Wolf Management Report and Plan, Game Management Unit 3:

Report Period 1 July 2010–30 June 2015, and Plan Period 1 July 2015–30 June 2020

Richard E. Lowell



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Alaska Department of Fish and Game

Division of Wildlife Conservation

Wolf Management Report and Plan, Game Management Unit 3:

Report Period 1 July 2010–30 June 2015, and Plan Period 1 July 2015–30 June 2020

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This species management report and plan was reviewed and approved for publication by Thomas V. Schumacher, Management Coordinator for Region I for the Division of Wildlife Conservation.

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Cover Photo: An adult wolf from a pack of 5 photographed at a remote camera trap near Castle River on Kupreanof Island, 11 November 2015. ©2015 ADF&G. Remote camera photo by Richard Lowell.

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Purpose of this Report

This report provides a record of survey and inventory management activities for wolves in Unit 3 for the 5 regulatory years (RY) 2010–2014 and plans for survey and inventory management activities for the following 5 regulatory years, 2015–2019. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY10 = 1 July 2010–30 June 2011). This report is produced primarily to provide agency staff with data and analysis to help guide and record its own efforts but is also provided to the public to provide information about wildlife management activities. In 2016 the Alaska Department of Fish and Game's Division of Wildlife Conservation launched this 5-year report type to more efficiently report on trends and describe potential changes in future data collection activities. It replaces the wolf management reports of survey and inventory activities that were previously produced every 3 years.

I. RY10–RY14 Management Report

Management Area

Game Management Unit 3 is an area of approximately 3,000 square miles on islands in the central portion of Southeast Alaska (Fig. 1) and falls within the department's Region I wildlife management region in Southeast Alaska Kupreanof, Kuiu, Etolin, Wrangell, Mitkof, and Zarembo, in descending order, are the largest islands in the unit. Smaller islands include several near the mouth of the Stikine such as Rynda, Kadin, and Sokolof islands. Moose have been sighted on all of these islands but are believed to be most numerous on Kupreanof and Mitkof islands.

Most land area in Unit 3 is within the Tongass National Forest and managed by the Tongass National Forest, with smaller parcels under Tribal, state, and private ownership. In addition to moose and deer, wolves and black bears are also present and widely distributed throughout Unit 3. A small number of brown bears also occur on islands adjacent to the mainland.

Elevation within Unit 3 ranges from sea level to nearly 4,000 feet. Predominant vegetative communities occurring at low to moderate elevations (<1,500 ft) include Sitka spruce (*Picea sitchensis*) western hemlock (*Tsuga heterophylla*) coniferous forest, mixed-conifer muskeg and deciduous riparian forests. Mountain hemlock (*Tsuga mertensiana*) dominated forest comprises a subalpine, timberline band occupying elevations between 1,500–2,500 feet.

Summary of Status, Trend, Management Activities, and History of Wolves in Unit 3

Evidence suggests that wolves colonized Unit 3 from the south following retreat of glaciers and establishment of a prey base including Sitka black-tailed deer. Deer are the primary prey for wolves in Southeast Alaska, with moose and mountain goats important in some areas. With their recent increase in distribution and abundance in Unit 3, moose are probably an important food source for Unit 3 wolves. Because of the relatively short water crossings involved, it is likely wolves commonly move between the mainland and adjacent Unit 3 islands and among islands.

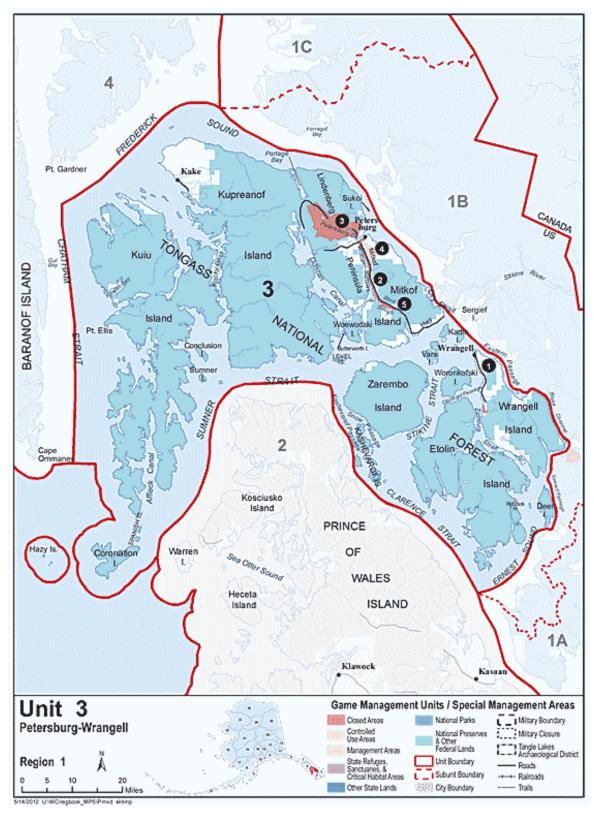


Figure 1. Map of the boundaries of Unit 3, Alaska.

Government wolf control programs and bounties were maintained into the 1970s in an effort to increase deer numbers following a series of severe winters and resulting deer die-offs in the early 1970s. However, deer numbers remained low for many years, and the average annual wolf harvest in Unit 3 during the 1980s also remained relatively low at 13 per year. Moose began colonizing the Unit 3 islands in the late 1970s and have continued to expand their range and abundance. Moose represent an alternate prey item for wolves and their increased abundance along with relatively high deer abundance in the 1990s likely allowed wolves to increase their numbers. During the 1990s the average annual harvest increased to 43 wolves per year, and by the 2000s the harvest had further increased to 49 wolves per year (Fig. 2). Prior to RY11, the harvest of 73 wolves by 41 individuals in RY02–RY03 represented the highest wolf harvest in Unit 3 since at least 1979. Harvests of 96 and 92 wolves were recorded in RY11 and RY13, respectively. The expanding moose population likely allowed wolves to maintain high numbers despite a decline in deer abundance following a series of severe winters during 2006–2009.

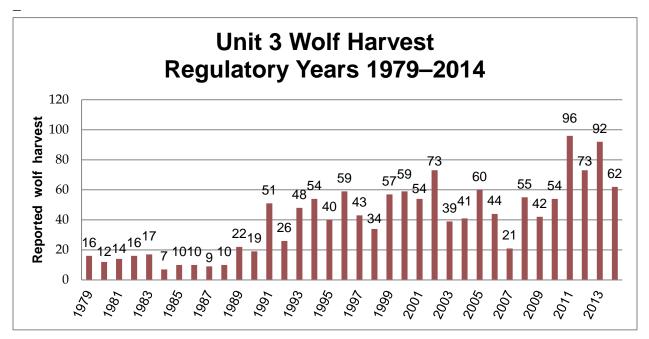


Figure 2. Unit 3 wolf harvest, regulatory years^a 1979–2014.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

In fall 2002, due to concerns about early and late season pelt quality and harvest of wolves during the denning period, the Board of Game shortened the Region 1 wolf hunting season by closing the months of August and April to wolf hunting. The board also shortened the wolf trapping season by closing the month of April. These actions are primarily responsible for the reduced wolf harvest in Unit 3 during RY03 and RY04.

In fall 2004 the board, made up of new appointees, rescinded the previous board's decision to shorten the wolf hunting season and restored the 1 August–30 April wolf hunting season throughout Region 1. The board also restored the month of April to the wolf trapping season and eliminated the requirement that the left foreleg of any wolf taken in Units 1–5 remain naturally attached to the hide until sealed.

From 1997 to 2002 hunters/trappers were required to leave the left foreleg naturally attached to the hide of any wolf taken in Units 1–5 until the time of sealing. During the sealing process, the foreleg bone was removed and submitted for use in evaluating the percentage of adults and subadults in the unitwide annual harvest. Between 1997 and 2002 the percentage of adults in the harvest ranged 32–58% annually, with an annual average mean of 48%.

Today a few recreational trappers and opportunistic hunters harvest wolves in the unit. In recent years, there has been growing interest in wolf hunting by nonresident hunters, and some big game guides now offer wolf hunts in Unit 3. While wolf densities are higher in Unit 3 than in interior regions of Alaska, viewing opportunities are limited due to the dense forest cover.

Management Direction

EXISTING WILDLIFE MANAGEMENT PLANS

The department has yet to complete a management plan for Unit 3 wolves. Management objectives and activities (Lowell 2012) have been reviewed and modified through public comments, staff recommendations, and Board of Game actions over the years. A record of these changes can be found in the division's management report series. The plan portion of this report contains the current management plan for wolves in Unit 3.

GOALS

Maintain a sustainably harvestable wolf population in all areas of the species' historic range.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The Alaska Board of Game has made a "positive" customary and traditional use determination for wolves in Unit 3; however, the amount necessary for subsistence has not been established. Because there is no resident subsistence hunt for wolves, the resident wolf hunting season in Unit 3 is classified as a "general hunt only."

Intensive Management

The Alaska Board of Game has identified Unit 3 deer as important for providing high levels of harvest for human consumptive uses. Intensive Management (5 AAC 92.108) population and harvest objectives for deer have been established at 15,000 and 900, respectively.

The board has made a "positive" customary and traditional determination for Unit 3 moose and set the amount necessary for subsistence at 40 moose per year from Units 1B and 3 combined. No other codified population or harvest objectives have been established for Unit 3 moose.

MANAGEMENT OBJECTIVES

Maintain a sustainably harvestable wolf population in all areas of the species' historic range.

MANAGEMENT ACTIVITIES

In addition to gathering anecdotal information about the Unit 3 wolf population through observations made by Alaska Department of Fish and Game (ADF&G) and U.S. Forest Service (USFS) biologists, trappers, hunters, and other members of the public, an annual statewide trapper survey asks for each trapper's subjective assessment of wolves in units where they trap.

Wolf harvest was monitored through a mandatory pelt sealing program. Data were collected on the number of wolves killed, sex, date of take, method of take, method of transportation used from home to the field, and when possible, an estimate of the number of wolves accompanying those killed. From regulatory year 1997 to 2002 the left foreleg from each sealed wolf was collected for age determination and tissue samples were opportunistically collected for genetic analysis.

During the current report period, hide, hair, and tissue samples and foreleg bones were opportunistically collected from harvested wolves during the sealing process. When possible, wolf carcass weights and condylobasal skull measurements for subspecies analysis were also obtained.

1. Population Status and Trend

Sealing records provide insufficient data to make a meaningful estimate of the Unit 3 wolf population. Current population estimates for Unit 3 wolves are based on inferences derived from wolf research (including radiotelemetry) conducted on neighboring Prince of Wales Island (Unit 2) during the late 1990s (Person et al. 1996). Based on estimates of the average number of wolves in a pack and pack territory size in Unit 2, it is estimated that Unit 3 can support approximately 250 wolves (range 125–385) in 23 packs. Conversations with trappers, hunters, pilots, and other biologists, along with information from trapper questionnaires, indicated the wolf population increased during the 1990s in response to increasing abundance of deer and moose. More recently, increases in moose distribution and abundance have probably contributed to maintaining apparently high wolf densities despite a decline and slow recovery of the deer population following a series of severe winters during 2006–2009.

ACTIVITY 1.1. Monitor wolf abundance.

Data Needs

Information on wolf abundance helps evaluate whether harvest is sustainable. Very little wolf research has occurred in Unit 3; therefore, information is lacking on the ecology, abundance, and population demographics of wolves in the unit.

Methods

Observations of wolves made by ADF&G and USFS biologists, trappers, hunters, pilots, and other members of the public were considered. Also, an annual statewide trapper survey was conducted that requested each trapper's subjective assessment of the population status of wolves in Unit 3.

Results and Discussion

In response to mail-out questionnaires distributed by the department, individual trappers provided subjective assessments of wolf abundance in the unit. From RY10 to RY13 trappers characterized wolves as either "abundant" or "common" in the unit. Trapper questionnaires were not distributed in RY14. Reported wolf sightings provided insights into the size and distribution of wolf packs in the Unit.

Recommendations for Activity 1.1

Continue.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor the wolf harvest through a mandatory pelt sealing program.

Data Needs

Monitoring harvest helps to ensure harvest rate remains sustainable. The reported wolf harvest probably under represents the actual take of wolves in the unit. Some estimate of unreported human caused mortality is needed.

Methods

Data on the number of wolves killed, sex, date of take, method of take, method of transportation used from home to the field, and when possible, an estimate of the number of wolves accompanying those killed.

Season and Bag Limit, Unit 3

RY10

<u>Season and Bag Limit</u> Trapping: No limit Hunting: 5 wolves (General hunt only)

RY11-RY14

<u>Season and Bag Limit</u> Trapping: No limit Hunting: 5 wolves (General hunt only) Residents and Nonresidents 1 November–30 April 1 August–30 April

Residents and Nonresidents 1 November–30 April 1 August–31 May

Results and Discussion

Hunter/Trapper Harvest

During the report period the Unit 3 wolf harvest averaged 75 wolves per year, ranging from a low of 54 in RY10, to a high of 96 in RY11 (Table 1). The number of successful trappers and/or hunters averaged 34 per year and ranged from a low of 26 in RY10 to a high of 41 in RY12. The harvests of 96 wolves in RY11 and 92 wolves in RY13 were the highest unitwide harvests since record keeping began in 1978.

Trapping is usually the primary method of take for wolves in Unit 3. During the report period 71% of the wolves harvested were taken with traps or snares and 29% were shot. Most wolves harvested by shooting are opportunistically taken by deer and bear hunters, and occasionally moose hunters.

The greatest percentage of the Unit 3 wolf harvest typically comes from Kupreanof, Mitkof, Kuiu, and Etolin islands, in descending order, and such was the case during the report period.

Regulatory	Reported harvest				Metho	d of take	Successful		
year	Μ	F	Unk	Total		Trap/snare	Shot	Unk	trappers/hunters
2005	32	28	0	60		36	24	0	27
2006	23	19	2	44		33	11	0	17
2007	11	10	0	21		6	15	0	16
2008	31	24	0	55		30	24	1	26
2009	21	18	3	42		25	17	0	26
2010	27	26	2	54		29	25	0	26
2011	48	47	1	96		68	28	0	39
2012	39	33	1	73		49	24	0	41
2013	51	41	0	92		70	22	0	36
2014	36	26	0	62		51	11	0	28

 Table 1. Unit 3, Alaska wolf harvest, regulatory years^a 2005–2014.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Harvest Chronology

On average, most Unit 3 wolves are taken during February, January, March, and April, in descending order. During the report period March, April, January, and February, in descending order, accounted for the highest monthly percentages of the harvest (Table 2).

Transport Methods

During the report period, most trappers and/or hunters reported using small boats, highway vehicles, and 4-wheelers, in descending order, to harvest wolves in Unit 3 (Table 3). Many of the Unit 3 islands, particularly those with established communities, have extensive logging road systems that allow hunters and trappers to use highway vehicles and 4-wheelers for access.

Other Mortality

The reported harvest probably underrepresents the actual take of wolves. It is suspected that some poaching of wolves is occurring and that each year some wolves are shot or trapped but are not salvaged, or otherwise go unsealed. Wolves are difficult animals to bring down, and it is not unreasonable to assume that some mortality also occurs as a result of wounding loss. Some wolves caught in traps that are not checked regularly, particularly intertidal drowning sets, are occasionally scavenged by other animals and the hides so badly damaged that they are discarded in the field and the harvest is not reported.

Regulatory						Pe	rcent of	harvest	by mont	th				
year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Unk	n
2005	0	7	3	7	10	13	27	5	18	10	0	0	0	60
2006	0	5	11	2	0	5	20	23	30	5	0	0	0	44
2007	0	5	14	14	5	5	14	5	14	24	0	0	0	21
2008	0	0	9	9	5	20	2	18	11	25	0	0	0	55
2009	0	2	12	7	2	21	10	24	14	7	0	0	0	42
2010	0	4	7	4	13	13	17	15	11	13	4	0	0	54
2011	0	2	3	2	11	0	15	17	34	6	9	0	0	96
2012	0	1	7	3	7	11	15	7	22	12	15	0	0	73
2013	0	0	2	7	4	7	14	10	23	26	8	0	0	92
2014	0	2	2	6	3	11	19	13	15	24	5	0	0	62

Table 2. Unit 3, Alaska wolf harvest chronology, percent by time period, regulatory years^a 2005–2014.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Regulatory			Percent	of harvest by trai	nsport me	ethod		
year	Airplane	Boat	3/4 wheeler	Snowmachine	ORV	Highway vehicle	Other	n
2005	0	78	5	0	3	12	2	60
2006	0	93	2	0	0	5	0	44
2007	0	86	0	0	5	5	5	21
2008	0	71	4	0	0	11	15	55
2009	2	76	2	0	2	10	7	42
2010	7	56	2	2	0	11	22	54
2011	0	65	17	1	0	14	4	96
2012	1	78	5	0	0	12	3	73
2013	2	78	5	1	2	10	1	92
2014	0	68	0	0	0	31	2	62

 Table 3. Unit 3, Alaska wolf harvest, percent by transport method, regulatory years^a 2005–2014.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Alaska Board of Game Actions and Emergency Orders

In fall of 2010, based on concerns about low deer numbers in Unit 3, the Board of Game extended the wolf hunting season to May 31. At the request of the department, the regulation change was expedited and the wolf season extension took effect on 1 May 2011. While the department had opposed previous attempts to extend the wolf hunting season to the end of May, in this instance concerns about low deer numbers prompted the department to support the wolf season extension in Unit 3.

In March 2013 the board authorized an operational plan for intensive management of Sitka black-tailed deer in a 648 mi² portion of Unit 3 consisting Mitkof and Woewodski islands, and the Lindenberg Peninsula on Kupreanof Island (ADF&G 2013). Although the experimental wolf control program has remained "inactive" while the department attempts to develop and refine techniques for measuring changes in deer abundance, the department has encouraged trappers to increase wolf trapping efforts in the unit. Voluntary increases in wolf trapping efforts combined with the extension of the wolf hunting season until the end of May are believed to be partly responsible for the relatively high wolf harvest during the report period compared with earlier years.

No emergency orders were issued for Unit 3 wolves during the report period.

Recommendations for Activity 2.1

Continue.

ACTIVITY 2.2. Collect biological samples from harvested wolves.

Data Needs

Wolf hair and tissue samples are needed to evaluate the genetic structure of wolf populations in the region and to assess the level of interchange between mainland and island populations. Better information regarding the spatial and seasonal variation in wolf diets across the region can also be gathered by stable isotope analysis of tissues. In addition to genetic samples, additional data are needed on wolf body weights and skull measurements to better understand the morphology and subspecies status of wolves inhabiting Southeast Alaska.

Methods

During the sealing process, hair and muscle tissue samples were opportunistically collected from harvested wolves for DNA analysis and stable isotope diet analysis. When available, foreleg bones were also collected from harvested wolves to gain insight into the relative age structure (juvenile, subadult, adult) of wolves taken by hunters and trappers. Trappers were encouraged to present complete (unskinned) carcasses of wolves in order to obtain whole carcass weights. When skulls were available, condylobasal measurements were also collected for potential use in subspecies classification.

Results and Discussion

Analyses of wolf DNA, diet analysis, and morphology are ongoing.

Recommendations for Activity 2.2

It is recommended that efforts continue to obtain hair, muscle tissue, and foreleg bones from wolves during the pelt sealing process. Efforts to obtain whole carcass weights and condylobasal skull measures should also be continued.

3. Habitat Assessment/Enhancement

No attempt has been made to enhance habitat in Unit 3 specifically for wolves. While primarily intended as a silvicultural practice, wolves likely derive some benefit from pre-commercial thinning of second growth stands which can temporarily enhance habitat for deer.

Clearcut logging has occurred extensively in Unit 3 and that has converted older conifer stands to early successional vegetation types that can temporarily enhanced forage for moose and deer. Pre-commercial thinning and pruning has been performed in many young second-growth stands in the unit. The resulting forage enhancement typically exists for only about 25 years after which time canopy closure again results in loss of understory vegetation.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

- Wolf sealing data are stored electronically in the Division of Wildlife Conservation's WinfoNet data system
- Images of wolf sealing certificates are stored electronically in WinfoNet.
- Hard copies of wolf sealing certificates are kept on file in the Petersburg Area Office.

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

The Unit 3 wolf harvest typically fluctuates from year to year in response to trapping effort and winter weather conditions. During the report period (RY10–RY14) the average harvest of 75 wolves per year in Unit 3 was well above the preceding 10-year (RY00–RY09) average annual harvest of 48 wolves per year. The RY11 harvest of 96 wolves and the RY13 harvest of 92 wolves represent the highest and second highest Unit 3 harvests since at least 1979. Voluntary increases in wolf trapping efforts combined with the extension of the wolf hunting season until

the end of May are believed to be partly responsible for the relatively high wolf harvests during the report period.

In fall 2010, based on concerns about low deer numbers in Unit 3, the Board of Game extended the Unit 3 wolf hunting season to May 31. At the request of the department, the regulation change was expedited, and the wolf season extension took effect on May 1, 2011. While the department had opposed previous attempts to extend the wolf hunting season to the end of May, in this instance concerns about low deer numbers prompted the department to support the wolf season extension in Unit 3. It was hoped that the wolf harvest could be increased by affording the annual influx of nonresident black bear hunters the opportunity to take wolves incidental to spring bear hunting. Of the 377 wolves trapped or shot during the report period, 32 (8%) were taken during the May season extension. Of the 32 wolves taken during the month of May, 28 (88%) were taken by nonresidents and 4 (13%) were taken by resident hunters.

In most years trapping is the primary method of taking wolves in Unit 3. During the last 10 years, only during 2007 did the number of wolves taken with the use of firearms exceed those taken by conventional trapping methods. Most of the wolves taken by hunters are harvested opportunistically during hunts for other species. Nonresident hunters, however, consider wolves a highly sought-after trophy animal, and some big game guides offer guided wolf hunts in the unit. Trapping effort and success fluctuates annually in response to fuel prices and winter weather conditions. Wolf hides from Southeast Alaska are considered to be of relatively poor quality by fur buyers, and there is little financial incentive to harvest wolves. Most wolf hunting and trapping that occurs in the unit is recreational and is viewed by many as simply a means of controlling wolf populations to improve deer and moose populations. Much of Unit 3 is not hunted or trapped.

No changes are recommended to the Unit 3 wolf hunting or trapping regulations at this time.

II. Project Review and RY15–RY19 Plan

Review of Management Direction

MANAGEMENT DIRECTION

No changes in management direction are being proposed at this time.

GOALS

Continue to maintain a sustainably harvestable wolf population in Unit 3.

CODIFIED OBJECTIVES

Amount Reasonably Necessary for Subsistence Uses (ANS)

The Alaska Board of Game has made a "positive" customary and traditional use determination for wolves in Unit 3; however, the amount necessary for subsistence has not been established.

Because there is no resident subsistence hunt for wolves, the resident wolf hunting season in Unit 3 is classified as a "General hunt only."

Intensive Management

The Alaska Board of Game has identified Unit 3 deer as important for providing high levels of harvest for human consumptive uses. Intensive Management (5 AAC 92.108) population and harvest objectives for deer have been established at 15,000 and 900, respectively.

The board has made a "positive" customary and traditional determination for Unit 3 moose and set the amount necessary for subsistence at 40 moose per year from Units 1B and 3 combined. No other codified population or harvest objectives have been established for Unit 3 moose.

MANAGEMENT OBJECTIVES

Continue to maintain a sustainably harvestable wolf population in Unit 3.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1.

Discuss wolf sightings reported by agency biologists and members of the public.

Data Needs

Information is lacking on the ecology, abundance, distribution, and population demographics of wolves in Unit 3.

Methods

Observations of wolves made by ADF&G and USFS biologists, trappers, hunters, and other members of the public will be considered. It is expected that the annual statewide trapper questionnaire effort will continue and provide additional information, including individual trappers' subjective assessment of the population status of wolves in Unit 3.

2. Mortality/Harvest Monitoring

ACTIVITY 2.1. Monitor the wolf harvest through a mandatory pelt sealing program.

Data Needs

The harvest needs to be documented in order to ensure it is sustainable. An estimate of the extent of unreported human caused mortality is also needed.

Methods

Wolf harvest will continue to be monitored through a mandatory pelt sealing program. Data will be collected on the number of wolves killed, sex, date of take, method of take, method of

transportation used from home to the field, and when possible, an estimate of the number of wolves accompanying those killed.

ACTIVITY 2.2. Collect biological samples from harvested wolves.

Data Needs

Wolf hair and tissue samples are needed to evaluate the genetic structure of wolf populations in the region and to assess the level of population interchange between the mainland and the island portions of Southeast Alaska. Better information is needed regarding the spatial and seasonal variation in wolf diets across the region. In addition to genetic samples, additional data on wolf body weights and skull measurements are needed in order to better understand the morphology and subspecies status of wolves inhabiting Southeast Alaska.

Methods

Efforts will continue to opportunistically collect hide, hair, and tissue samples and foreleg bones from harvested wolves during the sealing process. When possible, wolf carcass weights and condylobasal skull measurements for subspecies analysis will also be obtained.

3. Habitat Assessment-Enhancement

No change from previous reporting period. No habitat-related activities for wolves are planned for this unit.

Data Needs

No estimate has been made of the amount or quality of wolf habitat in the unit.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

• Continue to archive sealing data in WinfoNet and store paper copies of sealing forms in the Petersburg office files.

Agreements

None.

Permitting

None.

References

- ADF&G (Alaska Department of Fish and Game). 2013. Operational plan for intensive management of Sitka black-tailed deer in a portion of game management unit 3. February 2013. Report to Alaska Board of Game. Alaska Department of Fish and Game. Division of Wildlife Conservation, Juneau. http:///www.adfg.alaska.gov/staticf/research/programs/intensivemanagement/pdfs/gmu_3_im_operational_plan_february_2 013.pdf
- Lowell, R. E. 2012. Unit 3 wolf management report. Pages 39–46 [*In*] P. Harper, editor. Wolf management report of survey and inventory activities 1 July 2008–30 June 2011. Alaska Department of Fish and Game, Species Management Report ADFG/DWC/SMR-2012-4 Juneau.
- Person, D. K., M. Kirchhoff, V. Van Ballenberghe, G. C. Iverson, and E. Grossman. 1996. The Alexander Archipelago wolf: A conservation assessment. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, General Technical Report PNW-GTR-384, Portland, Oregon.



