

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

Report Period 1 July 2010–30 June 2015, and
Plan Period 1 July 2015–30 June 2020

Carl H. Koch



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

Report Period 1 July 2010–30 June 2015, and
Plan Period 1 July 2015–30 June 2020

PREPARED BY:

Carl H. Koch
Wildlife Biologist II

APPROVED BY:

Thomas V. Schumacher
Wildlife Biologist IV

© 2018 Alaska Department of Fish and Game

Alaska Department of Fish and Game
Division of Wildlife Conservation
PO Box 115526
Juneau, Alaska 99811



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. This funding provided support for Federal Aid in Wildlife Restoration Wolf Survey and Inventory Project 14.0.

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 five 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 five 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 Thomas V. Schumacher, 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, Alaska 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).

This document, published as a PDF only, should be cited as follows:

Koch, C. H. 2018. Wolf management report: Game Management Unit 1D. Report period: 1 July 2010–30 June 2015, and plan period: 1 July 2015–30 June 2020. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2018-42, Juneau.

The State of Alaska is an Affirmative Action/Equal Opportunity Employer. Contact the Division of Wildlife Conservation at (907) 465-4190 for alternative formats of this publication.

ADF&G does not endorse or recommend any specific company or their products. Product names used in this publication are included for completeness but do not constitute product endorsement.

Contents

Purpose of this Report.....	1
I. RY10–RY14 Management Report	1
Management Area.....	1
Summary of Status, Trend, Management Activities, and History of Wolves in Unit 1D	3
Management Direction.....	3
Existing Wildlife Management Plans	3
Goals	3
Codified Objectives	3
Amounts Reasonably Necessary for Subsistence Uses	4
Intensive Management.....	4
Management Objectives.....	4
Management Activities	4
1. Population Status and Trend	4
2. Mortality–Harvest Monitoring and Regulations	5
3. Habitat Assessment–Enhancement	8
Nothing to report.....	8
Nonregulatory Management Problems or Needs	8
Data Recording and Archiving:	8
Conclusions and Management Recommendations	8
II. Project Review and RY15–RY19 Plan	9
Review of Management Direction	9
Management Direction.....	9
Goals	9
Review Of Codified Objectives	9
Amounts Reasonably Necessary for Subsistence Uses.....	9
Intensive Management	9
Management Objectives.....	9
Review of Management Activities.....	9
1. Population Status and Trend	9
2. Mortality–Harvest Monitoring and Regulations	10
3. Habitat Assessment–Enhancement	10
Nonregulatory Management Problems or Needs	10
Data Recording and Archiving	10
References Cited	11

List of Figures

Figure 1. Map of Game Management Units 1C and 1D, Alaska, as published in the Alaska Department of Fish and Game’s 2016–2017 hunting regulations book (ADF&G 2016). 2

List of Tables

Table 1. Unit 1D, Alaska wolf harvest, regulatory years 2001–2014..... 6

Table 2. Unit 1D, Alaska wolf harvest, percent by transport method, regulatory years 2001–2014.
..... 6

Table 3. Unit 1D wolf harvest chronology, regulatory years 1999–2014..... 7

Purpose of this Report

This report provides a record of survey and inventory management activities for wolves in Unit 1D for the 5 regulatory years 2010–2014 and plans for survey and inventory management activities for the 5 regulatory years 2015–2019. A regulatory year (RY) runs from 1 July through 30 June (e.g., RY10 = 1 July 2010–30 June 2011). 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 planned changes in data collection activities. It replaces the wolf management reports of survey and inventory activities that were previously produced every 3 years.

I. RY10–RY14 Management Report

Management Area

Unit 1D is on the northern Southeast Alaska mainland, lying north of the latitude of Eldred Rock, excluding Sullivan Island and the Berners Bay drainages (Fig. 1). The land area of Unit 1D is 2,854 mi². The lower Chilkat Valley has a maritime climate with cool, often wet summers. Precipitation declines with distance away from salt water. Winter weather varies by location. The Haines area in the lower Chilkat Valley averages about 200 inches of snow each winter with temperatures near freezing. Moving up the valley, winter temperatures are colder and total snowfall and accumulated snowpack increase. Snowpack in the upper valley can exceed 10 feet. The topography consists of coastal mountains surrounding deep U-shaped river valleys created by glacial action. The larger rivers are shallow and fast-flowing with wide, braided channels. The mouths of rivers often contain alluvial fans of gravel, boulders, and silt. Silt deposition and glacial rebound at the mouth of the Chilkat River have created a large flat delta with varied seral vegetation types. Forest cover on upland slopes consists of Sitka spruce and western hemlock (*Picea sitchensis* and *Tsuga heterophylla*) forest with black cottonwood (*Populus trichocarpa*) and paper birch (*Betula papyrifera*; Hundertmark et al. 1983).

Much of the lower elevation forested habitat in the Chilkat Valley is managed by the Haines State Forest. In March of 2015 the Alaska Division of Forestry (DOF) finalized plans for the Baby Brown Timber Sale (NSE-1549), which include clearcut or partial harvest on about 1,000 acres of old-growth spruce and hemlock forest in the Porcupine and Jarvis Creek areas.

Lowlands, including river bars, support varying vegetation types ranging from willow (*Salix spp.*) and alder (*Alnus spp.*) to mature spruce-hemlock and cottonwood forest. Forest succession initiated by natural processes like glacial rebound or human activities like timber harvest can produce abundant forage for moose but eventually results in dense, even-aged stands of evergreen forest which produce little moose forage. Consequently, those processes may result in long-term reductions in carrying capacity for moose, an important prey species for wolves.

Potential prey resources for wolves in Unit 1D include moose, salmon, mountain goats, and beavers. Moose are likely the most important prey resource for wolves as deer occur in very low numbers in Unit 1D.

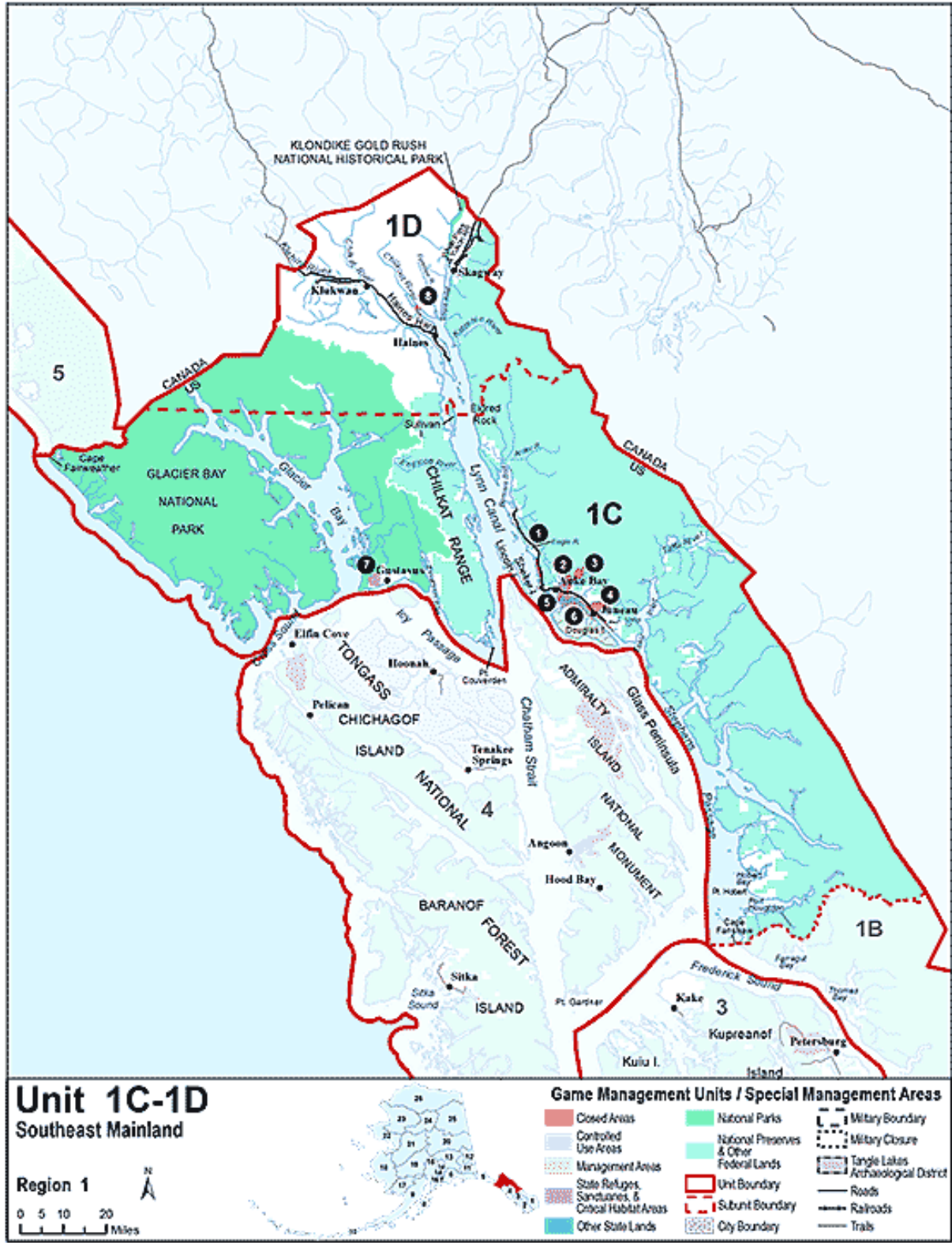


Figure 1. Map of Game Management Units 1C and 1D, Alaska, as published in the Alaska Department of Fish and Game’s 2016–2017 hunting regulations book (ADF&G 2016).

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

No formal studies of wolf populations have been conducted in Unit 1D. Most information about wolf abundance and distribution in Unit 1D has come from fur sealing records, anecdotal reports, and observations recorded during aerial surveys for moose and mountain goats. Fur sealing records indicate that harvest in Unit 1D varies widely. That is likely due to factors such as weather, trapper effort and experience, and wolf abundance.

In addition to moose, major prey species most likely include mountain goat (*Oreamnos americanus*), beaver (*Castor canadensis*), and seasonally available salmon (*Oncorhynchus spp*). An increase in the beaver population may have subsequently increased the importance of this prey item (Sell 2012).

Wolf distribution in Unit 1D is likely influenced by the distribution of moose (*Alces alces*), which occur in highest abundance in the Chilkat and Katzeihin river valleys (Koch 2017). The majority of observations during aerial moose surveys, locations reported on fur sealing records, and anecdotal reports come from the Chilkat River Valley and the Katzeihin River areas, suggesting that these areas support the most wolves in this unit.

Management Direction

Wolves in Unit 1D are an important part of the ecosystem and are managed for sustainable harvest and viewing through hunting and trapping regulations.

EXISTING WILDLIFE MANAGEMENT PLANS

The management goals of the ADF&G wolf management plan are to provide for optimum harvest of wolves and provide the greatest opportunity to participate in hunting and trapping (ADF&G 1976). The population has been monitored using data collected from mandatory sealing of harvested wolves, observations during aerial surveys for moose and mountain goats, and anecdotal reports.

Periodic changes in management planning have been reported in the division's previous species management reports. The plan portion of this report contains the current management plan for wolves in 1D.

GOALS

- Regulate seasons and bag limits to maintain populations that support a sustainable harvest and viewing.

CODIFIED OBJECTIVES

There is a positive customary and traditional use finding for both hunting and trapping of wolves in Unit 1D.

Amounts Reasonably Necessary for Subsistence Uses

The amount necessary for subsistence for trapping is 90% of the harvestable portion of the population.

Intensive Management

The Alaska Board of Game has made a negative finding regarding intensive management for both moose and wolves in Unit 1D (5 AAC 92.108).

MANAGEMENT OBJECTIVES

No formal population objectives have been established for wolves in Unit 1D. General management objectives are to maintain populations that support sustainable harvest and viewing through regulation of hunting and trapping seasons and bag limits.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Gather information from informal interviews with hunters and trappers and from observations during aerial surveys for other species.

Data Needs

No formal population estimates have been conducted in Unit 1D due to limited resources. The forested landscape limits using aerial surveys to estimate wolf abundance. However, observations during aerial surveys for moose and mountain goats in conjunction with anecdotal reports and fur sealing data (Activity 2.1 below) provide information about distribution.

Methods

We record the GPS location and number of wolves observed during aerial surveys for other species. We conduct informal interviews when interacting with hunters and trappers.

Results and Discussion

Wolves were observed during 4 separate moose surveys in this report period. We counted 1 wolf during each of 3 moose surveys (1 December 2010, 7 December 2012, and 16 March 2015) in the Chilkat Valley. Two wolves were counted on 7 January 2011 during the only moose survey of the Katzehin River Valley conducted during this report period.

Anecdotal reports from hunters and trappers indicate a belief that wolves were present in the Chilkat Valley during the report period and some think the population may have increased.

Recommendations for Activity 1.1

Continue this activity. Although these activities don't provide formal abundance estimates, when used in conjunction with harvest information they provide valuable supporting information which aids understanding wolf distribution and sustainability of the population.

2. Mortality–Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through mandatory sealing records.

Data Needs

To ensure that harvest is sustainable, fur sealing data are used to monitor trends. The location of harvest, hunter or trapper effort, gender, and pack size are valuable information needed to assess harvest trends. Trends in harvest may be indicative of status and trends in the wolf population.

Methods

For each wolf sealed we recorded the month of take, method, sex, transportation method, and estimated pack size. Harvest data were archived in ADF&G’s Wildlife Information Network (WinfoNet) database. We recorded number of wolves in the pack, sex of the wolf, pelt color, date of kill, name of trapper or hunter, kill location, method of take, and transportation method.

Season and Bag Limit

Seasons and bag limits for residents and nonresidents are identical:

	<i>Season</i>	<i>Bag Limit</i>
Hunting	1 August–30 April	5 Wolves
Trapping	1 November–30 April	No limit

Results and Discussion

Hunter/Trapper Harvest

Harvest by hunters and trappers during RY10–RY14 ranged 2–17 wolves per year (Table 1). The highest annual harvest ever recorded in Unit 1D occurred in RY12, with 17 wolves taken. A total of 36 wolves (17 males, 19 females) were harvested during the report period (Table 1) for a mean annual harvest of 7 wolves per year, which was similar to the 15-year mean of 6 wolves per year. Annual harvest can vary depending on winter weather conditions, trapping effort, and hunter opportunity.

Of the 36 wolves harvested during the report period, 53% (19) were shot and 47% (17) were trapped or snared. During the same period 61% (22) of wolves were harvested in areas accessed by boat or snow machine, and 39% (14) of harvested wolves were accessed from the road system (Table 2). Snowmachines were used only during RY10 and RY12, which were the 2 years with highest harvest. During the report period all wolves except one were harvested by residents.

Table 1. Unit 1D, Alaska wolf harvest, regulatory years^a 2001–2014.

Regulatory Year	Males	Females	Total
2001	2	1	3
2002	5	7	12
2003	3	0	3
2004	2	4	6
2005	0	2	2
2006	1	2	3
2007	0	0	0
2008	2	4	6
2009	5	2	7
2010	6	5	11
2011	2	0	2
2012	8	9	17
2013	3	2	5
2014	1	1	2
Mean Harvest	3	3	6

Source: ADF&G sealing records data.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Table 2. Unit 1D, Alaska wolf harvest, percent^a by transport method, regulatory years^b 2001–2014.

Regulatory year	Airplane	Dogsled, skis, snowshoes	Boat	3- or 4-wheeler	Snow-machine	ORV	Highway vehicle	Unknown
2001	0	33	33	0	33	0		0
2002	0	17	0	0	33	0	50	0
2003	0	33	33	0	0	0	33	0
2004	0	0	17	0	67	0	17	0
2005	0	0	50	0	50	0	0	0
2006	0	0	0	0	0	0	100	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	17	33	0	50	0
2009	0	14	14	0	71	0	0	0
2010	0	9	27	0	55	0	9	0
2011	0	0	100	0	0	0	0	0
2012	0	41	35	0	24	0	0	0
2013	0	20	40	0	0	0	40	0
2014	0	100	0	0	0	0	0	0

Source: ADF&G sealing records data.

^a In some cases annual percent values do not sum to 100 percent due to rounding.

^b A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Harvest Chronology Although harvest was documented during each month with an open season except July, the majority of harvest occurs during the trapping season in December, January, and February. January had the highest harvest during the current report period and over the last 14 years (Table 3).

Table 3. Unit 1D wolf harvest chronology, regulatory years^a 1999–2014.

Regulatory year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2001	0	1	0	0	0	0	0	0	1	1	0	0
2002	0	0	2	0	3	0	2	2	3	0	0	0
2003	0	0	0	1	0	0	1	0	1	0	0	0
2004	0	0	1	0	0	1	1	3	0	0	0	0
2005	0	0	1	0	0	0	0	1	0	0	0	0
2006	0	0	2	0	0	0	1	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	1	1	0	1	3	0	0	0	0	0
2009	0	1	0	0	0	3	1	1	1	0	0	0
2010	0	2	0	0	0	1	5	0	1	2	0	0
2011	0	0	1	0	0	0	0	0	0	0	0	0
2012	0	2	1	1	1	3	3	3	3	0	0	0
2013	0	2	0	0	1	0	2	0	0	0	0	0
2014	0	0	0	0	0	1	0	0	1	0	0	0

Source: ADF&G sealing records data.

^a A regulatory year begins 1 July and ends 30 June, e.g., regulatory year 2010 = 1 July 2010–30 June 2011.

Other Mortality

We are not aware of any illegal or accidental take of wolves in 1D except for one male wolf that was killed by agency personnel after it attacked a pet dog in 2011 in the Skagway area.

Alaska Board of Game Actions and Emergency Orders

There were no emergency orders issued or actions taken by the Board of Game regarding wolves during this report period.

Recommendations for Activity 2.1.

Continue because it provides information essential to manage harvest.

3. Habitat Assessment–Enhancement

Nothing to report.**NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS**

Data Recording and Archiving:

- Wolf sealing data are electronically archived in the ADF&G WinfoNet database (<http://winfonet.alaska.gov/index.cfm>).
- Hard copies of wolf sealing forms are stored in 3-ring binders in the Douglas Area Biologist file cabinets.
- Electronic copies of written reports are archived on the hard drive of the Douglas Assistant Area Biologist at C:\Users\chkoch\Documents\Wildlife Progress Reports & Research Papers\Wolf and the Region I sever S:\Region1Shared-DWC\Offices\Douglas\Carl Koch\Wildlife Progress Reports & Research Papers\Wolf.

Conclusions and Management Recommendations

Dense evergreen forest cover limits the effectiveness of aerial surveys to assess the wolf population. No research project has been done to assess the population size. Hunters and trappers are only able to access a small portion of overall wolf habitat in unit 1D. Sealing records (e.g. high harvest in RY 2010 and record high harvest in RY 2012), observations during aerial surveys for moose and mountain goats, and anecdotal reports from trappers, hunters, guides, and the local wildlife trooper suggest that harvest is sustainable.

Trapping effort in Unit 1D is often low to moderate and much of the harvest occurs when wolves are opportunistically encountered while targeting other species. Thus, fluctuations in harvest are likely to continue. Years with higher harvest appear related to winter conditions; consistent and deeper snow can improve trappers' ability to detect wolves and snowmachine access to remote areas.

Anecdotal reports from hunters indicate that some believe predation by wolves (and brown bears) is reducing survival of moose calves in the Chilkat River Valley. However, wolves are also considered important for wildlife viewers and photographers. The Board of Game made a negative finding regarding intensive management of wolves in Unit 1D and wolves are valuable to hunters, trappers and nonconsumptive users. Therefore, the department does not recommend any changes to seasons and bag limits for wolves in Unit 1D at this time.

II. Project Review and RY15–RY19 Plan

Review of Management Direction

MANAGEMENT DIRECTION

The department will continue to manage for both sustainable harvest and nonconsumptive uses of wolves in Unit 1D.

GOALS

Regulate seasons and bag limits to maintain sustainable harvest.

REVIEW OF CODIFIED OBJECTIVES

There is a positive customary and traditional use finding for both hunting and trapping in Unit 1D.

Amounts Reasonably Necessary for Subsistence Uses

The amount necessary for subsistence for trapping is 90% of the harvestable portion of the population.

Intensive Management

The Alaska Board of Game has made a negative finding regarding Intensive Management for both moose and wolves in Unit 1D (5 AAC 92.108).

MANAGEMENT OBJECTIVES

No formal population objectives have been established for unit 1D wolves. General management objectives are to maintain populations that support sustainable harvest and viewing through regulation of hunting and trapping seasons and bag limits.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Gather information from anecdotal reports and observations during aerial surveys for other species.

Data Needs

No formal population estimates have been conducted in unit 1D due to limited resources. The forested landscape limits using aerial surveys to estimate wolf abundance. However,

observations during aerial surveys for moose and mountain goats in conjunction with anecdotal reports and other data (see activity 2.1 below) provide information about distribution.

Methods

We will record the GPS location and number of wolves observed on data sheets during aerial surveys for other species. We will conduct informal interviews when interacting with hunters and trappers.

2. Mortality–Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through mandatory sealing records.

Data Needs

To ensure that harvest is sustainable fur sealing data is used to monitor trends. The location of harvest, hunter/trapper effort, gender, and pack size are valuable information needed to assess harvest trends. Trends in harvest may be indicative of status and trends in the wolf population.

Methods

For each wolf sealed we will record the month of take, method, sex, transportation method, and estimated pack size. Harvest data will be archived in ADF&G's Wildlife Information Network (WinfoNet) database. We will also record the number of wolves in the pack, sex of the wolf, pelt color, date of kill, name of trapper or hunter, kill location, method of take, and transportation.

3. Habitat Assessment–Enhancement

We do not plan to conduct wolf habitat studies during the upcoming report period due to limited available resources and other regional priorities.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

- Wolf sealing data are electronically archived in the ADF&G WinfoNet database (<http://winfonet.alaska.gov/index.cfm>).
- Hard copies of wolf sealing forms are stored in 3 ring binders in the Douglas Area Biologist file cabinets.
- Electronic copies of written reports are archived on the hard drive of the Douglas Assistant Area Biologist at C:\Users\chkoch\Documents\Wildlife Progress Reports & Research Papers\Wolf and the Region I server S:\Region1Shared-DWC\Offices\Douglas\Carl Koch\Wildlife Progress Reports & Research Papers\Wolf.

References Cited

- Alaska Department of Fish and Game (ADF&G). 2016. 2016–2017 Alaska hunting regulations. No. 57. Division of Wildlife Conservation, Juneau.
- Alaska Department of Fish and Game (ADF&G). 1976. Alaska wildlife management plans: Southeastern Alaska. Draft proposal subsequently approved by the Alaska Board of Game. Division of Game, Federal Aid in Wildlife Restoration Project W-17-R, Juneau.
- Hundertmark, K. J., W. L. Eberhardt, and R. E. Ball. 1983. Winter habitat utilization by moose and mountain goats in the Chilkat Valley: Final report. Contribution to the Haines-Klukwan Cooperative Resource Study; funded by legislative appropriation. Alaska Department of Fish and Game, Division of Game, Juneau.
- Koch, C. H. 2017. Moose management report and plan, Game Management Unit 1D: Report period 1 July 2010–30 June 2015 and plan period 1 July 2015–30 June 2020. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2017-1, Juneau.
- Sell, S. 2012. Unit 1D wolf management report. Pages 23–27 [*In*] P. Harper, editor. Wolf management report of survey and inventory activities 1 July 2008–30 June 2011. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2012-4, Juneau.

