

GAME MANAGEMENT UNITS 21B, 21C, 21D & 24

GALENA AREA OFFICE

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DESCRIPTION

The Galena Area office with management responsibilities for Units 21B, 21C, 21D and 24 (totaling approximately 51,134 mi²) is located in Galena. The Area Management Biologist, Assistant Area Management Biologist (shared with the Regional Office), and Wildlife Technician (shared with the Regional Office) are stationed in Fairbanks. The only road access is the Dalton Highway in Unit 24A. Access to other parts of the area is limited to travel by boat on the rivers, aircraft, and snowmachine during winter. Moose, caribou, and bears are important food sources for local rural residents and provide hunting opportunity for numerous nonlocal hunters. Fur trapping is an important traditional and economic activity.

Game Management Unit 21B contains approximately 9,311 mi². It consists of the Yukon River corridor between Tanana and Ruby, including the Nowitna River. The Nowitna National Wildlife Refuge occupies most of the unit south of the Yukon River. Ruby is the only village within Unit 21B.

Unit 21C contains approximately 3,670 mi². It consists of the Melozitna River drainage upstream from “the rapids” near the mouth, and the Dulbi River drainage upstream from Cottonwood Creek. There are no villages or year-round residents in Unit 21C.

Unit 21D contains approximately 12,110 mi². It consists of the Yukon River drainage from Blackburn Island upstream to Ruby, and the Koyukuk River drainage downstream from Dubin Point. Part of the Koyukuk Controlled Use Area is included within Unit 21D. Federal conservation areas in Unit 21D include parts of Koyukuk National Wildlife Refuge and parts of Innoko National Wildlife Refuge. Villages within Unit 21D include Galena, Koyukuk, Nulato, and Kaltag.

Unit 24 contains approximately 26,060 mi² and is divided into 4 subunits: 24A, 24B, 24C, and 24D. It consists of the Koyukuk River drainage from the headwaters in the Brooks Range and east of the Dalton Highway, downstream to Dubin Point. The Kanuti Controlled Use Area, part of the Dalton Highway Corridor Management Area, and part of the Koyukuk Controlled Use Area are included within Unit 24. Federal conservation units include parts of Koyukuk National Wildlife Refuge, parts of Gates of the Arctic National Park and Preserve, and Kanuti National Wildlife Refuge. Bureau of Land Management oversees some other federal lands in Unit 24. Villages within Unit 24 include Coldfoot, Wiseman, Bettles, Evansville, Anaktuvuk Pass, Alatna, Allakaket, Hughes and Huslia.

CONTROLLED USE AREAS

STATUS: There are 2 moose hunting controlled use areas (CUAs) in the Galena Management Area: the Koyukuk CUA and the Kanuti CUA.

KOYUKUK CONTROLLED USE AREA: The Koyukuk CUA was established in 1978 to reduce participation of nonlocal moose hunters and reduce hunter conflicts by prohibiting the use of aircraft. However, by 1986 the number of hunters arriving by boat from outside the unit equaled the number of hunters who previously accessed the area by aircraft. The Koyukuk CUA occupies 4,791 mi² in northern Unit 21D and southern Unit 24 and overlaps with a large portion of the Koyukuk National Wildlife Refuge. A moose hunter checkstation has been operating on the Koyukuk River since 1981. It enables accurate determination of the number of hunters using the river to access the Koyukuk CUA within Unit 21D and accurate collection of biological data from harvested animals. It is also used to educate local residents on licensing and reporting requirements, to inform nonlocal hunters about regulations specific to the area and the locations of private property along the river, and as a means of monitoring compliance with regulations. The CUA, the mandatory checkstation, and the registration and drawing hunts are all elements for managing this high profile hunting area and, in combination, have succeeded in meeting the objectives of the moose management plan.

There have been few changes in the boundaries or basic elements of the Koyukuk CUA (i.e. no fly-in moose hunting) since its creation. However, there have been a variety of changes to the type of moose hunts that the Department manages in the CUA, as discussed in the moose section of this overview. Currently, an unlimited number of resident hunters can hunt in the CUA on a subsistence registration hunt (RM832). Conditions for the registration hunt include keeping all the meat on the bone of the hindquarters, forequarters, and ribs, and sawing off the upper half of one antler and turning it in to ADF&G. Alternatively, there are a limited number of permits available for a drawing hunt. Conditions for the drawing hunt include keeping the meat on the bone of the hindquarters, forequarters, and ribs. Drawing hunt permittees are allowed to retain the entire antler without cutting the antler. For the drawing hunt, 258 permits were allowed in RY03, while only 50 permits were allowed each year during regulatory years 2004–2005 through 2007–2008 (RY04–RY07). Because of improving bull:cow ratios, the number of permits in RY10 and RY11 was increased to 136, but were 118 permits in RY12 and RY13, and 50 permits will be offered in RY14 due to declining bull:cow ratios in the 2013 moose survey. Implementation of the drawing permit hunt was a result of the Koyukuk River Moose Hunters Working Group’s recommendations and it effectively reduced hunter numbers within the Koyukuk CUA. Although regulatory changes did improve bull:cow ratios in the CUA from 2001 to 2011, as expected those changes were not effective in growing the moose population. The moose population decline, which occurred from approximately 1994 to 2004, was likely the result of poor calf survival and low yearling recruitment. The status of the moose population for the Galena Area is described in the moose status section below.

KANUTI CONTROLLED USE AREA: The Kanuti CUA was implemented in 1979, apparently to address the same issues that were identified when the Koyukuk CUA was

established. The Kanuti CUA occupies 1,885 mi² of Unit 24B; the size of the area was reduced in 2010 from 2,183 mi². The Kanuti CUA overlaps much of the Kanuti National Wildlife Refuge. In 1992 federal land within the Kanuti CUA was closed to moose hunting except for federally qualified users, so interpretation of the effectiveness of the CUA regulation is unclear. Although a few hunters who hunted the state navigable river corridor accessed the Kanuti CUA from the Dalton Highway in the past, most use within this CUA is by residents of the Unit 24 communities of Alatna, Allakaket, Bettles, Hughes, and Evansville. Overall, the federal closure that overlaps the Kanuti CUA has a greater impact on current hunting patterns in the Kanuti CUA, except for the lower Alatna River area that is mostly state land, where the federal closure doesn't apply.

MANAGEMENT/RESEARCH ACTIVITIES: A checkstation has been operated on the Koyukuk River within the Koyukuk CUA since 1981 (33 consecutive years). The Koyukuk River moose management planning effort was implemented in 1999 to deal with issues related to these CUAs. The Koyukuk CUA was the main focus of attention because of the large number of hunters using the lower Koyukuk River. A wolf predation control implementation plan was developed for Unit 24B in 2011 and adopted by the Board in 2012, which overlapped a large portion of the Kanuti CUA, and the management activity focus has shifted from the Koyukuk CUA to the upper Koyukuk River drainage.

ISSUES: Crowding of hunters is one of several factors that contribute to conflict among user groups. The Koyukuk and Kanuti CUAs restrict all hunters to the navigable rivers within those areas. This potentially has the effect of concentrating nonlocal hunters in the same areas as local hunters, which likely increases hunter conflicts. The drawing/registration permit system that was implemented in the Koyukuk CUA in 2000 has proven to be a far more effective way to regulate hunter numbers and disperse hunters throughout the Unit. Conflicts between local and nonlocal hunters appeared to subside temporarily in the early 2000s following implementation of the Koyukuk River Moose Management Plan. More recently (2010–2013), hunter conflicts appear to be increasing even though hunter numbers are lower than the late 1990's and moose numbers are relatively stable compared to then.

Harvest monitoring and moose population data collection has improved since the CUAs were established. The management objectives in both areas provide for harvest for subsistence hunters, as well as mature bulls for hunters who prize trophy quality bulls. The CUAs continue to be popular among local communities and the Koyukuk CUA is an important component of the management strategy for that area.

BLACK BEAR

STATUS: Black bears are numerous in most of Units 21B, 21C, 21D, and 24. No population estimation surveys have been conducted. There is no closed season for black bears in these units, which are an important species taken for food by local residents. Household surveys indicate local harvest is approximately 30–45 bears annually in Units 21B, 21D, and 24. Nonlocal hunters take an unknown, but probably small number of black bears, usually incidental to other hunting activities.

MANAGEMENT/RESEARCH ACTIVITIES: There is no requirement for sealing black bears. Subsistence household surveys and anecdotal information are used to monitor population status.

ISSUES: There is no efficient and cost effective way to monitor black bear population dynamics in this area. During years of low berry abundance, reports of black bears frequenting village dumps and fish camps are common. Bears taken in “Defense of Life or Property” (DLP) are usually not reported. Black bears are significant predators of moose calves, and poor moose calf survival is likely the primary reason for moose population declines in the Galena Management Area.

GRIZZLY BEAR

STATUS: The grizzly bear populations in Units 21B, 21C, 21D and 24 are believed to have been stable or slowly increasing during the past 10 years, based on field observations, nuisance reports, and hunter sightings. Historically, grizzly bears were an important source of food and hides for local residents. Despite liberal seasons, hunting pressure by both local and nonlocal hunters is low. Annual harvests from Units 21B, 21C, and 21D usually total less than 10 bears. Annual harvests from Unit 24 are usually less than 20 bears.

MANAGEMENT/RESEARCH ACTIVITIES: Management activities involve monitoring harvest through sealing certificates and administering hunts. No surveys have been conducted. Units 21D and 24 have a subsistence registration permit hunt in which grizzly bears taken do not have to be sealed unless the hides are transported out of the units.

ISSUES: Management objectives for grizzly bears are to maintain these populations at levels that will sustain a minimum annual reported harvest of 25 within Units 21B, 21C, 21D and 35 within Unit 24. Unreported harvest is estimated to be approximately 10 bears per year in Units 21B, 21C, and 21D and 5 bears each year in Unit 24. The combined reported and unreported 5-year average harvest was estimated to be 18 bears in Units 21B, 21C, 21D and 21 bears in Unit 24.

Local residents report concerns about increased numbers of grizzly bears. Residents of Huslia, who rely on black bears as a subsistence food source, report that grizzly bears are occupying traditional black bear dens. Some local residents believe that grizzly predation on black bears has substantially reduced the availability of black bears. More importantly, those residents believe black bear hunting has become a riskier endeavor due to the likelihood of encountering a grizzly bear at den sites. Grizzly bears are significant predators of moose calves, and poor moose calf survival may be the primary reason for moose population declines in this area.

CARIBOU

STATUS: Four caribou herds are resident in the Kokrines Hills (Units 21B and 21C), Ray Mountains (Units 20F, 24A and 24B), and Hodzana Hills (Units 24A and 25A). Each herd is associated with and named for a mountain peak within the range of mountains where they calve. The Ray Mountains herd numbers approximately 1,500–1,800 caribou, The Hodzana

herd is approximately 800–1,200 caribou, the Wolf Mountain herd is approximately 350–550 caribou, and the Galena Mountain herd is 80–120 caribou. Total annual harvest from the 4 herds seldom exceeds 20. The Western Arctic Caribou Herd is frequently found in northern Unit 24 and occasionally travels into the western-most portions of Units 21D and 24. During winter 2003–2004, up to 200,000 Western Arctic Herd caribou wintered in northern Unit 24, but since then have numbered only 20,000–30,000 each winter in the Zane Hills and Purcell Mountains of Units 24C and 24D.

MANAGEMENT/RESEARCH ACTIVITIES: Harvest monitoring is accomplished through the statewide general harvest ticket system. Information on caribou numbers and distribution of the 4 resident herds was obtained through cooperative studies involving ADF&G, U.S. Fish and Wildlife Service (USFWS), and Bureau of Land Management (BLM). We radiocollared 145 caribou between 1992 and 2009; however only about 40 radio collars are still active. Periodic radiotracking flights provide information on seasonal distribution. Annual composition flights using both fixed-wing and helicopter are conducted in July and October. Surveys of the Ray and Wolf Mountain herds have included aerial photography from fixed-wing aircraft during post-calving aggregations. Typically however, surveys of the 4 herds are conducted opportunistically. ADF&G staff in Region 5 oversees management of the Western Arctic caribou herd.

ISSUES: Due to limited access, hunters take few caribou from the 4 resident herds. The management objectives for these caribou herds are to maintain harvest at a level that allows the herds to grow. However, harvest is largely self-limiting because of difficult access, and it appears that predation is likely restricting herd growth. Lichen ranges are lush and the early calving date and the large body size of both calves and adults indicate good nutrition. The Galena Mountain Herd experienced a decline in estimated herd size over the past 10 years from over 300 animals to less than 100. The Department uses emergency orders to announce season openings in a portion of the Unit 21D to allow winter harvest of the Western Arctic Herd caribou east of the Koyukuk River, while providing adequate protection for the Galena Mountain and Wolf Mountain herds.

MOOSE

STATUS: Moose were reported in Units 21B and 21C historically, but are relatively new additions to Units 21D and 24. Local residents reported first observing moose tracks in those units during the 1930s. Colonization of moose in those areas was slow until federal predator control in the 1950s allowed rapid expansion of local populations. Moose densities range from low to moderate over most of the area, with very high densities in localized areas of high quality habitat. Generally, aerial trend count area surveys conducted in 1998–2003 showed declining calf:cow and bull:cow ratios. Surveys demonstrated declines of 16–25% from 1994 to 2001 in Unit 21D and 30–50% in Unit 24 from 1993 to 2004. Populations have apparently stabilized since the early 2000s, due primarily to excellent productivity during 2003–2006. However, record snow accumulations in the lower Koyukuk and Middle Yukon during winter 2008–2009 may negatively impact moose numbers in those areas.

MANAGEMENT/RESEARCH ACTIVITIES: Galena management staff conducted fall sex and age composition surveys, spring twinning surveys, and contacted hunters in the fall.

We conducted 6 population estimation surveys in portions of Unit 21D from 1987 to 2011; 2 in Unit 21B in 2001 and 2008; and 9 surveys in Unit 24 from 1999 to 2013. Hunter checkstations are operated during September near the mouth of the Nowitna River and 15 miles upstream from the village of Koyukuk on the Koyukuk River. The lower Koyukuk River drainage in Units 21D and 24 downstream from Hughes is within the Koyukuk Controlled Use Area (KCUA), and hunts in the KCUA are managed by drawing and registration permits. Surrounding the KCUA within 21D are 5 other drawing/registration permit areas and in Unit 21B there are 4 drawing/registration permit areas. Harvest monitoring for the rest of the Galena area is by general season harvest report cards and subsistence household surveys.

A 1997 browse quality assessment conducted by a researcher from the University of Alaska in the Three Day Slough area of Unit 21D suggests that browse quality was very high compared to other similar willow species in the Interior. In Unit 24B, the Department estimated the spring 2006 browse removal rate to be 5.3% (95% CL: 4.3%–6.3%). A removal index extrapolated to shrub counts and species composition yielded a browse removal rate of 8.8% (6.8%–10.8%). These values are among the lowest removal rates estimated in Interior Alaska and are statistically similar to the removal rate and removal index in adjacent Unit 24C (5.5% and 8.5%, respectively).

A cooperative moose management project was initiated in Units 24A and 24B by ADF&G, USFWS, National Park Service (NPS) and BLM in March 2008 with the deployment of 58 VHF and GPS radio collars. An additional 30 radio collars were deployed in 2009 and 37 collars in 2011 to replace mortalities and increase sample size to 125 total moose. In addition to monthly relocations to provide distribution information, other benefits that will result from this study include twinning surveys, survival rates, and sightability estimates. That study concluded in 2013 and the results are being analyzed. The Department also cooperated with the USFWS Koyukuk National Wildlife Refuge and NPS in research project to understand moose calf weight dynamics, survival rates, and moose distribution in the lower Koyukuk and Middle Yukon River areas.

ISSUES: The key issues for moose management in the Galena Management Area are 1) low abundance of moose in Units 24B and 24C, 2) predator-caused mortality, 3) moose hunter conflicts, 4) hunter compliance with antler cutting, 5) below objective Unit 21B moose population, and 6) increasing nonlocal resident hunters. Further details regarding moose hunting concerns as they relate to the KCUA, are discussed in the Controlled Use Areas section of this overview.

Residents of communities in the area served by the Galena area office are generally pleased with the results of the registration and drawing permit hunts and the ability this system affords the Department to manage hunter distribution. However, frustration continues over the realization that hunter management is having little impact on the moose population decline, which is attributable to the poor survival and recruitment of calves and yearlings, not hunting.

Private and federal land ownership and dual management presents challenges to moose management in these units. This is particularly a concern in the upper Koyukuk River

drainage near Allakaket, Alatna, and Hughes where the moose population has declined the most and local hunters are struggling to harvest enough moose. Local hunters in these areas are increasingly turning to federal managers to provide for additional hunting seasons, while private corporation lands that fall under State jurisdiction maintain the more restrictive seasons in an effort to prevent further moose population declines.

Unit 24

Moose occur at low density in Unit 24B, and the current population estimate is below the Intensive Management population objective established in 2006. Residents in the Upper Koyukuk River Drainage in Unit 24B have experienced difficult moose hunting for many years, due to the low density of moose in the area. The difficulty in obtaining a moose has been compounded by increasing fuel prices. Baseline biological data were collected in Unit 24B since 1989, and those data corroborate the moose population estimates and the concerns of local subsistence hunters. The Department assessed the moose population in Unit 24B, and developed an Intensive Management (IM) Plan to address the unique situation for this area. Bear and wolf predation were identified as factors limiting the moose population, however local advisory committees were initially not in favor of management actions that included bear removal. Therefore, the Department developed a plan to evaluate the removal of only wolves. The Board approved the IM Plan for the Upper Koyukuk Management Area (UKMA) in Unit 24B at its March 2012 meeting, and wolf control began in 2013.

Moose density on the Kanuti National Wildlife Refuge was estimated at 0.67/mi² in 1993, but was stable and averaged 0.33/mi² during 1999–2013. Moose density on the refuge and the remainder of Unit 24B, may have followed trends similar to those observed throughout the Galena Management Area and other regions in Alaska following the repeal of Land and Shoot wolf hunting regulations in 1991. The moose population now appears to be stable at low density with small annual fluctuations.

Subsistence Division household surveys in Alatna and Allakaket estimated combined harvest was nearly 40 moose/year during 1997–2002, while reported harvest from 2009–2013 was only 10–15 moose/year. Total estimated harvest among all hunters in Unit 24B was 83–109 moose/year during RY07–RY09, which is below the 24B IM harvest objective of 150–250 moose. Harvest of predators on moose (wolves, black bears, and grizzly bears) is low (20–30 wolves/year, 20–30 black bears/year, 3–8 grizzly bears/year).

Habitat in the UKMA is excellent as demonstrated by the high twinning rates (avg. = 57%; 2008–2011) with low browse utilization in 2007 (browse biomass removal = 5.3%, removal index = 8.8%), and does not explain poor calf survival or poor yearling recruitment. High fire frequency in Unit 24B has resulted in a high proportion of early seral vegetation communities; however, relatively few fires of significant size have occurred within the UKMA portion of 24B in the last 30 years, due to fire suppression activities and other factors. However, in the summer of 2013 a 20,363 acre fire occurred in the Siruk Creek drainage, and in 2012 a 2,709 acre fire occurred in the UKMA. Winters are marked by severe cold weather, but winters with deep snow (>36 in) likely to influence moose habitat selection or cause high energy use occurred in only 9 of the last 20 years.

Intensive management activities were initiated in 2011 including Subsistence Division household harvest surveys, wolf census surveys, wolf removal, moose population estimation surveys, moose captures and telemetry monitoring. Preliminarily, harvest by Allakaket and Alatna residents was estimated at 16 moose in RY11 and RY12, which remains below the harvest objective of 40 moose. As of October 2013, 161 moose have been captured and collared for survival assessment, from the 2011 (n=41), 2012 (n=60), and 2013 (n=60) cohorts. Calf survival rates ranged from 80-100% for the 2011 cohort and 73-97% for the 2012 cohort with the 2013 cohort monitoring just beginning. Yearling survival rates ranged from 56-86% for the 2011 cohort and 82-90% for the 2012 cohort. In March and April of 2013, a total of 23 wolves were killed from a helicopter within the UKMA as part of the wolf predation control activities. Full results are reported in: *Annual Report to the Alaska Board of Game on Intensive Management for Moose with Wolf Predation Control in GMU24B*.

Unit 21B

Bull:cow ratios in the heavily hunted Nowitna River portion of Unit 21B remain a concern. These ratios increased from 15–20 bulls:100 cows with approximately 1/3 of the bulls being yearlings during 2000–2003, to approximately 25 bulls:100 cows in 2013. During the period of low bull:cow ratios an increasing number of nonlocal residents hunted this area, and eventually success rates among local residents declined. This caused local hunters to either shift the area in which they hunted or change the season in which they hunted. As more hunters shifted to hunting the winter season, more cow moose were harvested, which accelerated the rate of the moose population decline. With increasing bull:cow ratios in recent years, local village harvest has steadily increased.

Based on the 2008 GSPE survey of Unit 21B, the population estimate was 2,317 observable moose (1,899–2,736; 90% CI), therefore the Unit 21B management objective to maintain a moose population of $\geq 4,000$ –5,000 was likely not met during RY09–RY10. Although Unit 21B has a positive finding for Intensive Management, intensive management options are limited due to federal land ownership in the areas of best moose habitat.

SHEEP

STATUS: Much of the suitable sheep habitat in Unit 24 is located within Gates of the Arctic National Park and Preserve (GAAR) in Units 24A and 24B. Sheep numbers declined from the mid 1980s until the early 1990s. This decline was likely the result of severe winters from 1989 through 1993. Population estimation surveys conducted in GAAR during summer 1996 indicated sheep numbers were lower than the mid 1980s, but recruitment had begun to improve by 1993. Surveys in 1996 found good numbers of lambs and yearlings, which indicated the population was increasing. During 1998–2002, annual surveys were conducted in a portion of the 1996 surveys area by GAAR staff. Although there were annual fluctuations, the population was considered stable during 1996–2002. However, comparisons with surveys in the 1980s indicated that the sheep population was historically much higher in this area. From 2002 through 2012, ADF&G conducted sheep surveys in part of the upper Chandalar drainage east of the Dalton Highway in portions of Unit 24A and 25A. Total sheep numbers, lamb:ewe ratios and total legal rams have remained healthy throughout 2002–2012. The number of legal rams ranged from 31 to 50 and the lamb:ewe ratio ranged from 18% to 43%, with 32% estimated in the 2009 survey. Total sheep numbers ranged from 989 to 1,738

sheep with 1,517 sheep counted in 2006, 1,310 in 2007, 1,535 sheep counted in 2009, and 1,738 sheep counted in 2012. In RY10–RY11, an average of 76 hunters reported harvesting an average of 27 animals in Unit 24, not including unreported harvest that occurred within GAAR on federal hunts.

MANAGEMENT/RESEARCH ACTIVITIES: Sheep populations in Unit 24 are monitored by analyses of harvest reports, occasional fixed-wing aerial surveys, and anecdotal information. Aerial surveys by ADF&G and BLM will continue dependent on funding in Units 24A and 25A. A sheep movement study by ADFG was concluded in that area in 2012.

ISSUES: Dall sheep in GAAR are managed somewhat differently than in most areas of Alaska. Federal law mandates subsistence use as the highest priority consumptive use within the preserve, and the exclusive consumptive use by federally qualified users within the park. Sheep in Unit 24 outside GAAR are managed for diversified human use. Although subsistence hunting is generally localized, the number of sheep in those areas remains sufficient to support current subsistence harvest. Other hunters are generally more widespread, but are restricted to areas outside GAAR. A majority of nonsubsistence hunters access Units 24A and 24B from the Dalton Highway.

WOLVES

STATUS: Wolf harvest in Units 21B, 21C, and 21D is well below the maximum sustained level the population can support. The Units 21B, 21C, and 21D combined average annual harvest for RY05–RY07 was 57 (range = 48–70) wolves annually, while the allowable harvest was estimated to be at least 124–182 wolves annually. Wolf harvest in Unit 24 is also well below the maximum sustained level the population can support. The Unit 24 average harvest for RY05–RY07 was 63 (range = 53–69) wolves annually, while the allowable harvest was 130–190 wolves annually. The Unit 24 wolf population was stable during 2007–2010 and changed little since regulatory year 1996, with only some localized fluctuations. Wolf numbers were highest (23–28 wolves/1000 mi²) in Unit 24 south of Hughes, moderate and stable (10–15 wolves/1000 mi²) in central Unit 24 (Bettles to Hughes), and variable (15–21 wolves/1000 mi²) in northern Unit 24 (north of Bettles). Estimated wolf population densities were highest and stable to increasing in Unit 21D (25–37 wolves/1000 mi²), moderate and stable in Unit 21B (11–17 wolves/1000 mi²), and moderate and stable in Unit 21C (13–18 wolves/1000 mi²).

MANAGEMENT/RESEARCH ACTIVITIES: Wolf population trends were monitored through harvest reports and aerial surveys. In a portion of Unit 21D a wolf study was conducted in 1994 and reconnaissance surveys were conducted in 1999 and 2001 in Units 21D and 21B, respectively. A population estimation survey was conducted in northern Unit 21D and southern Unit 24 in 2000. A wolf reconnaissance survey was conducted in Unit 24B in 2011. Use of snowmachines is the most common method of transportation for trappers and wolf hunters. Wolf harvest has declined, particularly in Unit 24 since the ban on taking wolves and other furbearers the same day a person is airborne. Wolf snaring clinics were conducted in Allakaket, Huslia and Galena during January 2000 and in Hughes, Kaltag and Ruby during December 2001, in Nulato and Galena in 2002 then again in Huslia and Allakaket in 2005, and Nulato in 2007.

ISSUES: Wolf population levels are likely stable throughout the area. While wolf predation on moose is also likely stable, demand for moose by nonlocal and local hunters is intensifying. Local residents of the Galena area recognize the predator–prey relationship between moose and wolves and make a conscious effort to increase wolf harvest when they perceive that moose are declining. There is some local demand for wolf pelts used as parka ruffs and gifts at funeral and ceremonial potlatches. But with depressed fur prices and increasing fuel prices, the incentive to trap wolves is not high enough to encourage trapping at levels needed to cause a positive response in moose recruitment.

FURBEARERS

STATUS: Furbearers have traditionally been an important resource in Units 21B, 21C, 21D, and 24, supplying food, clothing, and items of commerce. Although furbearer populations have always been sufficient to meet local demands, they are subject to cycles of abundance. Furbearers of economic importance found in these units are marten, beaver, lynx, wolves, wolverine, red fox, mink, river otters, and muskrats. Coyotes also occur, but are rare. Weasels and red squirrels are common, but usually not targeted by trappers. Harvest trends for some species are related to markets. Some species, especially beaver, are important food items and taken in high number irrespective of markets. Based on trapper reports, most furbearer population levels for the past several years in Units 21B, 21C, 21D, and 24 appear to be stable. Marten and lynx numbers were apparently low in 2012 and 2013.

MANAGEMENT/RESEARCH ACTIVITIES: Harvest is monitored through sealing records, fur export reports, fur acquisition reports, and trapper surveys. The local USFWS office studied the effects of forest fires on marten. Snap trapping for small mammals has provided indices of small mammal abundance in some areas.

ISSUES: Low fur prices for most species have directly affected trapper effort in the area. Furbearer populations are in good condition throughout the area. The current distribution and effort by trappers is light and compatible with the present population levels. The harvest of furbearers is below sustainable harvests, and is not expected to change significantly given the large area, number of trappers, remoteness, and fur prices.

SMALL GAME

STATUS: The overall status of small game populations in Units 21B, 21C, 21D and 24 are largely unknown. Anecdotal information suggests hare numbers were near their peak in 2008 and 2009 in some areas after a low populations during 2001–2005. Spruce and ruffed (locally called willow) grouse are common. Grouse and ptarmigan numbers followed similar trends of decline and increase to hares, and probably peaked in 2009–2010.

MANAGEMENT/RESEARCH ACTIVITIES: None

ISSUES: None