

Wolf Management Report and Plan, Game Management Unit 11:

Report Period 1 July 2015–30 June 2020, and
Plan Period 1 July 2020–30 June 2025

Joelle D. Hepler



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

This species management report and plan was reviewed and approved for publication by Todd Rinaldi, Management Coordinator for Region IV for the Division of Wildlife Conservation.

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Cover Photo: Gray wolf in snow. ©1990 ADF&G. Photo by John Hyde.

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Purpose of this Report

This report provides a record of survey and inventory management activities for wolves (*Canis lupus*) in Game Management Unit 11 for the 5 regulatory years 2015–2019 and plans for survey and inventory management activities in the next 5 regulatory years, 2020–2024. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY15 = 1 July 2015–30 June 2016). This report is produced primarily to provide agency staff with data and analysis to help guide and record agency efforts but is also provided to the public to inform it of wildlife management activities. In 2016 the Alaska Department of Fish and Game’s (ADF&G, the department) Division of Wildlife Conservation (DWC) launched this 5-year report to report more efficiently on trends and to describe potential changes in data collection activities over the next 5 years. It replaces the wolf management report of survey and inventory activities that was previously produced every 3 years.

I. RY15–RY19 Management Report

Management Area

Unit 11 (12,784 mi²) consists of the area draining into the headwaters of the Copper River south of Suslota Creek and the area drained by all tributaries into the east bank of the Copper River between the confluence of Suslota Creek with the Slana River and Miles Glacier (Fig. 1). Most of Unit 11 is included in the Wrangell-St. Elias National Park and Preserve. Unit 11 includes portions of 3 of Alaska’s 32 ecoregions: the Wrangell Mountains, the Chugach and St. Elias mountains, and the Copper River Basin. Glaciers cover 35% of the parklands, and the surrounding habitat consists of mixed spruce, aspen, and balsam poplar forest, as well as muskeg and tussocks.

Additional maps for Unit 11 boundaries and special management areas can be found at: <http://www.adfg.alaska.gov/index.cfm?adfg=maps.main>.

Summary of Status, Trend, Management Activities, and History of Wolves in Unit 11

In December 1978, the establishment of the Wrangell-St. Elias National Monument encompassed most of Unit 11. In 1980, monument status was changed to park and preserve with passage of the Alaska National Interest Lands Conservation Act. State hunting regulations apply on private and preserve lands within Unit 11. The National Park Service (NPS) closely manages hunting on parklands by issuing hunting permits based on hunter residency.

In 1985, the NPS prohibited the land-and-shoot taking of wolves on parklands. Prior to 1985, aircraft were the most commonly used method of transportation for wolf hunters and trappers in Unit 11 due to the remote nature of the area. Since then, the average wolf harvest in Unit 11 has remained slightly lower than pre-1985 levels.

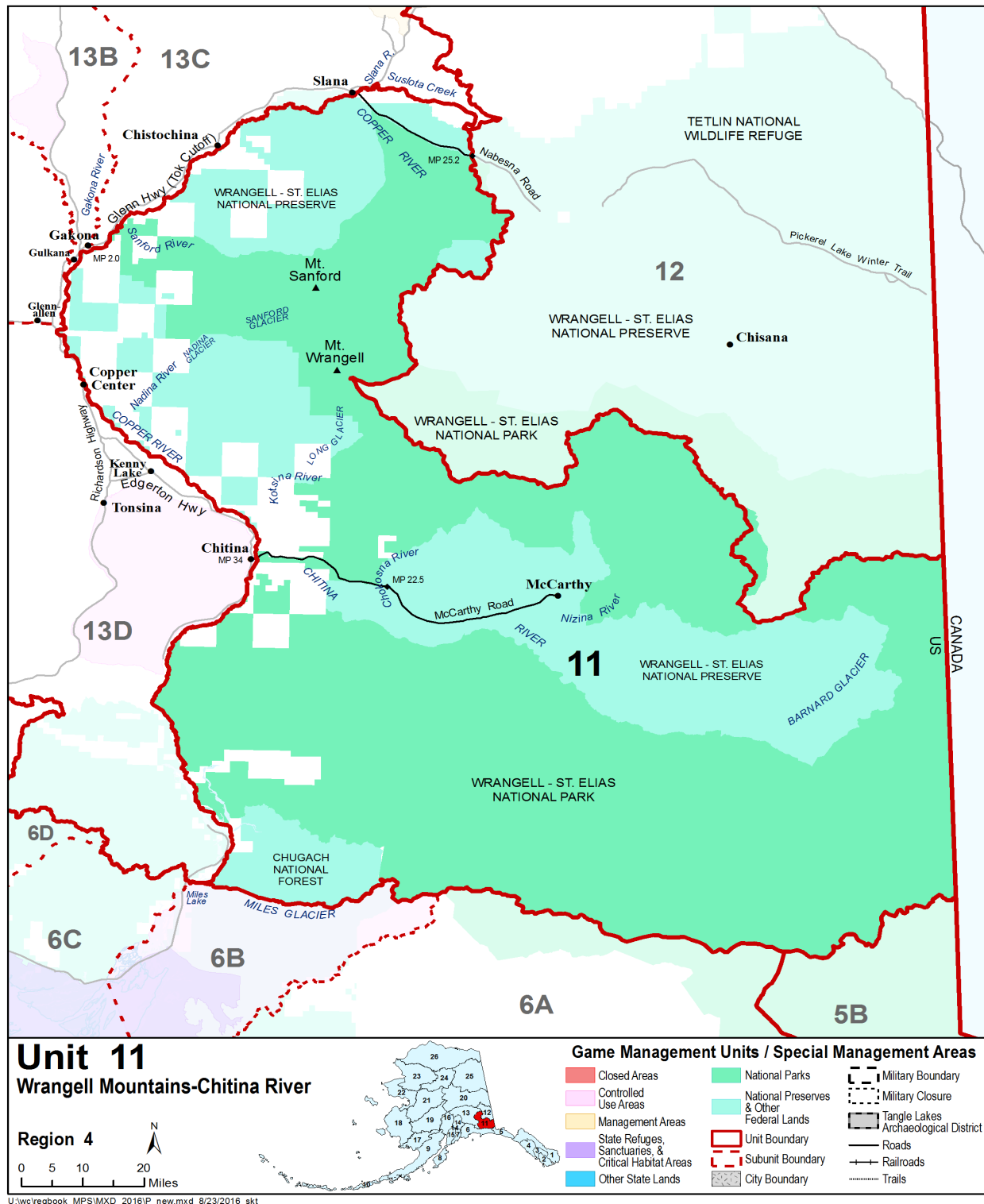


Figure 1. Map of Unit 11 in Southcentral Alaska, regulatory years 2015–2019.

Management Direction

Wolves are recognized as an integral part of the ecosystem throughout Unit 11 and are managed to provide for a wide variety of human uses and values, including hunting and trapping (for personal or commercial use of hides), photography, viewing, listening, and scientific research (ADF&G 2002).

EXISTING WILDLIFE MANAGEMENT PLANS

Directions, goals, and guidelines from the *Alaska Wildlife Management Plans: Southcentral Alaska* (ADF&G 1976) have been used by the department over the years to provide guidance when informing the Alaska Board of Game.

GOALS

- Ensure enough wolves remain within Unit 11 to contribute to the health of the ecosystem while providing for the broadest possible range of human uses.
- Increase public awareness and understanding of uses, conservation, and management of wolves, their prey, and habitat in Alaska. Wolves are a controversial species in Alaska, given their importance to consumptive and nonconsumptive user groups throughout the state. To dampen public conflict and encourage participation in the public process of wildlife management in Alaska, it is essential to increase public awareness and understanding of the ecological importance of wolves, their varied uses and values among Alaska's user groups, and the department's goals, tools, and limitations in managing the species.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The Unit 11 wolf population has a positive customary and traditional use determination. The unitwide amount reasonably necessary for subsistence is 5–10 wolves.

Intensive Management

There are no intensive management programs authorized for Unit 11.

MANAGEMENT OBJECTIVES

Maintain a minimum spring population of 75 wolves.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Collaborate with NPS to develop minimum wolf count (MWC; Gardner and Pamperin 2014) surveys on NPS lands during years when more intensive wolf surveys are not conducted.

Data Needs

MWC surveys on NPS lands would provide a base number of wolves from which a minimum population estimate for Unit 11 could be determined to ensure that the population objective is being met annually, and that wolf numbers do not drop below sustainable population levels. Should MWC results drop below the management objective for 2 years in a row, a sample unit probability estimator will be attempted to determine a precise estimate of the Unit 11 population (Becker et al. 1998).

Methods

ADF&G will collaborate with Wrangell-St. Elias National Park and Preserve to incorporate MWC surveys during years that NPS does not conduct more intensive wolf surveys within the park and preserve. Surveys will be conducted as described by Gardner and Pamperin (2014).

Results and Discussion

Activity 1.1 efforts were suspended for this reporting period. With the limited access and limited effort for wolf harvest in Unit 11, as well as the demonstrated rate at which wolf populations rebound even from artificially low levels in neighboring Unit 13, there is no conservation concern for wolves in Unit 11 and there is no reason to believe that the minimum objective of 75 wolves in the spring is not met annually. Harvest trends and hunter-trapper reports provide insight into wolf populations in Unit 11 and for this reporting period there were no management actions or decisions that would require more detailed information on the wolf population.

Recommendations for Activity 1.1

Discontinue. This activity can be reinstated if more specific information on wolf populations and trends in Unit 11 becomes necessary to inform management decisions or address conservation concerns. Currently there are no conservation concerns.

ACTIVITY 1.2. Utilize survey results, combined with incidental observations, anecdotal reports, and harvest data, to refine an annual wolf population estimate for Unit 11.

Data Needs

An estimate of the post-hunting and post-trapping season wolf population for Unit 11 is necessary to determine if the minimum number of wolves remain in Unit 11, and to determine if harvest numbers remain within sustainable levels.

Methods

NPS survey data will provide a minimum wolf count for NPS lands. Survey results combined with agency wolf observations, public reports, and sealing data for all of Unit 11 will be analyzed and utilized to develop an annual spring wolf population estimate as described previously.

Results and Discussion

Activity 1.2 efforts were suspended for this reporting period. Harvest of wolves in Unit 11 was not sufficient to cause a conservation concern, and specific population estimates were not necessary during this reporting period.

Recommendations for Activity 1.2

Discontinue. This activity can be reinstated if more specific information on wolf populations and trends in Unit 11 becomes necessary to inform management decisions or address conservation concerns. Currently there are no conservation concerns.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through sealing records.

Data Needs

Wolf harvest data are necessary to annually assess trends in harvest; corroborate survey results and anecdotal or incidental observations; and ensure that the population is not being harvested in excess of sustained yield.

Methods

Harvested wolves are required to be sealed in Unit 11. Through this process, the data collected for each wolf harvested includes the name of the harvester, location of kill, method of take, month of take, method of transportation, sex of the wolf, color of the pelt, and estimated number of wolves in the pack. These data are entered and stored in databases accessible through ADF&G's Wildlife Information Network (WinfoNet), from which the data can be queried and analyzed when needed. Harvest is reported by regulatory year.

Season and Bag Limit

	<u>Unit 11 bag limits</u>	<u>Resident and nonresident open seasons</u>
Hunting	5 wolves	10 August–30 April
Trapping	No limit	15 October–30 April

Sport hunting and trapping is not permitted in Wrangell-St. Elias National Park, although it is allowed in the preserve. Under federal subsistence hunting regulations, federally qualified subsistence users (residents of Units 6, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, Chickaloon, and Unimak Island) can harvest a limit of 10 wolves on most federal lands in Unit 11 between 10 August and 30 April. These users can also trap an unlimited number of wolves on most federal lands between 10 November and 31 March. Within Wrangell-St. Elias National Park, these regulations apply only to NPS-qualified subsistence users.

Results and Discussion

Harvest by Hunters-Trappers

Hunters and trappers reported harvesting an average of 20 wolves annually during RY15–RY19, with a range of 12–32 wolves (Table 1), which is twice as high as the average for the previous report period. Trapping and snaring are the most widely used methods of take in Unit 11.

Table 1. Unit 11 wolf harvest in Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Reported harvest			Method of take			Successful harvesters
	Male	Female	Total	Trap/snare	Shot	Unknown	
2015	7	6	13	12	1	0	5
2016	17	10	27	24	3	0	10
2017	5	7	12	10	2	0	8
2018	13	19	32	29	2	1	9
2019	9	5	14	11	3	0	9

Hunter Residency and Success

Local residents harvested the highest percentage of wolves, at an average of 84% annually (Table 2). There are very few nonlocal residents and nonresidents that harvest wolves, likely due to the inaccessible nature of Unit 11 and because local residents have a more thorough knowledge of the area and access points.

Table 2. Unit 11 hunter-trapper residency and success for all methods of wolf harvest, Southcentral Alaska, regulatory years 2015–2019.

RY ^a	Local residents ^b		Nonlocal residents		Nonresidents		Total	
	Hunters/ trappers	% of total harvest	Hunters/ trappers	% of total harvest	Hunters/ trappers	% of total harvest	Hunters/ trappers	Wolves harvested
2015	4	92	1	8	0	0	5	13
2016	8	92	1	4	1	4	10	27
2017	7	92	1	8	0	0	8	12
2018	7	94	1	3	1	3	9	32
2019	4	50	2	29	3	21	9	14

^a RY = regulatory year.

^b Residents of both Unit 11 and Unit 13 are considered local residents.

Harvest Chronology

Snow conditions and daylight contribute to wolf harvest in Unit 11 being concentrated in December through February (Table 3). There is a small portion of harvest that occurs in the fall; much of the fall harvest is likely incidental take during moose hunting excursions.

Table 3. Unit 11 wolf harvest percent chronology by month, Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Harvest percent by month							<i>n</i>
	Aug–Oct	Nov	Dec	Jan	Feb	Mar	Apr	
2015	8	0	23	0	38	31	0	13
2016	7	0	7	48	19	15	4	27
2017	17	0	8	50	17	8	0	12
2018	6	0	28	25	35	6	0	32
2019	21	0	50	0	29	0	0	14

Transport Methods

Although aircraft are not permitted for hunting or trapping within Wrangell-St. Elias National Park, aircraft are utilized by successful wolf harvesters in Unit 11 nearly every year on lands outside of the park, including in the Preserve (Table 4). Snowmachine is the most common transportation method for wolf hunters and trappers (58% annually), followed by aircraft (30% annually).

Table 4. Unit 11 percent wolf harvest by transport method, Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Percent harvest by transport method							<i>n</i>
	Airplane	Dogsled, skis, snowshoes	Boat	ATV	Snow- machine	ORV	Highway vehicle	
2015	23	0	0	23	54	0	0	13
2016	30	4	4	0	62	0	0	27
2017	8	0	8	0	84	0	0	12
2018	66	0	0	0	25	0	9	32
2019	22	14	0	0	64	0	0	14

Other Mortality

Natural causes of mortality in wolves include inter- and intra-species competition, disease, and starvation. Anthropogenic causes of mortality outside of the harvest framework (such as wolf-vehicle collisions) are low in Unit 11, where human densities are relatively low and there are very few roads, the majority of which are dirt roads.

While some wolf harvest may go unreported, Alaska wolves cannot be sold commercially or professionally tanned without being sealed. The unreported harvest of wolves in Unit 11 is suspected to be minimal.

Alaska Board of Game Actions and Emergency Orders

There were no Alaska Board of Game actions or emergency orders for wolves during this reporting period.

Recommendations for Activity 2.1

Continue.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities occurred for wolves in Unit 11 during RY15–RY19.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

Wolf sealing and harvest data are stored on the WinfoNet internal server (<http://winfonet.alaska.gov/index.cfm>).

Agreements

A data sharing agreement is in place to share wolf (and other species) harvest data between ADF&G and Wrangell-St. Elias National Park and Preserve for RY90–RY20 (Appendix A).

Permitting

Currently, there are no permits in place regarding wolves in Unit 11.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

None.

Conclusions and Management Recommendations

The current management direction should be maintained. Given the unique land status and relatively difficult access within Unit 11, wolf harvest pressure does not currently pose a concern for the sustainability of the population, although any improvements to accessibility of state or preserve lands could provide for increased hunting and trapping opportunities for wolves in Unit 11. Wolf populations in neighboring Unit 13 have demonstrated that a lower density of wolves is biologically sustainable, which suggests that the management objective for the minimum number of wolves in Unit 11 can reasonably be lowered to 50 wolves in the spring population.

II. Project Review and RY20–RY25 Plan

Review of Management Direction

MANAGEMENT DIRECTION

No change from the RY15–RY19 report.

GOALS

No change from the RY15–RY19 report.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

No change recommended.

Intensive Management

No change recommended.

MANAGEMENT OBJECTIVES

Maintain a minimum spring population of 50 wolves.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

Population status and trend will be monitored through evaluation of data collected in Activity 2.1. Under the current management framework there is no conservation concern for wolf populations in Unit 11.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through sealing records.

Data Needs

No change from the RY15–RY19 report.

Methods

No change from the RY15–RY19 report.

3. Habitat Assessment-Enhancement

No change from the R15–RY19 report..

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

No change from the RY15-RY19 report.

Agreements

The data sharing agreement with Wrangell-St. Elias National Park and Preserve will be updated to include future years.

Permitting

None.

References Cited

- Alaska Department of Fish and Game. 1976. Alaska wildlife management plans: Southcentral Alaska. Draft proposal subsequently approved by Alaska Board of Game. Division of Game, Federal Aid in Wildlife Restoration Project W-17-R, Juneau.
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- Gardner, C. L., and N. J. Pamperin. 2014. Intensive aerial wolf survey operations manual for Interior Alaska. Alaska Department of Fish and Game, Wildlife Special Publication ADF&G/DWC/WSP-2014-01, Juneau.

Appendix A. Data sharing agreement between Alaska Department of Fish and Game and Wrangell-St. Elias National Park and Preserve, 2016.

AGREEMENT FOR USE OF WILDLIFE DATA BETWEEN ALASKA DEPARTMENT OF FISH & GAME (ADF&G) AND WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE

This agreement covers the following two files to be transferred to Wrangell-St. Elias National Park and Preserve: 1) harvest data files for bison, black bear, brown bear, caribou, moose, mountain goat, sheep, and wolves in Game Management Units 11 and 12 by UCU, including location of kill by major and minor subdivisions, method of take, date of kill, horn, skull, or antler morphometric data, and sex for the regulatory years 1990–1991 through 2014–2015; and 2) a .shp file delineating UCU boundaries. ADF&G will provide harvest data for species listed for regulatory years 2015–2016 through 2020–2021 upon request by Wrangell St Elias National Park.

This information is released to, and may be used by, Wrangell-St. Elias National Park and Preserve under the following conditions:

1. The information will be used to monitor harvest of bison, black bear, brown bear, caribou, moose, mountain goat, sheep, and wolf populations within the Park boundaries.
2. Harvest information will not be published, publically disseminated, or presented by the NPS or its contractors at the spatial resolution of latitude and longitude of a kill site or by watershed defined as a Uniform Coding Unit (UCU) in ADF&G data.
3. The information will not be released to others except to persons in a contractual relationship with Wrangell-St. Elias National Park and Preserve who will be performing work for or on behalf of Wrangell-St. Elias National Park and Preserve, on a need-to-know basis, in which case Wrangell-St. Elias National Park and Preserve will require the contractors to agree to and abide by the conditions in this document.
4. The NPS agrees that the harvest location data is protected from disclosure under state law and will make every effort to keep it confidential under federal law, and will notify ADF&G if there is a Freedom of Information Act request for the data.

Under the above conditions, ADF&G agrees to release the attached information, and Wrangell-St. Elias National Park and Preserve agrees to receive and use it.

SOF _____ Date April 4, 2016
Maria Gladziszewski, Deputy Director, Division of Wildlife Conservation, ADF&G

SOF _____ Date 4/7/2016
Eric Veach, Acting Superintendent, Wrangell-St. Elias National Park and Preserve

