Species Management Report and Plan ADF&G/DWC/SMR&P–2025–52

Brown Bear Management Report and Plan, Game Management Unit 23:

Report Period 1 July 2014–30 June 2019, and

Plan Period 1 July 2019–30 June 2024

Christie R. Osburn

2025

Alaska Department of Fish and Game Division of Wildlife Conservation

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Species management reports and plans provide information about species that are hunted or trapped and management actions, goals, recommendations for those species, and plans for data collection. Detailed information is prepared for each species every 5 years by the area management biologist for game management units in their areas, who also develops a plan for data collection and species management for the next 5 years. This type of report is not produced for species that are not managed for hunting or trapping or for areas where there is no current or anticipated activity. Unit reports are reviewed and approved for publication by regional management coordinators and are available to the public via the Alaska Department of Fish and Game's public website.

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

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Cover Photo: Two young brown bears in the DeLong Mountains. ©2023 ADF&G. Photo by Christie Osburn.

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Purpose of this Report

This report provides a record of survey and inventory management activities for brown bear (*Ursus arctos*) in Game Management Unit 23 for the 5 regulatory years 2014–2018 and plans for survey and inventory management activities in the next 5 regulatory years, 2019–2023. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY14 = 1 July 2014–30 June 2015). This report is produced primarily to provide agency staff with data and analysis to help guide and record agency efforts but is also provided to the public to inform it of wildlife management activities. In 2016 the Alaska Department of Fish and Game's (ADF&G, the department) Division of Wildlife Conservation (DWC) launched this 5-year report to report more efficiently on trends and to describe potential changes in data collection activities over the next 5 years. It replaces the brown bear management report of survey and inventory activities that was previously produced every 2 years.

I. RY14–RY18 Management Report

Management Area

Unit 23 encompasses approximately 43,000 mi^2 of mainland in northwest Alaska, and it covers the Kotzebue Sound, Chukchi Sea, and Arctic Ocean drainages (Fig. 1). Mainland terrain varies from rugged mountains and river valleys to flat coastal wetlands. Eastern portions of the unit are characterized by spruce forests, while western portions are treeless and mostly covered with tundra and willow thickets along the riparian corridors. Maps for Unit 23 boundaries and hunt areas can be found online.[1]

Summary of Status, Trend, Management Activities, and History of Brown Bear in Unit 23

Brown bears occur throughout Unit 23, a large and relatively unpopulated area of northwest Alaska. In the 1980s, several assessments were completed to produce a baseline estimate of bear density, movement, group composition, and productivity in the Kivalina, Wulik, and Noatak drainages (Quimby 1984, Ballard et al. 1988). Subsequent surveys were completed in 2016 and 2017 (Schmidt et al. 2017, 2021), providing the latest density estimates for subareas within the unit.

Brown bears have been utilized by indigenous Inupiat hunters for both consumptive and nonconsumptive purposes for countless generations (Loon and Georgette 1989). Hunting regulations and sealing requirements for the unit were formally established by ADF&G in 1961, under the assumption that trophy hunts had become the primary use of brown bears. However, in 1987, the Board of Game (BOG, the board) determined that brown bears had a customary and traditional use in the region. Efforts were then initiated to develop regulations appropriate for subsistence use, leading to the creation of the Northwest Alaska Brown Bear Management Area (NWABBMA).

[1] http://www.adfg.alaska.gov/index.cfm?adfg=huntingmaps.gmumap&gmu=23.

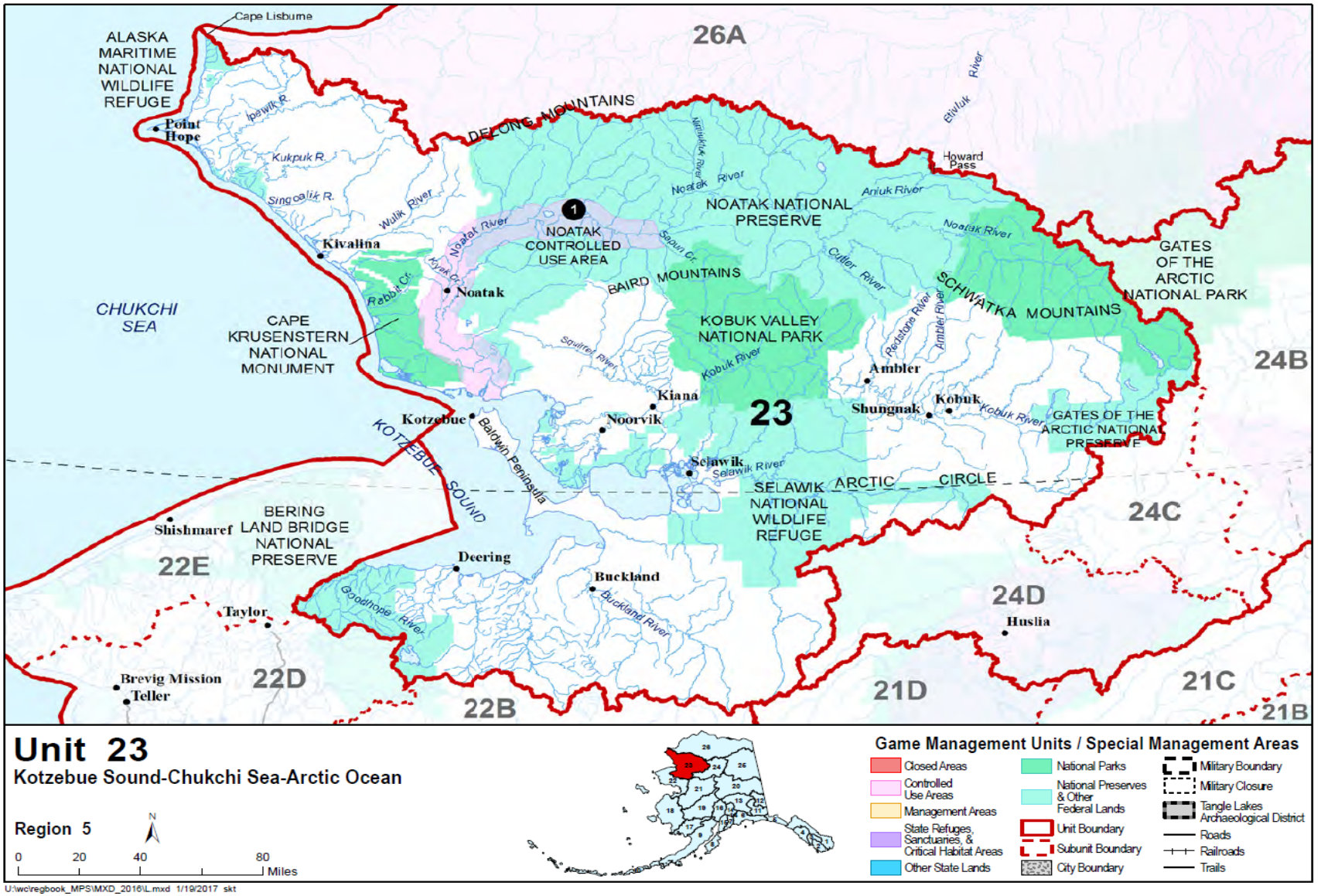

Figure 1. Map of Unit 23, including special management and controlled use areas found in the Alaska Hunting Regulations, northwest Alaska, regulatory years 2014–2018.

NWABBMA was outlined in 1992 and eventually included Units 21D, 22 (excluding 22C), 23 (excluding the Baldwin Peninsula north of the Arctic Circle), 24, and 26A. This management area allowed subsistence hunting with a registration permit, did not require the salvage of hides or skulls, and was exempt from the resident locking tag requirement. The NWABBMA subsistence registration permit later became unit-specific and is one of 4 hunt structures within Unit 23, along with a nonresident draw permit, a nonresident registration permit, and a resident general harvest season. Brown bear hunting seasons and bag limits have been incrementally liberalized within Unit 23 to increase hunting opportunity, reduce predation on ungulate species, and reduce human-bear conflict.

Management Direction

Brown bears in Unit 23 were managed to provide for the optimum sustainable harvest while also maintaining opportunities for nonconsumptive uses.

Existing Wildlife Management Plans

The "Brooks Range Brown Bear Management Plan" and the "Northwestern Alaska Brown Bear Management Plan" are included in *Alaska Wildlife Management Plans: Northwestern Alaska* (ADF&G 1976).

Goals

- Maintain a brown bear population that sustains a 3-year mean annual reported harvest of at least 50% males.

- Provide the greatest opportunity to participate in hunting for brown bears.

Codified Objectives

Amounts Reasonably Necessary for Subsistence Uses

Unit 23 has a positive customary and traditional use finding for brown bears, as determined by the BOG. The amount reasonably necessary for subsistence uses (ANS) is combined for Units 23, 24, and 26 and established as 25–35 bears.

Intensive Management

Unit 23 does not have a codified objective for intensive management of brown bears.

MANAGEMENT OBJECTIVES

- Seal the skins and skulls of harvested brown bears and extract a tooth for aging, except for bears harvested under subsistence permits, which do not require sealing.
- Monitor harvest data (age, sex, and skull size) for changes related to selective harvest pressure.
- Improve communication between the public and the department to promote harvest reporting and prevent defense of life or property (DLP) situations from occurring.
- Continue community-based surveys to collect brown bear harvest information from residents of Unit 23.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor population status and trend through incidental sightings, public dialogue, and occasional aerial surveys.

Data Needs

Monitoring the status of brown bears in Unit 23 through anecdotal accounts and opportunistic observation provides a general idea of population trends in the absence of a practical abundance survey.

Methods

Informal information on brown bear abundance was acquired through conversations with hunters, trappers, guides, pilots, and recreationalists, as well as from incidental sightings during aerial surveys of ungulates.

The National Park Service occasionally conducted aerial mark-resight surveys to estimate population abundance and density. ADF&G staff participated in these surveys as able, and details of the methodology are described by Schmidt et al. (2017).

Results and Discussion

Estimating brown bear abundance at a unitwide scale presents many challenges and has proven very difficult for Unit 23. Brown bear behavior and distribution do not fit well with structured surveys, and the monetary and logistical expenses to acquire meaningful management data have not been justified given the current levels of harvest; however, structured surveys can still provide general insights into population trends in subareas and a general reference through time.

With assistance from ADF&G, the National Park Service completed modified mark-resight aerial surveys of portions of the lower Noatak River drainage in spring 2016 and of the upper Noatak River in spring 2017. The survey of the lower Noatak subarea detected 100 bear groups and produced an estimated bear density of 70.5 independent bears per 386 mi^2 (1,000 km^2) with

heterogeneity (95% confidence interval [CI] = 52.9–93.0) and 49.2 without heterogeneity (95% CI = 40.0–61.6). The survey of the upper Noatak subarea detected 59 bear groups, with estimated bear densities of 36.8 independent bears per 386 mi^2 (1,000 km^2) with heterogeneity (95% CI = 25.5–52.1) and 24.9 without heterogeneity (95% CI = 19.4–32.6). The two subareas were also surveyed in 2007 and 2008 using a slightly different methodology. Although results from the earlier and more recent surveys are not directly comparable due to methodological differences, they suggest that bear densities in the upper and lower Noatak subareas have likely remained stable (Schmidt et al. 2021).

Anecdotal reports, aerial observations, and sealing data generally suggest that bear populations within Unit 23 are likely stable or increasing. However, caution is advised when interpreting sealing data for monitoring abundance, as many extraneous factors such as snow conditions, hunter effort, and sealer availability can drastically influence the number and composition of bears sealed.

Recommendations for Activity 1.1

Population status activities should continue through opportunistic sightings and communication with the public. Alternative methods for quantitatively estimating brown bear abundance within the northwest Arctic should be further pursued.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor brown bear harvest and hunter effort through sealing records and registration permit reports.

Data Needs

Harvest data through mandatory sealing is needed to help monitor harvest trends, assess brown bear presence within Unit 23, and facilitate dialogue with brown bear hunters and members of the public.

Methods

Brown bears harvested within the unit are required to be sealed by an ADF&G representative within 30 days of harvest, unless taken under a subsistence registration permit. At the time of sealing, the kill date, location, method of take, mode of transportation, sex of the harvested animal, and skull measurements are recorded. A premolar is extracted from the skull and submitted to Matson's Laboratory (Milltown, Montana) for aging through cementum annuli analysis. Additionally, hunter effort and ancillary field observations are often discussed during the sealing process. All sealing data is archived and can be searched by regulatory year in the department's Wildlife Information Network (WinfoNet) database.

Brown bears killed under DLP are documented through Defense of Life or Property Game Animal Kill reports. The circumstances of a DLP event are recorded and assessed; if necessary, future preventative measures are discussed with the parties involved. Hides and skulls of bears killed in DLP or through vehicle collisions are also sealed if the condition of the specimens allows.

Season and Bag Limit

RY14–RY16

Resident open season	Nonresident open season	Bag limit
1 Aug–31 May (general hunt)	–	1 bear per regulatory year; no tag required.
1 Aug–31 May (subsistence hunt)	–	1 bear per regulatory year by registration permit.
–	1 Sep–31 Oct; 15 Apr–31 May	1 bear every regulatory year by drawing permit, DB761–DB767 (fall permits) or DB771–DB777 (spring permits).
–	1 Sep–31 Oct; 15 Apr–31 May	1 bear every regulatory year by registration permit, RB761–RB767 (fall permits) or RB771–RB777 (spring permits).

Note: En dashes indicate no open season.

RY17–RY18

Resident open season	Nonresident open season	Bag limit
1 Aug–31 May (general hunt)	–	2 bears per regulatory year; no tag required.
1 Aug–31 May (subsistence hunt)	–	2 bears per regulatory year by registration permit.
–	1 Aug–31 Oct; 15 Apr–31 May	1 bear every regulatory year by drawing permit DB761–DB767 (fall permits) or DB771–DB777 (spring permits).
–	1 Aug–31 Oct; 15 Apr–31 May	1 bear every regulatory year by registration permit RB761–RB767 (fall permits) or RB771–RB777 (spring permits).

Note: En dashes indicate no open season.

Results and Discussion

Harvest by Hunters

The mean annual brown bear harvest in Unit 23 during RY14–RY18 was 57 bears (range = 44–74; Table 1). Harvest within the unit has remained relatively consistent over time, with the previous 10-year period (RY04–RY13) averaging 54 bears annually (range = 33–76). Males made up an average of 69% (range = 63–75%) of the annual RY14–RY18 harvest (Table 2), compared to the annual average of 71% males (range = 58–82%) during RY04–RY13. Overall, the proportion of males in the total Unit 23 harvest has remained relatively stable and generally well above the management goal of 50%.

Morphometric data from harvested bears have also remained relatively stable. During RY14–RY18, the mean skull size of harvested male bears was 21.3 in (n = 195), and the mean skull size of harvested females was 18.9 in (n = 87; Table 2). In comparison, the mean skull size over the prior 10-year period (RY04–RY13) was 21.5 in for males and 19.4 in for females. The mean age at harvest during RY14–RY18 was 8.2 years for males (n = 175) and 6.2 years for females (n = 79). While male age at harvest in RY14–RY18 is comparable to the RY04–RY13 average of 8 years, female age at harvest fell below the average of 7.4 years from the prior 10-year period, primarily due to the low age of harvest in RY16 (mean age = 4.5), when the sample size was also lower (n = 11).

Variation in harvest levels, particularly among local hunters, is likely greatly influenced by spring weather conditions. Harvest by local hunters tends to increase when den emergence aligns with favorable snow conditions that enable easier travel and tracking. Fuel prices also largely dictate local effort. Additionally, human-bear conflict affects harvest levels by resident hunters, who might choose to dispatch problem bears through the general season hunt instead of the DLP process. Bears harvested in these scenarios are often younger or female, which deviates from the typically preferred large males, potentially skewing the age and skull size data of harvested bears.

Permit Hunts

During RY14–RY18, 3 permit hunt structures were used for bear hunting in Unit 23. A subsistence registration permit (RB700) was available to resident hunters, which required the salvage of all edible meat but did not require the salvage or sealing of the hide or skull. Nonresident hunt opportunity was provided through drawing permits for fall (DB761–DB767) and spring (DB771–DB777). Beginning in RY14, any permits from undersubscribed nonresident drawing hunts were made available as in-person-only registration permits (RB761–RB767 for fall and RB771–RB777 for spring).

A total of 178 nonresident drawing permits were issued between RY14 and RY18, with a peak of 38 fall drawing permits and 6 spring drawing permits in RY15 (Table 3). On average, 37 nonresident fall permits and 4 nonresident spring permits were issued per year. The average nonresident fall harvest during RY14–RY18 was 12 bears, a slight increase from the RY09–RY13 average of 9 bears. Spring nonresident harvest averaged 1 bear per year for RY14–RY18 and was lower than the RY09–RY13 annual average of 2 bears. Interest in the fall nonresident hunt has remained relatively steady over the past 10 years, but spring nonresident hunts have

Table 1. Unit 23 brown bear harvest and nonharvest mortality, northwest Alaska, regulatory years 2014–2018.

		Hunter harvest				Nonharvest				Total			
Regulatory year	Season	Male	Female	Unknown	Total	Male	Female	Unknown	Total	Male	Female	Unknown	Total
2014	Fall	35	17	0	52	0	0	0	0	35	17	0	52
	Spring	18	3	1	22	0	0	0	0	18	3	1	22
	Total	53	20	1	74	0	0	0	0	53	20	1	74
2015	Fall	26	14	0	40	1	0	0	1	27	14	0	41
	Spring	15	7	0	22	0	0	0	0	15	7	0	22
	Total	41	21	0	62	1	0	0	1	42	21	0	63
2016	Fall	24	9	0	33	0	0	1	1	24	9	1	34
	Spring	11	2	0	13	1	1	0	2	12	3	0	15
	Unknown	1	1	0	2	0	0	0	0	1	1	0	2
	Total	36	12	0	48	1	1	1	3	37	13	1	51
2017	Fall	19	9	1	29	0	1	0	1	19	10	1	30
	Spring	11	4	0	15	0	0	0	0	11	4	0	15
	Total	30	13	1	44	0	1	0	1	30	14	1	45
2018	Fall	22	17	0	39	2	0	0	2	24	17	0	41
	Spring	12	4	0	16	0	1	0	1	12	5	0	17
	Unknown	1	0	0	1	0	0	0	0	1	0	0	1
	Total	35	21	0	56	2	1	0	3	37	22	0	59

Table 2. Mean skull size, age, and gender of brown bears sealed from Unit 23, northwest Alaska, regulatory years 2009–2018.

	Males				Females				
Regulatory year	Mean skull size	*n*	Mean age	*n*	Mean skull size	*n*	Mean age	*n*	Proportion of males in harvest
2009	21.4	34	6.4	32	17.8	13	6.6	13	72%
2010	20.4	41	6.7	39	18.4	12	7.8	12	77%
2011	20.1	53	7.0	51	20.3	15	8.4	14	78%
2012	21.7	43	9.3	35	19.9	19	5.5	17	69%
2013	21.2	28	8.1	25	19.8	17	9.9	14	62%
2014	22.0	53	7.8	48	17.2	20	7.2	19	73%
2015	20.7	41	8.5	37	19.2	21	7.2	20	66%
2016	21.8	36	7.8	33	18.9	12	4.5	11	75%
2017	20.6	30	8.5	26	19.7	13	5.3	13	70%
2018	21.1	35	8.1	31	19.7	21	6.8	16	63%

Note: Skull size is presented in inches and represents the sum of skull length and width. Sealing data excludes bears taken in the defense of life or property, as well as those taken through collision and incidental kills. Some tooth samples cannot be aged; therefore, the sample size for age is frequently less than that for skull size.

generally declined in permit issuance. This decline is likely driven by a lack of licensed guides willing to operate in the spring.

Over RY14–RY18, 31 resident subsistence registration permits were issued. Issuance gradually declined from a maximum of 13 permits in RY14 to 2 permits in RY18. There was no harvest under the subsistence permit during this period, in contrast to the RY09–RY13 reporting period, when there was a subsistence harvest of 16 bears (Table 3).

Inupiat hunters historically utilized bears as a source of meat, fat, and hide in the region, particularly in years when ungulate species were not readily available (Loon and Georgette 1989). The use of bears for meat has diminished in more recent history, and the requirement to salvage all edible meat under the subsistence harvest permit may be less appealing than the flexibility of optional meat salvage under the general season hunt. Over the years, harvest under the general season hunt has been incrementally liberalized, allowing resident hunters to salvage as much or as little meat as they choose. Additionally, the general season hunt does not require hunters to obtain a permit before hunting, which may better suit the more opportunistic hunting style prevalent in the region.

Hunter Residency and Success

The residency of successful hunters has shifted from RY14 to RY18. In RY14, nearly half of the bear harvest in Unit 23 was by Alaska residents residing outside the unit (nonlocal residents), with the rest roughly split between local resident and nonresident hunters (Table 4). By RY18, the harvest ratios had swapped; local resident hunters accounted for 45% of the harvest, nonlocal hunters for 39%, and nonresident hunters for 13%. Harvest by local residents averaged 21 bears annually during RY14–RY18, compared to an average of 15 bears annually during RY09–RY13. Nonlocal residents averaged 22 bears per year during RY14–RY18, a decrease from the RY09–

Table 3. Unit 23 brown bear permit issuance, hunter effort, harvest, and hunter success, northwest Alaska, regulatory years 2009–2018.

	Resident				Nonresident																			
	Subsistence registration				Fall drawing				Fall registration[a]				Spring drawing				Spring registration[a]				Annual total			
Regulatory year	I	H	B	S	I	H	B	S	I	H	B	S	I	H	B	S	I	H	B	S	I	H	B	S
2009	57	18	7	39%	24	16	8	50%	–	–	–	–	1	1	0	0%	–	–	–	–	82	35	15	43%
2010	26	6	2	33%	28	16	10	63%	–	–	–	–	9	7	4	57%	–	–	–	–	63	29	16	55%
2011	57	10	3	30%	33	19	9	47%	–	–	–	–	6	6	3	50%	–	–	–	–	96	35	15	43%
2012	41	6	3	50%	35	21	11	52%	–	–	–	–	5	1	1	100%	–	–	–	–	81	28	15	54%
2013	39	8	1	13%	35	15	7	47%	–	–	–	–	4	0	0	–	–	–	–	–	78	23	8	35%
2014	13	2	0	0%	37	15	9	60%	7	7	3	43%	5	2	2	100%	1	1	1	100%	63	27	15	56%
2015	9	1	0	0%	38	24	12	50%	2	2	0	0%	6	1	1	100%	0	0	0	–	55	28	13	46%
2016	5	3	0	0%	35	21	12	57%	9	9	5	56%	0	0	0	–	0	0	0	–	49	33	17	52%
2017	2	0	0	–	25	17	9	53%	2	1	1	100%	3	1	0	0%	0	0	0	–	32	19	10	53%
2018	2	0	0	–	29	16	8	50%	3	2	0	0%	0	0	0	–	4	1	0	0%	38	19	8	42%

Note: The number of permits issued (I), permits hunted on (H), and bears harvested (B), as well as the percentage of hunter success (S), are denoted for each permit type. En dashes indicate no permits issued or no data available.

[a] Beginning in RY14, any undersubscribed nonresident drawing hunts were made available as in-person-only registration hunts.

Table 4. Residency of successful bear hunters in Unit 23, northwest Alaska, regulatory years 2009–2018.

	Unit 23 resident		Nonlocal resident		Nonresident		Unknown		Total
Regulatory year	*n*	Percent	*n*	Percent	*n*	Percent	*n*	Percent	*n*
2009	17	32%	28	53%	8	15%	0	0%	53
2010	15	25%	30	51%	14	24%	0	0%	59
2011	14	20%	44	62%	13	18%	0	0%	71
2012	21	31%	35	51%	12	18%	0	0%	68
2013	9	20%	28	61%	9	20%	0	0%	46
2014	21	28%	34	46%	17	23%	2	3%	74
2015	22	35%	26	41%	14	22%	1	2%	63
2016	14	29%	17	35%	17	35%	0	0%	48
2017	22	50%	13	30%	9	20%	0	0%	44
2018	25	45%	22	39%	7	13%	2	4%	56

RY13 average of 33 bears. Nonresident harvest remained relatively unchanged between reporting periods, with an average annual harvest of 11 bears in RY09–RY13 and 13 bears in RY14–RY18. The apparent increase in local harvest may be a result of increased awareness and compliance with sealing requirements rather than an indicator of increased interest in bear harvest. Nonlocal bear harvest often occurs in conjunction with hunts for caribou and moose. Recent declines in these ungulate populations have likely deterred some nonlocal hunters from traveling to the area, resulting in decreases in nonlocal bear harvest.

During RY14–RY18, nonresident permit holders averaged a 47% success rate for fall hunts (n = 114) and a 60% success rate for spring hunts (n = 6), which is consistent with their success rates during RY09–RY13 (Table 3). Only 6 residents hunted under the subsistence registration permit, and none were successful.

Harvest Chronology

The majority of brown bear harvest in Unit 23 occurred during fall, with September making up over half of the total annual harvest in 3 of the 5 reporting years (RY14–RY18; Table 5). This is expected because the fall months are targeted by most guides and transporters, who often also provide transport for caribou hunters. Local hunters have good access along waterways in the fall and will opportunistically harvest bears while hunting ungulates. April is the second most harvest-heavy month, accounting for nearly a quarter of the annual brown bear harvest. As daylight and temperatures increase, hunters can travel and track by snowmachine more readily when bears begin emerging from their dens. This harvest chronology has been relatively consistent through previous reporting periods (Westing 2013, Saito 2022).

Transport Methods

As in previous years, airplanes remain the primary method of transportation for successful bear harvest in Unit 23, followed by snowmachines and boats (Table 6). Most of the unit is roadless; therefore, access by airplane is the predominant means of transportation for nonlocal and

Table 5. Percent of brown bear harvest in Unit 23 by month, northwest Alaska, regulatory years 2014–2018.

Regulatory year	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Unknown
2014	16	54	0	0	0	0	0	3	23	4	0
2015	8	56	0	0	0	0	0	2	29	5	0
2016	2	65	2	0	0	0	0	4	21	2	4
2017	27	34	5	0	0	0	0	0	27	7	0
2018	14	48	7	0	0	0	0	4	25	0	2

Table 6. Percent of brown bears harvested in Unit 23 by transport method, northwest Alaska, regulatory years 2014–2018.

Regulatory year	Airplane	Boat	Snowmachine	Off-road vehicle	Other	Unknown
2014	57	14	26	0	1	3
2015	47	16	29	3	5	0
2016	42	23	27	0	8	0
2017	48	16	30	0	7	0
2018	41	25	30	0	4	0

Note: Percentages are rounded to the nearest whole number; therefore, combined percentages may add up to more than 100%.

nonresident hunters. Waterways provide the most access for local hunters in the fall, while spring hunting is almost exclusively done by snowmachine.

Other Mortality

A total of 8 nonharvest brown bear mortalities were reported between RY14 and RY18 (Table 1). Of these mortalities, 5 were DLPs, 2 were due to illegal harvest, and 1 had an unknown cause. It is common for department staff to receive reports of 1 or 2 bears each year that have been shot and left unrecovered. Consequently, these mortalities do not appear in the sealing record. There is a general local sentiment that bears are nuisances, and additional illegal harvests and DLPs likely occur but go unreported.

Alaska Board of Game Actions and Emergency Orders

At the 2014 BOG meeting, the board amended and adopted Proposal 27 to create a registration permit to be issued for undersubscribed, nonresident bear drawing hunts. Beginning in RY14, the registration permit series was implemented through RB761–RB767 and RB771–RB777. This permit series allowed the same season and bag limits as the fall and spring drawing hunts but was only available for in-person registration in Kotzebue, Nome, and Galena beginning 2 September (fall hunts) and 15 April (spring hunts).

In 2017, the board adopted Proposal 40 to increase the resident brown bear bag limit to 2 bears per year under both the general season and state subsistence hunt. This change also allowed for the sale of hides and skulls of brown bears taken within Unit 23, which would require a permit for sale issued by the department at the time of sealing. The BOG also adopted Proposal 37 to

change the nonresident fall hunt season start date from 1 September to 1 August, thereby increasing the nonresident fall season by 31 days.

The BOG reauthorized the exemption of resident brown bear tag fees for all years during RY14–RY18.

Recommendations for Activity 2.1

Harvest monitoring activities should continue through mandatory sealing and registration permit reporting, with some potential modifications to consider in the RY19–RY23 plan.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities were conducted for brown bears in Unit 23 during RY14–RY18.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

There remains a need for public education and outreach about sealing and reporting requirements for brown bears taken under the general harvest season. Since a permit is not required for harvest during the general season, department staff do not have the opportunity to interact with most bear hunters. Consequently, sealing requirements are often conveyed through word of mouth. There are ongoing efforts to inform hunters about bear sealing requirements through other channels. Additionally, a lack of designated brown bear sealers in communities likely accounts for a portion of harvested bears going unsealed each year. Greater incentivization or compensation for sealers would likely assist our ability to recruit and retain them in communities. Actions towards offering these benefits should be pursued.

Data Recording and Archiving

All brown bear harvest and sealing data are maintained on the ADF&G WinfoNet database. Digital copies of Unit 23 brown bear management reports and plans can be found on the ADF&G website.[2]

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

Without robust population abundance estimates, it is difficult to conclude with certainty how brown bear abundance has trended from RY14 to RY18; however, available harvest data and

[2] https://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications.

public commentary lend support to a stable or generally increasing population. Prohibitions on the harvest of cubs and sows with cubs remain in place for ongoing protection of the population. Additionally, access is limited in much of Unit 23, which essentially provides vast areas of protected habitat. Of the 7 guide use areas in the unit, only 4 are consistently used. Nonresident hunters and guides have also reported that these areas continue to provide adequate harvest opportunity despite concentrated hunt pressure.

Brown bears remain a source of conflict for residents while at camp or engaging in subsistence activities. A handful of bears are killed through DLP in June and July, when residents are typically fishing or berry picking and the resident bear season is closed. Members of the public have expressed frustration at having to go through the effort of salvaging the hide and skull only to surrender them to the State; they would prefer a year-round resident season that allows for legal harvest of nuisance bears during this time of increased subsistence activity. Staff will continue to provide information and educational materials about safe travel and camping practices in bear country and will assist members of the public who want to engage in the public regulatory change process.

II. Project Review and RY19–RY23 Plan

Review of Management Direction

MANAGEMENT DIRECTION

Management direction will remain unchanged from the RY14–RY18 reporting period.

GOALS

No change from RY14–RY18.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

No changes to the ANS are recommended for RY19–RY23.

Intensive Management

No changes are recommended for RY19–RY23.

MANAGEMENT OBJECTIVES

No change from RY14–RY18.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor population status and trend primarily through sealing data, incidental sightings, and public dialogue.

Data Needs

No change from RY14–RY18.

Methods

No change from RY14–RY18.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor brown bear harvest and hunter effort through sealing records and registration permit reports.

Data Needs

No change from RY14–RY18.

Methods

Methods from RY14–RY18 will continue; however, it should be noted that interest in nonresident brown bear harvest has likely declined, partly due to the decrease in opportunity for concurrent moose and caribou hunting. Drawing hunts continued to be undersubscribed, and remaining permits are made available through in-person issuance. With decreasing nonresident hunting interest, it may be beneficial to transition from the draw permit structure to using nonresident registration permits, as this could simplify the permitting process for both hunters and department staff.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities are planned for brown bears in Unit 23 during RY19–RY23.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

No new problems or needs have been identified for RY19–RY23.

Data Recording and Archiving

No change from RY14–RY18.

Agreements

None.

Permitting

None.

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