

ON REDUCING THE NEW JERSEY BLACK BEAR POPULATION USING NON-VIOLENT METHODS

New Direction for New Jersey Division of Fish and Wildlife in a new millennium

Governor Corzine's recent statements on his preference for a non-lethal approach to black bear population control in New Jersey are prescient. His is a political decision based, no doubt, on a view of voter preference, and an overview of the facts and what is best for New Jersey. In the 1970s the New Jersey black bear population was decimated to less than one hundred as a direct consequence of over hunting the species. With an estimated one thousand five hundred bears now living in New Jersey and a 2005 prescription for a annual hunt for at least five years (as proposed in the 2005 New Jersey Comprehensive Black Bear Management Plan), the current bear population could again be decimated.

Development pressures on land are perhaps greater in New Jersey than any other state, and with that pressure is concern for the public safety. Bears, we are told by state agencies and sportsman's groups, are dangerous animals and present a grave threat to the public welfare. The fact of the matter is that black bears, despite their ominous physical size and power, are a prey species, easily frightened and only very rarely (never in the last seventy years in New Jersey and with only one lethal attack on humans per year in all of North America and with the great majority of those incidents occurring in deep woods Canada) involved in incidents with humans resulting in serious injury or death.

Statistics aside, politicians must be concerned about **any** perceived danger to the public welfare and take appropriate measures to minimize or eliminate that danger, real or imagined. "Black Bear Nuisance Complaints" is the metric frequently used by wildlife management agencies to measure that perceived danger by the public toward bears. The knee jerk response to such a perceived threat to the public safety by black bears has traditionally been the incidental physical removal (with likely destruction) of the suspect bear and, on a larger view, the hunting (and killing) of black bears. An honest and objective view of the effectiveness of this lethal approach to black bear management clearly indicates that hunting black bears does not result in a long term reduction of black bear nuisance complaints, while programs educating the public about black bears and garbage containment programs are reliably effective non-violent strategies that consistently and reliably reduce black bear nuisance complaints. (Tavss Report, 2005 attached)

Collection of Black Bear Census and Nuisance Complaint Data

Public policy regarding black bears turns on census and nuisance data, it is imperative that these data be accurate and non-biased. Because there has been much controversy regarding the collection and use of census and nuisance data in the past, it follows that an independent and unbiased agent is needed to collect and report these data. The current method of collection by NJ DFW implies conflict of interest as that division is dependent on fishing and hunting revenues for the bulk of its budget.

Garbage Containment

It is accepted that garbage attracts black bears and is usually the lure that brings black bears close to human habitations. Close proximity of bears to people is a prescription for trouble, and often resulting in black bear nuisance complaints. Garbage is usually the attractant that draws black bears near people. Controlling and containing garbage is a simple matter, and this measure eliminates the proximity of black bears to people and its consequential nuisance issues. Although state laws requiring garbage containment in areas with resident black bears populations, these laws are rarely enforced.

A model program for educating the public about black bears and requiring garbage containment has been implemented in Denville (Mercer County) New Jersey with very promising results. At the request of Denville Animal Control Officer (Meredith Petrillo) to develop a coordinated local program involving animal control, police and the courts, a public education program about black bears was instituted and garbage containment was legally required of all residential and commercial residents of Denville. Bear-proof garbage containers were provided and strict fines levied against offenders for non-compliance. Although Denville had a serious problem with black bears prior to implementation of the model program in 2003 (approximately 100 nuisance complaints per year), since implementation there have been no Category I bears (bears considered dangerous to the public and requiring euthanization) and black bear nuisance complaints have dropped to approximately zero.

It has been demonstrated that bears eating garbage have a higher reproductive rate than woods-foraging bears. Preventing bears from eating garbage not only minimizes bear-human interactions and nuisance complaints, but also results in lower bear reproductive rates.

Based on the Denville, New Jersey model therefore, an effort to provide black bear-proof garbage containers and to enforce existing wildlife (i.e. black bear) feeding bans would probably reduce or eliminate most black bear nuisance complaints, i.e. the public concern about black bears.

Black Bear Population Control

Overview

Given the open space and adequate food supply offered by New Jersey woodland areas, the current estimate of approximately 1500-3500 black bear population size does not even begin to approach the biological carrying capacity of the area. Using the metric of biological carrying capacity, neither New Jersey nor any of its counties are overpopulated by black bears. From a biological viewpoint, black populations in New Jersey do **not** need reductions.

Educating the Public about Black Bears

Human preferences and preconceived notions about bears and fear of wild bears by the general public, however, indicates that some people have little tolerance for bears, will complain about them and do not want them in their environs. This intolerance to black

bears, on an esthetic level, has been translated into a metric by some wildlife agencies as “cultural carrying capacity” (i.e. how many bears will humans tolerate). Cultural carrying capacity has nothing to do with biology and has everything to do with ignorance about and intolerance to black bears.

Instead of using “black bear cultural carrying capacity” as a metric to justify the destruction of black bears, New Jersey Division of Fish and Wildlife should, if they use this arbitrary metric at all, use it as an indicator of the relative success or failure of its programs to educate the public about black bears. Needless to say, I suspect that the “cultural carrying capacity of black bears” in Denville, New Jersey (where black bear public education and awareness programs are in place) is much higher than in many other parts of the state where black bears may not be as well tolerated.

Following the model of Denville, New Jersey Division of Fish and Wildlife should emphasize programs to educate the public about black bears in an effort to encourage tolerance and respect for the bear while also promoting the public safety by emphasizing the potential danger of humans interacting with black bears and prohibiting such interactions.

The Use of Contraceptives and Sterilants for Black Bear Population Control

There are several ongoing research projects in New Jersey studying the possibility of using and the potential merits of contraceptives and/or sterilants for black bear population control. A review of these potential applications are reviewed in a recent report to the New Jersey Department of Environmental Protection by Mark Fraker, et al “Feasibility of Fertility Control to Manage Black Bear Populations” (copy of document attached).

New Jersey, due to its high human population density and fragmented woodlands, is particularly amendable to a non-violent approach to black bear population control and utilizing fertility control methods rather than to the use of firearms, which could and does present a clear danger to the public safety.

Ongoing studies using Neutersol® as an injectible sterilant on male black bears suggests this to be an effective and permanent sterilant although the effects on black bear male libido and dominance has yet to be determined. The practicality and effectiveness of using Neutersol® as an effective method for black bear population control in wild black bear populations also remains to be determined and requires further research. Neutersol® injection and surgical vasectomy (which has been successfully performed on New Jersey black bears by the author and his research collaborators) remain viable options for fertility control of male black bears in small populations of isolated wild populations.

Ongoing studies using injectible contraceptive vaccines in female black bears offer some additional advantages as a possible fertility control method of wild populations of black bears.

Research studies on black bears are labor intensive and expensive due to the high cost of tranquilization and handling of these large and powerful animals. If New Jersey Division of Fish and Wildlife is serious about its interest in using fertility control methods to control New Jersey black bear population growth, an effort to assist in funding and other resource support should be offered to those private researchers who are performing these important studies.

Summary and Conclusions

Although the need to reduce the New Jersey black bear population is controversial and remains open to debate, the need to educate the public about black bears and to minimize human-bear interactions is a necessary requisite to minimizing and reducing black bear nuisance complaints. While garbage control has been shown in New Jersey and other areas to be an inexpensive and effective means of reducing human-black bear interactions and consequently reducing black bear nuisance complaints, the hunting of bears has not shown such reductions in nuisance complaints. Although fertility control methods remain in the research stage and as yet unproven for use in wild bear populations, these measures offer future promise of a safe and effective approach to black bear population control. New Jersey Division of Fish and Wildlife should offer financial and logistical support for ongoing research in black bear fertility control if they want the availability of this technology sooner rather than later.

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Attachments:

Tavss, Edward, "Correlation of Reduction of Nuisance Black Bear Complaints with Implementation of a/ a Hunt vs b/ a Non-Violent Program"