Nelchina Hunt Changed

Tier II subsistence hunters need to be aware of several important regulation changes regarding Nelchina caribou, including a shorter season and either-sex permits.

The season will be Aug. 10-Sept. 20 and Oct. 21-March 31. The change is a return to a more traditional opening date. The season was moved earlier with the advent of a Tier I primitive weapons hunt. With Tier I no longer in effect, the Board of Game agreed it would be better to give the herd the first 10 days of August to utilize the last of the summer forage and disperse across the northern portions of Game Management Unit 13. That dispersal was interrupted by an Aug. 1 opening.

Glennallen area wildlife biologist Bob Tobey believes that while scattering the animals, the change actually should make caribou more available to hunters across a wider stretch of the Denali Highway.

The other major change is that permits will be for either sex instead of changing the bag limit between the fall and winter seasons. Some harvest of cows is essential as Tier II hunters traditionally have selected bulls by an overwhelming margin and the bull:cow ratio is dropping steadily.

The harvest objective for bulls is 1,500. When that number is reached, the remaining unused permits will be valid for cows only. In the unlikely event 500 cows are taken first, then the remaining unused permits would be good for bulls only.

Nelchina hunters will need to pay close attention to the harvest numbers. ADF&G will widely announce the change when a harvest objective is met, but hunters should double check before going into the field.

Recorded information about the herd, including updated harvest numbers, can be heard at any time by calling the Nelchina Herd Hotline at (907) 267-2304. Glennallen area staff can be reached at (907) 822-3461 for answers to specific questions.

The harvest objectives reflect the numbers obtained from a mid-June composition count which downgraded the population estimate to 33,000 and put the cow:calf ratio at 32:100 — the lowest ever recorded for the Nelchina herd.

Poor calf productivity and survival mean fewer calves “recruited” into the adult population next year. Biologists believe the low calf:cow ratio is due mainly to poor range conditions last summer, and, to a lesser extent, wolf and bear predation.

Moose populations in most of the state were little impacted by the winter of 1998/99. Hunters can expect results similar to most past years this season. Coastal Alaska was hardest hit by winter. See inside area-by-area big game summaries. Photo by Chris Batin, Alaska Hunter Publications.

Hunter Education Required on Alaska Army Lands beginning January 1

A regulation requiring hunters on US Army lands to possess hunter education certification will go into effect in Alaska on January 1, 2000. US Army Alaska Natural Resources Chief Bill Gossweiler says the regulation has been on the books for two years, but Alaska implementation has been delayed because of the impact on hunters.

Gossweiler said Army commanders have been concerned that many Alaskans who use Army lands for hunting do not currently have the required certification and cannot obtain it in a short time. In other parts of the United States, most hunters do have the certification because every other state has some form of mandatory hunter education. The regulation was scheduled for implementation here on January 1, 1999, but delayed because of this concern.

The new regulation will affect hunters on Fort Richardson in the Anchorage bowl, Fort Wainwright in the Fairbanks area, and Fort Greely in the Delta Junction area. In addition to the bases themselves, Fort Wainwright and Fort Greely each manage large areas of nearby military lands south of Fairbanks and west of Delta. Civilian and military hunters extensively use these military reservations. A long-standing military regulation requires all hunters to obtain permits before using military lands in Alaska. This allows military personnel to...
The Alaska Hunting Bulletin is a publication of the Alaska Department of Fish and Game.

Frank Rue
Commissioner of Fish & Game

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Director, Division of Wildlife Conservation

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From the Director...The Way I See It

Wayne Regelin, Director of Wildlife Conservation

You will soon be seeing our new Mobile Shooting Sports System on Alaska's highways. This fifth wheel trailer will travel to communities on Alaska's road system to provide training in hunter education and several other shooting oriented projects.

One of the most exciting parts of this mobile facility is the DART training unit. Those of you who have been to the sports shows in Anchorage and Fairbanks in the last couple of years may have seen this in operation. It's an interactive marksmanship development system based around a computer operated large screen television with a laser equipped firearms. The shooter fires a laser light burst at a video image of big game. The computer then replays the sequence and shows where the shot would have struck in relation to the lethal zone. It is a very effective training tool.

The trailer is equipped with a variety of other firearms training equipment, which brings me to an important point. This mobile shooting sports facility has been made possible by an appropriation from the Legislature and significant help from a number of corporate partners. While the Alaska Legislature made possible the funds for the truck, trailer and staff to operate it, our partners have provided much of the equipment and supplies we are using. That's why you will see the names of prominent manufacturers in the shooting sports industry on the side of this trailer. It wouldn't have been possible without them.

I want to take this opportunity to thank Browning, US Repeating Arms (Winchester), Hodgdon Powder, Nosler, Redding, Knight Muzzleloaders, Leopold, Savage Arms and Swarovski for their exceptional contributions toward helping train Alaska's shooters and hunters. Other partners in the Hunter Information and Training program are the Ruffed Grouse society and Safari Club International. Each of these manufacturers and organizations have helped us extend the reach of our Hunter Information and Training program and have positively impacted thousands of Alaskans.

We are developing a calendar for the Mobile Shooting Sports System for the months ahead. If you would like to have this Training system in your community, please give us a call in Anchorage at 267-2534.

On another topic that will be of interest to hunters that are also trappers, we have been working with Alaska trappers to help develop "Best Management Practices." We recently conducted some workshops on this subject here in Alaska. The purpose of this concept is to help trappers, especially newer trappers, develop ways of trapping that provide the best possible fur, and the most humane trapping methods.

Finally, Southcentral Alaska youth will need Hunter Education certification for the first time next year. Any hunter born in 1984 or earlier will need a hunter education card to hunt on the Kenai Peninsula, the Anchorage area, and the Mat/Su area. I encourage adult hunters to accompany your children to classes being offered this fall and next spring in these areas. Students often learn best when accompanied by their parents or other significant adults in their lives.

Best wishes for a great 1999 hunting season. Wayne

Hunter Information and Training News

Hunting Clinics: The Hunter Information and Training Program conducted muzzleloading and survival clinics for hunters in Fairbanks and Anchorage during May. These clinics are part of the skills-based, hands-on clinic series designed to help hunters become more proficient and competent in the field. Those attending the muzzleloading gun clinic spent much of their clinic on the range becoming familiar with the various types of muzzleloading ignition systems, propellants, and projectiles. The clinic was climaxd by a "hunt" for plywood moose. Each shooter had the opportunity to identify and place shots in the vital heart-lung area of life-size plywood moose at a distance of 100 yards. Participants praised the hands-on approach to learning new skills. The survival clinic actually involved two nights out under primitive field conditions. Participants learned essential skills of fire and shelter building under difficult circumstances.

The intent of these survival clinics is to prepare hunters both skill-wise and psychologically for an unexpected night out or even a deliberate siwash when in good hunting country.

Goldenview (Anchorage) School Hunter Education Class: John Matthews and Tony Monzingo were invited to serve as guest instructors at Jim Lepley's Goldenview Middle School hunter education class. They discussed hunter ethics and values with the students. With the support of the principal, Lepley has instituted basic hunter education as a regular elective in the middle school curriculum. This is the first time hunter education has been offered as a regular class in the Anchorage school system. Matthews and Monzingo are working with key teachers and administrators to expand this elective concept to other middle schools.

Youth Bear Hunt: The Hunter Information and Training Program sponsored an educational/cultural youth bear hunt May 21-24 in Prince William Sound's Olsen Bay. Six teenagers made the hunt and one young man, from a non-hunting family and on his first ever hunt, was successful taking a 5-1/2 foot black bear. The U.S. Forest Service provided its research cabin in Olsen Bay for a home base and financial assistance was provided by the Alaska Chapter of Safari Club International, the Ruffed Grouse Society, and the Hunter Heritage Foundation of Alaska. Key logistical and moral support was provided by Cordova area biologist Dave Crowley. The teens are part of the HIT's Youth Shooting Development Program. This program focuses on introducing urban youth who have no significant prior experience to recreational shooting sports, including hunting. Grants from Safari Club and the Ruffed Grouse Society largely funded the project. The teens and their parents also worked hard to fund their shooting activities by selling cotton candy, hot dogs, and pop at Wal-Mart. Their profits were matched by the Wal-Mart Foundation, which gave the youngmsters a funding boost. These teens now have an appreciation for the role of recreational shooters and hunters in funding wildlife management through the purchase of licenses, tags, firearms, and ammunition.

Continued on back page

The purpose of the Hunter Information and Training Program is to help Alaska hunters hit the target – whether it be a paper target like the one here, making a clean and efficient moose kill, or become more ethical hunters and effective wildlife conservationists. ADF&G photo
Southeast Alaska 1999 Regional Big Game Summary

Heavy and persistent snows covered much of Alaska's Panhandle in early 1999. In Northern Southeast, biologists reported one of the worst winters in recent decades. Deep, persistent snow and cool temperatures can significantly impact deer, moose, and goat populations. Snow has less impact on bear populations as they are in winter dens. Bears may actually benefit because of increased availability of winter-killed carrion.

ADF&G management biologists across the region reported varying effects of winter on big game in their respective areas. In areas where snow depths are deeper than average, biologists observed heavier than usual deer losses. Some parts of the region saw relatively little deer loss, considering the conditions. The outer islands were impacted less because of the warming influence of the Pacific. Impacts of this past winter will be better understood as harvest reports for the upcoming 1999/2000 hunting seasons are analyzed.

Black and brown bears appear to have emerged from winter dens later than usual, biologists reported. Petersburg Area Biologist Ed Crain said the bears he saw were well furred, and most of good size. Ketchikan Area Biologist Boyd Porter said it was too early to assess any losses in mountain goat populations, but that there were probably some losses due to deep snow, especially avalanches. On the northern Southeast mainland, acting Juneau Area Biologist Neil Barton said moose losses appeared higher than usual in the Yakutat area, but moose in Gustavus and Haines apparently wintered relatively well.

Southeast Elk Hunting News

by Ed Crain, Petersburg Area Wildlife Biologist

Elk hunters have a better chance to obtain an elk drawing permit in Southeast Alaska this season. The Department of Fish and Game is issuing 70 drawing permits and the Petersburg Rod and Gun Club will raffle one elk permit. The season dates have also been lengthened by two weeks. This year the season will open September 15 and close October 31. The two weeks in September will be archery only and hunters must complete the International Bowhunters Educational Program (IBEP) before hunting in the September season. During the October part of the season any permit holder may use either archery or firearms and the IBEP card will not be required.

Fish and Game first issued 29 permits in 1997 when the elk population was estimated at 250 animals. At that time staff estimated the herd could sustain a harvest of 20 bulls. Only 8 were harvested. In 1998 a total of 31 permits were issued and 9 bulls were harvested.

Although the exact size of the population is unknown, we now estimate there are over 300 elk and their numbers are increasing. All of Unit 3 is open to the elk permit hunt, but most of the elk are on Etolin Island, with a small breeding population on Zaremba Island. There have been unconfirmed elk sightings on all the adjacent islands.

ADF&G released both the Roosevelt and the Rocky Mountain subspecies of elk from Oregon on Etolin Island in 1987. Due to the potential of interbreeding between the two subspecies, the Boone and Crockett Club will score the Southeast elk as American elk which requires a higher minimum score to qualify for the record book than the Roosevelt elk score. Several of the harvested elk had five or more points on each side of their antlers.

Most of the hunters have accessed Etolin Island by boat and several elk were shot near or on the beach. A few hunters flew into alpine lakes to hunt. Zaremba Island has a network of logging roads that provides hunting access. The potential for elk to become established on adjacent islands increases. The Department is concerned about the impact elk could have on native deer. We have developed a draft plan for managing elk in Southeast Alaska. We are interested in developing a list of alternatives for minimizing elk expansion to other areas until the effects of elk on native species have been more fully evaluated. The Department would like public comment on the plan. The Southeast Alaska Elk Management Plan is available at any southeast Fish and Game office.

Ed Crain serves as Area Wildlife Biologist in Petersburg. Ed was previously a biologist in the Fairbanks Regional Office.
Southeast Alaska Newsbreaks

Southeast Alaska Deer Temporarily Hurt by 1998/99 Winter Southeast Alaska DWC biologists and US Forest Service counterparts conducted annual deer pellet group surveys in 26 drainages from Ketchikan to upper Lynn Canal this past spring. While this past winter's heavy snowfall made completion of many transects impossible, the data collected indicate deer survived relatively well in the Sitka and Petersburg areas, and declined in areas closer to the mainland. The Cleveland Peninsula and Seymour Canal appeared to have been hardest hit. Beach mortality transects run in association with the pellet group transects indicate that most of the fawn population was probably lost last year. However, given the Sitka black-tail deer's reproductive potential, this should not be a problem unless another severe winter follows the one just past.

Biologists urge people to leave fawns alone. As always in the spring and early summer months, many well-intentioned humans call about or bring "orphanned" fawns into Southeast Alaska Division of Wildlife Conservation offices. Typically, the does are not far away, biologists say, and often are just waiting for people to leave to reunite with their offspring. People often suggest these small deer be sent to zoos where they can be cared for; however, fawns typically do poorly in these situations.

Moose Habitat Improvement Progress at Thomas Bay: Petersburg wildlife staff worked with US Forest Service (USFS) biologists and foresters again last summer to further enhance moose habitat at Thomas Bay. The Stikine River and Thomas Bay are among the most important moose populations in southeast Alaska. Petersburg Area Wildlife Biologist Ed Crain said this was the second phase of a 3-year capital improvement project aimed at improving moose habitat. During the first phase, managers cleared and re-opened ten miles of overgrown logging roads. During the summer,1998 second phase, contractors "thinned" the forest. Crain said he worked with USFS biologist Joe Deor and silviculturist Rich Jennings to devise a thinning scheme to optimize the forest for both moose and future commercial forest harvest. Crain and his colleagues selected four units of second-growth forest totaling 380 acres. Thinning crews then went in and removed smaller trees in a mottled pattern. The thiners left all poplar and willow as they provide some browse. Crain says blueberry and huckleberry are the most important moose food plants in this part of Alaska, and removing the evergreen "overtop" allows them to flourish. The USFS has thinned hundreds of acres in the Thomas Bay area in the last few summers and the combination of their work and this AD&G project on state lands should provide improved moose hunting opportunities for many years.

Juneau Regional Hunter Education Training Facility: The Alaska Legislature has appropriated $1.5 million for a new Southeast Alaska regional hunter education training facility. Wildlife Conservation Division Deputy Director Matt Robus said a citizen and agency steering group has located a preferred location on Mounta Creek Road in the Mendenhall Valley area. DWC is now working with the City & Borough of Juneau on a permit and lease arrangements for the land. Robus said tentative design goals include classroom space, an indoor shooting range, and archery lanes. Final design work will begin this fall with construction probably beginning next spring or summer. This facility will be the state's third regional hunter education training facility. The others are in Anchorage and Fairbanks.

Record Kuiu Island Black Bear Harvest A Problem? Last year's harvest of 151 black bears on Kuiu Island was a record, and that combined with a generally increasing trend has DWC managers, guides and hunters on alert. Petersburg Area Wildlife Biologist Ed Crain said the entire 1997/98 GMU 3 black bear harvest was about 245 animals, so more than half of the black bears taken came from Kuiu. He expects this year's (1998/99) harvest to come in at about 150 from Kuiu and 280 for all of GMU 3. Crain said sealing records show skull sizes are remaining at over 18 inches and there are more than 80% males in the harvest — not an indication of problems. Guides, and long time hunters, however, say that they have seen more bears in past years. The high numbers themselves and concerns of guides and hunters are causing biologists to more carefully analyze estimated population sizes and sustainable harvest levels. Crain said Region 1 staff are considering a research project that would help managers better understand black bear population sizes and sustainable harvest levels in the panhandle.

Reports of mountain lions increasing in central Southeast: Mountain lion sightings continue to increase in Southeast Alaska, especially in the Petersburg area. A lion that biologists believe came from a wildlife rehabilitation facility, rather than released captive, is believed to have reached Wrangell in 1987. Last December a trapper caught a lion in a wolf snare on Kupreanof Island. Lion experts indicate that this animal was probably a steppe lion that came from the Greater Yellowstone Ecosystem, rather than released captive, and that combined with a generally increasing trend has DWC managers, guides and hunters on alert. Petersburg Area Wildlife Biologist Ed Crain said the entire 1997/98 GMU 3 black bear harvest was about 245 animals, so more than half of the black bears taken came from Kuiu. He expects this year's (1998/99) harvest to come in at about 150 from Kuiu and 280 for all of GMU 3. Crain said sealing records show skull sizes are remaining at over 18 inches and there are more than 80% males in the harvest — not an indication of problems. Guides, and long time hunters, however, say that they have seen more bears in past years. The high numbers themselves and concerns of guides and hunters are causing biologists to more carefully analyze estimated population sizes and sustainable harvest levels. Crain said Region 1 staff are considering a research project that would help managers better understand black bear population sizes and sustainable harvest levels in the panhandle.

The winter of 1998/99 was hard on some deer populations. Biologists report substantial deer losses in parts of Southeast and Kodiak, but do not expect long term problems unless additional hard winters follow. Kodiak buck photo by Chris Batin, Alaska Hunter Publications.

by Tom Paul

An April decision by the US Forest Service putting an additional 233,000 Tongass Forest acres off limits to new logging and road building is good news for Southeast Alaska hunters.

Under Secretary of Agriculture Jim Lyons' decision on Tongass Land Management Plan appeals protects an additional 18 areas of the forest. Some areas among these are particularly important to hunters in Southeast Alaska. Although the road building restrictions may limit opportunities for future access, most areas have extensive shorelines with good habitat for both fishing and hunting.

The Cleveland Peninsula north of Ketchikan has provided about 5% of Ketchikan residents' deer harvest in recent years and has a healthy and relatively unexploited mountain goat population as well. Petersburg Area Wildlife Biologist Ed Crain said the 1997/98 harvest of about 18 bears a year. In Port Houghton, on the mainland north of Petersburg, the Sandborn Canal and salt chuck drainages have provided an average annual harvest of four black bears. The Port Houghton area is very scenic and has a healthy and only lightly hunted mountain goat population — and a growing moose population.

Ushk Bay is ranked in the top five drainages on Chichagof Island for brown bear harvest. Across Hoonah Sound, Broad Creek and Broad Finger Creek have been among the top 20 Chichagof drainages for brown bear harvest. That shore of Hoonah Sound has also consistently had one of the highest deer densities in Southeast Alaska.

Near Petersburg, southeast Mitkof Island is believed to be important habitat for wildlife moving from the mainland. Moose have undoubtedly used this corridor in expanding their range to Mitkof from the Stikine River drainage. In less than a decade the Mitkof Island moose harvest has grown from 0 to 24 annually.

On Kupreanof Island, Lyons' decision designated Castle River and Kushmeедин Creek wild and scenic rivers and protected their drainages from logging. Both drainages contain some of the best remaining deer winter habitat on southern Kupreanof. Castle River is a popular hunting and fishing area for Petersburg residents.

Tongass Decision Protects Hunting Areas

The new forest plan gives ridgetop to ridgetop protection for Kuiu black bear hunters. Two bays in particular, No On Kupreanof Island, Lyons' decision designated Castle River and Kushmeedin Creek wild and scenic rivers and protected their drainages from logging. Both drainages contain some of the best remaining deer winter habitat on southern Kupreanof. Castle River is a popular hunting and fishing area for Petersburg residents.
The hard winter of 1998/99 mainly affected Southcentral Alaska game populations living near the Gulf of Alaska coast. Deer and goat populations in Prince William Sound and Kodiak suffered substantial losses in some areas. Kodiak Area Wildlife Biologist Larry Van Daele says the loss of deer in his area was probably one of largest ever. Fortunately, he says, the long term outlook should only be a matter of concern if the area is hit with deep and persistent snows again.

Kenai Peninsula moose and Kodiak elk were also hit hard. Biologists are continuing to assess the impacts as annual game counts are conducted.

North of the coastal mountain ranges, biologists reported less impacts of winter on game populations.

### Cordova Area GMU 6 Prince William Sound
Area Management Biologist Dave Crowley 907/424-3215

| Area-Wide Trends |  
|------------------|------------------|
| **Population** | **98 Harvest** | **Winter** | **Regulations** |
| Black Bear | Increase | Increase | Some localized winter kill of deer and moose; not extensive |
| Brown Bear | Increase | Increase | Deer bag increases to 5. Brown bear one bear per regulatory year (except 6D). |
| Deer | Increase | Increase | In-unit sealing |
| Mountain Goats | Same | Same |  |
| Moose | Increase | Increase |  |

Comments: Moose registration hunts close quickly (typically 7-10 days) with emergency orders; hunters should not wait to hunt. Remember same-day airboating not legal in GMU 6B. Road completion to Whittier will increase access to Prince William Sound hunting opportunities, and may eventually affect regulations.

### Glennallen Area GMUs 11 & 13 Upper Copper and Upper Susitna drainages
Area Management Biologists Bob Tobey and Brad Scoton 907/822-3461

| Area-Wide Trends |  
|------------------|------------------|
| **Population** | **98 Harvest** | **Winter** | **Regulations** |
| Black Bear | Same | Same | Generally mild; not much effect on big game. |
| Brown Bear | Small increase | Same |  |
| Caribou | Same | Same |  |
| Dall Sheep | Same | Same | Shorter moose season; longer brown bear season; revised Tier II caribou hunt; many other changes; see regs. |
| Mountain Goats | Same | Same |  |
| Moose | Decrease | Decrease |  |

Comments: Caribou calf survival this summer very poor. Wolf numbers increasing. Moose and caribou hunting pressure high. Moose and Nelchina caribou bull:cow ratios becoming a matter of concern. Biologists ask hunters to hunt away from the roads.

### Anchorage Area GMU 14C Turnagain Arm to Knik Arm
Area Management Biologist Rick Sinnott 907/267-2185

| Area-Wide Trends |  
|------------------|------------------|
| **Population** | **98 Harvest** | **Winter** | **Regulations** |
| Dall Sheep | Same | Same | Main winter kill of moose was in the Twentymile/Portage area where snow was very deep and persistent. |
| Mountain Goats | Same | Same | Muzzleloader proficiency course now required for 14C muzzleloader hunts. Upper Campbell moose hunt still on hold. Many small changes; check regulations. |
| Moose | Same | Same |  |

Comments: Potential for loss of breeding duck habitat and waterfowl hunting opportunity, and possibly loss of Rabbit Creek Rifle Range due to strong push to put an extension of the bike trail through the Anchorage Coastal Wildlife Refuge.

Most young Southcentral Alaska hunters will need a hunter education card before going afield in the fall of 2000. The Alaska Board of Game recently passed a new regulation that requires hunters born after January 1, 1984 to complete a hunter education course before hunting in the most heavily populated parts of the region.

The new regulation does not go into effect until August 1, and when it does, it will affect only GMU 7 & 15 (the Kenai Peninsula) and GMU 14 (Anchorage and the Mat/Su areas). The Board put off implementation to allow young hunters time to obtain the necessary training.

Hunter education training is provided in Alaska by a corps of volunteer instructors working in cooperation with ADF&G's Hunter Information and Training (HIT) Program. Most hunter education classes are taught in the late fall, winter and spring months. Classes are generally not available right before hunting seasons.

ADF&G requires that each class be at least ten hours long, but may extend to as many as 18 hours or more. Each hunter education class provides basic instruction on firearms safety, wildlife conservation, and hunting ethics and responsibility. Many instructors provide additional training on subjects like survival, map & compass reading, specialty hunting equipment, game care, and more, and that extends class time. Live fire training and hands-on field courses are other frequent additions to the minimum training. Most classes are held over a series of several days.

The new hunter education requirement can be satisfied with a card from another state or Canadian province. Most states and provinces accept the cards issued by other states and provinces. Similarly, other states and provinces accept Alaska's hunter education card.

While the new requirement directly affects only young hunters, HIT program staff recommend that parents or other significant adults accompany the students in the classes to help provide the best possible learning environment. Experienced hunters can help the overall learning situation by sharing their experience. Furthermore, most adults discover that they learn valuable information while helping develop a family hunting tradition.

Information about upcoming hunter education training opportunities can be obtained from Division of Wildlife Conservation offices in Seldovia (907/260-2903), Anchorage (907/267-2373), Palmer (907/746-6321) and other locations in Alaska.

[Editor's note: see related story about mandatory hunter education for all hunters on US Army lands in Alaska on page 1]
Mulchatna Herd Update

“Steer Deer” Numbers Up On Kodiak: State and federal wildlife biologists are observing an unusual physical phenomenon in some Kodiak Island deer. Kodiak Area wildlife biologist Larry Van Daele says these “steer deer” appear to either have no testicles or testicles that have not developed and descended. Their antlers are also unusual in that they tend to have many small points instead of larger points — giving rise to their other name: “cactus bucks.” Some hunters have reported that these deer are smaller.

Van Daele said biologists don’t know how widespread the phenomenon is, although it does not appear to be common. He did say that there seem to be more reports now than when he worked in Kodiak in the early 1980s. Biologists are asking deer hunters and guides to report anything unusual about the deer they observe or harvest.

“We’re just collecting information right now,” Van Daele said. “However, we don’t have any indications at this point that we have a problem.”

Kenai Peninsula Bear Incidents: A brown bear was killed in defense of life or property on the Kenai Peninsula over the Memorial Day weekend in the wake of a fatal mauling. A lone hiker was reported overdue on a horse trail off Funny River Road on May 24. The next day, his body was found several miles up the trail. He had been killed by a single bite to the head. It appears the man, an experienced outdoorsman, stopped for lunch when the bear appeared. According to relatives, he would have been inclined to fire a warning shot. That may have precipitated a charge. He fired a second shot, apparently striking the bear. An empty cartridge was found in the chamber of his .280 Remington near his body. Biologists searched the area repeatedly by helicopter for the remainder of the week but there was no sign of the bear. Over the holiday weekend one of two yearling brown bears causing trouble in the Scout Lake area was killed. The bear was a female so it will count as one-half toward the allowable harvest of six females for the year. Area Wildlife Biologist Ted Spraker interviewed the shooter and concluded the killing was justified. The bears came to his property to eat his ducks, pigeons and chickens for four days, and had no fear of humans. The property owner also has seven horses but the bears did not seem too interested in them, probably due to their size. Three culvert traps were left in the area to try to catch the remaining yearling.

Award: Soldotna technician Larry Lewis was presented the annual Conservation Award by the Kenai Peninsula Chapter of Safari Club International in recognition of his dedicated service to hunters and wildlife. The award was presented at the chapter’s annual banquet, the largest fundraiser ever for the chapter. Lewis also worked with peninsula legislators to establish a “Take a Kid Hunting Weekend.”

Palmer Birds and Bears Affected By Late Spring: Migrating geese numbers staging in the Palmer area were as high this spring as biologists there can ever remember. Delayed migration due to the slow thawing of western Cook Inlet marshes may have backed up the migration. Whatever the reason, the situation provided awesome geese viewing opportunities.

Mulchatna caribou have now passed the 200,000 mark and are migrating in a wider area. Photo by Deltana Outfitters.

1999 Southcentral Game Summary...

### Palmer Area GMUs 14A, 14B & 16A Mat-Su, Western Cook Inlet

<table>
<thead>
<tr>
<th>Population</th>
<th>98 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Bear</td>
<td>Same or increase</td>
<td>Slight increase</td>
<td>Null; no significant impact.</td>
</tr>
<tr>
<td>Brown Bear</td>
<td>Same or slight increase</td>
<td>Same</td>
<td>No antlerless permits in 14A; eliminated some any-bull seasons. Fall moose season will be five days longer. See tags for other changes.</td>
</tr>
<tr>
<td>Dall Sheep</td>
<td>Same or slight increase</td>
<td>Decrease</td>
<td></td>
</tr>
<tr>
<td>Mountain Goats</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Moose</td>
<td>Same or slight decrease</td>
<td>Decrease</td>
<td></td>
</tr>
</tbody>
</table>

Comments: High numbers of predators in 14B and 16. Some concerns about snowmachines pushing moose out of important post-rut areas, for example Willow Mtn. Critical Habitat Area. Late moose seasons are being shortened to reduce stress on post rut. There will be a very liberal any moose registration permit season on Karluk Island. This is a hard hunt with difficult access; hunter orange recommended. Wolf population in area increasing.

### Kenai Peninsula GMUs 7 & 15 Entire peninsula

<table>
<thead>
<tr>
<th>Population</th>
<th>98 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Bear</td>
<td>Same</td>
<td>Increase</td>
<td>Winter moose calf mortality high. Fall 2000 harvest will probably be substantially reduced. Winds hopefully helped sheep and goats avoid big losses.</td>
</tr>
<tr>
<td>Brown Bear</td>
<td>Same or slight increase</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Caribou</td>
<td>Increase</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Dall Sheep</td>
<td>Slight decrease</td>
<td>Decrease</td>
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<tr>
<td>Mountain Goats</td>
<td>Slight decrease</td>
<td>Decrease</td>
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<tr>
<td>Moose</td>
<td>Slight decrease</td>
<td>Decrease</td>
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Comments: Berry crop failure may have contributed to higher bear harvest last year. Biologists on Kenai offer age and size measurement for sheep and goat horns if brought into the office.
Lice on the Loose: Louse Infestation Widens From Kenai Peninsula to Mat/Su

Adapted from a scientific paper prepared originally by ADF&G biologists Herman Griese, Ted Spraker and Mark Masteller

A New Parasite in Alaska

The symbol of all that is wild in Alaska, the gray wolf, stands to be deposed not by guns and traps but by a louse brought to Alaska on the back of dogs. Red wolves, gray wolves and coyotes in the contiguous U.S. and southern Canada carry the "dog biting louse" (Trichodectes canis), a common parasite of domestic dogs. Wildlife scientists in only the last two decades identified Kenai Peninsula Alaska gray wolves as hosts.

History of the Kenai Louse Infestation

In the winter of 1981-82, a trapper presented 11 wolves from Game Management Unit 15A wolves for sealing. The wolves came from 2-4 packs, and they all had lice. At least one coyote harvested from the area that winter also appeared to have lice.

The lice had a dramatic effect on these wolves. Pelt conditions were extremely poor, exhibiting varying degrees of hair loss. Guard hairs were broken at approximately half-inch lengths and underfur was matted. A waxy substance caused by skin irritation created a near intolerable smell — something like a mix between rotten flesh and ear wax. The irritation caused frequent scratching and rubbing. Hair loss was greatest on the back and extension of the trunk.

Hair loss was greatest on the back and approximately half-inch lengths and underfur was matted. A waxy substance caused by skin irritation created a near intolerable smell — something like a mix between rotten flesh and ear wax. The irritation caused frequent scratching and rubbing. Hair loss was greatest on the back and extension of the trunk.

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Louse-infested wolves frequently shake, scratch and roll in response to the skin irritation the lice create. Their scratching and shaking, much like a dog shaking upon emerging from water, is frequent and noticeable from an aircraft.

The radio-collared female and her mate both exhibited frequent shaking and scratching. We successfully captured and treated both wolves. Subsequently, when we inspected trapper-caught wolves from the area we found infestation.

Continued on page 8

1999 Southcentral Game Summary...

<table>
<thead>
<tr>
<th>Kodiak Area GMU 8 Kodiak Archipelago</th>
<th>Area Management Biologist Larry Van Daele 907/486-1880</th>
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<tbody>
<tr>
<td><strong>Area-Wide Trends</strong></td>
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<tr>
<td>Population</td>
<td>98 Harvest</td>
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<tr>
<td>Brown Bear</td>
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<tr>
<td>Elk</td>
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<td>Deer</td>
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</tr>
<tr>
<td>Mountain Goats</td>
<td>Probable Decrease</td>
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</table>

Comments: Brown bears are at high density, berry crop expected to be poor this year, may impact cubs next year. Considerable deer winter kill; proportionally less of deer may be one of the greatest ever. Big bucks will not be as plentiful this year. No anticipated emergency order changes for deer. Goat populations have been increasing until this winter; last year's goat harvest was highest yet. Elk hunters should be aware registration hunt may be curtailed by emergency order if survey data shows verified drop in elk numbers.

<table>
<thead>
<tr>
<th>King Salmon Area GMU 9 &amp; 10</th>
<th>Area Management Biologist Dick Sellers 907/246-3340</th>
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<tr>
<td><strong>Area-Wide Trends</strong></td>
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<tr>
<td>Population</td>
<td>98 Harvest</td>
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<tr>
<td>Black Bear</td>
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<tr>
<td>Brown Bear</td>
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<tr>
<td>Caribou</td>
<td>See notes below</td>
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<tr>
<td>Moose</td>
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Comments: Main black bear numbers in 9B; declining black bear harvest probably due to Mulchatna caribou harvests moving farther west. Fall 97 and Spring 98 highest ever brown bear harvest. Northern Alaska Peninsula (NAP) caribou herd continues to decline; SAP caribou herd appears to be bottomed out, and may be on road to recovery. Harvest low in both herds.

<table>
<thead>
<tr>
<th>Dillingham Area GMU 17 Bristol Bay area</th>
<th>Area Management Biologist Jim Woolington 907/842-2334</th>
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</thead>
<tbody>
<tr>
<td><strong>Area-Wide Trends</strong></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>98 Harvest</td>
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<td>Brown Bear</td>
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<tr>
<td>Caribou</td>
<td>Probable increase</td>
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<tr>
<td>Moose</td>
<td>Same</td>
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</tbody>
</table>

Comments: Moose and caribou meat must be left on the bone on quarters until removed from the field or processed. (See regulations for details). Lots of private lands in GMU 17 so hunters should be sure to ask permission where needed. Mulchatna herd is in good shape, and ADF&G is encouraging harvest.

Mulchatna Herd Update...

Mulchatna herd (GMUs 17B & C and 19A & B) is on the books.

Even with more than 200,000 caribou in the herd, finding them isn’t always guaranteed. Bartley recommends hunters listen to the advice of locals and air taxi operators. “They usually know where the caribou are on a day-to-day basis, and it pays to listen to them and go where they say, even if you have your heart set on a particular place.”

According to Jim Woolington, the area wildlife biologist in Dillingham, most of the Mulchatna Herd hoofed about in a large area of southwest Alaska last winter. Radio tracking flights during the winter revealed large numbers of the animals in the western side of the Kilbuck Mountains in Unit 18.

Hunters are reminded that hunting caribou the same day as airborne is legal ONLY from Jan. 1 through April 15, in game management units 9B, 17B, and that portion of 17C east of the Nushagak River.

Woolington can be reached at (907) 842-2334 for information on the herd.

John Wyman, an avid hunter, angler, and former hunter safety instructor, has worked for ADF&G as a Fish & Wildlife Technician since 1992 and is currently completing a degree in fisheries biology at the University of Alaska Fairbanks. John has served as editor of a weekly newspaper and for the last few years as a columnist with Alaska Fishing & Hunting News Magazine. This is his first appearance in the Alaska Hunting Bulletin.
Lice on the Loose: Louse Infestation Widens

Continued from page 7

that pack, what we saw suggested a successful cleansing effort.
During the winter of 1992-93, ADF&G staff conducted a statewide effort to evaluate the extent of Alaska louse infestation in wolves and coyotes. We looked at hundreds of wolves brought in for sealing. Our directions were to inspect all wolves brought in for sealing. We found no evidence of lice except on the Kenai Peninsula. Based on this, ADF&G adopted a policy of aggressively working to eliminate the spread of lice beyond the Kenai Peninsula.

Beginning in December, 1998 trappers began to bring into ADF&G offices louse-infested wolves and coyotes in the area between Willow and Talkeetna. After considerable deliberation, ADF&G committed funds and staff to investigate the infestation and, if appropriate, to follow up with treatment or pack removal.

Counterattack
Our observations led us to believe the new infestation centered along the George Parks highway between Willow and Talkeetna, within the drainage of the lower Susitna River. We conducted an initial reconnaissance of the area and inspected three wolf packs from fixed-wing aircraft during the first week in January 1999. We then captured wolves in mid-January using helicopters and spotter aircraft. Our objective was to capture at least one wolf from each pack in the study area, but to strive for one adult and one puppy in each pack. At least one wolf from each pack was radio-tagged and every animal we handled was treated with ivermectin. We ear-tagged and flagged all wolves to identify their previous treatment.

We followed the investigative effort with a second effort the following week to capture and treat all wolves in each infected pack. After that treatment effort we radio-tracked the packs at least once but as many as nine times in the subsequent six-week period to ensure that all infected wolves were treated.

During February and March we distributed 1,200 treated baits, consisting of 3-6 ounces of moose meat injected with ivermectin in paste form. Our goal was to reach coyotes and any lone wolves not previously captured and treated. We contracted with Wildlife Services of the US Department of Agriculture to assist in distributing baits. We also wanted to live capture as many coyotes as possible within the infested pack area. We relied heavily on local trappers for observations of wolf packs and in dispersing baits. We also quizzed trappers on the extent of lice in coyotes caught from the work area.

Did the Mat/Su De-Lousing Project Work?
We found and evaluated 14 packs containing a pre-trapping season minimum of 135 wolves. Three packs containing 30 total wolves were infested. The infested packs were the Willow Mountain pack (12 wolves), Montana Creek pack (5), and the Deshka/Moose Creek pack (13). Trappers provided animals for evaluation from two additional clean packs. We observed the two remaining packs at close range from the air. They were clean.

We suspected that it would be impossible to treat all of the wolves. For that reason, we called a meeting of interested groups that we knew would be affected by aerial shooting, should that be necessary to finish the job. These groups agreed with our proposal, and the Governor's office gave the green light.

We mutually agreed to capture and treat before relying on aerial shooting to complete the task. It was not necessary to kill any wolves this winter.

Singles and small groups are more difficult to deal with. In this case, however, we believe that between our efforts and effort by trappers, we were able to account for all of the wolves.

We checked with 14 active trappers within the infestation area and evaluated 36 coyotes for lice. Several were infested.

We found that coyotes readily discovered and ate the 1,200 treated baits we scattered. In many cases individual coyotes consumed several baits.

Our attempts to live capture coyotes during this later phase of the project proved unsuccessful. Many of the coyotes had become trap and snare shy by the end of the trapping season.

We believe we were at least 90% successful in identifying and treating the infested wolves in the Lower Susitna River area. Undoubtedly, the infestation was beyond its first year of development.

The level of infestation within the coyote population appeared to be in the range of 10-20%. This level is well above that observed on the Kenai Peninsula over the past 17 years. We had limited time, money and access to put out treated baits for coyotes. More baits distributed over a greater area would probably have increased overall effectiveness of the program.

The origin of the Mat/Su infestation was likely free roaming domestic dogs. The potential for interaction between dog and wild canids like wolves and coyotes has increased substantially in the last two decades. More residents in the Susitna Valley, more restrictive wolf harvest methods, and abundant moose have enhanced the rapid recovery of a locally depressed wolf population.

The overlap between wild and domestic canids was inevitable. Wolves and coyotes probably killed many infested dogs allowing the lice to transfer to a new host. It’s also possible that coyotes may have served as an intermediate host. Not all interactions between coyotes and dogs are fatal.

The occurrence of coy-dogs in parts of North America is a testament of additional opportunities for louse dispersion. Our de-lousing program was not 100% successful, but we were able to substantially reduce the level of infestation, especially in wolves.

[N Editor's note: The logical question after reading this is “what next?” Top-level Division of Wildlife Conservation managers regard the spread of louse as a very serious matter, and are in the process of developing an action plan this summer. Staff have demonstrated that it is possible to at least slow, and probably to stop the spread of the infestation by negotiating with wolves and coyotes. However, the financial and manpower costs are high. There would also be social costs in implementing an effective louse control program because of the connection with dogs and lingering concerns about killing of wolves that cannot be cleansed. DWC managers indicate that whatever course of action they select will be subject to public review and comment before implementation. Stay tuned.

Hunter Education Required on Army Lands...

Continued from page 1

direct hunters away from areas containing unexploded ordinance or active live-fire training exercises.

The new regulation does not affect Air Force lands.

Meanwhile, Alaska volunteer hunter education instructors are gearing up to provide necessary training in the areas affected by the regulation. Fairbanks ADF&G regional hunter education coordinator Bob Hunter says instructors in Fairbanks and Delta Junction are developing classes this summer and fall to meet the anticipated demand. Class schedule information can be obtained from hunter information and training program staff in Fairbanks (Bob Hunter — 907/459-7211) and Anchorage (Rod Perry — 907/267-2373). Alaska hunter education certification is accepted in other states and provinces that have these requirements.

Hunter education requirements are widening in Alaska. Beyond the military requirement, some younger Southcentral Alaska hunters will need to be certified next summer.

Beginning August 1, 2000, hunters born after January 1, 1984 must have completed a hunter education course to hunt in Game Management Units 7, 14 and 15 (the Kenai Peninsula, the Anchorage area and the Mat/Su area east of the Susitna River). [See related article on page 5]
Foot rot: Mulchatna Hunters Should Avoid Lame Caribou

© by John Wyman

Reports of dead and sickly caribou filtered in to the Dillingham and Anchorage Fish and Game offices last summer. Residents, hunters and air taxi operators near Iliamna Lake reported seeing caribou of the Mulchatna Herd with swollen and infected feet. Some said they had even found a few dead caribou in the area north of Iliamna. The news raised concerns of possible health threats to those eating caribou from the region, and threats to the herd itself.

Dillingham and King Salmon Area Wildlife Biologists Jim Woolington and Dick Sellers investigated the reports and collected samples from affected caribou. In a statement released to Mulchatna caribou hunters, Woolington summarized the department's findings and provided some valuable information on diseases that may afflict Alaskan caribou.

He explained that the symptoms people observed in the Iliamna area are typical of "foot (or hoof) rot," and that the caribou are safe to eat, as long as some common sense precautions are observed. The herd is probably not at serious risk from the infection.

According to the statement, foot rot is a disease commonly found in caribou and has been previously observed in both the Mulchatna and Northern Alaska Peninsula caribou. The demise of several thousand caribou on the Alaska Peninsula in 1968 was attributed to foot rot. A bacteria, Fusobacterium necrophorum, is the culprit behind the crippling disease, called "necrobacillosis" by wildlife disease specialists. It occurs naturally where caribou live and can be found in the mud and manure. The bacteria infect caribou through cuts or sores on their feet. Animals in wet, crowded conditions (like the Mulchatna Herd last summer and fall) are more susceptible.

Symptoms include swollen feet, with sores around the hoof and between toes, sometimes spreading to the mouth area. Caribou infected for some time may lose mobility and the ability to forage. This lameness and inability to feed, as well as general systemic infection can cause death.

Woolington says the risk of infection to people might occur while butchering the animal, not from eating the meat. First off, he advises hunters to steer clear of animals that obviously act lame or sick. If an infected caribou is taken, cut away the lower leg(s), being careful not to cut into any sores or swollen joints. He emphasizes the rest of the meat is safe to eat, as long as it is handled carefully and thoroughly cooked.

For more information, Woolington can be reached in Dillingham at (907) 842-2334.

John Wyman, an avid hunter, angler, and former hunter safety instructor, has worked for ADF&G as a Fish & Wildlife Technician since 1992 and is currently completing a degree in fisheries biology at the University of Alaska Fairbanks. John has served as editor of a weekly newspaper and for the last few years as a columnist with Alaska Fishing & Hunting News Magazine. This is his first appearance in the Alaska Hunting Bulletin.

Summary of Major 1999/2000 Regulations Changes

This is a summary of some of the most significant regulation changes adopted by the Alaska Board of Game during the past year. This is NOT designed to be a substitute for the 1999-2000 regulations book, No. 40, which is now at hunting license vendors and ADF&G offices around Alaska. It is important to check the new regulations book before going afield.

BISON
- Created two new drawing bison hunts in Units 11 and 13.

CARIBOU
- Shortened the Tier II caribou hunt in Unit 13 by 10 days, starting Aug. 10 instead of Aug. 1.; changed bag limit from one bull to one caribou; eliminated Tier I hunt.
- Extended the season for the caribou hunting in the Kenai Mountains in Unit 7 to Aug. 10-Dec. 31, and increased number of permits.
- Created a new drawing permit hunt, two-caribou bag limit in Kiltay River, Unit 15B East, season Aug. 10-Oct. 10.
- Reduced caribou bag limit for both resident and nonresident hunters in 9A and portion of 9C (Alatna River drainage) from four caribou to one, season Aug. 1-Mar. 31.

MOOSE
- Extended fall moose hunting (general season and drawing) in Units 14A, B, and remainder of 14C and 16A from Sept. 10 to Sept. 25; shortened the winter spike-fork hunting in the same areas by starting them Dec. 5 instead of Nov. 20.
- Shortened moose season in Unit 13, opening Sept. 1 instead of Aug. 20; changed Tier II season dates to Aug. 15-31.
- Created new spike-fork/50-inch drawing permit hunt in portions of 7 and Unit 15, Oct. 20-Nov. 20.
- Changed antlerless moose season in Unit 15C to coincide with the general season, Aug. 20-Sept. 20.
- Created new drawing permit hunt in portions of 7 and Unit 15, Oct. 20-Nov. 20.
- Opened registration hunt for any moose on Mulchatna Island, Aug. 20-Sept. 30.
- Changed winter moose hunt in Unit 9B and portion of 9C to Dec. 15-Jan. 15.
- Established archery-only spike-fork/50-inch bull hunt Aug. 10-17 in Unit 15B West.
- Established new drawing permit hunt for bull moose in Unit 9D, residents only, Dec. 15-Jan. 20.
- Extended winter resident moose season in 9E from Dec. 31 to Jan. 20 and added spike-fork/bull legal bag limit.
- Extended the registration archery hunt in the Eklutna Lake Management Area from Sept. 30 to October 20.

BROWN BEAR
- Extended fall brown bear hunt in Unit 9B (starts Sept. 20 instead of Oct. 1), and Units 9C, D, & F (starts Oct. 1 instead of Oct. 7).
- Established the spring brown bear season in Unit 13 from May 31 to June 15.
- Established the spring brown bear season in Unit 16B, starting Aug. 10 instead of Sept. 1.

BLACK BEAR
- Extended black bear hunting season in Unit 16B to June 30.

SHEEP
- Established fall and early drawing permit hunt in Crooked Lake Area in Unit 7, Aug. 10-Sept. 20.

GROUSE
- Reduced bag limit for spruce grouse on the Kenai Peninsula (Units 7C & 15) to 10 per day/20 in possession with 1 per day/2 in possession for ruffed grouse.

MISCELLANEOUS
- Opened Clearwater Controlled Use Area March 15-April 30 for hunting brown bears, wapiti, and small game.
- Required all muzzleloaders in restricted hunts in Unit 34C to complete certification course.
Managing Moose with Spike-Fork/50:

[Editor's note: Starting in the 1980's Alaska wildlife biologists faced with thorny moose management problems in a growing state with ever-improving access began advocating a management strategy known as "spike/fork 50" (SF/50). The strategy makes some yearling bulls legal for harvest, and protects others. All bulls with more than 50" antler spread or three or four brow tines (depending on the area) are legal. Today, after more than ten years of experience with the strategy, Alaska moose managers continue to advocate the use of this system for limiting moose harvest. But more circumspectly because of its impact on hunters and hunting. In this collection of three articles we present: 1) an overview of S/F50 and news about recent game regulations-making in Southcentral; 2) a perspective on why S/F50 is worth keeping; and 3) a perspective on why S/F50 should be replaced with another strategy.]

How SF/50 Works

SF/50 is a simple idea with powerful implications. The strategy is based on the fact that approximately half the yearling bull moose have spike or forked antlers. The other half have palmated antlers. With only spike-or forked-antlered yearling bulls legal, only half the yearlings can be taken. The rest are protected until their antlers reach fifty inches or three or four brow tines, depending on the area. This provides a pool of breeding bull moose that cannot be legally harvested.

With this built-in limitation on harvest, hunting opportunity can be expanded. Even with substantial mortality from hard winters, there is a protected pool of breeding bulls. This has meant more bulls and longer seasons. But, along with the positives, spike fork 50 has ushered in some new problems, among which are judging legal moose, unintentional violations, and waste.

Citizen/Agency Task Force Reviews SF/50 in Southcentral

A citizen/agency task force reviewed spike-fork 50 as a Southcentral Alaska management strategy in preparation for the spring, 1999 Alaska Board of Game meeting. The task force was comprised of Division of Wildlife Conservation staff, Fish & Wildlife Protection staff, and representative Advisory Committee members from Southcentral. The purpose of the team was to provide Game Board members a strategy for how to proceed with SF/50 in the region.

The review team worked on two fronts: biological data and hunter satisfaction and harvest data.

ADF&G staff worked up biological data and implemented a mail-out hunter survey approved by the team. When the information was assembled, the team reviewed and discussed the biological and hunting implications of SF/50 in Southcentral in a series of 1998 and 1999 meetings. The team recommended that Kenai Peninsula S/5-50 regulations be left intact, that GMU 14 & 16 (Mat/Su) regulations generally be liberalized, and that GMU 13 (Nelchina) regulations generally be tightened.

The Board of Game clearly appreciated the considerable work that had gone into the task force's review of the subject and development of consensus proposals. The Board carefully listened to and then passed the team's recommendations into regulation with little comment.

Public Involvement Must Continue

While the Southcentral task force was able to reach consensus on most issues, SF/50 remains somewhat controversial both among ADF&G staff and Alaska's hunters. Alaska's moose can be managed in a variety of ways. Ultimately, decisions on how best to manage them must be made and are public decisions, not ADF&G decisions. ADF&G managers urge Alaska hunters to become involved in advisory committee discussions on this and other game management issues.
Perspectives from Southcentral Alaska

Spike-Fork/50: Not A Good Strategy

by Tony Monzingo

Spike/Fork-50 (SF/50) is a well-intentioned attempt to promote hunting opportunity and long, consistent hunting seasons in Alaska. While it has provided some benefits, I personally believe it is fundamentally flawed. I believe it should be replaced with management strategies that are more beneficial for hunting and hunters. Here's why.

First, SF/50 places a heavy burden on hunters. Ideally there is plenty of time to examine bulls in the field, but anyone who has hunted very long knows about split-second decisions. It is difficult to judge 50-inch antlers under the best of conditions — and with SF/50 an error in judgement as small as 1% can result in a violation. SF/50 has caused many hunters to stay home or travel long distances to hunt under simpler regulations.

Second, while hunters can take bulls with three or four brow tines rather than 50" in some areas, that also is not without problems. For example, do you know what a bay tine is? This is a serious question: some hunters lose hard-earned meat and prized antlers each year because they mistake a 9-inch bay tine for a brow tine.

Third, SF-50 regulations have been unevenly enforced in the past. Some hunters taking a sub-legal bull are prosecuted while others are allowed to keep antlers and meat. Another law enforcement issue: an increase in wanton waste. Some erring hunters have elected to "shoot, shovel, and shut-up" after killing a sub-legal bull. Many hunters believe the problem is widespread.

Finally, this has not been lost on Alaska's hunters. We recently surveyed Southcentral hunters on SF/50. Here are some very relevant statistics:

- Over 70% of Kenai Peninsula moose hunters surveyed agreed that S/F 50 increases the number of illegal moose killed.
- Seventy-five (75) percent of hunters in management units where SF-50 is in effect say that the regulation increases their chance of making a mistake.
- Almost two out of three hunters in the Anchorage and Mat/Su areas say that SF-50 makes it too difficult to tell if a bull moose is legal.
- More than four of 10 hunters said that SF-50 kept them from getting meat needed for the table.

To wrap up, I urge Alaska hunters to become involved in the debate on this important issue through local advisory committees. While ADF&G is a fine wildlife agency that I am proud to be a part of, please don't assume that we always have the best answers. Hunting is in decline worldwide. We need management regimes that improve opportunity and do not turn otherwise honest hunters into violators. Let's work toward a new and better management strategy for Alaska moose hunting.

Tony Monzingo is a program coordinator in the Division of Wildlife Conservation's Hunter Information and Training program. Tony is a passionate hunter and very involved in Alaska hunting issues.

Spike-Fork/50: A Good Strategy

by Bruce Bartley

Alaska has a relatively short hunting period available for moose. The timing of the rut and the early onset of winter, making moose more vulnerable and nutritionally stressed, don't leave much room to tinker with season length and timing.

The Board of Game has been reluctant to restrict the types of weapons that may be used beyond those that generally considered unethical. And because of the overall difficulty of travel throughout most of the state, the Board also has been reluctant to restrict transportation methods.

Although Alaska generally is perceived to be a wildlife haven, in fact the habitat in most areas isn't all that productive. And even where habitat is adequate, large predators usually keep moose numbers below what they could be. So in most places, it isn't essential that hunters harvest a minimum number of moose each season. As a result, the Board traditionally has favored management strategies that maximize the opportunity to hunt, not necessarily the opportunity to harvest.

Given the generally declining moose population in Southcentral Alaska in the early 1990s, the Department of Fish & Game looked at its options for bringing harvest in line with ever-increasing hunter numbers.

Faced with declining moose numbers, increasing hunter numbers and a dangerously low bull:cow ratio, managers on the Kenai Peninsula pioneered a selective harvest strategy known as spike-fork/50-inch (SF/50) for bull moose in the mid 1980s. Although this type of antler restriction was uncommon in Alaska, similar strategies had been used in Canada and the Scandinavian countries for many years and selective antler strategies are common for elk in many states.

Not surprisingly, the antler restrictions were unpopular in the early years. Hunters went elsewhere and Kenai Peninsula harvests dropped. The deadly winter of 1989-90 changed the minds of many hunters. Throughout most of Southcentral Alaska, moose seasons were sharply curtailed or even closed. But not on the Kenai. The season was unchanged because of "weather-proofing" influence of SF/50.

Given the success of the program on the Kenai, the Board opted to try SF/50 throughout most of Southcentral. While it hasn't been as uniformly successful as it was on the Kenai, SF/50 not only has maintained but in fact has greatly increased moose hunting opportunity throughout most of Southcentral.

Prior to SF/50, most moose seasons opened Sept. 1 and ran two or three weeks. The new strategy enabled managers to open the season Aug. 20 and leave it open for an entire month. The increase has been even more dramatic in Unit 14A, the Palmer-Wasilla area. In addition to an archery hunt prior to the general season, there is an early-winter spike-fork hunt and numerous drawing permits for any bull. In Unit 16B the season was extended an additional 10 days, and this year it was extended five more days in 14A, 14B and 16A. Altogether, there hasn't been so much moose hunting opportunity in Southcentral in recent memory.

The exception is Unit 13, where this year the season won't open until Sept. 1. But the three-week season still is longer than many of those prior to SF/50. And the reduction in season length has more to do with mushrooming wolf and bear populations and the resulting poor calf survival than with the effects of antler restrictions.

Bruce Bartley is an ADF&G program coordinator in Anchorage and familiar to many as a spokesman for the Division of Wildlife Conservation. Bruce has been heavily involved in SF/50 both as a wildlife manager and as a dedicated hunter.
**Interior Alaska 1999 Regional Big Game Summary**

The Interior regional was generally little impacted by the difficult winter conditions reported by biologists along the Gulf of Alaska Coast. Some biologists reported late spring conditions, but none seemed greatly concerned about the impact on wildlife.

### Interior Newsbreaks

**Mosquito Fork Prescribed Fire Improves Moose and Waterfowl Habitat**

The first part of the Mosquito Flats and Kechumstuk Creek Prescribed Burn Plan was implemented on May 12-13 when more than 6,700 acres in the Mosquito Flats northwest of Tok were burned. Division of Wildlife Conservation, Division of Forestry and US Fish & Wildlife Service staff cooperated on phase one of the fire. A Division of Forestry crew working along the Taylor Highway fueled the helicopter. Managers designed the fire to get rid of dead grass and return nutrients to the soil, kill small spruce trees, and to allow willows to sprout to enhance habitat for moose and waterfowl. It was ignited while the ground was still wet so the fire would not carry into the surrounding spruce forests. As a result, no firefighters were needed on the ground. A "ping pong ball machine" was used from a helicopter to drop small balls of fuel, which ignite about 30 seconds after hitting the ground. The fire was conducted on land managed by BLM, much of which has been selected by village and regional corporations, but not conveyed yet. The fire plan was developed with the support of ADFG, the Division of Forestry, Doyon, DNR, BLM, Tanana Chiefs Conference, the Tanacross Village Council, and the Tanacross Corporation. Burning spruce forests and willow stands in the Kechumstuk Creek Drainage, which is phase two of the plan, will take place whenever weather conditions are within prescription and forces are available.

**GMU 20A Cow Moose Season Suspended**

Three drawing hunts for cow moose in GMU 20A (the Tanana Flats and foothills south of Fairbanks) have been suspended. Population and survival rates have been less than optimum recently, and fall calf and bull ratios have declined. Managers had recommended these hunts earlier based on a growing moose population. In light of what appears to be a downturn in the population, the cow hunt has been put on the shelf until population management again requires this tool. Biologists are considering habitat enhancement activities in the area to help the moose population begin to increase. "Kids' Fish and Game Fun Day" held on May 22 at the Fairbanks regional ADF&G office. Thanks to the sunny, 75 degrees day, about 2,500 people attended the event. Nearly 700 children fished in the pond for rainbow trout, Arctic char, and grayling, and several hundred enjoyed shooting the DART system. Kids were able to try archery, air guns, spincasting and fly fishing gear, as well as rock climbing and fur identification. Turn out by local groups was better than in recent years. Groups providing activities for children included the Alaska Public Lands Information Center, Alaska Trapper's Association, Alaska Outdoor Council, Alaska Volunteer Hunter Education Instructor's Association, Boy Scout's of America Venture Crew 696, Camp Habitat, Coalition of Historical Trekkers, Fish and Wildlife Protection, Gates of the Arctic National Park, Golden North Archer's Association, Interior Alaska Gun Dog Association, Midnight Sun Fly Caster's, Tanana Valley Sportsman's Association, Twin Bears Outdoor Education Association, U.S.A.F. Survival School, Wilderness Search and Rescue, and PAWS Search and Rescue Dogs. In addition, the Fairbanks North Star Borough Parks and Recreation Department provided garbage barrels and the Tanana Valley Sportsman's Association and TVSA Rifle & Pistol Club provided tables for the event.

**Delta Junction Area GMU 20D Upper Tanana from Delta River to Robertson River**

Area Management Biologist Steve DuBois

Area-Wide Trends

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>'98 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Bear</td>
<td>Same</td>
<td>Same</td>
<td>Winter may have been hard on lamb crop, late spring may have set up caribou calves for increased predation.</td>
<td></td>
</tr>
<tr>
<td>Brown Bear</td>
<td>Same</td>
<td>Same</td>
<td>Winter may have been hard on lamb crop, late spring may have set up caribou calves for increased predation.</td>
<td></td>
</tr>
<tr>
<td>Caribou</td>
<td>Same</td>
<td>Same</td>
<td>Winter may have been hard on lamb crop, late spring may have set up caribou calves for increased predation.</td>
<td></td>
</tr>
<tr>
<td>Dall Sheep</td>
<td>Same or slight increase</td>
<td>Same</td>
<td>Winter may have been hard on lamb crop, late spring may have set up caribou calves for increased predation.</td>
<td></td>
</tr>
<tr>
<td>Moose</td>
<td>Same</td>
<td>Increase</td>
<td>Winter may have been hard on lamb crop, late spring may have set up caribou calves for increased predation.</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Chihsan herd low & declining. No permits available for this herd. Fortymile herd is increasing. Hunters should note split moose season with different antler requirements. Morcomb caribou hunt (GMU20D) cancelled this year.

**Fairbanks Area GMUs 20A, 20C, 20F & 25C Lower Tanana**

Area Management Biologist Don Young

Area-Wide Trends

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>'98 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Bear</td>
<td>Same</td>
<td>Same</td>
<td>Relatively mild winter especially with regard to snow. Low snow may have stressed bears during hibernation, particularly younger age animals.</td>
<td></td>
</tr>
<tr>
<td>Brown Bear</td>
<td>Same</td>
<td>Same</td>
<td>Discontinued cow moose on Tanana Flats.</td>
<td></td>
</tr>
<tr>
<td>Caribou</td>
<td>Same or slight increase</td>
<td>Same</td>
<td>Discontinued cow moose on Tanana Flats.</td>
<td></td>
</tr>
<tr>
<td>Dall Sheep</td>
<td>Same</td>
<td>Same</td>
<td>Discontinued cow moose on Tanana Flats.</td>
<td></td>
</tr>
<tr>
<td>Moose</td>
<td>Same</td>
<td>Same</td>
<td>Discontinued cow moose on Tanana Flats.</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Some increase in Fortymile population and harvest. Moose densities are relatively high, but may have declined somewhat in GMU 20A. Sheep population has probably increased slightly but managers do not believe full-curl ram numbers are up significantly, if at all.

**Koyukuk Wolf Survey Reveals More Wolves**

Biologists completed a wolf survey for the lower Koyukuk River Valley in GMU 21D in April. Three planes covered almost 4,000 square miles. Staff visually counted 87 wolves in 14 packs. They

Continued on next page
Raft Hunting: Pros and Cons for Alaska Hunters

by Toby Boudreau

The raft is an amazing craft. It is lightweight, durable, and dependable. For hunting in Alaska the major plus is that it can be packed to fit into a small airplane, flown to a remote area, reassembled and used for transportation on otherwise un-navigable rivers. Furthermore, rafts are more stable than canoes, and can carry lots of weight. However, as useful as they are, they do have some disadvantages.

Initially, I think the problems start with misperceptions of rafts, misperceptions especially common among hunters that have never rafted. It’s easy to think the raft is the easy solution to all one’s wilderness transportation needs.

I believe one of the main reasons hunters have a difficult time with rafts is that they don’t carry payloads as well as it seems like they should. It seems as if there ought to be plenty of space for gear in the raft. It’s all too easy to pack accordingly. The reality is there isn’t that much space, especially when meat is added.

I once saw three hunters in a single overloaded raft come through our check station. These guys had plenty of gear—even a 25-lb propane bottle for cooking. They had so much gear that the two non-rowers had to straddle the raft tubes for a place to sit. Fortunately, they had not been successful in taking a moose. There was no room at all for meat.

Trying to add meat from a moose and or caribou to an already overloaded raft is asking for trouble. What happens all too often, unfortunately, is that the meat ends up in a pile on the raft floor in a pool of dirty water and blood. Gear covers it, blocking airflow. This is prime habitat for meat rotting bacteria, and it would be easy for them to take over ownership by the end of the trip.

The take home message is this: when packing for a float trip, be a minimalist. Lay out the raft at home with all the gear, and if they appear they require plenty of maintenance time. Always carry extra patching materials and fresh glue.

I personally don’t think trying to float and hunt at the same time is very productive. Chances are the game will not be sitting on the bank waiting for passing raft hunters.

Recently, I flew over a Western Alaska river looking for rafters. I saw 12 legal (>50") moose on one stretch of river—all within a 1/4 mile of the water. On that same stretch of river there were 10 hunting parties. Only one brought out a moose. Most did not even see one. They were spending more time floating and less time hunting.

I recommend floating the shortest possible distance between drop-off and pick-up points. Spend most of your time camped in just a few likely spots for better chances of success.

Another time cost of doing all this floating is stopping every night to set up camp. There are a hundred tasks to setting up camp, and they all take time—time that could be spent hunting. Then, the next morning all must be done in reverse order to continue the trip. Most float hunters spend several hours per day with camp chores.

After watching many, many raft hunters I have some observations that I think will help plan a raft trip. First, pack light and pack small. You will need plenty of space for yourself and any game you take. Second, pick as short a distance as possible for your trip, and allow more travel time than you expect. Don’t want to have to rush it. If you do plan a long hunt, try not to take game until toward the end of the trip. The meat will be in much better shape when you get home and it will give you more time for fishing in the beginning of the trip. Third, consider staying more than one night in likely looking areas so you can thoroughly hunt the country.

Rafting can be a great way to hunt wilderness Alaska if done thoughtfully. Plan carefully and you should have a safe and enjoyable trip.

Toby Boudreau is the Area Wildlife Biologist for GMUs 19, 21A and 21E. He is stationed in McGrath.

1999 Interior Game Summary...

<table>
<thead>
<tr>
<th>Fort Yukon Area GMUs 25A, B &amp; D; 26B &amp; C Upper Yukon &amp; Eastern Arctic Area Management Biologist Bob Stephenson</th>
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<tbody>
<tr>
<td>Area-Wide Trends</td>
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<tr>
<td>Population</td>
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<tr>
<td>Black Bear</td>
</tr>
<tr>
<td>Brown Bear</td>
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<tr>
<td>Caribou</td>
</tr>
<tr>
<td>Dall Sheep</td>
</tr>
<tr>
<td>Moose</td>
</tr>
<tr>
<td>Comments: 25D grizzly bear season now Sept 1, rather than August 20. Few other changes. See regulations for details.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Galena Area GMUs 21B, C, D and 24 Middle Yukon and Koyukuk Area Management Biologist Glenn Stout 907/656-1345</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area-Wide Trends</td>
</tr>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Black Bear</td>
</tr>
<tr>
<td>Brown Bear</td>
</tr>
<tr>
<td>Dall Sheep</td>
</tr>
<tr>
<td>Moose</td>
</tr>
<tr>
<td>Comments: Koyukuk moose hunters working group developing a management plan for the area. Contact Glenn Stout (907/656-1345) or Randy Rogers (Fairbanks 907/459-7335) to be on the mailing list for information about the plan. [See article in this issue — ed.]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>McGrath Area GMUs 19, 21A, 21E Upper Kuskokwim and Middle Yukon Area Management Biologist Toby Boudreau 907/524-3323</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area-Wide Trends</td>
</tr>
<tr>
<td>Population</td>
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<tr>
<td>Bison</td>
</tr>
<tr>
<td>Black Bear</td>
</tr>
<tr>
<td>Brown Bear</td>
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<tr>
<td>Caribou</td>
</tr>
<tr>
<td>Dall Sheep</td>
</tr>
<tr>
<td>Moose</td>
</tr>
<tr>
<td>Comments: Black bear density high in area. Decline in GMU 19D moose population; population same elsewhere in area. Managers working to expand bison herd and expand its range, creased slightly but managers do not believe full-curl rain numbers are up significantly, if at all.</td>
</tr>
</tbody>
</table>

Interior Newsbreaks...

added track counts from an additional 39 wolves in 6 packs for a minimum count total of 126 wolves in 20 packs in the area. Average pack size was about 6 wolves/pack, with 21 wolves counted in the largest of the observed packs. Wolf density appears to be up from the 1994 survey.

Spring at Creamer's: The US Army, Fort Wainwright Army Airfield (FWAA), joined the Fairbanks International Airport, University of Alaska, and ADF&G in the BASH (Bird Air Strike Hazard) Reduction program to cooperatively work toward reducing bird strikes on aircraft. To attract migrating birds to the refuge, Fort Wainwright and Fairbanks International purchased grain that was spread on the viewing fields by the Borealis

Continued on page 14
Unguided Alaskan combo species hunts: "More bang for your buck" OR "twice the trophies twice the problems"?

By Toby Boudreau

Most big game hunters dream of someday coming to Alaska. Since trips to Alaska are expensive, hunters want the most for their dollar. This makes combination moose and caribou hunts very popular. I field hundreds of calls each winter from hunters who want just that. The reality of unguided combination hunts, however, is that they can be very difficult. I am not trying to scare hunters away from this type of hunt, but I do want to emphasize some issues to consider before embarking on a moose and caribou combination hunt. Please note that while much of this applies elsewhere, I am writing relative to the situation in my part of western interior and southwest Alaska.

The first basic issue to deal with is that moose and caribou do not prefer the same habitats. Normally, they are not found in abundance together. This isn't to say that moose and caribou don't ever inhabit the same areas, however.

Good moose habitat is characterized by the availability of aquatic plants, willow, birch, aspen for food and coniferous forests to provide escape and thermal cover. Contrast this with good caribou habitat, which is characterized by open spaces covered with lichens, forbs, dwarf birch, and lots of open spaces to escape from predators.

Hunting in moose habitat reduces one's chances of seeing the caribou and vice versa. What usually happens is that hunters get dropped off in an area with fair densities of one species and usually a fairly slim chance at the other. Some hunters take into consideration the differences in preferred habitats and compensate for this by traveling during the hunt. I'll address this subject later.

Another major consideration for a combination moose and caribou hunt is the weight of these animals. The field dressed carcass of an adult bull moose weighs from 500 to 800 lbs. Caribou are quite a bit lighter with a carcass weight of between 125-250 pounds. Boning the meat can help with weight in both cases. It is important to note that in a large portion of Southwest Alaska, regulations require hunters to keep the meat on the bone until it is processed for storage.

If we add up the numbers, hunters that have killed both a moose and a caribou have to deal with from a quarter to a half ton of meat. That is a lot of meat, especially if it has to be carried any distance. A third or fourth animal adds to the complication.

The third major consideration is traveling. Most combination hunters need to travel between the preferred habitats of moose and caribou. Hunters can either be transported by aircraft or be self-mobile. Most air taxi operators will pick up a hunting party to move them to another location during the hunt. This is the best way as the air taxi can be ready by the same time haul already downed game into cool storage or a processor. This method is more expensive, but I think well worth the money in terms of quality and meat care.

The other way to travel during a hunt is to be self-mobile. The most popular method of self-mobility for hunters is the raft. Rafts are a good way to travel for scenic adventures and fishing, but because of the weight of meat you might be carrying, I don't think they are very good for combination hunts. [See article about hunting from rafts on page 13-Ed.]

I recommend to hunters calling my office that they concentrate on one species at a time. For first time hunters to Alaska, I recommend they try caribou hunting. Caribou are easier to hunt due to the open tundra habitat they occupy. And they are definitely lighter. Being lighter they are easier to handle during field dressing and easier to hang on a meat pole back at camp.

For hunters whose heart is set on moose hunting, I urge that they investigate the size of moose. There are some serious practical considerations in meat care in the field and transportation back to the drop off point.

Moose are herna makers. Experienced Alaska moose hunters will not kill a moose more than a mile from transportation, and many won't even go that far. They are just that heavy.

If after reading this, your Alaska hunting dream still centers on a combination moose and caribou hunt, that's fine. I do hope you will take the time to thoroughly investigate the issues we have looked at here. However you choose to set up your hunt, take the time to plan carefully for a quality experience, and have a great time.

Toby Boudreau is an Area Wildlife Biologist stationed at McGrath.

Interior Newsbreaks...

Continued from page 12

Kiwanis Club and Cub Scouts. The City of Fairbanks water utilities provided nearly 150,000 gallons of water pumped onto the main viewing field. Management was designed to attract primarily geese and sandhill cranes, but is being expanded to include more aquatic species like puddle ducks. New ponds were dug last fall and were heavily used by waterfowl this spring, with up to 500 pintails present at once. The first Canada Goose appeared April 12, and within eight days 520 Canadas were present. The first sandhill crane appeared April 22. Large pools of open standing water proved attractive to more than 200 white-fronted geese and more than 700 pintails by the end of April.

Sharp-tailed Grouse Study Underway in Delta: Last Fall, DWC biologists and Alaska Pacific University graduate student Rick Raymond live trapped and placed radiocollars on 28 sharp-tailed grouse in the Delta Junction agriculture project area. In October, Raymond began a two-year project of monthly monitoring of the collared birds. The objectives of the study are to determine seasonal habitat use and food habits of sharp-tailed grouse in this area. Funding for this study came from a legisla-
Draft Delta Bison Management Plan Available for Public Review

by Randy Rogers

The Alaska Department of Fish and Game and the Delta Bison Working Group citizen's advisory panel have completed work on a draft Delta Bison Management Plan for 1999-2004. The draft plan will remain open for public comment through October 1999. Public meetings on the plan will be conducted this coming fall.

This plan is the most recent in a series of five-year management plans for the Delta Bison Herd (DBH) near Delta Junction in Game Management Unit 20D. The plan describes the goals, objectives, and tasks for management of the bison herd. In addition, the plan includes information on the history and biology of the herd, management constraints, and hunting management. Of key importance, the plan proposes maintaining the existing herd size objective of 360 animals during the pre-calving census.

Management of the DBH has local and statewide implications. Balancing statewide hunting interests with local agricultural land use is the key issue involved in the plan. An equitable balance of these interests must be maintained to provide for a free ranging bison herd in close proximity to agricultural activities, and to preserve public access to nonpublic lands for hunting and viewing bison as well as a variety of other species. In addition, forage from private agricultural lands currently provides an important component of the herd's diet, and must be taken into consideration.

Past management of the DBH has emphasized providing the maximum number of hunting permits to maximize the opportunity to hunt Delta bison. Currently, there are not many large, mature bulls in the herd. Among other topics, the Department is interested in hunters' opinions on whether management of the herd should place greater emphasis on ensuring the herd contains mature bulls.

For additional information or to receive a copy of the draft plan contact:

Steve DuBois, Wildlife Biologist
Alaska Department of Fish and Game
P.O. Box 605
Delta Junction, AK 99737

Randy Rogers, Wildlife Planner
Alaska Department of Fish and Game
1300 College Road
Fairbanks, AK 99701

The draft plan will also be posted on the Division of Wildlife Conservation's web site under "News and Features." (www.state.ak.us/local/akpages/FISH.GAME/wildlife/wildmain.htm)

Randy Rogers is a wildlife planner. He works at the Division of Wildlife Conservation in the Interior region office in Fairbanks.

Fortymile Caribou Herd Recovery On Track

by Craig Gardner

(Editors note: The Fortymile caribou herd was once one of the largest in Alaska. It is today a mere shadow of its former size. Hunters, game managers and others in Alaska and Yukon have been concerned for decades about the herd's continuing failure to rebuild. Things are finally looking up for the herd.)

The Fortymile herd recovery project began in 1994 due to the efforts of the Upper Tanana/Fortymile Advisory Committee and the Yukon Hwech'in First Nation of Dawson, Yukon. Between 1995 and 1997, management and implementation plans were developed which recommended actions designed to cause an increase in the Fortymile herd and hopefully an expansion of their range back to traditional areas in Alaska and Yukon.

The three primary management actions were: (1) a reduction in the harvest quota to 150 bulls between 1996 and 2001, (2) a combination of public trapping and nonlethal wolf control to reduce wolf numbers on the herd's calving and summer ranges, and (3) habitat protection. All of these actions have been implemented.

Hunters continue to show their conservation ethic by arranging their opportunity to hunt Fortymile caribou. Since 1996, less than one-half of the hunters who used to hunt the Fortymile herd are participating and the quota of 150 has been maintained. Hunter opportunity across the herd's range is being maintained using several registration permit hunts. This year, because of high harvest near the Steese Highway, the Alaska Board of Game (BOG) created an additional registration hunt that will further protect hunting opportunity in Unit 22C and 22E.

The Fortymile Caribou Implementation Plan adopted by the BOG allows the reduction of 15 wolf packs within the herd's calving and summer ranges using nonlethal means including wolf relocation and sterilization. Trappers have been a big part of the program by helping to reduce wolf pack size in portions of the herd's summer range. The Alaska Department of Fish and Game is conducting the nonlethal control program and as of June 1999 has relocated 72 Fortymile wolves from 13 packs. The Department has also sterilized the alpha male and female of 12 packs and the male from one other pack. The combination of public trapping and nonlethal wolf control has reduced the wolf population in 13 packs on the herd's summer range from 112 wolves to just 26 sterilized wolves. None of the sterilized packs have produced pups, and they are defending their territories from intruding packs.

With the Pogo gold strike, mining activity has increased in the Fortymile area and much of the industry's attention includes the herd's summer range. The team has been working closely with the mining industry to develop an internet web site illustrating the herd's daily location and movement patterns that has given the herd adequate protection during the sensitive times of calving and post-calving and has allowed the miners to complete their mission. The mining companies are surveying a large area this summer and by contacting the web site they are able to plan their daily and weekly activities around the herd. Their efforts will benefit herd recovery and ultimately hunters. Our hats are off to the mining companies.

The Fortymile herd has grown 4%, 10%, and 20% the past 3 years. Wolf predation has declined and the herd's habitat is secure. If the weather does not become unfavorable, the herd is expected to number about 45,000 caribou and still be growing in 2001. The herd is "on track" to be enjoyed by people across the herd's traditional range from the Steese Highway to central Yukon.

Craig Gardner is ADFG's area wildlife biologist in Tan. He would be pleased to answer any questions about the Fortymile recovery effort. His telephone number is (907) 883-2971.

Thank you.

To the companies listed here, we want to publicly acknowledge our gratitude for your making possible a dramatic extension of the reach of our hunter and shooter training programs. The equipment and supplies you have provided will allow us to train many more people than would otherwise have been possible. On behalf of our agency, and the Alaskans that these programs will touch in the months and years ahead, please accept our sincere thanks.

Browning
US Repeating Arms (Winchester)
Hodgdon Powder Co.
Hornady Powder Co.
Leupold & Stevens, Inc. (scopes)
Nosler (bullets)
Knight Muzzleloading Rifle Co.
Redding (reloading equipment)
Savage Arms
Swarovski Optics

Alaska Department of Fish and Game
Hunter Information and Training Program
Koyukuk River Moose Planning Effort Begun

by Randy Rogers

The Alaska Department of Fish and Game has assembled a citizen's advisory panel called the Koyukuk River Moose Hunter's Working Group to provide recommendations on moose management in Koyukuk River drainage. The group is comprised of representatives of Fish and Game advisory committees, with additional representatives from the Western Interior Regional Advisory Council and commercial guides. Working Group representatives come from local villages like Koyukuk, Allakaket and Huslia and locations further away such as Fairbanks, Wasilla and Kenai.

The Working Group is intended to supplement the existing Fish and Game advisory system by providing a forum to bring stakeholders together. The Koyukuk and Kanuti National Wildlife Refuges and several other agencies are participating in the cooperative planning effort.

At the first meeting of the Working Group held in Fairbanks on May 17th and 18th, Glenn Stout, the Galena Area Biologist, and other agency personnel reviewed biological data, harvest trends and other information to provide the group with a common information base. Two of the key points from the presentations include:

* In 1998, a total of 645 hunters were checked at the Ella's Cabin Check Station and they harvested 345 moose. This compares to the 299 hunters that harvested 181 moose in 1988.

* Annual harvest is approaching the general guidelines of sustainability with the 1998 reported harvest on the Lower Koyukuk Drainage at approximately 6%.

The group will continue to meet during the summer with the intent of preparing recommendations for consideration during fall 1999 advisory committee meetings and the March 2000 Board of Game meeting. If you have questions or would like to be placed on the mailing list to receive information on the Koyukuk moose planning effort contact:

Glenn Stout  
Galena Area Biologist  
Alaska Dept. of Fish and Game  
P.O. Box 209  
Galena, AK 99741  
(907) 656-1345  
glenn_stout@fishgame.state.ak.us

Randy Rogers  
Wildlife Management Planner  
Alaska Dept. of Fish and Game  
1300 College Road  
Fairbanks, AK 99701  
(907) 459-7335  
randall_rogers@fishgame.state.ak.us

For additional information on Leave No Trace skills and ethics, contact your nearest Bureau of Land Management or Forest Service Office. Additional information may be found on the world wide web at http://www.lnt.org.
Northwest Alaska 1999 Regional Big Game Summary

Winter in Northwest Alaska was a mixed bag: mild in some areas and difficult in others. Biologists report increasing muskox populations where habitat allows larger numbers. Moose numbers are relatively low in comparison with some years in the past. Moose populations grew rapidly on the Seward Peninsula as they expanded their range there beginning in mid-century, but now are at lower densities. No report is available for the Barrow area.

Bethel Area GMU 18 Yukon Kuskokwim Delta
Area Management Biologist Roger Seavoy 907/543-2979

<table>
<thead>
<tr>
<th>Wildlife</th>
<th>1998 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Bear</td>
<td>Same</td>
<td>Same</td>
<td>Mild winter until spring which lasted later than usual.</td>
</tr>
<tr>
<td>Caribou</td>
<td>Slow increase</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Moose</td>
<td>See note below</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Muskox</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Brown bear harvest is very small. Resident elk and caribou herd is small; some other animals have come west from the Mulchatna herd in recent years. Kuskokwim muskox population dismally low and Same; Yukon population below objective but growing. Muskox population held at same level from year to year by harvest.

Nome Area GMU 22 Bering Strait and Norton Sound drainages
Area Management Biologist Kate Persons 907/443-2271

<table>
<thead>
<tr>
<th>Wildlife</th>
<th>1998 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Bear</td>
<td>Increase</td>
<td>Higher</td>
<td>Hard winter overall</td>
</tr>
<tr>
<td>Caribou</td>
<td>Increase</td>
<td>Higher</td>
<td>all considering deep snow late in season.</td>
</tr>
<tr>
<td>Moose</td>
<td>Same</td>
<td>Same or less</td>
<td></td>
</tr>
<tr>
<td>Muskox</td>
<td>Increase</td>
<td>1st hunt ever</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Brown bear harvest probably up because of increased population and excellent spring hunting conditions. Western Arctic caribou moving onto the Seward Peninsula during parts of the year; hunting season has been opened by emergency order in some areas to provide local harvest. Caribou arrive in the area in October so are normally unavailable for combination hunts. Moose population is at low density, particularly in comparison with previous years. Non-resident hunters should be aware of 50° antler restriction and that there are few moose of this size near the road system.

Kotzebue Area GMU 23 Kotzebue Sound drainages
Area Management Biologists Jim Dau & Lee Anne Ayres 907/442-3420

<table>
<thead>
<tr>
<th>Wildlife</th>
<th>1998 Harvest</th>
<th>Winter</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Bear</td>
<td>Same or increase</td>
<td>Same</td>
<td>An easy winter in GMU 23 but a later than usual breakup.</td>
</tr>
<tr>
<td>Caribou</td>
<td>Slow increase</td>
<td>Increase</td>
<td></td>
</tr>
<tr>
<td>Dall Sheep</td>
<td>Slow increase</td>
<td>Increase</td>
<td></td>
</tr>
<tr>
<td>Muskox</td>
<td>Increase</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Moose</td>
<td>Same or slight decrease</td>
<td>Same or slight decrease</td>
<td></td>
</tr>
</tbody>
</table>

Comments: Brown bear numbers abundant. No resident caribou in GMU 23, but Western Arctic herd moves through unit. Dall sheep numbers very low. Muskox hunt is a Tier II drawing permit. Noatak moose population declining big bulls few. User conflicts mounting throughout the unit. [See article about GMU 23 user conflicts]

Continued on page 18

Gift Certificates Should Buoy GMU 18 Harvest Ticket Reporting
Bethel Assistant Area Wildlife Biologist Roger Seavoy has teamed up with area merchants in an attempt to improve moose harvest reporting in his area. He said Alaska Commercial Company in Bethel has provided a $400 gift certificate for a firearm or other merchandise; Swanson's and ID Variety have each put up $100 gift certificates, and an interested conservationist who wanted to remain anonymous has donated a GPS unit. In August, Seavoy will draw four moose harvest reports at random from 1998 hunting season returns. The hunters who turn in the four reports will get the prizes. Seavoy expects good results from the program: already hunters are picking up more harvest tickets than usual.

Hunter Check Stations: Roger Seavoy operated hunter check stations at Aniak last fall on the Kuskokwim River and at Paimiut on the Yukon River. As in previous years, large numbers of GMU 18 hunters visited both stations. Additionally, a cabin constructed by ADF&G and the US Fish & Wildlife Service (FWS) at Paimiut was dedicated to the late Randall Kacyon. Kacyon was the former GMU 18 Area Wildlife Biologist, and was killed in an aircraft accident while conducting game surveys. FWS, ADF&G, and Fish & Wildlife Protection staff, and several local hunters attended the informal ceremony. FWS, ADF&G, and Fish & Wildlife Protection staff, and several local hunters attended the informal ceremony.

Nome Rabies Case: Nome Police shot a rabid red fox after a daylong chase through the community. The fox attacked, but did not bite, a pedestrian, but did bite one dog. The fox population is low near Nome, but rabies is always a concern. Nome Police still consider the community. The fox attacked, but did not bite, a pedestrian, but did bite one dog.
Unit 23 User Conflicts Growing, but Solutions May Be Within Reach

by Christopher Batin

Alaska has long been a destination where many people, myself included, have found the epitome of outdoor recreation. Yet this seemingly endless expanse seems to be shrinking each year. Indeed, “competition” is catching up with the 49th State, whether one is a subsistence hunter, a guided hunter, or an urban meat hunter.

Unit 23 Area Wildlife Biologist Jim Dau has been an Alaska resident since 1976, and has managed game populations out of Kotzebue since 1988. Recently, I talked with him about user conflicts in his area.

“What we’re talking about here is neither number of animals nor allocation,” he said. “The resource is space.”

“Fishing and hunting are just two of many uses for any particular game management unit. For instance, how many subsistence, commercial and sport hunters can a finite area absorb in a compressed four to six-week period in the fall? During a 1996 census, we counted over 463,000 caribou in the Western Arctic herd. The moose populations at the time were healthy. Yet the complaints didn’t pinpoint the lack of game. They dealt with space: too many users accessing the resource in the same locations.”

Most of the popular hunting areas in Unit 23 are hunted by local residents, usually by boat. Fly in hunters also use these rivers. Rivers are popular because much of the game is located along them, and they are the only transporters criticized other transporters. In recent meetings, Dau said there was little criticism among user groups. Guides complained about transporters, and transporters criticized other transporters. In recent meetings, Dau said there was little criticism among user groups, as everyone is feeling the effects of intense use. Dau said mere intolerance is a minor issue these days compared to what may be in store for us in the future.

That future might have already arrived. Last year, five western Alaska villages held non-local hunters at gunpoint over what is described as a user conflict issue. The issue was defused, and the perpetrators reportedly jailed. Dau said such signs show the social problems are no longer in the bud stage.

It’s easy to understand why these conflicts occur. Unit 23 was a great place to hunt at one time; both from the perspective of local subsistence hunters and recreational hunters. The country is beautiful, game and other traditional native foods are plentiful, and there seemed to be room for everyone. There is no longer room for all.

Even with the crowding that is raising tensions in the area, Dau said he was impressed with Unit 23 locals, commercial operators and the non-commercial hunters he has talked to regarding user conflict.

“I haven’t seen a lot of denial or finger-pointing,” he said. “People have generally accepted responsibility for the problem. The people working with us on this genuinely seem to want to develop solutions.

He said that his counterparts in the Bureau of Land Management, the US Fish & Wildlife Service and the National Park Service are also working constructively to help bring about a solution. “Even more than us agency people, I have to say that most of our progress so far is due to local people who have stuck their necks out and given their time to make this process work,” he said.

Dau has high hopes that Alaskans interested in GMU 23 will be able to effectively govern themselves out of the tangled maze of user conflict and dual state-federal management through cooperation, rather than aggression.

“Fish and Game is committed to working with all the interests represented here to develop a new game management strategy for this area. I know my colleagues in the federal agencies feel the same way,” he said. “I’m convinced it is possible — but clearly there is a lot of work ahead of us.”

Long time Alaskan Chris Batin is a frequent contributor to The Alaska Hunting Bulletin. He is the author of the newly revised 416-page book, Hunting in Alaska: A Comprehensive Guide. For an autographed copy, email him at chrisbatin@alaskaangler.com His website is http://www.alaskahunter.com

Northwest Newsbreaks...

Continued from page 17

non-local hunting interests had met. Participants were constructive, progress was made, and all agreed to meet again in Kotzebue in late July 1999. [See related article above — Ed.]

Western Arctic Herd Working Group Makes Good Cooperative Progress: The Western Arctic Caribou Herd interim working group, organized and co-chaired by ADF&G Rural Issues Coordinator John Trent, met in Kotzebue last week. Representatives from Units 22, 23, and 26A, federal management agencies, Fairbanks and Anchorage Advisory Committees, guides, and the Reindeer Herders Association all attended. The meeting was productive, and two significant decisions were made: 1) participants agreed to establish an expanded and more permanent working group. Approximately 20 "chairs" for diverse user groups were identified, and a process to nominate representatives and timelines was established. The new working group will meet in mid-January in Nome. 2) Participants agreed to prepare a newsletter. Writing assignments were made, and the National Park Service will provide a public communication specialist to produce it. Volume 1 number 1 will be distributed to all box holders within the range of the herd by September 1, 1999.

HOW WILL YOUR CHILDREN HUNT TOMORROW?

The Hunter Heritage Foundation of Alaska was established to provide private resources for the effort of training new hunters and educating the public about the benefits hunting brings to wildlife conservation.

Endorsed by the Alaska Department of Fish and Game, the HHFA has been an active partner in the Alaska Hunting Clinic Series since its beginning in 1995. Long term goals include educational projects promoting hunting’s important role in wildlife management and the cultural heritage of Alaskans.

All contributions to the HHFA are tax deductible and will be used entirely for projects that benefit hunting’s future. Please send your contribution to:

Hunter Heritage Foundation of Alaska
PO Box 73902
Fairbanks, AK 99707

For more information, call your local ADF&G Wildlife Conservation office or:

(907) 459-7211 • Fairbanks
(907) 267-2373 • Anchorage
(907) 465-4265 • Juneau

Ron CLASS, Executive Director

Hunter education: it’s not just for kids. Adults can learn valuable skills too!!

Most classes are taught winter and spring. Training includes firearms and outdoor safety, wildlife conservation, and hunting ethics and responsibility. Graduates receive an Alaska Hunter Education card which is accepted in other states and provinces that require hunter education training.
Where to Find Information on Alaska Hunting

PRIVATE SOURCES
The following businesses provide information about hunting in Alaska, either in their publications or on a consulting basis.

Alaska Hunter Publications:
Publishes Alaska hunting books and bimonthly journal, The Alaska Hunter. Provides consultation on Alaska hunting on a fee basis. Free catalog. PO Box 83550, Fairbanks, AK 99708-3550. Tel (907) 455-8000. e-mail: chrisbatin@alaskahunter.com Web URL: www.alaskahunter.com

Alaska Outdoors:
Publishes Alaska Outdoors magazine and books on Alaska outdoor activities. Free catalog. 7617 Highlander, Anchorage, AK 99518. Phone (907) 349-2424. e-mail: alaskaodl@alaska.net Web URL: www.alaskasconnect.com

Fishing and Hunting News-Alaska:
Publishes twice-monthly magazine with information about Alaska hunting and fishing opportunities and results. PO Box 19000, Seattle, WA 98109. Phone (800) 488-2827. Web URL: www.fhnews.com

DeLorme Mapping:
Sells the Alaska Atlas & Gazetteer, a large-format book of topographic maps and other information covering the entire state. PO Box 298, Freeport, ME 04032. Phone (800) 452-5931. Web URL: www.delorme.com

Outdoors America Communications:
Publishes the 144-page Outdoors Alaska Directory of Hunting and Fishing and a world wide website with Alaska fishing and hunting information. PO Box 609-HB, Delta Junction, AK 99777-0609. Phone (907) 561-5800. e-mail: akhb@outdoorsdirectory.com Web URL: www.outdoordirectory.com

ALASKA DEPARTMENT OF FISH AND GAME
(ADF&G/Division of Wildlife Conservation)

Southeast Alaska
PO Box 240020
Douglas, AK 99924-0020
Tel. (907) 465-2465
Fax (907) 465-4272
Web URL: www.state.ak.us/local/akpages/FISHGAME/wildlife/region3/rgn3home.htm

Southcentral Alaska
333 Raspberry Rd
Anchorage, AK 99518-1599
Fax (907) 267-2433
e-mail: wcinfo@fishgame.state.ak.us
Web URL: www.state.ak.us/local/akpages/FISHGAME/wildlife/region2/rgn2home.htm

Telephone numbers:
(907) 267-2347 General hunting information (recordings and staff)
(907) 267-2373 Hunter education
(907) 267-2182 Wildlife Conservation regional office staff
(907) 566-0130 Rabbit Creek Range (recording only)
(907) 267-2204 Nlenchina caribou herd information (recording only)
(907) 267-2308 Mulchatna caribou herd information (recording only)
(907) 267-2310 Fortymile caribou herd information (recording only)

Interior Alaska region
1300 College Road
Fairbanks, AK 99701-1599
Fax (907) 452-6410
Web URL: www.state.ak.us/local/akpages/FISHGAME/wildlife/region2/rgn2home.htm

Telephone numbers:
(907) 459-7206 and 459-7306 General hunting information
(907) 459-7313 Wildlife conservation staff
(907) 459-7211 Hunter education
(907) 459-7386 Recorded hunting information
(907) 267-2310 Fortymile caribou herd information (recording only-Anchorange number)
(907) 267-2304 Nlenchina caribou herd information (recording only-Anchorange number)

Northwest region
Pouch 1148
Nome, AK 99762
Tel. (907) 443-2271
Fax (907) 443-5893
Web URL: www.state.ak.us/local/akpages/FISHGAME/wildlife/region5/rgn5home.htm

Telephone numbers:
(907) 267-2310 Fortymile caribou herd information (recording only-Anchorange number)
(907) 267-2304 Nlenchina caribou herd information (recording only-Anchorange number)

APLICS
The Alaska Public Lands Information Centers (APLICS) in Anchorage, Fairbanks, Ketchikan and Tok are a joint project of the Alaska Departments of Commerce & Economic Development, Division of Tourism, Fish and Game, and Natural Resources, and the US Departments of Agriculture (Forest Service) and Interior (Bureau of Land Management, Fish & Wildlife Service, Geological Survey, and National Park Service). The APLICS have a wide variety of information about recreational uses of public lands in Alaska. Web URL: www.nps.gov/aplic/index.htm

Anchorage office
605 W 4th Ave Ste 105
Anchorage, AK 99501
(907) 271-2737

Fairbanks office
250 Cushman Street #1A
Fairbanks, AK 99701
(907) 456-0527

Ketchikan office
30 Main St
Ketchikan, AK 99901
(907) 220-6220

Tok office
PO Box 359
Tok, AK 99780
(907) 883-5667

While most species may be hunted on national forest, refuge, or BLM lands in Alaska, hunting may be closed or restricted on some federal lands. Please consult the Federal Subsistence Hunting regulations or the federal land management agency below if you plan to hunt on federal land.

FEDERAL AGENCIES
National Park Service
Hunting is permitted in some units of the national park system in Alaska. National preserves generally are open to hunting. Hunting is prohibited in Denali, Katmai and Glacier Bay national parks. Only persons living in certain areas of Alaska may hunt in other park units.

For additional information on hunting in lands managed by the National Park Service, contact one of the Alaska Public Lands Information Centers in Anchorage, Fairbanks, Ketchikan or Tok. Web URL: www.nps.gov

US Fish & Wildlife Service
Hunting is permitted in most areas of the national wildlife refuge system. Hunting regulations are shown in the Alaska hunting regulations. For additional information about hunting on lands administered by the USFWS, please direct questions and comments to:
USFWS, AK
1011 E. Tudor Road
Anchorage, AK 99503
Tel (907) 786-3309
Fax (907) 786-3495
Web URL: www.fws.gov/contact.html

US Forest Service
Virtually the entire national forest system in Alaska is open to hunting. For details of hunting seasons, bag limits, and areas on the national forests, consult the Alaska hunting regulations. For other information about hunting in national forests, the web URL for the Alaska Region is www.fs.fed.us/ak10 for contact one of the following offices:

USDA Forest Service, Alaska Region (for general, region-wide information)
PO Box 21628
Juneau, AK 99802-1628
Tel. (907) 586-8806
Fax (907) 586-7840

Chugach National Forest (Prince William Sound, eastern Kenai)
3301 N St, Anchorage, AK 99503
Tel. (907) 271-2500
Fax (907) 271-3992

Tongass National Forest (SE AK)
Chatham Area (northern panhandle)
204 Siganaka Way
Sitka, AK 99835
Tel. (907) 747-6671
Fax (907) 747-4331

Stikine Area (central panhandle)
PO Box 309
Petersburg, AK 99833
Tel. (907) 772-3841
Fax (907) 772-5895

Ketchikan Area (southern panhandle)
Federal Building
Ketchikan, AK 99901
Tel. (907) 228-6202
Fax (907) 228-6215

Bureau of Land Management
The BLM manages most federal lands not administered by NPS, USFWS, and USGS—some 87 million acres. Virtually all of this land is open to hunting. There are some federal restrictions to use of motorized vehicles in certain areas. Additional information on hunting uses of BLM-administered lands may be obtained from:

BLM Alaska - External Affairs
222 W 7th #13
Anchorage, AK 99513
Tel. (907) 271-5555
Fax (907) 272-3430

Where to obtain USGS maps
US Geological Survey topographic and other maps can be obtained by mail order or over the counter in several Alaska locations. Some Alaska sporting goods or outdoor stores stock high demand maps. There are retail stores in larger Alaska communities that specialize in maps. The USGS maintains a map distribution office at Alaska Pacific University in Anchorage that can provide fast service over the counter or by mail or telephone for people out of state. Maps are also available at the Geophysical Institute at UAF in Fairbanks. Here are the addresses:

US Geological Survey
Earth Science Information Center
4230 University Drive
Anchorage, AK 99508-4664
Tel. (907) 786-7011
Fax (907) 786-7050

Map Office, GeoData Center
Geophysical Institute-UAF
903 Koyukok Drive
Fairbanks, AK 99775
Tel (907) 474-6960

NOTE: We intend to publish this information in future editions. Please forward your suggestions for additional Alaska hunting information resources to Editor, Alaska Hunting Bulletin, Alaska Department of Fish and Game, Division of Wildlife Conservation, PO Box 25526, Juneau, AK 99802-5526 or e-mail: marlene@fishgame.state.ak.us. Mention in this publication of commercial goods or services does not constitute endorsement by the State of Alaska.
Hunter Information and Training News

Many more such young people will be needed to replace the current aging population of shooters and hunters. Becoming An Outdoorswoman Workshop: Blessed with nicest weather of the year, Alaska's sixth Becoming an Outdoorswoman workshop was held at the Solid Rock Camp near Soldotna. Wildlife technician Larry Lewis was instrumental in pulling off the workshop, which included classes in clam digging, halibut, and salmon fishing, as well as the more traditional course offerings including various hunting and shooting topics. Seventy-nine women participated in the 25 different courses taught mostly by local instructors.

Hunter Education Curriculum and Book Changes: The DWC HIT program is making significant progress on a project to revise Alaska's hunter education curriculum and teaching materials. Program coordinators John Matthews and Tony Monzingo are continuing to work with a team of Alaska hunter education instructors to develop the new materials. Monzingo said they expect to have the revised curriculum available early in 2000. The new curriculum materials will include a revised workbook for students and a revised teaching outline for instructors. The current student workbook is used widely across North America, and while it is a good general reference for hunters, it is not Alaska-specific. The new student workbook will feature photos, graphics and text that better cover Alaska wildlife and hunting situations. Monzingo said the curriculum team has also extensively reviewed materials from other states and provinces and will be incorporating that into the new teaching materials. In addition to the new student workbook, Matthews and Monzingo are developing new instructor materials that will incorporate the instructor team's recommendations.

Mobile Shooting Sports System Operational: The long-awaited mobile training system should be in Alaska by the time you read this. The long fifth-wheel trailer will feature the DART system and other training aids. The DART system uses laser and projection television technology to simulate hunting situations. Shooters can learn safety, shot placement and marksmanship. The DART system is only one of the capabilities of this new program. The trailer is being stocked with materials to conduct various clinics including muzzleloading, shot-gun skills, non-toxic shot, archery and more. Fish & Wildlife Technician Kirk Lingofelt will manage the program and transport the trailer system around the state as needed. Lingofelt has a degree in wildlife and has worked for almost 10 years in Prince William Sound, and is an avid and active shooter. He is now gathering requests to bring the mobile system to state and local fairs, hunter appreciation days, and the like. Lingofelt can be reached at 267-2534.

Moose Field Care Video Now Available: A HIT group was scheduled for training in navigation for hunters. Coordinator Tony Monzingo says the purpose of this training is to help volunteer hunter education instructors prepare for upcoming clinics and hands-on training that will be offered to hunters by the HIT program.

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