

Black Bears & Public Opinion

A Summary of Other States' Lessons Learned

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The following summarizes studies of human attitudes about black bears.

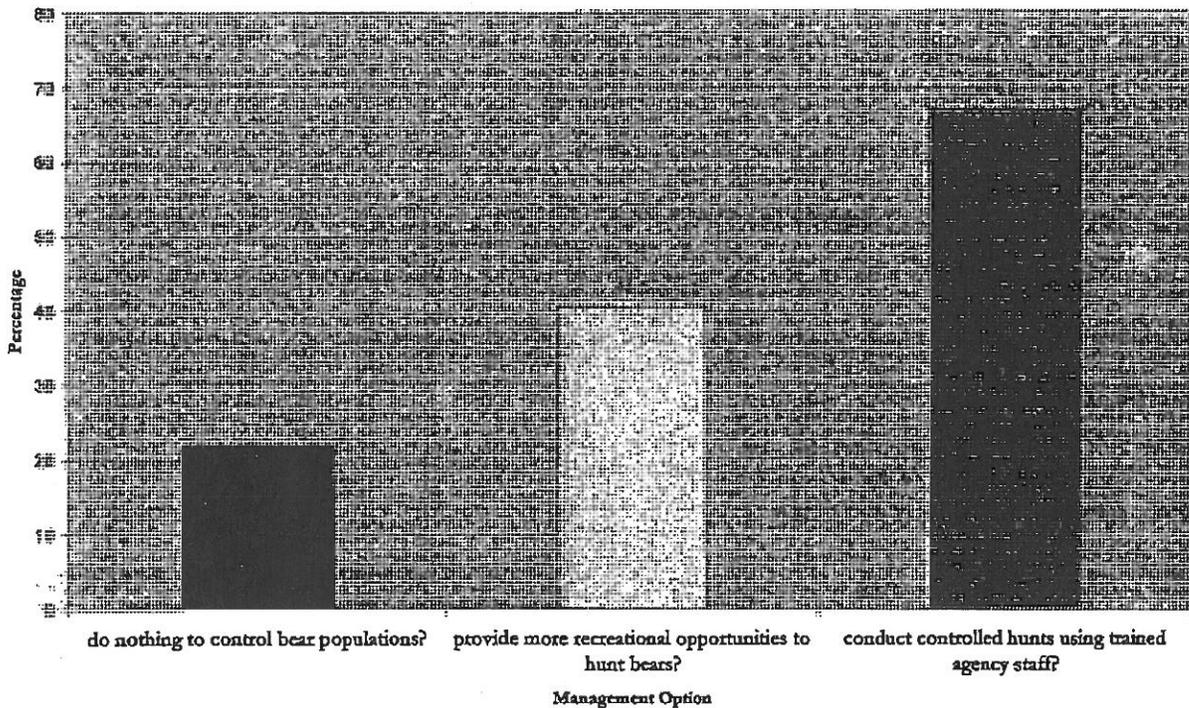
Wildlife Values in the West, Colorado State University, 2005

One of the objectives of this study was to determine public attitudes toward population-level management techniques to address human-wildlife conflict. Two conflict situations for black bears were presented in which the severity of the situation increased from nuisance to safety threat.

The results below are from a representative sample of Nevada citizens. *Note that the fact that a bear hunt would minimally affect Nevada's nuisance bear population was not taken into account.*

“Bears are wandering into areas where humans live in search of food. Bears are getting into trash and pet food containers. Is it acceptable or unacceptable to...”

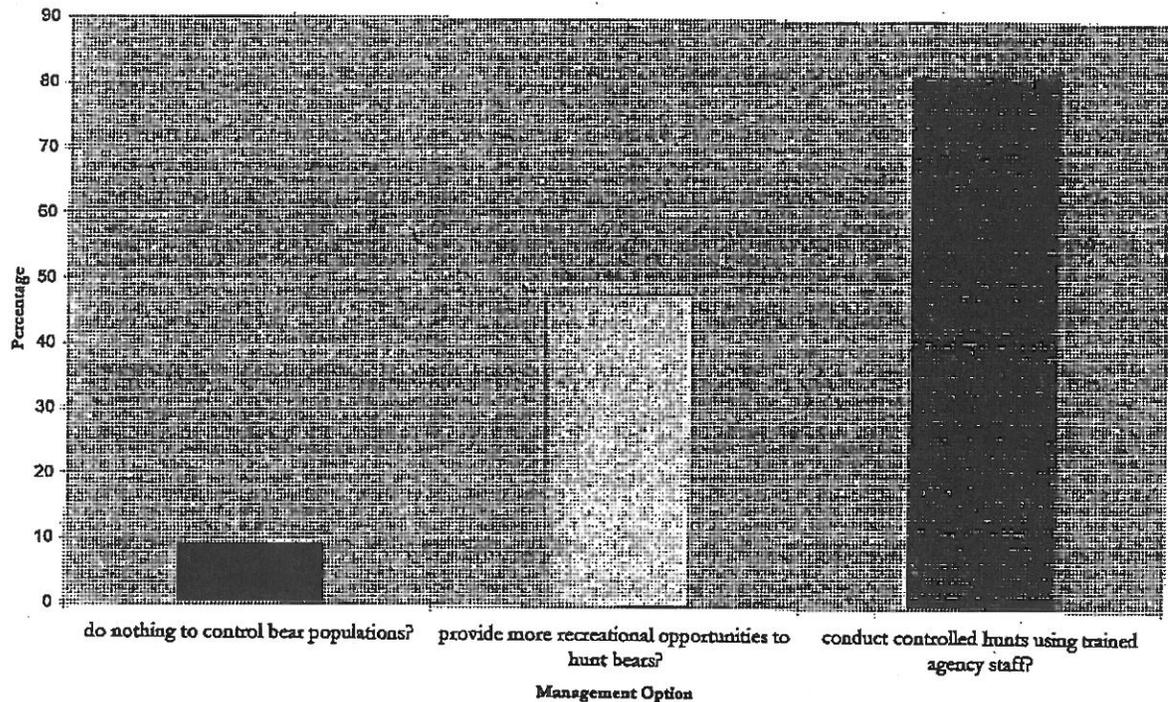
Scenario 1 No Threat to Human Safety



(Answers are not mutually exclusive, meaning than a respondent may find more than one action acceptable.)

“Bears are wandering into areas where humans live in search of food. Human deaths from bear attacks have occurred. Is it acceptable or unacceptable to...”

Scenario 2 - Human Deaths from Bear Attacks Have Occurred



(Answers are not mutually exclusive, meaning than a respondent may find more than one action acceptable.)

Note that public opinion prefers the agency removes bears using trained staff or sharpshooters.

Nuisance Bears in Communities: Strategies to Reduce Conflict, U.S. Geological Survey-Biological Resources Division & The University of Tennessee, 2001

The research reported in this paper is a review of policies dealing with human-bear conflicts within selected communities and analysis of the dynamics leading to their adoption.

This article addresses various policy frameworks. It highlights the *valuational forces* influencing wildlife policy concerning nuisance bears. Valuational forces, in this case, means the worth people ascribe to bears and can include economic, ecological, and social-psychological benefits – and are extremely varied and usually invoke strong emotions. The black bear is a very charismatic species. Invariably, conflicted values are at play as community policy concerning nuisance bears is debated and formulated. Aesthetic, spiritual, ecological, ethical, and utilitarian values are all represented among constituency groups. Hunters want to harvest the animals for sport, trophy, meat, and/or pelt. Catching a glimpse of a bear is a

trip highlight for tourists. Native Americans associate the animals with spiritual deities. Scientists and conservationists want bears in the environment to play their role in ecological processes. Bears are symbols of identity of place for communities and schools. Local residents see the bears as part of the aesthetic landscape but also as a threat to inflict personal injury and property damage. Community officials are concerned about liability from bear-inflicted injuries.

Case Studies

Juneau, Alaska

Due to topography and its economy, there are few areas of human habitation lying more than one-quarter mile from occupied bear habitat in this study area. The evolution of wildlife policy and programs concerning nuisance bears in Juneau took four years from initiation of research through initial implementation, evaluation, and revision before finalization.

Investigation of Juneau's problem began with estimations of population densities of black bears in nearby forested areas. Bear activity in the urban setting was associated with unnatural food conditioning. Behavioral conditioning was used, resulting in 43% of the treated bears abandoning the treatment site.

Although residents consider human-bear conflict an accepted consequence of living in bear habitat, in 1987 the number on incidences was particularly high. Nearly 300 complaints of nuisance bears were recorded and 14 bears were killed.

Media coverage of the killings led to public demands for nonlethal solutions to the bear problem. In response to these events, concerned non-Alaskans with protectionist views threatened to demonstrate at the southern disembarking terminals of Juneau-bound cruise ships, a major contribution to the community's tourist-based economy. Thus, human values of environmental stewardship by nonresident environmentalists and community economic development interests were both major factors.

The city government established guidelines for the storage and collection of refuse. It did not require residents to use bear-proof garbage containers but provided guidelines on tightness of lids and cleanliness of containers. The ordinance was followed by a major public education campaign.

Even though garbage handling improved, the ordinance failed to functionally limit unnatural food availability to bears. Voluntary compliance was not widespread, and there was no enforcement. Researchers concluded that the primary limitation was that the ordinance did not require the use of bear-proof containers.

A second incidence peak occurred in 1991 resulting in 587 complaints and 15 bears killed. Two humans were injured in separate incidences. A deliberation concerning adoption of new ordinances was lengthy and contentious, and achievement of the goal to reduce the availability of unnatural food was ultimately obtained through education, leading to public acceptance of a new ordinance requiring the use of bear-proof garbage containers.

Successful implementation of the policy was largely due to an educational program that heightened awareness about bears in the community.

Mammoth Lakes, California

Beginning in 1996, the town of Mammoth Lakes began to take aggressive action to mitigate the problem of nuisance bears. Human values were again described as key motivators.

Generations of bears were coming into town foraging for garbage. The community passed an ordinance banning the feeding and hunting of wildlife in the city limits and provided for procedures for dealing with nuisance wildlife. A misdemeanor or infraction can be punishable by up to 6 months in jail and a \$500 fine. The town provides bear-proof dumpsters to commercial businesses and the ordinance requires residential garbage be kept indoors until the day of pickup. The city's police chief indicated that citizens in the community have a strong environmental ethic and want no harm to come to the bears.

Additionally, aversive conditioning is practiced very aggressively in this community by the police department. The process of formulating the wildlife policy was highly influenced by an individual acting in concert with local law enforcement and state wildlife management officials.

West Yellowstone, Montana

A comprehensive garbage disposal ordinance had the human values for public safety and protection of property behind it. The ordinance defines "food" to include "any food material or attractants to bears such as human, livestock carrion, game meat in the possession of man, other edibles and/or garbage..." The ordinance prohibits the feeding, approaching, and the harassing of bears and knowingly or negligently making food available to bears.

The chief of police is designated to approve garbage containers, organize garbage collection and to assess penalties. The maximum fine is \$500 and/or 3 days in jail.

Over a 13-year period (as of the article's writing) the ordinance has been consistently enforced. It is the most comprehensive community ordinance designed to minimize the potential for human-bear interaction of any kind and should serve as a model for other communities.

Gatlinburg, Tennessee

The history of efforts to deal with nuisance bears in Gatlinburg reveals the complex interrelationship of forces influencing policy formation. For over 25 years, unnatural-food-conditioned bears had routinely entered the community. Such activity was tolerated by the community in spite of long-term pressure to deal with the problem by officials representing the National Park Service and the state wildlife agency. Human-bear conflicts increased dramatically in the early 1990s due to rapid growth of the bear population following several

years of abundant natural-food sources, and again in 1997 when climactic changes sent a large number of bears ranging outside of the national park boundary seeking food.

For a long period of time, Gatlinburg had been the primary place to hunt bears. Also, it is legal to bait bears in Tennessee up to 10 days prior to and during the hunting season. This practice remains a contributing factor to the problem.

Conflicting human values came into the forefront in 1997 and 1998 when there was an abundance of free-ranging bears outside the national park and a high bear harvest occurred during the peak fall tourist season. Legal harvest and the killing of nuisance bears, both of which were occurring within the city limits and within the park, raised national media attention.

The media was quite negative concerning the lack of an effective city policy to address the problem. Negative publicity clearly influenced the process to formulate community policy concerning securing refuse from the bears.

A task force convened in 1989, and a second one in 1997 to study the problem. Nine years after the original task force was established, Gatlinburg adopted new ordinances requiring the use of animal-resistant garbage containers in sections of the city and by all restaurants, plus a \$500 fine for violations.

The city received a grant of \$75,000 from the state to supplement the purchase of bear-proof containers for those unable to afford them.

It was reported that as the policy was being debated, some business owners would not comply until they were required to because panhandling bears attract customers. The desire to ban hunting within the city limits requires concurrence with the Tennessee Wildlife Resources Agency, and that issue remains under consideration (as of the writing of this article).

2002 New York State Black Bear Management Survey, Cornell University, 2003

The Bureau of Wildlife in the New York State Department of Environmental Conservation made stakeholder engagement the cornerstone of its new planning framework, and stakeholder engagement will continue as the key feature of their black bear management program. Stakeholders include people with an interest or concern about black bears, and people who can affect or are affected by the black bear management program.

Part of the situation analysis included a mail survey of state residents. Staff at Cornell University's Human Dimensions Research Unit worked closely with DEC staff to design the study. The objectives of the survey were to determine:

1. Characterize stakeholder experiences with black bears.
2. Identify important effects produced by interactions between people and black bears and differences in personal importance people place on those effects.
3. Identify factors that influence public perceptions of risk related to black bears.
4. Characterize people's tolerance for interactions with black bears.

5. Assess stakeholder attitudes about management response to individual bears in problem situations.

Highlights of the results include that 90% of respondents regarded an encounter with a black bear as a positive experience. Negative interactions with black bears were uncommon.

Several different study results suggest that most survey respondents held positive attitudes towards bears. However, the results also suggest that, for many people, those attitudes are based on little direct experience or knowledge about bears. In all geographic areas about 80% of respondents agreed with the statement "the risk of being threatened of attacked by a black bear in New York is acceptably low."

The new framework for bear management will emphasize managing impacts within levels acceptable to a range of stakeholders, including ecological, economic, psychological, social, and those effects produced by management action.

Responses to questions on management actions provided broad insight that can improve communication with stakeholders. When human safety is not an issue, most respondents (80%) supported or strongly supported DEC staff informing people how to remove bear attractants and leaving the bear alone. As well, aversive conditioning and relocation were supported by a majority of respondents. The practice of euthanizing bears in cases where human safety is threatened or when negative conditioning has failed to cause a behavior change was opposed by over half the respondents (66%). About half (49%) supported the use of hunting seasons as a means to address problems with individual bears by reducing the size of the black bear population.

Utah stakeholders' attitudes toward selected cougar and black bear management practices, Wildlife Society Bulletin 2002

This study examined Utahns' attitudes toward use of recreational hunting to manage black bears and cougars, the use of hounds to hunt these species, and the use of bear baiting. Most residents disapproved of the black bear management practices examined. This study used comparisons among various stakeholder groups (for example, hunters and non-consumptive users) who may feel differently about wildlife issues based on their patterns of involvement in wildlife-related activities.

Predator management variables – representing attitudes toward hunting and various practices, we measured using a 0 to 10 intensity scale. Zero represented strong disapproval and 10 represented strong approval. It is important to note that responses to most predator management items formed a bimodal distribution. In other words, large percentages of respondents selected values at the extreme ends of the 0-10 scale. This suggests that an interpretation of the results based solely on mean levels of response would be unwise.

Practice	Stakeholder Group									
	Hunters		Anglers		Non-consumptive users		Non-participants with high interest in wildlife		Non-participants with low interest in wildlife	
	% A	% D	% A	% D	% A	% D	% A	% D	% A	% D
Bear hunting	57	25	23	62	22	63	24	65	30	50
Using hounds to hunt bears	44	48	16	71	9	80	19	74	12	72
Bear baiting	22	64	11	78	6	83	12	73	10	75

The above chart shows approval/disapproval for select bear management questions by stakeholder group. A = approval, representing the selection of a value greater than 5.0 and D = disapproval, representing a selection of a value less than 5.0 on the response scale.

In addition to the above, the study examined various theoretical relationships that might aid in building a model to predict attitudes towards management practices, including geographic location, gender, age, educational attainment, and duration of residence in the state.

The implications for wildlife management include that policy makers should not ignore the fact that a large percentage of Utah's population appears to disapprove of many traditional forms of predator management. Findings suggest that the steadily emerging "protectionist" paradigm exemplified in the wave of ballot initiatives banning such practices as bear baiting across the nation may not only be firmly established now in the general population of Utah but may even be present among hunters and other traditionally supportive groups.

This may indicate a need to revise existing policy or incorporate such public sentiments into future predator management policy decisions to avoid the risk of unsuccessful implementation of practices like those outlined in this study. In other words, because the success of many traditional wildlife management strategies is increasingly based on public approval, it is risky for wildlife resource agencies to ignore public sentiment, particularly when it is expressed in the form of opposition. While this is not to say that approval should be the driving force in the selection of appropriate management strategies, it is something that must be considered along with such aspects as technique effectiveness, cost, etc.

The following summarizes management strategies involving black bears.

A framework for black bear management in New York, October 2003

This paper presents a framework for making decisions about black bear management that will produce a more adaptive and responsive management program. At its cornerstone is the following definition of wildlife management:

"Wildlife management is the guidance of decision-making processes and the implementation of practices to purposefully influence interactions among and between people, wildlife, and habitats to achieve impacts valued by stakeholders."

Managing to achieve human benefits – taking action to achieve more or less of the impacts people care about – in a fundamental objective of wildlife management. The new planning framework for bear management puts this principle into practice by answering three guiding questions:

1. What are the impacts that concern black bear management stakeholders?
2. Is the black bear management program focused on the impacts that matter most to stakeholders?
3. Is the management program designed to emphasize management activities that will have the greatest influence on increasing positive impacts and reducing negative impacts?

Stakeholder engagement, as carried out by DEC, implies more than talking to organized interest groups and the general public about black bear management (i.e., one-way communication from the agency to the general public). It is even more than seeking informal and formal input (e.g., public meetings and scientific public surveys). Stakeholder engagement includes such elements, but as part of an on-going management program engagement also refers to both transactional and co-management relationships among stakeholders and between them and DEC bear managers. DEC will create forums for dialogue and deliberation among stakeholders to sort out the relative importance of various impacts, assess stakeholder perceptions of advantages and disadvantages of various candidate management interventions, etc.

Creating opportunities for such transactional activities has been a hallmark of DEC deer management for over a decade. And DEC also recognizes the potential for stakeholders of various types (other agencies, non-governmental organizations, local governments, grass roots groups, individual landowners, etc.) to play a role in co-management of wildlife, given a broad view of management intervention possibilities. The same, inclusive philosophical perspective will guide DEC's black bear management program, where the management interventions to achieve objectives may take many forms and involve an array of partners.

An Assessment of Black Bear Impacts in New York, June 2006

This report presents the stakeholder input group process and findings, and their implications for black bear management. Several researchers have reported that well-designed processes for citizen participation in natural resource management can contribute to better decisions by increasing stakeholder knowledge and by improving stakeholder attitudes toward other people and management agencies. The overall engagement process required wildlife managers and stakeholder input group participants to make more thoughtful means-end connection than they might have if no engagement process had been used. That contributed to learning outcomes that may translate into better, more durable bear management decisions in the future.

The overall engagement process also prompted wildlife managers to think more rigorously about means-ends connections that may have been assumed for many years without much critical reflection.

In this study numerous impacts were identified, along with their associated fundamental management objectives. This report contains many charts simplifying the "ends-means matrix" to address several outcomes, including actions directed at bears and actions directed at people.

This multi-step, recursive process led to a number of positive outcomes for the management agency and wildlife management stakeholders. The information has been used to support agency decisions that led to a package of proposed bear hunting regulation changes.

Following this summary are copies of the full studies from which it was excerpted, and an address presented by Steve Williams, President of the Wildlife Management Institute at WAFWA in July 2006.