

# **Responsive Management**

Specializing in Survey Research on Natural Resource and Outdoor Recreation Issues

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### Anchorage Residents' Opinions on Bear and Moose Population Levels and Management Strategies

A STUDY CONDUCTED RECENTLY by Responsive Management for the Alaska Department of Fish and Game (ADFG) found that most adults living in Anchorage appreciate, or at least tolerate, wildlife in the state's largest city.

"Anchorage residents understand the challenges of coexisting with large, potentially dangerous wild animals, but they also appreciate the uniqueness," says Rick Sinnott, a state wildlife biologist. "Anchorage is a blueprint for living with wildlife, including bears and wolves, for the rest of the world."

A city of about 290,000 people, Anchorage is surrounded by natural areas. An estimated 250–300 black bears, more than 60 brown bears, 4 wolf packs, and 1,700 moose live in or near the city, according to the ADFG. The survey was conducted a little over a year after three Anchorage residents were mauled by brown bears within the city limits. According to the ADFG, the summer of 2009 was relatively quiet by comparison, with few problems with bears and no maulings in the Anchorage area.

The study was conducted to determine Anchorage residents' opinions on bear and moose populations, problems caused by bear and moose, and the management of these populations in the Anchorage area. The study included a series of preliminary focus groups and a telephone survey of Anchorage area residents who were at least 18 years old.

#### Methodology

Focus groups with Anchorage residents and trail users were conducted in Anchorage, Alaska, in August 2009.

The primary purpose of the focus group research was to help refine survey topics and questions for the telephone survey.

The focus groups were moderated by Mark Damian Duda, Executive Director of Responsive Management. The moderator used discussion guides developed by the ADFG and Responsive Management, which allowed for consistency in the data collection. By using the discussion guide, the moderator kept the discussions within design parameters without exerting a strong influence on the discussion content.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among Anchorage residents. Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost effective. Telephone surveys also have fewer negative effects on the environment than mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires. A central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The telephone survey was conducted in December 2009 and January 2010.

Respondents were classified by where they lived, based on the likelihood of encountering bears in their neighborhood: downtown, midtown, and west Anchorage were in one zone; east Anchorage, the Hillside, and the military bases were in an intermediate



zone; and outlying communities such as Eagle River, Chugiak, Bird, and Girdwood were in the third zone.

### Wildlife Values and Knowledge of Wildlife

The increase in wildlife populations in the Anchorage area is an important wildlife issue to residents, particularly the moose and bear populations. Despite some concern about wildlife populations, Anchorage residents hold generally positive attitudes toward wildlife—a majority (92%) of residents say that wildlife is an important part of their community, and a majority (86%) say that wildlife encounters, despite the possible danger, make life in Anchorage more interesting and special.

Other questions in the survey tested residents' tolerance levels with bears, and a majority (61% for black bears) and nearly half (48% for brown bears) indicate being tolerant to having bears in the Anchorage area. Conversely, about a third (35%) regarding black bears and nearly half (48%) regarding brown bears do not want bears in the Anchorage area. Note that tolerance levels are higher for black bears than they are for brown bears.

The survey also tested tolerance levels regarding moose. While acknowledging that moose cause some problems, the large majority of Anchorage residents (87%) say that encounters with moose make life in Anchorage seem more interesting and special. A further indication of tolerance toward moose is that an overwhelming majority (94%) of Anchorage residents indicate that they have enjoyed watching moose in the Anchorage area in the past 2 years. Residents' self-rated knowledge levels indicate fairly high knowledge about black and brown bears, with a majority (71%) saying that they know a great deal or moderate amount about black bears and a majority (66%) saying the same about brown bears. The leading sources of information about bear and moose among Anchorage residents are (in order of decreasing importance) newspapers (30%), television (25%), the Internet (20%), personal experience (20%), books (15%), and word of mouth (15%).

## Opinions on the Amount of Wildlife in the Anchorage Area

Although residents are generally tolerant of wildlife in the Anchorage area, they do not want the wildlife populations to increase—a large majority want the populations of black bears (58%), brown bears (56%), and moose (63%) to remain the same. However, a substantial number of residents want a decrease in the population of black bears (28%), brown bears (31%), and moose (24%).

The survey explored how often residents actually see black and brown bears in their neighborhoods and how often they would like to see them in their neighborhoods. The most common view among residents regarding black bears is that they see them about as much as they would like to; note, however, that the large majority (61%) never see black bears, and a large majority (60%) never want to see them. However, those who see black bears the most often have the highest tendency to want to see them less often, although not to the degree of saying that they never want to see them. Those who never see black bears are the most likely to say that they never want to see them.

Regarding brown bears, the most common view among residents is that they see them about as much as they would like to see them; note, however, that the large majority (85%) never see brown bears, and a large majority (79%) never want to see them. Among those who see brown bears a few times a year, twofifths (40%) would like to never see them. Indeed, very few people indicated that they want to see brown bears more often.

In a comparison of the two types of bear, black bears are seen more often in residents' neighborhoods than are brown bears, and residents would like to see black bears more often than brown bears.

### **Opinions on Wildlife in Anchorage Parks**

A large majority of Anchorage residents think it is acceptable to have bears (both black and brown) in Far North Bicentennial Park (73% for black bears and 63% for brown bears) and in Chugach State Park (87% for black bears and 82% for brown bears). In comparing the two parks, there is more acceptance about having bears in Chugach State Park than in Far North Bicentennial Park (the latter is closer to downtown Anchorage).

Although residents for the most part think it is acceptable to have bears in Far North Bicentennial Park, majorities nonetheless support legal, regulated hunting of bears to control their populations in the park: 65% (for black bears ) and 66% (for brown bears) support legal, regulated hunting of them. Likewise, although having moose in the Anchorage area is acceptable to most residents, a majority (70%) support legal, regulated hunting of moose to control their population in the Anchorage area, including the large parks.

Another indication of the fairly high level of tolerance toward bears and moose is that the possibility of encountering a black bear, brown bear, or moose has not prevented the overwhelming majority of Anchorage residents from using trails and parks in the Anchorage area—71% (black bear), 64% (brown bear), and 90% (moose) say this. Here, too, brown bears are perceived the most negatively regarding trail and park use.

Regarding trail use, the overwhelming majority of Anchorage residents (89%) support temporarily closing trails at times when the risk of encountering a brown bear is high. Regarding a proposed new or improved trail along a salmon stream where authorities believe the risk of brown bear attacks will be increased with increased trail use, the majority (57%) of residents still favor building the trail, with conditions.

### Negative Interactions and Damage Caused by Wildlife

Residents were asked about problems with black and brown bears in the past 2 years at their primary home, and black bear problems were more common, although very few residents reported problems with either black or brown bears—only about 1 in 20 reported having problems. The specific problems vary by the type of bear. Getting into garbage, entering a home, and damage to ornamental or fruit trees are the leading problems with black bears; building damage (but no entry), getting into garbage, being in the yard, and damage to a parked vehicle are the leading problems with brown bears.

Despite this, the overwhelming majority of residents (88%) agree that most problems with bears in the Anchorage area can be prevented by taking a few simple precautions, such as using bear-proof garbage containers. The large majority of residents (84%) support fines for not storing garbage to prevent problems with bears, and the overwhelming majority (85%) support a regulation or ordinance to require Anchorage area residents to use bear-proof garbage containers in neighborhoods frequented by bears. The large majority of residents (71%) also support paying more for their trash service if the city of Anchorage were to provide bear-proof garbage containers.



### **Opinions on Wildlife Management Options**

Opinions on management options for bears and moose indicate that Anchorage residents are tolerant of wildlife. A majority of Anchorage residents oppose having wildlife authorities destroy some black or brown bears in Anchorage every year to reduce the population (54% oppose regarding black bears, and 53% oppose regarding brown bears), and a majority (63%) oppose having wildlife authorities destroy some moose in Anchorage every year to reduce the population.

This should not be taken to mean that there are not situations in which Anchorage residents would support killing bears, however. A large majority (83%) support having wildlife authorities destroy specific bears at their discretion when the bears pose a threat to human safety, and a slight majority (53%) support having wildlife authorities kill bears at their discretion that cause property damage. Residents are split over killing bears that get into garbage (46% support, and 48% oppose), and support for (35%) is exceeded by opposition to (56%) killing bears that are seen frequently in neighborhoods. Indeed, in most residents' view, just being seen is not cause to kill bears, because a majority of Anchorage residents (60%) oppose designating specific areas in Anchorage where any bears coming into the area would be killed. Regarding the interaction between bears and moose, there is much more opposition to (68%) than support for (23%) reducing the moose population (a food source for bears) in Anchorage to reduce the number of brown bears.



The full telephone survey report, including results comparing different regions of the city, trail use, park use, and trends based on an earlier study, is available here. A report of the focus group results is available here. A printable version of this article is available here.

### More Studies on Attitudes Toward Bears Conducted by Responsive Management

The Public and Grizzly Bear Reintroduction in the Bitterroot Mountains of Central Idaho (1995) New Hampshire Residents' Opinions on and Attitudes Toward Deer, Moose and Bear in New Hampshire (1995) Washington Residents' Opinions on Grizzly Bear Recovery in the North Cascades Mountains (1996)

> Public Opinion on and Attitudes Toward Reintroducing Grizzly Bears to the Selway-Bitterroot Wilderness Area of Idaho and Montana (1997)

> Public Attitudes Toward Grizzly Bear Management in Wyoming (2001)

Public Attitudes Toward Black Bear Management in Maryland (2004)

New Hampshire Residents' and Hunters' Opinions on the Status and Management of Big Game Populations (2004)

West Virginia Residents' Opinions on Black Bears and Black Bear Hunting (2006)

Public Opinion and Knowledge Survey Regarding Grizzly Bears in the Cabinet-Yaak Ecosystem (2008)

Pennsylvania Residents' Opinions on and Attitudes Toward Black Bears (2008)

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