# Furbearer Management Report and Plan, Game Management Unit 22:

Report Period 1 July 2017–30 June 2022, and Plan Period 1 July 2022–30 June 2027

## **Alicia Carson**



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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 2017–2021 and plans for survey and inventory management activities in the next 5 regulatory years, 2022–2026. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY15 = 1 July 2015–30 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 more efficiently report on trends and describe potential changes in data collection activities over the next 5 years. It replaces the furbearer management reports of survey and inventory activities that were previously produced every 3 years.

# I. RY17-RY21 Management Report

## **Management Area**

Unit 22 encompasses approximately 25,230 mi<sup>2</sup> of western Alaska, covering much of the Seward Peninsula and southern Norton Sound, including the St. Lawrence and Little Diomede islands. Unit 22 is divided into 5 administrative units (Units 22A, 22B, 22C, 22D, and 22E; Fig. 1). The terrain varies from rugged mountains to flat coastal wetlands. Spruce forests and wide expanses of rolling hills characterize eastern portions (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.

# 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 for creating and lining clothing. Within the unit, Iñupiaq and Yup'ik native peoples historically harvested furbearers for both clothing and food purposes. Iñupiag 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 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 to be most abundant in the eastern portion of the unit, which is characterized by extensive spruce forests and riparian willow habitat. However, there is no abundance estimate for any furbearer species in the unit.

Harvest pressure seems to be variable in Unit 22, which is partly related to the abundance of furbearers. The number of hunters and trappers increases when furbearer abundances are high.

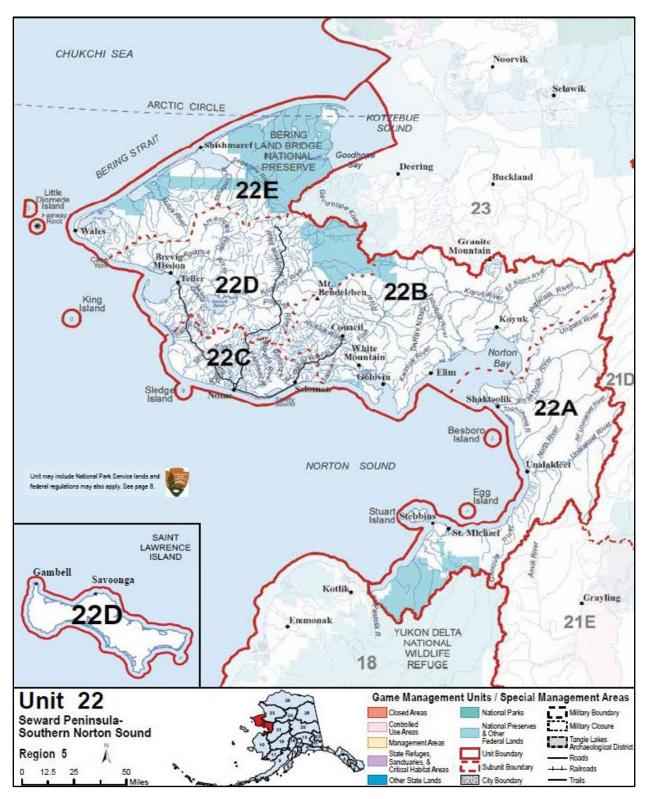


Figure 1. Map of Unit 22 in Northwest Alaska, regulatory years 2017-2021.

However, most furbearer harvest in Unit 22 is by subsistence and recreational users or is opportunistic by residents while engaged in other outdoor activities. Very few residents in Unit 22 trap as their sole winter occupation (Persons and Gorn 2007).

## **Management Direction**

There are no specific management issues for the furbearer populations 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.

### 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 of Game regulatory actions over the years. Moreover, the furbearer management policy (ADF&G 1971) highlights the importance of managing furbearers not only for their economic value of pelts but also for their value as food to both humans and predatory animals, ultimately managing 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 necessary for customary and traditional uses in Unit 22 (5 AAC 99.025). In 2000, The Board of Game made a positive determination that statewide populations of furbearers were harvested for customary and traditional uses. Initially, the statewide Amount Reasonably Necessary for Subsistence (ANS) value for each species was determined to be the entire harvestable portion but was later adjusted to equal 90% of the harvestable portion.

#### 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 and 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 research and surveys 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 humananimal conflicts.

#### Methods

Trapper questionnaires have been distributed to trappers since 1998. Questionnaires are issued to individuals with an active trapper's license to gather data about species harvested. Additionally, anecdotal sightings and reports from the public and staff provide insight into potential abundance increases or decreases between years.

#### Results and Discussion

Trapper questionnaire reports were completed for RY17–RY21 (Spivey 2019, 2020; Bogle 2021a, 2021b, 2022). Findings per individual furbearer species are noted below, and harvest data quantified from the trapper reports is summarized in Activity 2.1. Additionally, anecdotal relative abundance and trend estimates of furbearer populations are noted below by furbearer.

### Beaver

During RY17–RY21, anecdotal reports indicated that beavers were abundant and common. Beaver was considered by trappers to be one of the most important target species.

#### Coyote

Coyotes continue to be scarce in Unit 22. Respondents in the trapper questionnaire reported harvesting 1 coyote in RY19 and 2 coyotes in RY20 from Unit 22A. There were 2 reports of coyote sightings in the proximity of Nome in Unit 22 during the spring of 2022.

## Lynx

Lynx were common in RY20 and RY21, and sealing records indicated high harvest, suggesting an approach to the peak of the 10-year lynx population cycle. Trappers considered lynx the most important target species.

#### River Otter

River otters exist throughout most of the major drainages of Unit 22, but the highest level of harvests occur in Units 22C and 22B. River otters show no apparent change in abundance from previous years.

#### Wolverine

Observations and trapper questionnaires indicate wolverines were abundant during RY17–RY21 throughout Unit 22.

#### Fox

Red foxes were noted to be common throughout much of Unit 22 during RY17–RY21. In addition to common sightings of foxes, a rabies outbreak occurred during RY20, which led to increased harvest. Arctic foxes continue to be scarce, with no change from the previous years.

## Mink, Marten, and Ermine

Most of the suitable marten habitat occurs in Units 22A and 22B, such as large tracts of boreal forest, and the species were reported to be common. 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 both furbearer observations made during wildlife aerial surveys and anecdotal observations from the public and hunters. Enhance historical observations by creating a Microsoft Excel workbook to save recorded observations, as this can be easily accessed for future annual reports, advisory committee meetings, and discussions with the Board of Game. Trapper questionnaires should continue to be used to gather important data on harvests, trends, and relative abundances compared to the previous year.

Continue to minimize conflicts between furbearers and the public. Managers and staff should continue to monitor and inquire about the presence of foxes near and within municipalities, where concerns 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 by community-based harvest assessment surveys.

#### Data Needs

Annual summaries of harvest are necessary for understanding harvest demographics, and they provide managers a simple index of abundance. Summaries of harvest data will facilitate department recommendations for Board of Game proposals.

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

#### Methods

Lynx, river otters, and wolverines harvested by trappers and hunters are required 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 involves fixing a CITES (Convention on the Trade of Endangered Species) tag to the fur and completing a sealing certificate, which gathers 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 otter, the length and width of the pelt are also measured and recorded on the sealing certificate. Harvest data is recorded in ADF&G's Wildlife Information Network (WinfoNet). Harvest is reported by RY.

## Season and Bag Limit

RY17–RY21 hunting season and bag limit:

Species	Season	Bag limit
Beaver	No closed season	No limit
Coyote	1 Sept-30 April	2 coyotes
Fox, Arctic	1 Sep-30 Apr	2 foxes
Fox, Red	1 Sep-15 Mar	10 foxes, only 2 before 1 Oct
Lynx	1 Nov-15 Apr	2 lynx
Wolverine	1 Sep–31 Mar	1 wolverine

RY17-RY21 trapping season and bag limit:

Species	Season
Beaver	No closed season
Coyote	1 Nov–15 Apr
Fox, Arctic	1 Nov–15 Apr
Fox, Red	1 Nov–15 Apr
Lynx	1 Nov–15 Apr
Marten	1 Nov–15 Apr
Mink and weasel	1 Nov–15 Apr
Muskrat	1 Nov–10 Jun
Otter, River	1 Nov–15 Apr
Wolverine	1 Nov–15 Apr

Note: There is no trapping bag limit on any furbearer species.

#### Results and Discussion

Results from the trapper questionnaire indicated a Unit 22 total harvest of 17 Arctic foxes, 52 beavers, 27 ermine, 80 marten, 13 mink, and 138 red foxes during RY17-RY21 (Table 1).

Table 1. Unit 22 furbearer harvest reported on trapper questionnaires, regulatory years 2017-2021, Northwest Alaska.

		Arctic	<del>,</del>						Red	River		
RYª	Unit	fox	Beaver	Coyote	Ermine	Lynx	Marten	Mink	fox	otter	Wolverine	Total
2017	22A	1	6	0	0	1	46	1	14	2	3	74
	22C	1	2	0	0	0	0	0	0	0	0	3
	$22Z^b$	0	0	0	0	0	0	0	0	0	2	2
2018	22A	2	3	0	2	3	5	2	15	1	0	33
	22B	1	0	0	3	10	0	0	12	0	7	33
	22C	1	27	0	0	0	0	0	6	6	0	40
	22D	1	0	0	0	0	0	0	0	0	1	2
2019	22A	0	0	1	0	5	8	1	43	2	0	60
	22B	6	0	0	3	12	15	2	3	2	3	46
	22C	0	4	0	1	0	0	4	22	2	0	33
2020	22A	0	1	2	10	8	3	1	17	0	1	43
	22B	0	0	0	0	0	0	0	0	0	0	0
	22C	0	1	0	0	0	0	0	0	2	0	3
	22D	0	5	0	8	1	0	1	6	0	0	21
	22Z <sup>b</sup>	0	0	0	0	1	3	0	0	0	0	4
2021	22A	0	0	0	0	0	0	0	0	0	0	0
	22B	0	0	0	0	0	0	0	0	0	0	0
	22C	1	3	0	0	0	0	1	0	1	0	6
	22D	3	0	0	0	0	0	0	0	0	1	4

Note: Sources: Spivey 2019, 2020; and Bogle 2021a, 2021b, 2022.

Respondent harvest of river otter, lynx, and wolverine are also noted in Table 1 in order to facilitate comparisons between sealing data and to show discrepancies between sealing records and actual harvest (Tables 2-4).

However, the harvest from questionnaire respondents should not be compounded with the harvests from sealing records, as we cannot assume that they are independent of one another.

<sup>&</sup>lt;sup>a</sup> RY refers to regulatory year.

<sup>&</sup>lt;sup>b</sup> Unit 22Z indicates harvest reported nonspecific to a subunit.

Table 2. Unit 22 lynx harvest reported on sealing certificates, regulatory years 2000–2021, Northwest Alaska.

		F	Reporte	d lynx	harves	st		% Method of harvest				
			Ur	nit								Number
Regulatory								% Male		Trap/		hunters/
year	22A	22B	22C	22D	22E	Unk.	Total	harvest	Shot	snare	Unk.	trappers
2000	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	8	83	1	11
2016	12	2	0	1	0	0	15	41	25	75	0	5
2017	37	13	0	4	0	0	54	46	4	50	0	13
2018	14	14	1	5	3	2	39	38	11	27	1	15
2019	21	32	0	6	0	0	59	42	12	47	0	17
2020	19	82	0	19	0	0	120	32	22	90	8	20
2021	8	83	0	11	0	0	102	57	9	91	2	17

## Harvest by Hunters-Trappers

## **BEAVER**

According to the trapper questionnaire, 52 beavers were taken in Unit 22 during RY17–RY21. Highest levels of harvests hailed from Unit 22C in RY18, when 27 beavers (78%) were harvested, according to the trapper questionnaire. Anecdotal reports from Unit 22 residents and ADF&G staff indicate increases in beaver habitat and human-wildlife conflicts.

## LYNX

A total of 374 lynx were sealed during RY17-RY21, a 62% increase compared to RY12-RY17 (Table 2). Unit 22B had the highest level of harvest, with 224 lynx sealed, followed by Unit 22A with 99 lynx sealed. An average of 82% of lynx were harvested with traps or snares during the reporting period, while an average of 16% were harvested by shooting. Lynx harvest appears to have increased, with an average of 75 lynx harvested per year during this reporting period as opposed to the average of 46 lynx per year in the previous. The trapper questionnaire indicated the 5-year average number of hunters increased from 11 hunters and trappers in the previous reporting period to 16 in the current. It is difficult to distinguish whether the increase in lynx

harvest is due to increased trapping effort, a high period in the lynx 10-year population cycle, a combination of these factors, or a different cause altogether.

Table 3. Unit 22 river otter harvest reported on sealing certificates, regulatory years 2000– 2021, Northwest Alaska.

			Repo	rted ot	ter har	vest			% M	ethod of l	narvest	
			J	Jnit								Number
Regulatory								% Male		Trap/		hunters/
year	22A	22B	22C	22D	22E	Unk.	Total	Harvest	Shot	snare	Unk.	trappers
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	Unk.	0	100	0	3
2016	1	3	6	0	1	0	11	100	55	45	0	6
2017	4	4	3	3	1	0	15	47	8	16	0	6
2018	2	2	5	2	0	0	11	82	4	15	0	7
2019	3	4	10	4	0	0	21	52	2	34	0	12
2020	9	16	10	3	0	0	38	53	3	70	0	14
2021	5	5	6	0	0	0	16	75	3	27	0	7

#### RIVER OTTER

A total of 101 river otters were sealed in Unit 22 during RY17–RY21 (Table 3). River otters are found and harvested throughout Unit 22, but sealing records indicate the highest level of harvests occurred in Units 22C (34 sealed) and 22B (31 sealed) during the reporting period. Most river otters were harvested by traps or snares, with an average of 89% of harvests attributed to trapping or snaring over the 5-year reporting period.

#### WOLVERINE

A total of 173 wolverines were sealed during RY17–RY21 (Table 4). The highest level of harvest occurred in Unit 22B, with 84 wolverines sealed. Sealing records across the rest of the unit show steady harvests: Unit 22A with 33 wolverines sealed, Unit 22C with 18 wolverines sealed, Unit 22D with 21 wolverines sealed, and Unit 22E with 17 wolverines sealed. Sealing records indicated on average 52% of wolverines were harvested by trap or snares. This is an increase from RY12-RY17, when 46% of wolverines were harvested by trap or snare.

Table 4. Unit 22 wolverine harvest reported on sealing certificates, regulatory years 2000– 2021, Northwest Alaska.

		Rep	orted	wolve	rine ha	irvest			Meth	od of harves	st, %	
			U	nit			_					
Regulatory								% Male				Number of
year	22A	22B	22C	22D	22E	Unk	Total	Harvest	Shot	Trap/snare	Unk.	hunters/trappers
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
2017	6	11	7	2	2	0	28	64	4	47	0	14
2018	3	7	2	3	1	0	16	69	8	17	0	9
2019	15	24	2	11	3	0	55	65	12	88	0	22
2020	3	10	3	2	4	0	22	73	8	24	0	12
2021	6	32	4	3	7	0	52	65	11	86	0	17

#### Fox

According to the trapper questionnaire, 138 red foxes and 17 Arctic foxes were harvested during RY17-RY21. The highest level of harvest of foxes occurred in Unit 22A, with 92 foxes harvested, followed by Unit 22C, with 31 foxes harvested, according to the trapper questionnaire. During RY20, the U.S. Department of Agriculture's Wildlife Services (WS) culled 19 foxes and ADF&G collected an additional 21 foxes from the Nome area in Unit 22C. Some of the foxes collected from ADF&G were provided by hunters and trappers and may have also been reported on the trapper questionnaire; therefore, the 21 foxes collected by ADF&G are likely not all additive.

## MINK, MARTEN, AND ERMINE

According to the trapper questionnaire, 80 marten, 27 ermine, and 13 mink were harvested during RY17-RY21. Highest levels of harvests of marten, mink, and ermine all occurred in Unit 22A, where large tracts of boreal spruce forest exist, which is ideal habitat for these species.

## Harvest Chronology

According to sealing records, the majority of furbearer harvest is during the month of March (27%), followed by February (24%), and January (20%).

## Transport Methods

Sealing records indicated that hunters and trappers primarily used snowmachines (89%) and had only limited harvest using 4 wheelers and highway vehicles during RY17-RY21.

## Recommendations for Activity 2.1

Continue to monitor furbearer harvest through sealing certificates and community harvest assessments. Continue 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 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

There were no habitat assessment or enhancement activities for furbearers during RY17–RY21.

#### NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

In RY20, western Alaska communities experienced an outbreak of rabies, with a concentration around the community of Nome. Rabies is always present in northwest Alaska, with periodic outbreaks occurring when ecologic conditions, such as large red or Arctic fox and prey populations, facilitate transmission. During the RY20 outbreak, the state virology lab confirmed rabies in 15 animals: 12 foxes, 2 domestic dogs, and a river otter. The last time a river otter was confirmed to have rabies was in 2000 in an Aleutians East Borough community.

Rabid fox control operations by WS were conducted in Nome and Savoonga between 27 March and 6 April 2020. Of 19 red foxes that WS removed from the Nome area, 2 tested positive for the virus, and both of them were near a den site located north of the Nome Landfill. WS also sampled an additional 21 foxes previously collected by ADF&G, of which 6 were positive. WS also collected muscle samples, serum, and heads for ADF&G's Wildlife Health and Disease Surveillance Program to test for other diseases, including distemper.

ADF&G staff, Norton Sound Hospital staff, and Nome Animal Control all worked in collaboration to increase public outreach. Informational flyers and pamphlets were disbursed to the public with health and safety information such as typical rabies behaviors, how to protect oneself, public health concerns, and methods of reporting. During any rabies outbreak, it is vitally important that dogs are vaccinated; that dog or human encounters with wildlife are reported and managed accordingly; and that actions that promote transmission (such as moving animals which might be incubating rabies to different parts of the state) are minimized.

## Data Recording and Archiving

- Harvest data and sealing certificates are stored on an internal database housed on a server (http://winfonet.alaska.gov/index.cfm). Copies of sealing certificates are stored in file folders located in the Nome ADF&G DWC office.
- Rabies sample submission, outreach materials, and WS reports are housed on the local Nome server V:\\WILDLIFE\Rabies (see Veterinary Services folder)\2020 Rabies Outbreak.

Agreemen	<u>ts</u>
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None.

Permitting

None.

# **Conclusions and Management Recommendations**

With no valid abundance estimates of furbearer populations in Unit 22 during RY17–RY21, conclusions about their actual status are not possible. Sealing data indicates that wolverine and otter harvests remain similar to RY12–RY16; conversely, lynx harvest appears to have increased. The estimated degree of unsealed lynx, wolverine, and river otter hides and subsequent unreported harvest in Unit 22 is considered high. Communities such as Wales, Shishmaref, Stebbins, and St. Michael lack complete sealing data during the reporting period. However, sealing records show that higher numbers of individual hunters and trappers are sealing hides, suggesting higher rates of compliance. Sealing records also suggest that 86% of harvested lynx, river otters, and wolverine was taken by traps or snare. Department staff have helped hunters and trappers understand that valuable information is gathered from the sealing program regarding furbearer populations. Continuing outreach to educate the public about the information gathered from sealing will be valuable 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 for interfacing between managers and the public. It is a challenge to retain fur sealers on account of turnover or simply a lack of interest. Recruiting and maintaining fur sealers, in addition to developing a positive professional relationship between manager and sealer, will help reduce unreported furbearer harvest, achieve better sealing compliance, and contribute to more knowledge of furbearers within Unit 22.

# II. Project Review and RY22-RY27 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 populations of furbearers in Unit 22 will continue to provide for widespread hunting, trapping, and viewing opportunities for both residents and nonresidents.

#### GOALS

No change. The management goal for RY22–RY27 will remain as follows:

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

### **CODIFIED OBJECTIVES**

No change recommended.

Amounts Reasonably Necessary for Subsistence Uses

No change recommended.

**Intensive Management** 

No change recommended.

## MANAGEMENT OBJECTIVES

Management objectives for RY22–RY27 are listed as follows:

- 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 and 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.

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 change.
NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS
No new issues have been identified.
Data Recording and Archiving
No change.
Agreements
No change.
Permitting

No change.

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