

Alaska Hunting Bulletin

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1996 Nelchina Caribou Harvest Below Expectations: What Happened?

by Bob Robb

Alaska hunters holding Tier I and Tier II caribou permits for the Nelchina herd in Unit 13 shot more than 5,000 animals during the 1996-97 season, far fewer than biologists hoped for.

"That number wasn't quite as high as we wanted to see, but it was good in one respect — we did increase the cow harvest, which is what we need to do," said Glennallen Area Biologist Bob Tobey.

The Nelchina herd has been growing steadily since the late 1970's and reached 50,000 caribou in 1995, Tobey said. That continued growth was the reason for instituting the Tier I season that began in 1996.

ADF&G intends to continue the Tier I hunt until the herd is reduced to the management objectives of 35,000 - 40,000 adult animals. Under the state's subsistence preference law, a Tier I hunt includes only Alaska residents.

To reduce the herd to a manageable size, the department issued an unlimited number of Tier I cow and small bull permits and 10,000 Tier II bull permits in 1996. "We figured this could result in a bull harvest of about 5,000 animals, our maximum bull harvest target," said ADF&G spokesman Bruce Bartley. "We went with an unlimited number of cow permits to try to take up to 10,000 cows. That is the number we believe is

necessary to help us achieve our goal of around 35,000 animals. We never thought we'd achieve that figure in one year, and we didn't."

Bartley said people ask why the Department gave out so many cow permits and so few bull permits. "Past history shows that open hunting in this area results in a harvest of mainly adult bulls, so we had to limit the number of bull tags," he said. "Secondly, it's not just a numbers game. By killing so many older bulls but few cows, you are not really reducing the overall population. Bulls are really superfluous when it comes to population

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Making Your Best Shot Count

by Tony Monzingo

Keeping low as a snake's belly in a wagon rut, you creep over the crest of the ridge. On the next ridge, across a steep, open ravine grazes the ram of your dreams. No chance to close the range any further by stalking. You take the shot or let the big guy go. You estimate the range at 250 to 300 yards. Your rifle has plenty of energy for a clean kill at that range. But is the shot ethical? Let me suggest a system that can help you be confident in your own shoot/don't shoot decisions.

First of all, all game animals deserve our respect. To attempt a shot without full knowledge that the animal can be cleanly killed and retrieved is unethical. Each of us has the responsibility to sight in our rifle, practice enough with it to establish an ethical shooting range, and keep all shots within that range.

So...how do we figure our ethical shooting limits? First, we sight in under controlled conditions at known distances. Once sighted in, we shoot from hunting positions at progressively greater distances until the combination of bullet trajectory, bullet energy, and personal shooting skill puts a lid on it.

Preparing for hunting season and sighting in your rifle

should begin with a thorough cleaning session. A rifle's accuracy will often dramatically improve simply by a rigorous cleaning.

Once cleaned, check the mechanical operation of the rifle to insure that it is operating properly. Check the screws on the action, sights, scope mounts, and scope rings. A literal loose screw may play havoc with accuracy in the field.

The next step is to select your ammunition. Select a premium quality bullet that is relatively heavy for the caliber of your rifle. Heavy-for-diameter bullets improve deep penetration even if they strike a bone. Ammunition is not a good place to economize on a hunt.

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Making your best shot count begins at the rifle range with sighting in the scope and rifle practice. Photo by David M. Johnson

What Is This Publication?

If this is your first time opening up the *Alaska Hunting Bulletin*, welcome. The *Bulletin* is a regular publication of the Alaska Department of Fish and Game's Division of Wildlife Conservation.

For first time readers, let us say again what this publication is all about. What you will find in the *Alaska Hunting Bulletin* are the "nuts and bolts of practical wildlife conservation as that relates to hunting."

The *Alaska Hunting Bulletin* will not normally be covering "where to" or "how to" articles. That information is well covered by private publishers. Instead, you will find in this publication "information about changes in the hunting regulations, habitat management work, hunter education, wildlife research, results of game surveys, and so forth."

We are planning our next issue for mid-winter and another for spring, 1998.

We hope you find the information in this issue useful and inter-

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From the Director...The Way I See It

Dr. Wayne Regelin Director

Earlier this year, ADF&G staff took part in a management effectiveness review aimed at highlighting agency strengths and weaknesses. Dr. Steve McMullin of Virginia Tech was the principle investigator on this study. Almost half of America's fish and wildlife agencies have evaluated their performance using Dr. McMullin's system. The purpose, of course, is to learn where we can improve. I invite you to take a look at Dr. McMullin's findings in this issue. We asked him to summarize the results that relate to the Wildlife Conservation division for *Alaska Hunting Bulletin* readers.

We are continuing to move ahead on hunter education. Alaska instructors told us they need demonstration firearms, and we agree. To begin to meet this need, we recently worked out an agreement with the Alaska Department of Public Safety that will make available up to 100 firearms. These are almost all confiscated firearms, and are being made non-functional. Many instructors are having to use their own firearms for the important "hands on" component of hunter education training. This acquisition will reduce the need for the use of personal firearms, and I am optimistic that we can continue to obtain confiscated firearms for this purpose.

While I am on the subject, I am pleased to report that the Alaska Legislature appropriated \$100,000 for electronic shooting systems. We will be putting

these first units at our shooting ranges in Anchorage and Fairbanks. If you haven't seen these systems yet, they are sophisticated enough that the military and law enforcement agencies are using them. These particular models will allow hunter education students to train with modified firearms and large video hunting simulations. The legislature also approved additional funds needed to complete the improvements to the Rabbit Creek Rifle Range. With this additional funding, we have been able to let contracts to get the work under way.

Our hunter education/hunter services steering group continues to work diligently towards a new framework for these programs. As you may remember from the last issue, the citizen steering group was selected to represent the diversity of interests in these programs. The group's charge is to help us develop a coordinated program that will meet the future training and service needs of Alaska hunters.

The Division is very proud of Juneau area wildlife biologist Matt Robus. I believe Matt is the first of our division staff to be honored with a legislative citation. The legislature recently recognized Matt's outstanding contributions in teaching shooting sports in the Juneau area.

Comanagement is a new word for many Alaskans. It is a way of doing business that we are seriously considering as a means of better meeting the needs of local people, Alaskans as a whole and our visi-

tors. It means giving more stakeholders a stronger role in decision making. John Trent has put together a good introductory article in this issue about this concept. I hope you will take a minute to read it. We have made few decisions about how to proceed in this new area. We will be asking the Alaska hunting community more about this in the months ahead.

Many Alaskans were less than happy with this year's permit application forms. These and other concerns have caused us to initiate a thorough review of the whole permit process. The permit system has become far more complicated than any of us would have envisioned 20 years ago. Some of that complication is necessary in a more complicated Alaska. Nevertheless, there must be ways of making this work better, both for hunters and for us as an agency. I should point out before leaving this subject that this permit system was not developed overnight, and we are not expecting instant solutions. While I hope you will start to see improvements next spring, I anticipate the process of streamlining the permit system will take two years to complete.

Fall hunting seasons are now starting around much of the state. This year's regulations booklet is one of our best yet; still, the regulations are complicated. If you have questions, please call us.

Best of luck with your hunting this season.

Letters to the Alaska Hunting Bulletin MAILBAG

We invite your letters to the editor. We reserve the right to select which letters to print, and the right to edit letters for length, clarity and good taste.

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The mailbox is empty for this issue. Have a comment or question about hunting or wildlife conservation in Alaska? Share it with other Alaskans and other readers Outside with a letter to the Alaska Hunting Bulletin.

Automatic Subscription System for the Alaska Hunting Bulletin Fails: New Subscribers Lost

The voice mail system storing the names of new subscribers to the Alaska Hunting Bulletin failed during late June, and the names and addresses of an unknown number were lost. The system is set up to allow hunters to call (907) 267-2580 and record their names and addresses. ADF&G staff later transcribe that information to the subscriber database. The problem only became apparent when the mailbox reported "full" to callers. It appeared "empty" to staff.

If you called 267-2580 in late June or early July to subscribe to the Alaska Hunting Bulletin and find now that you are not on the mailing list, that may be the reason.

If you would like to subscribe, you may call that number at any time. You may also write us, FAX or send e-mail. Details on these subscription options are found elsewhere in this issue.

If yours was one of the subscriptions we lost, we apologize for the inconvenience.

Boning Meat of Big Game Now Illegal in Some Game Management Units

by Les Palmer

In mid-March, the Board of Game adopted rule changes intended to reduce the waste and spoilage of game meat in the field in Southwestern Alaska. The change of interest to most hunters applies to Game Management Units 9 (B), 17 and 19. It requires hunters to leave the meat of the front quarters, hindquarters, and ribs attached to the bone. (See "The New Regulations.")

The Board of Game didn't act in haste or without good reason, said Larry Holmes, board chairman. In March of 1996, a "no boning" proposal for GMU 19 came from a Kuskokwim River advisory committee concerned about wasted meat and unprepared drop-off hunters, Holmes said. The board took no action. Another proposal, even more restrictive, came back. And it wasn't just the local advisory committees who were riled.

"In September of 1996, Fish and Wildlife Protection made a report to the Nushagak Fish and Game Advisory Committee, in Dillingham, regarding wanton waste in GMU 17," Holmes said.

"The gist of it was that there are some real serious problems with the way hunters handle themselves in the field."

Col. John Glass, director of the Division of Fish and Wildlife Protection, said that, under present regulations and present budgetary constraints, his troopers can't adequately enforce the law.

"We made eight (wanton waste) cases in one day out there," Glass said. "One case is too many."

Area wildlife biologist Larry Van Daele, in Dillingham, said residents in his area have always been sensitive about meat spoiling and being left in the field.

"As the Mulchatna (caribou) herd has grown, we've seen a tremendous increase in the number of hunters coming into this area," Van Daele said. "Along with those hunters there has been quite a bit of waste of meat. It's either done deliberately, through carelessness or through ignorance."

Holmes said "head hunters" mainly intent on taking home a big set of antlers were part, but not all, of the problem.

"There were an awful lot of folks float-

ing rivers in Unit 17 who did not know how to prepare meat in the field or how to transport it," Holmes said. "By the time they got to their pickup point, they had bags of rotten meat. The overwhelming majority of it was meat that had been boned out."

Before the March board meeting, a working group considered the board's options, Holmes said. Group members represented the various interests in the areas affected by the proposals, he said. They recognized that the "no-boning" rule, while not ideal, was the only option available to the game board, he said. The board has no authority over guide-outfitters and transporters. "There was a lot of effort from the public and the management agencies that went into the regulation," Holmes said. "Short of setting up a controlled-use area and keeping transporters out, what are you gonna do? Then you'd be hurting hunters who use those."

Holmes said that since the regulations were adopted, he had heard some concern that the "no boning" rules would go statewide. He would lead the charge against any such proposal, he said.

Wayne Regelin, Director of the Division of Wildlife Conservation, said a regulation that requires leaving the meat on the bone has been on the books since 1991 in parts of GMUs 21 and 24, for moose.

"Before the regulation, we used to have the same problem up there, with just lots of meat spoilage," he said. "Most of the

meat comes out in good shape now."

Many hunters, after considering how the new regulation might affect them, the resource and the future of hunting, have accepted the leave-the-bone-in rule. But some state legislators have said they don't like it. In mid-June, members of the Legislative Council intensively questioned Holmes about the purpose for the rule and the board's authority to make it. The following week, Holmes called the game board together again. After that meeting, Holmes said, "We don't think we're exceeding our authority. These regulations are going to be in effect for this fall."

Board members want to hear from the public again, after the regulations have been in effect for a season, Holmes said. Fish and Wildlife Protection officers will be reporting on whether or not the number of wanton-waste cases is down, he said. Holmes has asked the Attorney General for an opinion on the board's authority, he said. He also has asked the Department of Law to research the statutes and regulations for conflicts regarding the board's authority, he said.

Biologist Van Daele said, "I wish we didn't have to make regulations like this, but if this will reduce wanton waste, I'm all for it. As hunters, we need to straighten up our own act."

Author Les Palmer is a free lance writer and hunter education instructor. He lives in Sterling.

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THE NEW REGULATIONS AFFECTING SOUTHWEST ALASKA

(Salvage of Game Meat, Fur and Hides)

"(d)...for moose or caribou taken in Unit 9 (B), Unit 17, those portions of Unit 19 (A) within the Holitna/Hoholitna Controlled Use Area, and Unit 19 (B), the edible meat of the front quarters, hindquarters, and ribs must remain naturally attached to the bone until the meat has been transported from these areas or is processed for human consumption."

The following apply only to GMU 19 (B):

(Restricted Areas)

"(A) the area consists of all portions of Unit 19 (B) within the Holitna and Hoholitna river drainages;

"(B) all hunters in the area passing a check station established by Department of Fish and Game must stop at that check station;

"(C) a moose or caribou taken in the area by a hunter accessing the area by aircraft must be transported out of the area by aircraft."

(Hunter Education and Orientation Requirements)

(b) "A nonresident hunter in Unit 19 (B) must have attended a department-approved hunter orientation course (to include trophy recognition and meat care) or must be accompanied by a registered guide or resident family member within the second degree of kindred."

Newsbreaks

Interior wolves may be going to the Kenai Peninsula as part of a plan to reduce predation in the range of the Fortymile caribou herd. Kenai Peninsula Area Biologist Ted Spraker says the Alaska Board of Game recently approved the Fortymile caribou management plan which, in part, mandates reducing wolf predation through non-lethal means including relocation. Spraker says his area was selected for possible wolf release because biologists believe Kenai wolves may benefit from increased genetic diversity. Wolves were extirpated from the peninsula in the early part of this century. They naturally repopulated the Kenai in the 1960's, but the "bottleneck" through which they traveled has effectively become more narrow with the urbanization of Anchorage and adjacent communities. Biologists believe the wolves now on the Kenai are probably descendants of a very small pioneer population. The resulting small gene pool may have something in it predisposing them to lice. Spraker says there is reason to hope that new genetic material in the population may reduce the louse problem. While neither state nor federal law require it, the Division of Wildlife Conservation is in the midst of an intensive public review process. The division held three public meetings in Southcentral Alaska last spring, and is now in the process of developing an environmental assessment. This will be available for public review and comment sometime after mid-August from David Fulton, ADF&G/WC, 333 Raspberry Rd, Anchorage, AK 99518-1599. Public response to the concept has so far been mixed. Major response themes have included general approval of the concept, opposition to the Fortymile plan, and concern about introducing caribou-eating wolves among fledgling caribou herds on the Kenai. Up to about 20 wolves would be introduced into the southern part of the peninsula each year for four years, possibly beginning as early as the spring of 1998. Spraker says whether or not the influx of new genetic material would reduce the louse problem, biologists stand to learn a great deal. He said the wolves would be radio collared. From this biologists could learn about dispersal patterns, mortality of introduced wolves among entrenched packs, and whether or not the concept of moving wolves into occupied wolf range is feasible.

Although there have been rumors for some time that martens were present in GMU 15C on the Kenai Peninsula, their presence was finally confirmed by a Ninilchik trapper who brought one in to be sealed. Assistant Kenai Area

Wildlife Biologist Gino Del Frate, based in Homer, said until now there had never been confirmed reports of marten in his area. He said marten have long inhabited the eastern portion of the peninsula, primarily in GMU 7. The Ninilchik trapper said he saw the tracks of additional marten in the area where he caught the first.

Southeast Alaska's first-ever elk hunt begins October 1 with 25 permits that allow hunters to take bull elk throughout GMU 3. Southeast Alaska elk are a result of two 1987 transplants from Oregon state to Etolin Island. Petersburg Area Biologist Ed Crain says today there are about 200 elk on Etolin, 30-40 on Zarembo Island, and perhaps about a dozen on other nearby islands. All but two of the new permits went to Southeast Alaska residents, and all of those to residents of nearby communities. The October season will miss the September rut. Crain says there may be some possibilities for bugling elk in, but the rut will be largely over when the season begins. The Boone and Crockett Club has also begun preparing for the hunt, as there are a few large bulls in the population. One complication: there are both Roosevelt and Rocky Mountain races of elk involved, and there are different antler standards for each. Crain said he thought the club would be using a single standard for all elk taken from Southeast Alaska. Is it going to be a hard hunt? Crain says yes and no. There are some nice bulls associated with the beaches, but elk learn quickly. Also, many of the bulls live on higher elevations in the interior of Etolin Island, and these will be difficult to access.

Late winter surveys turned up an increase in four of the five Kenai caribou herds counted. Biologists looked at the herds from fixed-wing aircraft and were unable to do sex and age composition counts. The Kenai Mountains herd numbered 452 (up about 6% from 1996), Killey River 361 (up 38%), Fox River 93 (up 4%), and Twin Lakes 56 (up 17%). The Kenai Mountains count is the highest since the herd was established in the mid-1960's and this is the third population peak since then. Declines following previous peaks can be explained by high harvests in the late 1970's and reduced calf survival in the 1980's. The herd has shown no inclination to expand its range and seems most productive at about 350 animals. At its spring meeting the Board of Game added a month to the Kenai Mountains hunt, including ten days in December when snowmachines may be used.

DWC staff censused moose, muskox and reindeer populations this past spring in several areas of northern and

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'96 Nelchina Caribou Harvest

Continued from page 1

dynamics."

Cows are the productive unit in a caribou herd, not bulls, Tobey points out. To limit herd productivity and reduce the population to a size its habitat can accommodate, ADF&G is using the Tier I permits to focus hunter effort on the female segment of the population.

In 1996/97, hunters split the 5,000+ harvest almost 50/50 between older bulls and cows/young bulls, Bartley said.

Biologists attribute the lower total harvest to the caribou not moving through their range as they normally do. Bartley explained: "These caribou normally calve in the high Talkeetnas and disperse in that area, spending the summer there at between 4,000 and 6,000 feet," he said. "1996 was one of the dryer years we've ever seen in those mountains, and the range looked in August like you'd expect it to in September."

Bartley said as a result, the animals left early and dropped into the low country near water, from about the Oshetna/MacLaren/Susitna river drainages, across the Alphabet hills and on to the Paxson area. In this area they hung around low-land lakes, staying away from easy human access. This is an area where even four-wheelers have a long, tough trip to get into, he said. Limited access and the fact that the animals were not concentrated in any one small area kept the big early season harvest from happening.

"And then, as soon as the general hunting season started to end, the caribou just packed up and left to the east, heading for Tok, Northway, and Canada," Bartley said. "It was about the earliest that ever happened. They were essentially unavailable to hunters during the winter portion of the hunt."

Why this new movement pattern? "No one really knows, but our speculation is that these unpredictable movements occur when you have too many critters, range problems, or both," Tobey said. "This emphasizes the need to reduce the herd."

The 1997 hunt will run the same as in 1996. How will hunters fare this time around?

"It's hard to predict where the animals will go," Bartley said. "They can bunch up, and when they do we could see a big harvest real quick. For example, back in 1990 we had a registration hunt in Unit 13. We were going to have 3-day openings until we had harvested 2,400 animals. But when the season opened the entire herd was right behind Eureka, where access is easy, and hunters killed 2,700 in the first three days."

"Caribou movements are hard to predict," Tobey echoed. "However, this year they are starting the calving season where they are supposed to be, and calving rates appear to be on par with what I've seen in the past, so everything seems to be going along status quo. We'll just have to wait and see."

There were high expectations from hunters who thought that holding a Tier I permit "would be like having a dip-net permit, it would be a sure thing," said Bartley, "but it wasn't."

"Obviously, there are no sure deals in hunting," Bartley said. "In 1997, the split Tier I season will still be in effect, mainly to avoid over-crowding during the more popular hunting periods. We don't want 30,000 people jammed into the area at once, which would detract from the overall experience. It can also be dangerous."

"I wish people would look at it more as a hunt than an easy way to get their meat supply," Tobey said. "They need to get off the road and actually go out there and hunt. I'm worried that we're going to get caribou migrating across the highway system and a lot of road hunting. That could create a firing line along the road — a dangerous situation where someone might get shot."

Bartley said hunters should be sure to fill out their harvest reports whether successful or not. The penalty for failure to do so is "blacklisting," he said. "This makes a person ineligible for a Tier I or Tier II permit the next season."

For some reason, many people did not return their harvest reports for this hunt. The result was that by April 15, ADF&G had a list of 17,000 permittees who had not reported. After reminder letters, that dwindled down to 5,000.

Those 5,000 were blacklisted for 1997/98. "When these people saw the permit results for this year, many were upset because they didn't find their name on the list," Bartley said. "But those are the rules. This is not just a bureaucratic exercise, we need this information as a critical part of our management process."

While the current surplus in the Nelchina population is good news for hunters, biologists remain concerned about the large size of the herd. As was the case in 1996/97, the agency is again looking for a large harvest of cows to help bring the herd down to a size its range can support. Whether hunters will be able to make a better dent in the population this year will soon be apparent.

Bob Robb is a free-lance writer and hunter. He lives in Valdez.

Registration Permits and Harvest Tickets: Help Us Keep the Records Straight

If you start the hunting season with both a permit AND a harvest ticket for moose or caribou, you are not alone. Many Alaskans are in the same situation. It makes perfect sense because many hunters plan to hunt in several places, and different paperwork is required.

Let's say you have a Koyukuk moose registration permit and a green moose harvest ticket. You have been successful after a five-day Koyukuk hunt. You only hunted that area. So how do you fill out the paperwork? Do you report success on both response forms?

Report success on only the permit report, managers say. Otherwise, it could look like two moose are in the freezer. At best, area management staff are able to manually separate the duplicates. At worst, it goes into management decisions as two moose.

Here's how to do it correctly: first, fill out the permit report completely. Then, on the harvest report form, simply indicate "did not hunt," and note that you are reporting your hunt on a permit report form.

This way, the data entry crew logs your green harvest report as a "did not hunt," but captures the information from your permit report. This works whether or not you were successful.

What if you were unsuccessful with your Koyukuk permit, and hunted unsuccessfully in another location where your harvest ticket was required? In this case, fill out both forms separately. The information is important even if you are unsuccessful.

In fact, the information is important enough that the regulations now mandate that hunters who fail to submit permit reports are ineligible to receive any permits the following year. So, please be sure to turn in your reports!

The basic rule is this: return all your reports, but never report results of a permit hunt on a harvest ticket.

Newsbreaks

western Alaska. Staff censused moose in two large areas on the western Seward Peninsula, north and west of Nome. Managers were encouraged to find 18 and 22 percent calves in the herd in the two areas, numerous sets of twins present, and adults apparently in good condition. The census indicated that the population decline observed in recent years may have stabilized. In the Noatak drainage, biologists estimated just 7 calves (short yearlings) per 100 adults in a spring recruitment survey. Staff also completed a spring muskox census northwest of Kotzebue. They counted 291 animals. The previous census was conducted in late spring 1994 and produced an estimate of 235. Another muskox census, this one on the central North Slope, turned up 92 muskox. This is more than observed in previous years. US Fish and Wildlife Service staff cooperated in the survey by flying the area east of the pipeline. DWC staff flew the area west of the pipeline. Further south, DWC and Yukon Delta National Wildlife Refuge staff conducted a cooperative muskox and reindeer census on Nunivak Island. Four aircraft were used, and approximately 535 muskox and 2,500 domestic reindeer were located.

ADF&G staff are actively managing wildlife habitat and investigating new techniques in several Interior locations using funds appropriated by the legislature specifically for this work. In one interagency project, workers used a shear blade to cut willows, small birch and aspen from more than 200 acres. The idea was to improve habitat at the Heritage Park Outdoor School site near North Pole. Vegetation in much of the area has grown decadent and of minimal value to moose, grouse and other wildlife that require younger forests. Project managers laid out treated areas in irregular patterns to mimic natural fire disturbance by creating a mix of young and old stands. A few trails were incorporated into the project to provide access for researchers, hunters and other recreationists. The Heritage Park Outdoor School site contains important moose winter range as well as bowhunting areas. It is popular among local moose, grouse, and hare hunters. Part of the treated area may be burned later this summer with prescribed fire.

Then, on Creamer's Refuge in Fairbanks, ADF&G staff coordinated tree cutting on more than seven acres in preparation for another prescribed fire this summer. Last year, five acres on the refuge were logged and burned. This year the trees are being left on the site to recycle as much nutrients as possible into the soil and to mimic the effects of naturally occurring fires. The

idea is to establish a program of planned "disturbance" that will keep this 50 year old birch forest viable in the absence of natural fire. Managers hope to produce a mix of different age stands by cutting 1/5 of the forest each decade for the next 50 years. Some birch trees were girdled - which kills them — and left standing to provide habitat for cavity nesting birds and woodpeckers.

Finally, staff obtained 4,000 felt leaf willow cuttings in late spring and stored them under snow and sawdust for a summertime planting in an area logged and burned in 1996. The willow planting and prescribed burning are part of an investigation into how to make logging more beneficial to wildlife. All of these projects were funded by a Habitat Improvement project approved by the legislature in 1994.

Excellent Kodiak weather seems to be the primary factor contributing to the above-average spring 1997 harvest of 114 bears. The harvest included 80 percent males, of which several were record-book size — including one with a skull measuring over 30 inches. Only one of the females failed to make the minimum 15" skull length. It was only the fourth sub-minimum female taken in two and one-half years. Future bear harvest levels in some Kodiak hunt areas are reduced when small bears are taken. Nonresidents accounted for 55 percent of the harvest. Subsistence hunters qualified under federal regulations took two bears, both males; one at Old Harbor and one at Larsen Bay.

Kodiak Brown Bear Survey: ADF&G and US Fish and Wildlife Service biologists conducted an intensive aerial spring brown bear survey in the Terror Lake area of northern Kodiak Island. Due to an unusual spell of excellent weather, they were able to complete four replicate surveys on four consecutive days. Using the same sightability factor developed in a 1987 Terror Lake capture-mark-recapture study, they estimated the density at 281 bears per 1,000 square kilometers (about 0.7 bears per square mile). The 1987 figure was 234. Composition also was comparable between years, with 80 percent singles observed this year versus 73 percent in 1987. The biologists concluded there has been no significant change in the area's bear population since 1987.

Mat/Su ruffed grouse drumming surveys suggest a nearly stable population. Palmer Area Biologist Herman Griese has been doing ruffed grouse surveys since 1992. He says 1997 numbers are up slightly from 1996, but in line with results biologists have observed in recent years. Mat/Su ruffed grouse are all a result of a series of transplants begun in 1988. Male

Continued next page

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Newsbreaks

ruffed grouse "drum" in early mornings in April and May to attract females. Biologists use this characteristic to estimate trends in populations. Griese and his colleagues have laid out five different semi-remote road routes of six to eight miles each. The surveyor stops about every half mile in good grouse habitat to listen for a drumming bird. The routes are usually replicated at least once to assure accuracy. Grouse numbers in the Mat/Su appear to be significantly fewer than biologists

have observed at the stocking source near Nenana. Griese says Mat/Su ruffed grouse habitat is only fair. Much of the Mat/Su is in mature forest or converted to farms or small holdings. Ruffed grouse prefer young aspen. Griese says as birds begin to populate areas with younger aspen, like the Point McKenzie area, and in years ahead, the Big Lake burn, densities in those areas may increase. For now, Griese predicts most Mat/Su bird hunters will find mainly spruce grouse in the area with occasional ruffed grouse. He says methodical grouse hunters using dogs may be able to locate more birds, but numbers remain well below what Interior hunters find. Many hunters using dogs have been successful at taking the two bird limit in recent years. Griese asks hunters taking grouse and ptarmigan in the Mat/Su area to bring in a wing from each bird, as this allows biologists a glimpse at population status.

Biologists flew late May moose surveys two western Alaska areas. In the Galena area, 23% of 39 cows observed with calves had twins. Calving appeared to be later this year than previous years. In the McGrath area, staff began moose calving surveys in late May. Calves were first noted on May 21, but calving seemed to extend over a longer than normal period. Early data indicated relatively good numbers of calves, although twinning rates appeared very low. Yearling survival,

however, appears higher than any of the previous five years.

North Slope moose numbers looked better this spring, says Barrow area wildlife biologist Geoff Carroll. The population had declined precipitously



Biologists report increasing ruffed grouse numbers in the Interior. The Kenai Peninsula population is becoming established, and hunters are taking some birds in the Mat/Su area. Photo by David M. Johnson

from the 1991 count of over 1500 to less than half of that in 1995. Population survey work this spring revealed 23% "short yearlings," a substantial increase from the almost zero calf survival observed in recent years. While the number of adults declined because of abysmal past calf survival, this year's survival ratcheted up the overall population by

15%. Carroll and North Slope Borough personnel also recaptured eight previously radio-collared adults and captured 15 more to fit them with collars and continue an on-going mortality study. As the biologists and veterinarians handled the moose, they took blood samples and general body condition measurements. These and past tests suggest a generally healthy population, although somewhat copper deficient and one exposed to brucellosis. Carroll says the brucellosis strain some of these moose carry is not the one so deadly to cattle, bison, and other moose. The infected North Slope moose carry a strain common to caribou and reindeer in the arctic. Some of the captured moose cows had been exposed to this disease, but brought calves successfully through the winter with about the same success as others that had not been exposed. Carroll and other biologists continue to investigate these and other potential causes for the initial decline. At this point, there appears to be no single "smoking gun," but rather a combination of factors. For now, the first population increase since the early 1990's has given biologists cautious optimism that moose numbers may stabilize or even increase.

Comings and goings in the Division of Wildlife Conservation: Beth Lenart of Fairbanks was recently hired to support McGrath, Galena, and Fort Yukon area management programs. Lenart

Continued next page

Registration Permits Required for Kenai Brown Bear Hunters

Beginning with the fall 1997 season, brown bear hunters will be required to obtain a registration permit before going afield on the Kenai. The Board of Game recently passed a regulation that requires brown bear hunters to pick up a permit in person at an ADF&G office on the Kenai Peninsula. Individual permits are required for either RB160 (fall hunt) or RB170 (spring hunt). Hunters must also have a hunting license and a \$25.00 metal brown bear tag.

"We need to get a handle on the number of hunters that are pursuing brown bears on the Kenai" says ADF&G Assistant Wildlife Management Biologist Gino Del Frate. "We keep records of all bears harvested but can only guess at the number of unsuccessful hunters." A registration permit system will provide biologists with this important information.

In recent years the agency has become concerned with brown bear management on the Kenai. Biologists' concerns are chiefly focused on an increasing number of bear/human encounters resulting in bears killed in defense of life or property (DLP).

These encounters are the result of more people on the Kenai. While there is no single cause for the growing number of lethal bear encounters, a variety of outdoor activities are contributing. Sport fishermen, hikers, hunters, and other outdoor recreationists are all using the space that brown bears inhabit. Kenai Peninsula communities are expanding into undeveloped areas and with more people comes more garbage, livestock and other attractive nuisances. Travel corridors for bears are being developed or closed off. Logging activities are providing public access into formerly secure bear habitat.

A research project was started in 1995 to study the movement patterns of brown bears on the Kenai. Results of this project will help ADF&G identify travel corridors and areas of high brown bear use. In addition, biologists will be identifying critical components of brown bear habitat and estimating survival rates of radio collared bears. With this knowledge, Alaskans can influence future development away from important brown bear areas and hopefully provide a safe environment for both humans and bears.

Hunting is also an important part of the picture. The department estimates that there are between 250 and 300 brown bears on the Kenai. Because brown bears are long-lived and reproduce slowly, only a small percentage of that overall population can be taken if stable numbers are to be maintained. More importantly, the number of adult female bears harvested can affect the rate of population decline or increase.

In order to maintain a healthy bear population — and future hunting opportunity — the department will reduce bear hunting opportunity if too many females are taken by hunters. Biologists encourage hunters to look closely at any bear they see and avoid taking female bears.

Hunters can train themselves for this by carefully watching a video available at ADF&G offices around Alaska. *Take a Closer Look* was developed in Canada to help hunters distinguish males from females. It was filmed in Alaska at McNeil River State Game Sanctuary. The video shows characteristics of male and female bears of various size and age groups. The viewer can then test his ability to judge bear sex and age classes using footage of other known bears. A returnable deposit fee is required to check out the video. ADF&G encourages all brown bear hunters to review this video before going afield. Even experienced hunters would benefit.

Registration permits will be available during regular state office hours approximately two weeks before the start of each hunt from either the Homer or Soldotna ADF&G offices. Hunters who cannot come to one of these offices should call either Homer (907) 235-8191 or Soldotna (907) 262-9368 and request an application for a registration permit by mail. Hunters should allow two weeks for mailing and processing.

Building a Public-Professional Partnership for a More Effective Division of Wildlife Conservation

Steve L. McMullin, Ph.D.
Department of Fisheries and Wildlife
Science, Virginia Tech

Editor's note: Every hunter wants an effective state wildlife agency. We all want our money to be put to good use, and it is hunter dollars that fund most Alaska state wildlife conservation programs. And regardless of money, we want our wildlife well managed. Dr. Steve McMullin of Virginia Tech has developed an evaluation process that has helped almost one half of state wildlife agencies see where they are strong and where they are weak in relation to the best wildlife agencies in America. We asked Dr. McMullin to give you an unvarnished perspective on his extensive review of the Alaska Division of Wildlife Conservation's effectiveness. We have not edited the following material. Our purpose in providing this is so that you can work with us to make your Wildlife Conservation division a more effective one.

Wildlife is managed well in Alaska but the Division of Wildlife Conservation (DWC) is not as effective as it should be because the partnership between the DWC and the public is not as strong as it should be. This conclusion is based on my survey of all 1,309 employees of the Alaska Department of Fish and Game. The survey found the DWC has dedicated employees, committed to sound professional management of Alaska's wildlife resources but it also found them to be frustrated by intrusion of politics into wildlife management and lack of public support for their actions. My studies of management effectiveness in 20 state fish and wildlife agencies, including nine agencies identified as the best in the business, show that effective wildlife management requires a strong partnership among wildlife professionals and the many publics they serve. Wildlife professionals know how wildlife resources can be managed but decisions about how wildlife should be managed should be based on the values of citizens who own the resource. I will describe below three key factors in building an effective professional-public partnership and how the DWC is performing relative to those factors.

The first, and most important factor affecting the

credibility of a wildlife agency, is how much faith its constituents have that agency employees have the technical knowledge and personal commitment needed to do what is best for the wildlife resource. I call this maintaining a biological base. Constituents will have faith in the agency if they believe that professionals always put the welfare of wildlife ahead of politics. The DWC's professionals have the same kind of missionary-like zeal and commitment to sound wildlife management that I have observed in other agencies. However, the survey showed that 57% of DWC employees felt the Division is perceived as being more political than other Alaska agencies. Most wildlife agencies are perceived as being less political than other agencies. Responses of DWC employees to a series of questions regarding the level of political intrusion into decisions ranging from setting of harvest regulations to acquisition of land indicated those decisions are more political in Alaska than in any of the 20 states previously sampled.

The second factor is maintaining a close and responsive relationship with constituents. In a state where 93% of the citizens annually participate in some form of wildlife-related activity, a strong tie between users and managers should exist. Despite Alaska's high participation rate, DWC employees perceived a general lack of support for the Division, with only nine percent believing constituents were quick to rally to the Division's support. Part of the problem may be that a majority of employees felt the DWC was not effective in informing or educating Alaska citizens about wildlife. Another potential problem is lack of public involvement in wildlife management. Nearly all DWC employees felt that Alaskans believe they do not have adequate opportunity for involvement in setting the Division's priorities and that citizens should have a more important role in agency decision making than they currently do. It is possible to have too much emphasis on a biological base if it results in professionals making value choices that the public should make.

The third factor is being politically effective without appearing to be too political. Many citizens and wildlife professionals would prefer to have wildlife

management based entirely on biological principles, but politics will always play a role in resource management. This is especially true in Alaska, where fish and wildlife are so important to everyday life. The most effective agencies I have observed were quietly effective in the political arena—achieving their goals without getting caught up in partisan politics. Only 12% of DWC employees thought the Division was politically effective, while a majority felt the DWC had poor credibility with politicians, especially legislators. Not surprisingly, 86% of DWC employees felt agency decisions were regularly challenged in political or legal arenas and only 15% felt issues were usually resolved in the Division's favor.

What does the DWC need to do to become more effective? First, the division must build stronger bridges with constituents by aggressively involving Alaskans in planning for the future of wildlife management. Public involvement must be focused on identifying values and goals for wildlife management while professionals focus their efforts on identifying and analyzing management alternatives designed to meet those goals. The DWC professionals then must inform and educate citizens regarding the implications of alternative management strategies. The ultimate goal is to develop management plans that are based on public values, sound biology and sound socioeconomic research. Management plans that combine public values and good science can be promoted and vigorously defended in the political arena by citizens and professionals to counter the actions of politicians responding to narrow special interests.

The leaders of Alaska's Department of Fish and Game should be commended for undertaking this survey and making the results public. It takes courage to ask these questions and determination to address the answers. Alaskans are being served by a good wildlife agency, but it can get better. The state with the finest natural resource base in the nation should also have the finest agency to manage those resources. Getting there will require a strong partnership between the DWC and Alaska citizens.

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started working for the department in 1984, first as a fisheries technician and later as a wildlife technician. In her capacity as wildlife technician in the interior region for the past several years, Lenart was involved in a wide variety of management and research projects. She recently defended her master's thesis on caribou/habitat relationships at the University of Alaska Fairbanks.

Also in Fairbanks, **Ron Burton**, long-time administrative assistant to the wildlife division's Interior region headquarters office retired on April 30. Ron

worked hard at keeping the complicated and sometimes balky wheels of bureaucracy turning. At the end of May, **Dave Kelleyhouse** also retired. Kelleyhouse had worked in California and Alaska as a wildlife biologist. He served Alaska as a regional wildlife biologist, special projects biologist, Tok area wildlife biologist, and Division Director. Kelleyhouse's colorful career was marked by high energy, constant innovation and dedication to wildlife and the Alaskans he served. **Wayne Heimer**, another long-time Fairbanks-

based wildlife biologist also retired this past spring. Heimer is respected among Dall sheep hunters and biologists for his dedication to good sheep management. He had served since the 1960's as a research biologist and special projects biologist.

In the southcentral region, **Steve Machida** has been tapped as wildlife management supervisor. Machida is a long-time DWC biologist, with substantial experience in western Alaska where he worked at St. Mary's and most recently at Nome. Machida is

filling the big shoes of **Karl Schneider**, who retired earlier this year. Schneider worked for many years as regional research supervisor, but most recently as management coordinator. He was a thoughtful and analytical biologist who made substantial contributions to the division's research and management programs from not long after statehood through 1997. **Bob Small** has been hired as the project leader of the Harbor seal project in southeast and south-central Alaska. He will be stationed in Anchorage.

Unit 13 Moose: What Does the Future Hold?

by Christopher Batin

Wherever there is talk of Alaska hunting, you invariably hear stories about Game Management Unit (GMU) 13 -- the Nelchina Basin -- and the moose hunting opportunities it offers. It is one of Alaska's most popular hunting areas as its moose habitat is accessible by all-terrain vehicle, boat, plane or even automobile. Yet Unit 13 moose populations and hunting opportunities continue to change, and not necessarily for the better.

For specifics I interviewed Dr. Ward Testa, an Alaska Department of Fish and Game research biologist studying Unit 13A moose. GMU 13A is the central section of the unit.

Here's the good news: Testa says that while Unit 13 moose populations have been up and down, numbers remain relatively high, and today there are almost as many moose as existed 10 years ago.

"To understand the long-term perspective on this population, we need to look at adult cows. Those numbers are down about 15% in the northern part of Unit 13, and probably only little changed in 13A," Testa said. "The number of bulls is largely a matter of hunting pressure, and that can turn around pretty fast if the cows are healthy and hunting pressure is light."

But numbers alone can be deceiving, and the not-so-good news is that Testa's investigations suggest some potential near-term problems.

There are a number of factors that determine Unit 13 moose numbers and

productivity. A major concern is that in many parts of the unit, moose calf survival has dropped substantially since the mid-1980's.

Testa said moose calf survival across the unit right now is about 1/3 below average. Even with mild to average winters in the years ahead, Unit 13 moose numbers could decline if low calf survival continues. While the current high level of calf mortality does not constitute a crisis, if it cannot be turned around, a more serious decline in adult moose will follow.

If high calf mortality is the question, what is the answer?

It turns out there is no simple answer. To more fully understand what is going on with GMU 13 moose, we need to examine some of the factors affecting the population.

Hunting

Some believe that if a moose population is in even a slight decline, hunting pressure should be curtailed first. The facts, on the other hand, show that hunting bulls has little effect if there are enough cows producing calves, and enough calves are surviving.

Testa explained the concept: "Moose have female-dominated demographics," he said. "A low bull:cow ratio has little to do with overall productivity, unless the ratio is extreme. The female population is the most important part in judging the overall health of Unit 13 moose. Things like bull:cow ratios and availability of bulls for hunting or viewing have more to do with public satis-



GMU 13 is one of Alaska's most heavily used hunting areas, providing opportunities to take large and small game. Photo ©Bob Robb

faction and its relationship to the management scheme. Bull numbers don't have the population consequences that females do in determining the long-term health of the moose population."

Unit 13 has been managed for bulls-only hunting during the past decade. Faced with the low bull:cow ratio in GMU 13A in the late 1980s, managers restricted harvest to spike-fork only in that subunit, and quickly built up a surplus of large bulls. In 1993-94, hunters began harvesting those large bulls, and a lot of nice moose were taken the first

two years. The take of large bulls from Unit 13A has since declined. Testa said the current ratio of 15 bulls per 100 cows is lower than what most managers are comfortable with, but still not at a crisis level. Hunting in the entire unit is now limited to spike- or fork-antlered moose or those with 3 brow tines or at least 50" antler spread.

Over the last two decades, hunting pressure has not played a big part in changing moose numbers because harvest has focused on bulls. Testa says fluctuations are more likely due to ecological interactions--like predation.

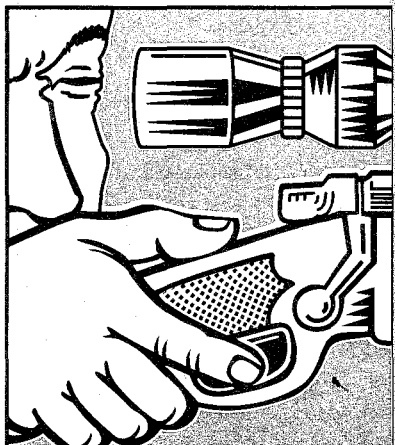
Predation

Despite Unit 13's history of occasionally liberalized bear harvest policies and regulations, it is unclear whether the periods of liberalized bear harvests have increased moose calf survival.

"There was evidence that if you went in and transplanted a bunch of bears away from the calving areas, you could increase moose cow/calf ratios in the fall," Testa explained, "but that meant removing 2/3 of the bears, and the effect was temporary. Most of the bears came back to the calving areas the following year, as anticipated."

"While we don't have direct evidence that bears are the main cause of high calf mortality right now (that work was done in the 1970's), we do have circumstantial evidence that the causes are the same today. Moose calf mortality in the first 30 days is very high, bears are very common in the area, and often seen on moose kills. Also, wolf numbers in 13A are not high enough to

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Continued on page 13

Bridging cultures, building trust: Should Alaska comanage its largest caribou herd?

Part One

by John Trent

Recently, the Alaska Department of Fish and Game began discussing the possibility of comanaging the Western Arctic Caribou Herd with both rural and urban Alaskans as well as federal land management agencies. "Comanagement" is an unfamiliar term to most hunters in our state. What does it mean and why are we seriously considering this management style for our largest caribou herd?

Huge but inaccessible to road-system hunters, the western arctic herd ranges from the Arctic Ocean near Prudhoe Bay and Barrow to the Chuckchi Sea and as far south as the Yukon River Delta. Numbering 450,000 caribou in 1993, this population supports a subsistence livelihood for Alaskans in about 50 rural communities. Recreational hunting activity is light overall but it is heavy and growing locally, especially near Kotzebue.

Right now, times are good for the western arctic herd and the people who use it. But it hasn't always been that way. And there are some serious problems lying under the surface of these current good times.

The herd declined rapidly in the early 1970s from about 243,000 to 75,000 in 1976. Within two years the Board of Game drastically shifted from "no closed season, no limit" to a permit system that capped the harvest at 3000 bulls, imposed a 2-bull individual bag limit, and established short, split seasons. Fortunately, the caribou population began to recover rapidly and seasons and bag limits were soon relaxed. But the social disruption for local subsistence hunters was enormous. Some residents of Barrow and Kotzebue never were convinced that the caribou population actually declined and rejected the evidence of

"the biologists" who said there was a problem.

Those of us working for ADFG in the late 1970's and 1980's struggled both to understand local people's perspectives, and to develop a management system more responsive to their needs. But in recent years subsistence management in rural Alaska has been complicated by "dual" efforts by state and federal agencies. And Alaska Native people have insisted on a stronger and more visible role in managing traditionally important resources like caribou.

Meanwhile, people living in other parts of the north are finding ways to do that. In 1982 Canadians formed the Beverly-Qamanirjuac Caribou Management Board for two herds between Hudson Bay and Great Slave Lake. Later, Canadians organized the Porcupine Caribou Management Board based in Whitehorse.

Both groups include managers and subsistence hunters as voting members. They meet regularly, often in villages, and discuss all management issues for those caribou populations. In Canada the resource agencies represent recreational hunters under these circumstances; in Alaska it would probably be different. The Canadian resource agencies retain ultimate authority for managing these caribou but have rarely, if ever, refused or over-ridden recommendations from the boards. "Great weight" is given to the decisions of the caribou management boards and they take their work seriously.

This style of involving all the players in meaningful decision making is now being referred to as "comanagement". The term holds different meanings for different people but the main idea might be called "shared decision making among equals to the greatest extent possible under existing statutes". Although this process often takes more time, important comanagement work-products



Many Alaskan hunters rely on Western Arctic caribou for winter meat. Photo by Sverre Pedersen

include improved mutual understanding and cooperation. Participants usually include people with established use of that particular resource, government agency officials and other "major stakeholders." There are now many formally established comanagement boards in Canada; often they are the products of negotiated lands claims settlements. In Alaska, cooperative agreements based on comanagement principles are becoming more common.

One of the earliest comanagement efforts in Alaska was the Yukon-Kuskokwim Delta Goose Management Plan in 1984. It established a waterfowl conservation committee that continues to meet regularly and make progress. The Qavilnguut (Kilbuck) Caribou Herd Cooperative Management Plan was signed in 1994. The "Kilbuck Caribou Herd Comanagement Group" working from this plan, has minimized conflict between subsistence caribou hunters and the resource agencies.

Other more recent developments include the Round Island Walrus Hunting Cooperative Agreement

(1995) and the comanagement-style activities of the Alaska Beluga Whale Committee which now has 17 participating communities. These are just a few of the comanagement-style organizations that have been developed recently in rural Alaska.

Can comanagement substantially improve the way western arctic caribou are managed for all Alaskans? Or does comanagement largely benefit rural Alaska subsistence hunters? ADF&G biologists began asking these and similar questions two years ago. Many of us in the resource agencies continue to think that more public discussion about this issue is needed before a firm decision is made. In the next installment of this article, we'll describe recent efforts to gather information about public perspectives on comanagement of the western arctic caribou herd.

Dr. John Trent is a long-time ADF&G employee and former Barrow Area Biologist. He now works in Anchorage as the Rural Issues Coordinator for the Division of Wildlife Conservation.

Biologists Report Sheep Populations Generally OK Thanks To Mild Winter

by Bob Robb and David Johnson

Generally speaking, Alaska Dall sheep are faring well following a string of bitter winters in the late 1980's and early 1990's that severely hurt populations. State wildlife biologists said they don't see the numbers of sheep that were prevalent prior to the historical highs in many areas in the mid-1980's, but that hunting opportunities in most popular mountain ranges appear to be reasonably good for the coming season.

Here's what they had to say.

Kenai Mountains: "It looks like we've had a pretty mild winter in the Kenai Mountains," said Ted Spraker, area wildlife biologist in Soldotna. "We were a little concerned early on, after we had two feet of snow in mid-October. However, it turned into a normal sort of winter in that there wasn't any additional heavy snows. The most important thing is we didn't have a lot of warm weather in winter, which would have then frozen up and kept sheep and goats from eating. That's a real key to sheep and goat numbers. Sheep enjoy cold, windy winters that will blow ridges clean and make it easy for them to eat."

"The numbers look to be pretty good," he said. "Lyman Nichols, a retired ADFG biologist who has been conducting spring yearling counts since 1968, said that the yearling survival this year is 'as good as he's ever seen it' on the Kenai. Our last complete census was done in 1991, when we estimated we had about 1,650 sheep in the Kenai Mountains. I don't think that number has increased much, but it probably has increased some due to relatively light winters. In 1968, we estimated about 2,200 total sheep, which was the historical high."

"Hunters have a fairly good chance of taking a legal ram on the Kenai," Spraker said. "We average about 35 per year killed by hunters. We do have a fairly high number of hunters, usually about 250-275 hunters per year. In 1996, 261 hunters harvested 39 rams. That's about average. The rams averaged 35.2 inches, and ranged from 30.5 to 40.9 inches. Almost all hunting is by residents, but there were three nonresidents that were successful in 1996. That's an average number of non-residents. The average age of harvested sheep is 8.3 years, and ranges from 6-12 years of age."

Western Chugach Mountains: "We haven't flown our summer surveys yet, so we don't know exactly how the sheep in the park fared this past winter. I don't think it was bad, however," said Anchorage Area Wildlife Biologist Rick Sinnott, at press time in mid-June. "In general, though, sheep numbers in the park are way up. Last summer's survey showed sheep numbers were the highest ever recorded, something like 2,400 total sheep."

"There have been three to four years of mild winters in this area, so survival has been good," he said. "There should still be some big old rams up there."

"In 1996, 72 total sheep were taken in the park by 268 hunters, 39 of them full curl or better rams, three

rams less than full curl by archers (which is legal), and 30 ewes," Sinnott said. "The largest ram taken was a 42-1/2 inch. Of the full curl or eight-year-or-older rams taken, there were six rams over 40 inches taken in 1996, six 39-inchers, eight 38-inchers, five 37-inchers,



Biologists report that most Dall sheep populations have increased since the hard winters of the early 1990's. Photo by Bill Fitzgerald, Denali Guides and Outfitters

four 36-inchers, three 35-inchers, six 33-inchers, and one 32-incher taken."

The new-for-1996 ewe permit hunt has been positive for the park's sheep population, he said. "Starting last year, the Board of Game permitted us to issue ewe-only permits for first time. We have been concerned with high overall sheep numbers, and this will help thin the herd and protect the winter range. Hunters have about a 20-30% chance to get a ewe permit, vs. a 1-2% chance for a ram permit. We hope this will focus the meat hunters on the ewes, and the trophy hunters on larger rams. We did have a record number of ewes shot last year, but the success rate was not all that high—only about 33%. People with ewe permits thought they'd be able to waltz in there and shoot a ewe easily, but that isn't the case."

Alaska Range (Delta Controlled Use Area): "We've had two mild winters in a row, which is good for the sheep population," said Steve DuBois, area wildlife biologist for the Delta Junction area. "The lambing looks to be going on pretty well so far, and that's encouraging."

"We didn't do any surveys last year, but hunter success was good last fall," DuBois said. "We did a census in 1995, when we estimated there were 1700 sheep in the DCUA, with 31 rams/100 ewes at that time. Survival this year should have been good, thanks to the mild winter. Trophy quality is good in the unit, too. We average one to two 40-inch-plus rams taken/year. Horn size has declined slightly the past year or two, however, our management objective to keep horn size at 36 inches or better."

White Mountains: Sheep numbers here "pretty much trucking along," according to Assistant Area Wildlife Biologist Toby Boudreau, in Fairbanks. "Overall the numbers have been slowly increasing the past five years, but the number of available rams hasn't gone up. There's only between six and ten legal rams in the entire mountains, of a total population of somewhere around 450 to 500 sheep. I don't know why there aren't more large rams, or where they go."

"Usually four to six rams are killed here every year, out of the up to ten or so legal rams that are available," he said. Boudreau says wolves and grizzlies kill lots of sheep in the White Mountains. "The sheep hunting is tough for people, and access is very difficult. There aren't even many places for people to land a super cub."

The White Mountains have seen somewhere between 25-45 hunters/year for past seven or eight years, he said. Hunter success rates range from 10 to 25%.

Central Alaska Range: Sheep numbers are beginning to rebound some after big declines during the harsh winters of the early 1990's" according to Fairbanks-based Area Wildlife Biologist Bruce Dale. "The last couple years, beginning in 1994, have been

pretty good. We've had both good lamb crops and a high survival rate, and as a consequence, an increase in numbers in the central Alaska Range."

"We flew surveys earlier in the summer, and what we saw was a bit disturbing," Dale said. "We saw very, very few lambs early on. Later, in mid-June, we started to see more lambs, so it doesn't look quite as bad as it did. It's really too early to tell definitively what is happening."

Dale said the number of legal rams is continuing to decline, and will for the next few years. Assistant Area Biologist Toby Boudreau explained: "Today, we have some older rams that made it through those tough years. But we're also missing rams that did not survive in years when the lamb crop was virtually non-existent."

"We still have many fewer mature rams than in mid-1980's," Dale said. In terms of a hunting forecast, he said the effort by hunters has declined in proportion to the sheep population, so success rates have stayed about the same.

"There's just not sheep everywhere like there were in the mid-1980's," he said. "The 1985 estimate for this section was about 5,000 total sheep. In 1994, our survey showed an estimated 2,000 sheep. The declines have been caused by both hard winters and predation."

In a new twist, biologists found an unsuspected predator. "Surprisingly, coyotes have been identified as the primary predator of sheep lambs in our study area in the Alaska Range, even more so than wolves," Dale said.

Continued on page 11

Southeast Alaska Deer Harvest Results

by Tom Paul

Deer hunters had a frustrating season last year in Southeast Alaska. Preliminary results from our panhandle deer hunter survey indicate the poorest success in 15 years. The good news is that based on pellet surveys, the small harvest was apparently due more to snow conditions than deer numbers.

We began the deer hunter survey and spring pellet group counts in the early 1980's. They have become our chief information sources for managing Southeast Alaska deer. We have had to make some changes in both programs over the years because of changing management needs, funding levels, and hunter response.

Last year, hunters saw some noticeable changes in the deer hunter mail survey. First, we surveyed fewer hunters. Second, hunters found a shortened survey form which asked details only about successful hunting trips. Last, we eliminated the map with numbered wildlife harvest areas. In place of it we asked hunters to be specific in describing where they took deer.

We made these changes for two main reasons. One, we were trying to reduce costs while still getting the most important information needed for good deer management. Second, we were trying to increase the number of hunters responding to the survey. In recent years, hunter response to the survey has been less than 50% region-wide and much lower than that from some smaller communities. We believe many deer hunters were not

responding because of the length of the survey and because some received it every year.

Hunters seemed to like the simplified survey: almost six out of 10 responded. We saw 11% more responses than last year — our best response since 1985. In addition, most hunters' answers were detailed enough to allow us to code nearly all kill locations with the same precision as in previous years. In short, we got about the same level of detail from hunter descriptions as we did from the map.

While we are encouraged by the improved survey response, the tradeoff with the shorter survey is that we now have no information about where people hunted but did not get deer. This makes it impossible for us to determine success rates and hunter effort for any area smaller than the region as a whole. For example, in past years we could estimate from the survey that on Douglas Island, 800 people hunted for 2,500 days and 320 of them killed 500 deer for a success rate of 40%. With the new survey, however, we can only say 320 people killed 500 deer on Douglas.

The information about where unsuccessful hunting takes place is also valuable in land use decision making. The loss of this information may be significant. Area biologists will evaluate survey results over the coming months to decide whether less detailed geographic information on hunter effort is adequate for management needs in the region.

Hunters reported significantly less success than usual throughout the 1996/97

season. Preliminary estimates from the mail survey bear that out. Deer harvest was about 9,100—the lowest since 1982 and 4,000 less than the 15-year average. We estimated that only about half of Southeast hunters were successful, which is about 11% less than average. Hunter numbers were slightly higher than average at 8,270 and they spent about 25% more time afield. Hunters spent almost seven days afield for each deer killed instead of four. The average number of deer killed per hunter was 1.1 compared to a 1.6 average for the past 15 years.

Such unusually low numbers by themselves can cause concern for the health of the region's deer populations. In response to hunters' concerns expressed during the season, ADF&G biologists and U.S. Forest Service staff planned spring pellet group counts in more watersheds in the region than usual.

Pellet group surveys give us an estimate of the relative abundance of deer in a watershed from one year to another. We believe they are a good gauge of the general health of deer populations. For more details, see the October 1996 Alaska Hunting Bulletin article "Southeast Alaska Deer Hunting Prospects." Department biologists have established permanent pellet group transects in 116 watersheds in Southeast Alaska. We surveyed 45 watersheds this spring—20 more than last year.

Our pellet group counts suggest deer populations in most of Southeast are relatively stable or even increasing. We saw declines in only about 25% of our count

areas from when last surveyed. This leads us to conclude that weather—not low deer numbers—was responsible for low hunter success last season.

The 1996/97 deer hunting season was characterized by an almost total lack of snow at low elevations throughout much of Southeast. That allowed deer to remain dispersed at high elevations, and harder for hunters to find. The almost snow free early winter seems also to have resulted in a higher than usual over winter survival in some areas.

Snow free conditions probably also gave hunters in roaded areas access to normally impassable, unplowed, logging spur roads for more of the season. We think this contributed to higher hunter-day totals on islands with extensive road systems. Hunters were able to spend more days hunting more of the road system than usual, but with less success because deer were so dispersed.

While we are still analyzing survey results, that in a nutshell is what happened last season. But what about the 1997/98 season? Now that we know that deer numbers remain relatively high, we can make some predictions. If late fall and winter weather returns to its more typical pattern, Southeast Alaska deer hunting should be back to around 13,000 deer in the harvest and approximately 60% success.

Tom Paul is a research analyst in the Division of Wildlife Conservation's Southeast Alaska regional office in Douglas. He is a long-time panhandle resident and outdoorsman.

Sheep Populations

Continued from page 10

Boudreau says with improved lamb crops of recent years, he thinks sheep hunting should improve in four to six years, unless some other disaster happens as these rams start maturing.

Eastern Chugach Mountains: "We haven't flown any surveys in this region in some time to count sheep," said Bob Tobey, area wildlife biologist in Glennallen. "However, every indication we have is sheep numbers are down. This is from both casual observation in some areas, and some areas where we have done counts, but taken together the information we have shows they are down. The last aerial counts we did a few years ago showed the same thing.

"In this part of the Chugach

Mountains, we think it's a combination of hard winters and predation, primarily by wolves, but we don't know for sure and don't know why," Tobey said. "But when we don't see ewes and lambs, it isn't hunters causing the population drop. I have been flying surveys since the late 1970's, and we had lots of sheep back then. In the early to mid-1980's it was really good. Some of my counts today show half of the population of the mid-1980's." Tobey's estimate includes the Tonsina Controlled Use Area.

Alaska Range (Tok Management Area): Tok wildlife technician and experienced sheep hunter Danny Grangard said, "The TMA has some nice rams, but the population density is pretty low."

"It takes time to hunt the TMA because there are not huge numbers of

sheep there," he said. "We haven't flown the area recently, but from hunter reports and our own observations, the population is probably about the same as in the past few years."

Grangard says recent winters have been easy on sheep. He says the average horn size that comes out of TMA is 37 inches, but he expects to see eight to ten 40" rams come out of the management area this year, as usual.

Central and Eastern Brooks Range: Like elsewhere, sheep numbers in the Brooks Range are not as good as in the 1980's, but much better than in the early 1990's, said Research Coordinator Ken Whitten of Fairbanks. Whitten says sheep have been recovering in this area since about 1993. "This past year, sheep numbers appear to have pretty much

held steady," he said.

"The primary driving force in these populations is probably weather," he said. "Predators are certainly taking lambs and adult sheep, but sheep survey data show that when weather is good, survival is good."

Whitten said there has been a decline in harvest in this part of the Brooks Range, but hunter success hasn't dropped proportionally. "In the mid- to late-1980's, sheep hunter success was in the 50-60% range. Recently, it has been just below 50%, which is still above the statewide average," he said.

Bob Robb is a free-lance writer and hunter who lives in Valdez. David Johnson is a retired ADF&G wildlife biologist who is serving as editor for this issue of the Bulletin.

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 bi-monthly 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 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: alaskaod@alaska.net www.alaskaconnect.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. 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) 227-1656 X7000 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 99737-0609. Phone (800) 561-5880. E-mail: akhb@outdoors-directory.com www.outdoorsdirectory.com

ALASKA DEPARTMENT OF FISH AND GAME

(ADF&G/Division of Wildlife Conservation)

Southeast Alaska

PO Box 240020
Douglas, AK 99824-0020
Tel. (907) 465-4265
FAX (907) 465-4272

Southcentral Alaska

333 Raspberry Rd
Anchorage, AK 99518-1599
FAX (907) 267-2433
email: wcinfctr@fishgame.state.ak.us

Telephone numbers:

1-(888)-255-3655 Drawing permit hotline (in-state, 8AM-5PM ADST, through August, 1997 only)
1-(888)-996-2003 Drawing permit hotline (out-of-state, 8AM-5PM ADST, through August, 1997 only)
(907) 267-2347 General hunting informa-

tion (recordings and staff)
(907) 267-2187 Hunter education
(907) 267-2531 Hunting clinics information (recording only; most clinics held spring and summer)
(907) 267-2885 FAX on Demand catalog (call from FAX machine only)
(907) 267-2180 Wildlife Conservation regional office staff
(907) 566-0130 Rabbit Creek Rifle Range (recording only)
(907) 267-2304 Nelchina 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) 456-6410
Telephone numbers:
(907) 459-7206 and 459-7306
General hunting information
(907) 459-7313 Wildlife conservation staff
(907) 459-7305 Hunter education
(907) 459-7333 Hunting clinics information (recording only; most clinics held spring and summer)
(907) 267-2310 Fortymile caribou herd information (recording only-Anchorage number)
(907) 267-2304 Nelchina caribou herd information (recording only-Anchorage number)

Western and Arctic Alaska region

Pouch 1148
Nome, AK 99762
Tel. (907) 443-2271
FAX (907) 443-5893

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.

Anchorage office
605 W 4th Ave Ste 105
Anchorage, AK 99501
(907) 271-2737
Fairbanks office
250 Cushman Street
Fairbanks, AK 99701
(907) 456-0527

Ketchikan office
50 Main St
Ketchikan, AK 99901
(907) 228-6220

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

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.

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, contact:

US Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
Tel. (907) 786-3487
FAX (907) 786-3495

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, 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) 586-7892

Chugach National Forest (Prince William Sound, eastern Kenai)
3301 C. Street Suite 300
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) 772-3314

Ketchikan Area (southern panhandle)
Federal Building
Ketchikan, AK 99901
Tel. (907) 225-3101
FAX (907) 225-5626

Bureau of Land Management

The BLM manages most federal lands not administered by NPS, USFWS, and USFS — 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 (912)
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 Alaskan 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,
Room 101
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: marthak@fishgame.state.ak.us

Biologists Predict Good Small-Game Hunting

by Les Palmer

Hunters walking the woods of Interior and Southcentral Alaska should find good hunting for grouse, ptarmigan and snowshoe hare in coming months.

According to state wildlife biologists, spring weather in these popular hunting areas ranged between average and good. Good weather usually translates to high survival rates for broods of ground-nesting birds, they say. And snowshoe hare populations also appear to be increasing in all areas.

FAIRBANKS AREA

Toby Boudreau, assistant area biologist in Fairbanks, said he had "good numbers" of drumming ruffed grouse during this spring's surveys. "I don't think we're in the middle of a grouse bonanza, but grouse are doing well in certain spots."

Spruce grouse aren't surveyed, but Boudreau said they are probably doing about as well as ruffed grouse.

"We're seeing more sharp-tailed grouse around Fairbanks," he said. "We're seeing sharp-tails now in places you wouldn't expect to see sharp-tails."

From hunter reports, ptarmigan populations in the area are also doing well.

"Snowshoe hare populations are definitely still on the increase," he said. "Judging from past cycles and looking at the browse, I'd say we can expect more for at least the next two years."

DELTA JUNCTION AREA

Ruffed grouse numbers are up, said Steve DuBois, area wildlife biologist in Delta Junction.

"We've gone through a low point in the ruffed grouse population cycle, but the number of grouse has been increasing for several years now," he said. "Ruffed grouse population surveys were disrupted this year due to climatic conditions, but surveys completed near Clear indicated the grouse population had increased about 20 percent over last year. The grouse population probably increased comparably in the Delta Junction area."

Sharp-tailed and spruce grouse also appear to be increasing in the Delta Junction area, following the same cycle as ruffed grouse.

"Hares are definitely increasing," he said. "They've been increasing for the last several years. In the last two years, there have been some areas of high den-



Chris Batin makes a point of hunting hares each spring as a way of tuning hunting instincts lain dormant all winter...plus they taste good. Photo by David M. Johnson

ty and others of low density. This year, hares are more generally high over larger areas. The number of hares is high in the best habitats and the population is also increasing in lower quality habitats."

GLENNALLEN AREA

Jeff Selinger, Assistant Area Biologist in Glennallen, said that, area-wide, sharp-tailed grouse numbers appear to be up slightly from last year. For two years, the department has surveyed sharp-tails along the pipeline corridor, from the Klutina River to Sourdough.

"In that stretch, there was almost double the sharp-

tail count this year over last year," Selinger said.

Willow ptarmigan numbers are increasing somewhat. Rock ptarmigan are possibly stable, or maybe even slightly down. "We didn't see near the number of spruce grouse this year, when we were out doing other surveys," he said.

Hare numbers are up in the Glennallen area also.

MATANUSKA-SUSITNA VALLEY

Spruce and ruffed grouse numbers appear to be good, said assistant area manager Mark Masteller. (See additional information about Mat/Su ruffed grouse under Newsbreaks - ed.)

"I don't have any handle on ptarmigan numbers, but we have ptarmigan," he said. "The places that are most accessible get hunted the hardest. I always advise people to walk the extra mile and get away from the roads a little further."

The snowshoe hare numbers still appear to be increasing here as elsewhere. "This appears to be the most noticeable surge in numbers since the early 1970's and we're excited about that," he said. "Of course, we don't know when numbers will peak."

KENAI PENINSULA

Area wildlife manager Ted Spraker said ruffed grouse released on the peninsula during the last two years seem to be dispersing well, but it's too soon to hunt them.

"This is about a five-year program, and we're just going into our third year," Spraker said. "Just a few more years of waiting, and we'll probably have enough birds where it won't hurt to shoot a few." One more release is in the works for GMU 7 in September. Hunters have done a real good job of not shooting these birds, he said.

"Spruce grouse seem to be stable," Spraker said. "I don't think there are as many as there were a few years ago, but I think we have a fair number of birds around to hunt." In recent years, hunters also say they've been seeing more ptarmigan.

"Snowshoe hare numbers have increased dramatically," he said. "I think we're now into about the third year of an increasing cycle. This year, if you're a hunter and you want to take some snowshoe hares, this is the year to give it a try."

Free-lance writer and hunter education instructor Les Palmer lives and works in Sterling.

Unit 13 Moose

Continued from page 8

cause the current high incidence of calf mortality. Few people question that bears remain the main cause of moose calf mortality."

Current regulations waive the \$25 resident tag fee and allow one bear to be taken per year in Unit 13. This empowers every hunter in Unit 13 to help curtail brown bear numbers and hopefully reduce predation on moose calves. The Alaska Board of Game intentionally liberalized the Unit 13 bear season in hopes of increasing moose calf survival.

If calf survival improves and those

calves can grow to adulthood, there could be an increase in the harvest of bulls, with the option of possibly harvesting cows should the population density begin to increase. The total numbers of moose would be kept near what they are now in 13A and 13E, with possible small increases in 13B and 13C.

While brown bear regulations have been liberalized, the department is keeping an eye on the overall health and well-being of brown bears in the unit. Testa explains:

"Brown bears are not capable of

bouncing back like wolves or even moose or caribou. A sow will produce a litter of cubs only once every two to three years, and cub mortality is high. We keep close tabs on the unit's brown bear harvest to prevent over harvest, and we're planning surveys in some representative parts of the unit."

Wolves are another major predator. The wolf population in Unit 13 is healthy and so far, public harvest has been sufficient to keep wolves at moderate levels throughout much of the unit - low enough that the moose population is not threatened at its current

density. Some parts of Unit 13 have higher than average wolf numbers. Biologists are investigating how much wolves are contributing to the decline of moose in those areas.

Habitat

Abundant high quality browse is another important factor affecting moose numbers, and fire, or more precisely, the lack of it, can be critical to its production. As most moose hunters know, forest fires burn out the dense spruce forests that contribute little

Continued on page 15

Lower Koyukuk River Moose Hunters Must Obtain Registration Permits This Fall

Editor's note: Moose hunting regulations on the lower Koyukuk River changed beginning with the 1996 season, and again this year. These regulations are complex, and this article is designed to summarize them and explain their purpose. See also the accompanying map and regulations summary table.

All moose hunting during the September, 1997 season within the Koyukuk Controlled Use Area downstream from Huslia requires one of two registration permits. These permits will only be available at the check station on the Koyukuk River or at R & M Mercantile in Huslia.

The general registration permit hunt (RM830) is open to all hunters. The bag limit is one cow, or one bull with antlers at least 50 inches wide or with four or more brow tines. The season is September 5 - 25. This registration hunt is limited to the drainages of the Koyukuk River between and including the Gisasa River and Dulbi Slough.

There will be a maximum of 250 of these permits available at any time. Up to 235 may be issued from the Alaska Department of Fish and Game (ADF&G) check station at "Ella's Cabin" on the Koyukuk River and 15 at R&M Mercantile in Huslia. They will be available on a first come-first served basis starting at 1 PM on September 4. Meat of the of the forequarters, hindquarters, and ribs from moose taken in this hunt must remain on the bone until transported home.

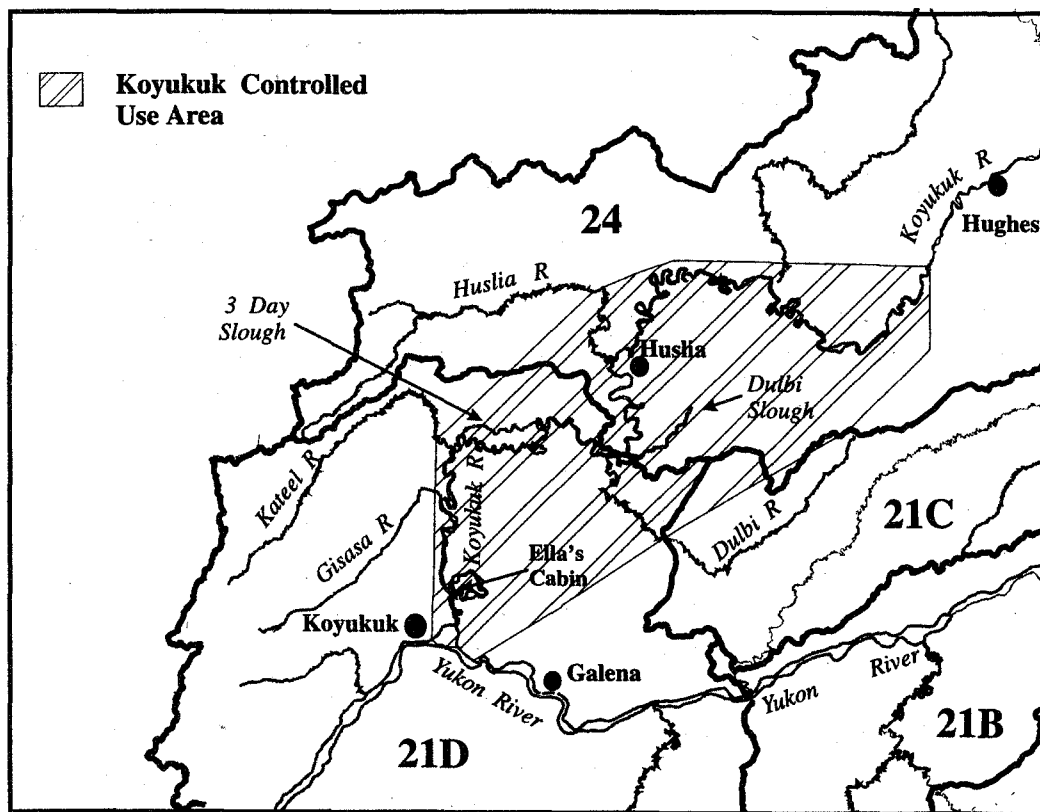
The subsistence registration hunt (RM832) is open to Alaska residents only. The bag limit is one moose. The season is September 1 - 25; however, cow

moose may not be taken below the mouth of the Gisasa River before September 21. There will be an unlimited number of these registration permits available beginning at 4 PM on August 31 at Ella's Cabin and at Huslia. All meat taken from moose in this hunt must remain on the bone until transported home, the head must be salvaged, and the antlers cut to destroy the trophy value.

The Alaska Board of Game established registration moose hunts on the lower Koyukuk River in 1996 for two reasons. First, moose hunter numbers have continued to increase each year in the area and biologists have concerns about sustainable harvest levels. Second, the Federal Subsistence Board initially closed much of the area to non-local hunters in 1996. The Federal Subsistence Board rescinded the closure only after the state Board of Game established the registration hunts. More restrictive measures may be needed in the future if hunter numbers in the lower Koyukuk River continue to increase.

A record number of moose hunters hunted the lower Koyukuk River in 1996. Limiting the number of permits in the general registration hunt will help slow the growth of the moose harvest. Although moose density estimates for some wintering areas in the lower Koyukuk continue to be relatively high by interior Alaska standards, bull:cow ratios are below management objectives.

Koyukuk Controlled Use Area



A continued increase in moose hunters in the area could result in higher than sustainable harvests.

The Department of Fish and Game, Fish & Game Advisory Committees, local village tribal councils, federal land management agencies, and interested local and non-local hunters will be discussing future moose management strategies for the lower Koyukuk River this winter. Managers encourage anyone with an interest in the moose population

in this area to participate in the planning process.

For further information on these permit hunts call Galena Area Biologist Jim Woolington at (907) 656-1345. During the hunting season, hunters can call the ADF&G office in Fairbanks at (907) 459-7206 or (907) 459-7386 (recording), and in Galena at 656-1345 (recording) for information on the number of permits that have been issued for registration hunt RM830.

Koyukuk River Controlled Use Area Fall Moose Hunting Regulations Summary

(See map for a description of the area and key geographic features)

Who	Where	When	What Moose	Permit or Harvest Ticket	Head
Alaska residents only	Downstream from Gisasa River	Sept 1 -20	Any bull	Registration permit RM832	Head must be salvaged and antlers (if any) cut to destroy trophy value
	Downstream from Gisasa River	Sept 21 -25	Any moose		
	Upstream from Gisasa River and downstream from Huslia	Sept 1 - 25	Any moose		
	Upstream from Huslia	Sept 1 -20	Any antlered moose	Harvest ticket	
	Upstream from Huslia	Sept 21 - 25	Any moose		
All hunters	Between and including Gisasa River and Dulbi Slough only	Sept 5 - 25	Cow or 50" bull or bull with 4 or more brow tines	Registration permit RM830	
	Upstream from Huslia	Sept 5 - 25	50" bull or bull with 4 or more brow tines	Harvest ticket	

Alaska residents may take either RM830 or RM832. Non-residents may take only RM830. Only 250 permits will be available at any one time for RM830: 235 from the ADF&G check station at Ella's Cabin and 15 from R&M Mercantile in Huslia. Permit availability information will be available at (907) 459-7286 (Fairbanks recording) or (907) 656-1345 (Galena recording). Successful permittees must check out at the check station or at Huslia and must present the lower front teeth. Unsuccessful hunters may check out at the check station or by mail by October 10, 1997. Meat must remain on the bone until the moose has been transported from the area.

User-group Conflicts Mount in Northwest Alaska

by Jim Dau

As the Area Wildlife Biologist for Game Management Unit 23, hunters frequently contact me for information about big game here. Most questions are easy to answer. What I am rarely asked, however, is about hunter satisfaction. Many of those who call assume that by traveling as far as Kotzebue Sound they can escape "people problems." Sadly, this is no longer correct.

When did people problems begin here? The answer depends on who you ask. Five or 10 years ago, hunters from outside Unit 23 rarely reported dissatisfaction with hunting here. Game was abundant in relation to demand. Crowding was nonexistent compared to the road system and the "lower 48." Hunters had a reasonable expectation of harvesting a trophy if they were willing to be patient and work.

During that time we frequently heard, "I'm coming back next year"--to which many added "...and I'm bringing my buddy." And they did. Infrequent reports from nonlocal hunters and some commercial operators of contacting other hunters, numerous low-flying small aircraft and fewer trophy-sized animals began to trickle into our office about 1989. They have become increasingly more common and reflect stronger dissatisfaction with hunting in Unit 23.

Residents of Noatak had a much different perception of hunting in that area as early as the late 1970s. At that time, their primary concern was the increase in small, low-flying aircraft. These aircraft were circling moose and caribou along the Noatak River they had hunted undisturbed for generations. Their complaint wasn't that aircraft reduced the aesthetics of hunting. Their concern was that aircraft frightened animals away from the river corridor where virtually all of their fall subsistence hunting occurred. Most pilots were probably unaware they had displaced animals or that local hunters were nearby.

As early as 1980, Noatak residents began asking for a controlled use area to prohibit the use of aircraft for hunting. A controlled use area was established in a

Avoiding User Group Conflicts

Here are some suggestions to help nonlocal hunters in GMU 23 avoid conflicts with local hunters

1. Avoid low flights over river corridors, especially in the vicinity of communities. Most local hunters use boats for transportation and are confined to these corridors. If it is necessary to fly a river corridor, stay high to avoid spooking game.
2. Consider checking with the Kotzebue ADF&G office about local hunting customs and concerns. For example, along the Kobuk River, it is an unwritten rule that no one hunts the north side of the river because many believe caribou will be turned away.
3. Try to find places to hunt away from areas heavily used for subsistence hunting. Hunting areas near villages, especially along the rivers, are heavily used by local people year after year.
4. Be sure to find out who owns the land you will be hunting. Today there is much private land in rural Alaska, especially near villages. Also, some federal lands are closed to nonlocal hunters. Alaska Department of Fish and Game regional offices, federal land management agencies, and native corporations can provide information on land ownership.

portion of the Noatak drainage in 1987 and expanded in 1994 to accommodate local concerns without totally excluding nonlocal hunters from the entire area.

Conflicts between local subsistence hunters and nonlocal hunters are no longer limited to the Noatak

River. Residents of the upper Kobuk River villages of Ambler, Shungnak and Kobuk are preparing to request a controlled use area in the upper portion of that drainage. This is a result of increasing numbers of nonlocal hunters, fishermen, guides and transporters. I have begun to hear similar concerns from Selawik and Buckland.

The limiting factor driving conflicts between local and nonlocal users isn't inadequate numbers of animals. Caribou are abundant in northwestern Alaska. Instead, the limiting factors are space and access. How many nonconsumptive users, sport hunters, subsistence hunters and commercial operators can a finite area absorb?

Although I pose this as a rhetorical question, it becomes very real when presented to the Board of Game as a regulatory proposal for a new controlled use area or permit hunt. Common sense tells us there are limits to everything, but ways to fairly reduce hunting before exceeding these limits are less obvious. In other portions of Alaska, intensive hunting has resulted in low male:female ratios and reduction of trophy males in wildlife populations. In Unit 23, it is resulting in escalating conflict between local and non-local hunters.

What's the answer? Is there an answer? There probably is no perfect solution, but many of us in the Department would like to hear your thoughts on this topic anyway! We want to do our best to help devise a fair solution for all Alaskans. We can do that best when we hear from the people we serve. We welcome your ideas and perspectives on this issue.

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Unit 13 Moose

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browse. In contrast, burns produce willows and birch that are critical for a moose population's health. Forest fires in Unit 13 are much less frequent now than earlier in the century. As a result, moose densities are lower now than in past decades. The lack of forest fires is very much a factor in comparing what the area can support now to what people remember from the 1950s, especially in areas like the Lake Louise flats.

A large part of the Unit 13 moose range is sub-alpine, which is little affected by forest fires. This is generally good moose habitat. And while moose densities in these areas may now be fairly high, productivity is not as high as in the past, when moose were fewer and the population was growing.

Which brings us to the double-edged

sword in Unit 13 moose management. Testa explains.

"Biologists don't want to increase the moose densities in 13 by very much because productivity—which at its best in the unit is only average for moose—would likely decline. For example, the twinning rate in unit 13A is only about 12%, one of the lowest reported in Alaska or Canada. This is why the department is not managing the entire unit to produce dramatically higher moose numbers, even though a few areas could possibly support a small increase."

In simplified, Unit 13 moose management terms, if 2+2 equals 4 moose, then 2+4 may still equal 4 moose. An increase in moose numbers will not necessarily lead to more moose to harvest.

Because of declining moose habitat,

wildlife viewers, hunters, and photographers should not expect to see the same numbers of moose in many areas of Unit 13 as they may have seen in the past.

For now, moose numbers are holding their own in Unit 13. However, a severe winter can devastate moose numbers and change the outlook of the best management plans. Yet by managing Unit 13 moose conservatively on all fronts, the chance of a substantial decline based on one or more ecological interactions is reduced.

So what does all this mean? Here's the short version: there are good numbers of moose in GMU 13. Biologists don't see dramatic declines or increases in the short run. A stretch of devastating winters, increases in predation, or major fires could change that. Biologists also don't see dramatic long-

term population changes without improved moose habitat.

Unit 13 is a complex ecological mechanism. Biologists are developing an increasingly better understanding of the system. There may not be opportunities for adjustments that bring dramatic system improvements. However, with appropriate management, and barring catastrophe, there is every reason to believe that the good numbers of moose now in the unit can be maintained for years to come.

Chris Batin is an experienced Alaska hunter, editor of The Alaska Hunter journal, and author of the 416-page award-winning book, Hunting in Alaska: A Comprehensive Guide. To obtain autographed copies of his books, contact Alaska Hunter Publications at (907) 455-8000.

Best Shot

Continued from page 1

Every rifle has a personality. Some will shoot one brand of bullet or ammunition more accurately than another. To obtain your rifle's best accuracy try at least two brands of ammunition to see which combination your individual rifle will shoot best. I have a .375 H&H that shows a distinct preference for 300-grain Noslers. My .280 will only strut its stuff with 160-grain Fail-Safe bullets.

Now let's head for the range. Make sure you have hearing and sight protection. Purchase a few targets with one-inch grids that are specifically designed for sighting in a scope-sighted rifle. If you use a peep sight or open sights select a target with a 6- or 8-inch bullseye.

At the range, use several sand bags to completely support and position your rifle. Support your rifle at two points—one just ahead of the butt of the rifle and second under the forearm. You should not have to physically hold the rifle to aim. Absolutely do not rest the barrel on anything! Upward pressure on the barrel will likely change the impact point of the bullets.

Sit upright so you will not "crawl the stock" with your face and wind up with "magnum eyebrow." Sitting upright also allows the body to move with recoil which lessens the perceived "kick."

The objective now is repeatability. You want to control as many variables as possible while firing your sighting-in shots. To do this you support the gun, you breathe, and you squeeze the trigger the same way every shot. Unless the gun is a real hard kicker, you can control the gun with only one hand on the pistol grip. Harder kicking guns will probably require a second hand on the forearm but behind the supporting sandbags.

Fire a fouling shot first. This removes any residue from cleaning and oiling. The fouling shot is the best time to be sure your rifle is adequately supported and to practice breath and trigger control. Squeeze the trigger at the end of a normal exhale.

Use constant pressure on the trigger until the rifle fires. If you have correct trigger control the rifle will fire unexpectedly. If it takes too long to get a steady sight picture, relax, breathe naturally a few times and try again. As the rifle fires keep your head down on the stock. Try to keep your eyes on the target. This is follow through. It is important in shooting consistent groups. If your follow through is good you should be able to "call" your shot based on the sight picture when the rifle fired.

Assuming your rifle is properly bore-sighted, your fouling shot will be on the paper. Do not adjust the scope or sights yet.

Loading a single round at a time, slowly fire three shots using the basic techniques of solid gun support, controlled breathing, constant trigger pressure, and follow through. Rapid fire will heat the barrel and mask what your rifle will consistently do on that critical first hunting shot.

You should find all three bullet holes near one another. They should form a rough triangle. Using the center of that triangle and the one-inch target grid lines you can now determine how far the sights must be adjusted to center the group two to three inches above the point of aim at 100 yards.



Most Alaskans — even many non-hunters — appreciate moose meat. Good quality meat begins with a good shot, and good shots begin with preparation on the rifle range. Photo by Steve DuBois.

Now adjust the scope to move the point of impact. Sighting in two to three inches above the point of aim at 100 yards will result in the bullet of most modern high-velocity rifles striking between four inches high at 150-200 yards and four inches low to between 250 or 300 yards. A well-placed shot at a big game animal from muzzle to 250-300 yards will strike within the vital area of the animal. It will usually be fatal within seconds. Most shots at big game occur within this range. This sighting-in strategy eliminates the need to memorize a trajectory table or be precise in range estimation within 250 to 300 yards.

After adjusting the sights, let the barrel completely cool down to air temperature. Repeat the three-shot group. Further sight adjustment or three-shot groups may be necessary.

You should now be able to shoot a group from a cold barrel that will center on the vertical axis of the target between two and three inches high at 100 yards. To practice for big game hunting I use a six- to eight-inch diameter bullseye target or simply a white paper plate of the same diameter.

After firing a fouling shot from a clean barrel, fire three shots at the 100 yard range from a hunting position. In hunting conditions, ground cover often prevents using the prone position. Use your practice time shooting from kneeling, sitting, and

off-hand positions.

Practice until you can place all three shots somewhere on an eight-inch paper plate target at 100 yards. Then move the target further away at 50 yard increments until you can no longer place all your shots on the plate. The greatest distance at which you can place three shots on the plate should be considered your maximum shooting range.

Now back to that trophy ram. Properly sighted in, the rifle and ammunition are capable of making the shot. If you have practiced enough to place all your shots in an 8-inch circle at the ram's range, take the shot and get the skillet hot. If not, the responsible hunter will pass on the shot and wait for another opportunity to get within range.

This season let us resolve to shoot straighter. An animal wounded by incompetent shooting suffers unnecessarily. An animal shot and not recovered takes away an opportunity for another hunter and future hunters.

Public opinion overwhelmingly supports taking game for human consumption if done cleanly and quickly. Help maintain public support for hunting. Practice enough before the season begins so you can make your best shot count.

Tony Monzingo is the Alaska Department of Fish and Game's Hunter Services Program Coordinator. He is a widely experienced shooter and hunter. Don't try to call him at the office during September...he probably won't be there!

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