

# **Alaska Residents' Attitudes toward Predator Management Statewide and in Unit 13**

## **Executive Summary**

**Tommy L. Brown and Daniel J. Decker**

**HDRU Series No. 03-4**

**July 2003**

## ACKNOWLEDGMENTS

This study was done for, and greatly facilitated by staff of the Alaska Department of Fish and Game (ADF&G). The support of former Director Wayne Regelin ensured that the study could proceed. Region II supervisor Jeff Hughes and wildlife planner Cynthia Jacobson of the Division of Wildlife Conservation directed the project, oriented the Cornell University researchers to ADF&G and issues in the Unit 13 area, and facilitated an important meeting of selected ADF&G staff in November 2002 to provide further orientation of the study topic to the researchers and to discuss many important aspects of the study. Al Lee, Jerry Lee, Harley McMahon, and John Schoen provided meaningful information and insights in preliminary interviews, and Jerry Lee provided the researchers a flight over a portion of Unit 13. ADF&G staff Matt Robus, Doug Larsen, Howard Golden, David James, Steve Machida, Bob Tobey, Gino Del Frate, Bruce Bartley, Colleen Matt, Mike McDonald, Randy Rogers, Margo Matthews, John Trent, and Rebecca Kelleyhouse provided background information and input to the development of the survey instrument.

Nancy Connelly of the Human Dimensions Research Unit arranged the purchase of the sample from Genesys, Inc., and provided data analysis. Margie Peech provided final formatting of the questionnaire and the final report. Karlene Smith provided data entry. Mailings of the questionnaire and database management in Alaska were handled by ADF&G staff members Steve Schwartz, Teri Arnold, and Heather Ruggirello.

## EXECUTIVE SUMMARY

Unit 13, located in southcentral Alaska, is one of 6 areas where the Alaska Board of Game has adopted a predator control plan to decrease mortality of moose and caribou. In their efforts to develop a workable management plan for Unit 13, the Alaska Department of Fish and Game (ADF&G) initiated a survey of public attitudes toward predator management in the area. The survey included households statewide and in Unit 13. It was developed and analyzed by the Human Dimensions Research Unit at Cornell University and was implemented by ADF&G staff.

A random sample of 1,300 households statewide and 1,300 in the Unit 13 area, based on numbers listed in the white pages of Alaska telephone directories, was surveyed. The questionnaire and up to 3 reminder letters were mailed to the sample in February-March, 2003. Of deliverable questionnaires, 62% were returned from the Unit 13 area and 47% were returned from the statewide stratum. Nonrespondent telephone follow-up interviews of a sample of 50 statewide and 50 Unit 13 area nonrespondents were conducted to determine any differences between respondents and nonrespondents.

A summary of results and implications, organized by the 6 study objectives, follows.

### **Objective 1: Characterize respondents and obtain general measures of (1) general interest in wildlife statewide, and (2) use, interest, and knowledge of Unit 13 wildlife topics.**

Respondents from both the statewide and Unit 13 samples had lived in Alaska for over a quarter century, and few of either group had lived in Alaska 5 years or less. On average, respondents had some post-high school education, and were in their early 50s. Over 40% of respondents statewide and over 60% of Unit 13 area respondents grew up in rural areas or small villages (under 5,000), while others grew up in cities with larger populations. The respondents were predominately male (80%) and Caucasian (85%).

About three-quarters of respondents were “greatly interested” in wildlife. Most (about 80%) read about or watched television programs about wildlife. Half to three-quarters reported they had fed or watched birds, fished or hunted in the past year. Snowmachine and ORV use was also common. Unit 13 was often cited as a location for outdoor and wildlife-related activity. About one-third of respondents belonged to a hunting, trapping, or fishing organization.

Nearly 80% of all respondents indicated interest in Unit 13 wildlife topics and completed this portion of the questionnaire. About 40% of these respondents placed themselves in a high knowledge category (upper half of the scale), based on their self-assessment of knowledge of predator-prey population levels, trends, and relationships in Unit 13 (the survey did not attempt to measure actual knowledge levels).

**Objective 2: Identify the general circumstances under which particular management actions (control strategies) would be acceptable (no geographic area specified).**

Predator control in Alaska has been controversial among Alaskans for decades. Reactions to the 6 situations posed in Questions 4 and 5 (see Appendix A), regarding actions respondents would support given specified impacts of grizzly and wolf predation on moose and caribou populations, indicate that statewide, predator control is still a polarizing issue. However, for most utilitarian reasons suggested in Questions 4 and 5 (hunting by locals for food, hunting by others, negative economic impacts vis-à-vis tourism), “management” of some kind (lethal or nonlethal methods) is supported by most respondents. Lethal methods are supported by most respondents when predators keep prey populations suppressed to a point where locals or nonlocals who “hunt in Unit 13 and rely on big game for food” are unable to find adequate big game there. (However, when adjusting for nonresponse to gain insight about the Alaskan population, only in cases where predators reduce prey populations to the point that there is not enough game for local people who depend on it for a portion of their food supply, would roughly half of all residents support lethal control.) The prominence among Alaskans surveyed of the value of having access to big game for food is codified in law, and certainly supported in these data. Clearly, this set of findings, although focusing on predator control acceptability, supports the observation made above that prey availability for human use is the heart of the issue for many Alaskans.

Public acceptance of predator control has to be described as conditional. In only one of 6 situations did a majority of statewide respondents indicate support for lethal predator control— *when predation reduces prey populations to the point that some local residents who rely on game for food are unable to find moose or caribou to hunt*. A majority of Unit 13 respondents and about half of statewide respondents would support lethal control when Alaskans from other areas who rely on game for food are unable to find moose and caribou to hunt. Thus, the need for moose and caribou for food, with the greatest concern being by local residents, strongly influences support for lethal predator control.

In two situations, the leading choice was to take *no action* to control predators: (1) when predators reduce prey populations available to Alaskans from outside the area who hunt moose or caribou but don’t rely on them for food, and (2) when predation reduces the appeal of the area for moose or caribou hunters to the point that the local economy suffers slightly.

*Non-lethal methods* (sterilization or contraception) usually ranked third (last) in preference. Only in the situation where locals who depend upon moose and caribou for food and could not find enough to hunt did more people select non-lethal control than no action. For this situation, 25% of statewide respondents indicated support for non-lethal control. For all other situations, smaller percentages supported this option.

**Objective 3: Determine the extent to which Alaskans perceive a predator-prey (i.e., wolf/grizzly – caribou/moose) imbalance in Unit 13.**

A large majority of Unit 13 area respondents perceive a predator-prey imbalance. Over 70% believe that caribou populations are too low; 83% indicated that moose populations are too low. On the other hand, over 60% believe that wolf and grizzly populations are too high. Moreover, the majority of statewide and Unit 13 respondents believe that prey populations are declining and predator populations are increasing. Predation, especially by wolves, was believed to be a cause of prey decline. Respondents overwhelmingly wanted moose and caribou numbers to increase. Consistent with this desire, prey populations are widely believed to be below desirable levels for various human benefit considerations.

Despite the obvious concern about predation, the data indicate that the desire to increase prey is stronger than the desire to decrease predators—one could argue that Alaskans' concern is focused more on supply of prey than reduction of predators, *per se*. To the extent this is true, it seems that public deliberations on the predator-prey issue might best be framed primarily in terms of the number of prey animals needed for reasonable availability for human use, not in terms of target numbers of predators to be killed or left remaining in the extant population.

**Objective 4: Identify sources of information supporting Alaskans' perceptions of predator-prey balance or imbalance in Unit 13.**

The primary sources of information on wildlife topics differed significantly for statewide versus Unit 13 respondents. Statewide residents have several important sources, including newspapers, spending time outdoors, television, ADF&G, and family and friends. The vast majority of Unit 13 respondents (nearly 85%), on the other hand, get their wildlife information from the direct experience of spending time outdoors. Information from family and friends, ADF&G, and newspapers are also important sources. Television was important to only one-third of Unit 13 area respondents.

Many respondents, and almost half of those from the Unit 13 area, regard themselves as being quite knowledgeable about the predator-prey situation. We can assume they consider their beliefs and opinions to be well-grounded, in that personal experience outdoors and input from friends and neighbors (also likely to be based in their personal experience) are very important sources of information. These data on source of information and self-assessment of knowledge level complement each other, and indicate the firmness of respondent beliefs about predator-prey topics. Fortunately, ADF&G is a significant source of information for many respondents, and for most within the Unit 13 area. However, in the event that conditions change or biological research produces results counter to the beliefs of most local residents, a two-pronged approach consisting of interpersonal and mass communication likely would be needed to garner local support. A comprehensive effort might include local opinion leaders' involvement in relevant studies, a field demonstration accessible to community members (perhaps "virtually" accessible via remote technology), and complementary newspaper coverage.

**Objective 5: Determine whether a predator-prey imbalance, if perceived to exist, is a concern in Unit 13.**

The data indicate that respondents not only believe a predator-prey imbalance exists in Unit 13, but also that it is a concern warranting attention. This assessment of respondent concern is supported by responses to multiple questions. Two-thirds of respondents indicate moderate to strong concern about predation. Half to two-thirds of respondents want predators to decline and four-fifths want the prey populations to increase. Also, two-thirds to three-quarters of respondents believe prey populations are inadequate to meet human needs in Unit 13. Most respondents attribute the decline in prey to predators. It is remarkable that so many Alaskans (at least respondents) are interested in predator-prey relations in Unit 13, and moreover are significantly concerned about predator-prey imbalance there, especially considering this is true for people who do not reside in or near Unit 13, as well as those from the area.

These findings have implications for ADF&G activity in Unit 13. Although Unit 13 area residents may have a special stake in predator and prey management in the unit, considering this a local or even regional issue, especially if unit-wide action were contemplated, would be too narrow, given the interest of many people across the state. Alaskans from outside the area may well expect to be involved in, or at least have input to, any decision-making processes leading to management of the predators in the unit.

**Objective 6: Identify measures that Alaskans would find acceptable to resolve a predator-prey imbalance in Unit 13.**

Of the population reduction methods inquired about in the survey, respondents favored the use of liberal hunting (for wolves and bears) and trapping (for wolves) seasons by a wide margin. There appears to be enough opposition to ADF&G staff killing predators that the public should be given considerable information about situations leading to ADF&G using its staff to control predators directly, even as a supplement to hunting and trapping seasons for accomplishing reductions in predator populations. Contraception techniques, either permanent or temporary measures, were not well received as a management alternative by respondents. The study did not delve into specific detail about acceptability of the allowable kinds of liberalized hunting or trapping regulations that might be considered. This level of detail likely would require more inquiry and stakeholder input before confidence might be developed in evaluations of one alternative being superior to another with respect to public acceptability.

**Conclusion**

Alaskans have a keen interest in wildlife, and they hold diverse opinions on how predators should be managed. Given the high level of public interest and the complexity of the predator management issue, ADF&G should make every effort possible to involve the public in the decision-making process. Furthermore, this study indicates the existence of considerable public support for predator management that increases availability of caribou and moose for Alaskans in Unit 13 who rely on these big game animals for food. As with any controversial wildlife management issue, the devil will be in the details of designing a particular set of

management strategies, but this study indicates that at least the necessary broad agreement on a fundamental goal of management (i.e., the primary impact or outcome of interest) may be relatively easy to establish.

In Alaska, public acceptability of lethal control of wildlife seems more prevalent than in many other contexts we have examined. However, citizen support does not seem to be overwhelmingly focused on one approach, and here is where the potential for major controversy seems greatest. This situation also presents a strong argument for some type of pilot effort (e.g., geographically limited) to demonstrate, compare and evaluate efficacy and public support of alternative approaches. Considering the strong public interest in this topic, stakeholder input and on-going involvement may be beneficial to inform decision making and monitor relative social acceptability of alternative actions. Such an approach may enhance the possibility of finding an effective and socially sustainable strategy for addressing Alaska's persistent predator-prey management conundrum.