WOLF ANNUAL SURVEY AND INVENTORY PERFORMANCE REPORT

STATE: Alaska Grant and Segment Nr: W-33-2

PROJECT NR: 14.0

WORK LOCATION: Statewide

PROJECT LOCATIONS: Game Management Regions 1, 2, 3, and 5

PERIOD: 1 July 2003–30 June 2004

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

REPORT DESCRIPTION: This statewide performance report includes the four regions involved in wolf survey and inventory activities. Statewide and regional activities are listed before specific activities by herd and game management unit.

The Status of Wolf and Factors Influencing Their Populations in Region I

Regionwide Activities

Activity: Prepare triennial regional wolf management report.

Data continued to be collected for this report. The next report is due in 2005.

Activity: Provide information to the Board of Game on wolf management.

The Board of Game meets on a two-year cycle for the SE Alaska region and did not meet during this reporting period. However, in preparation for the November 2004 meeting, regional staffs have met and discussed ideas may need to be addressed at the next meeting.

Activity: Collect harvest data when wolf pelts are presented for sealing.

Area staff, other ADF&G staff, FWP troopers, and designated sealing agents sealed wolf pelts during the regulatory year. About 147 wolf pelts were sealed from the region.

Activity: Obtain age structure of harvested wolves through examination of foreleg bones attached to pelts presented for sealing.

Area staff aged leg bones from Region I wolves that were submitted for sealing. About 116 wolf leg bones were collected for aging from the region.

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

This was done throughout the region as opportunities permitted.

Unit 1C

Activity: Monitor the wolf population within the Douglas Island Management Area and use data to determine seasons and bag limits.

We did not conduct any wolf monitoring activity during this report period. Rather, we used anecdotal information from deer hunters and other outdoor recreationalists to determine that wolves were not present in numbers high enough to warrant a wolf harvest.

Unit 2

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

We collected anecdotal information from hunters at the time of sealing. During sealing hunters were asked about numbers of wolves they saw and whether the number of wolves in their respective hunting area had changed from past years.

Activity: Use data generated from an ongoing wolf research radio-telemetry research project in the area and standard population modeling techniques to estimate the pre-season number of wolves on Prince of Wales Island.

The wolf research project is winding down at this point and consequently the numbers of wolves carrying radio collars has declined. At present only 3 wolves have functional radio collars and this small sample makes it impossible to infer an accurate Unit population estimate from the few remaining study animals.

Activity: Closely monitor wolf harvest during seasons through information gathered during sealing process.

We continue to monitor the wolf harvest using both in-season sealing records and also by regular contacts with the sealers and trappers.

Other activities funded by Federal Aid on this project: None

Stewardship Investment items purchased: None

Total Regional Segment Period Project Costs (in thousands): \$4.9

Submitted by: Dale L. Rabe – Region I Management Coordinator

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

Regionwide Activities

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

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

Monitored wolf harvest as possible.

Activity: Conduct systematic aerial transect surveys to estimate wolf population densities, pack sizes and distribution.

Conducted aerial surveys where possible.

Activity: Develop population estimates using the "Sample Unit Probability Estimator" (SUPE) technique in selected areas.

There were no SUPE surveys conducted due to poor weather conditions.

Activity: Provide information to the Board of Game on wolf management.

The Board of Game meets on a two year cycle for the SC Alaska region and did not meet during this reporting period. However, regional staffs have met and discussed ideas may need to be addressed at the next meeting.

Units 7 and 15

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

Most pelts examined during this reporting period were infested with *Trichodectes canis*. Pelt damage varied from extreme, generally on pups, to mild on adults.

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

The preliminary harvest for 2003/04: 45 wolves

Unit 7 = 3 Subunit 15A = 16 Subunit 15B = 16 Subunit 15C = 10

Units 9 and 10

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

The preliminary wolf harvest for 2003-04 was 119 including 4 from Unimak Island.

Units 11 and 13

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

The preliminary 2003/04 harvest was:

GMU 13 241 wolves GMU 11 22 wolves

Activity: Conduct systematic aerial transect surveys to estimate wolf population densities, pack sizes and distribution.

Preliminary Fall 2003 Estimates:

GMU 13 486 wolves 70 packs GMU 11 110 wolves 15 packs

Unit 14

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

There were no observed cases of lice infestation or any confirmed reports of lousy wolves in Unit 14 during this reporting period.

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

Preliminary 2003–04 harvest numbers are reported as follows:

14A	Males7	Females10	Unknown—0	Total17
14B	Males6	Females4	Unknown0	Total10
14C	Males0	Females0	Unknown0	Total0
Unit 14 Total	Males13	Females14	Unknown0	Total27

Unit 16

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

There was one case of lice on a wolf pelt sealed this season from Unit 16B.

Activity 2: Monitor the wolf harvest through field observations, fur sealing reports, trapper questionnaires, and contact with trappers and hunters.

Preliminary harvest for 2003-04 is reported as follows.

16A	Males10	Females9	Unknown1	Total20
16B	Males31	Females22	Unknown2	Total55
Unit 16 Total	Males41	Females31	Unknown3	Total—75

Unit 17

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

Results: 76 wolves reported harvested in 2003–04.

Other activities funded by Federal Aid on this project: None

Stewardship Investment items purchased: None

Total Regional Segment Period Project Costs (in thousands): \$50.25

Submitted by: Bruce Bartley, Acting Assistant Management Coordinator

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

Regionwide Activities

Activity: Collect harvest data when wolf pelts presented for sealing by trappers and hunters and analyze harvest data.

Collected harvest data was when wolf pelts were presented for sealing, analyzed harvest data. Preliminary data indicate harvest of:

- Unit 12: 30 wolves.
- Unit 19: 102 wolves.
- Units 20A, 20B, 20C, 20F, 25C: 193 wolves.
- 20D: 33 wolves.
- Unit 20E: 40 wolves.
- Units 21, 24: 62 wolves.
- Units 25A, 25B, 25D, 26B, 26C: 53 wolves.

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

Interviewed trappers, reviewed trapper questionnaires, recorded field observations, monitored wolf sealing data.

Activity: Provide information to the Board of Game and advisory committees on wolf management.

Provided information on wolf population status and management issues to the Board of Game and various advisory committees.

Unit 12

Activity: Conduct aerial wolf population estimation surveys in north central and western Unit 12. Conducted winter aerial wolf survey in north central and western Unit 12. Estimated wolf population at 190.

Units 19, 21A, and 21E

Activity: Conduct aerial wolf population estimation surveys in Units 19A and 19B. Conducted no wolf surveys because of poor survey conditions.

Units 20A, 20B, 20C, 20F, and 25C

Activity: Conduct aerial wolf population estimation surveys.

Conducted aerial wolf minimum population estimate for Tanana Flats portion of Unit 20A on 16 February.

Unit 20D

Activity: Conduct aerial wolf population estimation surveys in portions of Unit 20D.

Conducted aerial surveys to estimate southern Unit 20D wolf populations for 12.4 hours during March-April.

Unit 20E

Activity: Conduct aerial wolf population estimation surveys in southwest, south central, and southeast Unit 20E.

Conducted aerial wolf population estimation in southwest, southcentral, and southeast Unit 20E. Population in Unit 20E was estimated to be stable at approximately 255 animals. However, in <5% of Unit 20E where sterilized wolf packs were being replaced by unsterilized packs, the trend is an increasing number of wolves.

Activity: Monitor radiocollared wolves to determine range use, natality and mortality. Monitored radiocollared wolves to determine range use, natality and mortality. In portions of Unit 20E, sterilized wolf packs are dying off due to old age and being replaced by unsterilized packs.

Units 21B, 21C, 21D

Activity: Conduct aerial wolf population estimation surveys in cooperation with USFWS.

Did not conduct survey, due to poor weather and conflicting Board of Game meeting schedule.

Activity: Encourage participation in the statewide trapper questionnaire when wolf trappers present pelts for sealing.

Mailed approximately 150 trapper questionnaires in combination with Unit 24.

Unit 24

Activity: Conduct aerial wolf population estimation surveys in cooperation with USFWS.

Did not conduct survey, due to poor weather and conflicting Board of Game meeting schedule.

Activity: Encourage participation in the statewide trapper questionnaire when wolf trappers present pelts for sealing.

Mailed approximately 150 trapper questionnaires in combination with Units 21B, 21C, 21D.

Units 25A, 25B, 25D, 26B, and 26C

Activity: Conduct aerial wolf population estimation surveys in Units 25D and 25B.

No wolf surveys were completed because of budget limitations and limitations on availability of aircraft and personnel during late winter.

Other activities funded by Federal Aid on this project:

Units 12 and 20E: Developed a draft predator management plan for wolves.

Stewardship Investment items purchased: None

Total Regional Segment Period Project Costs (in thousands): \$72.1

Submitted by: Doreen Parker McNeill, Assistant Management Coordinator

The Status of Wolf and Factors Influencing Their Populations in Region V

Regionwide Activities

Activity 1: Provide information to the Board of Game on wolf management.

During the November 2003 Board of Game (BOG) meeting, the Department provided information regarding population status of wolf in Units 18, 23, 22, and 26A. We commented on and provided additional information at the board's request on 1 proposal for Unit 18 and 1 proposal for Unit 23. There were no proposals for Units 22 and 26A.

Activity 2: 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 agents throughout villages in each Game Management Unit to collect harvest information through sealing certificates.

Activity 3: Distribute the annual statewide trapper questionnaire to obtain harvest and population assessment information.

A general summary of wolf harvest and abundance in Region V was written for the Trapper Questionnaire annual report. A list of active hunter/trappers was compiled, a cover letter was written, and trapper questionnaires with annual reports were sent from the Juneau office.

Activity 4: Develop updated population objectives in cooperation with the public and other agencies.

We reviewed wolf population objectives internally but did not make progress towards involving the public or other agencies, and therefore we made no changes to the objectives.

Activity 5: Use public communication and education to obtain better harvest data through increased observance of sealing requirements.

We wrote newspaper articles which explained the importance of sealing and harvest reporting and we opportunistically 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.

Unit 18

Activity 1: 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 2003–2004 trapping season. Harvest figures are preliminary, but include at least 90 wolves. The low harvest of 15 wolves recorded on the 2002–2003 sealing certificates was probably the result of poor winter travel conditions and not a conservation concern related to low populations.

Activity 2: Assess population status and trends utilizing sealing records, track surveys, hunter/trapper interviews and questionnaires, and observations by staff and the public.

We analyzed sealing data over several years and determined that the Unit 18 wolf harvest is generally increasing but during years with poor travel conditions the harvest is low and doesn't follow the trend. The wolf population is increasing throughout Unit 18 as prey populations increase and this is corroborated by hunter/trapper interviews, observations by staff and the public, and opportunistic track sightings made during aerial work for other species.

Activity 3: Assess the effects of wolf predation on prey populations through field observations and interviews with hunters/trappers.

Hunters/trappers frequently comment during interviews that wolves are having a negative impact on moose populations and other prey species. However, moose populations continue to grow throughout Unit 18 but the Mulchatna caribou herd is declining. The extend to which wolf predation contributes to the caribou decline is not known.

Activity 4: Provide public education regarding wolves through the media, during public meetings, and other opportunities.

We prepared to teach a wolf trapping clinic in St. Mary's which would have addressed the need to seal furs for harvest reporting, provided an opportunity for trappers to learn effective trapping techniques, and provided instruction regarding wolf biology. However, due to the death of a respected St. Mary's elder, this clinic was cancelled. We also provided wolf education through newspaper articles.

Unit 22

Activity 1: Monitor wolf harvest through the fur sealing program, annual hunter/trapper questionnaires and big game harvest surveys conducted annually in selected villages.

Unit 22 sealing records show a harvest of 24 wolves: 12 from Unit 22A, 7 from Unit 22B, 4 from Unit 22C, 1 from Unit 22D, and 0 from Unit 22E. Community-based harvest assessment surveys completed in St. Michael and Shaktoolik show 2 additional wolves taken in St. Michael, and 15 additional wolves taken in Shaktoolik.

Activity 2: Assess population status and trends utilizing sealing records, hunter/trapper interviews and questionnaires, village harvest surveys and observations by staff and the public.

Wolf densities were highest in Units 22A and eastern 22B, but harvest data and observations by staff and local residents indicate wolves are becoming more numerous in all parts of the unit. Trapper surveys from Units 22A and 22B reported that wolves were common. Large numbers of caribou wintered in the Nulato Hills after an absence during the previous 2 winters. Hunters reported a corresponding increase in the number of wolves in the vicinity of the caribou and known wolf harvest in Unit 22A was more than double last years harvest. Wolf densities appear to be increasing in western Unit 22B, Unit 22C, and in Unit 22D where increasing pack sizes of 6 or more wolves have been reported. The increase in wolves on the Seward Peninsula is probably due to the large number of Western Arctic Herd caribou that have often wintered here since 1996, however there were few on the peninsula during this reporting period.

Activity 3: Cooperate 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, but wolves were not brought up for discussion.

Units 23 and 26A

Activity 1: Monitor wolf harvest through the fur sealing program, annual hunter/trapper questionnaires and big game harvest surveys conducted annually in selected villages.

<u>Unit 23</u>:Harvest data at the time of this report is incomplete: 21 wolves (16 males and 5 females) were reported taken. One wolf was trapped and 20 were shot. Airplanes were used for transportation to take 3 wolves, boats for 4 wolves and snow machines for 14 wolves.

<u>Unit 26</u>A: Sealing certificates indicated that of the thirteen wolves sealed in 2003–2004, eight were males and 5 were females. Two of the wolves were trapped and 11 were shot. Ten wolves were taken by residents of Unit 26A, 2 by non-local residents, and 1 by a non-resident.

Activity 2: Conduct aerial surveys in selected portions of Unit 26A during late winter to assess population status.

<u>Unit 26A</u>: Due to poor snow conditions, a sample unit probability estimate (SUPE) survey was not conducted. Instead, areas of relatively high wolf use, such as river bottoms and ridge tops within the Colville drainage, were flown in a Supercub, totaling 11.5 hours of survey time. No wolves and six sets of old tracks were seen. Between the 6 sets of tracks, at least 11 wolves were thought to be present in the area.

Activity 3: Record wolf sightings during moose censuses in Units 23 and 26A as an indicator of wolf population trends.

<u>Unit 23</u>: Opportunistic observations suggest wolves have re-established breeding populations on the Seward Peninsula of Unit 23. Numbers of wolves have fluctuated locally within the Unit but overall numbers have been generally stable.

<u>Unit 26A</u>: Two wolves were seen during 10.5 hours of moose composition counts along the Colville drainage trend count area in October 2003. During the April 2004 spring moose count in the Colville trend area, no wolves were seen in approximately 10 hours of flying.

Other activities funded by Federal Aid on this project: None

Stewardship Investment items purchased:

None.

Total Regional Segment Period Project Costs (in thousands): \$ 8.6

Submitted by: Peter Bente, Management Coordinator

Statewide Project Costs (in thousands):

 $State \ Share = \$32.04 \ \ Federal \ Share = \$96.11 \qquad Total \ Costs = \128.15