

The New Jersey Chapter of the Sierra Club

Critique and Recommendations: New Jersey's Black Bear Management Program

August 2003

The years 2002-2003 have seen heightened activity by the State of New Jersey in black bear management. This included a series of public hearings, and a recreational hunt proposed and approved by the Fish and Game Council, slated for December 2003. Based on this increased activity, the New Jersey Chapter of the Sierra Club felt that it was time to review the Chapter's previous black bear management policy statement. To accomplish this goal, the Chapter reviewed all of the Division of Fish, Game, and Wildlife's black bear reports, particularly focusing on the Division's 1997 Black Bear Management Plan. Chapter members had numerous discussions with Division personnel. The Chapter also reviewed the New Jersey Independent Bear Panel Report, issued March 2003 to New Jersey Department of Environmental Protection Commissioner Campbell, at his request. Based on these reviews, the Chapter has identified three main issues of concern in the State's black bear management program, as described below.

(A) The Division of Fish, Game, and Wildlife's *Black Bear Management Plan* (1997) lacks a fundamental habitat conservation component.

There is very little discussion of prime habitat conservation in the Plan and its relation to an ideal density, or sustainable population, as an ultimate management goal.

The Chapter recognizes the significant increase in the bear population since its low point in the 1970's, without a formal habitat conservation plan in place. However, as the most densely populated state in the United States, New Jersey's prime bear habitat counties in the Highlands are rapidly being infringed upon with development. As the Highlands region is allowed to become further fragmented and developed, the encroaching human population will be less and less tolerant. Without more aggressive and innovative educational work by the Division of Fish, Game, and Wildlife (as discussed below), cultural carrying capacity will continue to drop, and the Division, under the direction of the Fish and Game Council, is likely to opt for lethal reductions.

Instead, it is time for the Division of Fish, Game, and Wildlife to take a pro-active position, treating the black bear as an umbrella Highlands species worthy of habitat preservation. Bear habitat should become a top-ranking non-endangered wildlife state criterion for open space planning. Highlands black bear preservation core areas with migratory corridors to New York, Pennsylvania, within the Highlands, and to the Pinelands should be identified and protected as soon as possible, if the State of New Jersey expects to maintain a sustainable and genetically healthy black bear population into the foreseeable future.

Also, this preservation core should take into account the development of infrastructure to facilitate bear dispersal.

There is every indication that the citizens of New Jersey view the black bear as a valuable natural resource, as a special "wild" part of their state, as stated in the Division's 1997 Black Bear Management Plan (p. 73). There is only one way to ensure a sustainable black bear population for the future, and that is via habitat preservation now. A public question on the ballot this November to refinance bonds for open space preservation will earmark \$75 million additional dollars for Highlands preservation. This funding could jump-start this effort.

The Division should immediately follow its own recommendation in the 1997 *Black Bear Management Plan* to determine the biological carrying capacity and cultural carrying capacity for a re-introduced black bear population in the New Jersey Pine Barrens. Black bears were once native to the Pine Barrens, and this largest remaining wilderness area within New Jersey's borders could ensure the future survival of the black bear in the state.

Summary of Habitat Protection Recommendations:

1. Identify and protect existing "wild" habitat/foraging sites.
2. Identify and restore developed areas infringing and within prime forage areas. Property should be purchased via a "Bear Acres" program.
3. Identify and protect existing greenways and corridors.
4. Identify and restore developed areas infringing and fragmenting greenways and corridors. Property should be purchased via a "Bear Acres" program.
5. Work with our neighboring states of New York and Pennsylvania to identify and protect interstate greenways and corridors, absolutely necessary to maintain genetic health and viability.
6. Identify and protect a greenway linking the Pinelands and the Highlands.
7. After consultation with the Highlands Coalition, the Chapter will provide the Division with a recommended list of sites for bear habitat preservation.

(B) The Division of Fish, Game, and Wildlife's black bear management program should promote innovative educational and outreach methods to reduce nuisance incidents and human inflation of the forage base.

As the 1997 *Black Bear Management Plan* states, "Habitat and related nutritional factors are assumed to be the ultimate factors operating to control black bear populations" (p.108). It is assumed that black bear populations self-regulate according to the forage base. Commercial and residential unsecured garbage, illegal bear feeding, and bird feeders all promote expansion of black bears into suburban areas following the human-associated forage opportunities, potentially supporting population increases dependent on that human-associated forage base. The movement into suburban areas is also accompanied by bear habituation to humans and increases in nuisance reports. Reduction of the human-associated forage base is the only effective method on a long-term basis to reduce the nuisance incidents.

The Division should focus on bear-proofing methods throughout the suburban areas surrounding prime bear habitat (primarily Morris, Passaic, Sussex, and Warren counties). While it is true that the Division has expended significant resources in bear education, the Division's educational approach includes a broad array of topics which do not achieve actual bear-proofing of vulnerable areas. A combination of: (a) aggressive enforcement of the bear feeding ban; (b) aggressive promotion of bear-proof residential garbage cans and commercial dumpsters; and (c) elimination of bird feeders during prime bear season; are the only reliable methods to achieve long-lasting reduction of nuisance incidents, as has been documented in many areas throughout the United States. To develop methods to effectively communicate and promote bear-proofing in prime bear habitat, the Division should engage a broad-based and balanced stakeholder committee for all future bear management activities. This is recommended in the Division's 1997 *Black Bear Management Plan*. Members of such a committee will assist the Division in communication and outreach.

Budget cuts to the Division and elimination of the Bear Wardens have also resulted in inadequate black bear management efforts in bear-proofing and aversive conditioning. Funding allocations should not determine State wildlife policies. The State should provide full funding to the Division to implement adequate black bear management techniques.

Additional specific educational recommendations for the Division are as follows:

The Division should promote the use of bear pepper spray as a deterrent for residents and hikers to use, available to the public at local stores and via the Internet. Studies conducted at the University of Calgary by grizzly bear expert Stephen Herrero

demonstrated 94% effectiveness of bear pepper spray in deterring aggressive grizzly bears in close encounters.

There are numerous methods of targeted outreach for the Division and stakeholder committee to consider and implement. Methods include mailers targeted to prime bear county residences specifying the elimination of attractants, including acquiring and using bear-proof garbage containers; presentations to municipal officials, local police departments and the local business community stressing enforcement of the bear feeding ban and the correct use of bear-proof commercial dumpsters; use of public service announcements (which are free) through the local cable affiliates; and the use of local newspapers to promote bear-proofing methods, through both articles and advertisements.

The State, counties, and/or municipalities should consider passing laws in New Jersey's northern black bear habitat to require bear-proof garbage containers or no garbage cans placed outside at night, with fines associated with these violations.

(C) Is the State-approved 2003 bear hunt based on sound management principles?

One of the Sierra Club's highest concerns is the conservation of habitat and the protection of biodiversity. Proper utilization of sport hunting as a management tool requires harvest targets that are derived from reasonably accurate population estimates. On the particular issue of New Jersey's 2003 bear hunt, the Division of Fish, Game, and Wildlife's black bear population estimates appear to be too uncertain to justify establishing a harvest goal for a sustainable, recreational hunt. Without a reliable harvest goal, the Division cannot establish the number of hunt permits required for a sustainable harvest.

Commissioner Campbell held a series of public hearings regarding the State's black bear management program in the fall of 2003. He concluded from those hearings that the public believed the Division of Fish, Game, and Wildlife's black bear population estimates to be questionable. He therefore appointed an independent peer review panel in February 2003. The charge of the panel was to review the methodology of the New Jersey Fish and Wildlife's bear population estimates, to determine if the panel could reach a consensus on population census methodologies and the number of bears in northern New Jersey. The outcome of the panel was the issuance of a March 6, 2003 report summarizing the panel's recommendations to the Commissioner, entitled *New Jersey Independent Bear Panel Report*. This report stated:

"The panel was not able to reach a consensus on whether the Fish and Wildlife population estimate could be relied upon. Some panelists felt that the approach and assumptions were reasonable. Others felt that the concerns with the approach and assumptions were too significant to accept the estimate without further inquiry. The statistical experts also split on the issue of reliability."

The panel's conclusions do not inspire great confidence in the Division of Fish, Game, and Wildlife's black bear population estimates. In fact, in a subsequent letter to the Fish and Game Council prior to their vote on the 2003 recreational hunt, Commissioner Campbell specifically warned the Council that the Division's population estimates were uncertain.

The *New Jersey Independent Bear Panel Report* contains a section entitled Individual Comments of Panelists, which includes Dr. Lynn Rogers' critique of *Estimation of Population Size of Black Bears in Northern New Jersey, 2003*, Carr, PC and K Burgess, New Jersey Division of Fish, Game, and Wildlife. This critique raises a series of compelling and detailed technical questions regarding the Division's population estimate methodology, which create serious doubts concerning the reliability of the Division's methodology. In all fairness to the public and to the Commissioner's appointed peer review panel, the Division must provide an adequate response to these technical concerns, prior to establishing a target harvest goal. The Division must also be concerned regarding the public perception of their scientific integrity.

Dr. Allan Rutberg in the panel report's Individual Comments of Panelists section recommended the following: "New Jersey must structure a system that permits local authorities to condition bears as perhaps the quickest route to conflict reduction." He noted that the key to effective aversive conditioning is for local law enforcement officers to be capable of responding at the point in time when the bear is behaving inappropriately, indicating that New Jersey currently does not have that capability. He noted that conducting aversive conditioning once a bear is treed or re-entering the woods actually results in associating correct behavior with punishment. This is a very serious point. If the Division's aversive conditioning efforts are, in fact, not timed correctly because local authorities are not trained to conduct the conditioning, the implication is that the "conditioning" will be ineffective. The Division must respond to this concern.

To our knowledge, the Division has not formally responded to the *New Jersey Independent Bear Panel Report*. This is irregular; typically, peer reviews of scientific studies require responses from the authors. If Commissioner Campbell omitted this requirement, it is an oversight that should be corrected immediately.

Finally, the Division and state officials, including the Governor, must make clear distinctions for the public's benefit. A black bear recreational hunt, as it is clearly defined in the 2003

Game Code, must not be justified in public statements from state government officials as ensuring public safety and reductions in nuisance incidents. There is no data from any state indicating significant decreases in nuisance incidents associated with sustainable, recreational hunting. Suggesting otherwise to the public is misleading and irresponsible. This also brings the credibility of the Division and state government into question.

Summary

It is the Chapter's position that, in this era of rapidly dwindling natural areas in the State of New Jersey, it is imperative to establish and preserve core bear habitat and migratory corridors, both intra- and interstate. Focusing only on our recent gains in the black bear population is shortsighted. Future viability of the black bear population requires identification and preservation of key areas now, especially areas that may not currently be completely protected from future development.

It is the Chapter's position that reduction of the human-associated forage base is the only effective method on a long-term basis to reduce human-bear nuisance incidents. A recreational hunt, as planned for December 2003, cannot be represented as serving this function, as there is no data supporting this contention. The Division must focus educational and outreach efforts to essentially bear-proof bear country, and the bear feeding ban must be aggressively enforced.

There is much controversy surrounding the Division of Fish, Game, and Wildlife's black bear population estimate, which is the basis for the number of hunt permits to be provided for the state-approved December 2003 recreational bear hunt. The independent peer review panel convened by Commissioner Campbell in February 2003 could not reach consensus on whether the Division's population estimates were reliable or not. The *New Jersey Independent Bear Panel Report (March, 2003)*, Individual Comments of Panelists section, raised compelling and troubling questions about the Division's population estimate methodology. It is the Chapter's position that the Division must adequately address these compelling technical concerns in a response to the peer review panel, prior to establishing a target harvest goal. For credibility, the peer review panel and the Division should reach a mutually acceptable estimate. In order to achieve a sustainable hunt, a conservative approach is necessary in light of the uncertainties. For these reasons, the Chapter is opposed to the December 2003 black bear hunt, as currently planned.