

**WOLF
ANNUAL SURVEY AND INVENTORY**

STATE: Alaska

GRANT AND SEGMENT NUMBER: AKW-4 Wildlife Restoration FY2015

PROJECT NUMBER: 14.0

PERIOD: 1 July 2014 – 30 June 2015

PROJECT LOCATION: Statewide

PROJECT TITLE: The Status of Wolves and Factors Influencing Their Populations

REPORT DESCRIPTION: This performance report describes wolf survey and inventory activities. Regionwide activities are listed before specific activities by game management unit.

**The Status of Alaska Wolves and Factors Influencing Their Populations in
Region I**

Region wide Activities:

ACTIVITY 1: Provide information to state and federal regulatory processes on wolf management.

Information and data on wolf harvest and wolf populations were provided to the Alaska Board of Game and Regional Advisory Council at their next regularly scheduled winter 2015 meeting.

ACTIVITY 2: Collect biological data when wolf pelts are presented for sealing.

Area staff, other ADF&G staff, Alaska Wildlife Troopers, and designated sealing agents sealed wolf pelts during the regulatory year. About 161 wolf pelts were sealed from the region. During sealing, we acquire information on pelt size, sex, and color.

Unit 1A – 26 wolves

Unit 1B – 21 wolves

Unit 1C – 13 wolves

Unit 1D – 2 wolves

Unit 2 – 30 wolves

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Unit 3 – 61 wolves

Unit 5 – 8 wolves

ACTIVITY 3: Obtain an age structure of the wolves harvested through examination of foreleg bones attached to pelts presented for sealing.

We no longer require the foreleg during sealing so no data has been collected under this activity.

ACTIVITY 4: Contact reliable observers to obtain general information about the status and trends of wolf populations, including the use of an annual trapper survey.

This work was done throughout the region as opportunities permitted.

Activities by Unit

Unit 1C

ACTIVITY 1: Monitor wolves at Gustavus through the use of downloadable GPS radio collars.

One female wolf not closely associated with the local pack was monitored for Attempts to collar additional wolves were unsuccessful.

Unit 2

ACTIVITY 1: Collect information on wolves presented for sealing, and solicit anecdotal information about wolf populations.

This was accomplished during the reporting period.

ACTIVITY 2: Closely monitor wolf harvest during season through information gathered during sealing process.

The wolf harvest is monitored in season through sealing, and this recorded harvest is compared against the allowable harvest of 25 wolves. During Regulatory year 2014, the wolf season was closed early by emergency order. Due to a two week period between when a trapper harvests a wolf and when he must report that harvest, reported harvest (29 wolves) exceeded allowable harvest.

Activity 3: Capture and collar wolves as part of a study to determine population estimation techniques.

ADF&G and US Forest Service staffs are working to produce an efficient technique for accurately estimating the population of wolves in Unit 2. We used and further refined a DNA-based hair snare mark recapture technique for estimating the population. We calculated a fall 2014 population of 89 wolves (95% CI 50 – 151).

Submitted by: Tom Schumacher, Region I Management Coordinator

The Status of Alaska Wolves and Factors Influencing Their Populations in Region II

Region wide Activities:

ACTIVITY: Collect harvest data when wolf pelts are presented for sealing by trappers and hunters.

All wolves taken in Region II were presented to staff for specimen collection (if necessary) and sealing. Wolves taken in other parts of the state were often sealed in region II offices. See area specific activities for additional information.

ACTIVITY: Monitor the wolf harvest through field observations, fur sealing reports, trapper questionnaires, and contact with trappers and hunters.

These are standard activities accomplished in each office. See area specific activities.

ACTIVITY: Conduct aerial surveys to estimate wolf population densities, pack sizes and distribution.

Surveys were completed on the Kenai Peninsula during this period. See the activities under GMU 7 and 15.

ACTIVITY: Develop population estimates using the “Sample Unit Probability Estimator” (SUPE) technique in select areas.

No surveys of this type were completed during this period due in part to poor weather conditions and other higher priorities.

ACTIVITY: Examine pelts presented for sealing for the presence of louse infestation.

All wolf pelts presented to ADF&G and appointed sealers were examined for the presence of lice. Wolves infected with lice currently exist on the Kenai Peninsula within Region II. A wolf taken in GMU 6 was reported to have lice.

ACTIVITY : Draft a triennial wolf management report.

Wolf management report was prepared and submitted for publication in 2012. Area staff continued to collect information for publication of next management report. The department is transitioning to a 5-year report and plan. The next wolf report was delayed and will be published in 2016.

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ACTIVITY : Provide information to state and federal regulatory processes on wolf management.

Staff routinely interact with federal staff and discuss management of wolves relative to the respective regulatory systems. Staff prepared information for presentation to the state Board of Game meeting in March 2015.

Activities by Unit:

Unit 6

ACTIVITY : Twenty-four wolves (13 males and 11 female) were harvested in Unit 6 during the reporting period. At least 6 of 14 wolves taken in GMU 6A were suspected to have lice. Two pelts were submitted for diagnosis and although no lice found the suspicion was lice.

ACTIVITY : A lack of snow led to poor tracking conditions and the inability to complete normal winter field work. No wolves were seen during the moose recruitment survey that was conducted in March but a local pilot regularly packs in the Bering River drainage.

Units 7&15

ACTIVITY: Seventeen wolves were taken by trappers and hunters during the reporting period in Game Management Units (GMU) 7 and 15. The low harvest is most likely due to low snow conditions which made hunting and trapping difficult and closed snowmachine access to much of the Peninsula during the trapping season.

	GMU7	GMU15A	GMU15B	GMU15C
Harvest	1	8	3	5

ACTIVITY : An aerial survey was attempted in subunit 15A. Lack of good snow cover inhibited the completion of this survey and surveys in other subunits. Results from the partial survey in 15A indicate similar numbers to the previous survey conducted in February 2013 of 45-50 wolves.

ACTIVITY : Subjective examination of hides indicate pelt condition appears to have improved in the past few years but lice are still present on most hides examined.

Unit 14C

ACTIVITY : No wolves were reported taken for the fourth year in a row from Unit 14C.

ACTIVITY : No wolves were taken in GMU 14C therefore no wolf pelts were examined for louse infestation.

Submitted by: Gino Del Frate, Region II Management Coordinator

The Status of Alaska Wolves and Factors Influencing Their Populations in Region III

Region wide Activities:

1. Prepared 9 triennial wolf management reports.
2. Monitored harvest >439 wolves through field observations, sealing reports, trapper questionnaires, and contact with trappers and hunters.
3. Conducted 2 aerial wolf population estimation surveys.
4. Provide wolf management information to state and federal regulatory processes: 17 Fish and Game Advisory Committees, 1 Board of Game, 3 federal Regional Advisory Councils and 1 federal Subsistence Board.
5. Six area offices encouraged participation in the statewide trapper questionnaire when wolf trappers present pelts for sealing.

Covers GMUs: 12, 19, 20, 21, 24, 25, 26B and 26C

Prepared by: Doreen Parker-McNeil, Region III Management Coordinator

The Status of Alaska Wolves and Factors Influencing Their Populations in Region IV

Region wide Activities:

ACTIVITY 1: Prepare triennial wolf management reports.

The next triennial wolf management reports are due in 2015.

ACTIVITY 2 AND 3: Collect harvest data when wolf pelts are presented for sealing by trappers and hunters, and monitor the wolf harvest through field observations, fur sealing reports, trapper questionnaires, and contact with trappers and hunters.

Unit 9: 25 wolves harvested.

Unit 10: 5 wolves harvested.

Unit 11: 5 wolves harvested.

Unit 13: 53 wolves harvested.

Unit 14A: 1 wolves harvested.

Unit 14B: 0 wolves harvested.

Unit 16: 6 wolves harvested.

Unit 17: 6 wolves harvested

ACTIVITY 4: Develop population estimates using the “Sample Unit Probability Estimator” (SUPE) technique in select areas.

No SUPE surveys were conducted during this reporting period.

Submitted by: Lem Butler, Region IV Regional Supervisor

The Status of Alaska Wolves and Factors Influencing Their Populations in Region V

Region wide Activities:

Provide information to state and federal regulatory processes on wolf management.

Area management staff reviewed State and Federal regulatory proposals, attended regulatory process meetings, and presented wolf information to the State Board of Game, State Fish and Game Advisory Committees, Federal Subsistence Board, and Federal Subsistence Regional Advisory Councils.

Maintain the ability in all units to monitor harvests by collecting data through the wolf sealing process.

The area offices in Barrow, Bethel, Kotzebue and Nome maintained designated fur sealers in villages in each Game Management Unit to collect harvest information through sealing certificates. Staff supported 29 fur sealers in Unit 18, 17 in Unit 22, 9 in Unit 23, and 6 in Unit 26A.

Distribute the annual statewide trapper questionnaire to obtain harvest and population assessment information.

Staff supported this activity by contributing furbearer information and summarizing trapper responses and observations to be included in the trapper questionnaire report.

Develop updated population objectives in cooperation with the public and other agencies.

Meetings with the public and other agencies were not held due to conflicting schedules. Population objectives were not updated.

Use public communication and education to obtain better harvest data through increased observance of sealing requirements.

Staff discussed sealing and harvest reporting with trappers/hunters, and the public. During public meetings we explained the importance of harvest reports and encouraged trappers to report their harvest.

Activities by Unit:

Unit 18:

Monitor wolf harvests through the fur sealing program, fur acquisition reports, interviews with village residents, and annual hunter/trapper questionnaires.

We monitored Unit 18 wolf harvests using fur sealing data for the RY14 trapping season. Harvest figures are preliminary, but include at least 4 wolves. Regulations were changed to eliminate the fur acquisition report requirement, so no data from this source was monitored.

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Assess population status and trends utilizing sealing records, track surveys, hunter/trapper interviews and questionnaires, and observations by staff and the public.

Sealing data, as well as observations by staff and public, indicate that the Unit 18 wolf harvest was low for this reporting period. Winter weather, specifically snow conditions that are favorable for travel by snowmachine, plays a major role in harvest. The winter of RY14 was more favorable than RY13, but access was still poor compared to most years. The wolf population was probably close to normal south and east of the Kuskokwim River in Unit 18. Wolf number on the Yukon River within Unit 18 appeared to be average to lower than normal levels. This was collaborated by hunter/trapper interviews, observations by staff and the public, and opportunistic track sightings made during aerial survey work for other species.

Assess the effects of wolf predation on prey populations through field observations and interviews with hunters/trappers.

Observers participating in aerial moose, caribou, and muskox surveys, and/or telemetry flights in 2014 recorded wolf kills on both the Kuskokwim and Yukon rivers. In RY14 all wolf kills observed were of moose and caribou. Looking at annual recruitment and continued rapid population growth in moose populations in both the Yukon, and Kuskokwim drainages and riparian areas, wolf predation is not a factor effecting either population. Reports of wolves killing muskox on and Near Nelson Island are occasionally reported to the department. Wolf predation on Nelson Island has not influenced population growth or hunt management of Nelson Island Muskox in RY14. Observation of Mulchatna caribou being killed by wolves was observed by department staff and the public in RY14. With no recent population estimate for MCH it is unclear to what extent, if any, wolves are effecting the population with in Unit 18.

Provide public education regarding wolves through the media, during public meetings, and other opportunities.

We discussed wolf numbers, regulations and management at all Advisory Committee meetings and with numerous trappers and hunters during this reporting period.

UNIT 22:

Monitor wolf harvest through the fur sealing program, annual hunter/trapper questionnaires and Community-based Harvest Assessments conducted annually in selected villages, and through interviews with trapper/hunters.

Preliminary sealing certificates report 29 wolves were sealed during the RY14 in Unit 22: 5 in Unit 22A, 14 in Unit 22B, 4 in Unit 22C, 3 in Unit 22D, and 3 in 22E. Sex composition of harvest was 16 males and 13 females. One wolf was harvested by a nonresident and 28 wolves were harvested by Alaska residents. Snowmachine was the main mode of transportation (86%) for harvesting a wolf.

Assess population status and trends utilizing track surveys, sealing records, hunter/trapper interviews and questionnaires, Community-based Harvest Assessments and observations by staff and the public.

Wolf distribution and abundance varies depending on location and abundance of caribou. During this reporting period the Western Arctic caribou herd was

distributed north of Shaktoolik in Unit 22A, northern Unit 22D, and eastern Unit 22B.

A Community-based Harvest Assessment was completed in Shishmaref by Division of Subsistence. Data analysis is currently ongoing and results are not available.

Department staff and members of the public have reported wolf sightings throughout all of Unit 22. Unit 22 respondents to trapper questionnaires have indicated the number of wolves appear to be increasing. The increasing observation of wolves in Unit 22 does not correlate with the relatively low reported harvest numbers.

Examine pelts presented for sealing for the presence of louse infestation

Wolf hides that were sealed by department staff were examined for hair loss and patches of broken guard which may indicate the presence of lice. Wolves that were inspected did not appear to have visible signs of lice infestation.

Work with reindeer herders to evaluate methods for reducing adverse interactions between wolves and reindeer while conserving wolves.

Nome staff participated in the annual Reindeer Herders Association meeting and addressed the herders' concerns about wildlife issues. Herders have been concerned with increasing wolf numbers and their potential effect on the remaining reindeer herds. Wolf harvest trends and sighting information in Unit 22 were also reported to the herders.

Record wolf sightings during wildlife surveys as an indicator of wolf population trends.

Observers participating in the 2015 Unit 22 spring muskox composition and moose vegetation study reported observations of wolf signs and sightings. Unit 22 staff will continue to make observations on wolf and track sightings within the unit during survey and census work for other species.

Units 23 and 26A:

Monitor wolf harvest through the fur sealing program, annual hunter/trapper questionnaires and Community-based Harvest Assessments conducted annually in selected villages, and through interviews with trapper/hunters.

Unit 23: Preliminary sealing certificates indicated that 40 wolves were sealed in RY14, of which 24 were males, 14 were female, and 2 were unknown. Thirty four hunter/trappers reported method of take as firearm, 2 reported using traps, and 4 reported using snares. Snowmachines were indicated as transportation method for 27 wolves, 9 were taken by airplane, 1 by foot, and 1 by boat, and 2 unknown. Of the 40 wolves harvested, 30 were gray, 4 were white, and 4 were black, and 2 unknown. Six were taken by nonresidents, 5 by non-local residents, and the remaining 29 by area residents.

Community-based Harvest Assessments were completed by Division of Subsistence in Kotzebue in Unit 23, and in Point Hope in nearby neighboring Unit 26A. Data analysis is currently ongoing and results are not available.

Unit 26A: Sealing certificates indicated that 13 wolves were sealed in RY14. Ten were males and 3 were females. Eleven were ground shot and 2 were trapped. Snowmachines (snogots) were used as transportation for 9 and aircraft for 4. Fifteen wolves were gray

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and 3 were black. Nine wolves were taken by 5 residents of Unit 26A, 2 were taken by 2 nonlocal residents, and 2 wolves were taken by 2 nonresidents.

Community-based Harvest Survey were completed by Division of Subsistence in Barrow, Nuiqsut, and Point Hope in Unit 26A; also completed in Anaktuvuk Pass in close neighboring Unit 24. Data analysis is currently ongoing and results are not available.

Conduct aerial surveys in selected portions of Units 23 and 26A during late winter to assess population status.

A wolf survey in Unit 26A was not attempted because very low populations were documented in 2-014.

Record wolf sightings during moose censuses in Unit 26A as an indicator of wolf population trends.

During the April 2015 Unit 26A spring moose trend area count we only found wolf tracks from an estimated 5 wolves. In 2009, 2010, 2011, 2012, 2013, and 2014 we counted 3.10, 1.66, 0.45, 2.4, 2.5, and 0.3 wolves per hour, respectively. It appears that wolf numbers have continued to drop since 2014.

Submitted by: Peter Bente, Region V Management Coordinator