Species Management Report and Plan ADF&G/DWC/SMR&P–2021–5

Furbearer Management Report and Plan, Game Management Units 20A, 20B, 20C, 20F, and 25C:

Report Period 1 July 2012–30 June 2017, and

Plan Period 1 July 2017–30 June 2022

Mark Nelson

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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 Doreen Parker McNeill, Management Coordinator 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).

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Please contact the authors or the Division of Wildlife Conservation at (907) 465-4190 if you have questions about the content of this report.

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Purpose of this Report

This report provides a record of survey and inventory management activities for furbearers in Units 20A, 20B, 20C, 20F, and 25C for the 5 regulatory years 2012–2016 and plans for survey and inventory management activities in the following 5 regulatory years, 2017–2021. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY14 = 1 July 2014–30 June 2015). 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 2 years.

I. RY12–RY16 Management Report

Management Area

The management area consists of Units 20A, 20B, 20C, 20F, and 25C (44,760 mi^2) encompassing the central and lower Tanana Valley and the middle Yukon River drainage in Interior Alaska. Collectively the area is managed as the "Fairbanks area" by an area biologist and assistant area biologist both operating out of the ADF&G Region III headquarters office in Fairbanks.

Summary of Status, Trend, Management Activities, and History of Furbearers in Units 20A, 20B, 20C, 20F, and 25C

The fur trade is one of Alaska's oldest industries. Trapping is an important use of wildlife resources for many people and can be significant to the economies of rural areas because alternative sources of income are limited (Wolfe 1996). Individual trapping effort can vary from a full-time job providing a sole source of income, to a recreational weekend endeavor. All species of furbearers are utilized to some extent, but wolf, lynx, marten, wolverine; and to a lesser extent coyote, fox, beaver, and land otter are the most targeted species in the Fairbanks area. Beaver, coyote, lynx, Arctic fox, red fox, and squirrel are considered fur animals in Alaska and can be taken with a hunting license under the hunting bag limits and seasons. Wolverines are considered big game in Alaska and can also be taken with a hunting license under the hunting bag limits and seasons. Beaver, coyote, Arctic fox, red fox, lynx, marmot (Alaska or hoary marmot and woodchucks), marten, mink, muskrat, river otter, weasel, wolverine, and squirrel are all considered furbearers and can be taken with a trapping license under the trapping bag limits and season dates. Wolves are discussed in a separate species management report and plan. Current market prices of fur typically influence the level of trapping effort for a particular species. With the exception of lynx, wolverine, and river otter there is no requirement for sealing furbearers and therefore no means to track harvest. Trapping and hunting season lengths are set to maximize the opportunity to harvest fur bearers especially during times of the year when their pelts are prime.

Nonconsumptive users enjoy watching furbearers, especially beaver, fox, wolves, and lynx; and also enjoy finding evidence of their activities such as tracks and kill sites.

Little is known about factors limiting furbearer populations. Most furbearers are difficult to study because of their secretive habits. Information has come primarily from harvest data. Trapper questionnaires have been used annually since 1965 to collect information on trapper activities and the relative abundance of furbearers. The information collected and compiled from this questionnaire is not included in this report but is useful for management on a statewide basis (Parr 2018). Furbearer investigations in the last 50 years in Interior Alaska have included the following research:

1) Lynx population dynamics (Nava 1970, Berrie 1973, O'Connor 1984, Stephenson 1988, Perham 1995).
2) Beaver population ecology (Boyce 1974, 1981).
3) Marten population ecology (Shults 2001).
4) The effects of fire on furbearers (Stephenson 1984, Magoun and Vernam 1986).
5) Development of techniques to survey furbearer populations using track counts (Golden 1987, Schwartz et al. 1988, Stephenson 1988).
6) Wolverine distribution (Gardner et al. 2010).

Management Direction

Existing Wildlife Management Plans

The only formalized plan for furbearers, prior to the plan section of this document, is found in the Alaska wildlife management plans: A public proposal for the management of Alaska's wildlife: Interior Alaska (ADF&G 1976). Furbearer management report of survey and inventory activities, published by ADF&G, have included management objectives, summaries of sealing records, and recommendations for future management actions (Hollis 2013).

Goals

G1. Provide the greatest sustained opportunity for harvesting furbearers.

G2. Provide an opportunity for education, viewing, and photography of beaver on the lower Chena River.

G3. Minimize problems caused by nuisance beaver with the aid of harvest by the public.

Codified Objectives

Amounts Reasonably Necessary for Subsistence Uses (5 AAC 99.025)

The Amounts Reasonably Necessary for Subsistence Uses (ANS) is set by the Board of Game (BOG) and only applies to areas outside nonsubsistence areas.

C1. Units 20A, 20B, 20C, 20F, and 25C have a positive finding for customary and traditional use of furbearers. The ANS is 90% of the harvestable portion for each furbearer species outside the nonsubsistence area boundaries (G1).

MANAGEMENT OBJECTIVES

M1. Manage beaver in the lower Chena River portion of Unit 20B for an annual fall beaver colony density of 0.3–0.8 colonies/mile (0.2–0.5 colonies/km) of river (G1, G2, G3).

M2. Maintain populations of lynx that will support a minimum level of consumptive and nonconsumptive use (G1).

M3. Manage wolverine for a 3-year mean annual harvest of > 50% males by unit for the Fairbanks area (G1).

MANAGEMENT ACTIVITIES

1. Population Status and Trend

Activities to assess the status or trends of furbearer populations are not necessary to evaluate the management goals or management objectives. Population status and trend data are necessary to evaluate the codified objective; however, methods to determine basic population parameters such as population size, population composition, and habitat capacity do not currently exist.

2. Mortality–Harvest Monitoring and Regulations

ACTIVITY 2.1. Estimate the annual sex and age of harvested lynx by analyzing sealing records (C1, M2).

Data Needs

The lynx population cycles about every 10 years following trends in the snowshoe hare population. While ADF&G does not actively conduct surveys for lynx or snowshoe hare, anecdotal evidence of increases in the hare population is used to predict when the lynx population may also be increasing. Currently, the best approach for monitoring the lynx population status and trend is through harvest data from sealing records.

By monitoring the harvest, including proportion of kittens, over time we are able to retroactively track the lynx population. An increasing number of lynx harvested along with a higher percentage of kittens in the harvest indicates an increasing lynx population; conversely, fewer lynx sealed and a lower percentage of kittens in the harvest indicates a declining lynx population (Stephenson and Karczmarczyk 1989). While this information is not necessary for management purposes, it is interesting to ADF&G, trappers, advisory committees, and the BOG.

Methods

Trappers and hunters who take lynx are required to have the hide sealed (5 AAC 92.170). At the time of sealing a marker is placed on the hide and biological data is collected by an authorized ADF&G staff member or state-appointed sealer. The records from all sealed lynx are entered

into ADF&G's Wildlife Information Network database (WinfoNet) where data are made available for query. Total lynx harvest by unit (20A, 20B, 20C, 20F, and 25C) is tallied by age and for each regulatory year. When lynx hides are sealed, they are measured from the tip of the nose to the base of the tail. Lynx hides that are 36 inches or less in length are considered kittens.

Results

The total lynx harvest from sealing records for Units 20A, 20B, 20C, 20F, and 25C last peaked during RY08 then declined each year until RY14 and has been increasing since (Table 1, Fig. 1). This cycle of lynx harvest generally repeats itself approximately every 10 years in a classic predator (lynx) prey (snowshoe hare) interaction.

Harvest by Hunters and Trappers

Sealing records for the Fairbanks area indicate that the harvest of lynx declined from RY00–RY03, increased until RY08, declined to RY14 and then increased to RY16 (Table 1, Fig. 1).

Table 1. Number of lynx pelts sealed by Unit in the Fairbanks area including the percent kittens, regulatory years 2012–2016.

Regulatory year	20A	20B	20C	20F	25C	total	Kittens[a]
RY12	130	205	102	90	15	542	9%
RY13	57	69	59	12	12	209	14%
RY14	42	36	10	24	11	123	13%
RY15	46	63	36	28	19	192	27%
RY16	87	51	55	52	12	257	35%

[a] Pelts that have a total length of 36 inches or less are considered kittens based on sealing data collected by ADF&G.

Hunter Residency and Success

Residents seal far more lynx than nonresidents. During RY12–RY16 only 8 lynx were sealed by nonresidents (Table 2).

Table 2. Number of lynx sealed in the Fairbanks area by residency, regulatory years 2012–2016.

	Number of lynx sealed		
Regulatory year	Resident	Nonresident	Unknown
2012	539	3	0
2013	207	2	0
2014	123	0	0
2015	191	1	0
2016	254	2	1

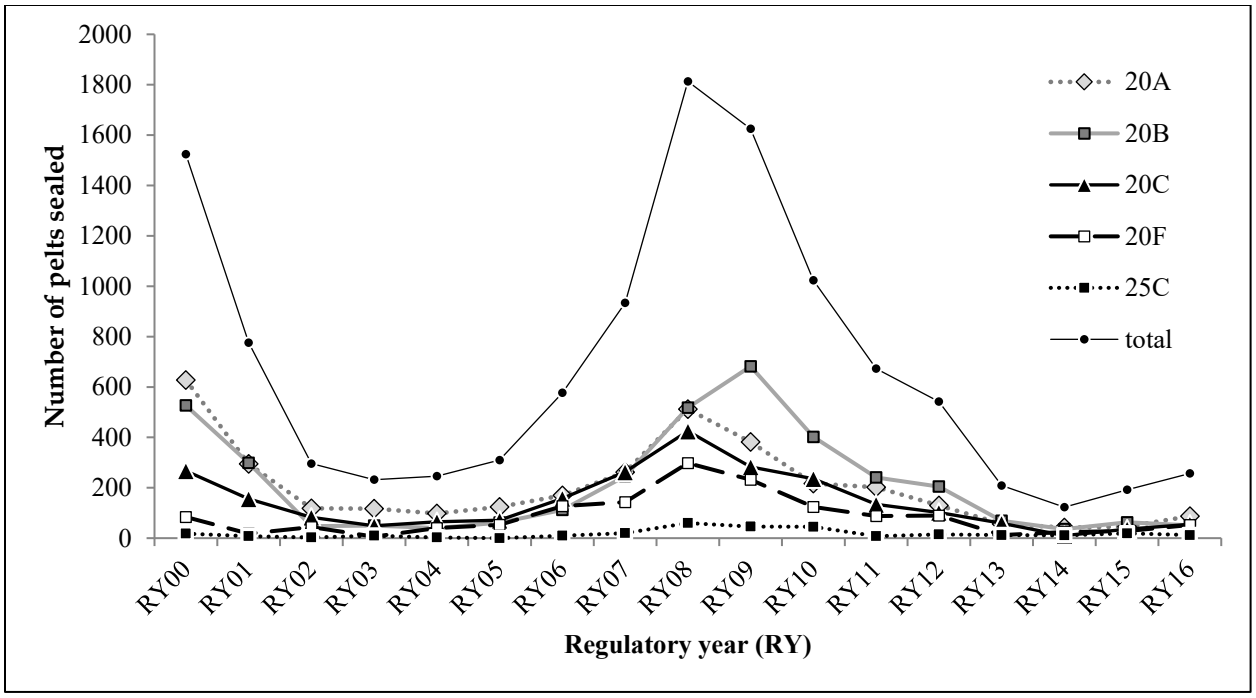

Figure 1. The number of lynx pelts sealed by unit including the total, Fairbanks area, Alaska, regulatory years (RY) 2000–2016.

Season and Bag Limit

Lynx are considered furbearers for trapping and fur animals for hunting and are available to take with a hunting or trapping license following the ADF&G Alaska hunting or trapping regulations, seasons, and bag limits (Tables 3 and 4).

Table 3. Resident and nonresident hunting seasons and bag limits for fur animals and big game for the Fairbanks area Units 20A, 20B, 20C, 20F, and 25C, Alaska, regulatory years 2012–2016.

Species	Bag limit	Resident season	Nonresident season
Beaver	–	no open season	no open season
Coyote[1]	no limit	no closed season	no closed season
Lynx	2 lynx	Dec 1 – Jan 31	Dec 1 – Jan 31
Arctic fox (Unit 25)	2 foxes	Sept 1 – Mar 15	Sept 1 – Mar 15
Red fox	10 foxes	Sept 1 – Mar 15	Sept 1 – Mar 15
Squirrel	no limit	no closed season	no closed season
Wolverine[2]	1 wolverine	Sept 1 – Mar 31	Sept 1 – Mar 31

Note: Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013).
[1] Beaver, coyote, lynx, red fox, and squirrel are considered furbearers and fur animals in Alaska.
[2] Wolverine is considered a furbearer and big game in Alaska.

Table 4. Resident and nonresident trapping seasons and bag limits for furbearers in the Fairbanks area Units 20A, 20B, 20C, 20F, and 25C, regulatory years 2012–2016.

Units	Species	Bag limit	Resident season	Nonresident season
20A, 20C, 20F	Beaver	no limit	Sept 15 – Jun 10	Sept 15 – Jun 10
20B (lower Chena River[1])	Beaver	–	no open season	no open season
20B (remainder)	Beaver	no limit	Sept 25 – May 31	Sept 25 – May 31
25	Beaver	no limit	Sept 1 – Jun 10	Sept 1 – Jun 10
20, 25	Coyote	no limit	Nov 1 – Mar 31	Nov 1 – Mar 31
20, 25	Fisher	–	no open season	no open season
20, 25C	Lynx	no limit	Nov 1 – Mar 15	Nov 1 – Mar 15
20, 25	Marmot[2]	no limit	no closed season	no closed season
20, 25	Marten	no limit	Nov 1 – Feb 28[3]	Nov 1 – Feb 28
20, 25	Mink	no limit	Nov 1 – Feb 28	Nov 1 – Feb 28
20, 25	Muskrat	no limit	Nov 1 – Jun 10	Nov 1 – Jun 10
25	Arctic Fox	no limit	Nov 1 – Feb 28	Nov 1 – Feb 28
20, 25	Red Fox	no limit	Nov 1 – Feb 28	Nov 1 – Feb 28
20, 25	River otter	no limit	Nov 1 – Apr 15	Nov 1 – Apr 15
20, 25	Squirrel	no limit	no closed season	no closed season
20, 25	Weasel	no limit	Nov 1 – Feb 28	Nov 1 – Feb 28
20A, 20B, 20C, 20F, 25C	Wolverine	no limit	Nov 1 – Feb 28	Nov 1 – Feb 28

Note: Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013).

[1] The lower Chena River consists of the Chena River downstream from the confluence with the Little Chena River and includes Creamer's Field Migratory Waterfowl Refuge.

[2] Marmot includes Alaska or hoary marmot and woodchucks.

[3] All seasons that end on February 28 ended on February 29 during RY15.

Permit Hunts

There is no open season for beaver in the lower Chena River (below the confluence with the Little Chena River). However, ADF&G may set seasons and bag limits by permit only to reduce problems caused by large beaver populations. These nuisance beaver permits are discussed in Activity 4.1.

Transport Methods

During RY12–RY16, the majority of the 1,318-lynx-reported harvest was taken by snowmachine (983 lynx), 182 by highway vehicle, 57 by walking, 51 by dog team; and the remaining 45 lynx were taken by a combination of airplane, ATV, and off-road vehicle.

Other Mortality

Lynx are elusive and are rarely killed by humans outside of trapping and hunting. ADF&G does not quantify nonhunting and trapping mortality.

Alaska Board of Game Actions and Emergency Orders

There were no Alaska BOG actions taken or emergency orders issued during RY12–RY16.

Recommendations for Activity 2.1.

Continue with modification. Since lynx sealing is mandated under 5 AAC 92.170, ADF&G will continue to record, compile, and present harvest data. We will modify the management objective to read "Maintain sealing records of lynx, river otter, and wolverine in accordance with 5 AAC 92.170."

ACTIVITY 2.2. Estimate the annual sex ratio of harvested wolverine from sealing records (M3, C1).

Data Needs

Population status and trend data are necessary to evaluate the codified objective (5 AAC 92.025); however, methods to determine basic population parameters such as population size, population composition, and habitat quality either do not exist or are cost prohibitive. Currently, the best approach for monitoring the population status and trend of wolverine is retroactively through harvest data from sealing records. Male wolverines have larger home ranges (Gardner 1985, Magoun 1985), typically disperse longer distances than females (Magoun 1985), and are more susceptible to trapping. A long-term trend in wolverine harvest of less than 50% male could indicate that unsustainable harvest rates are occurring and should trigger a more in-depth analysis of the population, including use of the population and harvest models developed by Gardner et al. (1993) and Golden et al. (2007). Therefore, M3 is important in triggering further investigation to determine if too many females are being harvested over a period of time.

Methods

Trappers and hunters who take wolverine are required to seal the hides (5 AAC 92.170). The records from all sealed wolverine were entered into WinfoNet where the data were made available for query. Total wolverine harvest by sex from each Unit (20A, 20B, 20C, 20F, and 25C) was tallied by regulatory year.

Results

Management objective M3 was met in all units for RY12–RY16. The lowest percent of males was in Unit 20F when 10 females, 2 males, and 1 unknown were harvested for a harvest of 17% males; however, this is a small sample size and the 3-year mean for Unit 20F around that time was still > 50% males (Table 5).

Harvest by Hunters and Trappers

Sealing records for the Fairbanks area indicate that the harvest of wolverine has remained fairly stable from a minimum of 45 animals in RY16 to a maximum of 72 animals in RY13 (Table 5).

Table 5. Number and percent of sealed wolverines in the Fairbanks area by Unit, regulatory years 2012–2016.

Regulatory year	Wolverine (% males[a])					
	20A	20B	20C	20F	25C	Total
RY12	13 (54)	18 (46)	8 (38)	12 (80)	2 (50)	53 (54)
RY13	9 (44)	29 (55)	15 (60)	13 (17)	6 (67)	72 (49)
RY14	9 (71)	11 (82)	9 (56)	12 (83)	6 (100)	47 (77)
RY15	8 (57)	21 (50)	14 (46)	13 (62)	8 (38)	64 (51)
RY16	6 (83)	16 (71)	8 (63)	11 (50)	4 (50)	45 (64)

Note: Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013).
[a] The percent males is the percentage of all sealed wolverine, of known sex, which were male.

Hunter Residency and Success

Fairbanks area hunter residency and success for wolverine is summarized in Table 6.

Table 6. Number of wolverines sealed in the Fairbanks area by residency, regulatory years 2012–2016.

	Number of wolverine sealed		
Regulatory year	Residents	Nonresidents	Unknown
2012	53	0	0
2013	64	0	4
2014	46	1	0
2015	64	0	0
2016	42	1	2

Season and Bag Limit

Wolverines are considered big game for hunting and furbearers for trapping and are available to take with a hunting or trapping license following the ADF&G Alaska hunting and trapping regulations, seasons, and bag limits (Tables 3 and 4).

Transport Methods

During RY12–RY16, the majority of the 280-wolverine reported harvest was taken by snowmachine (227 wolverines), 20 by highway vehicle, 12 by dog team; and the remaining 21 wolverine were taken by a combination of airplane, boat, ATV, and on foot.

Other Mortality

Wolverines are elusive and are rarely killed by humans outside of trapping and hunting. No effort is made to quantify nonhunting and trapping mortality.

Alaska Board of Game Actions and Emergency Orders

The board changed the wolverine trapping season in Unit 20C west of the Toklat and Kantishna rivers by extending the season from 1 Nov–28 Feb to 1 Nov–31 Mar. This change will be implemented in RY17.

Recommendations for Activity 2.2.

Continue. ADF&G will continue to seal wolverines as mandated in 5 AAC 92.170 and continue to compile harvest data as requested by the general public, advisory committees, and the Alaska Board of Game. There will no effort by the department to evaluate 5 AAC 99.025.

ACTIVITY 2.3. Estimate the annual harvest of river otter (C1).

Data Needs

Population status and trend data are necessary to evaluate the codified objective (5 AAC 92.025); however, methods to determine basic population parameters such as population size, population composition, and habitat quality either do not exist or are cost prohibitive. Currently the best approach for monitoring the population status and trend of river otter is retroactively through harvest data from sealing records.

Methods

Trappers and hunters who take river otter are required to seal the hides (5 AAC 92.170). The records from all sealed river otter are entered into WinfoNet where data can then be queried. Total river otter harvest by unit for Units 20A, 20B, 20C, 20F, and 25C was tallied by regulatory year.

Results

The harvest of river otter in the Fairbanks area ranged from 24 in RY16 to 49 in RY15 with the majority of the harvest taken from Units 20A and 20B (Table 7).

Table 7. Number of river otter sealed in the Fairbanks area by unit, regulatory years 2012–2016.

Regulatory year	River otter					
	20A	20B	20C	20F	25C	Total
RY12	8	25	5	0	0	38
RY13	15	7	9	0	0	31
RY14	7	21	2	1	2	33
RY15	22	23	2	1	1	49
RY16	8	8	8	0	0	24

Note: Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY12 = 1 July 2012–30 June 2013).

Harvest by Hunters and Trappers

Sealing records for the Fairbanks area indicate that the harvest of river otter has remained fairly stable from a high of 49 in RY15 to a low of 24 in RY16 (Table 7).

Hunter Residency and Success

Only residents, no nonresidents, sealed river otters during RY12–RY16.

Season and Bag Limit

River otters are considered furbearers and are available to take with a trapping license following the seasons and bag limits in the trapping regulations (Table 4).

Transport Methods

Of the 175 river otters sealed during RY12–RY16 the majority (135) were taken with the use of a snowmachine, 15 with an airplane, 11 by foot, and the rest (14) by a combination of dog team, boat, ATV, and highway vehicle.

Other Mortality

River otters are elusive and are rarely killed by humans outside of trapping. Nontrapping mortality was not quantified.

Alaska Board of Game Actions and Emergency Orders

There were no Alaska BOG actions taken or emergency orders issued during RY12–RY16.

Recommendations for Activity 2.3.

Continue. ADF&G will continue to seal river otter as mandated by 5 AAC 92.170 and compile harvest data as requested by the general public, advisory committees, and the Alaska Board of Game. There will no effort by the department to evaluate 5 AAC 99.025.

3. Habitat Assessment–Enhancement

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 at this time.

4. Furbearer Management with Public Participation and Outreach

ACTIVITY 4.1. Monitor nuisance beaver activity in the lower Chena River, provide information and education, and issue nuisance beaver trapping permits as necessary (C1, M1).

Data Needs

Beaver densities remained high (> 0.8 colonies/mile) on the lower Chena River, below the confluence with the Little Chena River, from 1986 when surveys began until 2013 when the last survey was completed (Table 8; Hollis 2013). There is no open season for beaver in the lower Chena River (below the confluence with the Little Chena River). However, ADF&G may set

seasons and bag limits by permit only to reduce problems caused by high beaver populations. The high population of beaver can create problems when they block culverts, create dams that flood houses, and cut down trees in residential areas. Beavers are managed in this area under the authority granted in 5 AAC 92.041 which allows the department to issue a permit to trap nuisance beavers.

Methods

Nuisance beaver complaints occur most frequently in the spring and in the fall. Complaints of beaver blocking culverts, flooding roads, and flooding houses are typically dealt with by issuing a permit to remove the problem beavers as well as a consultation about best practices to avoid the problem in the future. Complaints about beavers cutting down trees on private property in the vicinity of homes are rarely resolved by issuing a permit to remove the beavers because the problem will likely continue as more beavers move into the area. These problems are dealt with, to the greatest extent possible, with nonlethal solutions including fences, wrapping trees with wire mesh, and discussions of expectations when living in beaver habitat. This strategy discourages current and future beavers from creating the same issues for the landowner (G3) and allows the beavers to be available for education, viewing, and photography (G2).

Results

Table 8. Fall beaver cache survey results in the Chena River below the confluence with the Little Chena River Unit 20B, regulatory years 2008–2013.

Regulatory year	Caches	Caches/km (caches/mi)
2008	27	0.7 (1.1)
2009	28	0.7 (1.1)
2010	26	0.7 (1.0)
2011	25	0.6 (1.0)
2012	24	0.6 (1.0)
2013	23	0.6 (0.9)

Note: Regulatory year (RY) begins 1 July and ends 30 June (e.g., RY08 = 1 July 2008–30 June 2009).

The following nuisance permits were issued for the lower Chena River during the reporting period: 5 in RY12, 13 in RY13, 9 in RY14, 10 in RY15, and 7 in RY16.

Since the BOG repealed the requirement to seal beaver in the Fairbanks Area Game Management Units (5 AAC 92.175), ADF&G does not require sealing and has not kept records of beaver harvest.

Recommendations for Activity 4.1.

Continue with modified objectives and goals. We will continue to mitigate nuisance beaver issues by providing education about beaver habits, education in mitigating beaver related problems, and issuing nuisance beaver trapping permits when necessary. However, because the density of beavers has remained high since 1986, we will delete M1 and G3 and modify G2 to read: “Manage beaver in the lower Chena River portion of 20B to minimize nuisance beaver issues and maximize opportunities for education, viewing, and photography”.

ACTIVITY 4.2. Attend local advisory committee meetings, attend BOG meetings, respond to BOG inquiries, and conduct public outreach and education (C1, M1, M2, M3).

Data Needs

Methods to determine basic furbearer population parameters such as population size, population composition, and habitat capacity do not exist. Therefore, we rely on public input to determine when a furbearer population may need management attention.

Methods

Public input comes from many sources including the Board of Game and their local advisory committees, trappers and hunters, and nonconsumptive resource users. Fairbanks area biologists attend advisory committees associated with all units that ADF&G manages including Middle Nenana River (Clear, Ferry, Healy, McKinley Village), Minto/Nenana, Tanana/Rampart/Manley, Fairbanks, Delta Junction, and occasionally Central, Alaska. Most of these advisory committees meet once or twice per year except the Fairbanks advisory committee which meets monthly (7 meetings/year) and has approximately 5 trapping and/or game subcommittee meetings per year. The ADF&G Fairbanks area biologists attend most of these advisory committee meetings and BOG meetings when appropriate.

Depending on the time of the year, Fairbanks area biologists receive complaints, offer consultation, and work with the Alaska Wildlife Troopers on issues related to furbearers. Most issues of nuisance furbearers are solved through consultation. Some examples include better fencing which can keep foxes and lynx from harassing chickens and other livestock, wrapping trees with hardware cloth which will keep beavers from chewing on them, education about trapping seasons which will minimize conflicts with domestic dog owners, and keeping bird feed secure which will minimize the damage that squirrels can cause to houses or structures. When consultation is provided concerning legal issues, but ignored, the Alaska Wildlife Troopers are notified to increase compliance.

Results

No quantifiable results are available.

Recommendations for Activity 4.2.

Continue. ADF&G Fairbanks area biologists will continue to be available to listen to complaints, offer consultation, and work with the Alaska Wildlife Troopers on issues related to furbearers.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Sealing 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 Fur Sealing.

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

ADF&G will continue to provide for the greatest opportunity to harvest furbearers (G1). Goals G2 and G3 will be merged to read: "Manage beaver in the lower Chena River portion of 20B to minimize nuisance beaver issues and maximize opportunities for education, viewing, and photography." The beaver population in the lower Chena River remains high and we will continue to mitigate nuisance issues while maintaining an opportunity for education, viewing, and photography.

While it is not possible to evaluate objective C1 due to lack of population level, population composition, and habitat capacity data, we will continue to seal lynx, river otter, and wolverine as mandated by regulation and compile the data as necessary for reporting when requested by the general public, advisory committees, and the BOG.

Continue objective M1 with the following modification: "Manage nuisance beaver in the lower Chena River portion of 20B by issuing nuisance beaver permits." The beaver population in the lower Chena River remains high. The population will be managed based on the number of nuisance beaver complaints while maintaining the opportunity for education, viewing, and photography. Modify M2 as follows: "Maintain sealing records of lynx, river otter, and wolverine in accordance with 5 AAC 92.170."

II. Project Review and RY17–RY21 Plan

Review of Management Direction

Management Direction

There are no changes to the management direction for furbearers in the Fairbanks area; however, the management goals and objectives have been modified to better align with current management needs.

Goals

Goals for furbearers in the Fairbanks area have been modified slightly for RY17–RY21. G1 will remain unchanged, but G2 and G3 have been combined for clarity:

G1. Provide the greatest sustained opportunity for harvesting furbearers.

G2. Manage beaver in the lower Chena River portion of 20B to minimize nuisance beaver issues and maximize opportunities for education, viewing, and photography.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The ANS was set by the BOG and only applies to areas outside of nonsubsistence areas.

C1. Units 20A, 20B, 20C, 20F, and 25C have a positive finding for customary and traditional use of furbearers. The amount reasonably necessary for subsistence uses is set to 90% of the harvestable portion for each furbearer species in all areas outside the nonsubsistence areas (G1).

MANAGEMENT OBJECTIVE

M1. Maintain sealing records of lynx, river otter, and wolverine in accordance with 5 AAC 92.170 (G1).

M2. Manage wolverine for a 3-year mean annual harvest of > 50% males by unit for the Fairbanks area (G1).

M3. Manage nuisance beaver in the lower Chena River portion of 20B by issuing nuisance beaver permits (G2).

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

Activities to assess the status or trends of furbearer populations are not necessary to evaluate the management goals, management objectives, or codified objectives at this time.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Maintain sealing records of lynx, river otter, and wolverine in accordance with 5 AAC 92.170 (C1, M1, M2).

Data Needs

This activity is required by regulation (5 AAC 92.170) but is not necessary for management purposes. With basic population parameters such as population level, population composition, and habitat capacity on an annual basis, we could potentially evaluate C1 and compare these data to sealing records. However, there is no immediate need to collect this information nor are there appropriate survey methods or funding to undertake such a task. Nevertheless, sealing records will continue to be kept for these 3 species and compiled as necessary for reporting to the general public when requested, advisory committees, and to the BOG.

Methods

Trappers and hunters who take lynx, river otter, and wolverine are required to seal the hides (5 AAC 92.170). All sealing records will be entered into WinfoNet where the data are made available for query as necessary for reporting.

3. Habitat Assessment–Enhancement

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

4. Furbearer Management with Public Participation and Outreach

ACTIVITY 4.1. Manage beaver in the lower Chena River portion of 20B to minimize nuisance beaver issues and maximize opportunities for education, viewing, and photography (C1, M3).

Data Needs

Beaver densities have remained high in the lower Chena River (Table 8). High beaver populations can create problems if they block culverts, create dams that flood houses and roads, and cut down trees in residential areas. High beaver populations are also beneficial for viewing, education, and photography.

Methods

Nuisance beaver complaints are expected to occur most frequently in the spring and in the fall. Complaints of beaver blocking culverts, flooding roads, and flooding houses will be dealt with by issuing a permit to remove the problem beavers as well as a consultation about best practices to avoid the problem in the future. Complaints about beavers cutting down trees in people's yards are rarely resolved by issuing a permit to remove the beavers, because the problem will likely continue as more beavers move into the area. These problems are dealt with, to the greatest extent possible, with nonlethal solutions including fences, wrapping trees with wire mesh, and discussions of expectations when living in beaver habitat. This discourages current and future beavers from creating the same issues for the landowner and allows the beavers to be available for education, viewing, and photography.

ACTIVITY 4.2. Attend local advisory committee meetings, attend BOG meetings, respond to BOG inquiries, and conduct public outreach and education (C1, M1, M2, M3).

Data Needs

Methods to determine basic furbearer population parameters such as population size, population composition, and habitat capacity do not exist. Therefore, we rely on public input to determine when a furbearer population needs further study or management attention.

Methods

Public input comes from many sources including BOG and their local advisory committees, trappers and hunters, and nonconsumptive resource users. Fairbanks area biologists will attend advisory committees associated with all Units managed including Middle Nenana River (Clear, Ferry, Healy, McKinley Village), Minto/Nenana, Tanana/Rampart/Manley, Fairbanks, and occasionally Delta Junction and Central as well as attending BOG meetings.

Fairbanks area biologists receive complaints, offer consultation, and work with the Alaska Wildlife Troopers on issues related to furbearers. Most issues of nuisance furbearers will be handled through consultation. Some examples of the types of consultation that we do include

better fencing to keep foxes and lynx from harassing chickens and other livestock, wrapping trees with hardware cloth to keep beavers from chewing on them, education about trapping seasons (which will minimize conflicts with domestic dog owners), and securing bird feed to minimize squirrel damage to houses. When consultation is provided concerning legal issues, but ignored, the Alaska Wildlife Troopers are notified to increase compliance.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Sealing 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 Fur Sealing.

Agreements

None.

Permitting

None.

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