Species Management Report and Plan ADF&G/DWC/SMR&P–2025–50

Furbearer Management Report and Plan, Game Management Units 11 and 13:

Report Period 1 July 2017–30 June 2022, and

Plan Period 1 July 2022–30 June 2027

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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 Todd Rinaldi, Management Coordinator for Region IV for the Division of Wildlife Conservation.

Species management reports and plans are available via the Alaska Department of Fish and Game's public website (www.adfg.alaska.gov) or by contacting Alaska Department of Fish and Game's Division of Wildlife Conservation, PO Box 115526, Juneau, AK 99811-5526; phone: (907) 465-4190; email: dfg.dwc.publications@alaska.gov. The report may also be accessed through most libraries, via interlibrary loan from the Alaska State Library or the Alaska Resources Library and Information Services (www.arlis.org). To subscribe to email announcements regarding new technical publications from the Alaska Department of Fish and Game, Division of Wildlife Conservation please use the following link: http://list.state.ak.us/mailman/listinfo/adfgwildlifereport.

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Purpose of this Report

This report provides a record of survey and inventory management activities for furbearers in Game Management Units 11 and 13 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 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 was previously produced every 3 years.

I. RY17–RY21 Management Report

Management Area

Unit 11 encompasses approximately 12,784 mi^2 and consists of the area draining into the headwaters of the Copper River south of Suslota Creek and the area drained by all tributaries into the east bank of the Copper River between the confluence of Suslota Creek, with the Slana River and Miles Glacier. Most of Unit 11 is included in the Wrangell-St. Elias National Park and Preserve. Hunting and trapping are allowed under state regulations in the National Preserve, but only federal subsistence hunting or trapping is allowed in the National Park. The National Park Service (NPS) sometimes implements special rules for activities such as bear baiting on NPS lands, even within the National Preserve. Unit 11 includes portions of 3 of Alaska's 32 ecoregions: the Wrangell Mountains, the Chugach-St. Elias Mountains, and the Copper River Basin (Fig. 1).

Unit 13 encompasses 23,368 mi^2 and includes a vast array of public lands (state and federal), as well as private and Native corporation lands which span a variety of habitats (Fig. 2). Small rural communities are widespread throughout Unit 13, but the unique road system with extensive public-access trails attracts consumptive and nonconsumptive users to the area from urban centers such as Fairbanks, Anchorage, and the Matanuska-Susitna Valley. Unit 13 also includes portions of 3 of Alaska's 32 ecoregions: the Alaska Range, Chugach-St. Elias Mountains, and Copper River Basin.

Additional maps describing the boundaries and special management areas in Units 11 and 13 can be found on the Fish and Game website.

Summary of Status, Trend, Management Activities, and History of Furbearers in Units 11 and 13

Furbearer species in Units 11 and 13 include beaver (*Castor canadensis*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), lynx (*Lynx canadensis*), marten (*Martes americana*), mink (*Neovison vison*), muskrat (*Ondatra zibethicus*), river otter (*Lontra canadensis*), weasel or ermine (*Mustela*

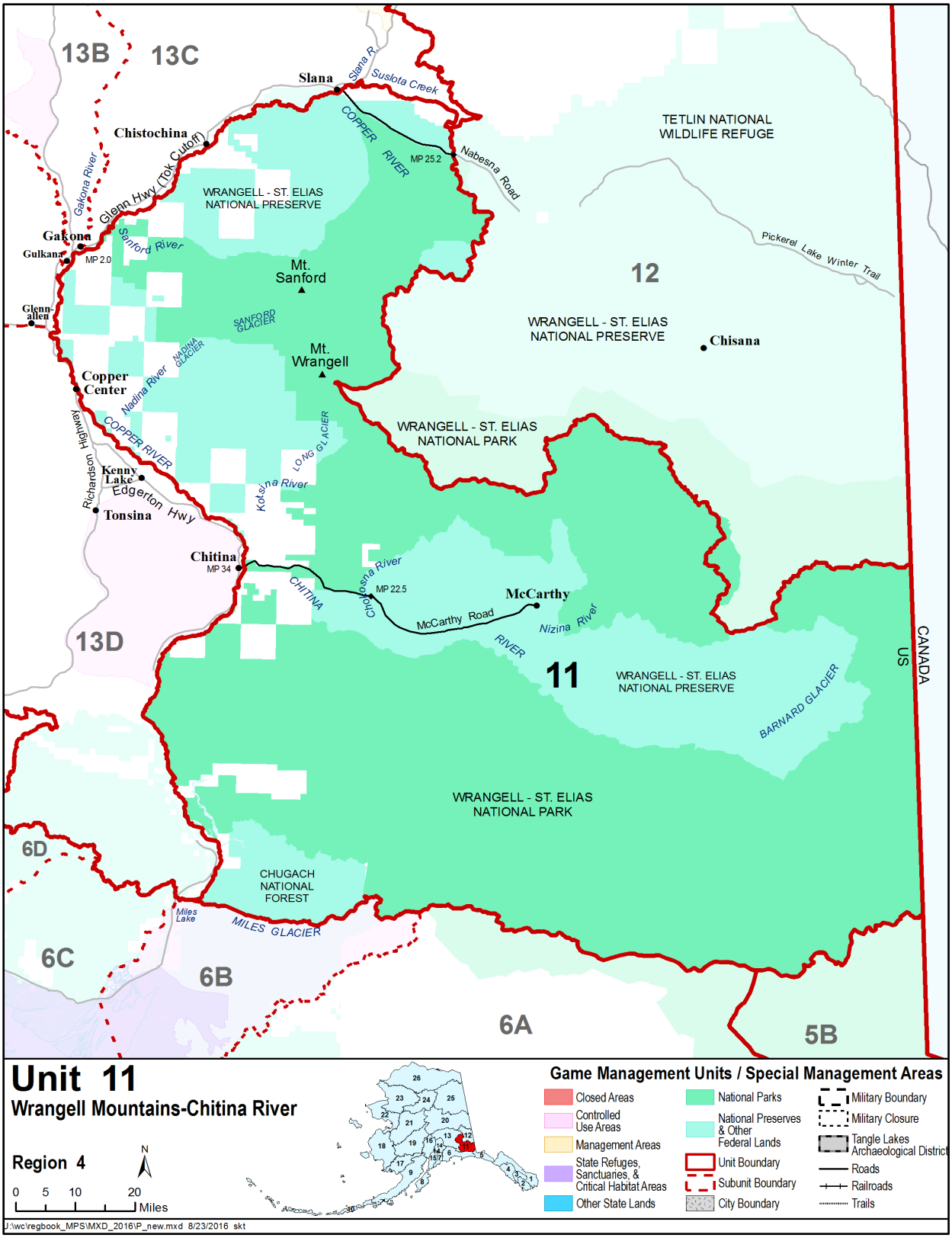

Figure 1. Unit 11 boundaries, regulatory years 2017–2021, Southcentral Alaska.

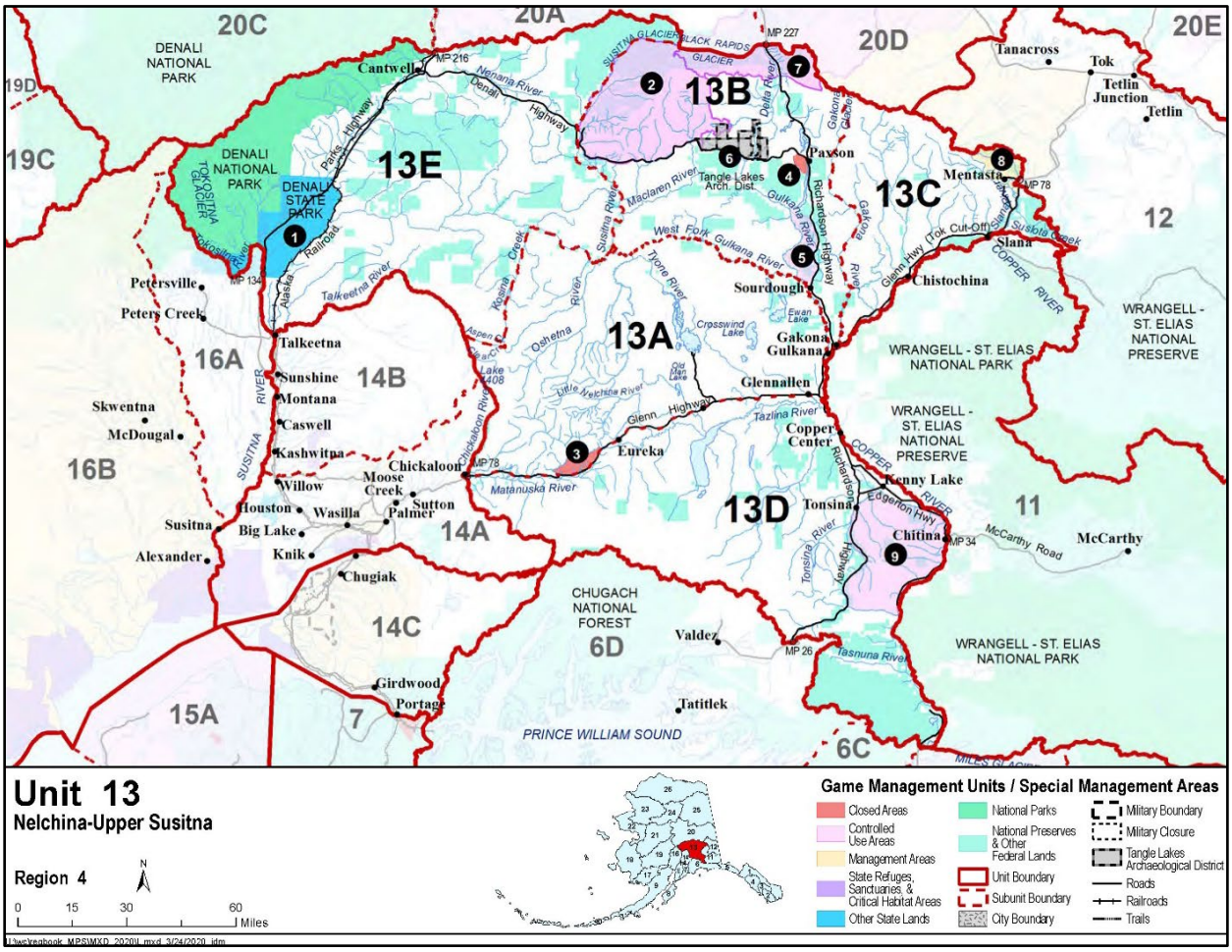

Figure 2. Unit 13 boundaries, regulatory years 2017–2021, Southcentral Alaska. Numbered black circles indicate state restricted areas.

spp.), wolverine (*Gulo gulo*), and wolf (*Canis lupus*). Wolves are addressed in a separate species management report and plan.

Historic harvest data are limited for furbearers in Units 11 and 13 prior to the initiation of sealing requirements. Wolverine and beaver sealing became mandatory in 1971, followed by lynx and river otter in 1977. Before sealing began, fur buyer reports gave minimal information on harvests, and bounty records provided harvest data only on wolverines. Harvest information for beavers, lynx, river otters, and wolverines is now monitored through the sealing process. Additional information on trapping conditions, trapper effort, and trends in furbearer abundance and distribution are collected using a yearly statewide trapper questionnaire.

Density of individual species is variable, depending upon a variety of ecological factors and levels of harvest. Harvest records, reports by hunters and trappers, and field observations by department personnel are the main unit-specific historic sources of information concerning

furbearer abundance. Further information on life history, range, habitat, and management of furbearers is available on our species website.[1]

Management Direction

Management direction of furbearers in Units 11 and 13 began with the Greater Alaska Furbearer Management Plan of 1976 (ADF&G 1976) and has evolved over the years through public input into the Board of Game process. The management direction for these units ensures that furbearers will persist as part of the natural ecosystem and ensures continued trapping and viewing opportunities.

Existing Wildlife Management Plans

The latest management direction is described in Furbearer Management Report and Plan, Game Management Units 11 and 13 (Robbins and Hepler 2021).

Goals

1. Provide for an optimal harvest of furbearers.

2. Provide the greatest opportunity to participate in hunting and trapping furbearers.

Codified Objectives

Amounts Reasonably Necessary for Subsistence Uses

The Alaska Board of Game has made a positive subsistence finding for furbearers in Units 11 and 13, with amounts necessary for subsistence of 90% of the harvestable portion for each species (5 AAC 99.025(13)).

Intensive Management

There is currently an intensive management program for moose in Unit 13. The intensive management wolf predation control program implemented for moose in Unit 13 may also influence the abundance of other furbearers.

Management Objectives

- Maintain accurate annual harvest records based on sealing documents.

- Maintain indices of population trends using trapper questionnaires.

[1] Additional species information is available at http://www.adfg.alaska.gov/index.cfm?adfg=animals.listmammals.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Record observations of furbearers seen incidentally during other survey work and anecdotal reports from the public.

Data Needs

Incidental observations are insufficient for estimating the population or detecting changes which would trigger management action. Statistical estimates of furbearers derived from a sample-based estimator, including a measure of the precision, would be needed to detect changes in the population.

Methods

GPS (global positioning system) locations and physical characteristics are recorded for any furbearers observed during other field work. Anecdotal reports are recorded to the maximum level of detail available.

Results and Discussion

None.

Recommendations for Activity 1.1

While this activity is useful, the information does not warrant inclusion in future species management reports and plans. Population status and trend information based off of public and trapper effort and observations are reported in the annual Alaska Trapper Report (Spivey 2019, 2020; Bogle 2021).

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through sealing records.

Data Needs

Harvest must be assessed to determine trends in use and availability of furbearers.

Methods

ADF&G collected harvest data by sealing the hides of beaver, otter, lynx, and wolverine taken by trappers and hunters. Sealers recorded location, date of harvest, method of take, transportation method, and sex (except for beaver and lynx). Lynx, otter, and beaver hides were measured at the time of sealing. Sealing is required to be done by either authorized ADF&G staff or a state-appointed sealer within 30 days of the close of the season. These data are entered into ADF&G's Wildlife Information Network. Harvest data were summarized by regulatory year.

Season and Bag Limit

Alaska hunting seasons and bag limits during RY17–RY21.

Species and unit	Season	Bag limit
Beaver, Units 11 and 13	No open season	Not applicable
Coyote, Units 11 and 13	No closed season	No limit
Red fox, Units 11 and 13	1 Sep–15 Mar	10 foxes[a]
Lynx, Units 11 and 13	10 Nov–28 Feb	2 lynx
Wolverine, Units 11 and 13	1 Sep–31 Jan	1 wolverine

[a] No more than 2 foxes may be taken before 1 October.

Federal subsistence hunting seasons and bag limits during RY17–RY21.

Species and unit	Season	Bag limit
Beaver, Unit 11	1 Jun–10 Oct	1 beaver per day, 1 in possession
Beaver, Unit 13	15 Jun–10 Sep	1 beaver per day, 1 in possession
Coyote, Units 11 and 13	10 Aug–30 Apr	10 coyotes
Red fox, Units 11 and 13	1 Sep–15 Mar	10 foxes[a]
Lynx, Units 11 and 13	10 Nov–28 Feb	2 lynx
Wolverine, Units 11 and 13	1 Sep–31 Jan in RY17	1 wolverine
Wolverine, Units 11 and 13	1 Sep–28 Feb in RY18–RY21	1 wolverine

Note: RY refers to regulatory year.

[a] No more than 2 foxes may be taken before 1 October.

Alaska trapping seasons and bag limits during RY17–RY21.

Species and unit	Season	Bag limit
Beaver, Units 11 and 13	25 Sep–31 May	No limit
Coyote, Unit 11	10 Nov–31 Mar	No limit
Coyote, Unit 13	15 Oct–30 Apr	No limit
Red fox, Units 11 and 13	10 Nov–28 Feb	No limit
Lynx, Units 11 and 13	10 Nov–28 Feb	No limit
Marten, Units 11 and 13	10 Nov–28 Feb	No limit
Mink, Units 11 and 13	10 Nov–28 Feb	No limit
Muskrat, Unit 11	10 Nov–10 Jun	No limit
Muskrat, Unit 13	25 Sep–10 Jun	No limit
River Otter, Units 11 and 13	10 Nov–31 Mar	No limit
Wolverine, Units 11 and 13	10 Nov–31 Jan in RY17	No limit
Wolverine, Unit 11	10 Nov–28 Feb in RY18–RY21	No limit
Wolverine, Unit 13	10 Nov–15 Feb in RY18–RY21	No limit

Note: RY refers to regulatory year.

Federal trapping seasons and bag limits during RY17–RY21.

Species and unit	Season	Bag limit
Beaver, Units 11 and 13	25 Sep–31 May	No limit
Coyote, Units 11 and 13	10 Nov–31 Mar	No limit
Red fox, Units 11 and 13	10 Nov–28 Feb	No limit
Lynx, Units 11 and 13	10 Nov–28 Feb	No limit
Marten, Units 11 and 13	10 Nov–28 Feb	No limit
Mink, Units 11 and 13	10 Nov–28 Feb	No limit
Muskrat, Unit 11	10 Nov–10 Jun	No limit
Muskrat, Unit 13	25 Sep–10 Jun	No limit
River otter, Units 11 and 13	10 Nov–31 Mar	No limit
Wolverine, Unit 11	10 Nov–28 Feb	No limit
Wolverine, Unit 13	10 Nov–31 Jan in RY17	No limit
Wolverine, Unit 13	10 Nov–28 Feb in RY18–RY21	No limit

Note: RY refers to regulatory year.

Results and Discussion

Harvest by Hunters-Trappers

BEAVER

The beaver harvest in Unit 11 ranged from 8–14 animals from RY17–RY21. An average of 2 trappers harvested beaver annually, with a total average annual harvest of 10 beavers (Table 1). Historically, the highest harvest was 56 beavers taken in 1985, but harvest has fluctuated appreciably between years.

In Unit 13, the beaver harvest has been fairly stable over the past decade. Beaver harvest averaged 150 animals per year during the report period (Table 2). The historic peak harvest was 333 beavers in RY86. The percentage of kits (animals measured at <52″ length plus width at the time of sealing) in the harvest of known size ranged from 13% to 26% during the report period.

While beaver harvests under summer federal subsistence hunting seasons on federal lands are low in Units 11 and 13, they are incorporated into state harvest records due to federal regulations and state sealing requirements.

In Alaska, average beaver prices fluctuated between $10.71 and $13.52 between 2016 and 2020 (Bogle 2021). Despite low prices, trappers still trap beaver for a variety of reasons. Some trappers have found markets for carcasses and sometimes for skulls. Beaver trapping continues to be an educational tool for young people as well.

Beaver populations are considered healthy across both Units 11 and 13. Trapping is not concentrated, apart from some highly visible roadside beaver colonies. Current harvest rates are considered sustainable. The Alaska Department of Transportation regularly requests out-of-season beaver harvest permits in Unit 13 as a result of beaver activity affecting culverts and

roadways, which suggests that trapping pressure in Unit 13 is not high. Permits such as these have the same salvage and sealing requirements as in-season harvest; as such, harvest numbers are included in Table 1.

LYNX

Unit 11 lynx harvest was highest in RY20 (192 lynx) with a 5-year average of 101 animals during RY17–RY21. Harvest ranged from 41–192 animals (Table 1).

Table 1. Beaver, lynx, river otter, and wolverine Unit 11 harvest, regulatory years 2017–2021, Southcentral Alaska.

		Reported harvest											
		Sex			Age			Method of take					
Species	Regulatory year	M	F	Unk	Juv[a]	Adult	Unk	Trap	Snare	Shot	Unk	Total harvest	Successful trappers/ hunters
Beaver	2017	–	–	–	2	6	0	8	0	0	0	8	2
	2018	–	–	–	3	2	7	12	0	0	0	12	2
	2019	–	–	–	1	7	0	6	2	0	0	8	3
	2020	–	–	–	2	7	0	9	0	0	0	9	1
	2021	–	–	–	1	13	0	12	2	0	0	14	2
Lynx	2017	–	–	–	5	40	1	43	3	0	0	46	8
	2018	–	–	–	19	105	0	122	2	0	0	124	10
	2019	–	–	–	25	77	2	87	10	9	0	106	14
	2020	–	–	–	25	147	20	164	2	14	12	192	18
	2021	–	–	–	10	30	1	38	0	3	0	41	9
River otter	2017	0	0	0	–	–	–	0	0	0	0	0	0
	2018	3	3	0	–	–	–	6	0	0	0	6	2
	2019	6	0	0	–	–	–	6	0	0	0	6	1
	2020	1	1	1	–	–	–	3	0	0	0	3	3
	2021	4	3	0	–	–	–	7	0	0	0	7	2
Wolverine	2017	6	4	3	–	–	–	13	0	0	0	13	6
	2018	3	2	0	–	–	–	5	0	0	0	5	3
	2019	3	0	4	–	–	–	7	0	0	0	7	3
	2020	9	3	1	–	–	–	12	1	0	0	13	7
	2021	3	0	0	–	–	–	3	0	0	0	3	3

Note: En dash indicates no data.

[a] Juvenile beavers are defined as <52″ in length and juvenile lynx are ≤35″ in length.

Harvest during this peak cycle is down from harvest in the previous peak, when 350 lynx were harvested in 2008 and roughly 290 lynx were harvested for each of the following 2 years. During that peak the number of trappers reached 25 in 2008, compared to the peak of 18 trappers in 2020. During the report period, the percentage of juveniles in the known-size sample of harvested lynx for Unit 11 ranged from 11% in 2017 to 25% in 2021.

Unit 13 lynx harvest was highest in RY20 (963 lynx) with a 5-year average of 575 animals during RY17–RY21 (Table 2). This is down from the previous peak cycle, when more than 1,200 lynx were harvested each year in 2009 and 2010. Nearly 120 trappers were successful in Unit 13 during each of those 2 years, compared to 163 successful trappers in 2020. During the report period, the percentage of juveniles in the known-size sample of harvested lynx for Unit 13 ranged from 18% in 2017 and 2018 to 33% in 2021.

Average lynx prices fluctuated during the report period from $43.21 to $79.59 with a top auction price of $178.40 in RY20.

Table 2. Beaver, lynx, river otter, and wolverine Unit 13 harvest, regulatory years 2017–2021, Southcentral Alaska.

		Reported harvest										
		Sex			Age			Method of take				
Species	Regulatory year	M	F	Unk	Juv[a]	Adult	Unk	Trap	Snare	Shot	Total harvest	Successful trappers/ hunters
Beaver	2017	–	–	–	26	103	17	139	7	0	146	24
	2018	–	–	–	16	80	8	98	6	0	104	22
	2019	–	–	–	25	168	33	207	10	9	226	36
	2020	–	–	–	30	93	59	132	34	16	182	29
	2021	–	–	–	22	62	7	68	22	1	91	19
Lynx	2017	–	–	–	46	216	27	209	67	13	289	60
	2018	–	–	–	108	493	46	366	106	21	493	84
	2019	–	–	–	172	579	72	565	215	43	823	97
	2020	–	–	–	188	608	167	585	267	111	963	163
	2021	–	–	–	98	200	12	193	81	36	310	72
River otter	2017	20	10	0	–	–	–	19	4	7	30	17
	2018	22	19	5	–	–	–	39	0	7	46	21
	2019	15	12	0	–	–	–	24	0	3	27	18
	2020	21	12	4	–	–	–	33	1	3	37	22
	2021	13	5	5	–	–	–	20	1	2	23	13
Wolverine	2017	19	16	3	–	–	–	29	4	5	38	27
	2018	34	23	2	–	–	–	53	3	3	59	39
	2019	37	19	1	–	–	–	46	8	3	57	33
	2020	54	25	0	–	–	–	68	6	5	79	42
	2021	26	18	5	–	–	–	40	6	3	49	26

Note: En dash indicates no data.

[a] Juvenile beavers are defined as <52″ in length and juvenile lynx are ≤35″ in length.

RIVER OTTER

Unit 11 otter harvest averaged 4 otters harvested during RY17–RY21, with an average of 2 trappers harvesting otters annually, and female harvest consistently making up 50% or less of the harvest (Table 1). This level of harvest and effort has been fairly consistent over the history of otter harvest records in Unit 11 and is not sufficient pressure to cause conservation concerns.

Unit 13 otter harvest averaged 33 animals annually during RY17–RY21, with the percentage of females in the harvest ranging from 46% in 2018 to 28% in 2021, and an average of 18 trappers harvesting otter annually (Table 2).

Average river otter prices fluctuated from $15.85 to $28.79 with a top auction price of $42.82 in RY20.

WOLVERINE

Unit 11 wolverine harvest during RY17–RY21 ranged from 3 in RY21 to 13 in RY17 and RY20 (Table 1). It is typical for the number of wolverine harvested in Unit 11 to fluctuate within this range, and the number of trappers also fluctuated within a fairly normal range for this area. The overall average harvest during this period was 8 wolverine annually, which is slightly lower than the average of 9 wolverine harvested during RY08–RY16 when the season end date remained the same as it is now, and lower than the average of 10 wolverine annually during RY85–RY91 when the season end date was also the same as it is now but the number of trappers was typically higher. The proportion of females in the harvest was consistently below 40%.

Unit 13 wolverine harvest during RY17–RY21 ranged from 38 in RY17 to 79 in RY20 with an average of 56 wolverine harvested annually, and the proportion of the harvest was consistently between 32% and 46% female (Table 2). This harvest is similar to that obtained in RY12–RY16, which had an average of 59 wolverine harvested annually and the percentage of females in the harvest ranged from 31% to 40%. The number of trappers has also remained stable between those two 5-year periods; but overall, the past decade has had a higher level of harvest and a higher number of trappers than has typically been seen since the early 1980s. The long-term (RY83–RY11) average of 38 wolverine harvested annually by an average of 25 trappers is representative of those 3 decades, as compared with the higher harvest averages observed in the most recent decade.

Average wolverine prices fluctuated from $195.66 to $255.75 with a top auction price of $479.14 in RY20.

Permit Hunts

Permits are issued for removal of beaver outside of normal hunting and trapping seasons when beavers are causing flooding or damage to roads or property, per 5 AAC 92.041. The salvage and sealing requirements under these permits are the same as for beaver harvest during the regular hunting or trapping seasons, and removal under these permits is reported with harvest data, except in situations in which beavers are not recovered. At this time the number of beavers which are removed under these permits but not recovered are minimal and do not pose a conservation concern.

Harvest Chronology

BEAVER

In Unit 11, beaver harvest is typically low, and chronology is highly variable. RY17–RY21 was no exception (Table 3). In 2007 the season open date was moved earlier to 25 September to

allow more open-water trapping opportunity. Since then, September beaver harvest in Unit 11 has only occurred in 2009 and 2015; no September harvest occurred during the report period.

Table 3. Unit 11 beaver harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory year	Harvest periods								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	*n*[a]
2017	50	0	0	0	0	50	0	0	8
2018	25	0	25	33	0	0	0	17	12
2019	50	0	25	0	0	13	0	13	8
2020	0	89	0	0	0	0	11	0	9
2021	64	0	14	0	0	0	0	21	14

[a] *n* indicates sample size.

For Unit 13, the season open date was shifted earlier to 25 September in 2001, and significantly more harvest has been observed in September for this unit than was observed in Unit 11 after this change (Table 4). Open-water trapping has been popular in Unit 13 due to the relative ease compared to under-ice trapping. Trappers often harvest beavers in the fall to gather meat for trapping bait or for sled dog food. The majority of harvest during RY17–RY21 occurred in September and October, but an increase in harvest can often be seen again during the spring months. This reflects the longer days, moderating temperatures, and in some cases, a return to open-water trapping opportunities.

Table 4. Unit 13 beaver harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory year	Harvest periods												
	Aug[a]	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Unk	*n*[b]
2017	0	36	44	8	1	4	0	0	0	8	0	0	146
2018	0	14	44	16	0	3	3	3	15	1	0	0	104
2019	1	22	16	4	3	2	2	0	4	47	0	0	226
2020	8	18	36	3	9	6	7	9	1	2	0	0	182
2021	0	5	36	14	2	2	14	10	2	14	1	5	91

[a] All beavers harvested in August were taken under beaver depredation permits issued by the Alaska Department of Fish and Game.
[b] *n* indicates sample size.

LYNX

Harvest chronology data for lynx in Unit 11 is included in Table 5 and Unit 13 in Table 6. For both units, harvest is generally lower in November, when trappers may be awaiting freeze-up and firm snow conditions which better facilitate harvest methods before effectively accessing traplines.

RIVER OTTER

River otter harvest in Unit 11 is generally low and chronologically highly variable (Table 7).

Table 5. Unit 11 lynx harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory year	Harvest periods				
	November	December	January	February	*n*[a]
2017	9	33	35	24	46
2018	3	6	40	51	124
2019	7	8	20	66	106
2020	6	15	56	23	190
2021	12	39	20	29	41

[a] *n* indicates sample size.

Table 6. Unit 13 lynx harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory year	Harvest periods				
	November	December	January	February	*n*[a]
2017	9	23	35	34	289
2018	10	33	32	26	493
2019	15	25	31	29	823
2020	10	35	32	23	963[b]
2021	13	30	36	21	310

[a] *n* indicates sample size.
[b] Excludes 5 harvests from unknown months.

Table 7. Unit 11 river otter harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory years	Harvest periods					
	November	December	January	February	March	*n*[a]
2017	0	0	0	0	0	0
2018	67	0	33	0	0	6
2019	33	0	0	0	67	6
2020	33	33	33	0	0	3
2021	14	86	0	0	0	7

[a] *n* indicates sample size.

In Unit 13, river otter harvest generally occurs throughout the open trapping season, and timing can be highly variable (Table 8).

WOLVERINE

Wolverine harvest in Unit 11 is relatively low and months with the highest harvest are variable from year to year (Table 9).

Table 8. Unit 13 river otter harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory	Harvest periods					
year	November	December	January	February	March	n[a]
2017	17	40	10	17	16	30
2018	4	28	22	13	33	46
2019	15	19	22	22	22	27
2020	24	14	30	16	16	37
2021	9	35	35	13	9	23

[a] *n* indicates sample size.

Table 9. Unit 11 wolverine harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory	Harvest periods				
years	November	December	January	February	n[a]
2017	23	23	38	15	13
2018	0	0	60	40	5
2019	0	0	14	86	7
2020	8	8	46	38	13
2021	0	67	0	33	3

[a] *n* indicates sample size.

In Unit 13, harvest of wolverines in September coincides with incidental take during moose, caribou, and sheep hunting seasons. Harvest otherwise occurs throughout the open trapping season (Table 10), and the extension of the season into February appears to have resulted in increased harvest during RY17–RY21, although the 5-year average of 56.4 wolverine annually is still below the previous 5-year average of 59.2. The percentage of females in the harvest for each of those two 5-year periods is the same, at 37.7% during RY12–RY16 versus 37.3% in RY17–RY21.

Table 10. Unit 13 wolverine harvest chronology percent by month, regulatory years 2017–2021, Southcentral Alaska.

Regulatory	Harvest periods					
year	September	November	December	January	February	n[a]
2017	8	3	21	68	N/A	38
2018	3	7	31	41	19	59
2019	2	11	18	51	19	57
2020	4	6	27	47	16	79
2021	2	2	33	55	8	49

[a] *n* indicates sample size.

Transport Methods

Transportation methods for Unit 11 are reported in Table 11. The method most used by successful trappers during RY17–RY21 was snowmachine, although methods for beaver

trapping are highly variable due to the extended season dates and variety of access options for this species.

Table 11. Unit 11 furbearer harvest by transport method, regulatory years 2017–2021, Southcentral Alaska.

		Percent of harvest						
Species	Regulatory year	Airplane	ATV[a]	Snow-machine	ORV[b]	Highway vehicle	Snowshoes/ skis/foot	*n*[c]
Beaver	2017	0	0	50	0	0	50	8
	2018	58	0	25	0	0	17	12
	2019	0	25	63	0	0	13	8
	2020	0	0	100	0	0	0	9
	2021	0	64	14	0	0	21	14
Lynx	2017	0	4	93	0	0	2	46
	2018	1	0	88	0	11	0	124
	2019	0	0	72	2	19	7	106
	2020	3	0	83	0	14	0	190
	2021	0	0	73	0	7	20	41
River otter	2017	0	0	0	0	0	0	0
	2018	0	0	100	0	0	0	6
	2019	0	0	33	0	0	67	6
	2020	0	0	100	0	0	0	3
	2021	0	0	0	0	0	100	7
Wolverine	2017	0	0	100	0	0	0	13
	2018	0	0	100	0	0	0	5
	2019	0	0	86	0	0	14	7
	2020	54	0	46	0	0	0	13
	2021	0	0	100	0	0	0	3

[a] ATV refers to 4-wheeler or all-terrain vehicle.
[b] ORV refers to off-road vehicle.
[c] *n* indicates sample size.

Transportation methods for Unit 13 are reported in Table 12. The method most used by successful trappers during RY17–RY21 was snowmachine, although transport methods in Unit 13 are more variable than in Unit 11. Additionally, many Unit 13 trappers are able to harvest furs by accessing trapping areas with highway vehicles off of the road system, as Unit 13 is much more accessible than Unit 11.

Table 12. Unit 13 furbearer harvest by transport method, regulatory years 2017–2021, Southcentral Alaska.

		Percent of harvest							
Species	Regulatory year	Airplane	ATV[a]	Boat	Snow-machine	ORV[b]	Highway vehicle	Snowshoes/ skis/foot	n^c
Beaver	2017	0	8	18	8	4	58	3	146
	2018	0	7	6	10	13	53	13	104
	2019	2	11	30	10	0	47	0	226
	2020	0	12	9	33	0	42	4	182
	2021	0	0	2	34	0	52	12	91
Lynx	2017	0	1	0	80	0	11	8	289
	2018	0	2	0	82	0	12	4	493
	2019	0	2	0	78	0	16	3	823
	2020	0	1	0	78	1	16	5	963
	2021	0	0	0	60	0	32	8	310
River otter	2017	0	0	0	80	0	0	20	30
	2018	0	0	0	87	2	0	11	46
	2019	4	0	0	74	0	11	11	27
	2020	3	4	0	92	0	0	0	37
	2021	0	0	0	69	0	22	9	23
Wolverine	2017	5	3	0	76	0	16	0	38
	2018	7	3	0	80	0	3	7	59
	2019	0	0	0	88	0	9	4	57
	2020	3	0	0	91	0	4	3	78
	2021	0	2	0	92	0	2	4	49

[a] ATV indicates 4-wheeler or all-terrain vehicle.
[b] ORV refers to off-road vehicle.
[c] *n* indicates sample size. This does not include harvest with unreported transportation.

Other Mortality

There are natural sources of mortality for these species; however, the department does not monitor them. Incidental mortality, such as vehicle collision, occurs among some furbearer species such as lynx; however, it is uncommon and does not significantly impact populations. During RY17–RY21, a member of the public reported observing wolves kill a river otter. In addition to wolves, bears and wolverines are known predators of beavers.

Alaska Board of Game Actions and Emergency Orders

Effective beginning RY18, the Board of Game increased the wolverine trapping season length in Unit 11 by 1 month from ending on 31 January to ending on 28 February. They also increased it in Unit 13 by 2 weeks from ending on 31 January to ending on 15 February. Both seasons still begin 10 November. These changes were in response to public proposals which requested state trapping seasons align with federal trapping seasons in this area. However, due to concerns for

the vulnerability of denning female wolverines to trapping pressure in late February, the Unit 13 season extension does not fully align with federal trapping seasons for wolverine in this area.

Recommendations for Activity 2.1

Continue to monitor harvest through sealing records.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities were conducted during RY17–RY21.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

There were no nonregulatory problems or needs during RY17–RY21.

Data Recording and Archiving

Fur sealing data are stored in ADF&G's Wildlife Information Network and hardcopies of sealing certificates are stored in the Glennallen office.

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

Harvest of furbearers has remained relatively stable during RY17–RY21 with the largest fluctuations seen in lynx, an expected trend due to the cyclical nature of their population. Trapper effort is driven by many things including fur prices, weather, snow conditions, and gas prices. During this reporting period fur prices generally declined, and the cost of gas was high. The metrics of method of take, method of transport, and harvest chronology were stable, indicating no shift in how or when furbearers in Units 11 and 13 were targeted. Harvests of furbearers appeared to be within sustainable limits and no changes in seasons or bag limits are recommended.

II. Project Review and RY22–RY26 Plan

Review of Management Direction

The existing management direction and goals appropriately direct management of furbearers in Units 11 and 13. No changes are recommended for RY22–RY26.

MANAGEMENT DIRECTION

No change from RY17–RY21.

GOALS

No change from RY17–RY21. Goals for RY22–RY26 will continue to be:

1. Provide for an optimal harvest of furbearers.

2. Provide the greatest opportunity to participate in hunting and trapping furbearers.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

No change from RY17–RY21.

Intensive Management

No change from RY17–RY21.

MANAGEMENT OBJECTIVES

No change from RY17–RY21.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor trends reported by trappers.

Data Needs

ADF&G's Alaska Trapper Report series provides insight into population status and trends. These reports are compiled annually through a trapper questionnaire.

Methods

Population status and trend information is based on effort and observations of the public and trappers. This information is reported in the annual Alaska Trapper Report (Spivey 2019, Spivey 2020, Bogle 2021).

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through sealing records.

Data Needs

No change from RY17–RY21.

Methods

No change from RY17–RY21.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities are planned for furbearers in Units 11 or 13 for RY22–RY26.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

No change from RY17–RY21.

Agreements

No change from RY17–RY21.

Permitting

No change from RY17–RY21.

References Cited

Alaska Department of Fish and Game. 1976. Alaska wildlife management plans: A public proposal for the management of Alaska's wildlife: Southcentral Alaska. Draft proposal subsequently approved by the Alaska Board of Game. Division of Game, Federal Aid in Wildlife Restoration Project W-17-R, Juneau.

Bogle, S. E. 2021. 2020 Alaska trapper report: 1 July 2020–30 June 2021. Alaska Department of Fish and Game, Wildlife Management Report ADF&G/DWC/WMR-2021-3, Juneau.

Robbins, W. F., and J. Hepler 2021. Furbearer management report and plan, Game Management Units 11 and 13: Report period 1 July 2012–30 June 2017, and plan period 1 July 2017–30 June 2022. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2021-44, Juneau.

Spivey, T. J. 2019. 2017 Alaska trapper report: 1 July 2017–30 June 2018. Division of Wildlife Conservation, Wildlife Management Report ADF&G/DWC/WMR-2019-3, Juneau.

Spivey, T. J. 2020. 2018 Alaska trapper report: 1 July 2018–30 June 2019. Division of Wildlife Conservation, Wildlife Management Report ADF&G/DWC/WMR-2020-1, Juneau.


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