

Wolf Management Report and Plan, Game Management Unit 16:

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

Chris Brockman



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PREPARED BY:

Chris Brockman
Area Wildlife Biologist

APPROVED BY:

Todd Rinaldi
Management Coordinator

REVIEWED BY:

Manny Eichholz
Assistant Management Coordinator

PUBLISHED BY:

Sally Kieper
Technical Reports Editor

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Alaska Department of Fish and Game
Division of Wildlife Conservation
PO Box 115526
Juneau, AK 99811-5526



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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: A pack of black wolves walk down a road. ©2004 ADF&G. Photo by Todd Rinaldi.

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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 16 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 16 is located west of Anchorage in Southcentral Alaska. The unit consists of the drainages into Cook Inlet between Redoubt Creek and the Susitna River, including Redoubt Creek drainage, and the drainages on the west side of the Susitna River (including the Susitna River) upstream to its junction with the Chulitna River; the drainages into the west side of the Chulitna River (including the Chulitna River) upstream to the Tokositna River (including the Tokositna River), and drainages into the south side of the Tokositna River upstream to the base of the Tokositna Glacier, including the drainage of the Kanikula Glacier. It is subdivided into Unit 16A and 16B. Unit 16A consists of the portion east of the east bank of the Yentna River from its mouth upstream to the Kahiltna River, east of the east bank of the Kahiltna River, and east of the Kahiltna Glacier, and Unit 16B covers all portions south and west of Unit 16A (Fig. 1). Unit 16A is 1,850 mi². Unit 16B is approximately 5.5 times larger at 10,405 mi². Unit 16 ranges in elevation from sea level to 20,310 feet at the top of Denali. Approximately 8,500 mi² occur below 3,500 feet elevation and are considered moose habitat. The moose habitat is dominated by riparian corridors interspersed with mixed deciduous and spruce forest and punctuated by numerous swamps, bogs, and lakes. In addition to moose, wolves are known predators of sheep and goats and have been found to follow ridgelines above the level of suitable moose habitat. Therefore, wolf density estimates are based on the total area of the units.

Summary of Status, Trend, Management Activities, and History of Wolf in Unit 16

Prior to the 1900s and the establishment of major human settlements in Anchorage and surrounding areas, wolf numbers in Unit 16 fluctuated with prey densities. Since 1900 wolf populations have been heavily influenced by various human harvest regimes ranging from predator control strategies prior to statehood (including the use of poison, bounties, and aerial shooting) to relatively restrictive regulations including only trapping and sport hunting (Harkness 1991; Masteller 1994; Del Frate 2003). Reports from trappers, pilots, and staff indicate wolf numbers began increasing in the early 1990s (Peltier 2006). The first systematic population

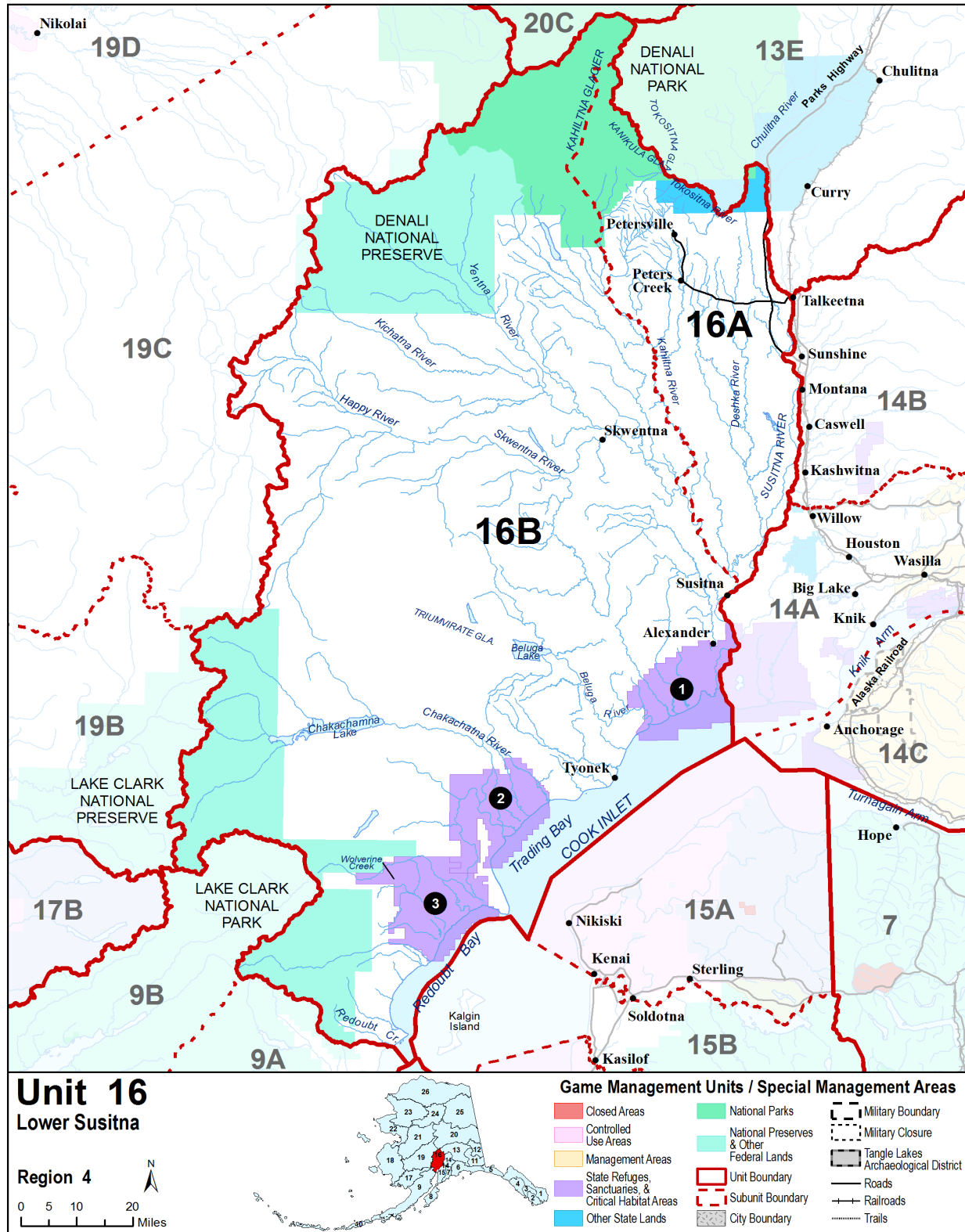


Figure 1. Unit 16 boundaries, Southcentral Alaska, regulatory years 2015–2019.

estimate of wolves in Unit 16 occurred in March 1993, during the development of the Sample Unit Probability Estimator (SUPE; Becker et al. 1998). At that time the department estimated there were 48–62 wolves, or 4–5 wolves/1,000 mi² (1.5–1.9 wolves/1,000 km²), in 8–10 packs in the area.

Following trapper discoveries of infestations of the dog-biting louse (*Trichodectes canis*) in wolves in 1998 (Golden et al. 1999), the department initiated a louse control program. Wolves were captured and treated with the antiparasitic drug ivermectin (Merck & Co. Inc) or received ivermectin through baits laced with the paste. However, the wolves examined after the treatment showed that it was unsuccessful in ameliorating the infestation. Based on the information gathered during the louse treatment and other reports, the population was estimated between 170–240 wolves, or 14–20 wolves/1,000 mi² (5.4–7.6 wolves/1,000 km²), in up to 22 packs in Unit 16 in 2004 (Peltier 2006).

In 2003, a wolf control implementation plan was initiated in response to declining moose numbers and a high wolf population in 16B. Initially, the implementation of the plan included the use of snowmachines to take wolves, but land-and-shoot wolf control began in December 2004 and was amended in February 2005 to include same day airborne shooting (SDA) of wolves by permittees. The SDA program allowed pilots to apply for permits to harvest wolves from the air. Applications were screened by the area manager and participation in the program was limited to approximately 30 permitted pilots. During the first year of the program SDA teams took 91 wolves. In 2006, the SDA program boundaries were expanded to include a portion of 16A (Fig. 2). Harvest in subsequent years from hunters, trappers, and SDA teams reduced the population to levels near the intensive management (IM) population objective of (Peltier 2009). The predator control program was reauthorized for 6 years and modified to include brown bear predation control in March 2011. In February 2015, the predator control program was again reauthorized for 6 years and included an *Operational Plan for Intensive Management of Moose* (ADF&G 2015). Under this plan the wolf population objective was 35–55 wolves.

Management Direction

EXISTING WILDLIFE MANAGEMENT PLANS

- Direction for wolf management outlined in the *Alaska Wildlife Management Plans* (ADF&G 1976) has been modified through Board of Game (BOG, board) regulatory actions over the years.
- *Operational Plan for Intensive Management of Moose in Game Management Unit 16 during Regulatory Years 2015–2017* (ADF&G 2015).

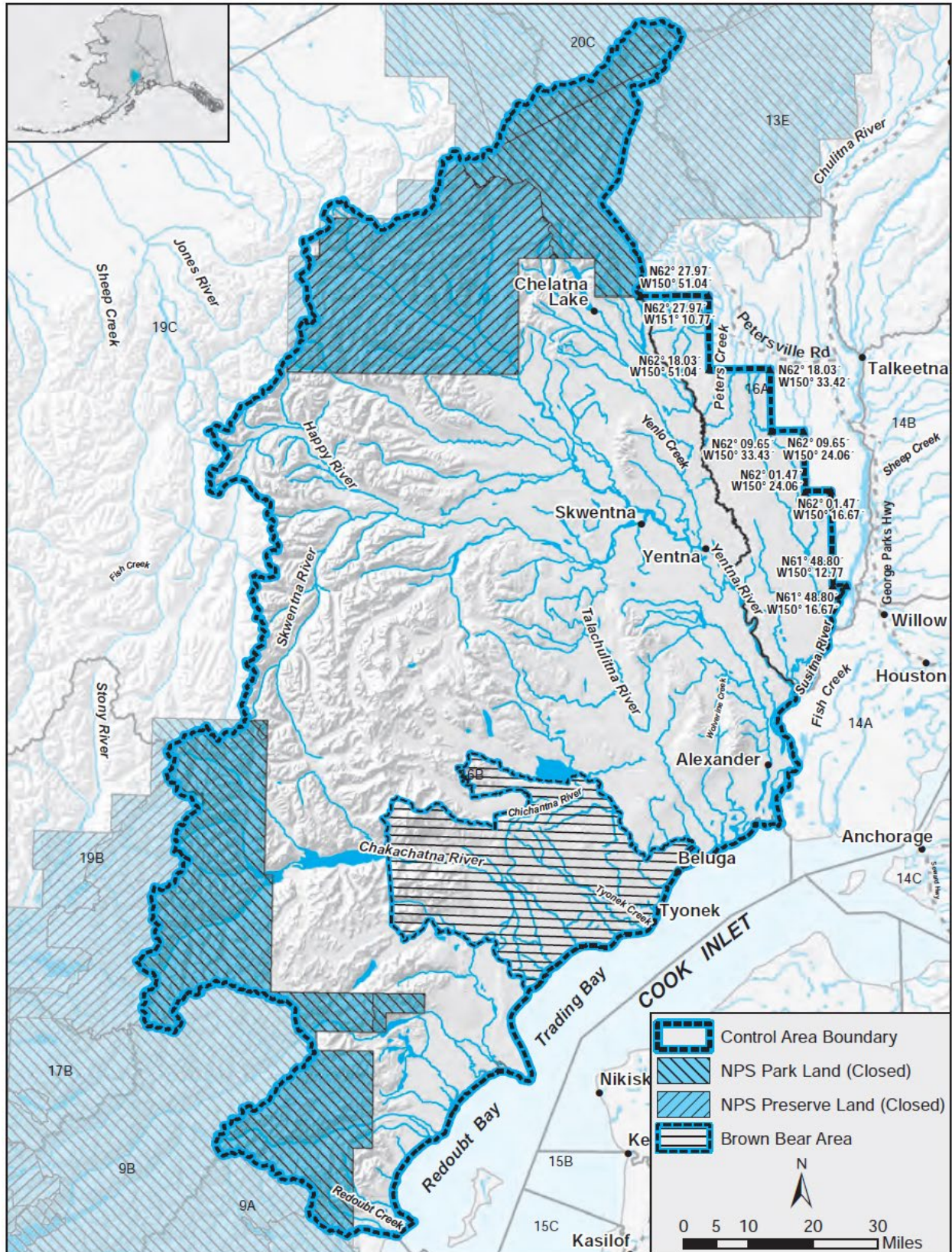


Figure 2. Unit 16 predation control area boundaries, Southcentral Alaska, regulatory years 2015–2019.

GOALS

- Ensure long-term conservation of wolves throughout their historic range in Alaska in relation to their prey and habitat.
- Provide for the broadest possible range of human uses and values of wolves and their prey populations that meet wildlife conservation principles and reflect the public's interest.
- Increase public awareness and understanding of uses, conservation, and management of wolves, their prey, and habitat in Alaska.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The Unit 16 wolf population has a positive customary and traditional use determination. The unitwide amount reasonably necessary for subsistence (ANS) is 0–5 wolves. Moose IM objectives for 16B are a population of 6,500–7,000 moose that can support annual sustainable harvest of 310–600 moose. The ANS for moose in 16B is 199–227.

Intensive Management

The predation control program for the IM of moose in Unit 16 was authorized by the BOG under 5 AAC 92.122. When the predator control program was reauthorized in February 2015, the spring wolf population objective was 35–55 wolves. The predator control plan for wolves was suspended in RY15 and is set to expire on 30 June 2021.

MANAGEMENT OBJECTIVES

1. The population objective is to maintain a fall wolf population of 30–60 wolves in at least 4 packs. This should include 8–15 wolves (in 1–3 packs) in Unit 16A and 22–45 wolves (in 3–5 packs) in Unit 16B. This represents a population density of 2.4–4.9 wolves/1,000 mi² (0.9–1.9 wolves/1,000 km²) unitwide.
2. The human-use objective is to allow maximum opportunity for harvest while maintaining minimum wolf population objectives.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Estimate the spring (posttrapping and predenning) wolf population using incidental staff and pilot observations and anecdotal public reports.

Data Needs

Estimations of the wolf population in Unit 16 are necessary to ensure that minimum population objectives are being met, to evaluate the success of IM objectives, and because they can lead to a better understanding of predator-prey dynamics.

Methods

Reports of wolves were collected from SDA pilots, trappers, hunters, and others on an annual basis. This information was supplemented with reports of wolves or wolf tracks observed during moose surveys in the fall.

Results and Discussion

The wolf estimate was 61–106, or 5–8.6 wolves/1,000 mi² (1.9–3.3 wolves/1,000 km²), in up to 10–13 packs in the spring of RY10 (Table 1). The harvest of wolves and the trapping effort during RY10–18 was reduced to the point that further population estimation with any degree of certainty could not be accomplished from public reports. Harvest increased substantially in RY19 and wolf sightings during moose surveys increased in RY18 and RY19.

Recommendations for Activity 1.1

Continue this activity once a precise or viable baseline population estimate has been established (see Activity 1.2 in the RY20–RY24 Plan below).

ACTIVITY 1.2. Conduct a minimum wolf count (MWC) or Sample Unit Probability Estimator (SUPE) survey in Unit 16.

Data Needs

Abundance data are needed to determine that at least 35 wolves occupy Unit 16 as required by the predation control plan (5AAC 92.122). A MWC survey will be adequate to establish the persistence of the minimum number of wolves. A SUPE survey would provide a more complete estimate of the entire Unit 16 population.

Methods

Both SUPE and MWC survey methods use aerial enumeration of packs and individual wolves to determine population size. SUPE survey assumptions are described in Becker et al. (1998, 2004) and Gardener and Pamperin (2014): 1) all wolves in the study area move and leave tracks; 2) fresh wolf tracks are not missed; 3) tracks can be followed forward and backward; 4) number of wolves in a pack are correctly enumerated; 5) no packs are double counted; 6) there is a 1:1 relationship between packs and tracks counted; and 7) the probability of observing any pack in the study area is >0.

Results and Discussion

No SUPE or MWC surveys were conducted during this period. Poor tracking conditions were widespread through the survey period preventing a minimum count and limiting the number of packs located.

Recommendations for Activity 1.2

Continue.

Table 1. Spring wolf population estimates, Unit 16, Southcentral Alaska, regulatory years 2001–2019.

Regulatory year	Population estimate	Wolves (per 1,000 mi ²)	Packs	Basis of estimate
2001	160–245	13.0–20.0	25–28	Reports from trappers, staff, public, and late winter pack survey
2002	132–197	10.9–16.1	22–25	Reports from trappers, staff, and public
2003	168–249	13.8–20.3	22–25	Reports from trappers, staff, and public
2004	170–240	14.0–19.8	18–22	Reports from trappers, staff, public, and SDA ^a pilots
2005	91–122	7.5–9.9	22–23	Reports from trappers, staff, public, and SDA pilots
2006	98–145	8.1–12.0	20–21	Reports from trappers, staff, public, and SDA pilots
2007	104–130	8.6–10.7	18–19	Reports from trappers, staff, public, and SDA pilots
2008	82–102	6.8–8.3	13–15	Reports from trappers, staff, public, and SDA pilots
2009	71–97	5.7–8.1	12–14	Reports from trappers, staff, public, and SDA pilots
2010	61–106	4.9–8.6	10–13	Reports from trappers, staff, public, and SDA pilots
2013	26–39	2.1–3.1	14+	Incomplete minimum count (March)
2014 ^b	—	—	—	—
2015 ^b	—	—	—	—
2016 ^b	—	—	—	—
2017 ^b	—	—	—	—
2018 ^b	—	—	—	—
2019	56+	—	12+	Reports from trappers, staff, and public

^a SDA = Same day airborne shooting permit for predator control

^b No surveys were conducted due to poor tracking conditions and an insufficient number of reports from the public were received to use as a basis for a population estimate.

Activity 1.3. Conduct a Territory Mapping using Radiotelemetry (TMR) survey to determine the number of wolves in Unit 16 for IM regulatory requirements (objective 1).

Data Needs

Abundance data are needed in order to determine that at least 35 wolves occupy Unit 16 as required by the predator control plan (5AAC 92.122). The TMR method would provide a complete estimate of the entire population.

Methods

The wolf population in Unit 16 has been a survey priority since 2011, as wolves have been managed under IM plans for the benefit of the moose population. Due to poor tracking conditions that have persisted each spring during RY15-RY19 our team of ADF&G biologists was unable to complete a minimum wolf count (MWC) or Sample Unit Probability Estimator (SUPE). To achieve the goal of enumerating the wolf population we began marking wolves in RY16 to derive a telemetry-mark recapture (TMR) estimate. Due to funding constraints, we have not been able to mark additional wolves. We expect that it will take up to 3 years of opportunistically marking wolves to achieve the goal of a mark in each pack.

Results and Discussion

We began capturing and marking wolves in a combined moose and wolf capture project in February 2017. During the capture effort, 2 packs of wolves were located. The pack near Nikolai Creek was composed of 3 wolves. In this pack the alpha male and female were captured. The female was equipped with a Lotek Iridium GPS collar and the male was equipped with a Lotek VHF collar. The Nikolai Creek wolves were both estimated at over 7-years old; the male weighed 110 lb and the female weighed 117 lb. The other pack was located on Portage Creek and was composed of 2 wolves. The female was collared with a Lotek Iridium GPS collar and the male was collared with a Lotek VHF collar. The Portage creek female was 4-years old and weighed 78 lb and the male was 5-years old and weighed 85 lb. Both GPS collars had stopped transmitting by August 2017. The wolf with the VHF collar in the Nikolai Creek Pack was harvested in the fall of 2017.

Recommendations for Activity 1.3

Continue.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor hunter and trapper harvest trends through sealing records.

Data Needs

Fursealing data from the ADF&G Wildlife Information Network (WinfoNet) are needed annually to assess trends in the harvest. Harvest location, pack size, and hunter-trapper effort are critical elements needed to assess harvest trends and corroborate aerial survey observations. Harvest reports are needed in order to establish that the population is not being harvested in excess of sustained yield.

Methods

All wolves harvested are required to be sealed. Information recorded at the time of sealing includes the month and year of kill, name of harvester, location of kill, methods of take and transportation, sex, color, and the number of other wolves believed to be in the pack.

Season and Bag Limit

Unit	Bag limits	Resident and nonresident open seasons
16A	Hunting: 10 wolves, but only up to 5 wolves per day may be taken	10 August–30 April
	Trapping: No limit	15 October–30 April
16B	Hunting: 10 wolves	10 August–30 April
	Trapping: No limit	15 October–30 April

Results and Discussion

Harvest by Hunters-Trappers

Hunters and trappers reported harvesting 4–17 wolves annually (Table 2; Table 3). The average for the period was 8.8 wolves annually. The majority of the harvest was from Unit 16B, which has large areas open to hunting and trapping, and no road access. The SDA program was suspended entirely in RY15.

Table 2. Wolf harvest, Unit 16A, Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Reported harvest				Method of take			
	Male	Female	Unknown	Total	Trap/snare	Shot	SDA ^a	Unknown
2015	0	1	0	1	1	0	0	0
2016	3	2	0	5	3	2	0	0
2017	0	1	0	1	0	1	0	0
2018	1	1	0	2	0	2	0	0
2019	1	0	0	1	0	1	0	0

^a SDA represents harvest by permitted pilots participating in same day airborne predator control.

Table 3. Wolf harvest, Unit 16B, Southcentral Alaska, regulatory years 2010–2019.

Regulatory year	Reported harvest				Method of take			
	Male	Female	Unknown	Total	Trap/snare	Shot	SDA ^a	Unknown
2010	1	1	1	3	2	1	0	0
2011	3	3	0	6	4	2	0	0
2017	3	2	0	5	3	2	0	0
2018	2	2	0	4	3	1	0	0
2019	7	9	0	16	9	7	0	0

^a SDA represents harvest by permitted pilots participating in same day airborne predator control.

Harvest Chronology

The small harvest during the report period makes the timing look widely varied and some of the monthly percentages seem large (Table 4). Harvest chronology coincides with method of take; wolves taken by snare or trap are taken during the trapping season of mid-October through April. Typically, wolves that were killed by hunters were incidentally taken during the fall moose hunting season.

Table 4. Wolf harvest chronology by month, Unit 16, Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Percent harvest chronology by month							<i>n</i>
	Aug-Oct	Nov	Dec	Jan	Feb	Mar	Apr	
2015	25	0	50	0	0	25	0	4
2016	27	27	37	0	0	9	0	11
2017	50	0	33	0	0	17	0	6
2018	66	17	0	17	0	0	0	6
2019	41	0	0	12	29	12	6	17

Transport Methods

Most successful hunters and trappers routinely use airplanes to harvest wolves (Table 5).

Table 5. Wolf harvest by transport method, Unit 16, Southcentral Alaska, regulatory years 2015–2019.

Regulatory year	Percent harvest by transportation method								<i>n</i>
	Airplane	Dogsled, skis, snowshoes	Boat	3- or 4-wheeler	Snowmachine	ORV ^a	Highway vehicle	Unknown	
2015	50	0	0	25	25	0	0	0	4
2016	45	9	0	9	28	9	0	0	11
2017	66	0	17	0	0	17	0	0	6
2018	33	0	0	50	17	0	0	0	6
2019	65	0	0	6	17	0	0	12	17

^a ORV = off-road vehicle

Alaska Board of Game Actions and Emergency Orders

In the spring of 2011, the board reauthorized the IM plan for Unit 16 for a period of 6 years. They also changed the hunting bag limit for wolves in Unit 16A to 10 per season, with no more than 5 wolves taken per day. In the spring of 2015, the IM plan was reauthorized for a period of 6 years and relocated under 5 AAC 92.122.

The IM plan is set to expire 30 June 2021. The BOG was not able to address the IM plan expiration due to the COVID-related cancelation of the spring 2020 meeting.

Recommendations for Activity 2.1

Continue.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities occurred in Unit 16 during RY15–RY19.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

- Harvest data and copies of sealing forms are stored on the WinfoNet internal server.
- Field data sheets were scanned and are housed on a server in the Palmer area biologist office (O:\WC\Palmer Area Office Folder\Species\Furbearer\Wolf\Scanned Archive Files). Hard copies are stored in file folders located in the Palmer assistant area biologist's office.

Agreements

None.

Permitting

None.

Conclusions and Management Recommendations

The suspension of the SDA program in RY15 has led to an increase in wolf abundance from reproduction and immigration during this reporting period. There is a measurable increase in active wolf trapping in the area. The moose population is currently within the objective; monitoring the growth of the wolf population and its subsequent effect on the moose population is recommended.

II. Project Review and RY20–RY24 Plan

Review of Management Direction

MANAGEMENT DIRECTION

The existing management direction and goals appropriately direct the management of wolves in Unit 16. The management direction for Unit 16 ensures that wolves will persist as part of the natural ecosystem and ensures continued wolf hunting, trapping, and viewing opportunities. There is no indication that the long-term sustainability of the wolf population or that statewide goals for human uses cannot be met (ADF&G 2002); therefore, the Unit 16 management direction should continue in a manner that complements the statewide wolf management goals. There are no area-specific issues in Unit 16 that require a departure from statewide goals for wolf management.

GOALS

- Ensure long-term conservation of wolves throughout their historic range in Alaska in relation to their prey and habitat.
- Provide for the broadest possible range of human uses and values of wolves and their prey populations that meet wildlife conservation principles and reflect the public's interest.
- Increase public awareness and understanding of uses, conservation, and management of wolves, their prey, and habitat in Alaska.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The Unit 16 wolf population has a positive customary and traditional use determination. The unitwide amount reasonably necessary for subsistence (ANS) is 0–5 wolves. Moose IM objectives for 16B are a population of 6,500–7,000 moose that can support annual sustainable harvest of 310–600 moose. The ANS for moose in 16B is 199–227.

Intensive Management

Maintain a spring population of a minimum of 35–55 wolves in Unit 16 during the IM program (5AAC 92.122).

MANAGEMENT OBJECTIVES

1. The population objective is to maintain a fall wolf population of 30–60 wolves in at least 4 packs. This should include 8–15 wolves (in 1–3 packs) in Unit 16A and 22–45 wolves (in 3–5 packs) in Unit 16B.
2. The human-use objective is to allow maximum opportunity for harvest while maintaining minimum wolf population objectives.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Estimate the spring (posttrapping) population using incidental staff and pilot observations and anecdotal public reports.

Data Needs

Estimates of the wolf population in Unit 16 are necessary to ensure that minimum population objectives are being met, to evaluate the success of the intensive management objectives, and because they can lead to a better understanding of predator-prey dynamics.

Methods

Reports of wolves will be collected from trappers, hunters, and others on an annual basis. This information will be supplemented with reports of wolves or wolf tracks observed during moose surveys in the fall.

ACTIVITY 1.2. Conduct a Sample Unit Probability Estimator to estimate wolf abundance or a minimum wolf count survey to determine the minimum number of wolves in Unit 16 (objective 1).

Data Needs

Abundance data are needed to determine that at least 35 wolves occupy Unit 16 to meet the IM population objective as required by the IM plan, 5AAC 92.122. A minimum wolf count survey (MWC; Gardner and Pamperin 2014) will be adequate to establish the persistence of the minimum number of wolves. A Sample Unit Probability Estimator (SUPE; Becker et al. 2004) would provide a more complete estimate of the entire Unit 16 population.

Methods

Both SUPE and MWC survey methods use aerial enumeration of packs and individual wolves to determine population size. SUPE survey assumptions as, described in Becker et al. (1998, 2004) and Gardener and Pamperin (2014), are 1) all wolves in the study area move and leave tracks, 2) fresh wolf tracks are not missed, 3) tracks can be followed forward and backward, 4) number of wolves in a pack are correctly enumerated, 5) no packs are double counted, 6) there is a 1:1 relationship between packs and tracks counted, and 7) the probability of observing any pack in the study area is >0 .

A SUPE survey is preferable to a MWC because it provides density information as well as an estimate of the total population and a measure of precision, however when conditions are not favorable for completing a SUPE, a MWC will provide a minimum estimate of the population size, thus determining if we have met the population objective. A MWC does not have a range of values, confidence intervals, or well-defined statistical inference and will only be used to evaluate the minimum wolf abundance relative to the population objectives.

ACTIVITY 1.3. Conduct a Territory Mapping using Radiotelemetry (TMR) survey to determine the number of wolves in Unit 16 (objective 1), and to provide information about current density and potential for future growth.

Data Needs

Abundance data are needed in order to determine that at least 35 wolves occupy Unit 16 as required by the IM plan (5AAC 92.122). The TMR method would provide a complete estimate of the entire population—particularly in the absence of survey data.

Methods

The TMR requires that most or all wolf packs in an area are radiocollared and regularly tracked to assess pack size and composition and to map territory boundaries (Adams et al. 2008). A TMR density estimate of wolves in Unit 16 is preferable to the MWC as it provides pack size and distribution data, with the deliverable being a population census. It may be the only option for assessing wolf populations in areas with continually poor snow tracking conditions (Gardner and

Pamperin 2014). Monitoring wolves, given the recent lack of tracking conditions in the area, will require collaring wolves to develop a TMR population estimate. This will cost approximately \$75,000 in the first year and ~\$25,000 in subsequent years to produce a relatively precise population estimate.

In RY24, in the final year of the IM program funding, a minimum estimate of wolves must be completed to assess sustainability of the wolf population as required by the Unit 16 predation control plan. As prescribed in the IM plan, a minimum population of 35 wolves in Unit 16 is approximately an 80% reduction from the pre-control population and is a level that will ensure that wolves persist as part of the natural ecosystem in Unit 16 and ensures there will be continued wolf hunting, trapping, and viewing opportunities.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through sealing records (objective 2).

Data Needs

Fursealing data stored within the WinfoNet database are needed annually to assess trends in harvest. Pack size, location of harvest, and hunter-trapper effort are critical elements needed to assess harvest trends and corroborate aerial survey observations.

Methods

Wolves harvested by trappers and hunters will continue to be sealed to monitor harvest. Fursealing data used will be archived in the WinfoNet database and queried annually to access reported wolf harvest data for Unit 16.

3. Habitat Assessment-Enhancement

No habitat assessment or enhancement activities are planned for Unit 16 for RY20–RY24.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

- Harvest data and copies of sealing forms will be stored on the WinfoNet internal server (<http://winfonet.alaska.gov/index.cfm>).
- Field data sheets will be scanned and housed on the computer server in the Palmer area biologist office (O:\WC\Palmer Area Office Folder\Species\Furbearer\Wolf\Scanned Archive Files) and hard copies stored in file folders located in the Palmer assistant area biologist's office.

Agreements

None.

Permitting

None.

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