

Furbearer Management Report and Plan, Game Management Unit 22:

Report Period 1 July 2012–30 June 2017, and
Plan Period 1 July 2017–30 June 2022

Sara Germain



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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 Phillip Perry, Management Coordinator for Region V for the Division of Wildlife Conservation.

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Cover Photo: A marten peers out from atop a small black spruce tree. ©2018 ADF&G. Photo by Sara Germain.

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Purpose of this Report

This report provides a record of survey and inventory management activities for furbearers in Game Management Unit 22 for the 5 regulatory years 2012–2016 and plans for survey and inventory management activities in the next 5 regulatory years, 2017–2021. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY15 = 1 July 2016–30 June 2016). 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 furbearer management report of survey and inventory activities that were previously produced every 3 years.

I. RY12–RY16 Management Report

Management Area

Unit 22 encompasses approximately 25,230 mi² of western Alaska, covering much of the Seward Peninsula and southern Norton Sound, including the St. Lawrence and Little Diomed Islands. Unit 22 is divided into 5 administrative units (Units 22A, 22B, 22C, 22D, and 22E; Fig. 1). The terrain within the unit varies from rugged mountains to flat coastal wetlands. Spruce forests and wide expanses of rolling hills characterize eastern portions of the unit (Units 22A and 22B), while western portions (Units 22C, 22D, and 22E) are predominantly subarctic tundra interspersed with willow thickets along riparian corridors, with rugged mountains bordering. Moreover, Unit 22 is generally untouched by roads, with just 3 seasonal roads within its borders. These roads measure approximately 400 mi (645 km) total in length, allowing for wide tracts of undisturbed habitat for furbearers and their prey to exist and thrive.

Summary of Status, Trend, Management Activities, and History of Furbearers in Unit 22

Furbearers in Unit 22 have long been highly coveted for their pelts, which are useful in creating and lining clothing. Within the unit, Iñupiat and Yup’ik Alaska Native peoples historically harvested furbearers for both clothing and subsistence purposes. Iñupiaq trappers utilized beaver fur, meat, and even teeth for traditional uses (Andersen 1993). Despite varying hunting and trapping pressure through the years, furbearer populations in Unit 22 have endured, with no extirpations occurring of any furbearer species in the area.

Presently, Unit 22 continues to support diverse populations of furbearers, including beavers (*Castor canadensis*), red foxes (*Vulpes vulpes*), arctic foxes (*Vulpes lagopus*), coyotes (*Canis latrans*), lynx (*Lynx canadensis*), marten (*Martes americana*), mink (*Neovison vison*), muskrats (*Ondatra zibethicus*), river otters (*Lontra canadensis*), wolverines (*Gulo gulo*), and wolves (*Canis lupus*). Wolves are discussed in a separate survey and inventory report. Furbearers are believed by ADF&G staff to exist in greatest abundance in the eastern portion of Unit 22, which

is characterized by extensive spruce forests and riparian willow habitat. There is no abundance estimate for any furbearer species in Unit 22.

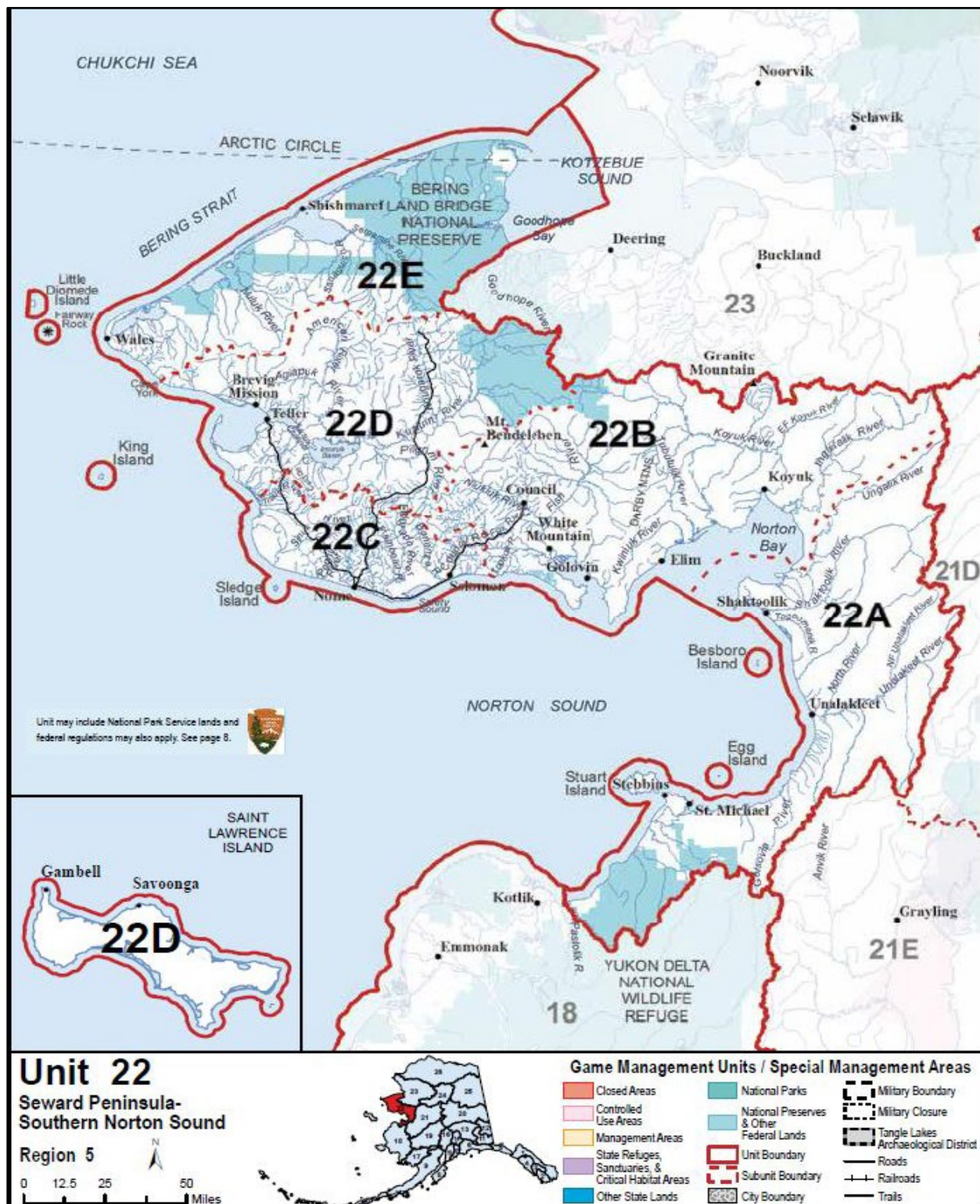


Figure 1. Map of Unit 22 in northwest Alaska, regulatory years 2012–2016.

Harvest pressure seems to be variable in Unit 22 and is partly related to the abundance of furbearers. The number of hunters and trappers increases when furbearer abundances are high; however, most of the furbearer harvest in Unit 22 is by subsistence and recreational users, or harvest is opportunistic by residents while engaged in other outdoor activities. Very few residents in Unit 22 trap as their sole winter occupation (Persons 2001, Gorn 2004, Persons and Gorn 2007). Parr (2016) reported that in 2015, approximately 50% of Region V (Units 18, 22, 23, and 26A) trappers participated in trapping recreationally, while only 15% trapped for profit and 35% trapped for other reasons.

Management Direction

There are no specific management issues for the furbearer population in Unit 22; therefore, furbearer management within the unit will complement the statewide goals established by ADF&G (1976) and approved by the Alaska Board of Game (board). These goals ensure the longevity of furbearers in northwest Alaska while also providing for human uses, ultimately allowing furbearers to remain an integral aspect of Unit 22 ecosystems.

EXISTING WILDLIFE MANAGEMENT PLANS

There are no plans presently specific to furbearers in Unit 22. Directions in the Greater Alaska furbearer management plan (ADF&G 1976) have been modified by board regulatory actions over the years. Moreover, the furbearer management policy (ADF&G 1971) highlights the importance of managing furbearers not only for the economic value of their pelts but also for their value as food to both humans and predatory animals. The plan ultimately manages in accordance with the sustained yield principle.

GOALS

Maintain populations of furbearers, recognizing that populations will fluctuate in response to environmental factors.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

Furbearers are considered to be necessary for customary and traditional uses in Unit 22 (5 AAC 99.025). In March 2000, the board made a positive determination that statewide populations of furbearers were harvested for customary and traditional uses. Initially, the statewide amount reasonably necessary for subsistence value for each species was determined to be the entire harvestable portion but was later adjusted in January 2012 to equal 90% of the harvestable portion.

Intensive Management

Not applicable.

MANAGEMENT OBJECTIVES

1. Monitor harvest and assess population status through the fur sealing program, annual hunter and trapper questionnaires, and community-based harvest assessments conducted annually in select Unit 22 communities.
2. Assess population status and trends using sealing records, hunter/trapper interviews and questionnaires, community-based harvest assessments, and observations by staff and the public.
3. Maintain license vendors and fur sealers in all Unit 22 communities.
4. Improve compliance with current sealing requirements through public communication and education.
5. Minimize conflicts between furbearers and the public.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Record observations of furbearers seen incidentally during researching and surveying for other species, as well as sightings reported from the public.

Data Needs

Sightings from staff and the public can be used to assess a potential need to mitigate human-animal conflicts.

Methods

Trapper questionnaires have been distributed to trappers since 1998. These questionnaires were issued to individuals actively trapping to gather data about the species harvested. In addition to trapper questionnaires, anecdotal sightings and reports from the public and staff have provided a glimpse into potential increases or decreases in abundance between years.

Results and Discussion

Trapper questionnaire reports were completed for RY12, RY13, RY15, and RY16 (ADF&G 2013; Parr 2016, 2017, 2018). Findings per individual furbearer species are noted below, and harvest data quantified from the trapper reports has been summarized in Activity 2.1.

Additionally, relative abundance and trend estimates of furbearer populations compared to the previous year have been completed specifically for Unit 22 in RY12 and RY13, but later reports lacked unit-specific relative abundance and trends due to a small sample size of reporting trappers. Thus, species-specific relative abundance and trends were only given for RY12 and RY13 where data specific to Unit 22 were available.

Beaver

During RY12–RY16, trapper questionnaire survey respondents reported that beavers were abundant in RY12 and common in RY13. Beaver was considered one of the most important target species to trappers in RY15, alongside red fox and lynx.

Coyote

Coyotes continued to be scarce in Unit 22, similar to RY09–RY11. A single respondent in the trapper questionnaire reported harvesting one coyote in RY12, which occurred in Unit 22A.

Lynx

Lynx were common in RY12 but appeared to decrease in RY13, with trappers seeing fewer individuals that year. Trappers considered lynx the most important target species in RY12 and RY15, along with red fox and beaver.

River Otter

River otters exist throughout most of the major drainages of Unit 22, but the highest levels of harvest occurred in Units 22A and 22C. River otter abundance showed no apparent change from previous years.

Wolverine

Observations and trapper questionnaires indicated that wolverines were scarce throughout Unit 22 in RY13, with no change from the previous year.

Fox

During RY12–RY16, red foxes were noted to be common throughout much of Unit 22. Red foxes were the most important target species by Region V trappers in RY15 and RY16.

Mink, Marten, and Ermine

Most of the suitable marten habitat occurs in Units 22A and 22B, where large tracts of boreal forest exist. During RY12, marten was reported to be common, and in RY13, it was considered the most important target species to Region V trappers, albeit reportedly scarce during that time. While mink and ermine also exist throughout Unit 22, low harvest of these species occurs, and take is likely incidental while hunters and trappers are targeting other species.

Recommendations for Activity 1.1

Continue to record furbearer observations made during wildlife aerial surveys and anecdotal observations from the public and hunters. Enhance historical observations by creating an Excel workbook to save recorded observations, which can be easily accessed for future annual reports, advisory committee meetings, and discussions with the board. Trapper questionnaires should continue to be utilized to gather important data on harvest, trends, and relative abundances compared to the previous year.

Continue to minimize conflicts between furbearers and the public. Issuing permits to allow the U.S. Department of Transportation to take nuisance beavers, which are causing issues near roadways, will help to lessen problems between beavers and the public. Managers and staff should continue to monitor and inquire about the presence of foxes near and within municipalities, especially in Golovin, where concerns about the proximity of foxes to town have been reported. Continue to educate the public accordingly about the risk of rabies transmission from foxes to dogs and humans.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor furbearer harvest in Unit 22 annually through sealing records, trapper questionnaire reports, and community-based harvest assessment surveys in selected Unit 22 communities.

Data Needs

Annual summaries of harvest are necessary for understanding harvest demographics and provide managers with a simple index of abundance. Summaries of harvest data facilitate department recommendations for board proposals.

Community-based harvest assessment surveys conducted by the Division of Subsistence, in addition to harvest reported on trapper questionnaires, are valuable to assess harvest in more remote areas of Unit 22, where sealing compliance is uncommon, or no appointed fur sealer exists. The data are used to gain a better understanding of unreported furbearer harvest as well as harvested furbearers that are not required to be sealed.

Methods

Lynx, river otters, and wolverines harvested by trappers and hunters were to be sealed within 30 days of harvest if collected under a hunting license, and within 30 days of the close of the trapping season if collected with a trapping license. Sealing involved fixing a CITES (Convention on the International Trade of Endangered Species) tag to the fur and completing a sealing certificate, which gathered data about the location and method of harvest, sex of the animal, and method of transportation used to harvest the animal. Specific to lynx and river otter, the length and width of the pelt were measured and recorded on the sealing certificate. Harvest data were thereafter archived and monitored in ADF&G's Wildlife Information Network (WinfoNet). Harvest was reported by RY.

Results from community-based harvest assessments conducted periodically in select Unit 22 communities by the Division of Subsistence were used to broaden managers' knowledge of furbearer harvest. Further, results from the ADF&G annual trapper questionnaires were used to monitor the trappers' method of harvest and the number of furbearers harvested that may not have a sealing requirement.

Season and Bag Limit

Unit 22 hunting season and bag limit, RY12–RY16.

Species	Season	Bag limit
Beaver	No closed season	No limit
Coyote	1 September–30 April	2 coyotes
Fox, Arctic	1 September–30 April	2 foxes
Fox, Red	1 September–15 March	10 foxes; only 2 foxes before 1 October
Lynx	1 November–15 April	2 lynx
Wolverine	1 September–31 March	1 wolverine

The trapping season for most furbearers is 1 November to 15 April. This includes coyote, arctic and red fox, lynx, marten, mink, otter, and wolverine. Muskrat season ends 10 June, and beaver do not have a closed season. There is no trapping bag limit for any species.

Results and Discussion

Results from the trapper questionnaire indicated a Unit 22 harvest of 6 Arctic foxes, 74 beavers, 14 ermine, 102 marten, 12 mink, and 234 red foxes by 23 trappers during RY12–RY16 (Table 1). Respondents who harvested river otter, lynx, and wolverine were also noted in Table 1 to facilitate comparisons between sealing data, and particularly to show discrepancies between sealing and actual harvest; however, the actual harvest should not be compounded with the harvests from sealing records, as it cannot be assumed that they are independent of one another.

Table 1. Unit 22 furbearer harvest as reported on trapper questionnaires for regulatory years 2012, 2013, 2015, and 2016, Alaska.

Regulatory year	Unit	Arctic fox	Beaver	Ermine	Lynx	Marten	Mink	Red fox	River otter	Wolverine	Total
2012	22A	4	22	5	97	20	4	135	5	4	296
	22B	0	0	2	16	0	1	12	1	7	39
	22C	0	0	0	1	0	1	28	1	1	32
	22D	0	0	0	0	0	0	0	0	5	5
2013	22Z ^a	0	10	3	6	26	3	9	1	2	60
	22B	0	0	0	0	0	0	11	0	2	13
	22C	0	6	1	1	0	0	0	0	4	12
2015	22A	0	0	1	1	52	1	7	0	1	63
	22B	0	0	0	0	0	0	0	0	1	1
	22C	0	0	0	0	0	0	0	0	0	0
2016	22A	2	4	0	0	4	0	27	0	8	45
	22C	0	32	2	0	0	2	5	1	3	45

Source: ADF&G 2013; Parr 2016, 2017, 2018.

Note: Furbearer harvest was not available in 2014.

^a Unit 22Z represents harvests reported that were not specific to any area within Unit 22.

The Division of Subsistence completed both a community harvest report and a household big game subsistence survey within Unit 22 during the report period. Surveyed locations for the

community harvest report included Golovin within Unit 22B in RY12, Stebbins within Unit 22A and Diomedes within Unit 22E in RY13, and Shishmaref within Unit 22E in RY14 (Braem et al. 2017). Furbearers were not found in the community of Diomedes, and thus no harvest was reported. The household big game subsistence survey was conducted in Teller, Brevig Mission, and White Mountain from RY14 through RY15 (Mikow et al. 2018). Though the household subsistence survey was oriented to gather information on local big game harvest, wolverine harvest was included in the interview and the subsequent report.

Harvest by Hunters-Trappers

Beaver

In total, 74 beavers were taken in Unit 22 during RY12–RY16. The highest harvests hailed from Unit 22C in RY16, when 32 beavers were harvested, and from Unit 22A in RY12, when 22 beavers were harvested. Stebbins community members heavily harvested beaver for food purposes and reported a harvest of 14 beavers in RY13. Members of Shishmaref reported harvesting 7 beavers in RY14 (Braem et al. 2017). According to the trapper questionnaire reports, 50% of beavers were harvested using a conibear trap, followed by 29% with snares.

Lynx

There were 230 lynx sealed during RY12–RY16 (Table 2). Unit 22A had the highest harvest, with 179 lynx sealed, followed by Unit 22B, with 39 lynx sealed. An average of 90% of lynx were harvested using a firearm during RY12–RY16, 9% were harvested with traps or snares, and the remaining 1% were harvested using unknown methods. Lynx harvest appeared to have declined during the report period, with an average of 46 lynx harvested per year, as opposed to the average of 109 lynx per year in the previous report period of RY09–RY11. It is difficult to distinguish whether the lynx decline was due to decreased trapping effort, a low period in the lynx 10-year population cycle, or a different cause.

River Otter

A total of 62 river otters were sealed in Unit 22 during RY12–RY16 (Table 3). River otters were found and harvested throughout Unit 22, but sealing records indicated the highest levels of harvest occurred in Unit 22C, with 24 harvested, and Unit 22A, with 26 harvested. Most river otters were harvested by traps or snares, at an average of 79% over the report period. The community harvest report indicated a harvest of 5 river otters by Stebbins residents and 2 by Shishmaref residents.

Wolverine

A total of 153 wolverines were sealed during RY12–RY16 (Table 4). The greatest harvests occurred in Unit 22B, with 58 sealed, and Unit 22E, with 41 sealed. A total of 31 wolverines from Unit 22D were sealed, and 23 were sealed from Unit 22C. More wolverines were shot than trapped, with 64% of wolverine take reported from trapper questionnaires and 54% of wolverine take reported from sealing records from shooting harvests. No wolverines were reported sealed during the report period; however, trapper questionnaire reports indicated that in Unit 22A, 4 wolverines were harvested in RY12, one in RY15, and 8 in RY16. These discrepancies in sealing data and trapper questionnaire responses indicated a lack of sealing compliance.

Table 2. Unit 22 lynx harvest reported on sealing certificates, regulatory years 1990–2016, Alaska.

Regulatory year	Reported lynx harvest							Male harvest (%)	Method of harvest (%)			Number hunters and trappers
	Unit 22A	Unit 22B	Unit 22C	Unit 22D	Unit 22E	Unknown	Total		Shot	Trap and snare	Unknown	
1990	2	0	0	0	0	0	2	0	0	100	0	1
1991	4	0	0	0	1	0	5	40	40	0	60	4
1992	4	2	4	0	0	0	10	0	10	80	10	4
1993	2	0	0	0	0	0	2	0	50	50	0	1
1994	3	1	0	0	0	0	4	0	25	75	0	2
1995	0	1	0	0	0	0	1	0	100	0	0	1
1996	5	0	0	0	0	0	5	0	40	60	0	2
1997	2	0	0	0	0	0	2	100	0	100	0	1
1998	6	0	0	0	1	0	7	43	14	86	0	3
1999	27	1	0	0	0	0	28	85	4	96	0	5
1900	56	0	0	0	0	0	56	79	5	82	13	9
2001	64	5	0	0	0	0	69	46	3	94	3	9
2002	35	11	0	5	0	0	51	47	14	86	0	9
2003	28	33	1	0	0	0	62	46	30	70	0	16
2004	52	44	4	0	0	0	100	45	11	87	2	16
2005	75	40	1	0	0	0	116	61	5	95	0	23
2006	34	69	0	0	0	0	103	62	10	89	1	19
2007	17	27	0	0	0	0	44	59	7	84	9	15
2008	14	70	0	0	0	0	84	69	8	87	5	16
2009	38	98	0	1	0	0	137	59	8	91	1	14
2010	51	32	0	0	0	0	83	66	10	90	0	16
2011	72	32	1	2	0	0	107	55	8	82	10	18
2012	95	24	3	1	0	0	123	48	0	100	0	24
2013	37	8	3	0	0	0	48	16	0	100	0	8
2014	23	1	1	0	0	0	25	26	13	87	0	9
2015	12	4	0	3	0	0	19	58	21	74	5	11
2016	12	2	0	1	0	0	15	41	25	75	0	5

Source: Alaska's Wildlife Information System (WinfoNet), Accessed 8 May 2019.

Table 3. Unit 22 river otter harvest reported on sealing certificates, regulatory years 1990–2016, Alaska.

Regulatory year	Reported otter harvest							Male harvest (%)	Method of harvest (%)			Number hunters and trappers
	Unit 22A	Unit 22B	Unit 22C	Unit 22D	Unit 22E	Unknown	Total		Shot	Trap and snare	Unknown	
1990	0	0	1	0	0	0	1	0	0	100	0	1
1991	2	0	2	0	0	0	4	0	0	100	0	2
1992	6	1	0	4	1	0	12	25	50	50	0	5
1993	9	0	4	4	0	1	18	0	22	78	0	6
1994	8	0	2	1	0	0	11	27	9	82	9	4
1995	1	0	0	0	0	1	2	0	100	0	0	1
1996	6	0	1	3	2	0	12	66	83	17	0	4
1997	4	3	3	1	1	0	12	80	0	75	25	8
1998	2	4	0	1	0	2	9	40	11	67	22	5
1999	3	0	1	0	0	2	6	75	17	50	33	4
2000	4	8	3	0	0	1	16	69	38	50	12	9
2001	5	0	1	0	0	0	6	100	0	100	0	2
2002	0	4	4	0	0	0	8	44	0	100	0	6
2003	4	2	6	0	0	0	12	73	58	42	0	7
2004	3	1	3	1	1	0	9	67	33	67	0	8
2005	2	1	1	0	0	0	4	50	0	100	0	3
2006	3	3	1	0	1	0	8	50	0	88	12	7
2007	3	9	5	1	0	0	18	69	56	44	0	11
2008	3	3	0	0	0	0	6	60	40	60	0	3
2009	3	6	1	0	0	0	10	63	10	70	20	6
2010	10	1	1	0	1	0	13	50	23	39	38	7
2011	3	0	1	0	0	0	4	67	50	50	0	4
2012	9	1	5	0	0	0	15	44	0	100	0	8
2013	7	2	2	1	0	0	12	43	17	83	0	8
2014	9	1	4	1	1	0	16	44	31	69	0	10
2015	0	1	7	0	0	0	8	Unknown	0	100	0	3
2016	1	3	6	0	1	0	11	100	55	45	0	6

Source: Alaska's Wildlife Information System (WinfoNet), Accessed 8 May 2019.

Table 4. Unit 22 wolverine harvest reported on sealing certificates, regulatory years 1990–2016, Alaska.

Regulatory year	Reported wolverine harvest							Male harvest (%)	Method of harvest (%)			Number hunters and trappers
	Unit 22A	Unit 22B	Unit 22C	Unit 22D	Unit 22E	Unknown	Total		Shot	Trap and snare	Unknown	
1990	33	6	14	9	4	0	66	0	64	36	0	23
1991	31	10	9	8	4	0	62	69	58	42	0	17
1992	26	3	14	6	2	1	52	68	62	35	4	17
1993	24	4	9	3	4	4	48	0	71	29	0	20
1994	13	7	5	1	0	0	26	77	77	23	0	13
1995	9	0	8	0	1	0	18	0	78	22	0	7
1996	24	1	12	4	2	4	47	46	63	33	4	22
1997	13	26	0	2	1	0	42	70	31	55	14	16
1998	10	10	1	0	4	0	25	76	29	71	0	12
1999	5	11	5	8	6	1	36	80	63	27	10	24
2000	17	29	7	9	9	0	71	74	44	42	14	35
2001	9	14	7	6	4	0	40	56	40	60	0	18
2002	7	17	2	7	0	0	33	70	50	50	0	20
2003	42	19	7	3	3	0	74	69	23	70	7	35
2004	16	12	9	5	7	0	49	62	33	67	0	23
2005	13	11	9	6	5	0	44	70	42	58	0	31
2006	9	14	6	0	6	0	35	69	29	71	0	20
2007	11	13	7	6	6	0	43	56	26	61	14	24
2008	7	10	2	3	1	0	23	64	22	74	4	14
2009	9	23	2	4	0	0	38	66	24	76	0	17
2010	10	9	1	1	5	0	26	77	30	62	8	13
2011	11	8	2	3	2	0	26	62	19	73	8	16
2012	0	19	3	9	5	0	36	72	44	50	6	34
2013	0	14	7	3	12	0	36	64	36	64	0	36
2014	0	5	1	2	10	0	18	61	61	39	0	18
2015	0	14	5	11	6	0	36	58	56	44	0	36
2016	0	6	7	6	8	0	27	67	74	26	0	27

Source: Alaska's Wildlife Information System (WinfoNet), Accessed 8 May 2019.

Fox

Golovin residents reported a harvest of 2 Arctic foxes and 5 red foxes during RY12 in the community harvest report. The trapper questionnaire report indicated that residents of Unit 22A harvested red foxes during RY12–RY16, with the highest harvest of 135 individuals having occurred in RY12. Unit 22B respondents reported a harvest of 23 red foxes, but no Arctic foxes, during the report period, and Unit 22C respondents reported a harvest of 28 red foxes and zero Arctic foxes. A total of 9 red foxes were reported harvested in RY13, but nonspecific to any area within Unit 22. From the community harvest report, members of Stebbins reported a harvest of 2 Arctic foxes and 2 red foxes in RY13, and Shishmaref had a reported harvest of 7 red foxes.

Mink, Marten, and Ermine

There were 102 marten, 14 ermine, and 12 mink harvested during RY12–RY16. The highest harvests of marten, mink, and ermine all occurred in Unit 22A, followed by Unit 22C for ermine and mink. According to trapper questionnaire reports, the majority of mink (84%) and marten (65%) were harvested using a conibear trap, with ermine (72%) primarily harvested by foothold traps.

Harvest Chronology

According to sealing records, the majority of trappers harvested their furbearers in March (32%), followed by February (22%), and January (21%).

Transport Methods

Sealing records indicated that most trappers (90%) used a snowmachine to harvest furbearers during RY12–RY16. The trapper questionnaire report also noted that Region V trappers had the longest traplines in the state in RY13, averaging 32 mi, and in RY16, averaging 27 mi. Region V trappers in RY15 reported an average trapline length of 17 mi. No data on trapline length was provided in the RY12 trapper questionnaire report.

Recommendations for Activity 2.1

Continue to monitor furbearer harvest through sealing certificates and community harvest assessments, and to use the annual trapper questionnaire to attain additional information about furbearer harvest within Unit 22. Identify communities in which fur sealers no longer exist and work with the regional fur sealing officer in order to recruit, train, and retain sealers. Visiting communities where sealing compliance is uncommon or fully absent and providing educational workshops about the data gathered from sealing would also aid in increasing furbearer sealing rates.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities for furbearers occurred in Unit 22 during RY12–RY16.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

There were no nonregulatory management needs during RY12–RY16.

Data Recording and Archiving

Harvest data and sealing certificates were stored on WinfoNet.¹ Copies of sealing certificates were stored in file folders located in the Nome Area Office.

Agreements

Currently, there are no agreements with other agencies pertaining to furbearer management.

Permitting

No permits were needed to conduct furbearer management activities in Unit 22 during RY12–RY16.

Conclusions and Management Recommendations

With no valid abundance estimates of furbearer populations in Unit 22, conclusions about their actual status were not possible. Sealing data indicated that wolverine and otter harvests remained similar to the previous report period of RY09–RY11; conversely, lynx harvest appeared to have declined. The estimated degree of unsealed lynx, wolverine, and river otter hides and subsequent unreported harvest in Unit 22 was considered high. Communities such as Stebbins and St. Michael completely lacked any sealing data during RY12–RY16; however, sealing records showed that higher numbers of individual hunters and trappers were sealing wolverine hides in this report period than in the previous, suggesting higher sealing compliance. On the contrary, no wolverines were sealed in Unit 22A during the report period despite trapper report data indicating wolverines were indeed harvested in the area. Hunters may not understand that valuable information is gathered from the sealing program regarding hunted and trapped furbearer populations, so educating the public about the information gathered from sealing could be a valuable tool in improving sealing compliance in the future.

Hosting educational events, such as trapping workshops or rabies prevention talks, may further allow for conversations about furbearer management and allow for interfacing between managers and the public. It is a challenge to retain fur sealers on account of sealer turnover or simply a lack of interest. Recruiting and maintaining fur sealers, in addition to developing a good manager and sealer relationship, will help reduce unreported furbearer harvest, achieve better sealing compliance, and contribute to more knowledge of furbearers within Unit 22.

¹ <http://winfonet.alaska.gov/index.cfm>

II. Project Review and RY17–RY21 Plan

Review of Management Direction

MANAGEMENT DIRECTION

The existing management direction and goals for Unit 22 remain adequate for the sound management of furbearers in the area. These objectives and goals ensure that the population of furbearers in Unit 22 will continue to provide for widespread hunting, trapping, and viewing opportunities by both residents and nonresidents.

GOALS

No change. The management goal for RY17–RY21 will remain as follows: maintain populations of furbearers, recognizing that they will fluctuate in response to environmental factors.

CODIFIED OBJECTIVES

No change.

Amounts Reasonably Necessary for Subsistence Uses

No change.

Intensive Management

No change.

MANAGEMENT OBJECTIVES

Management objectives for RY17–RY21 will be slightly modified from the objectives for RY12–RY16. Management objectives for the plan period are listed as follows:

1. Monitor harvest through the fur sealing program, annual trapper questionnaires, and community harvest assessments conducted by the Division of Subsistence annually in select Unit 22 communities.
2. Assess population trends using sealing records, trapper questionnaires, community harvest assessments, household subsistence surveys from the Division of Subsistence, and observations by both the staff and public.
3. Maintain license vendors and fur sealers in all Unit 22 communities and recruit new fur sealers in areas which currently lack them.
4. Minimize conflicts between furbearers and the public.

5. Provide educational outreach to increase sealing compliance in addition to promoting ethical, safe, and sustainable trapping methods.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Assess furbearer population abundance annually.

Data Needs

No change.

Methods

No change.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor furbearer mortality by regulated harvest in Unit 22 annually through sealing records, trapper questionnaire reports, and by community-based harvest assessment surveys in selected Unit 22 communities.

Data Needs

No change.

Methods

No change.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities for furbearers are expected in Unit 22 during RY17–RY21.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

No new problems or needs for RY17–RY21 have been identified.

Data Recording and Archiving

No change.

Agreements

No change.

Permitting

No change.

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