

KNOWLEDGE BASE



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Predator Control? It Depends

Last week at the annual convention of the British Columbia Wildlife Federation I wrote down a nugget from the keynote speaker, a person with vast experience in natural resources policy and management:

“It depends” is an acceptable response. Those words certainly ring true for the controversial business of predator control, the subject of The Wildlife Society’s latest technical review (#12-01, March 2012). From time to time, the incumbent president of The Wildlife Society (TWS) will appoint an ad hoc committee of experts to complete a thorough review of the scientific literature on a selected conservation issue. Often the technical review lays the scientific groundwork for TWS to issue a position statement on that issue. A few years ago an ad hoc committee was formed to review the scientific literature on the management of large mammalian carnivores in North America. It was chaired by Dr. Jim Peek, who served many years as a B&C Professional Member, and included nine other members from the U.S. and Canada. A much larger body of experts provided information and comments for the final product.

Why was this topic selected for review? In part it reflected some TWS members’ concern about the escalation of predator control in Alaska under the state’s intensive wildlife management strategy. But the issue is much larger, involving many jurisdictions in the U.S. and Canada and new problems such as predator conflicts in the urban interface and the spread of wolves beyond the public lands where they have been reintroduced. The committee boldly accepted the challenge in its full breadth: all large mammalian carnivore species, wherever they occur in the U.S. and Canada, and all aspects of the management issue.

The document notes that research on large mammalian predators began to pick up steam in the 1960s and ‘70s. Iconic studies of that time include the Craighead brothers’ grizzly bear research in Yellowstone National Park, Maurice Hornocker’s investigations of

mountain lions in the central Idaho wilderness, and the famous study of wolves and moose on Isle Royale, supported for many years by the Boone and Crockett Club. Most studies occurred in national parks or wilderness areas, for a couple of reasons. For one thing, large predators had been reduced or eliminated from most other areas, at least on the U.S. side of the border. And second,

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the scientists were mainly interested in studying predator-prey dynamics in natural systems, hoping to inform the long-standing debate on whether prey populations are limited by predation. The research emphasis shifted following passage of the U.S. Endangered Species Act and the subsequent listing of the wolf in 1974 and grizzly bear in 1975. Because the management objective was to increase populations and restore them to areas of former range, research focused on the feasibility of reintroductions and on follow-up studies to evaluate the results. Yet another shift occurred following the success of restoration efforts, and in response to the increased incidence of conflict stemming from human sprawl into areas occupied by predators. Today, managing predator populations “at levels compatible with other needs and values” is a challenge for scientists and managers alike.

Determining those “needs and values” is an important part of the research purview. That’s why the technical review includes a major section on research addressing human attitudes toward predators. It summarizes what is known about the differences in attitude among socio-demographic groups (who loves predators, who hates them, people’s tolerance for coexisting with predators, whether they support management, and so on). Next, the document provides a case-by-case, species-by-species review on the dynamics of predation in relation to prey populations. This is followed by a similar, case-by-case scientific review of predator

management programs in different parts of the U.S. and Canada.

Many readers of the technical review may be hoping for answers to two key questions: Does the science allow us to conclude that predators have a limiting effect on prey, thus reducing the supply of big game animals available for hunting? Can predator control programs that seek to increase ungulate populations be justified on a scientific basis? The answers to both are the same: It depends. It depends on the biology of the species and the particular predator population of interest. It depends on the biology and condition of the prey populations in question. It depends on the availability and condition of habitat. It depends on the quality of the predator control program: whether it is based on scientific information including a solid

analysis of predation pressure, or just on a simplistic notion that fewer predators equals more prey for hunters. It also depends on the human side of the equation: people’s attitudes about the predator-prey system in question, whether they are affected economically, and their views on the “right” balance between predators and other values.

The document offers general recommendations that should be helpful to managers and policymakers, regardless of the species or predator control situation they are dealing with. One concluding remark of the technical review should be taken to heart. It relates to the fact that we now have conflicts involving large predators, because we now have an abundance of these animals in many places. As stated by the authors, “...this review suggests that large mammalian predators have made a remarkable comeback from the lows of the early 20th century and that a large share of the North American public tolerates their presence and realizes that management at some level is at times necessary.” ■

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