Species Management Report and Plan ADF&G/DWC/SMR&P–2025–40

Furbearer Management Report and Plan, Game Management Unit 1D:

Report Period 1 July 2017–30 June 2022, and

Plan Period 1 July 2022–30 June 2027

Carl H. Koch

2025

Alaska Department of Fish and Game Division of Wildlife Conservation

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

This species management report and plan was reviewed and approved for publication by Roy Churchwell, Management Coordinator for Region I 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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Cover Photo: An Interior Alaska lynx. ©2020 ADF&G. Photo by Bill Brophy.

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Purpose of this Report

This report provides a record of survey and inventory management activities for furbearers in Unit 1D for the 5 regulatory years 2017–2021 and plans for survey and inventory management activities in the following 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 its own 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 Division of Wildlife Conservation 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 report of survey and inventory activities that was previously produced every 3 years.

I. RY17–RY21 Management Report

Management Area

Unit 1D is located on the Southeast Alaska mainland, north of the latitude of Eldred Rock, excluding Sullivan Island and the Berners Bay drainages (Fig. 1). It is bordered on the north, east, and west by Canada. Local communities include Haines, Skagway, and the Chilkat Indian Village of Klukwan. Most of the residents in this unit are federally qualified rural residents. The economy is primarily based on tourism, fishing, and mining. The unit is 2,854 mi^2 and is composed of a variety of habitats including wide river valleys, rugged mountains, lakes, muskegs, coastal areas, and old-growth spruce and hemlock forest. The Chilkat River Valley, with its numerous tributaries, is the largest drainage in the Haines area and one of the most important travel corridors for hunting and trapping in the unit. Land management within this unit is complex and includes the Haines State Forest, several state parks and recreation areas, two national parks, Tongass National Forest land, and two large blocks of land managed by the U.S. Bureau of Land Management.

Summary of Status, Trend, Management Activities, and History of Furbearers in Unit 1D

Furbearers managed by ADF&G in this area include martens (*Martes americana*), river otters (*Lontra canadensis*), beavers (*Castor canadensis)*, coyotes (*Canis latrans*), ermines and weasels (*Mustela spp.*), lynxes (*Lynx canadensis*), minks (*Neovision vison*), red foxes (*Vulpes vulpes*), and wolverines (*Gulo gulo*). Wolves (*Canis lupis*) are discussed in a separate report (Koch 2023). Furbearer population levels have not been estimated for Unit 1D. Historical population information comes from anecdotal reports and the 2021 Alaska trapper report (Bogle 2022). Harvest of martens, river otters, beavers, lynxes, and wolverines is monitored through mandatory sealing. Harvest levels are affected most by fur prices, which influence trapper effort. Logging has had the greatest influence on furbearer habitat in Southeast Alaska (ADF&G 1976).

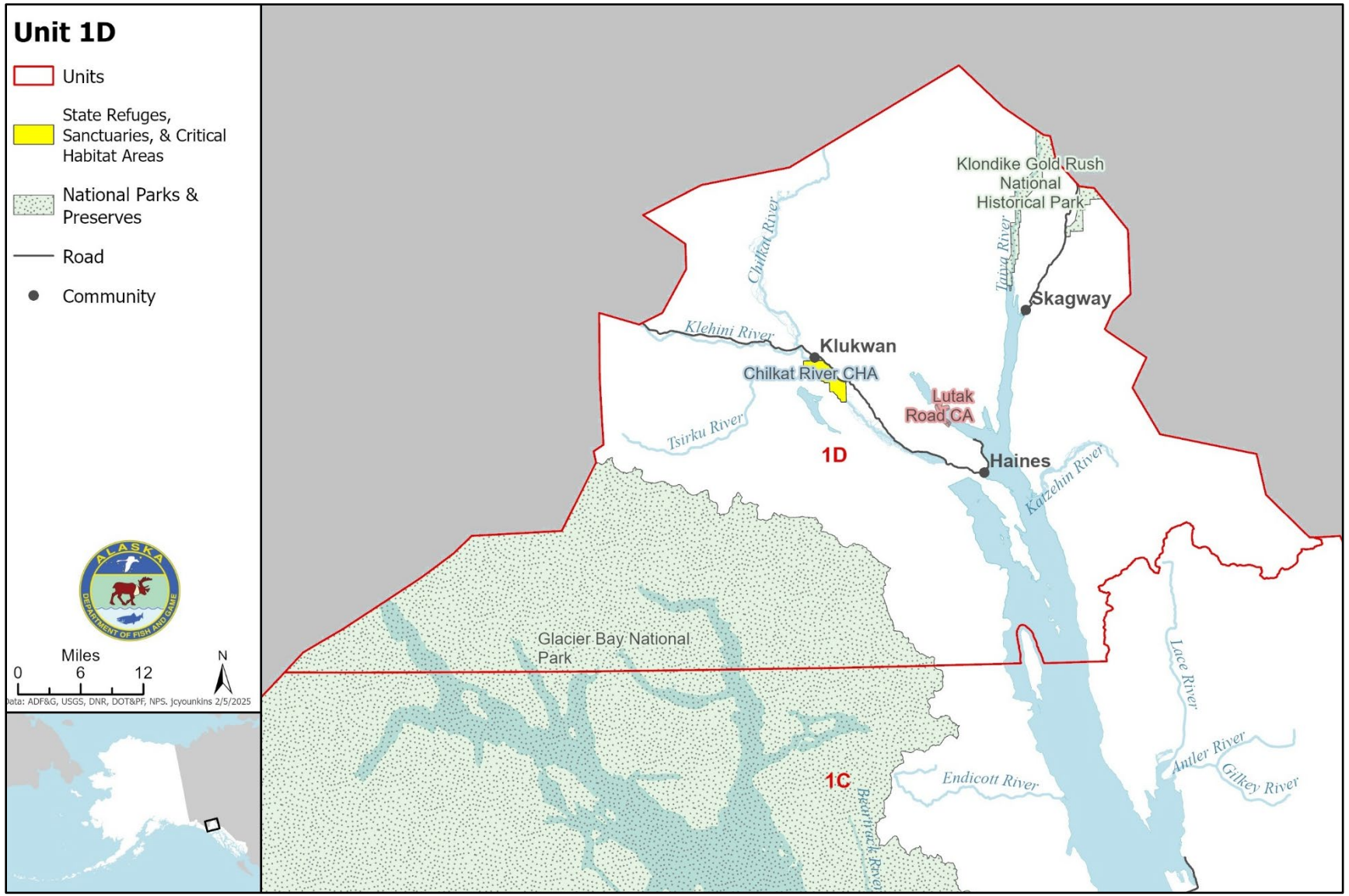

Figure 1. Map of Unit 1D, Southeast Alaska, regulatory years 2017–2021.

Marten are the most popular species targeted by trappers in Southeast Alaska (Bogle 2022). These habitat specialists experience better survival and reproductive rates in old-growth forests (Thompson and Colgan 1994). Logging has the potential to reduce marten numbers through loss of habitat. Timber harvest is included in the Haines State Forest Management Plan and is currently being proposed in other locations in Unit 1D. Flynn and Schumacher (2009) found strong correlations between marten numbers and rodent (especially voles) abundance in Southeast Alaska. Seasonally available salmon may be an important dietary supplement when rodent populations are in decline (Ben-David et al. 1997).

Beaver ranked second among species targeted by trappers in Southeast Alaska during RY17–RY21, while mink were third (Bogle 2022). In 2001, anecdotal reports of an increase in beaver abundance prompted the first beaver trapping season opening in the unit since 1976 and subsequent liberalization of bag limits (Sell 2013). Anecdotal reports indicated that beavers were also present throughout the Chilkat Valley during the report period.

River otter and mink habitat is less prevalent in Unit 1D than other areas of Southeast Alaska due to the comparatively limited marine shoreline found in Unit 1D (Sell 2013). Most river otters were harvested in the Chilkat River and its tributaries, while others were taken from the Chilkoot River corridor and in Lutak Inlet. Harvest trends for mink are unknown since sealing is not required.

Sealing is not a requirement for coyotes or red foxes in Unit 1D. In 2019, an Alaska Board of Game (BOG, board) proposal to require coyote sealing in Southeast Alaska failed to pass. Instead, population information on these species obtained by ADF&G comes from anecdotal reports and observations recorded during aerial surveys of other species. Trappers have reported that coyote numbers may be increasing in the Chilkat Valley, but red fox observations are far less common. Coyotes are also observed in the Skagway area, and red fox are commonly seen in the Skagway area as well.

Lynx are uncommon in Southeast Alaska compared to the Interior and populations are likely influenced by adjacent trends in snowshoe hare populations (Ruggiero et al. 1999, MacDonald and Cook 2007). The second and third highest harvest levels of lynx in Unit 1D occurred during this report period (in RY19 and RY20). Although overall harvest of the species in Unit 1D is typically low, the unit's Chilkat Valley sees the highest lynx harvest in all of Southeast Alaska, with the exception of Yakutat. This may be due in part to Haines' proximity to interior Canada's boreal forests.

Information about wolverine populations in Unit 1D comes from sealing records, anecdotal reports, and observations during aerial surveys for other species. Wolverines in Alaska are born between February and April. Natal dens are usually in snow caves at elevations from 984 to 4,101 ft. (Magoun and Copeland 1998). In some areas of Unit 1D, commercial heliskiing operations occur within this range of elevation, and den abandonment after human disturbance at maternal dens has been documented (Copeland 1996).

About 18 muskrats (*Ondatra zibethicus*) were translocated from Haines to Klawock Lake on Prince of Wales Island in 1931 (Paul 2009). The most recent available records of muskrat in Southeast Alaska suggests that they "have never been abundant" but were found in "fair

numbers" in the Haines area (ADF&G 1976). However, the department has not received reports of muskrat observations in Unit 1D for several decades since and it is likely that they no longer occur in the management area.

In January of 2014 the Skagway Assembly contacted ADF&G with concerns about trapping. Department biologists from Douglas attended Skagway Assembly meetings in an effort to help facilitate compromise. A compromise was never reached, and the Skagway Assembly passed a trapping ordinance in June of 2014. The ordinance closed some areas to trapping and placed restrictions on methods and means in other areas. Due to the steep terrain in the Skagway area, the ordinance essentially bans trapping in most accessible areas of the municipality. This reduces opportunity for subsistence trapping and may have economic impacts on local trappers. The Alaska Department of Law contacted the Municipality of Skagway to inform them that the ordinance (despite an amendment in 2015) exceeded the municipality's authority because regulation of hunting and trapping falls under the authority of BOG. Department of Law encouraged the Skagway Assembly to present their concerns to the Upper Lynn Canal Advisory Committee and follow BOG process. The Municipality submitted an Agenda Change Request to BOG intending to have the issue addressed out of cycle. In June of 2015, board support staff informed the municipality that their request was denied. At the department's recommendation, the Municipality of Skagway submitted a proposal for consideration at the January 2019 BOG meeting in Petersburg. BOG did not support the proposal and voted unanimously against it. ADF&G managers will monitor the situation and help facilitate compromise to increase opportunity for trappers where possible.

Management Direction

Existing Wildlife Management Plans

Greater Alaska Furbearer Management Plan in 1976 Species Management Plan (ADF&G 1976: 92) and Furbearer Management Report and Plan, Game Management Unit 1D (Koch 2020).

Goals

1. To provide for an optimum harvest of furbearers.

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

Codified Objectives

Amounts Reasonably Necessary for Subsistence Uses

BOG has made a positive subsistence finding for furbearers in Unit 1D with the amount necessary for subsistence at 90% of the harvestable portion of each population for each species (5 AAC 99.025(13)).

Intensive Management

Not applicable.

MANAGEMENT OBJECTIVES

1. Provide information to BOG for maintenance of viewable and harvestable populations of furbearers.

2. Seal harvested beaver, marten, river otter, lynx, and wolverine pelts as they are presented.

3. Contact reliable observers such as hunters and trappers for general information about the status and trends of furbearer populations, including the use of an annual trapper survey.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1 Record anecdotal reports and observations during surveys of other species.

Data Needs

Observational data collected during surveys for other species are not adequate for detecting population changes which require management action, but they do provide information about distribution. Detecting statistical changes in furbearer populations requires a sample-based estimator (e.g. capture-mark-recapture).

Methods

Department staff record the GPS (global positioning system) location and numbers of furbearers during aerial surveys for other species like moose. We also record anecdotal reports with as much information as available.

Results and Discussion

One wolverine was observed during a moose survey in February of RY18.

Recommendations for Activity 1.1.

The department will continue to seek information from consumptive and nonconsumptive users in addition to recording observations during aerial surveys for other species.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest trends through mandatory sealing records.

Data Needs

Monitoring harvest trends is required to understand the potential effects of harvest.

Methods

Data from harvested marten, river otter, beaver, wolverine, fisher, and lynx are collected during mandatory sealing. Information collected includes location of harvest, method of take, transportation mode, sex, and hide measurements from beaver, lynx, and otter. Sealing is

required within 30 days of season closure dates. Data are archived in ADF&G's wildlife information network (WinfoNet).

Season and Bag Limit

Hunting seasons and bag limits during RY17–RY21:

Species	Season	Bag limit
Coyote	1 Sept–30 Apr	2 coyotes
Wolverine	1 Sept–15 Feb	1 wolverine

Trapping seasons and bag limits during RY17–RY21:

Species	Season	Bag limit
Beaver	10 Nov–30 Apr[a]	No limit
Coyote	1 Nov–30 Apr	No limit
Fisher	1 Dec–15 Feb	1 fisher
Red fox	1 Dec–15 Feb	No limit
Lynx	1 Dec–15 Feb	No limit
Marten	1 Dec–15 Feb	No limit
Mink and weasel	1 Dec–15 Feb	No limit
River otter	1 Dec–15 Feb	No limit
Wolverine	10 Nov–28 Feb	No limit

[a] The Alaska Board of Game extended the beaver trapping season to end 15 May beginning in regulatory year 2020.

Results and Discussion

Harvest by Hunters-Trappers

All animals sealed in Unit 1D during RY17–RY21 were taken by trappers.

AMERICAN MARTEN

Marten harvest varied considerably during RY17–RY21, ranging from a low of 9 martens harvested in RY18 to 304 in RY17 (Table 1). Harvest appeared to correlate with the number of trappers. Effort may have been influenced by fur prices, which, during the report period, ranged from $69.47 per pelt in RY17 (when harvest was the highest) to $20.69 in RY20. All martens were trapped except one which was shot in RY19. The proportion of males harvested was consistently above 50%, ranging from 66% in RY17 to 54% in RY21.

RIVER OTTER

An average of 8 river otters per regulatory year were harvested during RY17–RY21 (Table 2). The majority were taken by trapping, 3 were snared, and 1 was shot. The proportion of juveniles in the harvest varied, ranging from 25–100%. The proportion of males ranged from 50–83%.

Table 1. Harvest and method of take for marten sealed in Unit 1D, regulatory years 2017–2021, Southeast Alaska.

Regulatory year	Total harvest	Successful participants	Percent male	Method of take (%)			
				Shot	Trapped	Snared	Unknown
2017	304	15	66	0	100	0	0
2018	9	5	56	0	100	0	0
2019	36	10	58	3	97	0	0
2020	25	8	56	0	100	0	0
2021	13	5	54	0	100	0	0

Table 2. Harvest and method of take for otter sealed in Unit 1D, regulatory years 2017–2021, Southeast Alaska.

Regulatory year	Total harvest	Successful participants	Percent males	Percent juveniles[a]	Method of take (%)			
					Shot	Trapped	Snared	Unknown
2017	8	3	75	50	0	100	0	0
2018	9	2	56	44	0	89	11	0
2019	12	3	58	25	0	83	17	0
2020	6	4	83	67	0	100	0	0
2021	4	3	50	100	25	75	0	0

[a] Juveniles are defined as otters measuring lengths of <42".

BEAVER

The average annual harvest was 8 beavers per regulatory year (Table 3). Harvest varied throughout RY17–RY21 ranging from 2–12 individuals. Harvest rates in Unit 1D are low but this may be due to low effort. Trapping was the only method of take reported for beaver during this report period. The portion of juveniles in the harvest ranged from 0–40%.

Table 3. Harvest and method of take for beavers sealed in Unit 1D, regulatory years 2017–2021, Southeast Alaska.

Regulatory year	Total harvest	Successful participants	Percent juveniles[a]	Method of take (%)			
				Shot	Trapped	Snared	Unknown
2017	10	3	40	0	100	0	0
2018	11	3	9	0	100	0	0
2019	3	2	0	0	100	0	0
2020	2	1	0	0	100	0	0
2021	12	3	17	0	100	0	0

[a] Juveniles are defined as beavers with total length and width measuring ≤52".

WOLVERINE

Harvest ranged from 3 to 12 animals per regulatory year (Table 4). The average wolverine harvest was 7 per year during RY17–RY21, which was identical to RY12–RY16. Most wolverines were harvested using traps but 2 were snared. Males composed 30–92% of the harvest.

Table 4. Harvest and method of take for wolverine sealed in Unit 1D, regulatory years 2017–2021, Southeast Alaska.

Regulatory year	Total harvest	Successful participants	Percent males	Method of take (%)			
				Shot	Trapped	Snared	Unknown
2017	12	5	92	0	92	8	0
2018	3	3	67	0	100	0	0
2019	3	3	33	0	100	0	0
2020	5	3	40	0	100	0	0
2021	10	4	30	0	90	10	0

LYNX

A total of 70 lynx were harvested during RY17–RY21, and 2 consecutive years had a harvest of 25 or greater (Table 5). This represents a 91% increase over RY12–RY16, and RY92 was the only other record of harvest exceeding 25 animals. Lynx abundance typically follows a 9-to-11-year cycle in response to the abundance of snowshoe hare, their preferred prey. It is likely that lynx abundance in the Chilkat Valley was peaking in response to changes in snowshoe hare abundance from RY18 and RY19 in Unit 1D and interior Canada. Increased trapping success and frequent lynx sightings along the Haines Highway beginning in RY18 may have also encouraged more effort to target lynx during subsequent years.

Table 5. Harvest and method of take for lynx sealed in Unit 1D, regulatory years 2017–2021, Southeast Alaska.

Regulatory year	Total harvest	Successful participants	Percent juveniles[a]	Method of take (%)			
				Shot	Trapped	Snared	Unknown
2017	1	1	0	0	100	0	0
2018	11	4	9	0	18	82	0
2019	25	8	25[b]	0	40	60	0
2020	26	11	27	0	54	46	0
2021	7	4	43	0	71	29	0

[a] Juveniles are defined as lynx measuring ≤34" in length.
[b] Length was unavailable for 5 lynx in regulatory year 2019.

Hunter Residency and Success

Haines and Skagway residents accounted for all the furbearer harvest in the unit during RY17–RY21. Success rates are unknown because only successful take is reported.

Harvest Chronology

The chronology of harvest normally depends on the timing of adequate snowfall and freeze up, which increases access by snowmachine. Marten harvest was highest in December and much higher in RY17 when fur prices were the highest (Table 6). One marten was taken in November of RY19 when the season was closed. The highest river otter harvest occurred in December and January with only 4 taken in February during RY17–RY21. Beaver harvest was highest during December of RY17 and November of RY18 with harvest spread from November through

February in RY21. Wolverine harvest occurred primarily in December and January with few taken in February, except during RY17, when February had the third highest harvest in the report period. The majority of lynx were harvested during December and January except for RY21 when 43% were harvested in February.

Table 6. Unit 1D marten, river otter, beaver, wolverine, and lynx harvest by total number, regulatory years 2017–2021, Southeast Alaska.

Species	Regulatory year	Month							n^a
		Nov	Dec	Jan	Feb	Mar	Apr	May	
Marten	2017	0	217	70	17	0	0	0	304
	2018	0	5	3	1	0	0	0	9
	2019	1[b]	22	8	5	0	0	0	36
	2020	0	13	12	0	0	0	0	25
	2021	0	10	2	1	0	0	0	13
River otter	2017	0	4	3	1	0	0	0	8
	2018	1[b]	7	1	0	0	0	0	9
	2019	0	6	6	0	0	0	0	12
	2020	0	1	4	1	0	0	0	6
	2021	0	0	2	2	0	0	0	4
Beaver	2017	1	9	0	0	0	0	0	10
	2018	11	0	0	0	0	0	0	11
	2019	0	3	0	0	0	0	0	3
	2020	0	1	1	0	0	0	0	2
	2021	3	5	3	1	0	0	0	12
Wolverine	2017	0	3	5	4	0	0	0	12
	2018	0	2	0	1	0	0	0	3
	2019	0	2	1	0	0	0	0	3
	2020	0	2	3	0	0	0	0	5
	2021	0	7	2	1	0	0	0	10
Lynx	2017	0	1	0	0	0	0	0	1
	2018	0	2	8	1	0	0	0	11
	2019	0	14	10	1	0	0	0	25
	2020	0	13	9	4	0	0	0	26
	2021	0	4	0	3	0	0	0	7

[a] *n* indicates total number of each species by year.
[b] Sealing records indicate take during a closed season.

Transport Methods

Boats are not a commonly used transport mechanism because rivers freeze over and most of the trapping in Unit 1D occurs in the Chilkat Valley. Successful marten trappers used a variety of methods to access trap sites, especially in RY17 when most of the harvest occurred (Table 7).

Table 7. Unit 1D marten, river otter, beaver, wolverine, and lynx percent harvest by transport method, regulatory years 2017–2021, Southeast Alaska.

		Percent of harvest							
Species	Regulatory year	Airplane	Ski/snow-shoe/foot	Boat	3- or 4-wheeler	Snow-machine	Highway vehicle	Unknown	n^a
Marten	2017	0	14	3	33	33	17	0	304
	2018	0	0	0	67	33	0	0	9
	2019	0	69	0	6	19	6	0	36
	2020	0	28	0	12	12	48	0	25
	2021	0	0	0	0	69	31	0	13
River otter	2017	0	0	0	0	50	50	0	8
	2018	0	0	0	0	0	100	0	9
	2019	0	75	0	0	0	25	0	12
	2020	0	50	0	0	0	50	0	6
	2021	0	75	0	0	0	25	0	4
Beaver	2017	0	0	0	90	0	10	0	10
	2018	0	0	0	0	0	100	0	11
	2019	0	0	0	0	100	0	0	3
	2020	0	0	0	0	0	100	0	2
	2021	0	67	0	0	0	33	0	12
Wolverine	2017	0	0	8	25	67	0	0	12
	2018	0	33	0	0	67	0	0	3
	2019	0	33	0	0	67	0	0	3
	2020	0	20	0	40	40	0	0	5
	2021	0	10	0	0	90	0	0	10
Lynx	2017	0	0	0	0	0	100	0	1
	2018	0	0	73	9	9	9	0	11
	2019	0	36	0	8	56	0	0	25
	2020	0	38	8	19	0	35	0	26
	2021	0	14	29	0	0	57	0	7

[a] *n* indicates percent per year.

River otter trappers most often accessed sites with snowshoes, skis, or by highway vehicle. Beaver trappers used 4-wheelers, highway vehicles, and snowmachines to access trap sites,

except in RY21 when trappers also accessed locations on foot. Wolverine trappers most often used snowmachines, but some used 4-wheelers, snowshoes, or skis to access sites. Trappers who took lynx had the most variation in transport methods, using every transport method except airplanes. Lynx trappers also had the highest incidence of boat use for any species during RY17–RY21.

Other Mortality

During RY17–RY21, 1 marten and 1 river otter were harvested out of season. Sealing records indicate that the marten was an incidental catch.

Alaska Board of Game Actions and Emergency Orders

BOG extended the beaver trapping season in Units 1–5 to end 15 May beginning in RY20. There were no emergency orders affecting furbearers during RY17–RY21.

Recommendations for Activity 2.1.

Continue to monitor harvest trends through mandatory sealing records.

3. Habitat Assessment-Enhancement

None.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Furbearer sealing data are electronically archived in ADF&G's Wildlife Information Network (WinfoNet[1]).

Hardcopies of furbearer sealing forms are stored in 3-ring binders at the ADF&G office in Douglas, in the area biologist's file cabinet.

Electronic copies of species management reports and plans, and other reports for Unit 1D furbearers, are stored online at Wildlife Publications, Alaska Department of Fish and Game. S:\Region 1Shared-DWC\Offices\Douglas\ Carl Koch\Wildlife Progress Reports & Research Papers\Furbearers.

Agreements

None.

Permitting

None.

[1] WinfoNet is accessible at http://winfonet.alaska.gov/index.cfm.

Conclusions and Management Recommendations

It is not feasible to set meaningful harvest objectives without population estimates. Some demographic information is available from sealing records, but harvest may not be an adequate index of short-term population trends because effort is affected by fur prices. It may be possible to develop better population monitoring techniques for species in which sealing is required. This would likely require consultation with a biometrician. For species in which sealing is not required (e.g., coyote, mink, etc.), the department must rely on a limited amount of anecdotal information.

The furbearer management strategy expects populations to self-regulate trapper effort and harvest. Harvest fluctuates based on trapping effort, fur prices, population trends, and winter weather, but is generally considered sustainable by department biologists. No changes in seasons or bag limits are recommended at this time.

II. Project Review and RY22–RY26 Plan

Review of Management Direction

Management Direction

The existing management direction and goals are appropriate for RY22–RY26 to meet statewide goals (ADF&G 1976). Should issues such as increasing tourism, proposed timber harvest, or mineral extraction arise, the department will consider alternate courses of action. Better species population data, including information about habitat use, would aid in this effort.

Goals

1. To provide for an optimum harvest of furbearers.

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

Codified Objectives

Amounts Reasonably Necessary for Subsistence Uses

The board has made a positive subsistence finding for furbearers in Unit 1D with the amount necessary for subsistence at 90% of the harvestable portion of each population for each species (5 AAC 99.025(13)).

Intensive Management

Not applicable.

MANAGEMENT OBJECTIVES

1. Provide information to BOG for maintenance of viewable and harvestable populations of furbearers.

2. Seal harvested beaver, marten, river otter, lynx, and wolverine pelts as they are presented for sealing.

3. Contact reliable observers for general information about the status and trends of furbearer populations, including the use of an annual trapper survey.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Record anecdotal reports and observations during surveys for other species.

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 precision, would be needed to detect change in the population.

Methods

GPS locations and characteristics will be recorded for any furbearers observed during other field work. Anecdotal reports will be recorded to the maximum level of detail available. It also may be possible to use incidental observations of some species detected at motion camera sites by the ADF&G brown bear research team. However, the higher priority bear research and analysis must be completed before resources for analysis of other species can be made available.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through sealing records.

Data Needs

Harvest must be assessed to understand the potential impact of furbearer harvest.

Methods

ADF&G will collect harvest data by sealing hides of beaver, marten, fisher, wolverine, and otter taken by trappers. We will record location and date of harvest, method of take, transportation mode, sex, and in the case otters and beavers, hides will be measured. Sealing must be conducted within 30 days of the close of the season and entered into WinfoNet.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Observations during aerial surveys will be recorded on data sheets and entered into an excel spreadsheet located on the Douglas area office server.

Species wildlife management reports and plans for furbearers in Unit 1D will be stored online.[2] Memos, electronic data, and hardcopies will be stored in the assistant area biologist files in Douglas.

Agreements

None.

Permitting

None.

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