

Furbearer Management Report and Plan, Game Management Units 25A, 25B, 25D, 26B, and 26C:

Report Period 1 July 2012–30 June 2017, and

Plan Period 1 July 2017–30 June 2022

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PO Box 115526
Juneau, AK 99811-5526



This funding provided support for Federal Aid in Wildlife Restoration Furbearer Survey and Inventory Project 7.0.

Hunters are important founders of the modern wildlife conservation movement. They, along with trappers and sport shooters, provided funding for this publication through payment of federal taxes on firearms, ammunition, and archery equipment, and through state hunting license and tag fees.

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 Doreen Parker McNeill, Management Coordinator for the Division of Wildlife Conservation.

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This document, published in PDF format only, should be cited as:

Caikoski, J. R. 2020. Furbearer management report and plan, Game Management Units 25A, 25B, 25D, 26B, and 26C: 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-2020-29, Juneau.

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Contents

I. RY12–RY16 Management Report	1
Purpose of this Report.....	1
Management Area.....	1
Summary of Status, Trend, Management Activities, and History of furbearers in Units 25A, 25B, 25D, 26B, and 26C.....	1
Management Direction.....	2
Existing Wildlife Management Plans	2
Goals	2
Codified Objectives	2
Amounts Reasonably Necessary for Subsistence Uses	2
Management Objectives.....	2
Management Activities	3
1. Population Status and Trend	3
2. Mortality–Harvest Monitoring and Regulations	4
3. Habitat Assessment–Enhancement	7
Nonregulatory Management Problems or Needs.....	8
Data Recording and Archiving	8
Agreements	8
Permitting.....	8
Conclusions and Management Recommendations	8
Amounts Reasonably Necessary for Subsistence Uses	8
II. Project Review and RY17–RY21 Plan	8
Review of Management Direction	8
Management Direction.....	8
Review of Goals.....	9
Goals	9
Codified Objectives	9
Amounts Reasonably Necessary for Subsistence Uses	9
Management Objective	9
Review of Management Activities.....	9
1. Population Status and Trend	9
2. Mortality-Harvest Monitoring	10
3. Habitat Assessment-Enhancement.....	10
Nonregulatory Management Problems or Needs.....	10
Data Recording and Archiving	10
Agreements	10
Permitting.....	10
References Cited	10

List of Figures

Figure 1. Number of lynx sealed during 1988–2016 in Units 25A, 25B, and 25D, Alaska.	4
Figure 2. Number of wolverines sealed during 1988–2016 in Units 25A, 25B, 25D, 26B, and 26C, Alaska.....	6

List of Tables

Table 1. Percentage of lynx harvest composed of kittens in Units 25B and 25D during regulatory years RY12–RY16.....	3
Table 2. Furbearer harvest for lynx, river otter, and wolverine sealed in Units 25A, 25B, 25D, 26B, and 26C, Alaska, RY12–RY16.	5
Table 3. Percentage of wolverine harvest composed of males in Units 25A, 25B, 25D, and 26B during RY12–RY16.....	5

I. RY12–RY16 Management Report

Purpose of this Report

This report provides a record of survey and inventory management activities for furbearers in Units 25A, 25B, 25D, 26B, and 26C for the previous 5 regulatory years (RY12–RY16) and plans for survey and inventory management activities in the 5 years following the end of that period (RY17–RY22). A regulatory year begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013). 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 (ADF&G, 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 report of survey and inventory activities that was previously produced every 3 years.

Management Area

Units 25A, 25B, 25D, 26B, and 26C (75,000 mi²) which includes the eastern interior, Yukon Flats, central and eastern Brooks Range, and central and eastern Arctic Slope.

Summary of Status, Trend, Management Activities, and History of furbearers in Units 25A, 25B, 25D, 26B, and 26C.

The upper Yukon River valley in eastern Interior Alaska is one of Alaska's most productive furbearer habitats, consisting of abundant wetlands, riparian, and upland seral vegetation communities. The area supports extensive populations of a variety of furbearers, especially beaver, lynx (cyclic), red fox, marten, and wolverine. Information about furbearer abundance and species composition on the northeastern North Slope is limited. Wolf, wolverine, and arctic fox are the most important species for trappers on the Arctic Slope. Wolves are discussed in a separate species management report and plan.

Information on furbearers was obtained from pelt sealing records for lynx, river otter, and wolverine, and also trapper questionnaires, which are published separately. Until 2002, beaver populations were monitored with pelt sealing documents by the Alaska Department of Fish and Game (ADF&G). In the 1980s there were also periodic lodge and cache surveys conducted by the Yukon Flats National Wildlife Refuge (NWR; McLean 1986; Yukon Flats NWR, unpublished data, Fairbanks). Limited surveys of other furbearers were conducted in the 1980s (Golden 1987), and a survey of wolverine occurrence was conducted by ADF&G in 2006 (Gardner et al. 2010).

Lynx trapping seasons were reduced beginning in RY85 because of concern about the effects of trapping during the low phase of the lynx population cycle. Before RY85, the lynx trapping season was from 1 November–15 March. In RY85, the Board of Game reduced the season in Units 25A, 25B, and 25D to 1 November–28 February. The RY86 season was further reduced to

1 December–31 January. In RY88, as lynx numbers began to recover, the season length was returned to 1 November–28 February, where it is currently.

Beaver trapping regulations were changed in RY95 to allow beavers to be taken by shooting during 16 April–1 June in Units 25A, 25B, and 25D, with a bag limit of 1 per day. The shooting bag limit was changed to 2 per day in RY96 with the requirement that the meat of beavers harvested by this method be salvaged for human consumption. A decline in trapping effort and harvest of beavers led the Board of Game to eliminate the requirement to seal beavers beginning in RY02. Since the early 2000's, few regulatory changes have been made in Units 25A, 25B, 25D, 26B, and 26C for furbearers and the trapping season is open from 1 November–28 February for most species in Units 25A, 25B, and 25D and from 1 November through 15 April in Units 26B and 26C.

Management Direction

EXISTING WILDLIFE MANAGEMENT PLANS

The plan section of this document outlines the current plan for furbearers in Units 25A, 25B, 25D, 26B, or 26C. Previous management direction has been documented in the furbearer management reports of survey and inventory activities.

GOALS

- G1. Protect, maintain, and enhance furbearer populations in concert with other components of the ecosystem to ensure the capability of providing sustained opportunities for trapping of furbearers.
- G2. Provide people with sustained opportunities to participate in hunting, subsistence use, viewing, and photographing furbearers.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

- C1. Units 25A, 25B, 25D, 26B, and 26C have a positive finding for customary and traditional use of furbearers. The amount reasonably necessary for subsistence uses (ANS) is 90% of the harvestable portion for each furbearer species.

MANAGEMENT OBJECTIVES

- M1. The management objective for furbearers is to maintain populations at levels sufficient to provide for sustained consumptive and non-consumptive uses.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Track total lynx harvest and the proportion of kittens harvested as an index to abundance through sealing records.

Data Needs

Population status and trend data are not necessary to achieve the management goals or to evaluate codified objectives at this time. The current opportunity to harvest furbearers is not restricted because there are no concerns for overharvest. However, tracking total lynx harvest and the proportion of kittens harvested likely indicates lynx population abundance relative to their 10-year cycle (growing, declining, low, or high). This information may be useful for trappers, advisory committees, and the Board of Game.

Methods

Total lynx harvest by unit (25A, 25B, 25D) and cumulative lynx harvest across units by year for RY12–RY16 were tallied from sealing data reported in ADF&G’s Wildlife Information Network database (WinfoNet). The proportion of kittens among lynx sealed were calculated as the total number of kittens divided by the total number of lynx sealed. Kittens were determined in the sealing database as those with pelt lengths ≤ 36 inches (Stephenson and Karczmarczyk 1989).

Results

Lynx harvest increased from RY12–RY16, particularly for Units 25B and 25D (Fig. 1). Based on the cyclic pattern in lynx abundance observed from the late 1980s through 2016, lynx were likely at or near peak abundance based on peak amplitudes in harvest that occur approximately every 10 years (Fig. 1). During RY12–RY16, the proportion of kittens increased, providing additional support for an increase in lynx abundance in these units (Table 1). The proportion of kittens harvested is typically composed of 10% or less of the total number harvested when lynx populations are at a low in their cycle, and can be as high as 40% when lynx are at a high in their cycle (Stephenson and Karczmarczyk 1989).

Table 1. Percentage of lynx harvest composed of kittens in Units 25B and 25D during regulatory years 2012–2016.

Regulatory year	25B	25D
2012	6%	5%
2013	5%	8%
2014	10%	13%
2015	18%	20%
2016	11%	20%

Note: Kittens were determined in the sealing database as those with pelt lengths ≤ 36 inches (Stephenson and Karczmarczyk 1989).

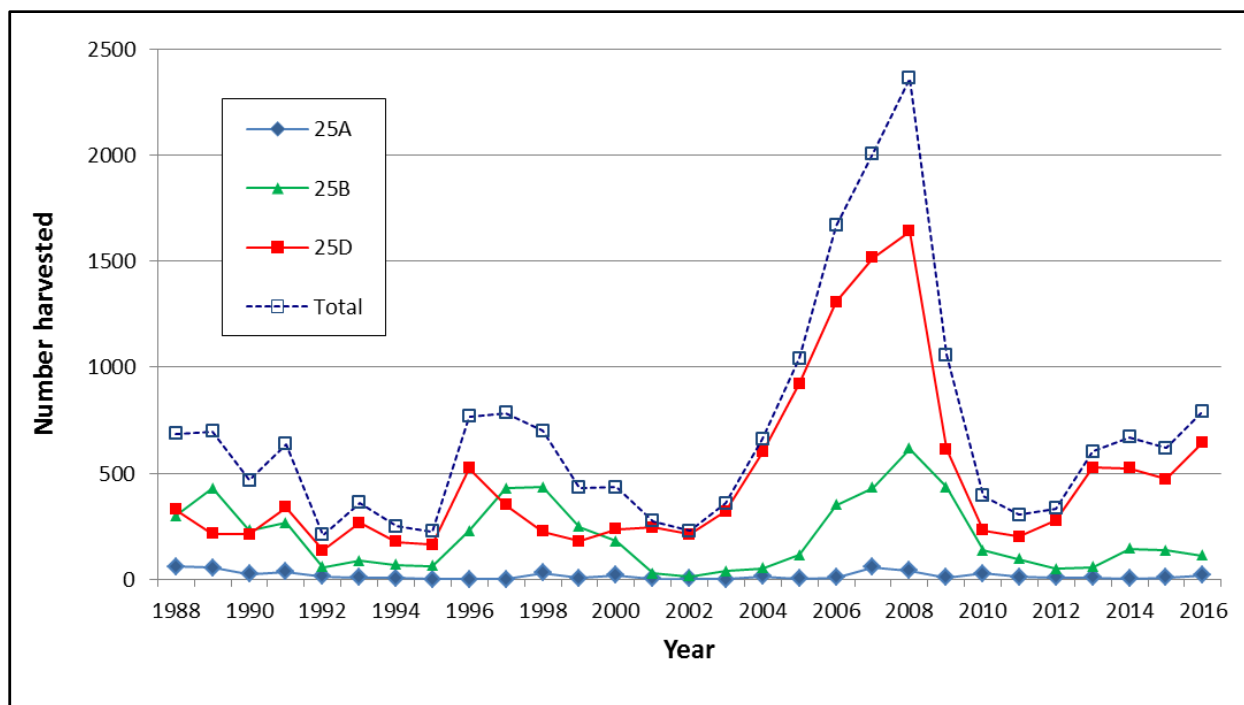


Figure 1. Number of lynx sealed during 1988–2016 in Units 25A, 25B, and 25D, Alaska.

Recommendations for Activity 1.1.

Continue. Tracking the total number of lynx harvested and the proportion of kittens may provide useful information for trappers, advisory committees, and the Board of Game.

2. Mortality–Harvest Monitoring and Regulations

ACTIVITY 2.1. Report annual harvest of lynx, wolverine, and river otter which are required to be sealed by regulation.

Data Needs

Harvest data are not necessary to achieve the management goals or to evaluate codified objectives at this time. The current opportunity to harvest furbearers is not restricted due to any concerns for overharvest. However, tracking harvest of those species that are required to be sealed by regulation may provide useful information for trappers, advisory committees, and the Board of Game.

Methods

Total annual harvest for lynx, river otter, and wolverine and cumulative harvest across units by year were tallied from sealing data reported in ADF&G’s Wildlife Information Network database (WinfoNet) for Units 25A, 25B, 25D, 26B, and 26C.

Results and discussion

Total lynx harvest across units increased from 338 lynx in RY12 to 778 lynx in RY16 (Table 2). Few lynx are harvested in Units 26B and 26C as most of the area is not suitable lynx habitat and

these units receive little trapping pressure. River otters are rarely harvested in any unit and total harvest did not exceed 4 river otters in any year (Table 2). Wolverine harvest was variable during RY12–RY16 and ranged from 54 to 102 (Table 2). The average proportion of male wolverines in the harvest during this reporting period ranged from 76% to 64% across units and never dropped below 50% in any year for any unit (Table 3). Population and harvest models suggest that long-term harvest composed of <50% male wolverines may indicate unsustainable harvest rates (Gardner et al. 1993; Golden et al. 2007). Since the 1980’s, wolverine harvest has been variable and stable (no detectable negative trend) suggesting harvest rates have been sustainable (Fig. 2).

Table 2. Furbearer harvest for lynx, river otter, and wolverine sealed in Units 25A, 25B, 25D, 26B, and 26C, Alaska, RY12–RY16.

Species	Regulatory year	Unit					Total
		25A	25B	25D	26B	26C	
Lynx	2012	8	50	277	3	0	338
	2013	9	58	526	4	0	597
	2014	4	144	523	0	0	671
	2015	8	137	473	0	0	618
	2016	19	111	646	2	0	778
River Otter	2012	2	1	1	0	0	4
	2013	0	1	0	0	0	1
	2014	0	1	0	0	0	1
	2015	1	0	0	0	0	1
	2016	0	1	0	0	0	1
Wolverine	2012	19	1	28	6	0	54
	2013	20	18	49	15	0	102
	2014	15	20	34	5	1	75
	2015	12	15	20	10	0	67
	2016	9	4	25	9	0	47

Table 3. Percentage of wolverine harvest composed of males in Units 25A, 25B, 25D, and 26B during RY12–RY16.

Regulatory year	Unit			
	25A	25B	25D	26B
2012	74%	100%	57%	67%
2013	68%	78%	63%	57%
2014	87%	55%	78%	75%
2015	78%	71%	67%	67%
2016	67%	75%	67%	56%
Average	75%	76%	66%	64%

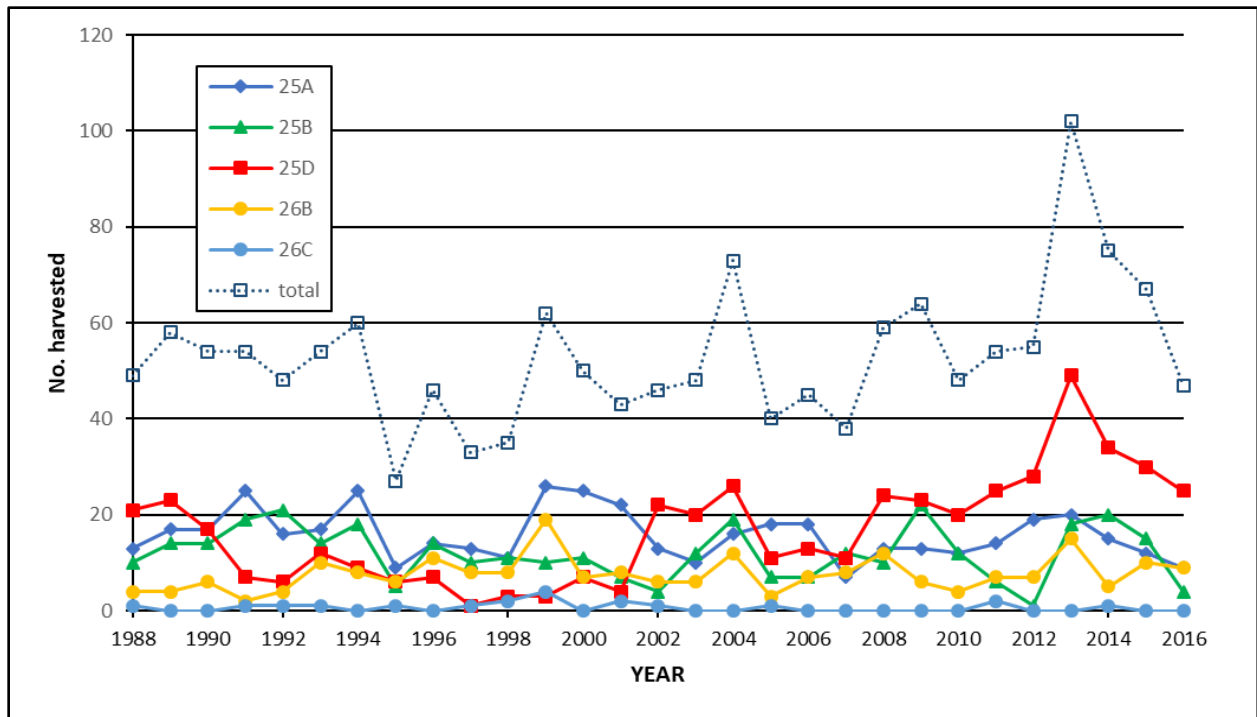


Figure 2. Number of wolverines sealed during 1988–2016 in Units 25A, 25B, 25D, 26B, and 26C, Alaska.

Season and Bag Limit

Unit 25 hunting seasons and bag limits during RY12–RY16.

Species	Bag limit	Season ¹
Coyote	No limit	No closed season
Arctic fox	2	1 Sep–15 Mar
Red fox	2	1 Sep–30 Sep
	10	1 Oct–15 Mar
Lynx	2	1 Nov–28 Feb
Wolverine	1	1 Sep–31 Mar

¹ Seasons are the same for both residents and nonresidents.

Unit 26 hunting seasons and bag limits during RY12–RY16.

Species	Bag limit	Season ¹
Coyote	No limit	No closed season
Arctic fox	2	1 Sep–15 Mar
Red fox	2	1 Sep–30 Sep
	10	1 Oct–15 Mar
Lynx	2	1 Nov–15 Apr
Wolverine	1	1 Sep–31 Mar

¹ Seasons are the same for residents and nonresidents.

Unit 25 trapping seasons and bag limits during RY12–RY16.

Species	Bag limit	Resident season
Beaver	No limit	1 Sep–10 Jun
Coyote	No limit	1 Nov–31 Mar
Arctic fox	No limit	1 Nov–28 Feb
Red fox	No limit	1 Nov–28 Feb
Lynx	No limit	1 Nov–28 Feb
Marten	No limit	1 Nov–28 Feb
Mink and Weasel	No limit	1 Nov–28 Feb
Muskrat	No limit	1 Nov–10 Jun
River otter	No limit	1 Nov–15 Apr
Wolverine	No limit	1 Nov–31 Mar

Unit 26 trapping seasons and bag limits during RY12–RY16.

Species	Bag limit	Resident season
Beaver	No season	No season
Coyote	No limit	1 Nov–15 Apr
Arctic fox	No limit	1 Nov–15 Apr
Red Fox	No limit	1 Nov–15 Apr
Lynx	No limit	1 Nov–15 Apr
Marten	No limit	1 Nov–15 Apr
Mink and Weasel	No limit	1 Nov–15 Apr
Muskrat	No limit	1 Nov–10 Jun
River otter	No limit	1 Nov–15 Apr
Wolverine	No limit	1 Nov–15 Apr

Alaska Board of Game Actions and Emergency Orders

There were no actions taken by the Board of Game or Emergency Orders issued.

Recommendations for Activity 2.1

Continue. Tracking total harvest of lynx, river otter and wolverine and the proportion of male wolverines in the harvest may provide useful information for trappers, advisory committees, and the Board of Game.

3. Habitat Assessment–Enhancement

ACTIVITY 3.1. None.

Activities to assess or enhance habitat for furbearers are not necessary at this time to achieve the management goals and objective or to evaluate codified objectives.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

None.

Data Recording and Archiving

Harvest data is stored on an internal database housed on ADF&G's Wildlife Information Network (WinfoNet) server (<http://winfonet.alaska.gov/index.cfm>) and archived in WinfoNet under Harvest Information and Survey and Inventory Tools.

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

Amounts Reasonably Necessary for Subsistence Uses

- C1. Units 25A, 25B, 25D, 26B, and 26C: 90% of the harvestable portion for each furbearer species.

It is unknown whether the ANS objective was met because abundance estimates for any furbearer species were not obtained and the sustainable harvest rate for each furbearer species is unknown.

- M1. Maintain populations at levels sufficient to provide for sustained consumptive and nonconsumptive uses.

Although furbearer populations were likely sufficient for sustained consumptive and nonconsumptive uses, this is not a management objective because the objective cannot be quantified; therefore, it will be changed to a goal in the RY17–RY21 Plan.

II. Project Review and RY17–RY21 Plan

Review of Management Direction

MANAGEMENT DIRECTION

There are no changes to the management direction for furbearers in Units 25A, 25B, 25D, 26B, and 26C. We will continue to report the harvest of lynx, river otter, and wolverine as these sealing data may be useful for trappers, advisory committees, and the Board of Game.

REVIEW OF GOALS

The previous report period goals were to: 1) Protect, maintain, and enhance furbearer populations in concert with other components of the ecosystem to ensure their capability of providing sustained opportunities for trapping furbearers, and 2) Provide people with sustained opportunities to participate in hunting, subsistence use, viewing, and photographing of furbearers, was combined into a single goal for RY17–RY21. The modified single goal also incorporates the previous report period management objective to maintain populations at levels sufficient to provide for sustained consumptive and nonconsumptive uses.

GOALS

G1. Provide for sustained opportunity for harvesting and viewing furbearers.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

C1. Units 25A, 25B, 25D, 26B, and 26C have a positive finding for customary and traditional use of furbearers. The amount reasonably necessary for subsistence uses is 90% of the harvestable portion for each furbearer species.

MANAGEMENT OBJECTIVE

None.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Track total lynx harvest and the proportion of kittens harvested as an index to abundance.

Data Needs

Population status and trend data are not necessary to achieve the management goals or to evaluate codified objectives at this time. The current opportunity to harvest furbearers is not restricted because of any concerns for overharvest. However, tracking harvest of those species required to be sealed by regulation may provide useful information for trappers, advisory committees, and the Board of Game.

Methods

Total lynx harvest by unit (25A, 25B, 25D) and cumulative lynx harvest across units will be tallied from sealing data reported in WinfoNet. The proportion of kittens among all lynx harvested will be calculated as the total number of kittens divided by the total number of lynx harvested. Kittens are determined in the sealing database as those with pelt lengths ≤ 36 (Stephenson and Karczmarczyk, 1989).

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Report annual harvest of species required by regulation to be sealed (lynx, wolverine, and river otter).

Data Needs

Harvest data are not necessary to achieve the management goals or to evaluate codified objectives at this time. The current opportunity to harvest furbearers is not restricted due to any concerns for overharvest. However, tracking harvest of those species required by regulation to be sealed may provide useful information for trappers, advisory committees, and the Board of Game.

Methods

Total annual harvest for lynx, river otter, and wolverine, by unit (25A, 25B, 25D, 26B, and 26C) and cumulative harvest across units by year were tallied from sealing data reported in WinfoNet.

3. Habitat Assessment-Enhancement

None. Activities to assess or enhance habitat for furbearers are not necessary at this time to achieve the management goals or to evaluate codified objectives.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

None.

Data Recording and Archiving

Harvest data will be stored on an internal database housed on ADF&G's Wildlife Information Network (WinfoNet) server (<http://winfonet.alaska.gov/index.cfm>) and archived in WinfoNet under Harvest Information and Survey and Inventory Tools.

Agreements

None.

Permitting

None.

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