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

GALENA AREA OFFICE

Area Biologist: Glenn Stout
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DESCRIPTION

The Galena Area office, with management responsibilities for Units 21B, 21C, 21D and 24 (totaling approximately 51,134 mi^2), is located in Galena. The Area Management Biologist, and Assistant Area Management Biologist (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 mi^2. 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 mi^2. 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 mi^2. 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 mi^2 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 mi^2 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 has been little change 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 ADF&G 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 drawing permits available. 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, 50 permits were allowed each year during RY14–RY17. 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 the present, 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 due to a combination of effects including poor calf survival, low yearling recruitment, cow harvest, and declining habitat. 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 mi^2 of Unit 24B; the size of the area was reduced in 2010 from 2,183 mi^2. 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 (36 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. The control plan area overlapps 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 the distribution of hunters throughout the Unit. Hunter conflicts between local and nonlocal hunters appeared to subside temporarily in the early 2000s following implementation of the Koyukuk River Moose Management Plan.

Harvest monitoring and moose population data collection has improved since the CUAs were established and analysis of perceived competition among user groups can now be accomplished. Because harvest does not exceed sustainable yield (demand is less than supply), we can demonstrate that competition has not occurred in these areas. However, within the Koyukuk CUA, regulated and sustainable levels of harvest were accomplished through the adoption of the drawing/registration permit system, not as a result of the CUA restrictions. The management objectives in both areas provide for abundant levels of harvest for subsistence hunters, as well as abundant numbers of mature bulls for hunters who prize trophy quality bulls.

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. Hunters reported declines in the number of black bears observed or harvested in the fall of 2015 and 2016.

MANAGEMENT/RESEARCH ACTIVITIES: There is no requirement for sealing black bears in the Galena Management Area. 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. Present harvest levels are well below that. 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 17 bears in Units 21B, 21C, 21D and 23 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.

Regulations were adopted by the National Park Service and the Fish and Wildlife Service that limited some methods and means for the harvest of bear in the Galena Management Area. These rules were opposed by the department, the Middle Yukon Advisory Committee, the Koyukuk River Advisory Committee, and the Western Interior Regional Advisory Council.

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 900-1,200 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 westernmost portions of Units 21D and 24. Each winter as many as 20,000–30,000 Western Arctic herd caribou can be found 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 205 caribou between 1992 and 2013; however only about 30 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 has experienced a sharp 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. Apparent shifts in migratory patterns of the Western Arctic Herd in northern Unit 24 has occasionally made it difficult for Anaktuvuk Pass residents to obtain caribou in early fall.

MOOSE

STATUS: Moose were reported in Units 21B and 21C historically, but were apparently a relatively new addition to Units 21D and 24 in the 20th century. 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 negatively impacted moose numbers in those areas. Good productivity and mild winters in 2013–2016 benefited these populations.

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 from1987 to 2011; 2 in Unit 21B in 2001 and 2008; and 10 surveys in Unit 24 from 1999 to 2015. 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 harvest report cards and door-to-door subsistence 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. ADF&G 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 in Unit 24B yielded a browse removal rate of 8.8% (6.8%–10.8%). These browse removal 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).

ISSUES: The key issues for moose management in the Galena Management Area the last five years were the predator control program in Unit 24B and the moose declines in the lower Koyukuk and Nowitna river drainages. Further details regarding moose hunting concerns as they relate to the KCUA, are discussed in the Controlled Use Areas section of this overview.

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. ADF&G assessed the moose population in Unit 24B, and developed an Intensive Management (IM) Plan to address the unique situation for this area. The Board approved the IM Plan for the Upper Koyukuk Management Area (UKMA) in Unit 24B at the 2012 meeting.

Population estimation survey density on the Kanuti National Wildlife Refuge was 0.67 moose/mi^2 in 1993, but was stable and averaged 0.33 moose/mi^2 during 1999–2013. Moose density on the refuge and the remainder of Unit 24B, likely 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 harvest was nearly 40 moose/year in 1997–2002. 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. 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 23 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. Through October 2015, 271 moose were captured and radiocollared for survival assessment, from the 2011 (n=41), 2012 (n=60), 2013 (n=60), 2014 (n=50) and 2015 (n=60) cohorts. Preliminary data, without censoring, showed calf survival rates from 5 months of age averaged 83% in the wolf control area and 72% in the area without wolf control. Yearling survival rates averaged 68% with wolf control and 69% without wolf control. Mild winters during the study contributed to high survival in both areas. In March and April from 2013 though 2016, a total of 59 wolves were killed from a helicopter by ADF&G staff 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 *Unit 24B*.

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 ⅓ of the bulls being yearlings during 2000–2003, to approximately 28 bulls:100 cows in 2015. 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 Geospatial Population Estimator (GSPE) survey, the population estimate for all of Unit 21B was 2,317 observable moose (1,899–2,736; 90% CI). The Intensive Management objective is 4,000–5,000 and was likely not met in 2008–2009, however, since 2008 no surveys have been completed and the population trend is unknown. Despite a positive finding, future intensive management activities will be challenging due to federal land ownership in areas most frequented by moose hunters.

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 ADF&G 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 a concern particularly 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.

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 that sheep numbers were lower than during 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 remained healthy throughout 2002–2012. During those 7 years 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 counted in 2007, 1,535 counted in 2009, and 1,738 counted in 2012. In regulatory years 2010–2011 and 2011–2012 (RY10 and RY11), an average of 76 hunters reported harvesting an average pf 27 animals in Unit 24, not including unreported harvest that occurred within GAAR on federal hunts. Sheep declined in 2014 and 1015, but appear to be rebounding again in 2016. Once again severe winter conditions appeared to decrease lamb recruitment and likely influenced sightability of ewes due to a reduction in lamb:ewe nursery groups during surveys.

MANAGEMENT/RESEARCH ACTIVITIES: Sheep populations in Unit 24 are monitored by analyses of harvest reports, occasional fixed-wing aerial surveys, and anecdotal information. The NPS initiated a sheep study in GAAR in 1998 that included assessments of harvest, population status, and movements, mostly north of the Brooks Range. Aerial surveys have also been conducted by ADF&G from 2002 through 2016 in a portion of Unit 24 and Unit 25A.

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 Unit 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 regulatory years 2005 through 2015 (RY05–RY07; RY begins 1 July and ends 30 June, e.g., RY05 = 1 July 2005 through 30 June 2006) was 41 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–RY15 was 40 wolves annually, while the allowable harvest was 130–190 wolves annually. The Unit 24 wolf population was likely stable during 2007–2015 and changed little since regulatory year 1996, with only some localized fluctuations. Wolf numbers were highest (9–11 wolves/1000 km^2) in Unit 24 south of Hughes, moderate and stable (4–6 wolves/1000 km^2) in central Unit 24 (Bettles to Hughes), and variable (6–8 wolves/1000 km^2) in northern Unit 24 (north of Bettles). Estimated wolf population densities were highest and stable to increasing in Unit 21D (9.8–14.2 wolves/1000 km^2), moderate and stable in Unit 21B (4.4–6.7 wolves/1000 km^2), and moderate and stable in Unit 21C (5–7 wolves/1000 km^2).

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, but may be rebounding with hares beginning in 2016.

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 increasing in 2016. 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