which comments on timber projects are funneled through the Department of Natural Resources and key information gets filtered out in the process. We ask the board to compare the content of last month's comments on the Forest Service's Big Thorne timber sale DEIS by the State of Alaska to those of the US Fish & Wildlife Service and the joint comments by most of the organizations that are submitting these comments to you today. While the State made a few good points, its comments in comparison clearly fall far short. As well shown in our DEIS comments, ADF&G did have much to offer that didn't make it through the "one voice" process. (See section IV.A of those comments).



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Unit-3 - Joint comments on Deer & Wolf IM "Feasibility Assessment." 28 Dec 2012

Thank you for the opportunity to comment.

### Submitting organizations (verifiable signatures upon request):

#### Greater Southeast Alaska Conservation Community

Paul Olson, Board President 606 Mertill St. Sitka, AK 99835 fishdefender@gmail.com 907-738-2400

### Alaska Wildlife Alliance

Tina M. Brown 19400 Beardsley Way Juneau, AK 99801 tmbrown3@aol.com 907-209-4221 (c)

#### **Tongass Conservation Society**

Carol Cairnes, Board President P.O. Box 23377 Ketchikan, AK 99901 ccairnes@gmail.com 907 225-3275

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## Attachment - B

September 16, 2007

## Down but not out: Numbers fall but deer hunting season proceeds

By RILEY WOODFORD FOR THE JUNEAU EMPIRE

Doe season opens this weekend, and wildlife biologists are keeping anespecially sharp eye on deer this fall.

Cold weather and big snow storms last November and March took a toll on deer in parts of Southeast Alaska - especially northern Southeast. This summer, wildlife managers assessed the situation, and before buck season opened in August, they talked about the possible need to curtail hunting this season.

"We know we had a fair bit of winter mortality in some areas," said biologist Neil Barten of the Alaska Department of Fish and Game. "If we were going to change some aspect of the season, it would be to protect the does."

The mainland hunt is always bucks only, but beginning this weekend, "antlerless deer" (does and young bucks) may be taken as well as bucks on Douglas Island, and on Admiralty, Baranof and Chichagof Islands, commonly referred to as the ABC islands. These are the areas most popular with Juneau hunters.

Barten and his colleagues scrutinized the data on last winter's deer mortality, compared notes and weighed options.

"Do we need to sacrifice one year of hunting to allow the herd to rebound for better harvest for upcoming years? Or can we allow the season to continue as is and be confident the deer population will be okay?" Barten said. "Just one bad winter after a number of easy ones, we think the population can rebound."

The situation is not consistent across the region. Parts of Southeast saw much less snow than others. The condition of the habitat, and the numbers of predators such as bears and wolves, also varies tremendously. Deer on Admiralty Island, for example, live in a significantly different system than deer on Prince of Wales.

One bad winter doesn't mean the population has dropped to unsustainable levels. Looking at northern Southeast specifically, Barten said with the relative lack of predators such as wolves, deer populations can rebound quickly. Given a mild winter this coming season, deer should come back in a few years. "It's consecutive, back-to-back hard winters that are hard on deer, and that's the situation you really have to look at as managers."

"We'll be keeping an eye on the fall and early winter weather conditions, and if we get a lot of snow early on, we'll reconvene and discuss the need to curb the harvest to prevent overharvest of the population."

Barten said he did not think it was necessary to pre-emptively close the season or restrict the harvest at this time.

"I don't think enough does are harvested during the first few weeks of doe season to make that a drop dead date to curtail the hunt early on," he said. "The deer are really scattered in September throughout 1,500 feet of forest. There are still leaves on the shrubs and the deer are hard to find. But in late October, once the deer start moving down in elevation and become more active during the rut, they're more vulnerable to hunters. People can call them



in, and that's when the harvest really starts to have an impact. That's when you have to worry about the does, if it's an issue."

Possible action could include limiting the doe harvest or closing it entirely on Douglas Island, and on northern Admiralty and Chichagof Islands.

#### Carrying Capacity: Deer on the Edge

No doubt a lot of deer died last winter and spring in northern Southeast, but there were a lot of deer to begin with.

"The last three or four years we were carrying a lot of deer on the range," Barten said. "The numbers were so high, I know it looks like a real drastic change - they were near the carrying capacity of the range in a lot of places. It's not really where you want to be with populations, because then they're using all the available forage and they're more vulnerable to major dieoffs from severe weather."

When deer are at or over the carrying capacity of the range, they can seriously impact their habitat. Dave Person, a Ketchikan-based state wildlife biologist, said there is an important balance between moderate and over-browsing.

"When a population is over carrying capacity, they can over browse and damage their winter forage," Person said. "It's like pruning. You get more growth with a little cutting back, but too much and you damage the plant and its ability to produce the following year."

Barten said deer density is kept relatively low on Douglas Island by hunters, providing a more resilient deer population. "With this lower density, we expect the deer to be more resistant to a severe winter because they're not competing with each other so severely for the available forage."

Person said that's quite evident in southern Southeast, where there are fewer deer per square mile than on the ABC islands. "The deer on Prince of Wales Island are fatter and bigger; they go into these winters in such good condition," he said. "They have a much greater potential to survive and produce offspring."

If deer are pushing the carrying capacity of the habitat and compromising the vegetation, then a die-off one winter may not be alarming to wildlife managers.

"If the objective is a smaller population less likely to hammer the range, then a smaller population is not necessarily bad," Person said.

#### Admiralty, Baranof and Chichagof Islands

Biologist Phil Mooney manages deer on the ABC islands. More deer are harvested in this area, Game Management Unit 4, than any other part of Southeast. The annual harvest ranges from 8,000 to 9,000 deer, but last year it was even higher.

"Last year it probably jumped up to about 12,000," Mooney said. Higher-than-average numbers of deer were harvested off the beaches in November because of the heavy snowfall and cold weather.

The March storms and the persistence of snow into late spring would almost certainly have doomed those deer that were already struggling in November, Mooney said.

By all indications, deer numbers currently are down in Unit 4. He estimates that 50 to 60 percent of the fawns died over the winter.

Mooney said the pellet transect data also indicates there are fewer deer, as much as a 30 to 35 percent decrease in areas of west Chichagof.

Some areas were harder hit than others. "North Chichagof, from Lisianski Inlet to west Port Frederick, was really hit by the March storms," Mooney said, "and on down to Ushk Bay.



There was 122 inches of snow on the beach in Tenakee Inlet in April. The south end of Baranof (Island) got hit hard as well, with record amounts of snowfall recorded on the docks at Port Alexander, Little Port Walter all the way up to Baranof Warm Springs."

Mooney said all things considered, he doesn't think the outlook is gloomy. The population was likely at the carrying capacity of the habitat, he said, based on evidence of heavy browsing occurring since 2004.

Mild winters in past years contributed to that, and also the way people hunt.

Mooney estimates from hunter surveys and contact with hunters that about 85 percent of Unit 4 hunts target the beach and coast fringe. "Some folks do alpine hunts, but the bulk of the harvest happens close to the shoreline, that's why a lot of the locals wait until November. So a lot of the interior parts of the islands don't get hunted nearly as hard as the shoreline."

Mild winters in past years meant that deer were able to spend the winter at higher elevations and were not restricted to sea-level habitat, as they are in deep snow years. Mooney said a few years ago, when deer numbers were very high and winters were mild, he had hunters coming in and asking, "Where are the deer?"

"They were at 1,000 feet," he said. "Most of the hunters were not going up there to hunt, so we had a lower harvest."

Mooney saw that plants at higher elevation showed signs of heavy browsing. Deer were targeting not only good, palatable species like blueberry, but less digestible species like rusty menzezies (also known as copper bush) which is not a good sign.

"When you have larger populations, you push deer into marginal habitat," he said. "Then when winter comes, those deer in the fringe areas have a more difficult time surviving. They were really pushing the carrying capacity of the range."

If concerned hunters want to take an active stand, Mooney suggests they don't shoot does.

"If you kill a doe after November 15 - she's probably pregnant," he said. "Shoot bucks and fawns. Don't shoot does. That can help."

Mooney is gathering more information - he's asking goat hunters about the deer they see at high elevations, and he's talking with pilots and air taxi operators about their observations. He's talked to early season hunters who tell him they are seeing lots of deer.

"The alpine bucks that I've seen come in look great, there's more than an inch of fat on the rumps," he said.

"Weather related die-offs are common in the wildlife world," Mooney said. "Animal populations build up in good years, and then Mother Nature comes in and levels the playing field. One bad year is not as significant as a few, back to back. That's what we'll be watching for."

• Riley Woodford is the editor of Alaska Fish and Wildlife News and produces the "Sounds Wild" radio program for the Alaska Department of Fish and Game.

(An <u>abbreviated</u> version of this article appeared in ADF&G's newsletter in October 2007.)

## Photos:

(Phil Mooney / ADF&G): On the edge: A weakened deer comes to shore in Tenakee Inlet last spring.

(LaVern Beier / ADF&G): Scrounging for food: A weakened fawn eats kelp on a beach in Seymour Canal last November.

## Deer Stressed by Harsh Winter, Alaska Department of Fish and Game

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Alaska Fish & Wildlife News, August 2007 http://www.adfg.alaska.gov/index.cfm?adfg=wildlifenews.view\_article&articles\_id=308&issue\_id=53

Alaska Department of Fish and Game

Attachment - C

ADF&G Home » News & Events » Alaska Fish and Wildlife News



## Deer Stressed by Harsh Winter but Hunting Season Still Opens

By Patti Harper

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During winter, deer rely on stored fat reserves, and subsist on a meager winter diet of evergreen forbs (leaves) and woody browse such as blueberry, yellow cedar and hemlock. Lichens on the trees are eaten too. However, it is critical they find fresh food in spring. In this rough year of deep snow and late snowmelt, it appears reserves ran out for many of them before plents emerged from the snow and graw new leaves. As deer hunting season opens in Southeast Alaska, after last winter's devastating snow and cold weather, hunters are uncertain about what to expect. Those who have been outdoors regularly this summer, such as Sitka hunter Erin Kitka, have seen disturbing signs where forest meets beach – fur and bones – the remains of deer that starved.

"It seemed there was a lot more winterkill this year than last year," Kitka said. "There's one on every beach, just right in the trees."

Phil Mooney, area biologist with the Alaska Department of Fish and Game, said he's been getting a lot of questions from concerned hunters. It's his responsibility to recommend whether the population is strong enough to support a hunt. Mooney said he appreciates observations shared by Kitka and others, which, combined with his own field work, help him figure out what is happening with deer and other animals hidden in the rainforest.

He's cautiously optimistic that the deer populations on what are called the A-B-C islands – Admiralty, Baranof, and Chichagof – remain in generally good condition. "Although we did experience some winter-kill in most of the unit, the areas of heavier losses were generally isolated

to narrow fiord bays, north-facing slopes, and open-terraced muskegs that experienced deep and persistent snow into early May," he said. There are no changes in bag limit or season anticipated, though he said he will be watching the situation as the season progresses.

That's good news for hunters and their families. Venison is an important food in the region, and has special importance to the native Tlingit people. "It's something that a lot of people have grown up with and used as a staple of their diet," said Woody Widmark, tribal chairman for Sitka Tribe of Alaska. Deer is also one of the customary and traditional foods that are prepared for memorial potlatch ceremonies, he said.

The game management unit that includes Sitka (Unit 4) draws about half of the hunting effort and accounts for most of the deer harvest in Southeast Alaska. In recent years, total annual harvest in Unit 4 has been 8,000 to 9,000 deer. Mooney said that while the harvest tally isn't final, it appears that several thousand more deer than usual may have been taken in 2006.

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## Deer Stressed by Harsh Winter, Alaska Department of Fish and Game

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Mooney remembers seeing boats heavy with venison in the Sitka harbor back in November. He knew that meant deer were being forced by snow onto beaches, where they were easy prey. But no one knew then just how hard the winter would be or how long the snow would last.

"It was a very exceptional high snowfall year," sald Aaron Jacobs, a meteorologist with the National Weather Service in Juneau. "It broke a lot of records." The best weather statistics in the region are gathered at the Juneau airport, and snowfall there reached an all-time recorded high, a total of 197.8 Inches for the winter. Snowfall varied around the region; Little Port Walter on the southern tip of Baranof Island saw a record 275.3 inches of snow. But, in general, the Juneau numbers reflect the unusual year around the region.

Jacobs said the record snowfall doesn't tell the whole story. Both snowfall and temperature during two months, November and March, affected snow depth on the ground. On the front end of winter, November saw 64.1 Inches of snow – 52 inches above normal. And while November's normal average temperature hovers around freezing, temperatures in November 2006 averaged just 19 degrees, 13.9 degrees below normal. Average temperatures were higher than normal in December (34.1 degrees Fahrenheit) and January (31.0



Hunters should hunters target bucks and fawns, rather than does, especially after the breeding season in mid-November, to help protect the reproductive capacity of the population.

degrees) by about 5 degrees, but spring was cold. While usually above freezing, the average monthly temperature in March was just 28.3 degrees. Precipitation was high, and precipitation that might normally fall as rain fell heavily as snow. It kept falling and falling, nearly 63 inches of it. Snow built higher and higher on the ground. Jacobs says that at his home he measured a snow depth of 55 inches. That's higher than a deer's shoulder.

Some of the snow persisted on the ground into April and May. That late-season snow probably caused much of the winterkill seen on beaches, Mooney said. During winter, deer rely on stored fat reserves. They are used to a meager winter diet of evergreen forbs (leaves) and woody browse such as blueberry, yellow cedar and hemlock. Lichens on the trees are eaten too. However, it is critical they find fresh food in spring. In this rough year of deep snow and late snowmelt, it appears reserves ran out for many of them before plants emerged from the snow and grew new leaves.

Mooney has been watching the deer situation as closely as possible. He surveyed deer periodically through the winter along a specific route, rating their condition into one of seven classifications. Winter mortality surveys conducted in the spring at 28 sites assessed the extent of winterkill deer on or near beaches. After snowmelt, department employees conducted deer pellet surveys along 18 established transect lines through the forest in different parts of the unit; following most of the transects involves hiking from sea level straight to a high point on the island while counting deer pellets. All of these surveys provide data that can be compared year to year.



A high tide takes a carcass off the beach - the fate of many Southeast deer last winter. Photos by Phil Mooney

It's clear the deer population took a big hit, but it was large and healthy to start with and so probably survived the blow, Mooney said. Deer populations are highly productive and can rebound quickly from a hard year.

Mooney is currently assessing how well the deer reproduced this year and how fawns are doing. He says he appreciates information others can share with him from their own field observations.

Though he's optimistic the population remains in good condition, overall, he asks that hunters target bucks and fawns, rather than does, especially after the breeding season in mid-November, to help protect the population's reproductive capacity. He may have additional

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recommendations after winter weather begins. "A back-to-back harsh winter in the unit may precipitate changes to the following season and/or bag limit if the impacts are significant to deer," he said.

Patti Harper Is a former news reporter and freelance writer who works as an editor and writer with the Alaska Department of Fish and Game in Juneau.

## Deer: Southern Southeast Alaska, Alaska Department of Fish and Game

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Alaska Fish & Wildlife News, October 2007 http://www.adfg.alaska.gov/index.cfm?adfg=wildlifenews.view\_article&articles\_id=321&issue\_id=55



Attachment - D

ADF&G Home » News & Events » Alaska Fish and Wildlife News



## Deer: Southern Southeast Alaska is a Different Story

By Riley Woodford



Deer like this one on northern Chichagof Island faced snow nine feet deep above the high tide line in March and April, Deer fared much better in Southern Southeast Alaska for several reasons. Riley Woodford photo.

Predators and weather make the southern part of the Alaska Panhandle a very different place for black-tailed deer than the northern half of the region.

Although deer were hit hard on some mainland areas and on the very northern portion of Prince of Wales Island, overall the effect of the winter was relatively mild.

"It's very different here," said Ketchikan-based Area Biologist Boyd Porter. "We're looking at the mild effect from a moderately severe winter."

Snow depth and persistence was less severe. Another factor played a big role in southern Southeast: there are fewer deer. Deer populations in Southern Southeast simply don't get as high as they do on the ABC Islands - Admiralty, Baranof and Chichagof Islands.

"The absence the main predators - wolves and black bears - makes it a totally different system," Porter said. Key predators such as wolves on Prince of Wales Island (commonly referred to as POW) keep the deer

density consistently lower than on the ABC islands.

"So the deer population is buffered a little bit against hard winters on POW," Porter said. "Deer numbers don't fluctuate as much. The deer there (on the ABC islands) are at or near the carrying capacity for that range, whereas on POW we're well below it."

"We're at a 12 to 14 year high for deer right now," he added. "Although that doesn't get anywhere near the high deer density numbers of Unit 4 (the ABC islands)."

Hunters harvest 8,000 to 9,000 deer every year from the ABC Islands, and between 2,000 and 3,000 each year from southern Southeest. 350 to 450 deer are harvested each year in the Juneau area, Unit 1C, and the vast majority of those are taken on Douglas Island.



Hunters harvest 8,000 to 9,000 deer every year from the ABC Islands, and between 2,000 and 3,000 each year from southern Southeast. 350

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## Deer: Southern Southeast Alaska, Alaska Department of Fish and Game



The Southeast mainland is simply not a good deer producer compared to 450 deer are harvested each year in the Juneau area.

"Harsh winters are the limiting factor on the mainland," Porter said. "Deeper, more persistent snow like we had last year really sets the bar. The mainland is a weather driven system. It doesn't matter how much food you have in the summer, the bottleneck is really peak winter habitat conditions." The amount of food available to deer and access to those resources determines carrying capacity, or how many deer the range can sustain.

"What really buffered deer in many areas of southern Southeast last winter was they had enough breaks between hard spells that deer could move around between patches," Porter said. "That's very different from deer being confined to the same area for three or four months."

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GEOPHYSICAL RESEARCH LETTERS, VOL. 33, L19820, doi:10.1029/2006GL026882, 2006



## Influences of a shift in North Pacific storm tracks on western North American precipitation under global warming

#### Eric P. Salathé Jr.1

Received 11 May 2006; revised 23 August 2006; accepted 12 September 2006; published 13 October 2006.

[1] Recent global climate model simulations for the IPCC Fourth Assessment report show a realistic North Pacific storm track and Aleutian Low for present-day climate conditions. Under climate change, the storm track and Aleutian Low move northward and intensify. These changes shift precipitation northward along the Pacific coast of North America. In particular, precipitation is intensified over the Pacific Northwest. Results from a statistical downscaling model suggest that precipitation may become more intense both due to the increased frequency of large-scale storms and due to changes in the interaction of these storms with the local terrain. Citation: Salathé, E. P., Jr. (2006), Influences of a shift in North Pacific storm tracks on western North American precipitation under global warming, Geophys. Res. Lett., 33, L19820, doi:10.1029/2006GL026882.

#### 1. Introduction

[2] In a recent study, Yin [2005] describes an intensification and poleward shift of midlatitude storm tracks associated with climate change as simulated in several climate models. This shift, and associated dynamical changes, has profound implications for the climate of the Western United States, which we present in this paper. The most obvious is a northward shift in precipitation due to storms arriving from the North Pacific. A second is the change in the mean pressure field off the coast, which controls a variety of climate impacts including the orographic enhancement of precipitation and coastal ocean processes. Variations of this Aleutian Low and the associated response of the climate in the North Pacific have been extensively studied [Hartmann and Wendler, 2005; Overland et al., 1999; Raible et al., 2005]. Evidence is presented elsewhere for more intense and poleward cyclones in the 20th Century [Fyfe, 2003; McCabe et al., 2001] and in scenarios for the 21st Century [Kushner et al., 2001]. In a modeling study, Raible and Blender [2004] found that ENSO-like tropical variability in climate simulations could produce changes in the midlatitude storm tracks. Fu et al. [2006] recently showed how satellite-observed mid-tropospheric warming from 1979-2005 implies a poleward shift in the mid-latitude jet stream.

[3] Changes in precipitation for the western U.S. under future climate scenarios are difficult to characterize. 20th Century data for the Pacific Northwest, for example, show considerable variability in space and time [Mote, 2003]. Climate model simulations under future emissions scenarios

Copyright 2006 by the American Geophysical Union. 0094-8276/06/2006GL026882\$05.00 for the 21st Century, however, show an aggregate trend for moderate increases in winter precipitation [Mote et al., 2005]. Even such a moderate increase would alter the frequency of extreme events, with important impacts to the region. This paper examines how changes in the Pacific storm track might alter precipitation over western North America in climate change scenarios. We examine the ability of several climate models to represent the presentday storm track in the Pacific in comparison to reanalysis data. We then examine how these models simulate changes in the storm track for future climate scenarios. Finally, we consider the effect of these changes on the local precipitation patterns in the Pacific Northwest.

#### 2. Climate Simulations

[4] For this study, a selection of simulations performed for the International Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) was analyzed. Simulation data are available from the IPCC Data Archive at Lawrence Livermore National Laboratory (< http://www-pcmdi.llnl. gov/ipcc/about ipcc.php>). Here we consider as a baseline climate the 1950-2000 simulations for historic conditions. For future climate we consider the 2050-2100 simulations for the IPCC Special Report on Emissions Scenarios [Nakicenovic et al., 2000] A2 emissions scenario (SRES A2). In particular, we shall use the 10 models: HADCM3, ECHAM5, CCSM3, PCM1, CNRM-CM3, CSIRO-MK3 MIROC-3.2, IPSL-CM4, CGCM-3.1, and GISS-ER, For validation purposes, the climate models will be compared to the NCAR-NCEP Reanalysis Project data [Kalnay et al., 1996]. In a comparison of storm tracks represented by various reanalysis projects, Hodges [2003] has shown the NCAR-NCEP Reanalysis produces similar storm tracks in the lower troposphere to other projects.

#### 3. Precipitation

[5] As can be verified from high-frequency data, the mean precipitation pattern for the months November-December-January (NDJ) closely conforms to the storm track as defined by baroclinic activity. Figure 1a shows the 1950-2000 mean NDJ precipitation from NCAR-NCEP Reanalysis; the thick line represents the maximum variance in the 500-hPa height field, indicating the location of the storm track. Peak rainfall occurs along the southern margin of the storm track. Thus, the shift in the storm track presented by *Yin* [2005] naturally suggests a similar shift in the band of intense precipitation over the North Pacific. In the following, this intense precipitation and its behavior under climate change is examined.

[6] The reanalysis will be used here as a reference for comparison of the various global climate models. While the

Climate Impacts Group, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington, Seattle, Washington, USA.

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Figure 1. Precipitation tracks for (a) the NCEP-NCAR reanalysis, (b) model composite for 1950-2000, and (c) model composite for 2050-2100. Thick line in Figure 1a indicates the storm track in 500-hPa heights. In Figure 1b, contour lines indicate difference between 1950-2000 and 2050-2100 patterns. Lines in Figure 1c indicate the peaks of the NCEP-NCAR (solid), 1950-2000 (dash), and 2050-2100 (dash-dot) precipitation tracks.

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NCAR-NCEP Reanalysis precipitation does not accurately depict local-scale precipitation features, it represents the precipitation pattern a climate model would produce if it accurately captured the planetary-scale weather patterns. The NCAR-NCEP Reanalysis shows a broad zonal band of precipitation extending between 35° and 45° N across the N. Pacific. This precipitation track curves northward as it reaches the N. American coast where it merges with a broad pattern of high precipitation extending from northern California to Alaska. The coastal precipitation pattern results from the interaction of the storm systems with the continental landmass, causing intense precipitation.

[7] To combine the simulations from the 10 climate models described above, we form a composite of the individual models. Each climate model field is interpolated to the NCAR-NCEP Reanalysis grid and a weighted mean is formed. A model is weighted by the inverse mean squared difference between the 1950-2000 NDJ precipitation pattern for the model and the NCAR-NCEP Reanalysis. This approach assumes all models have useful information about the changes in the precipitation pattern, but that models that represent the present climate best should be given greater weight. Figure 1b shows the composite precipitation pattern from the 10 climate models for the period 1950-2000, which corresponds well to the NCAR-NCEP Reanalysis pattern. The weights for the various models (Table 1) show that two models, CGCM and ECHAM5, are most heavily weighted. Furthermore, the RMS difference between the composite and NCAR-NCEP Reanalysis is smaller than for any individual model with a bias smaller than the mean of all models (0.19 mm/day), indicating that the model ensemble better represents the precipitation storm track than any individual model.

[8] Using these weights, we then composite the precipitation simulated for the A2 climate scenario for 2050-2100 (Figure 1c; contour lines in Figure 1b show the difference between the 1950-2000 and 2050-2100 patterns). In the west, positive changes to the north and negative changes to the south indicate the track moves northward. At the eastern end, there are strong positive changes, showing intensification over western North America. The three thick lines in Figure 1c indicate the peak of the precipitation track for the reanalysis (solid), 1950-2000 (dashed) and 2050-2100 (dash-dot) composites. These lines clearly show the northward shift at the western end of the track, which is consistent with the northward shift and intensification of the storm track under climate change [Yin, 2005]. The northward shift and intensification of precipitation in the composite is consistent across the 10 climate models. Seven models show a northward shift and seven show an intensification (Table 1). Only one model (CSIRO) shows neither change, with a decrease in precipitation. The agreement among models is not clearly related to performance in simulating the 20th Century precipitation pattern.

#### 4. Aleutian Low

[9] The changes in the storm track over the North Pacific is also manifested in the position and intensity of the Aleutian Low (Figure 2a, 1950-2000 NCAR-NCEP reanalysis). This feature is the residual of the daily variability in sea level pressure produced by storm systems that propagate along the storm track during the cool season. Figure 2b shows a weighted composite of sea level pressure from the 20th-Century climate model simulations derived as for precipitation in Figure 1. Compared to reanalysis

Table 1. Summary Statistics for Precipitation Composite Computed by Comparing the 1950-2000 Simulation for Each Climate Model With NCAR-NCEP Reanalysis<sup>a</sup>

| A transfer to the second |       | A second contract of the second |        |       |     |
|--------------------------|-------|---------------------------------|--------|-------|-----|
| Model                    | Bias  | RMS                             | Weight | North | Wet |
| CCSM3                    | 0.37  | 89.0                            | 9,94   | N     | Y   |
| CGCM                     | -0.06 | 0.82                            | 14.13  | Y     | N   |
| CNRM                     | 0.37  | 1.13                            | 7.40   | Y     | Y   |
| CSIRO                    | 0.07  | 1.01                            | 9.40   | N     | N   |
| ECHAM                    | 0.33  | 0.81                            | 14.54  | Y     | Y   |
| GISS                     | 0.17  | 1.24                            | 6.23   | Y     | Y   |
| HADCM                    | 0.07  | 0.99                            | 9,63   | Y     | Y   |
| IPSL                     | 0.32  | 1.34                            | 5.28   | Y     | N   |
| MIROC                    | 0.12  | 0.90                            | 11,66  | Y     | Y   |
| PCM1                     | 0.09  | 0.90                            | 11.80  | N     | Y   |
| Comp                     | 0.17  | 0.76                            |        | v     | Y   |

<sup>\*</sup>Bias and RMS are in mm/day; the weight factor is expressed in percent. The final 2 columns indicate whether the precipitation track moves north and gets wetter under the A2 scenario.

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#### SALATHÉ: STORM TRACKS AND PRECIPITATION



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Figure 2. Aleutian Low for (a) the NCEP-NCAR reanalysis, (b) model composite for 1950-2000; contour lines indicate difference between 1950-2000 and 2050-2100 patterns.

(Figure 2a), the composite sca level pressure produces a somewhat deeper Aleutian Low, but the position and shape of the pattern are well represented. In particular, the direction of onshore flow to the Pacific Northwest and Alaska is captured quite well. Contour lines in Figure 2b indicate the difference between the 21st and 20th Century model composites. For the 21st Century A2 climate scenario, the models show a marked deepening of the Aleutian Low with increased gradients across the North Pacific. The dipole in the difference field indicates a shift in the position of the low to the north-northeast. These changes are consistent with the northward shift and intensification of the storm track indicated by the precipitation patterns discussed above.

[10] Overland et al. [1999] discuss historic shifts in the Aleutian Low associated with decadal climate variability in the North Pacific. Natural variability is about double the magnitude of the pressure change from the late 20th Century to the late 21st Century (compare Figure 2c to Overland et al. [1999, Figure 4]). Decadal variability is associated primarily with variability in the strength of the low, not its position. Thus, the changes in the Aleutian Low due to global climate change are not entirely analogous to the natural variability observed on decadal scales.

#### 5. Regional Precipitation

[11] The large-scale precipitation results above suggest that regional precipitation will increase over the Pacific Northwest for the 21st Century. The large-scale circulation patterns also change, which could modulate the precipitation response at regional scales. To illustrate these effects, we shall examine the regional precipitation downscaled from the ECHAM5 model using two downscaling methods. The ECHAM5 model is selected since it best represents the observed storm track and Aleutian Low and since a single model illustrates these interactions more clearly than a composite.

[12] Widmann et al. [2003] and Salathé [2005] developed a method to downscale climate model simulations for Pacific Northwest precipitation that uses large-scale simulated precipitation as the primary predictor and large-scale sea-level pressure as a secondary predictor. In a simplified method, the effect of the pressure pattern is ignored and the downscaled precipitation is found by multiplying the simulated climate model precipitation by a scale factor defined. on the regional-scale grid, 1/8-degree over the Pacific Northwest. The scale factor is computed for each calendar month as the ratio of the 1950-2000 mean simulated precipitation and the 1950-2000 observed precipitation on the 1/8-degree grid. For the full downscaling method. taking circulation into account, the scale factor is modified according to the leading modes of the sca-level pressure field to preserve the observed covariance between precipitation and circulation during the training period [Widmann et al., 2003]. This covariance between sea-level pressure and precipitation is related to interactions between circulation and topography that affect the regional distribution of precipitation [Salathé, 2003]

[13] Figure 3a shows the difference in downscaled precipitation from 1950-2000 to 2050-2100 using only precipitation as a predictor. Precipitation increases over most of the region except for the Oregon Coastal Range. The largest increases are seen over terrain, with a general trend for smaller increases in the southern part of the region. These changes are a direct consequence of the





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#### SALATHÉ: STORM TRACKS AND PRECIPITATION

northward shift in the large-scale precipitation distribution with the storm track (Figure 1). Figure 3b is a similar difference map, but for the downscaling method that considers both precipitation and circulation as predictors. When circulation is taken into account, we find larger increases in precipitation for the 2050-2100 period. Figure 3c shows the difference between the two downscaling methods (circulation method minus precipitation-only method). In particular, relative to Figure 3a, we find greater precipitation over the North Cascades and extending southward along the Cascade Range. Increases in precipitation are also found over the Idaho Rockies, which was not indicated by the precipitation-only downscaling. This result suggests that the circulation changes produce more effective orographic enhancement of precipitation in the ECHAM5 climate change scenario than in the base climate. Transient wind patterns, not the mean pattern, are responsible for the change since the sea level pressure itself does not change over the region in the ECHAM5 simulation.

#### 6. Conclusion

[14] In accordance with Kin's [2005] result for the midlatitude storm track, we find a northward shift and intensification of winter precipitation over the north Pacific in climate model simulations for the 21st Century. The Aleutian Low similarly shifts northward and intensifies. These changes have important implications for the precipitation climatology of the Western United States. Downscaling precipitation for the Pacific Northwest shows increases both due to large-scale effects captured in the global model and due to mesoscale orographic effects not represented in the global model. Changes in the transient circulation associated with the shifting storm track and Aleutian Low yield an increase in winter (NDJ) precipitation that is not captured by the global model.

[15] Acknowledgments. This publication is funded by the Joine Institute for the Study of the Aunosphere and Ocean (JISAO) under NOAA Cooperative Agreement NA17RJ1232, contribution 1320. NCAR-NCEP Reanalysis data provided by the NOAA-CIRES Climate Diagnostics Center, Boulder, Colorado. USA, from their Web site at http:// www.cdc.noaa.gov/. The IPCC Data Archive at Lawrence Livennare National Laboratory is supported by the Office of Science, U.S. Department of Energy.

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Part of Attachment - E

Date: Thursday, October 26, 2006, 10:05:58 AM To: Larry Edwards <a href="mailto:salarry.edwards@mail.wdc.us.gl3">salarry.edwards@mail.wdc.us.gl3</a> From: Eric Salathé <a href="mailto:salathe@washington.edu">salathe@washington.edu</a> Subj: Questions on Alaska climate change.

#### Larry-

These results are based on global climate models, which do not represent the fine details of local terrain and land-sea contrasts that can play a very important role in climate change. We are working on high-resolution simulations for the WA-ID-OR area, but I do not know what is being done for Alaska at this time.

That being said, we can get a fair amount of guidance from the global models. Attached is the same figure as you saw in my paper. In this version, super imposed on the middle panel (1950-2000 model composite) are contour lines indicating the percent change in Nov-Dec-Jan precipitation from the 1950-2000 composite to the 2050-2100 composite.

There is a 15% increase indicated over the whole of SE Alaska. These results cannot really refine the geographic distribution much better. In terms of absolute numbers, the change will be largest in the areas already wettest, which is the south part of your domain.

I think this is very much a significant issue for Alaska. There is a group just starting up at the Univ of Alaska called "Alaska Center for Climate Assessment and Policy" that would be the best place to look deeper into this. I don't have contact info, but will send that on to you when I find out.

Other resources:

Arctic Climate Impacts Assessment <<u>http://www.acia.uaf.edu/default.html></u>

US National Assessment of the Potential Consequences of Climate Variability and Change (suppressed by the Bush administration) <http://www.usgcrp.gov/usgcrp/nacc/alaska-mega-region.htm>

Good luck with your work and let me know if we can be of any assistance.

-Eric

(Attached: precip\_track\_wcomp pct.png, Part.txt)

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1950-2000 Model Composite



2050-2100 Model Composite



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Alaska All-Time Snow Records Bursting as Accumulation Mounts | A ... http://www.alaskadispatch.com/article/snow-records-near-bursting-a

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### News

## Snow records near-bursting across Alaska as accumulation mounts

Alex DaMarban | Mar 05, 2012



Alaska communities are within striking distance of smashing their all-time snowfall records. Valdez isn't among them, at least not yet -- even though it's been smothered

With weeks of flake-generating weather to go, Anchorage and two other

by nearly 34 feet of snow. That's still a notable amount -- the third-highest for that community -- but still 12 feet shy of the record set in 1989-90.

RELATED 400 inches of show make Veldez

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The black sheep of Alaska snowfall this season is Fairbanks. Its winter remains well below average, notching an embarrassing 3 feet, 7 inches. That's far off the record of just over 12 feet (147 inches) set in 1990-91, according to a National Weather Service chart posted Sunday.

Those within a snowball's throw of the record include:

. Anchorage, with the third-most anowfall in history, needs 9 inches to break the 1954-55 record of 11 feet (133 inches).

Barrow, with its second-deepest ever, needs 12 inches to break the 2009-09 record of 6 feet, 5 inches (77 inches).

. Kodiak, with its third-most ever, needs 19 inches to break the 2007-08 record of 12 feet, 5 Inches (149 inches).

The chart, posted on the agency's increasingly lively Facebook page for Alaska, reviews 12 communities, primarily those with notable snowfall amounts this season where the agency has offices, according to Michael Lawson, the Anchorage meteorologist who posted it.

Missing are those communities with weather-tracking volunteers and sporadic record-keeping, such as Cordova, which got National-Guard help digging out from massive dumps earlier this winter.

With more snow forecast, Anchorage might set its record within days, said Lawson. Another 2 to 4 inches could fall by Monday night, possibly moving the city within a smidgeon of its secondhighest year, 1955-56, said Lawson.

Print

Click here to see the full chart.

Contact Alex DeMarban at alex@alaskadispatch.com





What's the difference botween Alaska's caribon and reindeer herds?

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Christmas brings back memories of not arrow elder

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Anchorage, Alaska Breaks Seasonal Snowfall Record | Alaska Dispatch

Page 1



#### Anchorage

# Anchorage, Alaska breaks seasonal snowfall reco



Eric Christopher Adams | Apr 07, 2012

An epic winter in Anchorage, became an historic one Satu several inches of new snowfall, according to the <u>National</u> the city officially broke the all-time record of 132.6 inches a snowfall came in the winter of 1954-55, before Alaska was

As of 4 p.m., <u>133.6 inches of snow had fallen</u> on Anchoi winter of 2011-12. Snow continued to fall into the evening

RELATED Science bahind Anchorage's historic snowfall

Alaskans: Brace for a miserable, wet, chilly breakup

And while some celebrated, others lamented the unending in the South Anchorage Hillside neighborhood, which has elevation than the city proper, have recorded upwards of 2 this winter.

All that snow has caused thousands of dollars in home ar property damage. It became fodder for the <u>city's mayoral election</u>. It prompted between neighbors over snowberms. It left city "<u>snow dumps</u>" bulging beyond ca up millions of dollars of street-clearing and other fees for city government.



http://www.alaskadispatch.com/article/anchorage-alaska-breaks-seasonal-snowfall-re.. 12/26/12 15:03:52



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Attachment - H

Snowpack 2nd-Highest on Record in Southeast Alaska

Matt Lichenstein, KFSK Radio 17-Apr-08

Southeast Alaska has the second highest enowpack on record this year according to federal data. The pack measured far above normal at locations across the region this month.

There are several survey sites around Southeast Alaska, including Skagway, Juneau, Ketchikan, and Petersburg. In Petersburg the U.S. Forest Service does 12 snowpack surveys over the course of 6 months on Ravens Roost Mountain, near the towns airport and old reservoir.

(Whitaker): "For the most part what we're doing when we go out to measure the snow is we're measuring snow depth and snow water content, or the amount of water that's contained in that volume of snow."

Petersburg Ranger District hydrologist Heath Whitaker says they check one site at about 550 elevation and then a higher elevation site on the mountain at 1650 feet.

(Whitaker): "And we generally have to snowshoe into those sites, and we have the equipment to take anow cores, that basically acts as a yardstick. We stick it through the snowpack to the ground. And that way we measure the depth and it also pulls out a core, and with that core you can determine the amount of water content."

Knowing the snowpack and its water content helps scientists predict the amount of water that will run downhill into streams and lakes in the summertime, a key factor in everything from salmon survival to hydro power generation in Southeast.

(Whitaker): "The way the state tends to use it, they forecast river and stream flow in terms of volume, they forecast flood potentials, avalanche dangers, summer forest fire probability -- which is an Interior application obviously -- fresh water availability for municipalities and the power generation that goes along with that. And the information is often used as an index of winter severity for wildlife survival. That's typically how we use it at the District here, more often than not."

April is generally the month with the highest level of snowpack and the highest water content, according to Whitaker. Judging from this months survey, Whitaker says this past winter is shaping up to have the second-highest snowpack on record in the Petersburg area, where the data extends back to 1979. Last year was the top snowpack.

(Whitaker): "Compared with last year, this month's survey up on top of Raven's ridge had 127", which is about 10.5 feet. And last year we had 168" at this point, for this month's survey -- which is about 14 feet. So this year's percent of 2007, we're about 76 percent of last year's amount. But we are also about 169% of average."

(Lichtenstien): "Average over the last 30 years or so?"



(Whiteker): "Correct. And that average tends to be about 75 inches or so."

Last year the snowpack in April was the highest on record by far, at 14 feet, and Whitaker says the Forest Service's equipment was just barely long enough to measure it.

The Southeast data from Petersburg and other areas is sent up to the US Dept. of Agriculture's Natural Resources Conservation Service in Anchorage. The NRCS compiles data from sites like this from across the state, which are monitored by a variety of agencies and organizations. Rick McClure is the NRCS snow survey supervisor for Alaska. He says the snowpack is not only the second highest on record for Petersburg, but for the Southeast region. McClure says the snowpack is above average in a lot of coastal Alaska.

(McClure): "In Southeast you've the Swan Lake Hydro project off Ketchikan, it's at 230 percent of average. Of course it's only 90 percent of last year, but 230 percent of average. And at Petersburg you have it at 200 percent of average, basically, and 80 pecent of last year. And then you go on to South Central Alaska -- the Kenai Peninusula is 110 to 130 percent of normal ranage or average range. And another high area is the Seward Peninsula. It's at the 130 to 150 percent of average range."

However McClure said pack levels dropped below normal in other areas of the state, particularly in Interior and Northeast.

(McClure): "It gets more average around the McGrath area, and then Fairbanks area is basically 50 to 60 percent of normal, and it seems that way to the north and east part of the state, in the Fort Yukon area and such."

While the snowpack varies for different areas of the state, the temperature was up in March. According to the NRCS, air temperatures for month varied from zero to six degrees farenheit above average across the state, except in Bethel where it measured a degree below average.

It Petersburg, I'm Matt Lichtenstein.



From: tmbrown3 <tmbrown3@aoi.com> To: TMBrown3 <TMBrown3@aoi.com> Subject: Comments for Southeast Alaska Board of Game Meeting in Sitka Date: Fri, Dec 28, 2012 10:38 am

December 27, 2012

Members of the Board of Game:

Below are my comments on issues schedule to be discussed at the 2013 Southeast Alaska Board of Game meeting in Sitka.

# RESCIND THE MORATORIUM ON ACCEPTING PROPOSALS ON THE DENALI BUFFER

I urge you to rescind the moratorium on accepting proposals regarding the Denali wolf buffer zone.

I do not believe that the Board of Game has the right to limit the public process that has been established with the express purpose of considering and processing public input. The Board of Game has been mandated to consider any reasonable wildlife management proposal submitted by members of the public; buffer zone proposals fall under this category. By refusing to accept proposals on any given wildlife issue, the Board of Game deprives its members of hearing new and relevant information about wildlife management conditions and needs. This prevents the Board of Game from making informed decisions based on the best available information. I urge you not to limit yourselves or the public by continuing this moratorium on accepting proposals on the Denali buffer zone.

### DO NOT PROCEED WITH PROPOSED IM PLANS ON SOUTHEAST ALASKA'S WOLVES

I oppose proceeding with plans to trap Alexander Archipelago wolves based upon the two current feasibility assessments (GMU 1A and GMU 3). These plans are not based good science. They are based on outdated information. The available information is, at best, sparse. The cost of the programs is exorbitant and would produce little if any gains; in fact, it is unlikely that the results of the programs could even be accurately measured. Proceeding with the plans would likely cause the Alexander Archipelago wolves to be listed as a threatened or endangered species.

# COMMENTS ON SELECT PROPOSALS

I SUPPORT Proposals 18 and 19 and urge you to accept them.

This proposal would prohibit bear snaring in Southeast Alaska.

http://mail.aol.com/37267-111/aol-6/en-us/mail/PrintMessage.aspx



As a resident of Southeast Alaska, I am completely opposed to bear snaring for any reason. Bear snaring gives our state a black eye, presents public safety issues, fair chase issues (no matter why it is implemented), and law enforcement issues. Bear snaring is an indiscriminate method of take that has great potential to take out two generations of bears at once when a sow with cubs is snared, which is especially bad because of bears' slow reproductive rate. Bear snaring is an unscientific method of take. Alaskans of all walks of life overwhelmingly oppose bear snaring for any reason.

I SUPPORT Proposal 20 and urge you to accept it.

This proposal would prohibit the taking of wolves in SE AK from March through November.

This proposal presents a sound scientific, biological, ecological, and ethical method of managing wolves. It is unethical and inhumane to take wolves while pups remain dependent upon adults, and doing so has the potential to wipe out two generations at once. The loss of the pups is not counted in harvest statistics. Wolf hides are not in good marketable condition during this period of time. Taking wolves during pup season is a waste of the resource.

I OPPOSE Proposal 33 and urge you to reject it.

This proposal would shorten the season for brown bear in Unit 4 by reducing the harvest of females.

Establishing the bear hunting season one week earlier will result in a greater take of bears in the fall because of the availability of salmon in fish streams. Target harvest levels are already being exceeded in parts of Unit 4; this potential additional take would be detrimental to the brown bear population in the area.

Earlier fall opening and closing would result in fewer female brown bears taken, which would keep the brown bear population healthy.

I OPPOSE Proposal 35 and urge you to reject it.

This proposal would modify the brown bear harvest allocation for residents in Unit 4 by permitting any increase in the brown bear 4% harvest guideline for GMU 4 to go to resident hunters only.

Four percent is a guideline harvest specified in the Brown Bear Management Strategy and was based upon the best populations estimates available from the Alaska Department of Fish & Game at the time. It also acknowledges the relatively low reproduction rates of brown bears in Unit 4.

I OPPOSE Proposal 36 and urge you to reject it.

This proposal would exclude wounding loss from the annual brown bear harvest for Unit 4.

Hunters should be held responsible for the bears they shoot. It is reasonable and responsible to consider wounding loss as part of the human-caused bear mortality. The Brown Bear Management Strategy estimated 1 loss for every 7 bears shot in guided hunts



and one loss for each bear killed by unguided hunters. This significant mortality must be accounted for by the Alaska Department of Fish & Game.

Additionally, it is my understanding that this proposal is in error in asserting that all wounded bears are being counted as sows.

I appreciate the opportunity to comment on these most important issues that affect my home and my life.

Sincerely, Tina M. Brown 19400 Beardsley Way Juneau, AK 99801

12/28/2012



Samuel Davis, D.C. 185 Lake Drive Lake Peekskill, NY 10537

December 28, 2012

ATTN: Board of Game Comments (907) 465-6094. Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

Dear Board of Game Members:

I would appreciate your support to ban bear snaring and restrict wolf hunting and trapping in Southeast Alaska. Also, please rescind the moratorium on accepting and considering Denali buffer zone proposals.

I support Proposal 18 and 19, and would ask your support. Unscientific wildlife management policies must end, as well as unhumane methods of killing. Public safety also need to be considered. Bear snaring is unpopular, unsafe, indiscriminate, unscientific, and cruel.

I support Proposal 20, prohibiting hunting and trapping of wolves in all areas of Southeast Alaska from March 1 until November 1, when females may be pregnant or have dependent pups. It is not sound science or ecology to allow it.

And please rescind your moratorium on accepting proposals to Denali National Park no-trapping buffer zones. Please consider proposals to re-establish a buffer zone. Allow public process.

Sincerely,

Sam Davis, D.C.



PC27

1 of 1

Samuel Davis, D.C. 185 Lake Drive Lake Peekskill, NY 10537

December 28, 2012

Fax: (907) 465-6094 ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

Dear Board of Game Members:

Please do not move forward with the predator management experiment. It is not scientifically based, and shooting endangered wolves to study the effect is not sensible management. Perhaps a significant change in clear-cut logging would yield the results you are seeking. It is clear from studies already done that there are factors causing the decline of the Sitka Black-tailed Deer. Please work to control those. AT this point, predator control is not justified for either the wolf or black bear population.

The science is lacking to justify this predator control program; this program is unlikely to result in a higher deer population; and the expense could be better spent on other, more constructive programs.

Please lead the way in sane management.

Sincerely,

Sam Davis, D.C.

Bruce H. Baker P.O. Box 211384 Auke Bay, AK 99821

December 26, 2012

Chairman Ted Spraker & Board of Game Members c/o Alaska Board of Game Support Section Alaska Department of Fish & Game P.O. Box 115526 Juneau, AK 99811

# Subject: BOG Proposals 18, 19, 32, 33, 35, 36

Dear Chairman Spraker and BOG Members

The following are my comments on the above six proposals. This letter will be postmarked prior to your December 28, 2012 deadline for public comments.

# Proposal 18.

Support. The snaring of bears is unnecessary, cruel, brutal, inhumane, indiscriminate, unsportsmanlike, provides a poor example for our youth, and legalizes the sort of human behavior which can give hunting in Alaska a bad name.

# Proposal 19.

Support. The snaring of bears is unnecessary, cruel, brutal, inhumane, indiscriminate, unsportsmanlike, provides a poor example for our youth, and legalizes the sort of human behavior which can give hunting in Alaska a bad name.

# Proposal 32.

Oppose. Instead of approving Proposal 32, I suggest that you support Friends of Admiralty Island's alternative proposal for the Board to direct ADF&G to devise a Drawing Permit Hunt System for Brown Bear in Unit 4, with the goal of bringing it to the Board for its consideration at the 2014/2015 Region I Board meeting

As a member of the 2000 Brown Bear Management Team (BBMT), I helped develop the Brown Bear Management Strategy (BBMS) which has provided guidelines for the management of brown bears in Unit 4. Unfortunately, after 12 years, key components of these guidelines are not being met.

From 2008 to 2010, the 3-year harvest guideline of 166 bears for Unit 4 was exceeded, with 171 killed. The maximum allowable mortality established for Fall 2011 was either met or exceeded for all 3 islands in Unit 4, resulting in season closures by Emergency Order (Admiralty on Oct 12, 2011, Baranof on Oct 6, 2011 and Chichagof on Oct 5, 2011). A 4th Emergency Order Closure was made in the Fall of 2012 for Baranof, when the maximum mortality for females climbed from 2 to 9. If the present trend continues, it is only a matter of time before Emergency Closures will be made to the more heavily hunted Spring hunting seasons.

Emergency closures, especially in the fall may reduce the taking of sows, but they can be a significant economic hardship on booked guided trips. Emergency closures are a "red-flag" that signals the biological health of the bear population is at some risk as is the economic well-being of the guiding industry.

The BBMS guidelines further recommended capping the non-resident hunting effort at approximately 2000 levels and rolling back commercial hunting guide levels to 1995 levels. Neither of these measures has occurred, raising serious concerns about hunting pressure and crowding. In addition, resident bear hunting effort is also uncontrolled, contributing to the disproportionate distribution of hunter effort throughout Unit 4.

From the Drawing Permit Hunt System on Kodiak, we know that such a system will stabilize the harvest of brown bear so that maximum allowable harvest levels are not exceeded, either island-wide or within specified Hunt Areas. It also distributes the resident and non-resident hunting effort, avoiding crowding and excessive pressure on certain preferred areas. With Emergency Closure Orders no longer necessary, all hunters will be spared the significant disruption and loss of revenue that those orders bring. Overcrowding is a significant issue on the southern portion of Admiralty.

It is even more urgent to create a more stable and predictable harvest system for Unit 4 because almost no current population studies have been conducted for brown bears in the Unit for many years. This calls into question the reliability of the population estimates that current harvest levels are based on. Given these realities, it is timely to initiate Board consideration of a Drawing

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Permit Hunt management option, and ADF&G is the best entity to evaluate and devise a fair and equitable system for all users that best assures the sustainability of the resource and a quality hunting experience. Such a proposal would then be presented to the Board for its consideration at the next Region 1 meeting in 2014/2015.

# Proposal 33.

Oppose. Establishment of the bear hunting season one week earlier, from September 15 to September 8, will result in more bears taken in the Fall season than under the current season, due to more salmon available in fish streams. Target harvest levels are already being exceeded in parts of Unit 4. Relatively few bears are taken by non-resident hunters from October to December, thus removing that period would have little impact on the overall harvest.

### Proposal 34.

Oppose. This requirement is too difficult to implement and would not achieve the desired reduction of female bear harvest. The most practical way to achieve target goals for females is to close seasons by emergency order when target levels have been reached or exceeded, or, more appropriately, accomplish the goal by assigning harvest levels to specific hunt areas in a drawing permit hunt system.

# Proposal 35.

Oppose. I oppose any increase in the 4 percent annual harvest for brown bears in Unit 4 (averaged over 3 years), that has been the management standard for decades and is firmly established as a guideline in the BBMS. This is based on the best population estimates available from ADFG and in recognition of the low reproductive rate of brown bears in Unit 4. Given the fact that no current population surveys exist for Unit 4, it would be entirely unjustified to consider any harvest allocation to residents or non-residents above 4 percent at this time.

# Proposal 36.

Oppose. Wounding loss is entirely appropriate and reasonable to consider as part of the human-caused bear mortality, particularly when target harvest levels are being reached or exceeded. While the number of bears lost to wounding is uncertain, information before the BBMS variously estimated one loss for every 7 bears shot in guided hunts to one loss for each bear killed by unguided hunters. This is a significant mortality and must be accounted for in the best way that ADFG can determine it. In 2004, Board of Game action directed that wounded bears be considered as part of the mortality. I also understand from ADFG that this proposal is in error in asserting that all wounded bears are being counted as female bears.

Sincerely,

Brace Barker

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PC29 1 of 2

ATTN: BOG COMMENTS Alaska Department of Fish & Game Boards Support Section PO Box 115526 Juneau, AK 99811

December 28, 2012

Dear Chairman & Members of the Board

I would like to take the opportunity to comment on the following proposals.

Proposal #23 I oppose this proposal. There is no lack of hunting opportunities in southeast Alaska and no biological reason for this proposal. It is also tiresome to hear people referring to other states as a justification for what we need to do here. Those other states have very limited hunting opportunity and in many cases will only issue 1 or 2 permits for a given hunt. You cannot compare that system to Alaska's abundant and lengthy hunting seasons. Especially in southeast Alaska for Deer, Goat, Black Bear, and Brown Bear.

Proposal #24 I oppose this proposal. No biological reason for this proposal. It is disturbing to see hunters try to take away from others so that they can have an easier hunt or preferred access to a resource. We all start out on the same foot on opening day you just need to hunt and not expect someone to guarantee you success because you don't want to put any effort into it.

Proposal #25 I oppose this proposal for the same reasons stated in #23 and #24. It is amazing to me this person cannot fill their freezer with the liberal deer seasons in southeast and the many Moose hunting opportunities that are available in the interior were this individual lives. We have dealt with this issue so much in the last several cycles that it is redundant. I would like to see a moratorium on this issue for seven years.

Proposal #25 | oppose this proposal. No biological justification. No reason to adopt.

Proposal #27 | oppose this proposal.

Proposal #28 | oppose this Proposal. Proposals 26 - 28 are all the same issue that the board has considered and rejected in the past several cycles. With so many other issues that need addressing it is



not productive to have to go over the same issues at every meeting taking valuable time from other issues. I would like to see a moratorium on this topic for a seven year period.

Thank you for the opportunity to participate in the regulatory process.

Sincerely,

Joe Letarte



President Bernard Punzalan Anchorage, AK peskadot@clearwire.net

Vice Prosident Larry Elan Palmer, AK page 1 @alaskalife.net

Legislative VP Jack Frost Anchorage, AK 907-344-8371 jdfrostmd@gci.net

Director At Large Gary Køller Anchorage, AK keller@ak.net

Stacce Frost Anchorage, AK ladybowhunter@psualum.com

Ryan Johnson Eagle River, AK pupchow@gmail.com

Northern Director Ken & Anna Vorisek Fairbanks, AK avorisek@gmail.com

Mat Su Director Wayne Poust Wasilla, AK waynefoust@yaboo.com

South Central Director Steve Untiet suntiet@alaskaeustomfirearms.com

Kenni Director Vacant

South Eastern Director Mike Collins Juneau, AK 907-789-5246 oldboar99@hotmail.com

Kodiak Director Vacant 12/27/2012 19:32

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1 of 4

#81

P. O. Box 220047 Anchorage, AK 99522 907-929-3600 Fax 907-334-9691 www.akbowhunters.com akbowhunters@gci.net

12 27/12

Attn: Board of Game Comments Alaska Department of Fish and Game Board Support Section PO Box 115526 Juneau AK 99811-5526 Fax 907-465-6094

# Proposal #11 Do Not Support

It would be nice to eliminate the need for a Non Resident drawing permit. However, not at the expense of dramatically shortening the seasons. Complex proposal, BOG does not have the authority to set fees.

# Proposal #20 Do Not Support

For many hunters a wolf represents a once in a lifetime trophy, even if its fur is less than prime. The **opportunity** to harvest a wolf incidental to another type of hunt is very valuable. There is probably no biologic reason to limit the season length. However if that is a problem then the bag limit could be reduced. For example allow only two wolves to be taken during August, September, October, April and May

# Proposal #36 Support plus eliminate the regulation in SE.

The regulation stating that any bear wounded in units 1-5 must be considered taken and as such part of a hunter's bag limit is a very bad one for many reasons. It should be eliminated in all of these units.

- It is not necessary for any biologic reason. There has been no evidence that wounded and not recovered animals have ever been a significant factor in maintaining a big game population.
- 2) This regulation penalizes ethical law abiding hunters

Dedicated To Fostering And Perpetuating Fair Chase Hunting With The Bow & Arrow

# The Alaskan Bowhunters Association, Inc.



P. O. Box 220047 Anchorage, AK 99522 907-929-3600 Fax 907-334-9691 www.akbowhunters.com akbowhunters@gci.net

12/27/12/092

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who (knowing the law) will stop hunting or limit their hunt to only the wounded animal upon discovering that they have lightly wounded a bear. Unethical hunters who don't even follow up on their shot to see if an animal is wounded may continue to hunt. Even if an unethical hunter knows that he has wounded a bear he may continue to hunt for another bear because he knows that the chance of enforcement of the law is very remote. So the regulation is NOT Necessary but does unreasonable restrict ethical hunters.

- 3) It is interesting that this regulation (wound equals taken) was originally proposed by professional guides. Now they are beginning to learn some of the drawbacks of the regulation and they are trying to modify it, in this instance in Unit 4. Guides wanted some State Regulation to back up a policy that if a hunter wounded an animal and lost it that the hunt was over. This is in fact a very poor policy. It would encourage a guide to tell a client to take a risky shot because either a hit or a wound would result I the hunt being over. However the client might refuse any shot except a perfect 100% shot because he doesn't want the hunt to be over. So the hunter and the guide would be at odds on what constituted an acceptable shot.
- 4) The guide would like to say "well you wounded the bear, your hunt is over". In response the good hunter will say "no my hunt is not over. We will stay here and continue for the rest of the hunt to hunt for that one animal that I have wounded. Not only that but your guide regulations say that you will use every means at your disposal to retrieve a wounded animal. This may mean that you call in all of your other hunters and assistant guides and we all continue to hunt for my animal." Clearly the guide will not want to do that.
- 5) The Alaskan Bowhunters Association has been on record as opposing this type of regulation since they

Dedicated To Fostering And Perpetuating Fair Chase Hunting With The Bow & Arrow

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PC30 3 of 4



# The Alaskan Bowhunters Association, Inc.

P. O. Box 220047 Anchorage, AK 99522 907-929-3600 Fax 907-334-9691 www.akbowhunters.com akbowhunters@gci.net

12/27/12 pg 3

were first proposed 8-10 years ago. Bowhunters shoot visible, retrievable projectiles at close range so we are more likely than a rifle hunter to be aware that we have wounded (possibly no more than a scratch) an animal. Statistically firearms hunters UNKNOWINGLY wound and lose many more animals than do bowhunters. It is critical to explain that we are not advocating wounding animals. We have previously advanced proposals to add the word "mortally" in front of wounded in this regulation. We do believe that morally and legally if a hunter knows that he has mortally wounded animal he should count that animal as his even if he can not retrieve it. Examples would be a bear hit solidly in a body cavity with either a bullet or an arrow: a goat that when shot falls into a river and is swept away.

- 6) No other State has this type of regulation. Only six of our 26 game management units have this regulation. This concept is practiced in Africa and Europe where the landowner privately owns the animals. This concept of "the slightest evidence of a wound" has not been part of the North American Model of publicly owned wildlife. This law is not widely known by hunters. Because it is not a statewide law you should be able to abolish it in these units at this meeting.
- 7) When this regulation was originally proposed it was only to apply to bear in some SE Alaska units. It has slowly spread and is an example of what I call "regulation creep". Cliff Judkins, past member of the BOG said that he would not allow it to spread to game animals other than bear. But now it applies also to Elk in unit 8 and the professional guides also want it to apply to goats in unit 8. The executive director of APHA has been quoted as saying that it should apply to all big game statewide!!
- 8) This regulation causes potential dilemmas. For example If I wound and am unable to find an animal am

Dedicated To Fostering And Perpetuating Fair Chase Hunting With The Bow & Arrow

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# The Alaskan Bowhunters Association, Inc.

P. O. Box 220047 Anchorage, AK 99522 907-929-3600 Fax 907-334-9691 www.akbowhunters.com akbowhunters@gci.net

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I guilty of wanton waste? If I wound an animal this regulatory year and cut my tag and then in the next regulatory year harvest the same animal, which survived the first wound, does it count against my bag limit since I have already tagged it? This has happened more often than you might think. I can document it with video evidence.

9) This is a "feel good regulation" that serves no real game management purpose. It serves only to hamper ethical hunters. It should be eliminated.

Thank you for your consideration of our comments.

Sincerely,

John D Frost – Legislative VP of The Alaskan Bowhunters. 12/27/12

Dedicated To Fostering And Perpetuating Fair Chase Hunting With The Bow & Arrow

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PC31 1 of 4



National Parks Conservation Association\* Protecting Our National Parks for Future Generations\*

Alaska Regional Office . 750 W. 2nd Avenue . Suite 205 . Anchorage, AK 99501 (907) 277.6722 . FAX 907.277.6723 . www.npca.org

December 28, 2012

Ted Spraker / Chair Alaska Board of Game ADF&G Board Support P.O. Box 115526 Juneau, AK 99811-5526

Chairman Spraker and members of the Board,

The National Parks Conservation Association (NPCA) appreciates the opportunity to provide input on two proposals (#5 and #44) for the upcoming Board of Game (BOG) meeting scheduled for Sitka on January 11-15, 2013. In addition, we have a comment we would like to include for the one-day meeting the Board has scheduled for January 10, 2013, also in Sitka.

NPCA has a long history of interest and involvement in BOG actions, especially those that impact wildlife found on lands managed by the National Park Service (NPS). NPCA is America's only private nonprofit advocacy organization dedicated solely to protecting, preserving, and enhancing the U.S. National Park System for present and future generations. Founded in 1919, NPCA has more than 740,000 members and supporters, of which nearly 2,000 reside in Alaska.

### Comment on January 10, 2013 One-Day Meeting:

NPCA has been a consistent supporter of a wolf buffer on state lands to the north and east of Denali National Park. As such, we have signed onto several petitions to the BOG this year asking that an emergency regulation be considered given new information released by the National Park Service that wolf populations in Denali are at its lowest in 25 years and preliminary data that shows that the opportunity for the visiting public to view wolves on the Denali Park road has dropped from 45% in 2010, the last year the buffer was in place, to just 12% this past summer in 2012.

While the new information and emergency nature of these requests was not shared by the Board, nonetheless this issue warrants discussion at the board level. This is an economic issue – a couple trappers vs. thousands of park visitors and the millions of dollars they bring to the state each year, partly for their opportunity to see wolves in Denali. As such, we support the request to rescind the existing moratorium and provide everyone with the opportunity to have a discussion about these new



facts as they relate to the need for a buffer. We would hope that discussion could then occur at un Wasilla Board meeting in February without the confusion of the moratorium.

### Comments on January 11-15, 2013 BOG meeting:

#### Proposal 5 - Oppose

The current brown bear harvest regulations were adopted by the Board to specifically address a historical increase in the brown bear harvest trend in GMU 5. These regulations, which included limiting resident harvest opportunity to one bear every four years, were further enhanced with the adoption of a registration hunt a few years later (RY 01/02). Combined, the two amendments adopted by previous Boards have been successful at stabilizing the brown bear harvest in GMU 5. Amending effective regulations that are successfully addressing historical management concerns should be based on solid data, not assumptions of an increasing brown bear population that then provides an additional harvest opportunity. We are concerned this change in harvest opportunity could have a negative impact on the brown bear population on national preserve lands found in GMU 5.

Currently the state has no brown bear population density estimate in GMU 5 and manages the harvest using male to female harvest objectives and minimum harvest age objectives. Managing this harvest, which appears to be near the maximum sustainable yield of the brown population, is a precarious balance using such low quality harvest assessments. Harvest indices in general, rather than a scientifically-sound population survey, provide low quality "feedback" on the overall health and composition of the brown bear population, and that feedback is further degraded by multiple regulation amendments over time which cloud the harvest results with varying degrees of vulnerability. With the harvest of brown bears being concentrated in Unit 5A, a region with high accessibility for resident hunters, the potential to tip the positive balance achieved over the past decade may be lost unnecessarily with the adoption of this proposal.

As noted by the AC, harvest of brown bears is primarily by nonresidents in GMU 5. Resident harvest has historically been as high as 20% of the yearly harvest. By amending the regulations to one bear every two years for residents, NPCA is concerned that an increase in resident harvest effort would have the potential to tip the balance by essentially returning to the historic regulation that contributed to an increasing harvest trend in the first place. NPCA does not support the amendment based on the AC's lack of biological justification. Should the proposal be adopted, NPCA requests that lands managed by the National Park Service be excluded.

#### Proposal 44 - Oppose

The National Park Service has a long opposed brown bear tag fee revocations that apply to lands managed by the NPS. This proposal is the annual reauthorization of that exemption for GMUs 18, 22, 23, and 26. The Board acknowledges state park lands found within GMUs adopting a tag fee revocation policy are exempt from such regulations (i.e. Denali State Park), but to date, the Board has never exempted lands managed by the NPS, even when they are found within the same GMU where state park lands are exempted.



The initial justification for adopting a resident tag fee revocation in these GMUs was primarily to increase resident brown bear harvest rates, with the assumption that in doing so, moose calf survival rates would increase:

"Since the early 1990s, brown bear hunting regulations have been incrementally liberalized in Unit 23 to increase hunting opportunity and <u>reduce predation on</u> declining numbers of moose." *Emphasis added*<sup>1</sup>

We would point out the assumption that increased hunting reduces predation has never been tested scientifically in these areas.

In 2006, the NPS opposed the reauthorization of tag fee exemptions for lands managed by the NPS in GMU's 22, 23, and 26 noting that the tag fee exemption requests:

"... Use predator control as a basic justification and as such are not allowed on NPS lands", <sup>2</sup>

In 2007, the NPS again goes on record opposing the reauthorization of brown bear tag fee exemptions for lands managed by the NPS stating:

"This proposal is effectively an extension of the state's intensive management and predator control program and should not be authorized on NPS managed lands. Should the Board support this proposal, we request that NPS lands be specifically excluded." Emphasis added <sup>3</sup>

In 2009, the NPS again goes on record stating:

"This proposal extends the state's intensive management control objectives and NPS opposes the extension of such measures on NPS lands." <sup>4</sup>

And most recently, in 2011, the NPS commented in support of reinstating resident tag fees:

"This proposal would remove the tag fee revocation for all lands in Unit 13 and NPS managed lands in Units 11 and 16B. Consistent with the narrative in the proposal and based on several comments from past years, the NPS supports this proposal as it relates to all NPS lands." Emphasis added<sup>5</sup>

A review of the ADF&G's brown bear management reports questions the assumption that increased brown bear harvest is sustainable. In 2001, the ADFG amended the brown bear management objective for GMU 22 stating:

<sup>2007</sup> Brown Bear Management Report: pg. 277

<sup>&</sup>lt;sup>2</sup> NPS comments to Board dated March 9, 2006 (Proposal 32, 33)

<sup>&</sup>lt;sup>3</sup> NPS comments to Board dated February 16, 2007 (Proposal 72)

<sup>&</sup>lt;sup>4</sup> NPS comments to the Board dated March 29, 2009 (Proposal 202)

<sup>&</sup>lt;sup>5</sup> NPS comments to the Board dated February 18, 2011 (Proposal 109)

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"Without census data since 1991 we have no means to compare the current densities and evaluate the management goal. To remedy this situation, in May 2002, staff developed a measurable management goal based on harvest parameters." 6

"Harvest data may be insensitive to changes in brown bear populations." 7

Peer reviewed scientific literature also highlights the limitations associated with attempting to manage brown bear harvest at high rates without population assessments based on solid science:

"The reliance by Alaskan managers on detecting trends in bear populations based on sex and age composition of bear harvests was an inappropriate substitute for welldesigned and executed research and monitoring programs. No theoretical or empirical basis exists for interpreting trend based on these harvest composition data. Available studies show that sex and age composition of harvest reflected vulnerability to harvest of different cohorts. Correspondingly, trends that might exist in these data likely would reflect changes in seasons, bag limits, tag fees, and other factors that affect vulnerability rather than trend in population size. Geographically patchy distribution of harvest caused by differences in accessibility further complicated interpretation of harvest data. Declines in mean age of harvested bears, for example, resulted in completely opposite inferences about population trend. Dramatic changes in grizzly bear hunting regulations occurred in the Alaskan Liberal Hunt Area [which includes all the GMU's found in this proposal during 1975-2010 so vulnerability to harvest also must have changed. This change in vulnerabilities would make it impossible to detect population trends based on any model that assumed temporal stability in vulnerability to harvest of different sex-age cohorts, except possibly in circumstances where most bears ultimately occur in the harvest." 8

NPCA requests that the Board honor the Master Memorandum of Understanding between the State of Alaska and the NPS to co-manage wildlife resources by acknowledging the multiple requests of the NPS to exempt NPS managed lands from resident brown bear tag fee revocation based on NPS management objectives to maintain a healthy and natural brown bear population that is managed conservatively and anchored in science.

Thank you for the opportunity to comment.

Sincerely, n Stratton **Regional Director** 

cc: Joel Hard, NPS

<sup>6</sup> 2001 Brown Bear Management Report

2007 Brown Bear Management Report pg 284

<sup>8</sup> Miller, S., Schoen, J., Faro, J., Klein, D. "Trends in Intensive Management of Alaska's Grizzly Bears, 1980-2010" / Page 1248 in The Journal of Wildlife Management 75(6):1243-1252; 2011; DOI: 10.1002/jwmg.186

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Patricia J. O'Brien PO Box 35451 Juneau, Alaska 99803-5451 (907) 789-9405 December 26, 2012

Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526 **Comments for Consideration** Board of Game meeting, Sitka Alaska January 10-15, 2013.

Dear Members of the Board of Game,

**Guiding Principle** A resident of Alaska for 45 years, I have watched wildlife management move heavily toward supporting a shrinking population of users. As a young woman I hunted, but time has changed my views. I support reasonable hunting to feed families. I oppose massive slaughter of top predators as non-scientific and a threat to the legacy of Alaska's wildlife for future generations. In Southeast Alaska, wildlife viewing is the fastest growing activity in the tourism industry. Wildlife viewing opportunities affect far more individuals than consumers of wildlife. In Sitka, the Board of Game has an opportunity to regain esteem by balancing decisions to reflect the views of the wider population.

**Proposals 18 and 19 - Support** I have closely followed the cruel and indiscriminant "experiment" of bear snaring adopted from Canada. Bear snaring has no place in Alaska, and especially in SE Alaska. Here, the tourism industry provides income to residents in major ports, smaller towns, and even in villages. Bear viewing is offered from local tour boats, fly-ins, guided hikes, and at numerous specially built bear viewing platforms. Southeast entrepreneurs also feature bears in calendars, books, photos, videos, sculptures, and paintings - all prominently displayed in galleries. Talks by scientists draw large crowds, whenever bears are featured. Festivals focus on these magnificent animals. Proposals 18 and 19 are well done. Southeast Alaska is the logical place to draw the line and vote against bear snaring.

**Proposal 20 – Support –** I urge the board to support this well stated proposal to prohibit hunting and trapping of wolves in Southeast Alaska annually from March 1 to November 1. In addition to the reasons put forth in my Guiding Principle at the beginning of this letter, you should aware that there is a budding business in wolf viewing in the tourism industry. It is time the board considered the negative fiscal impact on small tourism businesses from previous Board of Game decisions – support Proposal 20.

**RESCIND the Board of Game moratorium on Denali National Park No-Trapping Buffer zone.** In my 72 years I have viewed wolves in the wild only twice – among my most prized memories. Board of Game action to remove and then retain the No Trapping Buffer Zone appears to most to be a mean spirited statement aimed toward the Park Service, or those in the tourism business, or those who question or disagree with Board of Game predator control decisions. The Buffer zone has widespread public support and should be restored by the Board of Game as a statement of good faith in representing all Alaskans.

Sincerely,

Patricia O'Brien

# Greater SE Alaska Conservation Community • Alaska Wildlife Alliance • Tongass Conservation Society • Greenpeace • Center for Biological Diversity •

Alaska Board of Game c/o ADF&G, Boards Support Section by FAX: 907-465-4094 December 28, 2012

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Subj: Unit 1A: Comments on "Feasibility Assessment ... Black-tailed deer"

Dear Board of Game members;

These are jointly submitted comments of five organizations on the Alaska Department of Fish & Game's October 2012 Feasibility Assessment for Maintaining or Increasing Sustainable Harvest of Sitka Black-tailed Deer in a Portion of Game Management Unit 1A, hereafter called the "Assessment." ADF&G's proposal in the Assessment is to eradicate wolves on Gravina Island, which is a portion of the Unit.

The commenting organizations are: Greater Southeast Alaska Conservation Community (GSACC), Alaska Wildlife Alliance (AWA), Tongass Conservation Society, Greenpeace, and Center for Biological Diversity (CBD). Although we have differing policies or outlooks on whether or not the harvest of wolves is appropriate in general, we are united in commenting that the intensive management (IM) proposed in the Assessment should not be pursued. In summary, we believe that pursuit of the program of wolf eradication proposed in the Assessment is unwise and unsupported by the facts.

<u>GSACC</u> is a Southeast Alaskan conservation non-profit organization, formed in 2011, which seeks to foster protection of Southeast Alaska's fish, wildlife and their habitats. Its membership uses public lands throughout the region.

<u>AWA</u>, founded in 1978 and with a board composed entirely of Alaskans, is the only Alaskan-based group dedicated entirely to the sound management of Alaska's wildlife. AWA promotes an ecosystem approach to wildlife management with an emphasis on the non-consumptive values of wildlife.

<u>TCS</u>, based in Ketchikan, has a long been involved in land management planning processes throughout Southeast Alaska. The membership is primarily Alaskans who use the region's lands, fish and wildlife and have interests in the management of these natural resources. The membership includes commercial fishermen, Alaska Natives, tourism and recreation business owners, hunters and guides and citizens who use the region for business, recreation, scientific research and subsistence.

<u>Greenpeace</u> is a non-profit environmental organization whose mission is raising public awareness of environmental problems and promoting changes for a green and peaceful future. Involvement in the natural resource issues of the Southeast date to the early 1990s, and the long-time staffer here is a 36-year resident of the region. Work has included reducing the impacts of logging and associated road construction on ecosystems, toward the perpetuation of opportunities to fish, hunt and observe wildlife.

<u>CBD</u> is a non-profit environmental advocacy organization with more than 300,000 members and online activists dedicated to conservation and recovery of species at risk of extinction, and their habitats. Center members, activists and staff maintain long-standing interests in clean water and biological diversity in Southeast Alaska.

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#### I. Our Recommendations and Requests

For the reasons provided in the sections below, we recommend and request that the Board of Game:

(1) declare that the Unit-1A Feasibility Assessment is incomplete, based on information and deer objectives that are outdated, and does not present a basis for intensive management of wolves; and

(2) direct ADF&G to propose new deer population and harvest objectives for consideration at the next meeting of the Board, and that the department not reconsider IM objectives for deer in Unit-1A until new population and harvest objectives have been established by the Board.

#### II. The Deer Objectives Are Outdated and Therefore Do Not Support Wolf IM.

The current objectives for deer population and deer harvest in Unit-1A are outdated because they are based on older deer modeling which produced over-estimates of the carrying capacity of winter habitat.

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#### Unit-1A - Joint comments on Deer & Wolf IM "Feasibility Assessment." 28 Dec 2012

#### A. The current deer objectives for Unit 1-A, and how they were determined.

The current deer population and harvest objectives for Unit-1A were adopted by the Board of Game in 2000, setting them at 15,000 and 700 respectively. (Assessment at 7). They are based in large part on the Forest Service's 1997 deer model, which was used to estimate the winter carrying capacity of the habitat for deer, and on harvest rates from 1994 to 1999 which were the peak years for the Unit. (Id.). The Assessment itself recognizes that these objectives are "unrealistically high." (Assessment at 7, 18). Over the past five years the Unit-1A deer harvest ranged from 154 to 309 (Assessment at 7), but this does not include illegal take which the department estimates to be around 50% of the harvest estimated from hunter surveys. (Assessment at 30, 36). Thus, the actual total harvest over the past five years likely ranged from about 230 to 460, in comparison to the 700. This approaches two-thirds of the objective.

#### B. Problems with the deer model results that the harvest objective was based upon.

The Board of Game, in its 2000 determination of Unit-1A deer population and harvest objectives, relied upon deer carrying capacity data from the Forest Service's 1997 deer model. (Assessment at 7, 18). The Forest Service updated its model for the 2008 Tongass Forest Plan, and the new model' makes significantly lower carrying capacity estimates.

Three corrections made to the model since 2000 were substantial:

(1) In its FY-2000 Monitoring & Evaluation Report (published April 2001),<sup>2</sup> the Forest Service corrected the conversion factor (called the Deer Multiplier) used to change the model's non-dimensional output to carrying capacity in deer per square mile, from 125 to 100.<sup>3</sup> The Deer Multiplier is based on deer pellet transect data, and is the carrying capacity of best quality habitat (of which very little exists). The older model results in over-estimated carrying capacity by 25%. From the information in the Assessment we don't know which multiplier had been used when the Board of Game set the Unit-1A objectives.

However; regarding the Deer Multiplier, Gravina Island is a special case as ADF&G itself explained to the Forest Service in 2002 regarding the Gravina Island Timber Sale Project:<sup>4</sup>

"Deer model. Our concerns for sustainability of deer harvests on Gravina stem in part from the reported results of runs of the deer model for the DEIS, as well as analysis of hunter demand. The coefficients used for these runs very likely underestimate the effects of the project upon deer, leading to overly optimistic projections of true deer numbers and future availability. The model was run with a multiplier of 125 deer per square mile, as directed by the 1997 Forest Plan, although a multiplier of 100 deer per square mile has been recommended by both FS and ADF&G biologists.

<sup>&</sup>lt;sup>1</sup> When we speak here of a "version" of the model, this encompasses the core of the model and the vegetative data and directives for some external settings that are used when carrying capacity in deer per square mile is calculated from the model's non-dimensional output. The core of the model has not changed over the years, only the other factors in its application.

<sup>&</sup>lt;sup>2</sup> USFS R10-MB-431, at 2-155.

<sup>&</sup>lt;sup>3</sup> The multiplier represents the winter carrying capacity of the highest quality habitat type; however, this kind of habitat is scarce.

<sup>&</sup>lt;sup>4</sup> This timber sale project was not executed. As a result of an administrative appeal of the project decision (Greenpeace et al. 2004) to the next highest level of the Forest Service, the project decision was withdrawn. However, since that time a significant amount of logging in high quality deer habitat has occurred on Gravina Island, done under timber sales by Alaska DNR and the Alaska Mental Health Trust.

In the September 13 meeting, Gene DeGayner indicated that the FS intends to use a multiplier of 100 deer per square mile for habitat scores of 1.0 from this point forward, unless project-level data suggest otherwise. In general, ADF&G recommends assuming a maximum **year-round** carrying capacity of 35 to 40 deer per square mile in the best habitat. After consultation with ADF&G research biologists Matt Kirchhoff and Dave Person, we recommend equating a multiplier of 35 deer per square mile to a score of 1.0 for the Gravina project area, due to the lack of high-value alpine habitat, indicating a non-migratory deer population that occupies the area all year, with little seasonal variation. (See the Appendix for a more detailed discussion of application of the deer model.)"

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(ADF&G Habitat Div. letter to Alaska OMB, 12 Dec. 2002, at 3 to 4. Orig. emph.). Thus, for Gravina Island, reliance on Deer Multipliers of 125 or 100 would result in over-estimations of carrying capacity of a factor of 3.57 (a 257% over-estimation) or 2.85 (a 185% over-estimation).

(2) In 2008 the Forest Service made a further correction to use of the Deer Multiplier.<sup>5</sup> From 1997 through 2007 the scale for the non-dimensional habitat value outputs was a range "habitat suitability index (HSI)" of from zero to 1.3. The value 1.3 represents best quality habitat. However, the way the Deer Multiplier was used during those years, it corresponded to a value of 1.0 in that range, which is incorrect and results in a 30% overestimation of carrying capacity. If these and the previous error were both present in the data the Board considered in setting the objectives, the total error was a 62.5% carrying capacity over-estimation.

(3) The vegetative dataset used in the 1997 deer model was later found by a Forest Service statistical study to be uncorrelated to habitat quality. (Caouette et al. 2000).<sup>6</sup> An adequate dataset was not used until adoption of the 2008 Tongass Forest Plan. The new dataset "results in an overall reduction in average HSI7 values because fewer stands would be classified as high and medium volume strata and more stands would be classified as low volume strata compared to the old volume strata mapping used in the 1997 Forest Plan Revision Final EIS." (2008 Forest Plan FEIS at 3-265 to 266). This change resulted in significantly lower carrying capacity estimates by the new model, nearly everywhere in the Tongass, but the changes were not the same everywhere because the previous dataset's non-correlation to habitat quality had made the amount of error erratic.

#### C. The Amount of Deer Modeling Error, As Incorporated in the Unit-1A Objectives.

The 2008 corrections made by the Forest Service to its 1997 modeling of deer winter habitat carrying capacity indicate that the 1997 modeling made these over-estimations:

<sup>6</sup> Caouette, J.; Kramer, M.; & Nowacki, G. (2000). Deconstructing the Timber Volume Paradigm in Management of the Tongass National Forest. USDA Forest Service, Pacific Northwest Station. PNW-GTR-482. 20p. <u>http://tongass-</u> fpadjust.net/Documents/Caouette\_eta\_%202000\_GTR482.pdf

<sup>&</sup>lt;sup>5</sup> 2008 Tongass Forest Plan (TLMP) FEIS, at 3-266: "HSI values were standardized to range from 0 to 1.0, by dividing all values by 1.3, because outputs from such models represent a range from 0 to 100 percent habitat suitability, with higher values indicating higher habitat capability." Also at 3-284 in footnote 2: "Habitat capability in terms of deer density calculated using a multiplier of 100 deer persquare mile equating to a habitat suitability index score of 1.0."

<sup>&</sup>lt;sup>7</sup> HSI is habitat suitability index, the non-dimensional output of the model that was mentioned in a previous footnote.

| Unit 1-A             | 39% | Over-estimation |
|----------------------|-----|-----------------|
| Gravina Island       | 77% | Over-estimation |
| Revillagigedo Island | 60% | Over-estimation |
| Cleveland Peninsula  | 34% | Over-estimation |

Fig. 1: Over-estimations of the earlier model.

(See calculations in Fig. 2, next page.) But percentages don't tell the whole story. The Tongass Forest Plan has a standard and guideline of providing a deer habitat carrying capacity of at least 18 deer per square mile (where possible), in order to sustain both wolves and deer hunters. ADF&G has advocated the use of this standard and guideline (S&G), and the department played a major role in its adoption by the Forest Service. Note in Fig. 2 that according to the 1997 modeling that two major historic hunting areas for Ketchikan residents, the Cleveland Peninsula and Revillagigedo Island, scored above the S&G at 18.8 and 18.3 deer per square mile, respectively. However, according to the 2008 model for the current (2006) condition they scored well below the S&G at 13.6 and 11.7 deer per square mile. Moreover, Gravina Island was already below the S&G in 1995 at 13.0, but with the revised modeling (and when using ADF&G's recommended Gravina Island Deer Multiplier of 35) it was at 7.3 deer per square mile in 2006.

Accordingly, after assessing the improved modeling results it is unsurprising that the harvest of deer and the amount of hunter effort in Unit-1A have declined and that deer numbers are low, particularly after recent hard winters.

It is important to note that not all of the difference between the modeling of the 1995 and 2006 current conditions is due to corrections to the model. In that 11-year interim, second growth timber in clearcuts over about 25 years old entered the stem exclusion stage, which dropped their contribution to carrying capacity to essentially zero. Furthermore, the future stem exclusion condition of other second growth which was less than 25 years old in 2006 (or not yet created by clearcutting) is not reflected in Fig. 2.

The point here is that the deer modeling basis for the current deer population and harvest objectives that were set by the Board of Game in 2000 is no longer valid. An urgently needed action by the Board is to update those objectives. It is not valid to initiate a program of wolf intensive management on the basis of the outdated objectives. Moreover, if the Board acts contrary to wolves because prey is under-abundant for both wolves and meeting deer harvest objectives, we believe that is an indicator that listing the Alexander Archipelago wolf under the Endangered Species Act is warranted.

#### III. The Habitat & Ecosystem Situation Is Such That Wolf IM Is not Feasible in Unit-1A.

#### A. Current model results for Unit-1A show that low original deer habitat capability and subsequent loss of old-growth habitat are the problem.

The deer habitat capability results in Fig. 2 from the 2008 deer modeling indicate that, in times of average winters (which is what the model predicts) or worse, Unit-1A is incapable of supporting a large harvest of deer. A large harvest may be possible in multi-year periods of mild weather if the browse recovers adequately from harder winters, and the peak years of harvest upon which the current harvest objective was set may be indicative of such a situation. However, since that time in the mid-1990s many then-recent clearcuts have reached the stem exclusion stage and additional clearcuts have been created that in the

Fig. 2: Unit-1A Deer Model Carrying Capacities by WAA, for 1997 vs. 2008 models

Edwards (23Dec12, for BoG comments)

|                              | 11           | 1997<br>Model | 2008<br>Model                | Model<br>Comparison          | lf Deer<br>Mult. = 35   |                              |                         | 1997<br>Model           | 2008<br>Model                | 1997<br>Model                | 2008<br>Model        |                      |  |
|------------------------------|--------------|---------------|------------------------------|------------------------------|-------------------------|------------------------------|-------------------------|-------------------------|------------------------------|------------------------------|----------------------|----------------------|--|
| WAA Location                 | WAA Location | WAA<br>Number | 1995<br>Carrying<br>Capacity | 2006<br>Carrying<br>Capacity | 1995<br>Over-estimation | 2006<br>Carrying<br>Capacity | Land<br>Area<br>(sq-mi) | Land<br>Area<br>(sq-mi) | Area<br>Weighted<br>Capacity | Area<br>Weighted<br>Capacity | Carrying<br>Capacity | Carrying<br>Capacity |  |
| Gravina                      | 101          | 13            | 21                           | -38%                         | 7.3                     | 62.1                         | 62                      | 807                     | 455                          | 13.0                         | 7.3                  | Gravina L            |  |
| Duke I.                      | 303          | 19            | 18                           | 3%                           | -                       | 73.3                         | 73                      | 1393                    | 1348                         | 19.0                         | 18.4                 | Duke I.              |  |
| Revilla, east shore          | 404          | 22            | 12                           | 86%                          | 1                       | 281.4                        |                         | 6191                    | 3321                         |                              |                      | 1                    |  |
| Revilla, Thorne Arm to Behm  | 405          | 24            | 18                           | 34%                          |                         | 83.4                         |                         | 2002                    | 1495                         |                              |                      |                      |  |
| Revilla, Carroll Inlet       | 406          | 20            | 12                           | 64%                          | ALC: NOTICE             | 194.6                        | 1,076                   | 3892                    | 2374                         | 4<br>3<br>5<br>18.8          | 44.7                 | Revilla<br>Island    |  |
| Revilla, George Inlet        | 407          | 13            | 15                           | -12%                         |                         | 64.2                         |                         | 835                     | 835 953<br>182 335           |                              |                      |                      |  |
| Revilla, Ketchikan           | 408          | 7             | 13                           | -46%                         | 6 CF 11                 | 26.0                         |                         | 182                     |                              |                              | 11.7                 |                      |  |
| Revilla, Clover to Francis   | 509          | 17            | 14                           | 25%                          | 5 (*C                   | 105.6                        |                         | 1795                    | 1431                         |                              |                      |                      |  |
| Revilla, Traitors to Bell I. | 510          | 17            | 10                           | 79%                          |                         | 237.1                        |                         | 4031                    | 2252                         |                              |                      |                      |  |
| Revilla, Burroughs Bay       | 511          | 15            | 5                            | 195%                         |                         | 83.3                         |                         | 1250                    | 424                          |                              |                      | in the second        |  |
| Cleveland, Spacious Bay      | 612          | 20            | 18                           | 13%                          | -                       | 107.9                        |                         | 2158                    | 1907                         |                              |                      |                      |  |
| Cleveland, Helm Bay          | 613          | 24            | 19                           | 29%                          | 1.041                   | 71.0                         | 358                     | 1704                    | 1321                         | 40.9                         | 42.6                 | Cleveland            |  |
| Cleveland, Meyers Chuck      | 614          | 15            | 20                           | -24%                         | Let 1                   | 20.5                         |                         | 308                     | 407                          | 10.3                         | 13.0                 | Pen.                 |  |
| Cleveland, base              | 715          | 15            | 8                            | 92%                          |                         | 158.7                        |                         | 2381                    | 1238                         |                              |                      | In Sta               |  |
| Unuk River                   | 716          | 3             | 4                            | -21%                         |                         | 523.8                        | 524                     | 1571                    | 1980                         | 3.0                          | 3.8                  |                      |  |
| Chickamin & Walker Cove      | 717          | 8             | 4                            | 79%                          |                         | 227.0                        | 227                     | 1816                    | 1012                         | 8.0                          | 4.5                  | a state of the       |  |
| Rudyerd Bay                  | 719          | 4             | 4                            | -8%                          | 1.1.1                   | 311.9                        | 312                     | 1248                    | 1354                         | 4.0                          | 4.3                  | Mainland             |  |
| Smeaton Bay                  | 821          | 15            | 9                            | 67%                          | 6. I A I                | 173.4                        | 173                     | 2601                    | 1554                         | 15.0                         | 9.0                  |                      |  |
| Boca de Quadra               | 822          | 10            | 8                            | 18%                          | . ÷                     | 608.9                        | 609                     | 6089                    | 5170                         | 10.0                         | 8.5                  | Li Change            |  |
| Unit                         | 1-A total    |               |                              |                              |                         | 100                          | 3,414                   | 42,251                  | 30,330                       | 12.4                         | 8.9                  | UNIT-1A              |  |

| Overall deer carrying | capacity over-estimations of the 1997 model: |     |  |  |  |
|-----------------------|----------------------------------------------|-----|--|--|--|
|                       | Unit-1A:                                     | 39% |  |  |  |
|                       | Gravina Island:                              | 77% |  |  |  |
|                       | Revillagigedo Island:                        | 60% |  |  |  |
|                       | Cleveland Peninsula:                         | 34% |  |  |  |

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Data Sources:

1997 model results from the 1997 TLMP FEIS, Table 3-112. 2008 model results and WAA land areas are from 2008 TLMP planning record document 0935 (0935.xls).



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years ahead will also reach stem exclusion – a "succession debt"<sup>8</sup> that will be paid in a further reduction of deer carrying capacity. Thus, the current deer population and harvest objectives adopted in 2000 are no longer valid, and it would be a mistake to base the adoption of wolf intensive management measures on those objectives.

It is insufficient and reckless, after recognizing that the deer objectives are not realistic, to suggest substituting the 20-year harvest average, as the Assessment does. (Assessment at 7). The habitat is now in poorer condition than during the extent of that 20-year period, and the winter conditions experienced during that period need to be taken into account as well as the expectation that severe winters will occur in the future. The Assessment notes (at 19) that "[r]elative factors in this decline [in deer numbers] have not been determined." We believe it is crucial that the relative factors be determined, and habitat capability, the effect of recent winters, and the condition of the browse over recent years are key among them.

We believe realistic deer population and harvest objectives for Unit-1A need to be adopted by the Board based on consideration of all the factors involved, and ADF&G needs to reconsider its Assessment on the basis of those new objectives.

# B. Because Gravina Island's winter browse is limited and already chewed-down, wolf predation is a benefit.

A deer habitat difficulty on Gravina Island is that there is little summer range on the island, so deer feed on the winter range all year. (<u>Attachment-1</u>, ADF&G letter of 2002 concerning habitat on Gravina Island). In combination with this adverse reality, "[a]n extensive forest fire around 1960 caused loss of winter habitat along the south end of the island" (Assessment at 24) and over the past decade other winter range has been lost to logging on State of Alaska and Alaska Mental Health Trust Lands (Assessment at 24).

Snow depths of over the critical 20" depth for deer are common on Gravina Island (Assessment at 22, 24). "Gravina Island is mostly muskeg scrub forest with very few intact patches of old growth forest. Those few old growth patches have been depleted of deer forage after many years of browse when winter snow forced existing deer into small areas for extended periods." (Assessment at 22, 25).<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> A term coined by ADF&G research biologist Dave Person.

<sup>\*</sup> Unit-1A overall also has degraded forage. "[T]he remaining habitat in portions of 1A is not as productive for deer (lack of favored winter browse species), and those areas with good forage show signs of intensive browsing." (Assessment at 3). "In parts of the unit (i.e., Cleveland Peninsula), past browse utilization appears to have reduced preferred browse species such as Vaccinium spp. Other, less palatable and useful browse species (i.e., salal) has become more common in this area. Availability of sufficiently high quality browse in some parts of the unit is thus reduced." (Assessment at 23).

<sup>&</sup>lt;sup>10</sup> Contrary to these statements in the Assessment, the document as says, "Habitat capability: Past, present, and anticipated future reductions in important deer winter range (old growth forest) remain a management issue as it affects the ability of the landscape to support deer. On this larger scale, the ability of the habitat in Unit 1A to support deer will decline, and these habitat changes likely play a role in the recent population decline. <u>Nonetheless, we suspect that in the treatment area deer are well below the carrying capacity of the remaining habitat and could increase substantially while remaining within the carrying capacity of this area." (Assessment at 17). We find that the underlined statement is bald optimism that is contradicted by much of the content of the Assessment, as well as by our further analysis herein of the carrying capacity situation. The bottom line question is, what really is the carrying capacity of Gravina Island (or for that matter Unit-1A)? The Assessment does not confront this key question.</u>



It is apparent that winter habitat for deer is likely the limiting factor for deer numbers on Gravina Island, and not predation or hunting, because of the degraded condition of winter forage. The problem therefore seems to be an unoptimally high number of deer for the amount and quality of habitat available on the island, despite the fact that the deer population is apparently a small number.

Both wolves and deer hunters help keep the deer population in check, but damage to winter forage has become widespread nonetheless. The effort and deer harvest by hunters has been low in recent years (Assessment at 36), so wolves have been the primary agent for keeping the deer population somewhat in check and preventing worse damage to browse vegetation on Gravina Island. Moreover, wolves take deer all year, while hunting seasons are in the fall and winter. Winter range browse that is spared early in the year by predation is browse that is available when needed in winter.

For all of these reasons, the proposed extirpation of wolves on Gravina Island is a bad idea.

#### C. The use of Unit-4 in the "Feasibility Assessment" actually contra-indicates wolf IM.

The Assessment notes that "[e]ven areas like Unit 4, where wolves are absent, experienced severe die-offs during some of these same heavy snow years." (Assessment at 3). However, the bearing of this isolated remark is left unexplained. Other documentation shows that the deer population on the most heavily affected part of Unit 4 was at carrying capacity at the time the heavy winters began occurring. (<u>Attachment-2</u>, ADF&G statements in Juneau Empire, 16 Sept 2007). The high population affected the condition of winter browse. If Unit 4 had had wolves, we posit that the ensuing lower deer population would have left the winter range in better condition. (See also <u>Attachment-3</u>, ADF&G statements of August 2007). The impact of hard winters in the following years may then have been less catastrophic because the range would have been in better condition. To date, the deet season on northeastern Chichagof Island in Unit 4 is still not back to normal. Moreover, the winter severity and habitat characteristics differ greatly between units in southern Southeast Alaska, as well as across those southerly units from west to east. (<u>Attachment-4</u>, ADF&G statements of October 2007).

In sum, the point in the Assessment regarding Unit 4 and its absence of wolves provides no support for the proposed wolf intensive management on Gravina Island, and if anything it contra-indicates the proposal because, if present, wolves would have moderated the deer population, leaving the winter range in better condition.

#### D. The Assessment over-simplified the matter of severe winters.

The occurrence of severe winters is a limiting factor for deer on and near the mainland of southern Southeast Alaska, including in Unit-1A and on Gravina Island (Attachment 4; Assessment generally). It is the extreme years that matter most and how closely they follow one another, not the long-term average climate statistics on snowfall and temperature.

#### i. Recent severe winters were merely mentioned, but their actual severities and their particular effects were not described.

The Assessment includes many remarks about severe winters and the general effects of winter at several places, for example:

"Winter weather on Gravina Island is a limiting factor for deer survival. Snow depths exceeding 22 inches are common during winter months ..." (Assessment at 22).



"Heavy snow winters, such as we experienced during RY2006-2008 and again in 2011, cause die-offs due to starvation and higher predation rates because animals are in poorer condition. At the same time, in Unit 1A we are faced with habitat alterations related to clear-cut logging that tends to exacerbate the effects of even mild winters." (Assessment at 3).

"Effects of weather, habitat capability, diseases, and parasites.

• Weather: Severe winter weather is believed to have the greatest impact on Unit1A deer populations, often resulting in high rates of mortality. Severe winters generally occur in cycles and appear to be associated with the Pacific Decadal Oscillation. Historically, two or three bad winters are followed by seven to ten mild winters." (Assessment at 17).

While we believe these statements are accurate (except we believe there is more to it than just Pacific Decadal Oscillation), the Assessment fails to describe the severity and impacts of winters of the past few decades and particularly the hard winters of the past six years. Where on Gravina (or elsewhere on Unit-1A) did deer survive and where did they perish? How was the browse in deer winter habitat affected over these winters? What were the relative effects of limited winter forage and predation? How much of the predation during these winters was compensatory and how much was additive?

#### ii. The likelihood of future severe winters was not accurately presented.

The Assessment attributes the occurrence of severe winters to cycles of the Pacific Decadal Oscillation (PDO). (Assessment at 16, 22). The PDO has a 20 to 30 year cycle between warm and cold phases, of which we are presently perhaps half way through a cold phase. (NOAA).<sup>11</sup> However, in reporting this the Assessment overlooks other climate factors that interact with the PDO and which operate on different time scales. These include El Niño/Southern Oscillation (ENSO),<sup>12</sup> and the interaction of the Arctic Oscillation (AO) and the Madden-Julian Oscillation (MJO). An interaction of these oscillations, and predominantly the latter three which operate on shorter time scales that the PDO results, as one example, in what is called the Pineapple Express, which brings high moisture to the coasts of the Pacific Northwest and Gulf of Alaska.<sup>13</sup> All it takes is such moisture encountering a body of cold air from the Arctic or interior of the continent to make a lot of snow.

Frontal systems (apart from those of the Pincapple Express) also make snow. Climate models indicate that generally higher moisture and precipitation can be expected along the west coast and Gulf of Alaska as a consequence of warming caused by on-going climate change. (<u>Attachment-5</u>, Salathe 2006). Again, all it takes is moist air encountering a body of cold continental or Arctic air to create extreme snowfall. As also shown by recent very cold or deep snow winters in the US east coast, the UK and Europe, very problematic or record-setting winter conditions should continue to be expected across the upper northern hemisphere despite global warming (Seager et al. 2010; Guan et al. 2010; Boos 2011). Annual snowfall records have been set throughout Alaska, up through the winter of

<sup>&</sup>lt;sup>1</sup> NOAA (undated (a)). Pacific Decadal Oscillation (PDO). On the NOAA NW Fisheries Science website, http://www.nwfsc.noaa.gov/tesearch/divisions/fed/oeip/ca-pdo.cfm.

<sup>&</sup>lt;sup>12</sup> NOAA (undated (b)). El Niño/Southern Oscillation (ENSO). NOAA Earth System Research Laboratory website. <u>http://www.esrl.noaa.gov/psd/enso/</u>

<sup>&</sup>lt;sup>13</sup> NOAA (2005). NOAA catches a culprit behind western storms. NOAA Magazine, 12 Jan 2005. http://www.noaanews.noaa.gov/stories2005/s2367.htm



2011/2012. (<u>Attachment-6 & -7</u>, Ak Dispatch 2012(a,b).<sup>14</sup> After snow depth records were set in Southeast Alaska in 2006/2007, the following winter set the second highest records. (<u>Attachment-8</u>, KFSK 2008).<sup>15</sup>

We believe it is likely that global warming effects on the Pacific Ocean, leading to higher atmospheric moisture commonly reaching Southeast Alaska, is causing more snowfall (and higher rainfall in the non-snow months) in contemporary years than the PDO alone can account for. Thus, we challenge the conclusion in the Assessment's Appendix B section I.B.3 (Assessment at 23) that "[t]here is no evidence that climate change will result in lower deer numbers in this area." To the contrary, we believe climate change is already playing a role in keeping deer numbers low on Gravina Island and in Unit-1A, and that it will continue to do so even though the population will increase for a time during periods of mild years. We expect these changes will not coincide with the PDO cycle, although it will have an influence on the overall weather at all times.

#### F. Ranking the potential for mitigating low deer numbers in Unit-1A and on Gravina Island.

In subsection titled Potential to Mitigate Biological Limitations in Considered IM Area (p.11), the Assessment claims a "moderate" chance of mitigating low deer numbers, with the factors involved being "severe winters" and "reductions in deer carrying capacity resulting from logging," as well as predation by wolves and bears:

"While the effects of winter weather might be partially mitigated by retaining as much old growth forest as possible to function as deer winter range, the department has little influence over forest management activities occurring on federal lands. While the Forest plan manages wildlife at viable levels, the State manages for sustainable levels (i.e., providing subsistence and recreational harvests). Although we are not proposing to mitigate the effect of bear predation on the deer population, research being conducted in neighboring Unit 2 indicates that on POW Island black bears prey heavily on deer fawns." (Assessment at 11).

We believe to the contrary, based on our analysis in these comments, that in fact the mitigation potential is <u>low</u> on Gravina Island. This conclusion is also supported by other content in the Assessment. Appendix B of the Assessment answers the Board of Game's questions of:

"<u>Has the combination</u> of natural and human-caused disturbance <u>produced an extent and</u> <u>mixture of vegetative seral stages capable of maintaining the present productivity if the</u> population changes due to management treatment at a moderate level of increase? *Yes/No.* At a substantial level of increase? *Yes/No*"...

... giving answers of "No" and "No." (Assessment Appen. B I.B.5 at 23 to 24, emph. added). <u>We agree</u>. The several bullet points that that continue the answer clearly illustrate the problem on Gravina Island, as summarized here: (1) important deer habitat has been lost to logging, to additional logging that can be expected to happen, and to a fire of some years ago; (2) logged habitat reaching stem exclusion is a time bomb; (3) productive alpine habitat is under-utilized because the paucity of remaining winter habitat has limited the number of deer; (4) plant species that are important winter forage have been damaged by the number of

<sup>14</sup> (1) Alaska Dispatch, 2012a. Snow records near-bursting across Alaska as accumulation mounts. (Concerning Anchorage, Barrow, Kodiak, Cordova). 5 Mar 2012. [Attachment -5.]

http://www.alaskadispatch.com/article/snow-records-near-bursting-across-alaska-accumulation-mounts. (2) 2012b. Anchorage, Alaska breaks seasonal snowfall record. 7 Apr 2012. [Attachment-6.] http://www.alaskadispatch.com/article/anchorage-alaska-breaks-seasonal-snowfall-record.

<sup>15</sup> KFSK, 2008. Snowpack 2nd-Highest on Record in Southeast Alaska. 17 Apr 2008. [Attachment-7.]



deer which was too great for the limited winter forage that was available; and (5) the limited number and size of the remaining patch of deer winter habitat have made deer susceptible to predation.

The problem is, the Assessment has not ranked the importance of these problems, all of which are activated by severe or, now, even mild (Assessment at 3) winters. The over-arching problem is the degradation of habitat from both human and natural causes. It is questionable that predation is even a problem at all since it will help keep the number of deer in check, moderating damage to winter browse and perhaps affording a chance for its eventual recovery.

#### IV. Facts In the "Feasibility Assessment" Show That Wolf IM is not Feasible in Unit-1A.

The Assessment considers only the technical feasibility of eliminating wolves on Gravina Island, but not whether the project is economically feasible. The Assessment provides indicators of the proposed project's cost, but they are scattered throughout the report. Pulling those cost estimates together, the project will cost <u>more than</u> the range of \$395,000 to \$470,000,<sup>16</sup> with an increase to both ends of that range from providing food, fuel and the use of an ADF&G boat to the contract trappers.

The Assessment is incomplete because it does not estimate how much the deer population and the deer harvest would be increased as a result of the program. However, it seems that those increases will be quite small. If each wolf takes 26 deer over a year (Assessment at 25), elimination of the island's pack of about 8 wolves could perhaps increase the deer population by 208 deer — if the habitat can support that increase. However, because as the Assessment acknowledges the browse in the winter range is already depleted (Assessment at 22, 24, 25), it seems that this level of population increase cannot be supported by the habitat that remains after the damaging logging that has occurred on Gravina Island.

But for purposes of discussion, using that 208 deer figure the cost of the program would exceed \$2,000 per addition deer in the population and perhaps be as high as \$2,500. In terms of harvested deer, if we use the ratio in the current Unit-1A deer objectives of 700 harvested in a population of 15,000 (or 0.047), a population increase of 208 could result in a harvest increase of only 9 deer. The cost per additional deer that can be expected to be harvested would exceed the range of \$43,900 to \$52,200, cach.

Moreover, because Gravina Island is not a closed system – with wolves able to come and go from the island freely – to be effective the wolf control program would need to be continued and costs would have to be on-going for the program to have any continuing effect.

This project is not economically feasible or a wise use of State fiscal or staff resources. The Assessment does not address at all the feasibility of using state funds and staff resources for a project with such exorbitant cost per unit (each deer) of benefit.

#### V. Missing Information in the "Feasibility Assessment."

We note that in Fig. 5 (Gravina Island deer harvest and deer pellet group mean per plot) data points for eight years are missing, including for six of the twelve years since 1999. The missing information is important, yet the Assessment did not disclose its absence. Regardless of whether the data simply doesn't exist, its absence calls into question some of

<sup>&</sup>lt;sup>16</sup> This includes amounts given in the Assessment for: contracts for the trappers; DNA population estimate work, and the \$20,000 (see p.18) in administrative costs.



the sweeping conclusions in the Assessment. Has the harvest of deer on Gravina well been as consistently low since 2000 as shown? The answer to this question is important.

#### VII. Conclusions

For the reasons we have expressed in the above discussions we recommend that the Board of Game find that the intensive management of wolves on Gravina Island and elsewhere in Unit-1A is unwarranted. Based on scientific and other available information: eliminating wolves may result in even more damage to the remaining deer winter range; the program is likely to be technically ineffective; and the program will be unjustifiably expensive in comparison to the potential for benefit to hunters.

Further, we request that the Board of Game direct ADF&G to recommend revised population and harvest objectives for deer in Unit-1A at the earliest possible date. It is obvious from the content of the department's Assessment and our comments that the current objectives are outdated and no longer valid for guiding the management of deer and their predators.

Finally, we request the Board of Game to do everything it can within its powers to pressure ADF&G (and more broadly the State) to strongly resist further loss of deer habitat in Unit-1A due to logging. This is in the best long-term interest of good hunting. We are particularly concerned about the State's "one voice" policy by which comments on timber projects are funneled through the Department of Natural Resources and key information gets filtered out in the process. We ask the board to compare the content of last month's comments on the Forest Service's Big Thorne timber sale DEIS by the State of Alaska to those of the US Fish & Wildlife Service and the joint comments by most of the organizations that are submitting these comments to you today. While the State made a few good points, its comments in comparison clearly fall far short. As well shown in our DEIS comments, ADF&G did have much to offer that didn't make it through the "one voice" process. (See section IV.A of those comments).

#### Submitting organizations (verifiable signatures upon request):

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Center for Biological Diversity Kiersten Lippmann Box 100599 Anchorage, Alaska 99510 <u>klippmann@biologicaldiversity.org</u> 907-274-1110
Unit-1A - Joint comments on Deer & Wolf IM "Feasibility Assessment." 28 Dec 2012

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# STATE OF ALASKA

# DEPARTMENT OF FISH AND GAME

HABITAT AND RESTORATION DIVISION

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# **ATTACHMENT - 1**

- TO: Jennifer Garland Project Review Coordinator Office of Management & Budget Division of Governmental Coordination Juneau
- FROM: Moira Ingle Habitat & Restoration Division Douglas

DATE: December 12, 2002

SUBJECT: Gravina Island Timber Sale Final ACMP Finding

The Alaska Department of Fish and Game (ADF&G) has reviewed the March 8, 2002 Project Clarification letter and associated materials for the Draft Environmental Impact Statement (DEIS) prepared by the USDA Forest Service (FS) regarding the Gravina Timber Sale project. The information and recommendations contained herein constitute the final comments from ADF&G for the Alaska Coastal Management Program (ACMP) review, and respond to various communications and further efforts at clarification between the state and the FS since the Proposed Consistency Determination was issued on May 21, 2002. Specifically, these comments address issues raised at a meeting between the state and the FS in Ketchikan on September 13, 2002, and to a letter from the FS dated November 13, 2002, that provided additional information to the State.

#### **PROJECT DESCRIPTION**

In the Project Clarification, the FS identified Alternative 3 with modifications as the proposed Selected Alternative. In the original Alternative 3, identified as one of two preferred alternatives in the 2001 DEIS, the FS proposed to cut approximately 31 MMBF and construct approximately 22.2 miles of new road, including approximately 6.7 miles of road across Department of Natural Resources (DNR), Mental Health Trust, and Ketchikan Gateway Borough lands. In the original Alternative 3, the FS proposed that the roads on National Forest System land would be decommissioned after the timber harvest is completed to protect wildlife habitat and reduce hunting and trapping pressure on deer, wolves, and marten over the long term.

For the modified Alternative 3 (2002), the FS stated in the Project Clarification "the mainline road will remain open following timber sale activities to allow for recreational access to the project area.



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However, to initigate impacts on traditional subsistence uses by minimizing additional hunting pressure on deer, *these roads<sup>1</sup>* will be closed to all motorized traffic" through Special Forest Orders during the deer-hunting season (emphasis added)."

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Additionally, the original Alternative 3 of the DEIS proposed to convert approximately 1,145 acres of old growth forest to an even-aged condition, 282 acres to a two-aged condition, and 392 acres to an uneven-aged condition. As clarified verbally by Colleen Grundy (FS) to Lorraine Marshall (DGC) on May 16, 2002, the modified Alternative 3 would convert 1,064 acres to an even-aged condition, 311 acres to a two-aged condition, and 437 acres to uneven-aged condition. Other modifications to the Selected Alternative identified in the Project Clarification include the addition of four units "to improve the economics of the helicopter sale at the south end of the island." Areas below 500 feet in elevation in two of those units were left out "due to their habitat value for goshawks and deer." In addition, five previously proposed helicopter units were deleted to improve the economics of the proposed helicopter units were deleted to a source as well as address Native subsistence concerns, by reducing timber harvest in the vicinity of Bostwick Inlet and eliminating the proposed barge drop location in the inlet. The project as currently proposed would use an existing land-to-barge log transfer facility located at the Pacific Log and Lumber sawmill site on Tongass Narrows, west of the airport.

#### ACMP REVIEW STANDARDS

The sections of the Alaska Forest Resources and Practices Act excerpted below are part of the ACMP standards for federal timber sales (underlines added):

#### AS 41.17.060. REGULATORY AND ADMINISTRATIVE STANDARDS.

- (c) With respect to state and municipal forest land only, the following standards also apply:

   (1) forest land shall be administered for the multiple use of the renewable and nonrenewable resources and for the <u>sustained yield</u> of the renewable resources of the land in the manner that best provides for the present needs and <u>preserves the future options</u> of the people of the state;
  - (3) to the extent its capacity permits, forest land shall be administered so as to <u>provide for the</u> <u>continuation of businesses</u>, activities, and lifestyles that are dependent upon or derived from forest resources,
  - (5) there may not be significant impairment of the productivity of the land and water with respect to renewable resources; and
  - (7) allowance shall be made for important fish and wildlife habitat.

#### GENERAL COMMENTS

We appreciate the willingness of the FS to extend the review time for this project to assist in resolving issues. The FS also provided additional information, including the End-of-Rotation analysis of deer habitat capability by FS biologist Jim Zelenak; a copy of relevant pages from the Annual Monitoring Report for 2000; and tables and maps showing coarse-canopy stands (including Volume Class 6 and 7) within the project area. We were pleased to learn that the FS intends to provide information on coarse-

<sup>&</sup>lt;sup>1</sup> The FS proposal remains unclear, in that one sentence indicates the mainline "road" (i.e., singular) will remain open, but the following sentence states that "these roads" (plural) will be closed to motorized traffic.



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canopy stands in the Gravina sale and all future timber sale and interagency Old-growth Habitat Reserve (OGR) analyses (September 19, 2002 letter from Forest Supervisor Tom Puchlerz to ADF&G Commissioner Frank Rue). As we have previously stated, this information is the best available depiction of some important wildlife habitats, and critical for the effective evaluation and monitoring of the effects of timber harvest on biodiversity and wildlife resources.

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We are also pleased to note that for the Gravina sale, the FS intends to implement modification of the small OGRs as recommended by the interagency biologists' review. ADF&G considers this to be an important step toward fully implementing the Forest Plan conservation strategy, which is critical to maintaining sustainable populations that can accommodate human uses.

#### REMAINING ISSUES OF CONCERN

ADF&G continues to have serious concerns about the effects of implementation of the Gravina project relating to several analyses, including the following issues:

- Ability of managers to meet future demand for deer, particularly regarding potential restrictions to subsistence and/or limitations to Ketchikan and other non-rural hunters on future deer harvest on Gravina;
- Additional impacts as a result of other potential future timber entries that were not described or analyzed in the DEIS; and
- 3) Additional impacts as a result of the proposed "hard link" to Ketchikan.

We have commented previously that the analyses in the DEIS and supporting information potentially underestimate effects of project implementation on important wildlife habitats, maintenance of deer and other wildlife populations, protection of fisheries and water quality, and subsistence, and have requested more detailed analyses. Accurate effects analyses are important for ACMP reviews, and are required by the federal Coastal Zone Management Act regulations: 15 CFR 930.39(a) provides that a federal consistency determination must include a detailed description of the activity and its effects on the coastal zone. For federal timber sales, the description of the activity and its effects is contained in the NEPA documents for each project. Therefore, our comments on adequacy of effects analyses in the Gravina DEIS are applicable to the ACMP review.

#### ACMP CONSISTENCY ISSUES

Ability of managers to meet future demand for deer. In the DEIS, the FS recognized that several factors "could lead to unsustainable levels of deer harvest on Gravina". The FS reported that if the road remains open, "increases in access and competition for deer may result in a significant possibility of a significant restriction of subsistence use of deer." We are concerned that due to habitat loss and increased access as a result of this sale, future demand for deer from the island cannot be met and limitations will be placed on Ketchikan and other non-rural hunters who desire to harvest deer on Gravina Island.

<u>Deer model</u>. Our concerns for sustainability of deer harvests on Gravina stem in part from the reported results of runs of the deer model for the DEIS, as well as analysis of hunter demand. The coefficients used for these runs very likely underestimate the effects of the project upon deer, leading to overly optimistic projections of true deer numbers and future availability. The model was run with a multiplier of 125 deer per square mile, as directed by the 1997 Forest Plan, although a multiplier of



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100 deer per square mile has been recommended by both FS and ADF&G biologists.

In the September 13 meeting, Gene DeGayner indicated that the FS intends to use a multiplier of 100 deer per square mile for habitat scores of 1.0 from this point forward, unless projectlevel data suggest otherwise. In general, ADF&G recommends assuming a maximum yearround carrying capacity of 35 to 40 deer per square mile in the best habitat. After consultation with ADF&G research biologists Matt Kirchhoff and Dave Person, we recommend equating a multiplier of 35 deer per square mile to a score of 1.0 for the Gravina project area, due to the lack of high-value alpine habitat, indicating a non-migratory deer population that occupies the area all year, with little seasonal variation. (See the Appendix for a more detailed discussion of application of the deer model.)

In their November 13 letter, the FS indicated that they will provide the results of the new deer model run using our recommended values soon after the New Year. That the results will undoubtedly show substantially lower deer habitat capability magnifies our concerns about the long-term sustainability of deer populations on Gravina. In addition, ADF&G plans to request interagency meetings to discuss and standardize the application of the current deer model.

Discrepancy with TLMP predictions. The results of the deer model portrayed in the DEIS sharply contrast with Forest Plan estimates of deer habitat capability on Gravina. In the DEIS for the first entry on Gravina, the predicted loss of deer habitat capability exceed the levels predicted by the Forest Plan over the entire rotation. We have previously requested but have not yet received an explanation of this discrepancy, which may have implications for wildlife and subsistence not only for the Gravina sale but also for TLMP habitat capability predictions forest-wide. We again request an explanation, which could be provided by the FS with the new run of the deer model.

Analysis of long-term demand for deer. The analysis of hunter demand may underestimate the true demand, and it does not include the effects of additional access. According to the DEIS (page 3-114):

Forest Plan projections of hunter demand for deer were based solely on projected increases in human population; they did not account for changes in access. Therefore, increases in demand could be much greater than predicted in the Forest Plan because of the proposed hard link between Ketchikan and Gravina, and if Ketchikan hunters are at some time restricted from harvesting deer on Prince of Wales Island. As described above, this could lead to unsustainable levels of deer harvest on Gravina.

In addition, in the Forest Plan projections that served as the basis for the Gravina analysis, no increase in hunter demand for deer was projected beyond 50 years for the 100-year rotation, therefore underestimating the demand over the rotation.

<u>Analysis of harvest throughout the rotation</u>. After road construction and logging has been completed, the FS plans to keep the road open for multiple use, including recreation, silviculture, and long-term timber access (August 26, 2002 letter from the Jerry Ingersoll to Lorraine Marshall.) ADF&G has expressed concern that the FS did not analyze in the DEIS possible future timber harvest entries that could occur during the current rotation. Instead, the scope of this analysis was limited to "reasonably



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foreseeable" activities (defined by the FS as timber sales scheduled on the 10-year schedule.)

Although the DEIS indicates (page 3-111) that "there are no other 'reasonably foreseeable' timber sales scheduled in the project area at this time," additional timber sales may still be scheduled in development Land Use Designations (LUDs) on Gravina under the 1997 Forest Plan. In previous sales on the Ketchikan and other Ranger Districts, the FS has generally provided analyses of effects on habitat capability for deer and other Management Indicator Species throughout the rotation. For example, the North Revilla FEIS contained a table (Chapter 3, page 106) titled "Total Cumulative Changes Caused by This and Future Timber Sales, in Habitat Capability for MIS to the year 2140." In addition, the deer model is generally considered to be most informative when used to assess cumulative effects on a landscape scale over the long term, rather than at the project level.

Attachment 1 of the Memorandum of Understanding between the State of Alaska and USDA Forest Service, Alaska Region, on Coastal Zone Management Act/Alaska Coastal Management Program Consistency Reviews (ACMP MOU) requires the FS to supply wildlife analyses "over the rotation."<sup>2</sup> The FS did provide the End-of-Rotation analysis, (identified as "CZMA MOU – Attachment 1, G-13") to the state with their preliminary coastal zone consistency determination, mailed to Jennifer Garland of DGC on January 24, 2001. Except for the deficiencies and recommended changes in the deer model and hunter demand analyses, as detailed above, we agree with the premise and assumptions of this analysis, which assumes that all acres currently designated as suitable and available for timber harvest in the project area (6,802 acres) would be harvested at least 26 years prior to the end of the rotation, accounting for harvested stands in the stem-exclusion stage by the end of the rotation. ADF&G believes, however, that it would have been appropriate to include the entire analysis in the DEIS for the sale. The full potential effects of the sale, both now and into the future should be depicted, especially for a sale that will very likely have effects on Ketchikan hunters.

In their August 26 letter, the FS noted that the State requested clarification on several items, including the following:

The State is seeking a commitment from the Forest Service at this time that future entries will not occur. If such future entries are likely, the State asks for clarification from the Forest Service if potential future entries will be addressed in the FEIS.

The FS indicated that making such "a commitment to refrain from future entries [in land use designations that allow timber harvest activities] would not be consistent with the goals of the Forest Plan," then requested clarification on the ACMP basis for seeking such a commitment.

The full context of the request for clarification, which appeared in the July 9, 2002 letter from Lorraine Marshall, actually reads:

<sup>&</sup>lt;sup>2</sup> G. General information will be furnished at the DEIS stage, or with the consistency determination if at the ROD stage in the NEPA process, including:

A quantitative, objective, repeatable, and consistent estimate of changes to habitat productivity for deer, bears, marten, and wolf within the project area over the rotation.

<sup>14.</sup> An evaluation of the sustainability of historic harvest levels by the affected communities for marten, deer, moose, bear, goats, and wolves, in light of the estimated habitat changes created by the project and pertinent changes in public access.



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The State is concerned about the potential for future timber harvest entries on Gravina Island. In the State's experience, having an open road increases the likelihood of additional entries. The State is seeking a commitment from the Forest Service at this time that future entries will not occur. If such future entries are likely, the State asks for clarification from the Forest Service if potential future entries will be addressed in the FEIS.

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ADF&G views the request for clarification as exactly that: a request of the FS to elucidate the intent of their proposed actions. The DEIS indicated that no "foreseeable" entries are planned, but also planned to keep the road open for recreation (this was later clarified by the FS stating it would be kept open both for recreation and for potential future timber harvests.) The request for clarification explains that it is necessary to determine which review standards apply: if the road were strictly for timber harvest, the Alaska Forest Practices Act and Regulations would apply as an ACMP Standard. If, however, the long-term purpose of the road is primarily for public recreation, the State may need to evaluate the proposal under ACMP standards 6 AAC 80.040-900. We can see how the request could be misconstrued if not considered in the full context in which it was presented. The statement that the State is "seeking a commitment" from the FS that future entries should not be construed as an assertion of ACMP authority to demand that action. Initially, the purpose of the request was to ensure that the FS fully analyzed and displayed potential impacts to deer and wolf populations, and prepared plans to minimize these long-term impacts. The statement was a request for a commitment for certainty of information, and clarification as to whether the full end-of-rotation analysis would be included in the FEIS.

In a telephone conversation on December 11, Larry Meshew of the FS clarified to ADF&G that the FS does intend to include the end-of-rotation analyses in the FEIS for Gravina. We again request inclusion of these analyses for all future timber sale reviews.

<u>Effects on subsistence and non-rural hunters</u>. ADF&G continues to question significant aspects of the proposed sale that could have irreversible consequences for the future of wildlife and important wildlife habitats on Gravina Island. Most importantly, we have serious concerns about actions that would cause a significant possibility of a significant restriction to subsistence use of deer or result in limiting non-rural hunters from future deer harvests on Gravina Island. We believe a variety of alternative measures are available to the FS to mitigate such serious impacts. Habitat losses could be reduced and road access managed to avoid restrictions to non-rural or subsistence hunters of deer.

#### The DEIS concludes (page 3-126) that

For deer, declines in habitat capability resulting from project-related or reasonably foreseeable future timber harvest activities are not expected to cause a significant possibility of a significant restriction on subsistence use of deer. However, projected increases in hunter demand and competition for deer resulting from increased access to National Forest System lands, combined-with proposed development on non-National Forest System lands and completion of a hard-link transportation system between Ketchikan and Gravina could, under Alternative 4, lead to unsustainable levels of deer harvest. Therefore, under Alternative 4, increases in access and competition for deer may result in a significant possibility of a significant restriction on subsistence use of deer.



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In other words, the FS does not expect the habitat loss associated directly with timber harvest to be the cause of restrictions on subsistence. ADF&G maintains that reducing habitat losses would provide for more deer and that the FS conclusion may change given the modified application of the deer model. Additional access, as proposed in the original Alternative 4 and in the modified Alternative 3, would lead to unsustainable levels of deer harvest. Underestimates of hunter demand as projected by the Forest Plan will only hasten the inevitable outcome of this scenario. Given the federal subsistence priority, it is clear that the actual effects will first be felt not by subsistence hunters, but by hunters from Ketchikan, which is considered non-rural under federal regulations.

<u>Additional analysis of access: the "hard link"</u>. In our previous comments on the DEIS, ADF&G has noted that the FS did not quantify human access impacts in the event of a "hard link" to Gravina Island. The road, in conjunction with the hard link, will significantly increase the already high deer demand, while the proposed timber sale and potential future sales reduce deer availability through habitat loss.

#### As stated in the DEIS (page 3-126),

Even with no timber harvest [on federal and non-federal land], projected hunter demand will be 15.9 percent of habitat capability on Gravina Island by 2095...Increases in demand (and competition between rural and non-rural hunters) could be much greater than predicted in the Forest Plan because of the proposed hard link between Ketchikan and Gravina, and if Ketchikan hunters are at some time restricted from harvesting deer on Prince of Wales Island.

The FS maintains that they did analyze the effects of the hard link in the DEIS, at least subjectively. At the September 13 meeting, the FS requested that the State describe how we would like to see an impact analysis displayed. ADF&G responded at that time with some suggestions (e.g., looking at the environmental analyses conducted for the hard link project to assess potential increases in use that could be correlated to potential numbers of hunter or increases in number of days of use).

Other possible analyses could illustrate the numerous potential secondary and cumulative effects that may occur as a consequence of a "hard link" and road connection to Ketchikan, for example, subdivisions, timber sales on non-FS lands, industrial development, and the frequency and increased numbers of people hunting on and using Gravina in various ways. The FS should attempt to better identify, describe, and quantify the types and intensities of those and other uses. In particular, it would be helpful to have a more quantitative and meaningful projection of how increased hunter numbers and access could affect deer and other wildlife populations, by answering the following questions:

Would deer demand increase significantly, and within what range would it likely increase?

• How quickly would unsustainable deer harvests be likely to occur?

• To what degree would this affect deer numbers over time if left unchecked?

How soon might non-rural hunters be excluded from hunting on Gravina, or limited in various ways?
 Similar unanswered questions apply to habitat loss as well as for access.

• How might hard-link access stimulate habitat losses on non-FS lands and what would be the overall impact to wildlife of such new developments?

<u>Possible alternative measures</u>. The cumulative impacts from road access into the interior of Gravina Island, in combination with habitat loss from this timber entry, could significantly and permanently



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alter coastal habitat, and deer and wolf population dynamics on the island. ADF&G believes the deleterious effects and future long-term management problems resulting from the proposed project could be significantly reduced by taking a more conservative short-term approach. Several alternative measures are available to the FS to mitigate impacts and better provide for future deer demand. For example, if the "hard link" and its effects are reasonably foreseeable, as the FS has indicated is the case, ADF&G recommends that the FS implement more selective silvicultural systems in the current project to mitigate against such potentially damaging losses to habitat and human use patterns.

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Other examples of potential alternative measures that could be implemented include the following: • Limit future impacts for the duration of this Forest Plan, followed by validation monitoring: If the road is to be kept open for recreation, the FS could minimize additional activities that would further limit non-rural hunters or restrict subsistence. The FS could fund the collection of better data that will give us more accurate deer/human-use information, which could be incorporated into the next TLMP revision. In this way we could learn more about deer/habitat loss/subsistence and hunter demand on Gravina Island through a well-designed research project before causing more impacts that exceed construction of a permanent road and cutting the first entry.

Studies should be designed in cooperation with the ADF&G Wildlife Conservation and Subsistence Divisions. One top priority would be to obtain better deer population estimates prior to and following the road construction and logging proposed in the Gravina Timber Sale EIS. The collection of field data and monitoring of recruitment, predation, mortality, habitat capability, and similar aspects of deer population biology would be desirable. More accurate data collection concerning deer demand (underestimated in the DEIS) and actual numbers of deer harvested on Gravina by both subsistence and non-rural hunters prior to and following timber sale implementation should be obtained. Old methods of monitoring deer harvest, such as check stations, might help, although new methods for obtaining better information might be developed. We also strongly support development of an improved interagency deer model (preferably one that incorporates field data) to more accurately analyze and predict actual effects of timber harvest and road access. Results of field-based studies and more intensive data analysis could be compared to estimates reported in TLMP and the Gravina EIS.

• Road closures: The FS could implement the original Alternative 3 (or a modified Alternative 3, but decommission roads), and then collect post-timber harvest data that could be used to better analyze the effects of habitat loss in the next TLMP. Some of the effects analyzed in the studies described above (e.g., deer responses to habitat changes) would be easier to assess in the absence of motorized access.

The FS has proposed closure of the mainline road to all motorized traffic through Special Forest Orders during the deer-hunting season to reduce hunting and trapping pressure on deer, wolves, and marten. ADF&G has serious concerns about the efficacy of this proposed measure. In our experience (e.g., on Prince of Wales Island), to be effective, road closures must consist of a physically impassable barrier, such as large rip rap ("dinosaur eggs"), a pulled bridge, a gate, scarification of the first 100 yards of the road, or some combination of these. Enforcement is also critical, and the FS must commit to adequate enforcement of the proposed closure. Also, the wolf and marten trapping seasons extend beyond the deer-hunting season. We recommend that the FS maintain the closure through those seasons.



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 Reduce or delay habitat losses: If the road remains open, the FS could reduce the amount of habitat loss by deleting additional units that are most important to deer and subsistence. Such a plan would need to remain in effect for the duration of this TLMP to be credible and effective.

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At a minimum, the FS could commit to delaying harvest of the units with highest values as deer winter range as long as possible, to spread out the effects over a slightly longer timeframe, although this may only delay inevitable declines in deer habitat capabilities in such areas for a few years, in the context of closed-canopy stands that take 150+ years to achieve a semblance of old-growth characteristics. For example, harvest of the units in VCU 7610 could be deferred to delay the long-term declines in deer habitat capability. Habitat capability in this VCU currently exceeds the recommended minimum to maintain deer and wolves (18 deer per square mile), but is projected to be reduced to 12.4 deer per square mile at the end of the rotation. Habitat capability in two other VCUs (7630 and 7650) would be reduced to 18.6 and 18.8 deer per square mile, respectively; high-value units in these VCUs would also be likely candidates for deferral.

#### DISCUSSION

In the September 13 meeting, the FS expressed frustration that it is caught in a bind: on the one hand, they hear concerns about cumulative effects when they propose going back into areas that have already been harvested; on the other hand, entering new roadless areas is even more controversial. We recognize this dilemma and the frustrations it creates, because we wrestle with it ourselves: is it better to further impact areas that are already heavily harvested in favor of maintaining the integrity of pristine areas, or is it better to spread out the effects over a larger landscape?

In the case of Gravina, however, this roadless area is of particular importance to a population of nonrural hunters-i.e., Ketchikan-that has already been threatened by restrictions on hunting in one of their most important areas: Prince of Wales. We believe they deserve full disclosure of the potential effects of the Gravina project on their hunting activities.

ADF&G recognizes the necessity of making timber available to the industry and making developable land available to communities. The Forest Plan designates an allowable cut; i.e., it identifies a maximum level of forest-wide timber harvest and associated habitat loss. Second, the Forest Plan has applied land use designations to areas of Gravina that allow for timber harvest; i.e., there may be timber harvest at some time somewhere on Gravina. Third, there will be community development at some point on Gravina.

ADF&G's primary concern is to avoid, minimize, or at least mitigate potential effects on major subsistence and personal use resources such as deer and salmon. One means of achieving this would be to focus timber harvest, even in roadless areas, in areas that are not as important to hunters as is Gravina; in other words, delaying harvest on Gravina as long as possible. We have suggested other techniques and modes of sale design that would serve to minimize effects. For example, in our proposed consistency finding, we recommended that the road be closed, because we believe leaving the road open causes more impact than is necessary.

On the basis of the analyses presented in the DEIS, the proposed timber sale and its associated effects create an unsustainable situation in terms of maintaining a harvestable population of deer; there are



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secondary effects on wolves, as well. Modifying the deer habitat analysis to use the appropriate coefficients will illustrate an even bleaker scenario. We are particularly concerned about the implications of these analyses for a first entry into a currently roadless area, which lends even more credence to the idea of delaying harvest on Gravina. We believe the projected scenario on Gravina is symptomatic of broader problems with sustainability throughout the Forest.

Although we think the FS proposal to close the road seasonally will be difficult to implement and ineffective in reducing hunting and trapping pressure, we are willing to give it a chance to work, provided we can arrange to learn from the experience by implementing an effective study design to assess the effects of the timber harvest and road access on deer and wolf populations.

#### Consistency Determination

Consequently, ADF&G does not object to the determination by the FS that the proposed project is consistent with the ACMP, provided the following alternative measures are adopted:

- 1. The FS shall implement effective seasonal road closures through the deer hunting season and wolf and marten trapping seasons. Effective road closures shall consist of barriers that are physically impassable barriers to motorized traffic, and will be monitored by FS enforcement personnel on a regular basis (at least weekly, and daily during intensive deer hunting periods such as opening weekend and the rut period).
- The FS shall design a study in cooperation with ADF&G to evaluate deer and wolf population dynamics, effects of habitat loss due to logging, and effects of the timber sale and increased access on subsistence and hunter demand on Gravina Island.

These alternative measures are necessary to provide for the continuation of businesses, activities, and lifestyles that are dependent upon or derived from forest resources, per AS 41.17.060(c)(3). The alternative measures will help reduce impacts of hunting and trapping to deer, wolves, and marten; help maintain deer and other wildlife populations; and help provide for subsistence and personal use of wildlife resources. The DEIS stated that increased access as a result of leaving roads open could result in significant restrictions on subsistence use of deer. In proposing that the roads remain open, even with seasonal closures to prevent access during the deer season, the FS has not demonstrated that foreseeable impacts to deer populations and hunter harvests have been avoided to the maximum extent possible.

By copy of this memorandum we are providing the US Fish and Wildlife Service and the U.S. Army Corps of Engineers with our comments and recommendations on this project pursuant to the Fish and Wildlife Coordination act. (16 U.S.C. 661-66c).

Thank you for the opportunity to provide comments on this proposed timber sale.

cc: Bill Hanson, ADF&G, H&R, Douglas Chip Dennerlein, ADF&G, H&R, Juneau Jack Gustafson, ADF&G, H&R, Ketchikan



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Mike Turek, ADF&G, Subsistence, Douglas Boyd Porter, ADF&G, WC, Ketchikan Dave Person, ADF&G, WC, Ketchikan Matt Kirchhoff, ADF&G, WC, Douglas Kim Titus, ADF&G, WC, Douglas Tom Paul, ADF&G, WC, Douglas Tom Paul, ADF&G, Juneau Kevin Hanley, ADEC, Juneau Jim Zelenak, USFWS, Fairbanks Steve Brockmann, USFWS, Juneau Steve Duncan, COE, Anchorage Colleen Grundy, FS, Ketchikan Larry Meshew, FS, Ketchikan Gene DeGayner, FS, Petersburg



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#### APPENDIX

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For the Gravina project, the deer model was run with a multiplier of 125 deer per square mile, as directed by the 1997 Forest Plan, although a multiplier of 100 deer per square mile has been recommended by both FS and ADF&G biologists. Recommendations in the Annual Monitoring Report for 2000 indicate that a Habitat Suitability Index (HSI) score of 1.0 should correspond to a deer density of 100 deer per square mile. In addition, as referenced in the End-of-Rotation analysis, interagency biologists recommended that 100 deer per square mile is a more appropriate multiplier (on the basis of deer pellet data) to use when converting HSI values to deer habitat capability.

Both the DEIS and the End-of-Rotation analysis note that the habitat capability model assumes that all timber harvest is accomplished using traditional even-aged (clear-cut) silvicultural systems, and that 35 to 75 percent of the acres in the sale will be harvested by uneven-aged or two-aged systems, which "probably have less impact on deer habitat capability...[and] although the effects of these alternative harvest methods on deer habitat capability are currently unknown, results of the model are likely to overestimate the impact of this type of timber harvest on deer habitat capability... [In the second or the acres of these alternative of the second of these alternative silvicultural systems generally has resulted in units that are actually smaller clearcuts with "reserve areas" along the edges of larger unit boundaries, not openings with well-distributed patches of trees and substantial canopy cover. To the extent that fewer total acres are actually clear-cut, the effects may be less, but it is not reasonable to rely on this trend as a substantial mitigating factor to counteract decreases in deer habitat capability. Regardless, any overestimates of effects using these model coefficients are negated by the overestimates of deer habitat capability produced by the 125 deer per square mile multiplier used in the deer model runs.

A multiplier of 100 is used to convert the HSI score to a theoretical deer carrying capacity number. On the basis of ADF&G pellet-group data in high deer density areas of Game Management Unit (GMU) 4, an HSI score of 1.0 equates to between 75 and 100 deer per square mile, and would reflect the density that might be found seasonally on the highest value deer winter range. Although densities of up to 75 deer per square mile are found on some of the very best winter ranges in northern southeast (on Admiralty, Baranof, and Chichagof Islands), these densities are in areas where migratory deer populations that use high-elevation alpine and sub-alpine habitats in summer are concentrated on the winter range by snow. Their use of these winter ranges in such densities is only seasonal. This is a different situation than might be found in the Gravina project area and other places, where resident deer occupy low-elevation forest habitat year-round, and maximum deer densities would be substantially lower. (That snow is less often a factor in the vicinity of Gravina Island than on islands to the north does not diminish the need to maintain high-value deer winter habitat in this area. To the contrary, although the average winter may be less severe, quality winter range is very much a limiting factor in periodic severe, deep-snow winters.)

Changing predation coefficients, rescaling habitat coefficients, or lowering carrying capacity multipliers will not change the relative comparison of alternatives, because the multiplier and coefficients are scalers. The changes will influence the overall estimate of deer per square mile for the project area, however. Although the amended numbers do not change the relative values of alternatives, the absolute value also is important in terms of meeting the Standard and Guidelines for wolves, which require maintaining a minimum habitat capability corresponding



to 18 deer per square mile to provide a 95 percent probability of persistence of deer and wolf populations at equilibrium while allowing for harvest by humans.

In the September 13 meeting, Gene DeGayner indicated that the FS intends to use a multiplier of 100 deer per square mile for habitat scores of 1.0 from this point forward, unless projectlevel data suggest otherwise (this is also the change recommended in the Annual Monitoring Report for 2000). For the recent Kosciusko Timber Sales project, ADF&G deer research biologist Matt Kirchhoff recommended that the multiplier be changed to 35 to 40 deer per square mile to reflect the low elevation, year-round non-migratory deer population in the project area. In general, ADF&G recommends assuming a maximum year-round carrying capacity of 35 to 40 deer per square mile in the best habitat. After consultation with Matt Kirchhoff and Dave Person, ADF&G predator/prey research biologist, we recommend equating a multiplier of 35 deer per square mile to a score of 1.0 for the Gravina project area, due to the lack of high-value alpine habitat, indicating a non-migratory deer population occupying the area all year, with little seasonal variation. This figure is supported by FS deer density estimates of approximately 32 deer per square mile on Grindall Island, which also has a non-migratory deer population. ADF&G agrees that habitat scores can range from 0.0 to 1.3, however. PC33 26 of 44



# **ATTACHMENT -2**

September 16, 2007

#### Down but not out: Numbers fall but deer hunting season proceeds

By RILEY WOODFORD FOR THE JUNEAU EMPIRE

Doe season opens this weekend, and wildlife biologists are keeping anespecially sharp eye on deer this fall.

Cold weather and big snow storms last November and March took a toll on deer in parts of Southeast Alaska - especially northern Southeast. This summer, wildlife managers assessed the situation, and before buck season opened in August, they talked about the possible need to curtail hunting this season.

"We know we had a fair bit of winter mortality in some areas," said biologist Neil Barten of the Alaska Department of Fish and Game. "If we were going to change some aspect of the season, it would be to protect the does."

The mainland hunt is always bucks only, but beginning this weekend, "antlerless deer" (does and young bucks) may be taken as well as bucks on Douglas Island, and on Admiralty, Baranof and Chichagof Islands, commonly referred to as the ABC islands. These are the areas most popular with Juneau hunters.

Barten and his colleagues scrutinized the data on last winter's deer mortality, compared notes and weighed options.

"Do we need to sacrifice one year of hunting to allow the herd to rebound for better harvest for upcoming years? Or can we allow the season to continue as is and be confident the deer population will be okay?" Barten said. "Just one bad winter after a number of easy ones, we think the population can rebound."

The situation is not consistent across the region. Parts of Southeast saw much less snow than others. The condition of the habitat, and the numbers of predators such as bears and wolves, also varies tremendously. Deer on Admiralty Island, for example, live in a significantly different system than deer on Prince of Wales.

One bad winter doesn't mean the population has dropped to unsustainable levels. Looking at northern Southeast specifically, Barten said with the relative lack of predators such as wolves, deer populations can rebound quickly. Given a mild winter this coming season, deer should come back in a few years. "It's consecutive, back-to-back hard winters that are hard on deer, and that's the situation you really have to look at as managers."

"We'll be keeping an eye on the fall and early winter weather conditions, and if we get a lot of snow early on, we'll reconvene and discuss the need to curb the harvest to prevent overharvest of the population."

Barten said he did not think it was necessary to pre-emptively close the season or restrict the harvest at this time.

"I don't think enough does are harvested during the first few weeks of doe season to make that a drop dead date to curtail the hunt early on," he said. "The deer are really scattered in September throughout 1,500 feet of forest. There are still leaves on the shrubs and the deer are hard to find. But in late October, once the deer start moving down in elevation and become more active during the rut, they're more vulnerable to hunters. People can call them



in, and that's when the harvest really starts to have an impact. That's when you have to worry about the does, if it's an issue."

Possible action could include limiting the doe harvest or closing it entirely on Douglas Island, and on northern Admiralty and Chichagof Islands.

#### Carrying Capacity: Deer on the Edge

No doubt a lot of deer died last winter and spring in northern Southcast, but there were a lot of deer to begin with.

"The last three or four years we were carrying a lot of deer on the range," Barten said. "The numbers were so high, I know it looks like a real drastic change - they were near the carrying capacity of the range in a lot of places. It's not really where you want to be with populations, because then they're using all the available forage and they're more vulnerable to major dieoffs from severe weather."

When deer are at or over the carrying capacity of the range, they can seriously impact their habitat. Dave Person, a Ketchikan-based state wildlife biologist, said there is an important balance between moderate and over-browsing.

"When a population is over carrying capacity, they can over browse and damage their winter forage," Person said. "It's like pruning. You get more growth with a little cutting back, but too much and you damage the plant and its ability to produce the following year."

Barten said deer density is kept relatively low on Douglas Island by hunters, providing a more resilient deer population. "With this lower density, we expect the deer to be more resistant to a severe winter because they're not competing with each other so severely for the available forage."

Person said that's quite evident in southern Southeast, where there are fewer deer per square mile than on the ABC islands. "The deer on Prince of Wales Island are fatter and bigger; they go into these winters in such good condition," he said. "They have a much greater potential to survive and produce offspring."

If deer are pushing the carrying capacity of the habitat and compromising the vegetation, then a die-off one winter may not be alarming to wildlife managers.

"If the objective is a smaller population less likely to hammer the range, then a smaller population is not necessarily bad," Person said.

#### Admiralty, Baranof and Chichagof Islands

Biologist Phil Mooney manages deer on the ABC islands. More deer are harvested in this area, Game Management Unit 4, than any other part of Southeast. The annual harvest ranges from 8,000 to 9,000 deer, but last year it was even higher.

"Last year it probably jumped up to about 12,000," Mooney said. Higher-than-average numbers of deer were harvested off the beaches in November because of the heavy snowfall and cold weather.

The March storms and the persistence of snow into late spring would almost certainly have doomed those deer that were already struggling in November, Mooney said.

By all indications, deer numbers currently are down in Unit 4. He estimates that 50 to 60 percent of the fawns died over the winter.

Mooney said the pellet transect data also indicates there are fewer deer, as much as a 30 to 35 percent decrease in areas of west Chichagof.

Some areas were harder hit than others. "North Chichagof, from Lisianski Inlet to west Port Frederick, was really hit by the March storms," Mooney said, "and on down to Ushk Bay.



There was 122 inches of snow on the beach in Tenakee Inlet in April. The south end of Baranof (Island) got hit hard as well, with record amounts of snowfall recorded on the docks at Port Alexander, Little Port Walter all the way up to Baranof Warm Springs."

Mooney said all things considered, he doesn't think the outlook is gloomy. The population was likely at the carrying capacity of the habitat, he said, based on evidence of heavy browsing occurring since 2004.

Mild winters in past years contributed to that, and also the way people hunt.

Mooney estimates from hunter surveys and contact with hunters that about 85 percent of Unit 4 hunts target the beach and coast fringe. "Some folks do alpine hunts, but the bulk of the harvest happens close to the shoreline, that's why a lot of the locals wait until November. So a lot of the interior parts of the islands don't get hunted nearly as hard as the shoreline."

Mild winters in past years meant that deer were able to spend the winter at higher elevations and were not restricted to sea-level habitat, as they are in deep snow years. Mooney said a few years ago, when deer numbers were very high and winters were mild, he had hunters coming in and asking, "Where are the deer?"

"They were at 1,000 feet," he said. "Most of the hunters were not going up there to hunt, so we had a lower harvest."

Mooney saw that plants at higher elevation showed signs of heavy browsing. Deer were targeting not only good, palatable species like blueberry, but less digestible species like rusty menzezies (also known as copper bush) which is not a good sign.

"When you have larger populations, you push deer into marginal habitat," he said. "Then when winter comes, those deer in the fringe areas have a more difficult time surviving. They were really pushing the carrying capacity of the range."

If concerned hunters want to take an active stand, Mooney suggests they don't shoot does.

"If you kill a doe after November 15 - she's probably pregnant," he said. "Shoot bucks and fawns. Don't shoot does. That can help."

Mooney is gathering more information - he's asking goat hunters about the deer they see at high elevations, and he's talking with pilots and air taxi operators about their observations. He's talked to early season hunters who tell him they are seeing lots of deer.

"The alpine bucks that I've seen come in look great, there's more than an inch of fat on the rumps," he said.

"Weather related die-offs are common in the wildlife world," Mooney said. "Animal populations build up in good years, and then Mother Nature comes in and levels the playing field. One bad year is not as significant as a few, back to back. That's what we'll be watching for."

• Riley Woodford is the editor of Alaska Fish and Wildlife News and produces the "Sounds Wild" radio program for the Alaska Department of Fish and Game.

(An abbreviated version of this article appeared in ADF&G's newsletter in October 2007.)

#### · Photos:

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(Phil Mooney / ADF&G): On the edge: A weakened deer comes to shore in Tenakee Inlet last spring.

(LaVern Beier / ADF&G): Scrounging for food: A weakened fawn eats kelp on a beach in Scymour Canal last November.

#### Deer Stressed by Harsh Winter, Alaska Department of Fish and Game

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#### Deer Stressed by Harsh Winter but Hunting Season Still Opens

By Patti Harper



During winter, deer rely on stored fat reserves, and subsist on a meager winter diet of evergreen forbs (leaves) and woody browse such as blueberry, yellow cedar and hemlock. Lichens on the trees are eaten too. However, it is critical they find fresh food in spring. In this rough year of deep show and late snowmelt, it appears reserves ran out for many of them before plants emerged from the snow and grew new leaves. As deer hunting season opens in Southeast Alaska, after last winter's devastating snow and cold weather, hunters are uncertain about what to expect. Those who have been outdoors regularly this summer, such as Sitka hunter Erin Kitka, have seen disturbing signs where forest meets beach – fur and bones – the remains of deer that starved.

"It seemed there was a lot more winterkill this year than last year," Kitka said. "There's one on every beach, just right in the trees."

Phil Mooney, area biologist with the Alaska Department of Fish and Game, said he's been getting a lot of questions from concerned hunters. It's his responsibility to recommend whether the population is strong enough to support a hunt. Mooney said he appreciates observations shared by Kitka and others, which, combined with his own field work, help him figure out what is happening with deer and other animals hidden in the rainforest.

He's cautiously optimistic that the deer populations on what are called the A-B-C islands – Admiralty, Baranof, and Chichagof – remain In generally good condition. "Although we did experience some winter-kill in most of the unit, the areas of heavier losses were generally isolated

to narrow fiord bays, north-facing slopes, and open-terraced muskegs that experienced deep and persistent snow into early May," he said. There are no changes in bag limit or season anticipated, though he said he will be watching the situation as the season progresses.

That's good news for hunters and their families. Venison is an important food in the region, and has special importance to the native Tlingit people. "It's something that a lot of people have grown up with and used as a staple of their diet," said Woody Widmark, tribal chairman for Sitka Tribe of Alaska. Deer is also one of the customary and traditional foods that are prepared for memorial potiatch ceremonies, he said.

The game management unit that includes Sitka (Unit 4) draws about half of the hunting effort and accounts for most of the deer harvest in Southeast Alaska. In recent years, total annual harvest in Unit 4 has been 8,000 to 9,000 deer. Mooney said that while the harvest tally isn't final, it appears that several thousand more deer than usual may have been taken in 2006.

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Mooney remembers seeing boats heavy with venison in the Sitka harbor back in November. He knew that meant deer were being forced by snow onto beaches, where they were easy prey. But no one knew then just how hard the winter would be or how long the snow would last.

"It was a very exceptional high snowfall year," said Aaron Jacobs, a meteorologist with the National Weather Service in Juneau. "It broke a lot of records." The best weather statistics in the region are gathered at the Juneau airport, and snowfall there reached an all-time recorded high, a total of 197.8 inches for the winter. Snowfall varied around the region; Little Port Walter on the southern tip of Baranof Island saw a record 275.3 inches of snow. But, in general, the Juneau numbers reflect the unusual year around the region.

Jacobs said the record snowfall doesn't tell the whole story. Both snowfall and temperature during two months, November and March, affected snow depth on the ground. On the front end of winter, November saw 64.1 inches of snow – 52 inches above normal. And while November's normal average temperature hovers around freezing, temperatures in November 2006 averaged just 19 degrees, 13.9 degrees below normal. Average temperatures were higher than normal in December (34.1 degrees Fahrenheit) and January (31.0



Hunters should hunters target bucks and fawns, rather than does, especially after the breeding season in mid-November, to help protect the reproductive capacity of the population.

degrees) by about 5 degrees, but spring was cold. While usually above freezing, the average monthly temperature in March was just 28.3 degrees. Precipitation was high, and precipitation that might normally fall as rain fell heavily as snow. It kept falling and falling, nearly 63 inches of it. Snow built higher and higher on the ground. Jacobs says that at his home he measured a snow depth of 55 inches. That's higher than a , dear's shoulder.

Some of the snow persisted on the ground into April and May, That late-season snow probably caused much of the winterkill seen on beaches, Mooney said. During winter, deer rely on stored fat reserves. They are used to a meager winter diet of evergreen forbs (leaves) and woody browse auch as blueberry, yellow cedar and hemlock. Lichens on the trees are eaten too. However, it is critical they find fresh food in spring. In this rough year of deep snow and late snowmelt, it appears reserves ran out for many of them before plants emerged from the snow and grew new leaves.

Mooney has been watching the deer situation as closely as possible. He surveyed deer periodically through the winter along a specific route, rating their condition into one of seven classifications. Winter mortality surveys conducted in the spring at 28 sites assessed the extent of winterkill deer on or near beaches. After snowmelt, department employees conducted deer pellet surveys along 18 established transect lines through the forest in different parts of the unit; following most of the transects involves hiking from sea level straight to a high point on the island while counting deer pellets. All of these surveys provide data that can be compared year to year.

A high tide takes a carcass off the beach - the fate of many Southeast deer last winter. Photos by Phil Mooney It's clear the deer population took a big hit, but it was large and healthy to start with and so probably survived the blow, Mooney said. Deer populations are highly productive and can rebound quickly from a hard year.

Mooney is currently assessing how well the deer reproduced this year and how fawns are doing. He says he appreciates information others can share with him from their own field observations.

Though he's optimistic the population remains in good condition, overall, he asks that hunters target bucks and fawns, rather than does, especially after the breeding season in mid-November, to help protect the population's reproductive capacity. He may have additional

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recommendations after winter weather begins. "A back-to-back harsh winter in the unit may precipitate changes to the following season and/or bag limit if the impacts are significant to deer," he said.

Pattl Harper is a former news reporter and freelance writer who works as an editor and writer with the Alaska Department of Fish and Game in Juneau.

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#### Deer: Southern Southeast Alaska is a Different Story

By Riley Woodford

winter was relatively mild,



Deer like this one on northern Chichagof Island faced show nine feet deep above the high tide line in March and April. Deer fared much better in Southern Southeast Alaska for several reasons. Riley Woodford photo.

half of the region. Although deer were hit hard on some mainland areas and on the verv northern portion of Prince of Wales Island, overall the effect of the

Panhandle a very different place for black-tailed deer than the northern

Predators and weather make the southern part of the Alaska

"It's very different here," said Ketchikan-based Area Biologist Boyd Porter. "We're looking at the mild effect from a moderately severe winter."

Snow depth and persistence was less severe. Another factor played a big role in southern Southeast: there are fewer deer. Deer populations in Southern Southeast simply don't get as high as they do on the ABC Islands - Admiralty, Baranof and Chichagof Islands.

"The absence the main predators - wolves and black bears - makes it a totally different system," Porter said. Key predators such as wolves on Prince of Wales Island (commonly referred to as POW) keep the deer

density consistently lower than on the ABC islands.

"So the deer population is buffered a little bit against hard winters on POW." Porter said, "Deer numbers don't fluctuate as much. The deer there (on the ABC islands) are at or near the carrying capacity for that range, whereas on POW we're well below it."

"We're at a 12 to 14 year high for deer right now," he added. "Although that doesn't get anywhere near the high deer density numbers of Unit 4 (the ABC islands)."

Hunters harvest 8,000 to 9,000 deer every year from the ABC Islands, and between 2,000 and 3,000 each year from southern Southeast. 350 to 450 deer are harvested each year in the Juneau area, Unit 1C, and the vast majority of those are taken on Douglas Island.



Hunters harvest 8,000 to 9,000 deer every year from the ABC Islands, and between 2,000 and 3,000 each year from southern Southeast. 350

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The Southeast mainland is simply not a good deer producer compared to 450 deer are harvested each year in the Juneau area.

"Harsh winters are the limiting factor on the mainland," Porter said. "Deeper, more persistent snow like we had last year really sets the bar. The mainland is a weather driven system. It doesn't matter how much food you have in the summer, the bottleneck is really peak winter habitat conditions." The amount of food available to deer and access to those resources determines carrying capacity, or how many deer the range can sustain.

"What really buffered deer in many areas of southern Southeast last winter was they had enough breaks between hard spells that deer could move around between patches," Porter said. "That's very different from deer being confined to the same area for three or four months."

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Attachment - 5

# Influences of a shift in North Pacific storm tracks on western North American precipitation under global warming

#### Eric P. Salathé Jr.1

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[1] Recent global climate model simulations for the IPCC Fourth Assessment report show a realistic North Pacific storm track and Aleutian Low for present-day climate conditions. Under climate change, the storm track and Aleutian Low move northward and intensify. These changes shift precipitation northward along the Pacific coast of North America. In particular, precipitation is intensified over the Pacific Northwest. Results from a statistical downscaling model suggest that precipitation may become more intense both due to the increased frequency of large-scale storms and due to changes in the interaction of these storms with the local terrain. Citation: Salathé, E. P., Jr. (2006), Influences of a shift in North Pacific storm tracks on western North American precipitation under global warming, *Geophys. Res. Lett.*, 33, L19820, doi:10.1029/2006GL026882.

#### 1. Introduction

[2] In a recent study, Yin [2005] describes an intensification and poleward shift of midlatitude storm tracks associated with climate change as simulated in several climate models. This shift, and associated dynamical changes, has profound implications for the climate of the Western United States, which we present in this paper. The most obvious is a northward shift in precipitation due to storms arriving from the North Pacific. A second is the change in the mean pressure field off the coast, which controls a variety of climate impacts including the orographic enhancement of precipitation and coastal ocean processes. Variations of this Aleutian Low and the associated response of the climate in the North Pacific have been extensively studied [Hartmann and Wendler, 2005; Overland et al., 1999; Raible et al., 2005]. Evidence is presented elsewhere for more intense and poleward cyclones in the 20th Century [Fyfe, 2003; McCabe et al., 2001] and in scenarios for the 21st Century [Kushner et al., 2001]. In a modeling study, Raible and Blender [2004] found that ENSO-like tropical variability in climate simulations could produce changes in the midlatitude storm tracks. Fu et al. [2006] recently showed how satellite-observed mid-tropospheric warming from 1979-2005 implies a poleward shift in the mid-latitude jet stream.

[3] Changes in precipitation for the western U.S. under future climate scenarios are difficult to characterize. 20th Century data for the Pacific Northwest, for example, show considerable variability in space and time [Mote, 2003]. Climate model simulations under future emissions scenarios

Copyright 2006 by the American Ocophysical Union. 0094-8275/06/2006GL026882\$05.00 for the 21st Century, however, show an aggregate trend for moderate increases in winter precipitation [Mote et al., 2005]. Even such a moderate increase would alter the frequency of extreme events, with important impacts to the region. This paper examines how changes in the Pacific storm track might alter precipitation over western North America in climate change scenarios. We examine the ability of several climate models to represent the presentday storm track in the Pacific in comparison to reanalysis data. We then examine how these models simulate changes in the storm track for future climate scenarios. Finally, we consider the effect of these changes on the local precipitation patterns in the Pacific Northwest.

#### 2. Climate Simulations

[4] For this study, a selection of simulations performed for the International Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) was analyzed. Simulation data are available from the IPCC Data Archive at Lawrence Livermore National Laboratory (< http://www-pemdi.llol. gov/ipcc/about\_ipoc.php>). Here we consider as a baseline climate the 1950-2000 simulations for historic conditions. For future climate we consider the 2050-2100 simulations for the IPCC Special Report on Emissions Scenarios [Nakicenovic et al., 2000] AZ emissions scenario (SRES A2). In particular, we shall use the 10 models: HADCM3. ECHAM5, CCSM3, PCM1, CNRM-CM3, CSIRO-MK3 MIROC-3.2, IPSL-CM4, CGCM-3.1, and GISS-ER. For validation purposes, the climate models will be compared to the NCAR-NCEP Reanalysis Project data [Kalnay et al., 1996]. In a comparison of storm tracks represented by various reanalysis projects, Hodges [2003] has shown the NCAR-NCEP Reanalysis produces similar storm tracks in the lower troposphere to other projects.

#### 3. Precipitation

[5] As can be verified from high-frequency data, the mean precipitation pattern for the months November-December-January (NDJ) closely conforms to the storm track as defined by baroclinic activity. Figure 1a shows the 1950-2000 mean NDJ precipitation from NCAR-NCEP Reanalysis, the thick line represents the maximum variance in the 500-hPa height field, indicating the location of the storm track. Peak rainfall occurs along the southern margin of the storm track. Thus, the shift in the storm track presented by *Nn* [2005] naturally suggests a similar shift in the band of intense precipitation over the North Pacific. In the following, this intense precipitation and its behavior under climate change is examined.

[6] The reanalysis will be used here as a reference for comparison of the various global climate models. While the PC33 35 of 44

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Figure 1. Precipitation tracks for (a) the NCEP-NCAR. reanalysis, (b) model composite for 1950-2000, and (c) model composite for 2050-2100. Thick line in Figure 1a indicates the storm track in 500-hPa heights. In Figure 1b, contour lines indicate difference between 1950-2000 and 2050-2100 patterns. Lines in Figure 1c indicate the peaks of the NCEP-NCAR (solid), 1950-2000 (dash), and 2050-2100 (dash-dot) precipitation tracks.

NCAR-NCEP Reanalysis precipitation does not accurately depict local-scale precipitation features, it represents the precipitation pattern a climate model would produce if it accurately captured the planetary-scale weather patterns. The NCAR-NCEP Reanalysis shows a broad zonal band of precipitation extending between 35° and 45° N across the N. Pacific. This precipitation track curves northward as it reaches the N. American coast where it merges with a broad pattern of high precipitation extending from northern California to Alaska. The coastal precipitation pattern results' from the interaction of the storm systems with the continental landmass, causing intense precipitation.

[7] To combine the simulations from the 10 climate models described above, we form a composite of the individual models. Each climate model field is interpolated to the NCAR-NCEP Reanalysis grid and a weighted mean is formed. A model is weighted by the inverse mean squared difference between the 1950-2000 NDJ precipitation pattern for the model and the NCAR-NCEP Reanalysis. This approach assumes all models have useful information about the changes in the precipitation pattern, but that models that represent the present climate best should be given greater weight. Figure 1b shows the composite precipitation pattern

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from the 10 climate models for the period 1950-2000. which corresponds well to the NCAR-NCEP Reanalysis pattern. The weights for the various models (Table 1) show that two models, CGCM and ECHAM5, are most heavily weighted. Furthermore, the RMS difference between the composite and NCAR-NCEP Reanalysis is smaller than for any individual model with a bias smaller than the mean of all models (0.19 mm/day), indicating that the model ensemble better represents the precipitation storm track than any individual model.

[8] Using these weights, we then composite the precipitation simulated for the A2 climate scepario for 2050-2100 (Figure 1c; contour lines in Figure 1b show the difference between the 1950-2000 and 2050-2100 patterns). In the west, positive changes to the north and negative changes to the south indicate the track moves northward. At the eastern end, there are strong positive changes, showing intensification over western North America. The three thick lines in Figure 1c indicate the peak of the precipitation track for the reanalysis (solid), 1950-2000 (dashed) and 2050-2100 (dash-dot) composites. These lines clearly show the northward shift at the western end of the track, which is consistent with the northward shift and intensification of the storm track under climate change [Yin, 2005]. The northward shift and intensification of precipitation in the composite is consistent across the 10 climate models. Seven models show a northward shift and seven show an intensification (Table 1). Only one model (CSIRO) shows neither change, with a decrease in precipitation. The agreement among models is not clearly related to performance in simulating the 20th Century precipitation pattern.

#### 4. Aleutian Low

[9] The changes in the storm track over the North Pacific is also manifested in the position and intensity of the Aleutian Low (Figure 2a, 1950-2000 NCAR-NCEP reanalysis). This feature is the residual of the daily variability in sea level pressure produced by storm systems that propagate along the storm track during the cool season. Figure 2b shows a weighted composite of sea level pressure from the 20th-Century climate model simulations derived as for precipitation in Figure 1. Compared to reanalysis

Table 1. Summary Statistics for Precipitation Composite Computed by Comparing the 1950-2000 Simulation for Each Climate Model With NCAR-NCEP Reanalysis"

| entrepresentation of the state |       |      |        |       |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|--------|-------|-----|
| Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Bias  | RMS  | Weight | North | Wot |
| CCSM3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.37  | 0.98 | 9,94   | N     | X   |
| CGCM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -0.06 | 0.82 | 14.13  | Y     | N   |
| CNRM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.37  | 1.13 | 7.40   | Y     | Y   |
| CSIRO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.07  | 1.01 | 9.40   | N     | N   |
| ECHAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.33  | 0.81 | 14.54  | X     | Y   |
| GISS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | D.17  | 1.24 | 6.23   | v     | Y   |
| HADCM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | D.07  | 0.99 | 9.63   | Y     | Y   |
| TPSL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.32  | 1.34 | 5.28   | Y     | M   |
| MIROC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.12  | 0.90 | 11,66  | Y     | Y   |
| PCMI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.09  | 0.90 | 31.80  | N     | Y   |
| Comp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.17  | 0.76 |        | Y     | Y   |

"Bias and RMS are in mm/day; the weight factor is expressed in percent. The final 2 columns indicate whether the precipitation track moves north and gets wetter under the A2 scenario.

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150E 1606 170E 180 170W 150W 150W 140W 130W 120W 110W 100W

Figure 2. Aleutian Low for (a) the NCEP-NCAR reanalysis, (b) model composite for 1950-2000; contour lines indicate difference between 1950-2000 and 2050-2100 patterns.

(Figure 2a), the composite sea level pressure produces a somewhat deeper Aleutian Low, but the position and shape of the pattern are well represented. In particular, the direction of onshore flow to the Pacific Northwest and Alaska is captured quite well. Contour lines in Figure 2b indicate the difference between the 21st and 20th Century model composites. For the 21st Century A2 climate scenario, the models show a marked deepening of the Aleutian Low with increased gradients across the North Pacific. The dipole in the difference field indicates a shift in the position of the low to the north-northeast. These changes are consistent with the northward shift and intensification of the storm track indicated by the precipitation patterns discussed above.

[19] Overland et al. [1999] discuss historic shifts in the Aleutian Low associated with decadal olimate variability in the North Pacific. Natural variability is about double the magnitude of the pressure change from the late 20th Century to the late 21st Century (compare Figure 2c to Overland et al. [1999, Figure 4]). Decadal variability is associated primarily with variability in the strength of the low, not its position. Thus, the changes in the Aleutian Low due to global climate change are not entirely analogous to the natural variability observed on decadal scales.

#### 5. Regional Precipitation

[11] The large-scale precipitation results above suggest that regional precipitation will increase over the Pacific Northwest for the 21st Century. The large-scale circulation patterns also change, which could modulate the precipitation response at regional scales. To illustrate these effects, we shall examine the regional precipitation downscaled from the ECHAM5 model using two downscaling methods. The ECHAM5 model is selected since it best represents the observed storm track and Aleutian Low and since a single model illustrates these interactions more clearly than a composite,

[12] Widmann et al. [2003] and Salathé [2005] developed a method to downscale climate model simulations for Pacific Northwest precipitation that uses large-scale simulated precipitation as the primary predictor and large-scale sea-level pressure as a secondary predictor. In a simplified method, the effect of the pressure pattern is ignored and the downscaled precipitation is found by multiplying the simulated climate model precipitation by a scale factor defined on the regional-scale grid, 1/8-degree over the Pacific Northwest. The scale factor is computed for each calendar month as the ratio of the 1950-2000 mean simulated precipitation and the 1950-2000 observed precipitation on the 1/8-degree grid. For the full downscaling method, taking circulation into account, the scale factor is modified according to the leading modes of the sea-level pressure field to preserve the observed covariance between precipitation and circulation during the training period [Widmann et al., 2003]. This covariance between sea-level pressure and precipitation is related to interactions between circulation and topography that affect the regional distribution of precipitation [Salathé, 2003].

[13] Figure 3a shows the difference in downscaled precipitation from 1950-2000 to 2050-2100 using only precipitation as a predictor. Precipitation increases over most of the region except for the Oregon Coastal Range. The largest increases are seen over terrain, with a general trend for smaller increases in the southern part of the region. These changes are a direct consequence of the





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northward shift in the large-scale precipitation distribution with the storm mack (Figure 1). Figure 3b is a similar difference map, but for the downscaling method that considers both precipitation and circulation as predictors. When circulation is taken into account, we find larger increases in precipitation for the 2050-2100 period. Figure 3c shows the difference between the two downscaling methods (circulation method minus precipitation-only method). In particular, relative to Figure 3a, we find greater precipitation over the North Cascades and extending southward along the Cascade Range. Increases in precipitation are also found over the Idaho Rockies, which was not indicated by the precipitation-only downscaling. This result suggests that the circulation changes produce more effective orographic enhancement of precipitation in the ECHAM5 climate change scenario than in the base climate. Transient wind patterns, not the mean pattern, are responsible for the change since the sea level pressure itself does not change over the region in the ECHAM5 simulation.

#### 6. Conclusion

[14] In accordance with Vin's [2005] result for the midlatitude storm track, we find a northward shift and intensification of winter precipitation over the north Pacific in climate model simulations for the 21st Century. The Aleutian Low similarly shifts northward and intensifies. These changes have important implications for the precipitation climatology of the Western United States. Downscaling precipitation for the Pacific Northwest shows increases both due to large-scale effects captured in the global model and due to mesoscale orographic effects not represented in the global model. Changes in the transient circulation associated with the shifting storm track and Aleutian Low yield an increase in winter (NDJ) precipitation that is not captured by the global model.

[15] Acknowledgments. This publication is funded by the Joint Institute for the Study of the Atmosphere and Ocean (JISAO) under NOAA Cooperative Agreement NA17RJ1232, contribution 1320, NCAR-NCEP Reanslysis data provided by the NOAA-CIRES Climate Diagnostics Center, Boulder, Colorado, USA, from their Web site at http:// www.cdc.noaa.gov/, The IPCC Data Archive at Lawrence Livermore National Laboratory is supported by the Office of Science, U.S. Department of Energy.

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E. P. Salathé Ir., Climate Impacts Group, JISAO, University of Washington, Seattle, WA 98195, USA. (salathe@washington.edu)



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Part of Attachment - 5

Date: Thursday, October 26, 2006, 10:05:58 AM To: Larry Edwards <u><larry.edwards@mail.wdc.us.gl3></u> From: Eric Salathé <u><salathe@washington.edu></u> Subj: Questions on Alaska climate change.

#### Larry-

These results are based on global climate models, which do not represent the fine details of local terrain and land-sea contrasts that can play a very important role in climate change. We are working on high-resolution simulations for the WA-ID-OR area, but I do not know what is being done for Alaska at this time.

That being said, we can get a fair amount of guidance from the global models. Attached is the same figure as you saw in my paper. In this version, super imposed on the middle panel (1950-2000 model composite) are contour lines indicating the percent change in Nov-Dec-Jan precipitation from the 1950-2000 composite to the 2050-2100 composite.

There is a 15% increase indicated over the whole of SE Alaska. These results cannot really refine the geographic distribution much better. In terms of absolute numbers, the change will be largest in the areas already wettest, which is the south part of your domain.

I think this is very much a significant issue for Alaska. There is a group just starting up at the Univ of Alaska called "Alaska Center for Climate Assessment and Policy" that would be the best place to look deeper into this. I don't have contact info, but will send that on to you when I find out.

Other resources:

Arctic Climate Impacts Assessment <a href="http://www.acia.uaf.edu/default.html">http://www.acia.uaf.edu/default.html</a>

US National Assessment of the Potential Consequences of Climate Variability and Change (suppressed by the Bush administration) <http://www.usqcrp.gov/usgcrp/nacc/alaska-mega-region.htm>

Good luck with your work and let me know if we can be of any assistance.

-Eric

(Attached: precip\_track wcomp\_pct.png, Part.txt)



150E 160E 170E 180 170W 150W 150W 140W 130W 120W 110W 100W



Alaska All-Time Snow Records Bursting as Accumulation Mounts | A ...

http://www.alaskadispatch.com/article/snow-records-near-bursting-a ...



#### News

# Snow records near-bursting across Alaska as accumulation mounts

Alex DeMarban | Mar 05, 2012



Alaska communities are within striking distance of smashing their all-time snowfall records. Valdez isn't among them, at least not yet -- even though it's been smothered

With weeks of flake-generating weather to go, Anchorage and two other

RELATED

400 inches of snow make Valdez a winter holisbot

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by nearly 34 feet of snow. That's still a notable amount - the third-highest for that community -- but still 12 feet shy of the record set in 1989-90.

The black sheep of Alaska snowfall this season is Fairbanks. Its winter remains well below average, notching an embarrassing 3 feet, 7 inches. That's far off the record of just over 12 feet (147 inches) set in 1990-91. according to a National Weather Service chart posted Sunday.

Those within a snowball's throw of the record include:

Anchorage, with the third-most snowfall in history, needs 9 inches to break the 1954-55 record of 11 feet (133 inches).

· Berrow, with its second-deepest ever, needs 12 inches to break the 2008-09 record of 6 feet, 5 inches (77 inches).

Kodiak, with its third-most ever, needs 19 inches to break the 2007-08 record of 12 feet, 5 inches (149 inches).

The chart, posted on the agency's increasingly lively Facebook page for Alaska, reviews 12 communities, primarily those with notable snowfall amounts this season where the agency has offices, according to Michael Lawson, the Anchorage meteorologist who posted it.

Missing are those communities with weather-tracking volunteers and sporadic record-keeping, such as Cordova, which got National-Guard help digging out from massive dumps earlier this winter.

With more snow forecast, Anchorage might set its record within days, said Lawson. Another 2 to 4 inches could fall by Monday night, possibly moving the city within a smidgeon of its secondhighest year, 1955-56, said Lawson.

Print

Click here to see the full chart.

Contact Alex DeMarban at alex@alaskadispatch.com

Tweet : 2





What's the difference between Alaska's caribon and reindeer herda?

Single Page

Christmas brings back memories of noted Barrow elder

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12/26/12 14:47

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Page 1





Anchorage

# Anchorage, Alaska breaks seasonal snowfall reco

Eric Christopher Adams | Apr 07, 2012



An epic winter in Anchorage, became an historic one Satu several inches of new snowfall, according to the <u>National</u> the city officially broke the all-time record of 132.6 inches a snowfall came in the winter of 1954-55, before Alaska was

As of 4 p.m., <u>133.6 inches of snow had fallen on Anchor</u> winter of 2011-12. Snow continued to fall into the evening

RELATED Science behind Anchorage's historic snowfall Alaskans: Brace for a miserable, wet, chilly breakup And while some celebrated, others lamented the unending in the South Anchorage Hillside neighborhood, which has elevation than the city proper, have recorded upwards of 2 this winter.

All that snow has caused thousands of dollars in home ar

property damage. It became fodder for the city's mayoral election. It prompted between neighbors over snowberms. It left city "snow dumps" bulging beyond car up millions of dollars of street-clearing and other fees for city government.



Manual And Andrews



Attachment - 8

Snowpack 2nd-Highest on Record in Southeast Alaska

Matt Lichenstein, KFSK Radio 17-Apr-08

Southeast Alaska has the second highest snowpack on record this year according to federal data. The pack measured far above normal at locations across the region this month.

There are several survey sites around Southeast Alaska, including Skagway, Juneau, Ketchikan, and Petersburg. In Petersburg the U.S. Forest Service does 12 snowpack surveys over the course of 6 months on Ravens Roost Mountain, near the towns airport and old reservoir.

(Whitaker): "For the most part what we're doing when we go out to measure the snow is we're measuring snow depth and snow water content, or the amount of water that's contained in that volume of enow."

Petersburg Ranger District hydrologist Heath Whitaker says they check one site at about 550 elevation and then a higher elevation site on the mountain at 1650 feet.

(Whitaker): "And we generally have to snowshoe into those sites, and we have the equipment to take snow cores, that basically acts as a yardstick. We stick it through the snowpack to the ground. And that way we measure the depth and it also pulls out a core, and with that core you can determine the amount of water content."

Knowing the snowpack and its water content helps scientists predict the amount of water that will run downhill into streams and lakes in the summertime, a key factor in everything from salmon survival to hydro power generation in Southeast.

(Whitaker): "The way the state tends to use it, they forecast river and stream flow in terms of volume, they forecast flood potentials, avalanche dangers, summer forest fire probability -- which is an Interior application obviously -- fresh water availability for municipalities and the power generation that goes along with that. And the information is often used as an index of winter severity for wildlife survival. That's typically how we use it at the District here, more often than not."

April is generally the month with the highest level of snowpack and the highest water content, according to Whitaker. Judging from this months survey, Whitaker says this past winter is shaping up to have the second-highest snowpack on record in the Petersburg area, where the data extends back to 1979. Last year was the top snowpack.

(Whitaker): "Compared with last year, this month's survey up on top of Raven's ridge had 127", which is about 10.5 feet. And last year we had 168" at this point, for this month's survey -- which is about 14 feet. So this year's percent of 2007, we're about 76 percent of last year's amount. But we are also about 169% of average."

(Lichtenstien): "Average over the last 30 years or so?"



(Whitaker): "Correct. And that average tends to be about 75 inches or so."

Last year the snowpack in April was the highest on record by far, at 14 feet, and Whitaker says the Forest Service's equipment was just barely long enough to measure it.

The Southeast data from Petersburg and other areas is sent up to the US Dept. of Agriculture's Natural Resources Conservation Service in Anchorage. The NRCS compiles data from sites like this from across the state, which are monitored by a variety of agencies and organizations. Rick McClure is the NRCS show survey supervisor for Alaska. He says the snowpack is not only the second highest on record for Petersburg, but for the Southeast region. McClure says the snowpack is above average in a lot of coastal Alaska.

(McClure): "In Southeast you've the Swan Lake Hydro project off Ketchikan, it's at 230 percent of average. Of course it's only 90 percent of last year, but 230 percent of average. And at Petersburg you have it at 200 percent of average, basically, and 80 pecent of last year. And then you go on to South Central Alaska -- the Kenai Peninusula is 110 to 130 percent of normal ranage or average range. And another high area is the Seward Peninsula. It's at the 130 to 150 percent of average range."

However McClure said pack levels dropped below normal in other areas of the state, particularly in Interior and Northeast .:

(McClure): "It gets more average around the McGrath area, and then Fairbanks area is basically 50 to 60 percent of normal, and it seems that way to the north and east part of the state, in the Fort Yukon area and such."

While the snowpack varies for different areas of the state, the temperature was up in March. According to the NRCS, air temperatures for month varied from zero to six degrees farenheit above average across the state, except in Bethel where it measured a degree below average.

It Petersburg, I'm Matt Lichtenstein.



PC34 1 of 3

RECEIVED

Dick E. Hoskins 1008 W 16<sup>th</sup> Avenue Anchorage, AK 99501

December 26, 2012

#### RE: Units 1A and 3 proposals for predator control - OPPOSE

Dear Alaska Board of Game:

Concerning the proposal to remove wolves in an effort to increase the Sitka Black-tailed Deer population I believe that the proposals do not contain enough convincing information to warrant proceeding with removing any wolves from Unit 1A or Unit 3.

Specifically:

- The proposal seems to indicate that habitat loss due to clear cutting is the major cause
  of deer population decline. The proposal states that the population will continue to
  decline 50 to 60% during the tree harvesting logging rotation cycle to 2054. There are no
  details about how this number was determined. If you do the math, that is about a 1 %
  decline/year for about a 50% drop in population. I believe that this number is way too
  low. It would be useful to have some actual estimates of the impact habitat destruction
  has impacted the number of deer over time.
- The proposal indicates that the severe winters during 2006-2008 and 2011 reduced deer populations but there is no numerical estimate. Climate models indicate that in the next decades that as global temperatures rise winters in SE Alaska will get wetter and more variable as the tree line changes and glaciers recede. The data already supports this is happening. The yellow cedar is in significant trouble as are other arboreal species due to soil changes which are thought to be related to climate warming. Likely the same for deer browse. This means that habitat destruction will likely accelerate which will accelerate the decline of deer populations.

The synergistic interaction of clear-cutting and climate change may reduce habitat quality far more than predation. Predators will also experience the stresses of habitat destruction and climate change.

 Further it seems that the current data on deer or predator census is very thin so it is not clear how a credible population model can be developed either in time, money, available expertise, or with respect to the current state of the statistical theory.

Initial conditions are needed for these models as well as some historical data. Developing a sampling frame which includes spatial variability is very difficult to do properly in much less complex ecosystems than Unit 1A. Looking over the charts and especially the maps of the transect collection process I suggest that at best it is known that populations might have gone up or down from one year or the next, but that there is no way to make useful numerical estimates with usefully small standard errors.



PC34 2 of 3

 There is a statement that at harvest levels reported, staff observations, and trapper reports that the wolf population in Unit 1A is stable at moderate levels. I suggest that this statement and others like it are not useful or accurate enough to make any policy decisions and should be disregarded. Every scientist develops an intuitive feel for what is going on in their area of work, but it does not belong in a proposal that should be science based.

The only population data that is potentially useful should be collected by a peer reviewed protocol which also estimates the variability of the data as well as the population. There are many statements in the proposal that indicate that there is very high uncertainty in quantifying any of the factors that impact deer population. They should be taken seriously.

 The proposal states that data from other units indicate that bears may be a significant predator of deer fawns. However there is no population data on bear populations in Unit 1A much less how many fawns are being killed by bears. Of course there is no population data that is credible on wolves or deer.

I suggest that even if you kill all the wolves in some experimental area and the deer population appears to go up you will still not know if the wolves are the causal link to deer population decline. Even if the data were very good - number of wolves and deer, rate of predation over several years - you would only be able to say to what degree wolf predation was correlated with deer population decline; you will not know that the wolves were *the* factor that was most important or possibly even slightly important in changing deer population. The interactions of various species with the environment and climate and human encroachment are too complex to be reduced to controlling for one factor when the others are varying but not being measured.

The proposal makes it clear that the population numbers are not available and are likely not going to be anytime soon. The proposal is not convincing that the methodology, old or new, is going to give useful numbers. Without accurate numbers it is not possible to make credible policy decisions.

If there is to be an attempt to complete a useful census of bears, wolves and deer then it appears that a different methodology is needed that has been peer reviewed. I am a layman with regard to this type of data collection but I can see significant holes in the methodology starting with the designation of the sampling frame to the lack of accounting for temporal and spatial variability.

I do not see how killing all the wolves in some restricted area and then monitoring what happens with flawed methods without accounting for likely the most important competing factors as is chronicled in hundreds of studies in the wildlife management literature – habitat destruction – is going to tell us anything. The burden is on the Fish & Wildlife scientists to explain in detail exactly what would be learned and how the data would inform them one way or the other.

If anything, stop the clear-cutting for a few years and see if the deer harvest goes up. This would cost far less for the state. At the very least if you were to continue with the killing of

wolves in Unit 1a you would have a better experimental design if you stopped clear-cutting in some other area, perhaps with habitat restoration, with no wolf killing and see what happens.

In summary, there is not enough credible science to indicate that the proposal should be adopted.

Sincerely,

Dick Edson Hostins

Dick E. Hoskins

PC34



PC35 1 of 1

### RECEIVED

BOARDS ANCHORAGE

Unit 1A and 3 Feasibility Studies

I am sick of the board of game and its irresponsible way of "managing" wildlife. Your management is not scientific. Please, follow real scientific studies. Recognize that fluctuation in animal numbers such as wolves and bears is normal. Killing wolves will not bring the deer back. Saving their habitat will. More money can be made through tourism to see wolves than hunting them. Take into account all environmental conditions of the past few years as well. I wish the board of game represented all Alaskans in their views on wildlife and not just a "privileged" few.

Donna Quante Willow, Alaska


# RECEIVED

DEC 2 8 2012 BOARDS ANCHORAGE

Unit 1A & 3 Feasibility studies

I am opposed to killing this rare group of wolves when the science is so unclear about the causes of the deer decline and when destroying wolves is meant to cater to only certain hunting consumers and not to the health of the ecosystem and the wishes of non-hunting citizens.

Tima Priess POB 213 Ester 99725



PC37 1 of 1

## RECEIVED

DEC 2 8 2012 BOARDS ANCHORAGE

1A and 3 Feasibility Studies

To the BOG:

I completely oppose the unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves. Wolves, and all animals, deserve respect and protection, they have their very important role in the balance of nature, when you destroy a species you are putting another nail in our own coffin. What you do is totally unethical and stupid.

Iris Gallegos Lussac-les-Eglises France

DEC 2 8 2012 BOARDS ANCHORAGE

Units 1A and 3 feasibility studies

Alaska Board of Game,

I oppose this unscientific and expensive "management experiment" against Canis lupus ligoni, a rare, unique subspecies found only in southeast Alaska. The Alexander Archipelago wolf is already unacceptably threatened by habitat loss due to the logging of old-growth, along with hunting and trapping which is at the highest it has been in the last three decades.

These wolves have been helping to shape the ecology of these temperate rainforests for many thousands of years, and are therefore an integral part of this wild community. Slaughtering them will harm the biodiversity, the resilience of these coastside systems. "Predator control" does not address the source of the decline in Sitka black-tailed deer. It is not justified. Clear-cut logging has destroyed over half of the old-growth forest habitat of both deer and wolf, and another 30% more could very well be lost in the next 20 years. The Alaska Department of Fish & Game's own studies admit that this, along with severe winters, are significant factors in the decline. Killing wolves or other predators will not result in any meaningful long-term benefit for these herds.

There used to be coastal temperate rainforest in my home state, as well. In fact, we used to be connected to Alaska in this way. Alas, the legacy of unsustainable logging: "Along the coast from northern California to southern British Columbia, where temperate rain forests once stretched, not a single watershed or river valley of size remains intact; it is an astounding loss to witness in a mere moment of time. All of these river valleys should have been protected for their global rarity alone. Logging these ancient forests has not resulted in anything resembling sustainability for the people on this coast, so one has to question why we allow this long-term loss of natural capital for short-term gain, if any." - Ian McAllister

Please address these very human impacts, rather than uniting with and extending the damage caused by them.

With grave concern, Erin Barca 1365 Creekside Dr. #429 Walnut Creek, CA. 94596



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BOARDS ANCHORAGE

1A and 3 feasibility studies

Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

These predator control programs are being called a "management experiment." I therefore oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!

Fernanda Klinger



#### RECEIVED

#### GMU 1A and 3 feasibility studies

DEC 2 8 2012 BOARDS ANCHORAGE

To the Board of Game,

I am asking you to not allow the hunting of the Alexander Archipelago wolves. Once more you the board of game are clouding your choices by allowing personal bias and agendas to get in the way of scientific facts. Read what the biologists are saying and not what your own agendas are. It is time that the board of game listen to the people that pay there wages, and not to the narrow minded groups and organizations that most of the board belongs to.

Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit.

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

Thank you for your time,

Buck Curry



1A and 3 feasibility studies

DEC 2 8 2012 BOARDS ANCHORAGE

Board of Game Members:

I strongly object to your management experiment for the Alexander Archipelago wolves which is completely unscientific and therefore probably illegal since you do not have the necessary data to support it.

I'm sure the public is totally opposed to the unscientific and expensive project of killing the Alexander Archipelago wolves, as I am. I would like to know how you feel you can justify such a project especially considering what wolf killing does for tourism.

Sincerely,

Virginia De Vries 4260 Black hawk Drive Willits, Ca 95490



PC42 1 of 1

#### Feasibility Studies Units 1A and 3

DEC 2 n 2012

Why is it that the wolf is always to blame? Because it's an easy scapegoat!!!

COARDS

Why would you cater to a few deer hunters who are lazy and just want an easier hunt, when your local economy will benefit much more from wildlife tourists who travel to see and photograph the wolves and other wildlife in your area?

I travel to Alaska for long vacations because of the wildlife viewing available in Alaska. When I travel, I ensure I spend my money with locally owned establishments and artists and I spend a lot of money (average of \$10 – 15k per trip). But, as Alaska implements more and more policies that allow the killing of wolves, I am quickly re-thinking my travel plans and will, instead, go to a place where they like and support the wolves!

The Alexander Archipelago wolf is found only in the old-growth forests of Southeast Alaska. The most recent population estimate for this gray wolf subspecies was done in the mid-1990s, and found a total of **only about 900 throughout the region**. There hasn't been a recent study to determine if this population has remained steady or has declined.

Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline including:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population. Why don't you ban the clear-cut logging for more responsible logging practices?????

 Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

Most importantly, the studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

Terry Traveland Traveland Law P.O. Box 865057 Plano, Texas 75086



RECEIVED

ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

BOARDS ANCHORAGE

#### FEASIBILITY STUDIES UNITS 1a AND 3

#### I OPPOSE YOUR UNSCIENTIFIC, EXPENSIVE WOLF KILLING EXPERIMENT ON THE ALEXANDER ARCHIPELAGO WOLVES~\_\_\_\_

 Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

 The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

Thank you, Jed B. Zimmerman



RECEIVED

BOARDS ANCHORAGE

#### Feasibility studies 1a and 3

I am completely opposed to this ill-advised, unscientific predator control program right from the start. The proposal calls for trappers to kill all of the wolves in the Unit 1A area and 80 percent of the wolves in the Unit 3 area! This is insane!

These are the same Alexander Archipelago wolves that several groups petitioned the U.S. Department of the Interior to include on the threatened or endangered species list under the Endangered Species Act.

The BOG needs to dissolve and let science take over.

Sincerely,

Susan and Pete Vogt 269 Bias Dr. Fairbanks, AK 99712



BOARDS ANCHORAGE

#### Feasibility studies 1a and 3

Dear BOG,

As an Alaskan I am uncomfortable with proposals that call for the complete elimination of species that are part of a balanced ecosystem. In a Democracy it seems more appropriate to consider all type of solutions, those with minimal interference and those with extreme measures as studies that propose killing wolves in two Game Management Units: a small portion of Unit 1A on Gravina Island near Ketchikan, and a portion of Unit 3, several islands near Petersburg. As you know, the proposal calls for trappers to kill <u>all</u> of the wolves in the Unit 1A area and <u>80 percent</u> of the wolves in the Unit 3 area.

The Alexander Archipelago wolf is found only in the old-growth forests of Southeast Alaska. The most recent population estimate for this gray wolf subspecies was done in the mid-1990s, and found a total of only about 900 throughout the region. These are the same Alexander Archipelago wolves that several groups petitioned the U.S. Department of the Interior to include on the threatened or endangered species list under the Endangered Species Act.

So, I call on you as an Alaskan and fellow citizen in a democracy to gather more information and seek alternatives to complete elimination. Without doing so, it appears to the rest of us as if you're being bought out by interest groups. When my kids ask, 'mommy what happened to the Alexander Archipelago wolf?' should I explain that even when you know what is right, you should just do what is quickest, easiest and makes you the most friends/money? Hmmm, not sure that is how best to create future citizens.

Lastly, please delay plan to exterminate, reduce or eliminate and take more time to gather information from all perspectives before making a recommendation.

Thanks Jennifer Meyer



# RECEIVED

BOARDS ANCHORAGE

Units 1A and 3 Feasibility studies

We are opposed to the unfounded experiment of killing these wolves.

Patricia Tallman PhD



PC47 1 of 1

## REGEIVED

DEC 2 o 2012

#### FEASIBILITY 1A AND 3

BOARDS

PLEASE, OH PLEASE, I'M PLEADING WITH YOU TO VOTE NO ON PLANS TO THE KILLING OF SOUTHEAST ALASKA'S ALEXANDER ARCHIPELAGO WOLVES IN THE TWO AREAS:

1. SITKA BLACK TAILED DEER UNIT 1A

2. SITKA BLACK TAILED DEER UNIT 3

ANDREA WOLFINSOHN LONG BEACH, IN



# RECEIVED

DEC 2 o 2012 BOARDS ANCHORAGE

Units 1A and 3 feasibility studies

Please save the Alexander Archipelago wolves.

Please save these majestic creatures.

Brian Armer



## Unit 1a and 3 Feasibility Studies

ATTN: Board of Game Comments Alaska Department of Fish and Game BOARDS ANCHORAGE

# Gentlemen:

As a avid wildlife photographer I am appalled by the proposal for trappers to kill wolves on Gravina Island and several islands near Petersburg. The sole purpose of this wolf kill would be to try to artificially boost deer populations for hunters. Well let me remind you gentlemen that some of us like to hunt with our camera.

This beautiful Alexander Archipelago wolf is a rare subspecies of the grey Wolf. We wildlife photographers go up there and are not afraid to spend money in order to capture a picture of these magnificent creatures. Unlike many hunters, the wildlife photographers many times bring their whole families with them so that we can teach our children about the beauty of Alaska.

These wolves should be put on the endangered species list, not trapped and killed. I have heard that this proposal calls for 100% of the wolves in unit 1A and 80% of the wolves in unit3 area. This ill conceived plan has absolutely no scientific bases and is in fact called an experiment.

Wolves are just an extremely small part contributing to the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other more significant factors contributing to the decline in the deer population such as severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality." Another is the loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

## <u>Please reject this horrendous plan and say no to killing the wolves in</u> these two areas.

Thanking you in advance, Mark Balitzer San Diego Ca





PC50 1 of 1

Feasibility studies Units 1A and 3

BOARDS ANCHORAGE

Dear Board of Game,

I urge you to stop plans to kill the Southeast Alaskan Alexander Archipelago Wolves in two areas.

Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a
decline in the wolf population as well as in the deer population.

 Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

These predator control programs are being called a "management experiment." I oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!

Sincerely,

Rebecka Tobler Oregon City, OR 97045

#### Units 1A and 3 Feasibility Studies

I am writing on behalf of my family of 7 voting adults (and a number of concerned, informed pre-adults):

We understand that next month the Board of Game will consider two Feasibility Assessments that propose killing some of Southeast Alaska's rare Alexander Archipelago wolves in order to increase the population of Sitka Black-tailed Deer for hunters; and that if the Board accepts them, there will be killing of wolves in two Game Management Units: a small portion of Unit 1A on Gravina Island near Ketchikan, and a portion of Unit 3, several islands near Petersburg.

#### To us, it is outrageous that you propose to kill <u>all</u> of the wolves in the Unit 1A area and <u>80 percent</u> of the wolves in the Unit 3 area:

Not only is the Alexander Archipelago wolf found only in the old-growth forests of Southeast Alaska; but the most recent population estimate for this gray wolf subspecies was done in the mid-1990s, and found a total of only about 900 throughout the region. Please stop these predator control measures <u>now!</u>

These animals are deserving of respect in and of themselves, as part of an endangered population, and as the subject of admiration for tourists like our family who have often visited Alaska --camping and hiking--primarily to see live animals in the wild--including Sitka deer. We won't engage in Alaska tourism while this killing spree is your policy. Hunters have plenty to kill; please give these animals a break!

Sincerely,

The Zucker family 1966 Orchard St. Eugene, OR 97403

#### RECEIVED

DEC 2 . 2012 BOARDS ANGHORAGE  Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

• The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

 ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

 The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

Dave Cannon

BOARDS



# OPPOSE UNITS 1A AND 3 FEASIBILITY STUDIES

Please say YES to STOP bear snaring & year round wolf hunting !!!

Please say NO to KILLING off the WOLVES in 2 different areas!!!

These are God's beautiful creatures & if people would stop infringing on their territory they wouldn't come into ours!!

Wolves are beautiful creatures & yes wild but not always vicious!! LEAVE THEM BE!!!

Tina Leber

## RECEIVED





PC54 1 of 1

## UNITS 1A AND 3 FEASIBILITY STUDIES

Please say "no" to plans to kill Southeast Alaska's Alexander Archipelago wolves in two areas. There is no scientific evidence that this is needed in order to increase the deer population, and it doesn't make sense to kill an animal that should be on the endangered species list to increase the population of one that is not anyway.

Thanks so much.

Curtis and Jane Hoffman 6747 Lupton Dr Dallas TX 75225

RECEIVED



SUPPORT 18, 19, 20

**OPPPOSE FEASIBILITY STUDIES UNITS 1A AND 3** 

Please STOP killing the wildlife and predators of Alaska. It is one of the few wild areas left, and we need that in this devastation that the world is becoming. Destroying these beautiful animals will only add more damage to an ecologically challenged world... PLEASE......

Lynn Snyder

RECEIVED

## SUPPORT 18, 19, 20

## OPPOSE FEASIBILITY STUDIES 1A AND 3

## ELIMINATE THE MORATORIUM

DEC 2 8 2012 BOARDS ANCHORAGE

Dear Alaska Board of Game,

As an Alaskan Native person with roots in Southcentral Alaska, I know of and love dearly the natural beauty of the state.

I am writing to ask that you continue to defend and preserve it, by ending inhumane and unsporting bear snaring, and year round wolf hunting.

It is important that game policies be sustainable and fair.

I also request that you eliminate your moratorium on Denali Buffer Zone Proposals.

Alaska's greatest treasures are natural ones, including its wildlife. Careless and thoughtless policies threaten extinction and destruction of these resources for future generations.

Finally I request that you reject the plan to kill Alaska's Alexander Archipelago Wolves in two areas.

It is vital that you not take actions that destroy the tremendous natural gifts of Alaska. No one constituency should be able to make unilateral decisions which destroy nature for all.

I thank you for continuing to be good stewards of the land, and carrying on a tradition of generations.

Sincerely,

Storme Webber

PC57 1 of 1

## We OPPOSE feasibility assessments that propose killing Southeast Alaska's wolves in Sitka Black-tailed Deer units 1A and 3:

Alexander Archipelago wolves are unique and are under consideration for listing under the Endangered Species Act. They are a valuable component of Southeast Alaska's wildlife.

The feasibility assessments admit that they are not the only factor in deer population fluctuations, not the least of which is the clear-cut logging of old growth forests. Continuing to destroy components of the ecosystem is not the answer to this issue.

Both deer and wolves should be protected from human impacts as coevolved members of the ecosystem. Hunting pressure should be lessened if deer numbers are low and this should be accepted as a necessity of natural system management, particularly when other human impacts have lead to the decline.

Sincerely,

Robert and Linda Shaw 9684 Moraine Way Juneau, AK 99801

RECEIVED DEC 2 8 2012 BOARDS ANCHORAGE No to plans kill Southeast Alaska's Alexander Archipelago wolves in two areas. Please protect them. Leave the Alexander Archipelago wolves alone.

Thanks

Kitty Smith

RECEIVED

BEC 2 S 2012 BOARDS ANCHORAGE

## OPPOSE UNITS 1A AND 3 FEASIBILITY STUDIES.

No .....to Plans to Kill Southeast Alaska's Alexander Archipelago Wolves in the designated Two Areas.

Thank You,

Jann Webb

RECEIVED

## **OPPOSE UNITS 1A AND 3 FEASIBILITY STUDIES**

Dear Alaska Board of Game:

National Wolfwatcher Coalition is a nonprofit organization that promotes wolf education and conservation, and it is currently supported by more than 250,000 members. We promote educational tourism opportunities throughout the USA and Canada, which enable participants to observe and learn about wolves in their natural habitat.

It is our understanding that next month, you will consider two Feasibility Assessments that propose killing some of Southeast Alaska's rare Alexander Archipelago wolves in order to increase the population of Sitka Black-tailed Deer for hunters. We believe these proposals are ill-advised and woefully unscientific.

Wolves are not solely responsible for the decline in the Sitka Blacktailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline, such as loss of habitat and severe winter weather. The science is clearly lacking to support any predator control measures since the ADF&G does not know the impact of black bear predation on deer fawns. In addition, the Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are.

Of particular interest to us is the fact that the studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

Thus, we oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves and urge you to vote NO to plans that kill Southeast Alaska's rare Alexander Archipelago wolves.

Best regards, Diane Bentivegna, Ed.M. Director, Education and Resources National Wolfwatcher Coalition

RECEIVED DEC 2 8 2012 BOARDS ANCHORAGE PC60 1 of 1 ATTN: Board of Game Comments Alaska Department of Fish and Game

## **OPPOSE THE FEASIBILITY ASSESSMENTS FOR UNITS 1A AND 3**

Dear Board of Game Members:

I am writing to you today to urge you to oppose the unscientific "wolf killing experiment" on the Alexander Archipelago wolves currently under consideration. The Alexander Archipelago wolf is found only in the old-growth forests of Southeast Alaska. It is a small population that several wildlife groups recently petitioned the U.S. Department of Interior to include as threatened or endangered species under the Endangered Species Act.

It is clear that wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, and scientific studies provide ample proof of this. A more significant factor contributing to the decline of deer population is the loss of habitat due to clear-cut logging, especially of old-growth forests, which also causes a decline in the wolf population. You would do well to investigate this environmental catastrophe in the making instead of blaming the forest inhabitants. Severe winter weather, according to the studies, has also had a much greater impact on high rates of deer mortality.

Available studies indicate that there is no information available to accurately estimate wolf numbers on Gravina Island, nor does the ASF&G have any idea how make black bears -- or even deer -- there are. In other words, there is no science available to support any predator control measures.

The cost for this "experiment" will be costly; more than \$200,000 per year for five years. It's outrageous that you would consider using state funds for a program with no scientific basis or predictable outcome given austerity measures embraced by other state agencies and the very small number of deer hunters. Perhaps you might consider focusing on the economic benefits of the wildlife tourism industry instead. There is no greater disincentive to avoid visiting Alaska than state-sanctioned extermination of the very wildlife that makes Alaska such an attractive tourist destination.

Judith Fairly 450 Stoneridge Trail Weatherford, TX 76087

RECEIVED DEC 2 S 2012 BOARDS ANCHORAGE PC61 1 of 1



PC62 1 of 1

## I OPPOSE APPROVAL OF THE FEASIBILITY ASSESSMENTS FOR GAME MANAGEMENT UNITS 1A AND 3

 Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

 ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

 The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

RECEIVED

Dena Selby

#### Units 1A and 3 Feasibility Assessments

I'm **against** the plans to kill Southeast Alaska's Alexander Archipelago Wolves, and this is why:

 Wolves are not the only ones responsible for the decline of the Sitka Blacktailed Deer populations, and there are studies to prove so. Severe cold weather, loss of habitat, and other predators have just as much, if not more an impact on them than the wolves.

 It is estimated that the cost for the predator control program and related deer population studies will be more than \$200,000 per year for five years. Certainly there is a better use for all that money, considering it's unlikely the program will work, and result in more deer.

- The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." If the wolf population number is uncertain, how do they know there is even enough wolves to affect the deer population?

 The wildlife tourism industry feeds off of visitors coming to get a glimpse of the rare wolf. The industry will be affected if the wolves are killed.

The predator control programs are being called a "management experiment".
 It's not worth it. Please don't go ahead with these killing plans.

Savannah Ford

#### RECEIVED

BOARDS ANCHORAGE PC63 1 of 1

PC64 1 of 1

Dear Members of the Alaskan Board of Game,

Citizens of the lower 48 do care deeply about Alaska's wildlife.

Thus I write to urge you to rescind the moratorium on accepting proposals related to Denali National Park no-trapping buffer zones.

I also oppose the conclusions of the Feasibility Assessments for Units 1A and 3, and urge you not to kill the Alexander Archipelago wolves as a predator control action just so humans can possibly have more black tailed deer to hunt. Alaska still has large ecosystems that do best when the humans interfere the least.

Thank you for your consideration.

Sincerely,

Jennifer Thiermann 3909 Rugen Road Glenview, IL 60025

> DEC 2 8 2012 BOARDS ANCHORAGE



Good day,

<u>I oppose the Feasibility Assessments for GMUs 1A and 3.</u> I am opposed to the predator control programs that are called a "management experiment." I oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!

This is not sound, responsible wildlife management. Please explore humane, respectful and responsible wilderness management that preserves wolves ---- they are an important part of America's heritage, and an even more important part of our environmental health.

Kind regards,

Marina Salazar 1773 First Avenue Apartment #14 New York, New York 10128

RECEIVED

DEC 2 § 2012 BOARDS ANCHORAGE

#### PLEASE DO NOT ACCEPT THE FEASIBILITY ASSESSMENTS FOR UNITS 1A and 3.

 Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

Loss of habitat because of clear-cut logging, especially of old-growth forests. This
causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

 The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

# I strongly oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!

RECEIVED DEC 2 S 2012 BOARDS ANCHORAGE

Ardis Skillett Ranchita, CA PC66 1 of 1



## Units 1A and 3 Feasibility Assessments

I work with children in after school programs in CT. The children are following this.

I'm pleading with you, now is the time to show mercy. The last thing we need is the children to see attacks on innocent creatures. Way too much death lately don't you think?

Let's show some restraint and responsibility. Willpower, gentlemen.

Yours

Daniel Thomacos

RECEIVED DEC 2 5 2012 DOARDS

PC68 1 of 1

# **OPPOSE THE UNITS 1A AND 3 FEASIBILITY ASSESSMENTS**

Say "No" to Plans to Kill Southeast Alaska's Alexander Archipelago Wolves in Two Areas

Heidi Zodorozny

RECEIVED

DEC 2 3 2012 BOARDS ANCHORAGE

## **OPPOSE THE FEASIBILITY ASSESSMENTS FOR GMUS 1A AND 3**

Wolves are not responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. If you are sincerely interested in balancing nature, there are many alternatives other than destroying a species that so many have worked so hard to protect. Every region in the country has declining populations of species which have nothing to do with wolves although trophy hunters would like us to believe otherwise.

The following are clearly more logical explanations:

 Loss of habitat because of clear-cut logging, especially of old-growth forests causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters.

Given these and many other unknown variables, predator control is not justified for either wolves or black bears.

The science is clearly lacking to support any predator control measures.

There is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

WOLVES ARE AN ICON IN NORTH AMERICA AND MULTIPLE GENERATIONS HAVE GROWN TO RECOGNIZE THEM AS A CRITICAL PART OF THE ECOSYSTEM.

Brad & Melanie Weberg Bloomington, MN RECEIVED

BEC 2 3 2012 EOAFDS

Patricia Cue 11903 Town Park Circle Eagle River, AK 99577

Board of Game Comments Alaska Dept. of Fish and Game Boards Support Section PO Box 115526 Juneau, AK 99811-5526

December 26, 2012

I am writing in opposition to the Units 1A and 3 Feasibility Assessments, the plans to hunt the Alexander Archipelago wolves.

Killing wolves in Game Management Units 1A on Gravina Island and Unit 3 will serve no purpose. Wolves are not soley responsible for the decline in deer. Over hunting and loss of habitat due to clear cutting reduces populations. Severe weather (especially the last three winters) has resulted in high deer mortality rates. Predators play an important role in the balance of the natural world. Is it really true that these proposals call for the total elimination of wolves in Unit 1A and 80% in Unit 3? Why is this even being considered? Are you people out of your minds?

The estimated cost of \$200,000.00 is outrageous and not fiscally responsible. I urge the BOG to oppose the horrible and destructive practice of predator control.

Patricia Cue

BEC 2 g 2012 BOARDS ANCHORAGE Dear Alaska Board of Game,

The proposals contained in the Alaska Department of Fish & Game Feasibility Assessments (2) which will be considered next month are unscientific and will harm both species under discussion.

The Alexander Archipelago Wolf (Canis lupis ligoni) is currently under petition before the Secretary of Interior to list as Threatened Or Endangered pursuant to Section 4(b) of the Endangered Species Act ("ESA"). Petitioners are Center for Biological Diversity, and Greenpeace (August 10, 2011). I believe that the information contained in this petition is both substantial and scientific, and thus warrants listing of a rare subspecies of gray wolf with a distinct but declining population peculiar only to Southeast Alaska.

Because of the following information below - as cited in aforementioned petition - it is unthinkable to kill one individual of this species as its numbers become more critical with each kill. It is in the interest of first, the Alexander Archipelago Wolf, its ecosystem, and the people of Alaska that this rare wolf with its remaining habitat be left UNTOUCHED, and that you reject any proposals to allow hunters to take any wolves:

1. All indications are that the population is declining from both past and present threats (clear-cut logging of old-growth forests as its prime habitat is shrinking; legal and illegal overkill; road construction and ineffective land management planning; the inevitability of climate change impact ). Because it is a small and relatively isolated population segment, its gene pool is restricted and may have adverse consequences in the midst of compounded selective pressure. The Alexander Archipelago wolf is facing extinction and must be protected throughout its geographical range, not "experimented" on with further molestation.

2. The only predator control needed is control of ourselves - the hunters. There is no direct proven correlation between a lower population density of the Alexander Archipelago wolf's prey and the Sitka black-tailed deer (Odocoileus hemionous sitkensis). Both species share the same habitat and rely on old-growth forest; heavy winter snow with lack of forest canopy severely impacts the Sitka. It is now common knowledge that all attempts to control predators - in the predator-prey relationship - so as to purportedly increase prey numbers is detrimental to both species and only enhances the human hunters. The most efficient control of ungulate prey populations is by their predators -- no one else. Hunters will kill the young healthy adults of populations, leaving the weak, sick and old survive; a subversion of the inter-specific limiting factor regulating animal numbers. In short, no one knows the Sitka black-tailed deer better than its predator, the Alexander Archipelago wolf.

Please give this matter all due consideration it deserves, and thank you for your time and attention.

Sincerely,

Jeffrey Kramer

DEC 2 · 2012 DARDS

RECEIVED
## Units 1A and 3 Feasibility Assessments

To Members of the Board of Game,

If it is correct, that ADF&G is proposing a predator control program for the Alexander Archipelago wolves, I must express my utter dismay and opposition to this management measure. An ecosystem without its top predators is unbalanced. Humans have got to learn how to share the top predatory position.

Beverly Minn 500 Lincoln St B9 Sitka AK 99835

## RECEIVED

BOARDS ANCHORAGE

#### GMU 1A and 3 FEASIBILITY ASSESSMENTS

Wolves are not solely responsible for the decline in the Sitka Black-tailed deer population, as the studies themselves admit. There are other significant factors contributing to the decline, including:

Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

Severe winter weather, especially three recent deep-snow winters. In fact, the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality.

ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the areas, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf ... numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five millions dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

The studies do not address effects of fewer wolves on the wildlife tourism industry which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

I absolutely do not support you catering to 6% of Americans who hunt and trap and demand you listen to the 94% of Americans opposed to hunting & trapping in lieu of wildlife observation. I will cancel my trip to AK and request all friends and family do the same. I vehemently oppose the BOG undertaking this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!!

Donald Samuelson 26011 31<sup>st</sup> Street Salem, WI 53168 DEC 2 S 2012 BOARDS PC73 1 of 1

#### GMU 1A and 3 FEASIBILITY ASSESSMENTS

Wolves are not solely responsible for the decline in the Sitka Black-tailed deer population, as the studies themselves admit. There are other significant factors contributing to the decline, including:

Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

Severe winter weather, especially three recent deep-snow winters. In fact, the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality.

ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the areas, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

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I vehemently oppose the BOG undertaking this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!!

Sharon Samuelson 26011 31st Street Salem, WI 53168

BEC 2 S 2012 BOARDS PC74 1 of 1

# **OPPOSE UNITS 1A AND 3 FEASIBILITY STUDIES**

I want to go on record as helping to prevent killing of the rare Archipelago wolves... I've been studying wolves for many years and am convinced that they are intelligent, sociable, caring animals on a par with dolphins and apes in the "thought" range. See my books, "Mark of The White Wolf" (an e-book) and "Eyes That Haunt" (both eand print book).

I am working on a sequel to "Eyes" that will feature killing of the wolves from the air, both by aircraft and helicopters. I hope to point out the idiocy (brainlessness) of parties implementing the killing of these brave, sentient creatures.

Thanks for listening... E. Lee North, Brightwaters, NY

RECEIVED

DEC 2 S 2012 BOARDS ANCHORAGE

#### I oppose the Feasibility Assessments for Units 1A and 3

Wolves are not solely responsible for the decline in the Sitka black-tailed deer population, which is shown by the studies themselves. There are other significant factors that caused the decline, including:

 Loss of habitat due to clear-cut logging, especially of old-growth forests, which causes the wolf population and the deer population to decline.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

These predator control programs are being called a "management experiment." I oppose this unscientific, expensive wolf killing "experiment" on the Alexander Archipelago wolves!

Sincerely, Abbie Harville

DEC 2 S 2012 BOARDS ANCHORAGE PC76 1 of 1

#### OPPOSE FEASIBILITY ASSESSMENTS FOR UNITS 1A and 3

I am writing to express my strong opposition to the proposed predator control program in order to increase the population of Sita Black-tailed Deer for hunters. As the studies prepared by the Alaska Department of Fish & Game demonstrate, wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population. Other significant factors include loss of habitat due to clear-cut logging, particularly of old-growth forests. Of course, this causes a decline in both the wolf population and the deer population. Another cause involves three winters of deep snow, as the Unit 1A study states: "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

In addition, the ADF&G cites data from a neighboring area indicating that black bears kill a significant number of fawns, but the bears have not been targeted for predator control because of their economic value. However, if predator control is initiated in this area, bears could be the next target. In view of many unknown variables, there is no justification for predator control for either wolves or black bears.

According to the Unit 1A study, there is no information to accurately estimate wolf numbers on Gravina Island. Similarly, the Unit 3 study indicates that wolf population counts are not even feasible there. Nor does ADF&G have information regarding black bear or deer numbers in either Unit. It is simply unthinkable to institute predator control measures when the science is clearly lacking to support any such measures.

In such difficult economic times, there is no justification for the basic cost of the predator control program of more than \$200,000 per year for five years. Surely there are better uses for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. This could prove to be a huge waste of those dollars, since a predator control program is unlikely to result in more deer in view of the many other factors involved.

Another important economic factor to consider that is not addressed in the studies is the effect of fewer wolves upon the wildlife tourism industry, which benefits local economies when visitors like myself seek an opportunity to view the rare Alexander Archipelago wolves. These wolves are a valuable asset that should be protected, rather than used as a scapegoat for the benefit of a small special interest group. The studies also do not address the loss of wolf viewing opportunities for the increasing number of non-consumptive users, including hikers and photographers.

I strongly urge the Board not to accept or adopt the proposed predator control programs, as they are an unscientific and expensive experiment on the magnificent, rare Alexander Archipelago wolves. I believe these wolves are a much more valuable asset to the State of Alaska alive than as part of an ill-advised program to increase unknown deer numbers!

Thank you for your consideration,

RECEIVED DEC 2 C 2012 BOARDS ANCHORAGE

Lynn Driessen

PC77 1 of 1



#### GAME MANAGEMENT UNITS 1A AND 3 FEASIBILITY ASSESSMENTS - OPPOSE

#### I am totally opposed to this unscientific, blatantly ignorant and expensive wolf killing "experiment" on the Alexander Archipelago wolves!

It is shocking to hear that in this day and age wildlife management can act based on " management experiment" guise rather than scientific, knowledgeable and ethical protocol in making good and sound decisions. <u>Jumping to any conclusion based on incomplete data is</u> <u>absurd.</u>

The decline of a species such as the Sitka Black-tailed Deer population is not due to wolf predation nor bear predation. If that was the case the deer species would have been extinct many eons ago before the arrival of man. Nature has evolved to keep species in a healthy balance. It is man that upsets the natural ecosystem balance such as clear-cut logging and habitat destructions of old-growth forests.

Consequently it is totally irresponsible and stupid to jump to any conclusion that is unfounded to blatantly kill wildlife.

It would be in everyone's interest to be responsible and make logical decisions based on fact ... rather than fiction ... as follows:

Note that it is the destruction of the old growth forest by MAN that has negatively impacted the population of the Sitka deer and wolf population.

- Severe winter weather with deep snow coverage in the last 3 years has impacted Unit 1A. The study stated that " severe winter weather is believed to have had the greatest impact on Unit 1A deer populations, resulting in the high rates of mortality"

- The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

- ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer. These approaches have been proven time and time again not to work.

- The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers, wildlife enthusiasts and observers.

When are we going to start making intelligent, logical scientifically sound decisions to preserve this wonderful wilderness.

Eva Schorer

Puslinch, Ontario Canada

DEC 2 0 2012 BOARDS ANCHORAGE

## OPPOSE FEASIBILITY STUDIES FOR UNITS 1A and 3

Stop the killing of S.E. Alaska's Alexander Archipelago Wolves. This is the most outrageous predator control program I have ever heard of. The wolves were meant to be there – who gives hunters all the rights?

What about my rights to have wolves in our natural environment?

Nina Hakanson

RECEIVED DEC 2 \$ 2012 BOARDS ANCHORAGE



PC80 1 of 2

RECEIVED

#### FEASIBILITY ASSESSMENTS FOR UNITS 1A and 3

Sirs,

BOARDS ANCHORAGE

As a note of introduction, I am a veteran, a physician and a biologist by background! I have long followed issues surrounding predator control in the United States as well as Canada. Unfortunately, this topic is so heavily imbued with politics, lack of scientific data, and sometimes corruption that is hard to "stomach" this issue given the overwhelming chances that boards will vote in favor of political platforms as opposed to adhering to honest scientific and ethical standards. And of course, wolves have no voices and cannot vote!

I am writing to request that the "management experiment" under consideration regarding the Alexander Archipelago walls be halted immediately.

The reason for this is that the studies do not support this kind of draconian action. There is no reason to hold Wolf solely responsible for the decline of the Sitka deer population. There are many other factors contributing to the decline including severe weather and loss of habitat not to mention hunting, poaching and other predator activity. This type of rationalization engaged in by the Fish and Wildlife group (and which will no doubt strike a chord with the BOG) has a long history in North America. e.g. This includes the lower 48 where Isle Royale wolves were thought to be responsible for moose decline.... this was proven to be false! Other areas with questionable at best data are Algonquin Park, Northern Rockies and Wyoming. Unfortunately wolves always take the hit because they are the pariah for humanity it seems! This goes back thousands of years.....

This "old growth" Wolf population is subject to habitat loss from clear-cut logging which is going on within that area.

Severe winter weather has been cited as having the greatest impact on deer populations in area Unit 1A according to the F&W study.... indeed they also state that the impact of black bears on fawns is unclear..... thus there could be some predation at that end as well.

There is no accurate knowledge of how many wolves are in the Gravina island area... nor for that matter black bear so the statistical basics are totally lacking.

The cost of these studies have averaged about \$200,000 a year money that could be well spent in other areas of wildlife, tourism, and forestry management it certainly does not warrant this kind of financial input for a few deer hunters.

Finally wolves contribute to wildlife tourism. Particularly since the Alexander Archipelago wolves are so rare that a petition has been directed to the Department of the Interior to put them on the Endangered species list. Sadly response to this petition is still in the works!

In closing I would like to bring out one further point. I am appalled as are many other potential tourists and wildlife lovers that Alaska is incapable of a fair and equitable distribution of representatives on their BOG. Any reasonable, intelligent and ethical

Ingrid de Baintner

1 of 2



individual would find it highly suspect to obtain a verdict on this matter from a group that is strictly composed of trappers and hunters! This is "the Fox guarding the hen house" in its most egregious manner. There will not be justice in a system like that. Shameful and a disgrace; in essence, a kangaroo court....

As a veteran, an American and a scientist I asked you to do the RIGHT thing. Do not engage in this senseless shameful massacre!

Ingrid.de Baintner MD (retired Maj.USAF)

Boston MA

Oppose Feasibility Assessments Units 1A and 3

Dear Board members:

Please no experiments when it comes to predator management and endangered wolf species. Solid science!

Dawn V Powell

RECEIVED

DEC 2 S 2012 BOARDS ANCHORAGE



## **Oppose Feasibility Assessments for 1A and 3**

DEC 2 8 2012

Support Proposals 18, 19 and 20

As a teacher of America's next generation(s), I must voice my disapproval of the proposed measures to permit the eradication of wolves in Unit 1A (on Gravina Island near Ketchikan) and the near eradication in a portion of Unit several islands near Petersburg. My students have followed the wolf management efforts of both Alaska and Minnesota, and these current proposals do not make sense, from a responsible biological management perspective.

There are no established numbers for biologists to agree upon regarding deer populations, nor of numbers to cite the threat of wolves to the deer population. Add to this that the wolves are most likely a rare subspecies that would be fascinating to learn more about....how can the eradication of these tourist-drawing animals be wise? I have friends who are avid wildlife photographers, and their complaints are that the same wolf packs are photographed over and over again. Why would Alaska not be proud to promote the rare subspecies?

I am not against the harvesting of animals by responsible hunters. I AM against overhunting, eradication, and haphazard hunting and trapping. I seek examples of wise land stewardship rulings to motivate my nature-loving students and the public, in general. To this end, I ask that you:

## 1) Do NOT approve current wolf hunting proposals for Unit 1A and Unit 3.

2) Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting, and to Eliminate Its Moratorium on Denali Buffer Zone Proposals.

Thank you,

Jeanne Fedel P.O. Box 882 Springville, CA 93265 PC82 1 of 1

BOARDS ANCHORAGE



PC83 1 of 1

RECEIVED DEC 2 5 2012 BOARDS ANCHORAGE

Oppose Feasibility Studies for Units 1A and 3

A proposal calls for trappers to kill all of the wolves in the Unit 1A area and 80 percent of the wolves in the Unit 3 area! Tell the Board of Game to OPPOSE plans to kill Southeast Alaska's Alexander Archipelago wolves in these two areas.

Bonnie Ranta Lake Nebagamon Wi 54849



RECEIVED DEC 2 5 2012 BOARDS ANCHORAGE

## OPPOSE 1A and 3 FEASIBILITY STUDIES

Dear Board of Game,

I have been recently informed of your plan to kill Alexander Archipelago wolves in order to increase the Sitka black-tailed deer populations. The Alexander Archipelago wolf is a unique animal who's population is very small (approximately 900), causing less biodiversity which leads to poor genetic health and less of an ability to adapt. If you where to decrease the gene pool even more, it would leave long lasting effects. Not only this, but the hunt itself is backed up by unscientific facts, and was ill-advised from the start.

Wolves are not the only factor that has led to the decrease of deer. Clear cutting old-growth forests which the deer rely on for protection and food, along with the recent severe winters have taken their toll. Also, have you studied the possibility of black bears or human hunters effects on deer populations?

Furthermore, you said that this predator control would cost \$200,000 per year for five years. It seems that all our tax dollars are being used in a costly attempt to make more targets in the woods. Don't you think we could use the government's money on more productive things?

Lastly, your studies don't take ecotourism into consideration. People come from around the globe to catch a glimpse of wild wolves, and their spending benefits local economies. If tourists stopped coming, what would happen to those people who rely on them for income?

In conclusion, the wolf control program being proposed is both unscientific, and misguided.

Quinn Santos



PC85 1 of 1

RECEIVED

## OPPOSE FEASIBILITY ASSESSMENTS FOR UNITS 1A and 3

Dear Sirs,

I disagree strongly with the plans to kill the Archipelago Wolves.

Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

Yours faithfully

Cris Iles-Wright (Mr) Devon, UK BOARDS



PC86 1 of 1

#### OPPOSE UNITS 1A and 3 FEASIBILITY ASSESSMENTS

DEC 2 2 2012

I write to add my voice to the protests at proposals to allow trappers to kill all wolves in an area known as Unit 1A on Gravina Island near Ketchikan and 80% of wolves in part of the area known as Unit 3 (several islands near Petersburg).

The studies, by the Alaska Department of Fish and Game (ADF&G), admitted that wolves are not solely responsible for the decline in the Sitka black-tailed deer population; these studies also admit that there are other significant factors contributing to this decline. One of these is loss of habitat due to clear-cutting of forest, including old-growth forest which has resulted in the decline of both wolf and deer populations. Also, severe deep-snow winters are, in the words of the Unit 1A study, "believed to have the greatest impact on Unit 1A deer populations often resulting in high rates of mortality."

The Unit 1A study states that they have no research information to accurately estimate wolf....numbers on Gravina Island and yet *all* the wolves in this area would be killed if these proposals were to go ahead! The Unit 3 study states that wolf population counts are not even feasible there whilst the ADF&G is equally unsure of how many black bears are in each Unit nor does it know how many deer there are! In other words, the thorough and detailed scientific data that would be essential to form the basis of any decision to allow such high numbers of wolves to be killed is completely lacking!

Then there is the financial cost: even if more than a million dollars of state money were to be spent on this highly questionable 'predator control program' it seems unlikely that it will result in more deer.

It seems that, so often, the demands of small but highly vocal groups (in this case, deer hunters) are allowed to drown out the voice of scientific reason. There are many factors to consider in these matters, not least the fact that natural predators, such as wolves and bears, are an essential component in a healthy eco-system which has thrived for millennia until humans intervened and upset the balance. This is not mere whimsy, it has been proved, time and again, that removing predators results in an imbalance in the prey species which, in turn, has a knock-on effect on the flora and fauna of the habitat.

Obviously, many hunters are concerned only with an abundance of 'game' to kill for their sport but there is so much more to be considered and I urge you to please consult and work with scientists, conservationists and environmentalists to work out a plan which does not include a mass slaughter of a species whose numbers are already precariously low.

Please rethink this ill-advised 'management experiment' which is destined for failure on all counts and work out a sustainable, long-term program which protects the wild areas which sustain wolves, bears and many other species. It is worth noting that many people visit these places to see the animals that are so much a part of the natural heritage of North America and the revenue from the tourism industry is surely far too beneficial to communities in these areas to risk.

Yours faithfully

Ms J A Henretty Elmacres Church Westcote Chipping Norton UK



## DEC 2 : 2012

#### OPPOSE FEASIBILITY ASSESSMENTS FOR 1A and 3

BOARDS

I am disgusted to hear about this unscientific, ill-advised predator control program: to Plans to Clark Kill Southeast Alaska's Alexander Archipelago Wolves!

 Wolves are not solely responsible for the decline in the Sitka Black-tailed Deer population, as the studies themselves admit. There are other significant factors contributing to the decline include:

- Loss of habitat because of clear-cut logging, especially of old-growth forests. This causes a decline in the wolf population as well as in the deer population.

- Severe winter weather, especially three recent deep-snow winters. In fact the Unit 1A study states "severe winter weather is believed to have the greatest impact on Unit 1A deer populations, often resulting in high rates of mortality."

- ADF&G does not know the impact of black bear predation on deer fawns, but it cites data from a neighboring area indicating that black bears kill a significant number of fawns. The study states that black bears have not (yet) been targeted for predator control in Southeast because of their economic value; nevertheless, if the BOG gets a foothold with predator control on wolves in the area, bears could be the next target. Given this and many other unknown variables, predator control is not justified for either wolves or black bears.

 The Unit 1A study states that "we have no research information to accurately estimate wolf...numbers on Gravina Island." The Unit 3 study states that wolf population counts are not even feasible there. ADF&G is equally unsure how many black bears are in either Unit, and it does not even know how many deer there are. The science is clearly lacking to support any predator control measures.

 ADF&G's preliminary estimates indicate the basic cost for just the predator control program and related deer population studies will be more than \$200,000 per year for five years. In these times of austere budgets, there is certainly a better use for more than a million dollars of state money than to provide easier targets for a small number of deer hunters. Especially since, given the many other factors involved, it seems very unlikely the predator control program will actually result in more deer.

 The studies do not address effects of fewer wolves on the wildlife tourism industry, which benefits local economies when visitors come to catch a glimpse of the rare wolf. Neither do they address the loss of wolf viewing opportunities for non-consumptive users, such as hikers and photographers.

These predator control programs are being called a "management experiment." I completely and utterly oppose this unscientific, expensive Wolf killing "experiment" on the Alexander Archipelago wolves!

I happen to LOVE Wolves. How about some just damn good, ethical reasons here. Wolves belong here and I am ashamed and appalled at all the killing of these majestic animals in USA, in the name of 'management/ harvesting' or anything else. It is US, HUMAN BEINGS who needs to work out how to live with them. They were here before us and we need them here.

Dr Shelley Ruth Wyndham Philadelphia PA

PC88 1 of 1

SUPPORT 18, 19, 20

OPPPOSE FEASIBILITY STUDIES UNITS 1A AND 3

Please STOP killing the wildlife and predators of Alaska. It is one of the few wild areas left, and we need that in this devastation that the world is becoming. Destroying these beautiful animals will only add more damage to an ecologically challenged world... PLEASE......

Lynn Snyder



Please support and approve proposals 18, 19, 20

Please rescind the moratorium on the buffer zones.

Patricia Tallman, PhD

PC90 1 of 2

December 26, 2012

### SUPPORT PROPOSALS 18, 19, 20

Please **approve Proposals 18 and 19** at your upcoming meeting in Sitka. As an Alaskan resident for over thirty years I have enjoyed harvesting the fish and game our state so bountifully provides. But I consider the practice of snaring large animals inhumane and inappropriate for our state, just as the use of poison or explosives would be unacceptable methods for people to harvest our fish resources. I agree with Greg Brown that bear snaring should be outlawed, for the following reasons:

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once.
 When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.



Please approve Proposal 20 also, in the interest of maintaining SE Alaska's wolf population. These animals are so valuable in maintaining the balance of species in our ecosystem, as well as to the enjoyment of the growing number of wildlife viewers and out-of-state visitors.

Sincerely,

Chris Fredell POB 33803 Juneau, Alaska 99803

PC91 1 of 1

# The Casey family of Eagle River Alaska would like to support proposals 18, 19, and 20.

Although you are supposed to represent all Alaskans I realize that you are primarily composed of maximum harvest representatives.

However, wildlife will not exist as other than token species with increasing human populations and harvests. How about taking some strong actions to protect our magnificent predators.

Thank You.

Sincerely,

The Casey Family 12428 Winter Park Circle Eagle River, AK 99577 Dear Board of Game,

On behalf of our Board of Directors and 250,000 national supporters, including those from Alaska, we strongly **support Proposal 20** and urge you to approve it.

It is our understanding that this proposal will prohibit the hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 until November 1. We believe it is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has the potential to wipe out two generations at once. Additionally, the loss of the pups is not counted in harvest statistics, making accurate population estimates - and future management decisions problematical.

Allowing the take of wolves during pup season is not a sound scientific, biological, ecological, or ethical method of managing this species.

Thus, we strongly urge you to approve Proposal 20 which stops yearround wolf hunting.

Best regards, Diane Bentivegna, Ed.M. Director, Education and Resources National Wolfwatcher Coalition



## SUPPORT PROPOSALS 18, 19, 20

Vote YES to stop snaring bears and year around hunting wolf.

Thank you

Kitty Smith



PC94 1 of 1

SUPPORT 18, 19, 20

Greetings!

My wife & I spend a lot of money in Alaska and I had the honor to be selected for McNeil River bear viewing last year. Alaska is a very special place to us and I find some things going on now very disturbing, to say the least.

My wife & I SUPPORT proposals 18 & 19 that would prohibit the snaring of bears in the Southeast region of the state.

We also SUPPORT proposal 20 that would prohibit the hunting & trapping of Wolves in all areas of S/E Alaska annually from 3/1 until 11/1.

Thanks for your attention involving these activities as we do wish to keep coming and spending money in your beautiful state.

Respectively yours,

Bruce Faanes

Alaska Board of Game,

Please support proposals 18, 19 and 20 and rescind the moratorium on proposals related to a Denali Buffer zone.

Thank you,

Regina Case

#### I support proposals 18, 19, & 20.

18 & 19: Alaska has a reputation for unscientific wildlife management policies, and this one is no different. Bear snaring kills ALL bears: males, females, and cubs. Bears have a low reproduction rate, and the population will fall if cubs are killed.

It's obviously a stressful way to die for a bear: bears can be left in the snare for long periods of time until the trapper returns to finally shoot them. It can be a danger to the public (if a cub is snared, the mother will attack anyone who approaches it, including the trapper).

Bear snaring doesn't take into consideration the growing wildlife tourism industry that is making money from people coming to see the bears. It does not follow the principles of fair chase hunting, and large amount of Alaskans oppose bear snaring, so why go on with it?

**20**: Currently, wolves can be killed from March 1st - November 1st. During that time, females are pregnant, and wolves are raising pups. Letting hunting happen will surely wipe out two generations of wolves, and will greatly affect the population as a whole. It's inhumane to allow hunting of adult wolves when pups are dependent on the pack. Making a shorter hunting season will have no financial impact on hunters, because wolf pelts are not at prime marketable condition prior to November.

Savannah Ford

## I SUPPORT PROPOSALS 18 AND 19

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once.
 When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

Dena Selby

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# a.

PC98 1 of 1

## I SUPPORT PROPOSAL 20

 Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant.

 Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

 Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.

• Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Dena Selby

# SUPPORT PROPOSALS 18, 19 AND 20

STOP bear snaring and wolf killing!

Jane Ann Turzillo



Good day,

I write in support of your approval of the following:

## PROPOSALS 18 and 19

## PROPOSAL 20

Further, I request that the Board of Game rescind its moratorium regarding proposals to establish a no-trapping buffer zone adjacent to Denali National Park. Please allow consideration of proposals to re-establish a buffer zone.

I live in New York City, but am a frequent visitor to our wilderness areas. I would like to see more responsible, ethical, and humane management, preservation, and respectful treatment of our wildlife, in particular bears and wolves.

Kind regards,

Marina Salazar 1773 First Avenue Apartment #14 New York, New York 10128



To the Alaska Board of Game,

I respectfully urge you to **support Proposals 18, 19 and 20**. Snaring of any animal is horrific and cruel, especially pregnant or animals with dependent cubs. Please give the bears a break.

Also halt wolf hunting/trapping from March 1 until November 1st. Trapping/snaring any animal is a sadistic way to kill - there are humans out there who enjoy the torture of a live trapped critter. Maybe someday compassion will be rewarded instead of ridiculed and trapping/snaring will be outlawed.

Please, it's time to move forward snaring and/or leaving orphaned cubs to die is not acceptable. I am not a patchouli-soaked tree-hugger, but an American citizen who believes if animals are to be killed it should be done as quickly and humanely as possible.

Larissa Madrigal 4385 E Winter Drive Flagstaff, AZ 86004

## SUPPORT PROPOSALS 18 19 20

Killing wolves simply because they are wolves has passed its time. Killing wildlife that is not cooked and eaten is a disgrace to humanity.

PC102 1 of 1

Among the states that kill wolves and other necessary predators, Alaska should stand out and be the state that doesn't kill anything on four legs simply because they can. Why not be the champion of wildlife in this killcrazy culture we live in and speak out with compassion about your wolves, bears and other beloved creatures that live in your beautiful wilderness?

Alaska could have a reputation for fairness and humanity, calling more aware tourists and their money to your state. Tourists love to look at wolves and have a reverence for wildlife and the outdoors. Be the state where they know they will find animals and scenery without being in a gun-sight.

Let Texas, Idaho, Wyoming. Montana bethe "Killing States". It should be "Alaskans are the good guys that love their wolves, wildlife and their "wild life". The publicity alone is worth a lot.

Thank you.

Florence Stasch

SUPPORT PROP. 18, 19, 20

Dear Board of Game of Alaska,

I'm not a scientist, hunter, nor do I live in Alaska. I'm just a simple Canadian citizen truly concerned about what this generation of money-hungry individuals and big companies is doing to deplete, spoil and pollute our oceans' ecosystems, our land and air, and all forms of life, animal or plant species therein.

All the right reasons have been evoked by the Alaska Wildlife Alliance and I fully agree and endorse their comments, I couldn't have said it better myself.

I hope one day to visit Alaska, not only to enjoy the rugged beauty but especially to finally see a wild wolf and bear living freely in their natural habitat, not in a zoo. This to me is priceless! It's worth all the gold in the world.

To know that Alaska protects its habitat for all species great and small is to show respect for future generations. Please do not let this injustice take place. The ball is in your court.

Best regards,

Agnès Castilloux

#### SUPORT PROPOSALS 18 19 20

#### PROPOSALS 18 and 19:

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

• Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

#### PROPOSAL 20:

Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves
may be killed before November 1, while pups remain dependent on their parents and the pack. In
other areas hunting and trapping is legal after March 1, after mating has occurred and females
may be pregnant.

 Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.

 Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Lewis Ratliff

PC104 1 of 1

#### I support proposal 20 and urge the BOG to approve it.

This proposal would prohibit the hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 until November 1. In some areas current regulations allow wolves to be hunted and trapped after March 1, when females may be pregnant. In other areas hunting and trapping is allowed before November 1, when wolf pups are dependent on adults in their pack for survival.

It is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has the potential to wipe out two generations at once. Additionally, the loss of the pups is not counted in harvest statistics, making accurate population estimates - and future management decisions - problematical.

Allowing the take of wolves during pup season is not a sound scientific, biological, ecological, or ethical method of managing this species.

Thank You,

Ken Green POBox 776 Cooper Landing 99572


I support proposals 18 and 19 and urge the BOG to approve them.

Bear snaring is an archaic practice with is not only out-dated and un-sporting, but also unnecessarily dangerous in the back country, not to mention near inhabited areas. The evidence points to a great deal of irresponsible bear baiting practices, which includes trashing the bait areas with plastic buckets, drums, grease, and the like. This often occurs near neighborhood-type settlements or on multi-use paths and roads.

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once.
When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

Thank You,

Ken Green PO Box 776 Cooper Landing 99572



# SUPPORT 18, 19, 20

Please vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting

Heidi Zodorozny

# SUPPORT PROPOSALS 18, 19, 20

## RESCIND THE MORATORIIUM ON THE DENALI BUFFER ZONE

Alaska Board and Game,

I'm writing from Minnesota for the wildlife in Alaska. I'm asking that the bear snaring be stopped and that year round wolf hunting be ended. My personal preference would be to see an end to all trophy hunting anywhere in the country as it's immoral. Additionally please create the buffer zone around Denali National Park.

My wife and I plan on visiting Alaska to visit Denali for the wildlife and natural areas. I understand that there are probably pressures to hunt and harvest more and more wildlife from the local people in Alaska but the tourism industry should be taken into account too. Additionally we should all consider that wild animals have very few people that take the time to understand them or stand up to defend them.

Please do the right thing and help protect this area for wildlife!

Regards from Minnesota,

Matt and Nikki Johnson

Patricia Cue 11903 Town Park Circle Eagle River, AK 99577

Board of Game Comments Alaska Dept. of Fish and Game Boards Support Section PO Box 115526 Juneau, AK 99811-5526

December 26, 2012

I am writing in <u>support of proposals 18, 19 and 20</u> and requesting that you rescind the Moratorium.

I support prohibiting the heinous act of bear snaring. It is cruel and a poor management tool. It offends even the most ardent hunters in that it does not allow fair chase, has significant public safety issues, law enforcement issues. It is absolutely inhumane. Bear snaring damages the reputation of all Alaskans.

The Board of Game should absolutely rescind the moratorium on accepting proposals related to Denali National Park no-trapping buffer zones.

I support the buffer zone and so do thousands of Alaskans. Visitors from around the world come to Denali to view the wildlife. It is ridiculous that the BOG refuses to hear proposals for a new buffer zone. OUR VOICES MUST BE HEARD!!!!

I urge you to support all of these proposals.

Patricia Cue

PC110 1 of 1

To Members of the Board of Game,

I have resided in Alaska since 1979, consider myself an avid waterfowl hunter, and submit the following comments.

I **support Proposal 18 and 19**, prohibiting the snaring of bears. Snaring is an inhumane method of harvesting animals, unless the trapper is monitoring the snare 24/7.

I **support Proposal 20**, prohibiting the hunting and trapping of wolves in SE AK, from March 1 to November 1. This will encourage a healthy population of wolves, allowing for a surplus for the fur market.

Beverly Minn 500 Lincoln St B9 Sitka AK 99835

### SUPPORT PROPOSALS 18, 19, 20

#### ELIMINATE THE MORATORIUM

To whom it may concern,

I urge you to vote yes to stop Bear Snaring and year round wolf hunting and to eliminate its moratorium on Denali buffer zone proposals. I agree with all these proposals and ask that you consider them seriously before making any decision.

Although I do not live in Alaska I was born there a full-blooded native and stockholder in Cook Inlet Region, Inc. I do not speak on there behalf, but I do for all the wildlife that lives in the state.

Someday I would like to see Alaska and all its glorious wildlife, it is after all the Last Frontier, but I fear that by the time I make it there, there will be no wildlife to see.

A bear caught in a snare is not hunting at all it is cruel and inhumane, the free dictionary online defines hunting as the activity or sport of pursuing game. So bear snaring is not hunting, neither is pursuing wolves in airplanes hunting. Hunting wolves by airplane is just plain laziness and the fact you have to find them with airplanes probably means they are far enough away they aren't bothering anyone anyways, not to mention the thousands of TAXpayers money you could be spending on something else.

We as humans have the moral obligation to protect all wildlife so please don't think along the same lines as Montana, Utah, Minnesota, Wisconsin, Michigan, Washington, and Arizona - all these states have declared war on wolves. We as humans do not have the right to make any animal species Extinct.

So please I implore you to make the right decision, proposals 18,19, 20 are very good proposals and I urge you to vote yes for them and always remember extinction is forever.

Thank You for your time,

Thomas St. Laurent



I strongly **support Props. 18 and 19** and oppose bear snaring in Southeast Alaska. Bear snaring is unjustifiably inhumane and indiscriminate of gender and age. In southeast Alaska, bear viewing is a very important segment of the tourist industry, which brings in more money and jobs to southeast than hunting and trapping. Furthermore, this segment of the economy is growing. It would be foolish to damage this source of growth.

M. F. Willson, Juneau.

I strongly **support Prop. 20** and favor limiting the wolf-killing season to months OUTSIDE of the pup season i.e. winter. Wolf pelts aren't worth much anyhow, except in winter. Importantly, dependent pups that have lost their parents incur higher mortality, but this is not counted in the harvest total, therefore yielding an under-estimate of harvest. Under-counting mortality and inaccurate counts lead immediately to inadequate management.

M. F. Willson, Juneau

### SUPPORTING PROPOSALS 18, 19, 20

#### Proposals 18 & 19

Alaska's already enormously deteriorated reputation on unscientific, inhumane, unethical management of wildlife should be a prime concern for the decisions made by the BOG. In today's era our knowledge and concerns for a healthy wildlife ecosystem should be the major driving factor in your decision making process.

Bear snaring is not only an indiscriminate method of killing adult bear and cubs, males , females and is totally unethical, unscientific and totally flawed not to mention enormously cruel and savage.

This poses unsafe conditions for those traveling through the land who can inadvertently come across a sow protecting her snared cub.

There is a large group of environmentally minded individuals world-wide that look to the wilderness as something very special and irreplaceable, who want to enjoy the wilderness as is and who respect and want to view wildlife. I visited Alaska this year for that very reason for the sole purpose of seeing the natural beauty and wildlife that this land has to offer. Your state benefits from these tourism dollars.

Bear snaring is despicable and should be totally banned. It can destroy two successive generations at once and leaves animals suffering unnecessarily for a long time. This is a completely unacceptable practice.

#### Proposal 20

There should be consistency in the hunting/trapping regulations. As far as I am concerned no wolves should be killed. They are required as the apex predator to manage a healthy ecosystem. These animals are intelligent and require the support of the pack to reproduce and maintain a healthy wolf pack. Hence any killing that impacts the pregnant females and the nurturing of young pups is not only wrong but despicable, inhumane, cruel, insensitive, unethical and ecologically and scientifically unsound.

The indiscriminate hunting and trapping that can destroy two generations at once is absolutely despicable. No wolves should be killed between March 1 and Nov 1. As far as I am concerned no wolves should be killed at all.

Your efforts should be geared towards appreciating the wildlife that lives within

Eva Schorer

PC113 1 of 2



your state boundaries. Use the time to learn and educate yourselves on how intricate and wonderful the wolf really is and share this knowledge with the rest of the world.

Your methods are scientifically flawed as pups that do not survive are not counted meaning that a substantial number of wolves are lost that are reflected in the harvest statistics.

Regards

Eva Schorer Puslinch, Ontario Canada



### Support Proposals18,19 and Proposal 20

1. Proposals 18,19: I support Proposals 18 & 19 and urge your approval when voting. The snaring of bears in the Southeast region is unscientific, unwarranted, and inhumane. Because any and all individuals of this species is snared and killed-adult males and females, the sow and her dependent cubs-it is random and arbitrary and does not support any semblance of a scientific endeavor. It is simply wholesale slaughter. This obsolete method also endangers all other wildlife in the immediate vicinity, as well as any humans who may happen to encounter a site where a sow is protecting her ensnared cub--putting human life in danger.

Bear snaring can reduce species population numbers precipitously since both a sow and her cubs will be killed simultaneously when either is snared -- in effect destroying 2 generations of a species which has a low natality. The enforcement of bear snaring regulations will only add to the convoluted bureaucracy of state wildlife laws whose officers are overworked and will contribute to lower morale.

Bear snaring is inhumane: I invite any Alaska Board of Game member to become snared for en extended period while family relations watch you. It is AN ACT OF TERROR upon an animal for which all Alaskans deplore.

2. Proposal 20: I **support proposal 20** and urge your approval when voting. The hunting and trapping of wolves IN ALL AREAS of Southeast Alaska from March 1 until November 1 must be prohibited. During this period, any number of females may be pregnant and wolf pups are dependent solely on adults in their families. Given the high social structure and cooperation inherent in wolf families, along with their erratic fluctuations in population numbers, the slaughter of pups with adults will cause disarray of family units, destroy 2 generations in an instant, and distort future population estimates ( the likely large amount of non-surviving pups are not counted in take data ).

Our cultural value placed on wolf pelts is totemic, barbaric and equivalent to other cultures' slaughter of species for same reasons (elephant ivory tusks; tiger organs; bird feathers etc.) contributing further to their endangerment approaching extinction. There is no reason in today's world to kill wolves for their pelts anymore than to kill a human being for their brain.

Please give these proposals your serious consideration, and attempt to rethink the concept of wildlife management with equal consideration of interests -- for man and non-human animals.

Thank you for your time and attention.

Sincerely,

Jeffrey Kramer

From: Gerald R. Brookman 715 Muir Avenue Kenai, Alaska 99611-8816

To: Alaska Board of Game

Subject: Items for Consideration at BOG Meeting

Dear Sirs:

I support Proposals 18 and 19, and urge the board to approve them. The Alaska Wildlife Alliance lists several reasons in support of these proposals, all of which I consider valid. Snaring bears is not fair chase and I believe that it should be prohibited in all of our state. PC115 1 of 1

I support proposal 20, and urge the Board to approve it. Again, I believe that all of the reasons for supporting this proposal stated by the Alaska Wildlife Alliance are valid, and make eminently good sense to me. I hope that you will agree.

I understand that while it is not on the formal Agenda for this meeting, the Board's current moratorium on accepting proposals relating to a no-trapping buffer zone around Denali National Park may be discussed informally at this meeting. I would like to urge the board to rescind this moratorium, and entertain proposals on the matter at the earliest possible time.

Thank you for considering my comments.



THE ALASKA WILDLIFE ALLIANCE

"LETTING NATURE RUN WILD"

December 28, 2012

ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526 RECEIVED

PC116 1 of 6

BOARDS

Hand-delivered to Anchorage ADF&G

To Members of the Alaska Board of Game:

The Alaska Wildlife Alliance (AWA) herewith submits its written comments on proposals to be considered at the meeting for **Southeast Regulations**, January 11 -15, 2013 in Sitka.

### AWA's Mission Statement

The Alaska Wildlife Alliance is a non-profit organization committed to the conservation and protection of Alaska's wildlife. We promote the integrity, beauty, and stability of Alaska's ecosystems, support true subsistence hunting, and recognize the intrinsic value of wildlife. The AWA works to achieve and maintain balanced ecosystems in Alaska managed with the use of sound science to preserve wildlife for present and future generations.

Thank you for considering our comments.

Yours truly,

Brandel

Connie Brandel Office Manager

P.O. Box 202022 Anchorage, AK 99520 & 907-277-0897 & info@akwildlife.org & www.akwildlife.org



# Alaska Wildlife Alliance's Comments on Proposals to the Alaska Board of Game

## Southeast Region Meeting

PROPOSAL 3: We OPPOSE this proposal and urge the Board of Game to reject it.

This proposal, if adopted, would extend the brown bear season and increase the bag limit for Berners Bay, Unit 1C.

Recent research efforts estimate the Berners Bay brown bear population to be about 63 bears. Small changes in a small population can have a significant unintended impact.

There is no moose mortality research to substantiate the adoption of this proposal, and implications on moose survivorship due to the lengthening of the brown bear season and the allowance of one bear every year are unknown. Especially since the Berners Bay moose population is slowly increasing, it makes sense to maintain current management policies at this time

This proposal states that it is unlikely that no anyone would suffer if the proposal were adopted, thus disregarding the nonconsumptive user group, including the many people, both locals and tourists, who enjoy photographing or simply viewing brown bears in the wild. The opportunities for wildlife tourism in the spring when bears use the tidal flats and estuaries in the lower portions of the bay present especially considerable potential.

PROPOSAL 4: We OPPOSE this proposal and urge the Board of Game to reject it.

This proposal, if adopted, would extend the brown bear season and increase the bag limit for Berners Bay, Unit 1C.

Recent research efforts estimate the Berners Bay brown bear population to be about 63 bears. Small changes in a small population can have a significant unintended impact.



There is no moose mortality research to substantiate the adoption of this proposal, and implications on moose survivorship due to the lengthening of the brown bear season and the allowance of one bear every year are unknown. Especially since the Berners Bay moose population is slowly increasing, it makes sense to maintain current management policies at this time

This proposal states that it is unlikely that no anyone would suffer if the proposal were adopted, thus disregarding the nonconsumptive user group, including the many people, both locals and tourists, who enjoy photographing or simply viewing brown bears in the wild. The opportunities for wildlife tourism in the spring when bears use the tidal flats and estuaries in the lower portions of the bay present especially considerable potential.

PROPOSAL 18: We SUPPORT this proposal and urge the Board of Game to accept it.

This proposal would prohibit the snaring of bears in the Southeast region.

In addition to giving the state of Alaska a black eye, bear snaring presents public safety issues, fair chase issues, scientific issues, economic issues, law enforcement issues, and bear snaring is an indiscriminate and inhumane method of take. It also has the potential to take two generations at once when a sow with cubs is snared; this is especially egregious given bears' slow reproductive rate.

As shown by the negative reactions to the 2010 decision to list bears as furbearers, the majority of visitors and of Alaskans of all user groups oppose bear snaring. A small sampling of those who have recently spoken out in opposition of bear snaring in Alaska includes: President of the Safari Club International's Alaska Chapter Terry Holliday; master guide and executive director of the Alaska Professional Hunters Association Robert Fithian; bear hunter and big game hunting guide Karl Braendel; Native leaders Maxine Franklin and Roy and Charlene Huhndorf; 77 current or former wildlife scientists (representing about 1,600 years of involvement with Alaska's wildlife) who sent a letter to the Board of Game opposing bear snaring; former ADF&G scientists Sterling Miller, John Schoen, and Rick Sinnott; Alaskan conservation groups such as Alaska Center for the Environment and the Alaska Wildlife Alliance.

This proposal was submitted by Greg Brown, chair of the Juneau-Douglas Advisory Committee; a similar proposal, 19, was submitted by the Alaska Wildlife Alliance. Both proposals were approved by the JDAC by a vote of 10 yeas and 2 abstentions.



PROPOSAL 19: We SUPPORT this proposal and urge the Board of Game to accept it.

This proposal would prohibit the snaring of bears in the Southeast region.

In addition to giving the state of Alaska a black eye, bear snaring presents public safety issues, fair chase issues, scientific issues, economic issues, law enforcement issues, and bear snaring is an indiscriminate and inhumane method of take. It also has the potential to take two generations at once when a sow with cubs is snared; this is especially egregious given bears' slow reproductive rate. As shown by the negative reactions to the 2010 decision to list bears as furbearers, the majority of visitors and of Alaskans of all user groups oppose bear snaring. A small sampling of those who have recently spoken out in opposition of bear snaring in Alaska include: President of the Safari Club International's Alaska Chapter Terry Holliday; master guide and executive director of the Alaska Professional Hunters Association Robert Fithian; bear hunter and big game hunting guide Karl Braendel: Native leaders Maxine Franklin and Roy and Charlene Huhndorf; 77 current or former wildlife scientists (representing about 1,600 years of involvement with Alaska's wildlife) who sent a letter to the Board of Game opposing bear snaring; former ADF&G scientists Sterling Miller, John Schoen, and Rick Sinnott; Alaskan conservation groups such as Alaska Center for the Environment (ACE) and the Alaska Wildlife Alliance (AWA). Environment and the Alaska Wildlife Alliance.

This proposal was submitted by the Alaska Wildlife Alliance; a similar proposal, 18, was submitted by Greg Brown, the chair of the Juneau-Douglas Advisory Committee. Both proposals were approved by the JDAC by a vote of 10 yeas and 2 abstentions.

PROPOSAL 20: We SUPPORT this proposal and urge the Board of Game to accept it.

This proposal would prohibit the taking of wolves in Southeast Alaska from March through November.

It is unethical and inhumane to allow the taking of wolves while the pups remain dependent upon their parents and the pack. The take of wolves while pups are dependent upon adults has the potential to wipe out two generations at once. The loss of the pups is not counted in harvest statistics. Wolf hides are not in prime marketable condition during this time period. This is a waste of a valuable resource. Allowing the take of wolves during pup season is not a sound scientific, biological, ecological, or ethical method of managing this species.



#### PROPOSAL 32: We OPPOSE this proposal, but recommend MODIFICATIONS.

This proposal would alternate spring and fall brown bear seasons for nonresidents in Game Management Unit 4.

It should be noted that a bear population survey in Unit 4 has not been done for decades; a current survey is essential for effective management of bear populations on Admiralty, Baranof, and Chichagof Islands.

Upward trends of human-caused mortality are a cause for concern with the brown bear population. Hunting harvest, mainly from nonresident hunters, is the largest sustained cause of mortality. Three-year average mortality guidelines exceeded on two occasions and led to Emergency Order closures on Admiralty, Baranof, and Chichagof Islands during the fall 2011 season.

Brown bear populations are important to all user groups, including those who enjoy viewing brown bears in the wild and those in the strong and growing wildlife tourism industry in Southeast Alaska.

The best way to promote sustainability of brown bears in Unit 4 is to develop a fair and equitable drawing permit hunt for Admiralty, Baranof, and Chichagof Islands. This draw permit hunt would reduce the human caused mortality rate of brown bears in Unit 4 to a sustainable level; address the concern of high sow mortality harvest; and reduce crowded bear hunting areas in the unit.

PROPOSAL 33: We OPPOSE this proposal and urge the Board of Game to reject it.

This proposal would shorten the season for brown bear in Game Management Unit 4 by reducing the harvest of females.

Establishing the bear hunting season one week earlier will result in a greater take of bears in the fall because of the availability of salmon in fish streams. Target harvest levels are already being exceeded in parts of Unit 4; this potential additional take would be detrimental to the brown bear population in the area.

Earlier fall opening and closing would result in fewer female brown bears taken, which would keep the brown bear population healthy.

We support the effort to conserve brown bear populations for all user groups.



PROPOSAL 35: We OPPOSE this proposal and urge the Board of Game to reject it.

This proposal would modify the brown bear harvest allocation for residents in Game Management Unit 4 by permitting any increase in the brown bear 4% harvest guideline for Unit 4 to go to resident hunters only.

Four percent is a guideline harvest specified in the Brown Bear Management Strategy and was based upon the best population estimates available from the Alaska Department of Fish & Game at the time. It also acknowledges the relatively low reproduction rates of brown bears in Unit 4.

PROPOSAL 36: We OPPOSE this proposal and urge the Board of Game to reject it.

This proposal would exclude wounding loss from the annual brown bear harvest for Game Management Unit 4.

Hunters should be held responsible for the bears they shoot. It is reasonable and responsible to consider wounding loss as part of the human-caused bear mortality. The Brown Bear Management Strategy estimated 1 loss for every 7 bears shot in guided hunts and one loss for each bear killed by unguided hunters. This significant mortality must be accounted for by the Alaska Department of Fish & Game.

Additionally, it is our understanding that this proposal is in error in asserting that all wounded bears are being counted as sows.

### SUPPORT 18, 19 and 20

### RESCIND THE MORATORIUM

I have followed Alaska's wildlife policies in regards to bears and wolves for many years now. Unfortunately, the policies of the BOG have been heavily skewed towards the desires of the hunters with little regard for the needs and values of the wildlife. You now have an opportunity to help turn some of that around by approving Proposals 18, 19, and 20. In addition, I ask that the Board of Game RESCIND ITS MORATORIUM on accepting proposals related to Denali National Park no-trapping buffer zones.

In regards to **Proposals 18 and 19**, bear snaring is not only an indiscriminate method of killing and therefore unscientific, it is also inhumane as the bear is caught in the trap until the hunter returns to shoot it. Bear snaring has the potential for taking two generations at once. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

As for **Proposal 20**, it is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. Two generations could easily be wiped out at once. This is unscientific and a very poor way to manage Southeast's wolf population. Wolves serve a vital role in Alaska's ecosystem and should be managed with these values in mind. I am opposed to the taking of wolves on public lands which belong to me as well as any other citizen. They are not Alaska's wolves for the taking. Our voices must be heard and considered.

Finally, in regards to the Moratorium, the BOG has a statutory mandate to consider any reasonable proposal from the public relating to wildlife management. A buffer zone for the Denali wolves is such a proposal.

While I do not live in Alaska, I would love to come to Alaska to be able to see bears and wolves in the wild. If Proposals 18, 19 and /or 20 fail, then Alaska will lose the support and economic boon of tourists like myself who will only support a wildlife friendly state.

Please support these proposals, and eliminate the moratorium and allow consideration of proposals to re-establish a buffer zone.

Thank you for considering my concerns.

Joan Beldin

PC117 1 of 1 ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

Dear Board of Game Members:

I am writing today to urge you to support Proposals 18 19 and 20.

Bear snaring is an indiscriminate method of killing all ages and both genders of bears, with no scientific rationale to support it. Allowing this activity further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies. It is also insupportably cruel; a bear remains caught in the snare until the trapper returns to shoot it. This in no way adheres to the abominably-labeled "fair chase hunting."

Further, bear snaring presents safety issues for hikers or campers who may inadvertently approach a site where a mother bear is defending a snared cub. Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. This is outrageous; bears have a low reproduction rate, and you will allow "hunters" to kill two generations at once. And this activity does not take into consideration the growing wildlife tourism industry which provides economic benefits to the Southeast.

Overburdened wildlife enforcement officers will find it difficult, if not impossible, to enforce bear snaring regulations, I must remind you, too, that Alaskans overwhelmingly oppose bear snaring.

I urge you to support Proposal 20.

Allowing the hunting and trapping of wolves between March I and November 1 means that two generations of a pack likely would be exterminated; the parent wolves, dependent pups, and pregnant females.

Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than the statistics reflect. This is unscientific and a very poor way to manage Southeast's wolf population. Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers.

Respectfully yours,

Judith Fairly 450 Stoneridge Trail Weatherford, TX 76087

# SUPPORT PROPOSALS 18, 19, 20

### We SUPPORT Proposals 18 and 19:

As residents of Southeast Alaska we are categorically opposed to bear snaring as an indiscriminate, wasteful, dangerous, inhumane and barbaric method of killing bears. Allowing this practice in Alaska is an embarrassment to the State.

It has further been opposed by hunting advocates, including the President of the Safari Club International, Terry Holiday, Executive Director of the Alaska Professional Hunters Association, Robert Fithian, bear hunter and big game guide Karl Braendel, and Native leaders Maxine Franklin and Ray and Charlene Hundorf, as well as 77 current or former wildlife scientists. In light of such broad based opposition from multiple user groups in the State, it is unclear why it is being allowed anywhere in Alaska. We urge passage of these proposals on behalf of Southeast Alaskans desire to prevent the use of bear snaring in our region of the State.

### We SUPPORT Proposal 20:

We support this proposal to prohibit hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 to November 1. Closed seasons are a basic tenet of wildlife management science. Wolves in Southeast Alaska are an important resource maintaining ecosystem balance and are valued by visitors and residents alike. Protecting wolf pack integrity and reproductive capacity is essential to ecosystem health in Southeast Alaska.

Sincerely,

Robert and Linda Shaw 9684 Moraine Way Juneau, AK 99801

#### I SUPPORT PROPOSALS 18, 19, & 20.

Bear snaring is indiscriminate, cruel, is not fair chase, and the reasoning for doing so is unscientific. If a sow with cubs is snared the loss is magnified, both in terms of how many bears will die and the species low reproductive rate. Unnecessary cruelty should have no place in the policies of a wildlife agency. Period. Similarly, wolf hunting and trapping when females may be pregnant and packs are caring for dependent young, is both unethical and devoid of sound science. The loss of pups is not even noted in "harvest" statistics, making population estimates ever more questionable. It's difficult to find the words for such shocking expressions of carelessness and lack of respect for other species. PC120 1 of 1

With grave concern,

Erin Barca 1365 Creekside Dr. #429 Walnut Creek, CA. 94596 Support Proposals 18,19 & 20

Hello,

I'm wondering when common sense will be used since the BOG and they're illegal hunting game seems to still go the direction which will lead to children having to read a book about everything. Vote YES to end the bear snaring & year around wolf hunting.

Because in the future there won't be anything left to look at when people wander thru nature NOTHING for the children newly born or yet to be born you'll be giving them a dead planet where there was beauty but illegal hunting and illegal killing of the wildlife will lead to the destruction of an ancient ecosystem.

Wolves & bears need to be protected since their existence is necessary as like any other animal which keeps the ecosystem from collapsing what one animal stops from happening when they are not anymore. This will NOT be beneficial for people whom live near any wildlife.

So YES on stopping bear snaring & year-round wolf hunting. YES to preserving the ecosystem & YES on protecting & preserving wildlife in all forms.

Bart Van Hoeck

Dear Alaska Board of Game,

It is our understanding that the Alaska Board of Game will meet in Sitka from January 10 - 15, 2013 to vote on proposals to change wildlife management regulations for the Southeast region.

On behalf of our 250,000 supporters across the nation, we respectfully urge you to **SUPPORT Proposals 18-19**. We believe bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific and also violates the principles of fair chase.

As an organization that sponsors several eco-tourism adventures in various locations around our nation, including Alaska, our supporters will also perceive this practice as inhumane and thus, the practice could negatively impact Alaska's wildlife tourism industry as a result.

For the aforementioned reasons, we strongly urge you to support proposals 18-19 to stop bear snaring in the Southeast region of Alaska.

Best regards,

Diane Bentivegna, Ed.M. Director, Education and Resources National Wolfwatcher Coalition Support proposals 18 19, 20

To the board of game,

Once more we the citizens of Alaska are asking you to stop the horrific, inhumane and cruel practice of bear snaring.

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

- Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

- Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once.
When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

- Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

### As a subsistence hunter and avid outdoorsman I am asking you to stop and consider what the people want. And not your own agendas.

Thank you for your time,

Buck Curry



Dear Board of Game Members:

I am writing in **support of proposals 18 and 19** that prohibit the snaring of bears in Southeast Alaska.

I also **support proposal 20** which I understand prohibits hunting and trapping of wolves in SE Alaska from March 1 to November 1st to protect the wolf pups. Killing wolf pups directly or indirectly is unthinkable (and we wonder why we have a violent society!).

Sincerely,

Virginia De Vries and Christopher Jones 4260 Blackhawk Drive Willits, CA 95490



#### Support 18 AND 19

I travel to Alaska for long vacations because of the wildlife viewing available in Alaska. When I travel, I ensure I spend my money with locally owned establishments and artists and I spend a lot of money (average of \$10 – 15k per trip). But, as Alaska implements more and more policies that allow the killing of wolves, I am quickly re-thinking my travel plans and will, instead, go to a place where they like and support the wolves!

I SUPPORT Proposals 18 & 19 and urge the BOG to approve them.

These proposals would prohibit the snaring of bears in the Southeast region.

In addition further damaging Alaska's already poor reputation for unscientific wildlife management policies, bear snaring presents public safety issues, fair chase issues, scientific issues, economic issues, law enforcement issues, and is an indiscriminate and inhumane method of killing. It also has the potential to eliminate two generations at once when a sow with cubs is snared; this is especially egregious given bears' low reproductive rate.

Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

Bear snaring is an inhumane method of killing. A bear remains painfully caught in the snare until the trapper returns to shoot it.

Terry Traveland Traveland Law P.O. Box 865057 Plano, Texas 75086



PC126 1 of 1

I travel to Alaska for long vacations because of the wildlife viewing available in Alaska. When I travel, I ensure I spend my money with locally owned establishments and artists and I spend a lot of money (average of \$10 – 15k per trip). But, as Alaska implements more and more policies that allow the killing of wolves, I am quickly re-thinking my travel plans and will, instead, go to a place where they like and support the wolves!

I SUPPORT Proposal 20 and urge the BOG to approve it.

This proposal would prohibit the hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 until November 1. In some areas current regulations allow wolves to be hunted and trapped after March 1, when females may be pregnant. In other areas hunting and trapping is allowed before November 1, when wolf pups are dependent on adults in their pack for survival.

It is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has the potential to wipe out two generations at once. Additionally, the loss of the pups is not counted in harvest statistics, making accurate population estimates - and future management decisions - problematical.

Allowing the take of wolves during pup season is not a sound scientific, biological, ecological, or ethical method of managing this species.

Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.

Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Terry Traveland Traveland Law P.O. Box 865057 Plano, Texas 75086

### Proposals 18, 19 20

### Moratorium

Please vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting, and to Eliminate Its Moratorium on Denali Buffer Zone Proposals. PC127 1 of 1

Besides the BOG being totally lopsided with hunters and trappers and the always inhumane method allowed to kill predators, the BOG should not have the right to limit the public process. A moratorium on Denali buffer proposals - or on proposals related to any other issue - should not be used as a way to stifle those it does not agree with. The BOG has a statutory mandate to consider any reasonable proposal from the public relating to wildlife management. A buffer zone for the Denali wolves is such a proposal.

When the BOG refuses to accept proposals on any given wildlife management situation, it loses the opportunity to hear new and relevant information about wildlife management conditions and needs. This prevents it from managing Alaska's wildlife with the use of the best available information.

I live in Alaska too and my voice should be heard!

Sincerely, Susan and Pete Vogt 269 Bias Dr Fairbanks, AK 99712 **PROPOSALS 18 19, 20** 

MORATORIUM

PLEASE BOG MEMBERS VOTE YES TO STOP BEAR SNARING AND YEAR ROUND WOLF HUNTING AND TO ELIMINATE IT'S MORATORIUM ON DENALI BUFFER ZONE PROPOSALS....

THANK YOU EVER SO MUCH ... ANDIE WOLFINSOHN

#### Support Proposals 18, 19 20

December 26, 2012

Alaska Department of Fish and Game Boards Support Section PO Box 115526 Juneau, AK 99811

Dear Department of Fish and Game,

In honor of the children lost in Connecticut please stop the future plans of bear snaring and year-round wolf hunting. Perhaps to some they are only animals, but in the end they are living beings. Instead of supporting death, let's fund educational programs. Children will learn and grow to be compassionate human beings.

PC129 1 of 1

Furthermore, such vile actions instigate hate that can transcend into other type of murders for example the Connecticut incident. As a parent, I would hate for my child to witness the killing of any life. I want my child to experience the goodness in life and learn to appreciate nature. Please stop bear snaring and year-round wolf hunting. These animals deserve to exist wild and we can learn so much from them. Scientists devote hours and we need to appreciate education. Please don't allow greedy uneducated folks win.

All in all, I am not a crazy animal activist. I am a parent of a child that seeks a better world for her child. I want my child to grow up appreciating life not killing it. I want my child to hold a book and not a gun. I want the new generation to grow up educated and compassionate toward the weak.

In the end, it will benefit all of us. We will create a better society and perhaps create a conscious generation that will think it twice when pulling a trigger. Men used to hunt for food, today men hunt for fun teaching their kids it's ok to kill for no reason. Please remember there is no difference between men or animal except the justice system. However many disturbed individuals fail to fear the law and end up taking innocent lives away. Please stop the plans for bear snaring and year round wolf hunting.

Thank you,

Christy Vilchez PO Box 173313 Hialeah, FL 33017



Greetings Board of Game members,

I am writing as a frequent visitor to Alaska to very strongly ask that you **support proposals 18, 19 and 20** regarding bear snaring and wolf hunting in SE Alaska. I (and most Americans) are adamantly opposed to all snaring of bears and hunting for wolves. These activities (based on current science) do nothing to enhance Alaska's wildlife or ecosystems and will undoubtedly degrade and damage the area's fragile wildlife/ecosystem balance, which has been demonstrated throughout the world when similar anti-predator management schemes have played out.

• Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

· Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

The future is uncertain for our precious wildlife and I implore you to do everything in your power to protect Alaska's wolves, bears and still vibrant ecosystems.

Sincerely,

Spencer Lennard

POB 344 Williams OR 97544



## Yes on proposals 18, 19 and 20

# Rescind the moratorium

Please ban bear snaring and restrict wolf hunting and trapping in Southeast Alaska, and stop the BOG's moratorium on accepting and considering Denali buffer zone proposals.

Brian Armer

Hello,

I am writing to demand that the Board of Game Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting, and to Eliminate Its Moratorium on Denali Buffer Zone Proposals! I SUPPORT Proposals 18,19,20.

Thank you,

Carla David 4550 Little Applegate Rd. Jacksonville, OR 97530



#### Support 18, 19 20

#### **Rescind moratorium**

Please Tell the Board of Game to Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting, and to Eliminate Its Moratorium on Denali Buffer Zone Proposals!

Bear snaring and year-round wolf hunting would have a long term devastating effect on these animal groups that would have a domino effect into all other living creatures that is difficult if not impossible to recover from.

Rescind the moratorium on Denali Buffer Zone. The Board of Game needs to make these decisions very carefully so future generations don't have to work on ways to reintroduce bears and wolves back into these areas. Please keep Alaska wild.

Maggie Wilkinson 3021 Concord Lane Anchorage, Alaska 99502 I strongly support the proposals 18, 19 and 20

Supporting proposals 18 and 19: In addition further damaging Alaska's already poor reputation for unscientific wildlife management policies, bear snaring presents public safety issues, fair chase issues, scientific issues, economic issues, law enforcement issues, and is an indiscriminate and inhumane method of killing. It also has the potential to eliminate two generations at once when a sow with cubs is snared; this is especially egregious given bears' low reproductive rate.

Snaring is unethical, dangerous not only for wildlife but for humans as well, and, given the growing wildlife tourism industry, an economical mistake. Nobody is visiting Alaska to watch rotting bear carcasses and devastated woods.

Supporting proposal 20: It is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has the potential to wipe out two generations at once. Additionally, the loss of the pups is not counted in harvest statistics, making accurate population estimates - and future management decisions - problematical.

Hunting of wolves after mating season, when females could be pregnant, and with it killing the next generation before it is even born, also does not sound like "scientifically based, humane wildlife management" to me.

With regards

Johanna Duffek-Kowal Austria



# Support 20

It is time to stop killing the wolves, not expand the torture and killing into S.E. Alaska!!!

Diane Raynor Anchorage, AK
#### Support proposals 18 19 20

Dear Board of Game,

#### Please Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting

#### Support proposals 18 & 19:

Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

PROPOSAL 20: I SUPPORT this proposal

Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant.

Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.

Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Sincerely, Rebecka Tobler Oregon City, OR 97045

#### Dear Alaska BOG:

Since bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific please do not approve it.

Bear snaring sites also present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

#### Regarding Proposal 20:

Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack.

In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant. Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population. Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Debbie Brush



Support 18 19 & 20

Please Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting.

Sincerely

Karen Hackey

Las Cruces, NM

### Support 18, 19, 20

With regard to **PROPOSALS 18 and 19**: I strongly SUPPORT these proposals and urge the BOG to approve them for the following reasons:

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in the Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

With regard to PROPOSAL 20: I strongly SUPPORT this proposal

 Currently, hunting and trapping regulations in the Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant. This is inhumane.

 Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once. This is inhumane.

 Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.



 Establishing a shorter, standardized season for wolves in Southeast would have no financial

impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Thank you for the opportunity to comment,

Marie Louise Morandi Long Zwicker P.O. Box 230 Sullivan, ME 04664



### SUPPORT 18, 19, 20

Please act to stop the suffering of wonderful animals that share our planet: Stop bear snaring—urgent.

Stop year round wolf hunting--there has to be a better way.

As a person who is concerned about the suffering of animals, I implore you to opt for kindness and think for one moment of the suffering that is not seen by your eyes but is in your power to act.

Thank you so very much,

Constance Morgan Mamaroneck, New York



Vote "Yes" to stop bear snaring and year-round wolf hunting, and please eliminate your moratorium on Denali Buffer Zone Proposals.

The reasons seem obvious, but bear snaring is cruel. Year-round wolf hunting means wolf pups could lose their mothers, and the buffer zone is needed to protect wolves who wander outside of their boundaries.

Thank you.

Curtis and Jane Hoffman 6747 Lupton Dr Dallas TX

### SUPPORT 18, 19, 20

# OPPOSE UNITS 1A AND 3 FEASIBILITY STUDIES

Please say YES to STOP bear snaring & year round wolf hunting !!!

Please say NO to KILLING off the WOLVES in 2 different areas!!!

These are God's beautiful creatures & if people would stop infringing on their territory they wouldn't come into ours!!

Wolves are beautiful creatures & yes wild but not always vicious!! LEAVE THEM BE!!!

Tina Leber

PC143 1 of 1

### I support proposals 18, 19 and 20.

The BOG has yet to clearly prove to the public the need for such drastic measures. These policies defy common sense and sound management. The potential for wiping out 2 generations of either bear or wolf is just not sound management. What is the scientific justification?

Alaska's credibility is suffering due to such unscientific polices.

Kim Stephanie Fitzgerald



### SUPPORT PROPOSALS 18, 19 and 20

I strongly **support Proposals 18 and 19**, which would prohibit the snaring of bears in the Southeast region, and urge the Board of Game to approve them. Bear snaring is unscientific because it is an indiscriminate method of killing, which includes females with dependent cubs, and cubs themselves. Such snaring also raises public safety issues for hikers and campers who may come upon a sow defending a snared cub.

Bear snaring does not adhere to the principles of fair chase hunting, nor does it take into consideration the ever-increasing wildlife tourism industry in the Southeast, with the obvious economic benefits of visitors who come to view the bears. Already overburdened wildlife enforcement officers would encounter difficulty enforcing bear snaring regulations.

Since bears have a low reproduction rate, it is not sound management to kill two generations at once. Yet, when a sow is snared, she and any cubs with her are shot. Bear snaring is generally considered an inhumane method of killing, as the bear remains caught until the trapper returns to shoot it. Such practices result in further damage to Alaska's already poor reputation for inhumane, unscientific wildlife management policies. Alaskans from all user groups have expressed overwhelming opposition to bear snaring.

I also strongly **support Proposal 20**, which would prohibit the hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 until November 1. Current regulations in the Southeast are inconsistent. Some areas allow wolves to be killed before November 1, while pups remain dependent on their parents and the pack. Other areas allow hunting and trapping after March 1, after mating has occurred and females may be pregnant. Allowing hunting and trapping of wolves between March 1 and November 1 would likely result in wiping out two generations of a pack at once.

A substantially greater number of wolves is lost than indicated in harvest statistics because dependent pups that do not survive are not counted. This is obviously unscientific and a poor method of management for Southeast's wolf population. A shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, as wolf pelts are usually not in prime marketable condition prior to November.

Thank you for your consideration,

Lynn Driessen



**Proposals 18 and 19** relating to the trapping and snaring of bears should be adopted, as these methods lead to all kinds of unwanted side effects such as endangering hikers and campers who come to our state to experience our parks and wildlife in a safe manner. The extreme and inhumane methods of snaring bears and potentially leading to killing sows and cubs should end. These methods are not based on sound scientific knowledge and it's time for the BOG to pay attention to the scientists who have spoken out and signed a petition.

**Proposal 20**, relating to the end of trapping and snaring of wolves should also be adopted. These are also inhumane ways of managing the wolf population. The killing of wolf pups in their dens and/or their parents upon whom they depend is inexcusable and egregious. Once again, these activities are not based on sound science and should be ended.

The above activities of culling the bear and wolf populations, I believe, are enacted to provide more moose, especially trophy specimens, to outside hunters. Creating an artificial imbalance between the moose, bear and wolf populations also harms the moose and other prey populations, for example, making their food sources more scarce and starvation most likely. The BOG cannot accommodate all requests for trophy hunting from outside the state. There just isn't enough to go around.

Please adopt these three proposals.

Thank you.

Sincerely,

Susan Valenti

# SUPPORT PROPOSALS 18, 19 AND 20

Dear Board of Game,

Biologist should decide wildlife management based on a healthy diverse ecosystem with sustained pristine water and pristine air.

Please protect wolves, and bears too, wherever humanly possible.

It is all one system people.

Jim Pallett

### Support Proposals 18 19 20

Please let adult bears and wolves raise the next generation in peace; a parent is essential to the survival in the wild of young pups and cubs.

A sound, whole ecosystem, complete with predators, has created one of the most beautiful natural environments on earth. A humane management system reflects on our own society, as well.

Thanks for considering my views.

A. Ballantine 24 Enoch Crosby Rd. Brewster, NY 10509 RE: Proposals 18, 19 and 20

As a wildlife conservationist, I support Proposals 18, 19 and 20.

First of all, bear snaring is an inhumane method of killing and further damages Alaska's already poor reputation for unscientific, inhumane wildlife management. Additionally, when a sow is snared, and may have cubs, they too will be shot and killed. Because bears have a low reproduction rate, two generations would be wiped out at once.

The trapping of wolves during the periods from March 1 until November 1 could also wipe out two generations of wolves. It is unethical and inhumane to allow the killing of wolves while pups remain dependent upon the pack. Establishing a shorter, standardized season for wolves in the Southeast would have no financial impact on hunters and trappers.

Respectfully submitted,

Susanne Belcher

Dear Alaska Board of Game,

First, you should **support proposal 18 and 19**. Bear trapping is indiscriminate killing, no matter what age, and is thus unscientific. Mother bears also become very aggressive when their cubs are distressed. If a sow's young where caught in a trap, she would become a safety hazard to campers and hikers. Snares don't uphold the principles of fair chase hunting either. Bears attract many ecotourists as well, bringing money to local economies. Enforcing bear snares would be difficult for wildlife enforcement officials, who are already overburdened. Because bears have a low production rate and the fact that snares catch both breeding animals and cubs, means that snaring would have devastating effects on the population. Bear snaring is also an inhumane practice. Lastly, this would add on to Alaska's bad reputation of unethical and unscientific wildlife management.

Secondly, you should **support proposal 20**. The hunting of wolves in the southeast is inconsistent, with some areas allowing wolves to be killed before November 1 when pups are still dependent on their parents for survival, and with other areas allowing hunting after March 1 when wolves are pregnant. Secondly, allowing trapping between March 1 and November 1 would open the possibility of literally killing two generations of wolves. Thirdly, the pups that don't survive after their parents deaths are not added into the number of wolves harvested, leaving us with incorrect data, and therefore unscientific and poor wildlife management. Lastly, this hunt would have no effect on financial impact on trappers or hunters, since wolf pelts are not in marketable condition until winter when they grow a thick coat.

I hope you take consideration my arguments during your meeting, and hope you have the best outcome.

Sincerely,

Quinn Santos



# Please approve Proposals 18-19 and Proposal 20

Don't go against wildlife. PLEASE!

Sam Davis

#### I support Proposals 18 19 and 20

#### I support Proposals 18 and 19 because:

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Alaska gains a lot of tourism money from visitors who come to Southeast Alaska to see bears. Bear snaring would therefore worsen the economy.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers. It is just more for them to take on.

 Bear snaring can eliminate two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once. So many more bears than predicted can be lost.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare, left to suffer, until the trapper returns to shoot it.

 Alaska already has a bad reputation for unscientific, inhumane wildlife management policies. This would just further support that reputation.

Alaskans from all user groups overwhelmingly oppose bear snaring.

I support Proposal 20 because:

 Currently, regulations for hunting and trapping in Southeast Alaska are not consistent. In some areas wolves may be killed before November 1, while pups are still dependent on their parents and the rest of the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred, when females may be pregnant.

 If hunting and trapping of wolves is allowed between March 1 and November 1, two generations of a pack will probably be eliminated. This would seriously decrease wolf populations.

 Dependent pups that do not survive are not counted, and therefore a substantially greater amount of wolves is lost than is shown by harvest statistics. This is unscientific and a very poor way to manage Southeast Alaska's wolf population.

 Establishing a shorter, standardized season for wolves in Southeast would not impact hunters or trappers financially, because wolf pelts are usually not in prime marketable condition before November.

#### Abbie Harville

PC151 1 of 2



Reasons to rescind the moratorium on accepting proposals related to Denali National Park no-trapping buffer zones:

 The BOG should not be allowed to limit the public process. It should not use a moratorium on any issue to avoid listening to those it disagrees with.

 The BOG has a statutory mandate to consider any reasonable proposal made by the public that relates to wildlife management. A buffer zone for the Denali wolves is such a proposal.

 If the BOG will not accept any proposals about any wildlife management situation, it cannot learn new and important information that may have been discovered. Therefore, it cannot necessarily make the right decisions, as it will not have the most recent information.

Sincerely,

Abbie Harville

Please ban bear snaring in SE Alaska. I live in Yellowstone, have experience in bear country. I'm against snaring wildlife. Snaring is indiscriminate and unscientific. Snaring catches females with young as well as males plus other wildlife that is not targeted. It also presents safety hazards for humans and their pets. A few years ago a woman in my area lost her dog - it died in her arms - in a snare.

I SUPPORT proposals 18-19.

I also SUPPORT proposal 20: Stop year round wolf hunting. Wolves are social animals, with roles within packs. Year round hunting means that there are no multi-generational pack members. Multi-generational packs are better able to take care of themselves without resorting to competing with humans.

Julianne Baker Gardiner Montana

### Support Proposals 18, 19 and 20

As a teacher of America's next generation(s), I must voice my disapproval of the proposed measures to permit the eradication of wolves in Unit 1A (on Gravina Island near Ketchikan) and the near eradication in a portion of Unit 3, several islands near Petersburg. My students have followed the wolf management efforts of both Alaska and Minnesota, and these current proposals do not make sense, from a responsible biological management perspective.

There are no established numbers for biologists to agree upon regarding deer populations, nor of numbers to cite the threat of wolves to the deer population. Add to this that the wolves are most likely a rare subspecies that would be fascinating to learn more about....how can the eradication of these tourist-drawing animals be wise? I have friends who are avid wildlife photographers, and their complaints are that the same wolf packs are photographed over and over again. Why would Alaska not be proud to promote the rare subspecies?

I am not against the harvesting of animals by responsible hunters. I AM against overhunting, eradication, and haphazard hunting and trapping. I seek examples of wise land stewardship rulings to motivate my nature-loving students and the public, in general. To this end, I ask that you:

1) Do NOT approve current wolf hunting proposals for Unit 1A and Unit 3.

### 2) Vote "Yes" to Stop Bear Snaring and Year-round Wolf Hunting.

Thank you,

Jeanne Fedel P.O. Box 882 Springville, CA 93265



To the members of the Alaska Board of Game:

I have lived in Alaska since 1976. I enjoy living in an environment full of a variety of wild animals. It was wonderful seeing the tracks of a wolf on a trail north of Fairbanks.

Therefore I SUPPORT PROPOSALS 18, 19 AND 20.

Sincerely,

Douglas McIntosh

2208 Nottingham Drive Fairbanks, Alaska 99709 PROPOSALS 18 and 19: I SUPPORT these proposals to prohibit the snaring of bears in the Southeast region, and strongly urge the BOG to approve them.

**PROPOSAL 20: I SUPPORT** this proposal to prohibit the hunting and trapping of wolves in all areas of Southeast Alaska annually from March 1 until November, and strongly urge the BOG to approve it.

Diana McCleery 3115 39th Ave Minneapolis, MN 55406



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Please convey my opinions as below. I am invested in the outcomes of wolves since legal hunting started in Wisconsin were I live. I firmly oppose hunting wolves. People do not hunt wolves for food.

I firmly oppose any snaring or trapping any animal this is cruel to animals. It is foolish of humans to think their actions can "help" manage wildlife. We do not know everything about how nature works and should not weigh such a heavy hand. Especially a cruel and torturing hand.

### APPROVE Proposals 18-19 APPROVE Proposal 20

Thank you for letting me add my input,

Bonnie Ranta Lake Nebagamon Wi 54849 To Whom It May Concern:

Please support Proposal 20 and STOP the year-round trapping and killing of wolves!

Wolf pups are dependent on their mothers for survival and pregnant females are necessary for the birth of new generations. If year-round trapping and/or killings of wolves are allowed, their population numbers will decrease dangerously low. Keep wolves off the threatened species list, they are vital to the ecological balance!

Jenei Blake



I am writing as a concerned citizen, and educated scientist, and passionate activist for the preservation of the wild. I ask you to please vote **YES on Proposals 18 and 19**, to prohibit the snaring of bears in the Southeast region of Alaska. My points to this argument are as follows:

Bear snaring is an indiscriminate method of killing and is therefore unscientific.

Bear snaring sites present issues to public safety for campers and hikers.

Bear snaring DOES NOT adhere to principles of "fair" chase hunting.

There is no consideration of growing tourism economies based on the nature and wildlife surrounding the area in SE Alaska.

Enforcing bear snaring regulations puts a strain on already understaffed wildlife enforcement officers.

Bear snaring can wipe out 2 generations of bears at once, threatening healthy numbers of this apex predator to thrive and therefore its ecosystem to thrive.

Bear snaring is an inhumane method for killing and should be banned.

Bear snaring is opposed by Alaskans from ALL user groups.

Please also vote **YES on Proposal 20**, to prohibit the trapping of wolves in ALL areas of SE Alaska annually from 3/1 until 11/1, when females may be pregnant. It is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has serious potential to wipe out two generations at once. Allowing the take of wolves during pup season is not sound scientific, biological, or ecological method of species management - it goes without saying the lack of ethics displayed in these practices.

It is the highest standards of sound scientific, biological, ecological, and ethics the U.S.

Division of Wildlife and its State subsidiaries are expected to practice and manage their ASSETS. Anything less is corrupt and unacceptable.

Sincerely, Deborah M. Henriksen, LEED AP BD+C



<u>Proposals 18 and 19</u>: In addition further damaging Alaska's already poor reputation for unscientific wildlife management policies, bear snaring presents public safety issues, fair chase issues, scientific issues, economic issues, law enforcement issues, and is an indiscriminate and inhumane method of killing. It also has the potential to eliminate two generations at once when a sow with cubs is snared; this is especially egregious given bears' low reproductive rate.

As shown by the negative reactions to the BOG's 2010 decision to list bears as furbearers (which thereby allowed trapping), a majority of visitors and Alaskans representing all user groups oppose bear snaring. A small sampling of those who have recently spoken out in opposition of bear snaring in Alaska includes: President of the Safari Club International's Alaska Chapter Terry Holliday; master guide and executive director of the Alaska Professional Hunters Association Robert Fithian; bear hunter and big game hunting guide Karl Braendel; Native leaders Maxine Franklin and Roy and Charlene Huhndorf; 77 current or former wildlife scientists (representing about 1,600 years of involvement with Alaska's wildlife) who sent a letter to the Board of Game opposing bear snaring; former Alaska Department of Fish & Game scientists Sterling Miller, John Schoen, and Rick Sinnott; and Alaska-based conservation groups such as Alaska Center for the Environment and the Alaska Wildlife Alliance.

 Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

 Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

 Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot. Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

Proposal 20: It is unethical and inhumane to allow the killing of wolves while the pups remain dependent upon the pack. This has the potential to wipe out two generations at once. Additionally, the loss of the pups is not counted in harvest statistics, making accurate population estimates - and future management decisions -problematical.

Allowing the take of Wolves during pup season is not a sound scientific, biological, ecological, or ethical method of managing this species.

 Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant.

 Allowing the hunting and trapping of wolves between March 1 and November 1 means that two generations of a pack likely would be wiped out at once.

 Dependent pups that do not survive are not counted, meaning that a substantially greater number of wolves is lost than is reflected in harvest statistics. This is unscientific and a very poor way to manage Southeast's wolf population.

 Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Regards

Dr Shelley Ruth Wyndham Philadelphia PA PC159 2 of 2 Currently, hunting and trapping regulations in Southeast are inconsistent. In some areas wolves may be killed before November 1, while pups remain dependent on their parents and the pack. In other areas hunting and trapping is legal after March 1, after mating has occurred and females may be pregnant.

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• Establishing a shorter, standardized season for wolves in Southeast would have no financial impact on hunters and trappers, because wolf pelts are usually not in prime marketable condition prior to November.

Thank you for your attention,

Stacey L. Lumley

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# SUPPORT PROPOSALS 18 19 20

Stop the senseless killing of wildlife. Me as a Dutch tourist that likes to visit your state for its wildlife will stay away and will tell everyone who would like to come over not to go to Alaska due to your so called wildlife management. Don't be stupid like a lot of other states are.

Mr. J.Huizinga

## PLEASE VOTE YES FOR PROPOSALS 18 and 19

Bear snaring is an indiscriminate method of killing - males, females, females with dependent cubs, and cubs themselves are killed - and is therefore unscientific.

• Bear snaring sites present public safety issues for hikers or campers who may inadvertently approach a site where a sow is defending a snared cub.

Bear snaring does not adhere to principles of fair chase hunting.

• Bear snaring does not take into consideration the large and growing wildlife tourism industry in Southeast and the economic benefits of visitors who come to see bears.

 Enforcing bear snaring regulations presents difficulties for already overburdened wildlife enforcement officers.

 Bear snaring has great potential for taking two generations of bears at once. When a sow is snared, she and any cubs accompanying her are shot.
Because bears have a low reproduction rate, it is not sound management to kill two generations at once.

 Bear snaring is an inhumane method of killing. A bear remains caught in the snare until the trapper returns to shoot it.

 Bear snaring further damages Alaska's already poor reputation for unscientific, inhumane wildlife management policies.

Alaskans from all user groups overwhelmingly oppose bear snaring.

Thank you for your attention,

Stacey L. Lumley

Dear Sirs:

We **support Proposals 18 and 19**. We are not residents of Alaska, but for as long as I can remember my husband and I have planned on visiting Alaska because of your beautiful wilderness and magnificent wildlife. We would especially like to go Fairbanks for 3 weeks in the winter for the Northern Lights. We will not be making any trips and encourage our friends not to go to Alaska because of some of the wildlife management policies you are initiating or have in effect.

Even though we live in Indiana we are aware of some proposals which do not do all you can to protect the wildlife in your state. We would be one of your repeat visitors for many years to come if some of your policies change. Seeing bears would be one of our goals in visiting Alaska. Bear snaring is one of the policies we oppose. A bear snare is a most inhuman way to kill or trap an animal. I suspect you would never trap a family pet that way and the same respect should be given to your bear population.

I understand your need to manage the wildlife in your state, but surely there are better ways to manage it. This type of killing affects the males, females and cubs. It is not scientific management of the different parts of the bear populations. Hunters are not the only ones interested in enjoying the magnificence of Alaska. Those of us who cherish wildlife should also be considered in polices you make.

Please don't make the same mistakes we have made in Indiana. We have virtually eliminated wolf, bear, cougar and other predator wildlife. Please learn from our mistakes and protect the unbelievable ecosystems of wildlife you have in abundance. When you do this we will happily spend a lot of time and money in Alaska.

Charles and Diane Brandstetter 5670 Carvel Ave Indianapolis, Indiana Dear Sirs:

We support Proposal 20. We are not residents of Alaska, but have been interested in and are supporting the wildlife in you area. In Indiana where we live our predator wildlife was hunted and eliminated. We have no bears, cougars, wolves, etc.

We will not be making trips to Alaska and encourage our friends not to go to Alaska because of some of your wildlife management polices that you are initiating or have in effect. We would be repeat visitors for many years to come if some of your policies change or you do more to protect wildlife that we enjoy seeing and experiencing.

The southeast portion of Alaska is one area we would consider visiting. Passing Proposal 20 would not do much to enhance the financial situation for hunters and trappers. The extended time period of March 1 to November 1 is when wolf pelts are not in their best condition. Hunting in the period of March 1 to November 1 could mean that two generations of wolves and their packs could be adversely affected. I do not believe this to be effective scientific management of wolves.

People like me and my husband are untapped financial resources that will bring strength to your economy if we are encouraged to visit because of the scientific management of your wildlife.

Please don't make the same mistakes we have made in Indiana where much of our wildlife is gone because of habitat loss and unscientific hunting procedures.

Please support Proposal 20

Diane Brandstetter 5670 Carvel Ave. Indianapolis, Indiana

JAY & CAROLYN PRITCHETT P.O. Box 1091 Petersburg, Alaska 99833 PC165 1 of 1

December 28, 2012

Alaska Department of Fish & Game FAX: 907 465-6095 RE: Feasibility Assessment for Increasing Sustainable Harvest of Sitka Black-Tailed Deer in a Portion of Game Management Unit 3

It has recently come to our attention that the Department of Fish and Game is currently involved in a feasibility assessment of how to increase a "sustainable harvest" of Sitka Black-Tailed Deer in a portion of Game Management Unit 3. After reading the document, we find ourselves unable to see how it in any way addresses the scientific management of our wildlife resources.

Specifically we refer to the proposal that would reduce by 80% the wolf population in a section of Unit 3. When the population of any species is reduced by 80%, it is vulnerable to extinction. We hope this is not the purpose of this proposed experiment. And not only that, but It just isn't science. The document itself states that the Department doesn't really know how many deer there are – or how many wolves. Nor does it have a reasonable model to base its population of either species upon. There is a lot more groundwork that needs to be done, including whether the 900 deer a year target number is even remotely realistic.

And why is it that the eradication of a large number of wolves is proposed as being an answer when the factors involved in lower deer population numbers are so much more complex than that? Certainly other factors include commercial/industrial development that has led to loss of habitat; increased road building and thus greater access to deer harvest; and a series of harsh winters.

We would like to go on record as opposing the proposal to kill a large number of wolves in the hopes that maybe the deer population will rebound. We would encourage you to do the science first, then come up with a comprehensive plan based on something more recent than the obsolete models that are currently being used. What we need is a plan based on science and reason – not one based on wishful thinking and experimentation.

Toy Intertet



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Boards Support Section Board of Game

As a 42-year resident of Alaska and as one who has hunted and hiked extensively, I am deeply concerned about the lack of a Denali Wolf Buffer Zone as well as the moratorium emplaced on discussion of that issue.

The Buffer Zone was created to ensure a very valuable resource, the wolves of Denali Park, were given a biologically-justified safety zone which acknowledged that wildlife does not behave in accordance to geopolitical boundaries. It was in place for several years with no negative impacts and a very quantifiable, large positive impact for tourism. Its removal was nothing short of a petulant slap at the federal presence and a totally indefensible, intentional ignorance of the Alaskan public's will as demonstrated by a large petition submitted to the Board. The removal was not the act of a mature, science-based entity and it's absence remains a glaring demonstration of that fact.

The moratorium itself is at best illegal for removing from public discussion at the whim of the Board a very significant topic affecting not only Alaskans but national and even international tourism in the area. Already substantial revenue from a national wolf viewing group has been lost as a result of the decreased viewing the lack of a buffer zone created. Further, the trapping incident this past spring in which a Grant Creek female wolf was taken (and allowed to die in the trap with subsequent loss of any pelt, thus a total waste) highlighted not only how poorly thought out was the decision to remove the buffer zone but how quickly negative results came about.

Much attention has been paid to this incident in particular and the decision in general in the statewide press as well as newspapers outside of Alaska, Internet venues, and radio programs. The result is a great deal of negative "press" for Alaska's wildlife management methods. This is wholly due to the decision to remove the Buffer Zone.

I would very strongly urge the Board reconsider their moratorium as well as their removal of the buffer zone as soon as possible and reverse both actions. To do otherwise is only to invite more bad press and possible federal action.

Additionally, I wish to express my support for proposals 18, 19, 104, 173, and 174. The very idea of snaring bears is reprehensible. It seems anymore the Board of Game is in the business of killing off wildlife in the most brutish ways possible and this is certainly one. It wipes out two generations at once. It is in no way discriminating. It creates a danger to others using the forest.

Sincerely, Art Greenwalt 1620 Washington Dr., Apt.79 Fairbanks, Ak. 99709