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VIA First Class Mail

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The Humane Society of the United States ("HSUS") submits the following comments in response to the New Jersey Division of Fish and Game Council's ("FGC") Draft Comprehensive Black Bear Management Policy ("BBMP").

First, the FGC should be commended for some of its recommendations, primarily the recommendations to increase enforcement of no-feeding ordinances and increase use of non-lethal management techniques, including aversive conditioning. However, on behalf of the more than 11 million members and constituents of the HSUS, with over 440,000 residing in the state of New Jersey, HSUS strongly opposes the initiation of a black bear hunt. We respectfully request that the FGC reconsider its proposal and focus instead on humane approaches to managing conflicts with bears.

Overview
In the past, there were attempts to stipulate that if bear-human conflicts were not reduced by an arbitrary number, that a black bear hunt would automatically be initiated. However, the number of bear-human conflicts in a given area is related to the availability of anthropogenic and natural foods, as well as other factors. Black bears are particularly affected by droughts and mast failures, as well as the ability of communities to remove bear attractants, such as birdseed and pet food, and replace traditional garbage cans with bear-resistant versions. There is no cause to believe that removing bears at random from primarily wilderness areas would have any impact on the number of bear-human conflicts in a given area. In fact, the opposite has been revealed to be true. Furthermore, simply tallying bear sightings, encounters, or perceived conflicts is not a rational measure for determining the depth or nature of bear interactions. Classification of these comments has not been standardized in the past and any comparison to new numbers would be irrelevant.
Moreover, the BBMP recently proposed by the FGC lacks the supporting scientific evidence and research to sustain the claims made within it. The New Jersey statutory code specifically states that the FGC may adopt regulations or establish hunting seasons relating to game animals, “after the council has first determined the need for such action on the basis of scientific investigation and research.” N.J.S.A. § 13:1B-32 (emphasis added). However, as discussed in further detail below, there are numerous instances in which the FGC has failed to include or reference supporting scientific evidence to justify the need for a bear hunt in the BBMP. For example, at one point in the BBMP, the FGC specifies that “Hunting should increase the effectiveness of non-lethal techniques because the animals learn to associate humans with negative consequences.” However, no studies are cited to support this conclusion and it remains unclear whether any studies even exist on this topic. Therefore, it is doubtful that the FGC has truly determined the need for the implementation of a black bear hunt on the basis of scientific investigation and research, as mandated by New Jersey statute.

The New Jersey statutory code further provides that the FGC shall “formulate comprehensive policies for the protection and propagation of fish, birds, and game animals.” N.J.S.A. § 13:1B-28. The New Jersey Supreme Court has also held that any proposed black bear hunts must conform to a comprehensive black bear management policy implemented by the FGC, “include . . . broad preservation goals, . . . the tools at the [FGC’s] disposal to accomplish those goals, and . . . the factors that should be considered when determining which tools will be utilized.” See U.S. Sportsmen’s Alliance Foundation v. NJ Dep’t of Environmental Protection, 182 NJ 461, 478 (2005). The New Jersey Supreme Court has specifically stated that “both contextual and common sense considerations compel the conclusion that . . . ‘comprehensive policies’ refers to a thorough statement of guidelines that set forth not only end-point objectives but also the means that should be used to attain those ends.” Id. at 477 -78. Additionally, the New Jersey Appellate Division has found that any comprehensive black bear management policy must be adopted in accordance with the New Jersey Administrative Procedure Act. See N.J. Animal Rights Alliance v. N.J. Dep’t of Environmental Protection, 396 N.J. Super. 358 (App. Div. 2007).

Thus, as specified by the New Jersey Supreme Court, the FGC is required to ensure that its management plan effectively relates to its stated objectives. See U.S. Sportsmen’s Alliance Foundation v. NJ Dep’t of Environmental Protection. However, the FGC’s BBMP does not include a thorough statement of guidelines with clear end-point objectives as required. The FGC’s proposed BBMP is disjointed and its recommendations will not necessarily effectuate its stated objectives, and may even contradict some of its goals.

For instance, the FGC states in the BBMP that its objectives include “sustain[ing] a robust black bear population” as well as “reduc[ing] and stabiliz[ing] the population at a level commensurate with available habitat and consistent with risk to public safety and property.” However, as discussed in further detail below, while the BBMP states that there is an estimated 3,400 black bears north of I-80, it does not list a statewide black
bear population estimate and does not contain an adequate description of bear population estimate or the methodologies used to obtain population estimates. Moreover, the BBMP does not specifically reconcile how implementing a bear hunt will help sustain a “robust” bear population, while concurrently reducing the population. It also does not discuss the potential environmental impact the black bear hunt proposed in the BBMP will have on bear habitats or populations.

As such, a black bear hunt should not be the preferred method of addressing bear-human conflicts because it has not been demonstrated to be effective and lacks supporting scientific evidence and research.

The Public Trust
The North American wildlife conservation model sets limits through restricting activities as a means of protecting wildlife. According to the U.S. Fish and Wildlife Service, wildlife watchers alone outnumber hunters by more than five to one in the nation and also contribute nearly twice as much to the economy. In New Jersey, wildlife watchers outnumber hunters by more than seventeen to one and outspend them by more than four to one. Only 1.3 percent of New Jersey residents hunt. It is important that hunters carefully consider their actions in context of the general public’s perception of their activities. The general public will not tolerate hunting viewed as unfair, unsporting or inhumane. All New Jersey residents have a stake in the proper conservation and management of New Jersey’s wildlife. As hunters impose issues that the general public does not support, such as the trophy hunting of black bears or the use of bait when hunting, the public’s opinion of all hunters is challenged.

The Northeast Wildlife Damage Management Research and Outreach Cooperative accurately stated that “Black bears are a public trust resource in the United States. They are held in trust by the state and are managed by wildlife agencies for the benefit of all citizens. Decisions about bear management are an expression of public policy and, in general terms, bear management issues are actually public policy issues.”

The Purpose of this Hunt Would be to Cater to Trophy Hunters
The FGC makes it abundantly clear that the purpose of the proposed black bear hunt is to provide its primary constituents with additional species to hunt, not to reduce conflicts or reduce the black bear population. In the very first line of the BBMP, the FGC states that it has been mandated to conserve bird and mammals in order “to provide an adequate supply for recreational and commercial harvest.” Two pages later, it specifies that “the Mission of DFW is to protect and manage the state’s fish and wildlife to maximize their long-term biological, recreational and economic values for all New Jerseyans,” and to “maximize the recreational and commercial use of NJ’s fish and wildlife for both present and future generations.”

There are already at least 54 species for hunters to shoot in New Jersey, and the addition of bears is completely unnecessary.
The Addition of a Black Bear Hunting Season Would Not Increase Revenue
During New Jersey’s previous black bear hunts, in 2003 and 2005, bear hunters were only required to buy a deer hunting license, and it can be reasonably assumed that many, if not most of the hunters who participated in the bear hunt would have done so already. Consequently, bear hunters were not required to pay an additional fee to hunt bears. Additionally, potential bear hunters were required to attend a free seminar on bear hunting, provided by the New Jersey of Fish and Wildlife (“DFW”), which actually resulted in a loss of revenue, rather than bringing revenue to the department.

Allowing trophy hunters to pursue black bears in New Jersey would exclude other recreationists from those areas during the bear hunting season. Furthermore, it would deprive wildlife watchers of the opportunity to view what could be more than 400 bears in the state. There are more than 17 times as many wildlife watchers in the state as there are hunters of any kind, and more than 4,700 times more wildlife watchers in the state than there were successful bear hunters in 2003, the height of bear hunting in New Jersey’s modern history. Wildlife watchers in the state also contribute four times as much to the economy through their related expenditures. For instance, in 2006, they contributed more than $631 million dollars to the New Jersey economy.

According to the Department of Environmental Protection (“DEP”), 47 percent of bear hunting permit applicants in 2003 had previously hunted bears and 86 percent stated that they intended to hunt bears where they traditionally deer hunt. Also, “Participation by non-resident hunters (4.3%) was consistent with other seasons such as deer and turkey hunting.” This reveals, as should have been expected, that bear hunting will not attract many additional hunters to the practice, either in-state or out-of-state.

Though the FGC states that the DFW “estimated that hunters spent approximately $1 million in each of the 2003 and 2005 hunting seasons for equipment, supplies, gas, food and lodging in pursuit on black bears,” absolutely no information is cited to support this conclusion.

Black Bears were Nearly Extirpated from New Jersey Due in Part to Hunting
Black bears were nearly absent from New Jersey by 1900 “through a combination of habitat loss and unregulated exploitation.” According to the DEP, “By the mid-1900’s less than 100 existed and these were restricted to the northern portion of the state.”

Black bears are late to mature and bear populations grow exceedingly slow, making the species especially vulnerable to over-hunting. It took decades for the bear population to rebound in the state. There is no way to determine how many bears can be killed without jeopardizing the black bear population.
New Jersey’s black bear population has proven to be fragile and vulnerable to the effects of over-hunting. Considering the uncertainty of the current black bear population, and the fact that no demonstrable need for a hunt has been shown, a bear hunt seems both unnecessary and reckless.

**The Black Bear Population in New Jersey is Unknown**

Though the FGC states that the black bear population in the portion of New Jersey north of I-80 is 3,400 animals, this estimate should be seriously questioned due to past population estimates labeled by experts as “exaggerated” and “overstated.” The BBMP lacks valid and strong scientific references to justify many of the claims made within it. If this data has been collected, and if this research has been done, why is it not fully and plainly disclosed in the BBMP? The policy itself does not include a discussion of the black bear population estimates, methodologies used to obtain such estimates, and why such estimates have been so inaccurate in the past.

Though the FGC states that “black bear densities are as high as 2-3 bears / square mile,” that is a fairly large range and other areas of the country have densities of three bears per square mile, and have learned to effectively coexist with the species. This high number and broad range are both questionable.

In the past two decades it has become clear that authorities in New Jersey would be willing to recommend a hunt with little regard for how small or at risk the actual population in the state might have been. Population estimates in the past were greatly inflated, which may have been intentional or unintentional; nevertheless, these exaggerations call into question the accuracy of current estimates. In 2004, DEP Commissioner Bradley M. Campbell urged the council to not schedule a bear hunt, stating that the 2003 population estimate had been “overstated.” According to *The New York Times*, while DFW studies placed the population at 3,278 individuals, the actual population was likely closer to 1,350 bears. Campbell argued that a hunt would preoccupy the wildlife division and detract from non-lethal bear management programs.

The 2003 black bear population estimate produced by the DFW was seriously questioned by a number of experts all along, but the DFW moved ahead with the hunt anyway. Stephen F. Stringham, of Wildwatch Consulting, stated that “Even if all methods were valid, this approach would suffer from lack of any estimate for the uncertainty of each figure.” Stringham says that the DFW’s “most glaring problem is their calculation that the population is now growing at 35-36%/yr, which is phenomenally and probably unrealistically high for any ursid.” Stringham pointed out a number of assumptions that were likely made, which probably skewed the results, including lumping two-year-old females with older females, assuming that they were of reproductive age when they were most likely not.

Stringham further questioned the methods through which the bear population was estimated, including use of hair snares and genetic fingerprinting. He pointed out that
when using hair snares, there may potentially be a failure to correctly identify the number of individuals sampled by counting one bear twice or by counting several bears as one, which is more probable in areas such as New Jersey where the bear population has only recently passed through a genetic bottleneck. This method may not take into account the fact that some bears are “trap happy” while other bears are “trap shy,” based on a number of factors including age, sex and prior experience with traps. And this method may fail to distinguish the proportion of time spent within the study area by bears whose home ranges extend beyond this area. Stringham stated that “the paper on New Jersey bears provides little of the information one would need to thoroughly assess the approach. But what it does provide suggests that the available data could be subject to serious bias.”

Stringham also points out that “age-sex classes tend to differ in how readily they are sampled,” explaining that subadult and adult boars tend to travel more widely than females or the cubs who accompany them, and boars would also be less likely to visit or revisit a bait station. Further, boars are more cautious when approaching bait stations, which would skew results for the purpose of this research, and would skew the number of bears killed by hunters over bait stations.

In a paper prepared for the DFW at Pennsylvania State University, regarding black bear population estimates in New Jersey in 2003 and 2005, Duane Diefenbach stated that “The precision of population estimates is poor. Harvest rates varied widely among management units, age-sex classes, and between years. In addition, relatively few bears were captured and tagged in [bear management zones] 2 and 4. Consequently, the variability in harvest rates and relatively few bears tagged in some BMZs made it difficult to obtain statistically precise population estimates. Changes in point estimates of population size (from 2003 to 2005)... are meaningless because the statistical precision is too poor to detect changes in abundance.”

A panel was created prior to the 2003 bear hunt, which consisted of a number of prominent black bear biologists across the country, and though these panelists found significant problems with the population estimate produced by the DFW and the methodology used to obtain it, the hunt went forward. In the summary of the panel’s findings, it is stated that “The panel was not able to reach a consensus on whether the Division of Fish and Wildlife’s population estimate could be relied upon,” that “There was no consensus that the 8.5 percent [growth rate] figure was in fact the correct number,” and that it was “not possible for the panel to evaluate what the growth trend is or determine if the increase is statistically significant.”

Lynn Rogers, a bear biologist with the Wildlife Research Institute also vigorously questioned the accuracy of the population estimates. He stated that “The authors rightly showed that the bear range in New Jersey has expanded, but their population estimates are questionable because the estimation procedures are based on unsupportable claims and exaggerated reproductive rates... Essential data is left out of the report, and the authors use as support for their methods misquotes from published works and references to their own unpublished internal reports that have not undergone peer review, [and] were not made available to the panelists.” Rogers points out that the estimated growth rate is
"nearly twice as high" as has ever been reported for any bear population, that reproductive rates were "exaggerated" because sows who were not sexually mature were considered breeding females, and the DFW failed to consider a number of factors when determining the death rate. Rogers states that "The decision appears to be entirely arbitrary and unrealistic. Actual mortality could be double, triple, or quadruple the known mortality."

Panelist Lynda Smith stated in her report that "I firmly believe that no matter what population estimate is put forth, the Division of Fish & Wildlife will recommend bear hunting and the Fish & Game Council, because of its inherent bias, will embrace the recommendation. George Howard correctly asserted at the February 28 meeting that the Fish & Game Commission doesn't need an estimate in order to have a hunt. Also, it is interesting to note that the 1997 [black bear management plan] recommends a hunting season, even though the population was only between 450 and 550 bears."

Thus, considering the fact that a number of black bear biologists seriously questioned the accuracy of the DFW's population estimate and the methodology used to obtain that estimate, extra care should be taken when estimating the current population of black bears in New Jersey.

**Hunting Is Not Known to Reduce Bear-Human Conflicts**

Trophy hunting is simply not a long-term solution to reducing negative interactions with black bears or in assisting individuals with coexisting with this species. Hunting only temporarily reduces bear-human conflicts because it fails to target the so-called "problem" bears who may be breaking into trashcans or trespassing near homes. On the other hand, non-lethal alternatives have the ability to target specific bears and systematically condition them to avoid human confrontation. They remain in control of the territory and teach other bears to avoid the presence of humans and remain as placeholders, thereby avoiding conflict situations. Furthermore, DFW has the authority to kill individual bears who repeatedly cause damage or exhibit fearless or aggressive behavior toward humans, if they deem that necessary.

Several conservation biologists have called high levels of predator killing as a means of wildlife conflict prevention and resolution as the "sledgehammer" approach to wildlife management. Lethal controls, including indiscriminate hunting, are not selective for specific animals, but rather are used to remove the most individuals from an area in the hopes of removing the individuals responsible for property damage.

As a predator species, bear populations are not in need of reduction and the DFW has presented no evidence to suggest otherwise. Black bears are capable of regulating their own numbers. Population sizes are based largely on the availability of food and bears will produce fewer offspring in food-poor years, eliminating the need for a reduction in the population through hunting.
Various state wildlife agencies concede that hunting does not reduce conflicts between humans and bears. The Kentucky Department of Fish and Wildlife Resources recently stated that, “We agree that establishing a hunting season is not a way to address human-bear conflicts. The KDFWR has never considered the implementation of a black bear season as a management technique for alleviating nuisance complaints regarding black bears,” and that “Human-bear conflicts arise almost exclusively as a result of access to human-related foods. As a result, a bear hunting season will have little to no impact on the occurrence of nuisance complaints.”

Between 1985 and 2002, the estimated bear population in Minnesota increased from 8,000 to 21,000, but complaints dropped from 2,859 to 625. The Minnesota Department of Natural Resources suggested a link between the drop in complaints and residents learning to live with bears and prevent most conflicts.

According to the Wildlife Conservation Society, in a paper about coexisting with black bears, “In many cases it is assumed that an increase in the number of conflicts between black bears and humans is automatically due to an increasing bear population. In some cases, it is indeed true that black bear populations are increasing with the end result being more conflicts. However, in other cases increasing conflicts between bears and people may have nothing to do with an increasing bear population.”

The Wildlife Conservation Society goes on to state that,

“Similarly, increases in bear-human conflict statewide were more closely associated with human population growth than bear population growth. This distinction sheds light on one of the problems with adopting new hunting opportunities as a solution to conflict; for example, because of the urban nature of some bears in the Lake Tahoe basin, hunting in this region is likely not an effective management option to reduce conflicts. Because of the population dynamics at work here (and the large amount of time that many bears spend in urban environments), an increase in hunting would likely only remove wildland bears and not the portion of the bear population responsible for the conflicts. In addition, in our research we observed that when bears were removed from urban areas, new bears sometimes moved in to fill vacated home ranges within short periods of time. This suggests that hunting would be even less effective at reducing conflicts, since the removal of a particular bear in a conflict situation could likely just lead to a substitution of another.”

The Northeast Wildlife Damage Management Research and Outreach Cooperative admits that “Regulated hunting alone may not be sufficient to control increase in the number of bear-related complaints, because adding households continues to reduce natural food availability and increase bear attraction to residential food sources.” They go on to state that “Hunting alone may not stop a rise in complaints, given other dynamic and management constraints. In systems where hunting already occurs each year, incremental increases in hunting shouldn’t be viewed as a means to eliminate all problems or complaints.”
According to the DEP, only ten bears killed in the 2003 hunt were considered “nuisance bears,” meaning that only approximately three percent of bears killed in that hunt were known to have ever caused a problem.

Though the FGC claims that “Hunting should [emphasis added] increase the effectiveness of non-lethal techniques because the animals learn to associate humans with negative consequences,” no studies are cited to support this conclusion and it is unclear whether any studies even exist on this topic. Considering the fact that bears are solitary animals, the only bears who would witness the hunting of other bears would be cubs whose mothers are killed and sows whose cubs are killed, though it may impact bears who are wounded by hunters, but not killed. These three cases bring up a number of serious concerns, and the purported benefit of these scenarios certainly does not outweigh the cost to these animals.

When a bear is removed by hunters, other bears may simply move in to the unoccupied area and make it their own territory. But when aversive conditioning is used, bears can continue to occupy a given area, keeping other bears out, and will avoid human contact. The only bears who learn to fear humans because of hunting are the bears who too frequently are shot, but never recovered. Biologists tell of bears who have been shot and whose wounds take years to heal.

The study conducted by Edward A. Tavss also revealed that there is a positive correlation between the number of bears killed by hunters and the number of complaints about bears. In Virginia, between 1980 and 1998, as the number of bears killed steadily increased from 200 to nearly 800 a year, the number of complaints about bears increased at approximately the same rate. Results were similar in the northeastern region of Pennsylvania, New York, Ontario, and Minnesota. Results would likely be similar in other areas.

The so-called “problem” bears who cause a majority of conflicts with humans are young males who live in the urban-suburban interface. They have become accustomed to obtaining food from humans and remain in the vicinity of human-inhabited areas.

Alternatively, the bears who are typically hunted are those in wilderness areas who have little or no contact with humans and are simply not “problem” bears. Hunters typically seek large males who would make the most impressive trophy rather than young bears who cause the majority of the problems.

According to a report drafted by the BC Conservation Corps and the British Columbia Ministry of Environment, “Removing bears can create local population sinks, disrupt social organization, and may not reduce rates of conflict over the long-term, particularly when attractants remain available.”
A study on trends in management of black bears states that “Many nuisance bears are relatively invulnerable to hunters because of access and firearm restriction in and around communities.”

**Misleading Categorization of Bear Conflicts and Encounters**
The DFW illogically includes bears acting in a natural manner under a category of “damage” and “nuisance” bears. The DFW is entirely misleading when it includes bears “found dead” as “Category III” bears, consisting of “damage & nuisance.” In 2008, 14 bears were found dead and in 2009 nine bears were found dead, but that should hardly be considered a “nuisance.”

Additionally, mere sightings are also included under Category III, as nuisance bears or bears that have caused damage. In 2008, 678 bears were considered nuisances because they were sighted by someone, likely going about their business, avoiding humans, and doing what bears are supposed to do. In 2009, 833 bears that were sighted by someone were listed by the DFW as nuisance bears. In 2009, three bears were also listed under “complaints” which had been killed illegally.

80 bears are listed by the DFW under “complaints” because of “other” reasons, though no explanation is given.

“Provoked dog attacks” are included, though it is clear that the bear was not the aggressor, and therefore should not be considered a nuisance. In 2009, 833 bears are listed as a “nuisance,” though no explanation is given as to what a nuisance is or whether the bear had caused any damage. “Unprotected beehives” are alarmingly included under Category I, even though owners have the ability to protect their hives from bears, and should bear some responsibility for this problem.

It is illogical and misleading to characterize bears who have simply died or apparently had the misfortune of being spotted by someone, as either nuisances or as bears assumed to have damaged property. Therefore, at least one third of all “complaints” appear to be inappropriately categorized.

**Categorization of Bears is Overly Broad and Undefined**
While portions of the behavior included under Category I is clearly defined, much is not defined. The FGC states that Category I bears “are those exhibiting behavior that is an immediate threat to human safety,” no definition of this behavior is given in the BBMP. It is unclear whether bears huffing, swatting at brush nearby, or even bluff charging when cornered would be considered threats to human safety, when these behaviors are known to be indicators of nervousness, not aggression. The FGC states that “DFW personnel, law enforcement personnel, state park police and landowners and farmers have killed nearly 250 dangerous Category I bears since 1993,” but no explanation is given of what “dangerous” means in this instance. Including bears who have damaged crops or property
in an attempt to find food should not be labeled as "dangerous," if that is what has been done, and doing so is highly misleading.

The BBMP also does not indicate whether individual landowners, farmers, or ranchers have any responsibility to try to prevent or reduce bear-human conflicts in order to minimize the number of so-called Category I bears. As part of the DFW's overall efforts to educate the public to prevent and eliminate bear-human conflicts, it must place some level of responsibility on the individual landowner and must not simply authorize the killing of Category I bears in those instances where a landowner's ignorance or willful neglect clearly contributed to the conflict.

According to the BC Conservation Corps and the British Columbia Ministry of Environment,

"We believe the context of the display is more important than the display itself when labeling and behavior as aggressive. We define aggression as any behavior where a bear attempts to intimidate a person when it has a clear escape route. By our definition, bears that bluff-charge, vocalize or paw swat when they have no option of escape are not aggressive bears; that is, we discriminate between defensive aggression and antagonistic aggression. Also, we do not consider huffing and jaw-popping as aggressive but categorize this behavior as a stress response that may escalate into defensive aggression if the source of stress is not removed." xlii

**Attempts Should First be Made to Reduce Conflicts through Non-Lethal Methods**

Non-lethal alternatives to hunting should first include public education and should stress the elimination of conditions that attract bears to human-inhabited areas. Black bears are, by nature, shy animals who avoid human contact when possible. Simply replacing traditional garbage cans with bear-resistant garbage cans, putting garbage out the morning of pick up rather than the night before, hanging bird feeders out of reach of bears or bringing them inside during peak bear seasons, bringing pets and their food indoors, cleaning outdoor grills after use, not storing food in vehicles, not keeping compost piles or protecting them with fencing, removing fruit-bearing trees or picking fruit as soon as it ripens and not allowing it to lie on the ground, and keeping doors and windows locked can significantly reduce incentives for bears to approach human-inhabited areas.

Stubborn bears who have become conditioned to human food sources can be deterred through implementation of aversive conditioning strategies, including systematic use by authorities of rubber bullets, pyrotechnics and trained bear dogs, which frighten bears. Bears are intelligent animals and not only do these strategies teach them to fear and avoid humans, but also prompt adult bears to pass this knowledge on to their cubs, meaning that these methods require a short-term investment, but the results are long-lasting.
According to several speakers at the 2009 Bear-People Conflicts Workshop, “Attempts to co-exist with bears have undergone a dramatic evolution in the past several decades, changing from killing most bears that came near humans to making efforts to understand bears’ motives and seeking ways to alter their behavior.”

The Wildlife Conservation Society states that “The use of deterrent techniques, although not a new management tool, has been increasing rapidly in both Canada and the United States primarily in response to the public’s request for non-lethal bear management near urban-wildland interface areas.”

In a study titled “How agencies respond to human-black bear conflicts: a survey of wildlife agencies in North America,” it is stated that “A primary component of most current bear management programs in North America is some type of bear awareness program aimed at educating people on how to avoid or prevent conflict with food conditioned bears.” When each state was asked “How does your agency respond to black bear-human conflicts interactions where public safety is a factor,” kill permits and use of hunters were the “least common response.”

The study further states that, “We recognize that these approaches have an upfront investment in time and energy, but argue that these can be compensated by important future dividends if garbage-related human-bear conflicts are greatly reduced or eliminated. When human-bear conflicts are caused by access to garbage, we encourage a proactive approach to address the problem with the expectation of a positive result, as opposed to the annual reactive response often resulting in stretching limited resources and relocation of killing multiple bears.”

In another study it is concluded that “Human-bear conflicts can be greatly through non-lethal measures such as bear-proof waste management systems; electric fencing around dumps, bee hives, crops and gardens; modifying placement or configuration of field crops; and using aversive conditioning to train first-time offenders to keep away; these all reduce bear access to food and other attractants.”

When the FGC stated in its BBMP that “Because of agricultural damage attributed to black bears, DFW and Council recognized that the level of human/bear conflicts had become untenable,” but no additional details were given, regarding whether residents who suffered agricultural damage had installed electric fencing, when possible, or had used any other type of bear deterrent; whether those residents had been advised to do so by the DFG; and why it would not be possible to target only the specific bears causing agricultural damage, which should be the first option. Farmers already are able to obtain a special permit to destroy black bears depredating crops and livestock (N.I.A.C. § 7:25-5.32).

The FGC rightly states that “Residents, campers and outdoor enthusiasts within bear country can reduce or eliminate negative interactions with black bears by simply adjusting their activities,” and that “These [bear aware] programs have resulted in
declines in certain nuisance complaints over time, especially in such simple actions as reducing bear damage to bird feeders and using electric fencing to protect beehives." II

Non-lethal alternatives to hunting have proven enormously effective in areas where they have been adequately implemented. These programs have been implemented in national parks such as Yellowstone and Yosemite, which had once experienced a large number of conflicts between bears and humans, including large amounts of property damage. After implementation, conflicts dropped precipitously. A report titled “Correlation of reduction in nuisance black bear complaints with implementation of (a) a non-violent program and (b) a hunt,” by Edward A. Tavss, PhD, at Rutgers University concluded that “at every site in which the non-violent program was evaluated, it was demonstrated to be markedly effective in reducing human complaints/conflicts, while at every site in which the hunting approach was evaluated no effect in reducing the human complaints/conflicts was observed.” Evaluation of the effects of non-lethal programs implemented in Yellowstone revealed that both injuries to visitors and damage to property caused by both black and grizzly bears plummeted. The number of complaints/conflicts reported in Yosemite was cut to a third within three years after implementation of a non-lethal program. The number of nuisance bears removed from Great Smokey Mountain National Park fell from more than thirty to zero the year following implementation. In Juneau, Alaska complaints fell from more than 1,000 a year to less than 200 a year two years after implementation. In Elliot Lake, Ontario the number of complaints dropped from 500 a year to fewer than 100 a year the year after implementation. Complaints also fell dramatically in the Lake Tahoe basin of Nevada directly following the implementation of a non-lethal program. III

A study on the effectiveness of aversive conditioning of black bears in Louisiana also drew on the conclusions made by Tavss, when it stated that “National parks in the United States (e.g., Yellowstone, Yosemite, and Great Smokey Mountains) and communities bordering black bear habitat (e.g., Juneau, Alaska; the Lake Tahoe Basin, Nevada; and Elliot Lake, Ontario, Canada) that use these programs have reported fewer conflicts involving nuisance black bears. In all instances, the removal of food sources has been successful in substantially reducing by 40 to 80% the number of human-bear conflicts reported.” IV

According to the journal Human-Wildlife Conflicts, “Most of the complaint calls have food as the common factor. When bears emerge from hibernation, they are hungry and seek an easy meal; they are attracted to human garbage, bird feeders, pet food, or food set out by hunters to attract deer.” IV

**Hazing and Aversive Conditioning**

When requesting records through the New Jersey Open Public Records Act on February 2, 2010, The HSUS requested “all documents relating to resources dedicated to humane conditioning of bears, including but not limited to use of trained dogs, use of rubber bullets or use of pyrotechnics; and all studies related to aversive conditioning or other non-lethal attempts to encourage bears to vacate human populated areas.” On March 2, 2010, we received a response to our request from Wayne Grennier of the DEP. The only
response addressing this section of our request stated “Rutgers study which we do not have,” implying that the DEP had no additional information available on the use of aversive conditioning, nor had the DEP employed this strategy at any time.

Most wildlife agencies use aversive conditioning as a tool for black bears involved in conflict. Projectiles can be used to condition bears to avoid humans. Rubber bullets and “beanbags” are shot at the bear. Cracker shells produce a loud bang and a flash of light. Screamers produce a siren-like noise and smoke.

According to a paper produced by the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service, presented at the 2009 Bear-People Conflicts Workshop in Alberta, Canada, “Bear deterrent projectiles fired from a 12 ga. shotgun are potentially effective methods to haze bears,” though responses of individual bears vary based on a variety of factors, including the bear’s previous experience with humans, garbage or human-related food. In cases where projectiles have been used to teach bears to avoid people “no bears have turned aggressive. In fact, the opposite is usually the case - bears become more wary and try to avoid people.”

In the paper it is warned that garbage should be contained and that bears should be hazed before they obtain human food, because “Once a bear has obtained human food or garbage hazing is less likely to be effective in the short term and may decrease the bear’s response to hazing in the future,” and that if there is no immediate threat to the safety of residents, “removal of attractants - e.g., garbage - should be the first priority.”

In a study conducted on the aversive conditioning of black bears in Louisiana, reported in the journal Human-Wildlife Conflicts, “Our findings suggest that the use of dogs to condition bears results in increased movement of bears away from sites where nuisance activity occurred, compared to conditioning bears without dogs.”

The study concludes that “A more interactive approach should be considered in the management of human-bear conflicts, placing greater emphasis on public education to prevent nuisance bear behavior. Nuisance bear activity in our study was typically centered on bears using garbage in residential areas. Hence, measures addressing the availability of food from humans should be pursued aggressively. Such measures include implementing governing ordinances with stiff penalties against the intentional feeding of black bears and using bear-proof trash containers in areas witnessing nuisance bear activity.”

In a paper in the Journal of Wildlife Management titled “Does Aversive Conditioning Reduce Human-Black Bear Conflicts?” it is concluded that “Aversive conditioning can prevent nuisance behaviors in many wild bears if it keeps them away from developed areas.” The study further states that the purpose is to “modify unacceptable behaviors to those deemed acceptable for human safety,” to “keep them out of developed areas long enough to install bear-proof facilities,” and to “keep females with cubs out of developed areas so the cubs do not learn nuisance behavior.” But in the conclusion of the study, the importance of proper garbage storage is stressed, and it is stated that “Before [aversive
conditioning] is attempted, adequate food-storage facilities must be available, along with an outreach and enforcement program that ensures that these facilities are used."

Capture and on-site relocation can be effective because “The goal of this approach would be a bear that maintains its home range yet avoids areas of human activity, thus reducing the need for agency staff to relocate or kill new bears occupying vacant territories in chronic problem areas.”

According to the BC Conservation Corps and the British Columbia Ministry of Environment, “Ideally, non-lethal behavioral modification techniques would be applied to prevent food-conditioning. Bears approaching a relatively attractant-free urban area or neighborhood would be prevented from obtaining and food rewards and would lose motivation to frequent developed areas.”

“Aversive conditioning involves a planned, consistent approach to teach a bear to modify its behavior over time... It involves close follow-up monitoring after the aversive conditioning event. Hazing, however, is a single event with an immediate short-term goal of removing a bear from an inappropriate location. Hazing often involves reactive bear management whereas aversive conditioning is a more labor-intensive proactive management approach over a multi-day time frame, and attempts to pair an unconditioned stimulus (e.g. pain from rubber bullets) with a conditioned one (e.g. approaching humans).”

Both the study conducted in Whistler, British Columbia and information provided by the Wind River Bear Institute reveal that they have aversively conditioned a large number of bears.

According to Lou Berchelli, biologist for the New York Department of Environmental Conservation, “A combination of aversive conditioning techniques will help many if not most bear human problem situations. The option of lethal control is still vital to assure human safety.”

The Wind River Bear Institute (WRBI) operates a highly successful aversive conditioning and dog training program in Montana, and works with wildlife agencies across the United States and Canada. Other organizations offer such services though. The WRBI has successfully conditioned hundreds of black bears and brown bears in a manner that is most likely to produce results.

Dozens of national parks and state wildlife agencies employ the use of aversive conditioning and strongly recommend it. The Wind River Bear Institute has worked with a number of state wildlife agencies, the National Park Service and Canadian wildlife agencies. Patrick J. Graham, Director of Montana Fish, Wildlife and Parks, said “We believe that this Program has changed the way we manage ‘nuisance’ bears in Montana and believe that the methodology has far reaching implications that will change the way other species of ‘problem’ wildlife are managed throughout Montana and perhaps the world.”
According to Ken S. Berg of Western Washington Fish and Wildlife Services, “We are impressed by the professional work being done by the Wind River Bear Institute, and feel that our own investment into the Bear Shepherding training has been very worthwhile. The training has greatly enhanced our ability to respond to bear/human conflict situations by providing a proven technique that meets the needs of the public and of personnel responding to such situations.”

Darrell Croft of Alberta Sustainable Resources stated that the Wind River Bear Institute’s “methods and techniques in the use of Karelian Bear Dogs are cutting edge and one of the most important contributions to bear management in the past 30 years.”

**Aversive Conditioning Report**

In the BBMP, the FGC states that “Recent studies in New Jersey as well as other states conclude that aversive conditioning has limited short-term effect on reducing the negative behavior of nuisance bears.” However, as detailed below, there was a single study conducted in New Jersey that has been released by the FGC, not multiple studies, as is implied; the single study conducted in New Jersey is unscientific because it failed to remove attractants, failed to fully condition bears, and the sample size was extraordinarily small; and in the information released by the FGC, only a few additional aversive conditioning programs were even referenced, though many exist, yet there is no mention of whether these programs were successful or unsuccessful.

In the BBMP, it is stated that conditioned bears “continue nuisance activity at other, different locations,” claiming that this has been determined by “other state and federal agencies and institutions,” yet no documentation is presented, other than a single study conducted in New Jersey. Three studies are briefly mentioned, but it is stated that aversive conditioning did reduce conflicts, and in at least two of the studies, it was concluded that the continued availability of garbage made the program less successful.

The study, “New Jersey Black Bears Aversive Conditioning Report,” conducted by East Stroudsburg University, is incomplete.

It does not appear as though any attempt was made in this study to remove the anthropogenic food sources that originally attracted the bears to human-inhabited areas, and resulted in the conflict situations. However, in the study, it is stated that “The efficacy of non-lethal approaches is directly related to ongoing availability of non-natural attractants.” It is also stated that “Conflicts between humans and black bears are commonly centered on the availability of human-provided food and garbage to bears.”

The amount of aversive conditioning used was entirely insufficient to produce any kind of lasting results, yet this study incorrectly concludes that aversive conditioning is ineffective. The methods used in this study should not be classified as “aversive
conditioning.” It is stated that “Bears were aversively conditioned only at the initial release because we were interested in the effects of the hard release treatment and the resultant actions by the bear.” It was also stated that “We applied the aversive conditioning techniques only once, as this is the most reasonable means of application.” It is not stated that this approach will be the most effective or will yield the best results, just that it is the most reasonable, which is not the ideal basis for studying whether a particular approach is effective.

The sample size was far too small to make any kind of scientific determination on the effectiveness of aversive conditioning. Only five bears were given soft releases, and data was incomplete for one bear, and only four bears were given hard releases. It is admitted in the study that “An increased sample size may provide additional insight into the efficacy of aversive conditioning techniques.”

No citation is given to support the claim that “Many states have addressed human-bear conflicts by implementing nonlethal deterrent measures in addition to adjusting hunting season regulations (i.e. length of season, baiting, and bag limits).” We are entirely unaware of any scientific research that indicates that baiting aids in the reduction of conflicts with bears. In fact, this claim runs counter to logic. Additionally, an extremely small number of states allow each hunter to kill more than one bear each.

Additionally, the mere presence of black bears near human-inhabited areas is not necessarily a problem, though sightings are for some reason considered a form of conflict. Bears become problems, and may become a nuisance to residents, when they become food-conditioned, which is the direct result of intentional feeding and improper food and garbage storage. The study states that “It is easier to reduce conflicts with human-habituated bears than with food-conditioned bears,” which indicates that an emphasis should be placed on reducing the availability of food to bears.

In a report drafted by the BC Conservation Corps and the British Columbia Ministry of Environment, the results were often thwarted by continued access to garbage. Bears were “accessing garbage at the landfill in the fall of 2005, by going through the electric fence when it was not working properly,” and “accessed garbage at the landfill when garbage was exposed during the construction of the Athlete’s Village.” In the report, it is stated that 35 percent of conflicts that prompted action were related to access to anthropogenic food sources. It is also stated that

“The frequency with which bears are able to access unnatural attractants in urban Whistler (mostly garbage and recycling) is a significant obstruction to successful behavioral modification… Until garbage sheds are constructed to be bear proof, all residents have access to bear-proof waste containers for household garbage disposal, and attractant by-laws are enforced with regularity, we believe bears will continue to access these food sources. This limits the success of non-lethal methods and continues to create situations in which conflict behavior escalates to the point that killing the bear is the only ‘solution.”
Operant Conditioning
According to researchers at Washington State University and a wildlife biologist for the Alaska Department of Fish and Game, who have thoroughly studied operant conditioning on brown bears, "One of the most successful methods of altering an animals' behavior in an efficient and long-lasting manner is through application of techniques associated with operant conditioning." \textsuperscript{xxvii}

The goal of operant conditioning is to teach animals that their actions will have both immediate and direct consequences, either positive or negative, and that the animal can control - or operate - the outcome. Bears are intelligent animals, gifted with strong problem-solving abilities due to their need to constantly forage, and "These techniques are more effective than many others because they take advantage of psychological changes in the brain during both positive and negative reinforcements." \textsuperscript{xxviii}

While hazing or aversive conditioning typically just scares bears away from a specific area where bears are unwanted, these technologies do not provide a specific learning objective as operant conditioning does. Through operant conditioning, a learning objective is defined, and ideally, a punishment is applied during the bear's undesired action, such as use of rubber bullets. A negative reinforce, such as voice or other auditory signal. Is also given as a warning signal, which the bear will associate with the punishment, and will act as a deterrent at a later time when used by itself.\textsuperscript{xxxix}

Reduced Access to Anthropogenic Food Sources Reduces Conflicts with Bears
The FGC rightly states that "Eliminating bear access to human provided food should result in decreased habituation and should decrease nuisance and public safety related complaints."\textsuperscript{xc} In order for management to be effective, anthropogenic food sources must be contained.

Stephen Herrero, a well-known bear biologist, stated that "Studies have demonstrated that a high proportion of negative bear interactions are a result of bears becoming habituated to humans and food-conditioned."\textsuperscript{xci}

According to a case study in New Mexico, it was found that "Bears whose home range overlapped towns with unsecured garbage were most likely to get into conflict with humans."\textsuperscript{xcii}

Another case study in Yosemite National Park in California found that "35% of the bear-human conflict incidents documented between 1989 and 2002 were the result of conditioned bear behavior; most of the rest were attributed to human error."\textsuperscript{xciii}

According to a study produced by the Wildlife Conservation Society, "We recorded little evidence that non-lethal deterrents or relocation would eliminate or even reduce conflicts between bears and humans when anthropogenic food sources are not adequately contained."\textsuperscript{xcv} The study goes on to state that "We feel strongly that black bear-human
conflict is a problem that deserves attention and, whenever possible, should be prevented through proactive measures before a conflict situation truly develops. We have found evidence in our work that makes us hopeful that conflict problems can be prevented.\textsuperscript{xcv}

This point is reiterated again and again, with statements such as, “Our results from this case study also demonstrate that efforts to reduce the availability of human-related food to bears can be quite effective at reducing these potential conflicts,”\textsuperscript{xxvi} and that “It is important to recognize that humans are a root cause of many of these issues, and that focusing on bears as a public safety threat or as an economic nuisance is largely counterproductive. To solve these problems, the central focus needs to be on human behavior.”\textsuperscript{xxvii} This point is made clear when it is stated that “The root of most bear-human conflict is the availability of anthropogenic food sources – everything from unsecured garbage to birdseed, dog food, or unattended coolers and backpacks full of chocolate.”\textsuperscript{xxviii}

According to a black bear study in New Mexico, of the 29 bears involved in conflict, “half were attracted to towns with unsecured garbage or other available foods. Garbage was made available to bears most often by the use of open dumpsters lacking bear-resistant lids. Foods associated with homes included hummingbird feeders, pet foods, deer feed, and garbage.”\textsuperscript{xxix} Two areas in New Mexico implemented use of bear-resistant lids or bear-resistant latches to garbage dumpsters, which “greatly reduced nuisance activities in these towns, but did not eliminate them completely, because of the availability of other foods, including those intentionally put out for birds, deer, and ever fox.”\textsuperscript{x}

The Wildlife Conservation Society study concludes that methods to reduce conflicts with bears cannot be expected to be successful in eliminating bear-human conflicts if the sources of anthropogenic food remain available to bears,\textsuperscript{c} that bear-proofing works,\textsuperscript{cii} and that “Only those strategies that prevent bears from accessing human foods will actually prevent conflict, while other strategies will at best be mechanisms to manage existing conflict.”\textsuperscript{ciii}

According to a study about black bear conflicts in urban areas, “Human-bear conflicts often result from increased availability of anthropogenic attractants (e.g., residential garbage, bird/pet food) and the ability of black bears to alter foraging patterns to exploit these food sources.”\textsuperscript{xiv}

The Alaska Department of Fish and Game, after working to reduce conflicts with bears in Juneau, Alaska, “Recent efforts in public education and the passing of restrictive city ordinances associated with refuse management have shown to be much more effective in addressing this issue. We are convinced that focusing on the source of the problem (refuse management) is the most effective way to reduce human/bear conflicts in an urban setting.”\textsuperscript{xv}

In a study conducted by the Washington Department of Fish and Wildlife, analyzing the practices of all state wildlife agencies, it is stated that “Not surprisingly, we found that
garbage related complaints were most common, and that “Education on proper sanitation methods should be the first priority to address garbage related issues.”

According to BC Conservation Corps and the British Columbia Ministry of Environment, “Once bears gain access to unsecured foods and attractants, they often become food-conditioned and/or habituated to humans.”

This wealth of scientific information clearly indicates that reducing – and ideally eliminating – access by bears to anthropogenic food sources, has the potential to eliminate most conflicts with bears.

A Variety of Bear-Resistant Garbage Containers Have Been Tested
The Grizzly & Wolf Discovery Center, the Interagency Grizzly Bear Committee, the Living with Wildlife Foundation, Montana Fish, Wildlife & Parks, Montana Fish, Wildlife & Parks Foundation, Montana Wildlife Center, U.S. Fish and Wildlife Service, U.S. Forest Service and Wyoming Game & Fish have partnered in a bear-resistant container testing program.

Containers are first visually inspected. An impact test is then done, where a 100-pound weight is dropped onto the container from a height of two feet, equaling 200 pounds of energy. Containers will be considered to have passed if they do not sustain damage that results in an opening or gap of a quarter of an inch or greater anywhere on the container.

If the container is made of non-metallic material, it undergoes a penetrometer test at the U.S. Forest Service Missoula Technical Development Center, to determine if the container will withstand punctures from claws or biting.

Commercially produced garbage containers and other large food storage containers that cannot be fully tested using the impact test must pass a captive grizzly bear test in order to be approved, using live grizzly bears at the Grizzly and Wolf Discovery Center in West Yellowstone, Montana or other approved facilities. A food reward is placed inside the container and a number of bears are allowed access to it until it is breached or until the container has had a total of 60 minutes of contact with a bear or bears.

Half of agencies who responded to a survey reported that they used bear-resistant containers, and a third of those provided agency funds to purchase bear-resistant containers.

Appropriate Steps Have Not Been Taken to Reduce Availability of Garbage
The majority of all complaints about bears in New Jersey are related to garbage. While the DFW lists 3,003 “complaints” about bears in 2009, many are not legitimate complaints, including bears found injured or dead, bears killed illegally, conflicts listed simply as “other,” and mere bear sightings. Of the fewer than two thousand instances that could be considered legitimate conflicts – though a large number could have been
prevented – more than five hundred were related to garbage, another 68 were related to birdfeeders, and a large number of others were likely related to available human food. Clearly, garbage and other anthropogenic food sources play a major role in creating conflicts with bears.

According to the Wildlife Conservation Society,

“Strong regulations regarding the proper storage of bear attractants and subsequent citations and fines are required for the inevitable non-compliers and hardcore deviants. Citations and fines have been demonstrated to be effective tools in providing human-bear conflict messages where other messaging techniques have failed to change the behavior of non-compliers. They also serve an effective threat for people to consider in their decision whether or not to follow bear-related regulations, particularly in areas where people see human-bear conflicts as serious but unlikely. Replacing the unlikely threat of a human-bear conflict with the likely threat of a citation or fine can motivate people to follow regulations.”

**Damages Due to Failure to Prevent Access to Anthropogenic Food Sources**

Results from a 10-year study show “significant differences” between bears who live in “wildland” – largely wild or natural - environments and those who frequent urban areas. “Adult urban bears were 30% larger in mass and had home ranges 70-90% smaller than wildland conspecifics. Additionally, our results point to a depopulation of wildland areas by black bears. These findings are relevant not only for understanding bear biology, but for understanding how anthropogenic food sources may influence carnivore populations.”

It is also noted that “because stomachs of necropsied bears were filled with garbage, and garbage was concentrated in urban areas and was present in sites where we most successfully captured bears, we believe that garbage concentrated in urban areas is the proximate cause of a recent and more clumped distribution of bears across the landscape.”

**Stricter Enforcement of Regulations**

Stricter enforcement of prohibitions of intentionally or unintentionally feeding bears is needed.

The BC Conservation Corps and the British Columbia Ministry of Environment, when studying conflicts with bears, stated that “We strongly believe that enforcement must be regularly applied, and that penalties must be severe enough (or incentives strong enough) to modify human behavior.”
Other Unconsidered Factors May Increase and Decrease Conflicts
While it is assumed that bear-human conflicts were reduced in 2004 and 2006 due to the previous years’ hunts, there is no basis for this assumption. When looking at the number of complaints about bears from 1999 to 2003, the total number decreased and increased dramatically from year to year based on a number of factors, hunting not being one of them. In 1999, there were 1,659 bear-related complaints, in 2001 there were only 1,096, and the following year the number rose to 1,412. It should not be assumed that hunting is either wholly or even partially responsible for any decline in nuisance complaints without further study.

According to Lou Berchielli, biologist for the New York Department of Environmental Conservation, “The number of complaints will vary from year to year depending on education [of residents and visitors], weather etc.”

According to the BC Conservation Corps and the British Columbia Ministry of Environment, “It was apparent from 2005 field season that black bears preferred natural food over garbage and anthropogenic food, when available. Nutritional and perhaps social stresses may have contributed to conflict behavior.”

Black Bears Pose Very Little Danger to Humans
Black bears are seldom dangerous to humans. The Wildlife Conservation Society reported that “although in reality black bears pose little threat to human safety, they are sometimes feared. The species’ power in the public eye can lead to intense public safety concerns and, thus, extreme management reactions.” They go on to state that “On average over the last decade, there has been approximately one human fatality from a black bear per year in North America,” though most of those fatalities occur in Canada in areas far from dense human habitation.

Black bears are timid and non-confrontational, which is believed to be the result of more than a million years of living among much larger predators, including saber-tooth cats, dire wolves and short-faced bears, against whom black bears did not stand a chance. The black bear’s response was to climb a tree when there was danger, a response so ingrained in the species, that it is still their first instinct today, often even when started by cats or birds. Black bears rarely consider attacking, as grizzlies more often do, and stand their ground or bluff only in some instances when cubs, extreme hunger or habitation to people are involved. Many people wrongly believe that black bears often attack in defense of their cubs, but this is not the case, and no one has ever been killed by a black bear defending her cubs. That is a grizzly bear trait. Black bears simply have a different evolutionary history than grizzlies.

Stephen Herrero agrees, stating that “sudden encounters with black bears, even mothers with cubs, almost never lead to injury – further evidence of the bears’ tolerance for human beings. In a sudden encounter the black bear’s behavior is different from the grizzly’s. When a wild black bear suddenly encounters a person, it frequently will charge toward the person, swatting the ground with a front paw or making loud, blowing noises.
Although such actions may make your palms sweat and your legs shake, they are rarely followed by attack. Herrero relates an experience he had, where he watched three teenagers chase two cubs up a tree while the mother bear watched helplessly. The youths pelted the cubs with rocks, which eventually prompted the mother bear to climb the tree and wrap her body around one of the cubs “to shelter it.”

Lynn Rogers says that the message that should be taken from reports in the media about injuries due to bears in that “such aggressive behavior is unusual. That’s what makes it news.” According to Rogers, “We are learning that black bears can be added to the growing list of animals that were once feared but are now known to be mostly gentle and timid. Their aggressive displays are more ritualized expressions of apprehension than threat. Once I understood black bear body language and vocalizations, I interpreted their aggressive displays in terms of their fear rather than my fear. I responded by improving my bear manners to avoid scaring them, and their fear turned into trust – and trustworthiness. They were not the unpredictable animals I had always been warned about.”

Rogers points out that the risks of being killed by dogs, bees or lighting are “vastly greater” than of being killed by a black bear, and that your chance of being murdered is 90,000 times greater than of being killed by a black bear, and that “Our change in attitude toward black bears was not a matter of courage or recklessness. It was just a matter of keeping open minds and letting facts erase the misinformation we grew up with. Most bear stories are either exaggerations or involve incidents that are the rare exceptions. Warnings about bears usually don’t distinguish between black bears and grizzly bears and are intended more to prevent liability problems than to truly educate the public.”

According to Stephen F. Stringham, Director of the Bear Viewing Association, in a paper presented at the Bear-People Conflicts Workshop, “Numerous reports document that bears kill or seriously injure far fewer people than do dogs, livestock, or other common hazards.”

According to Stephen Herrero, Professor of Biology and Environmental Science at the University of Calgary, and author of Bear Attacks: Their Causes and Avoidance, “Most people don’t fear black bears as they do grizzlies. There are few if any accounts by pioneers and explorers depicting ferocious black bears that withstood extensive wounds and attacked the hunter. Even though black bears lived in most areas where the pioneers settled, this bear rightfully never became the topic of fearsome legend.”

Herrero points out that 90 percent of recorded black bear injuries were “minor,” and that most injuries were the result of human behavior. At least 90 percent of the injuries inflicted on humans by black bears between 1960 and 1980 can be attributed to bears “habituated to people and conditioned to eat human food.” He cites data from Great Smoky Mountains National Park, where “crowding or petting preceded twenty-nine (78 percent) of the situations leading to contact.”

Herrero says that,
"The black bear's intense motivation to feed on human foods or garbage has probably set up hundreds of thousands of situations that could easily have led to human injury, yet only a few did. During the 1960s and early 1970s I watched people hand-feed black bears along national park roadsides and at dumps. Black bears were sometimes made to stand on their hind legs and 'dance' for small edible bits. I've seen people pet, poke, and even 'shake hands' with black bears. The restraint that the powerful black bear normally displayed in these circumstances always amazed me."

According to Charles Fergus, author of a guide on bears, "The fact is that bears rarely harm people. Several factors probably account for this restraint. First, both black and grizzly bears had many other, more-powerful carnivores to contend with during the Pleistocene epoch, which ended only around 10,000 years ago, and that situation built a healthy amount of caution into their temperaments. Second, thanks to our sophisticated weaponry, people are deadlier than bears. We have killed so many bears for so many years that a fear of humans has been passed down through the generations, to the point that it likely has become embedded in their genes. And third, by eliminating aggressive bears, humans have selected far more timid ones; to a certain extent, we have molded the bears that exist in subpolar North America today."

Fergus writes that "Outdoor magazines regularly print photographs and paintings of snarling, slavering bears – usually grizzlies – pandering to people's fears of large predators. Dramatic films play up the potential for mayhem while ignoring the fact that humans and bruins generally coexist."

**A Moderate Bear Population Alone does not Justify a Hunt**
The FGC has shown a desire to hold a black bear hunt, it has shown no demonstrable need to initiate a hunt.

The black bear population in Florida is also estimated at roughly 1,500 to 3,500 animals, yet bear hunting is prohibited. According to Florida Fish and Wildlife Conservation Commission spokesman Stan Kirkland, "Even though population has increased, we could not sustain hunting," and that "It is not a biological decision only; there are other related factors, such as it being public-supported or not. There is a sociological issue here. Some citizens would be very angry at opening up a bear season."

**Problems Associated with Bear Hunting**
Aside from the obvious direct impact to the bears who are hunted, hunting also impacts cubs who are orphaned when their mothers are killed, regardless of whether a hunt is conducted in the spring or the fall. Previous bear hunts in New Jersey have been conducted in the fall, a time when sows and their cubs were not yet hibernating. Because killing sows has a far larger impact on the ability of a population to continue to expand
than does killing boars, killing more than 400 black bears this year may have a more disproportionate impact on the state’s bear population than may initially be realized.

Bear cubs need their mothers during hibernation in order to survive the long winter. Bear cubs remain with their mothers through their first full year and den with her the following winter, pressed against her to reduce heat loss in the den she builds. Orphans are forced to hibernate alone and the increased heat loss leads to increased weight loss, which is critical in cases of marginal nutritional status. The worsened condition is also disadvantageous to reproductive success.

Mothers not only nourish their cubs, they protect them, as well as their yearlings, from predators. When a bear’s mother is killed, another bear might immediately move into her territory and view the orphan as an intruder to be killed. When cubs mature, the sow’s female offspring will move into distant segments of her territory. The mother continues to protect her cubs by patrolling her territory and fighting off intruders. When orphaned, other bears will move in and even kill yearlings, or will force them out. As a result, the displaced bears will have reduced feeding efficiency, which delays maturation and reduces reproductive success.\textsuperscript{cxxx}\textsuperscript{vi}

Lynn Rogers, PhD, states that, “I found that cubs in family groups have about 50 percent greater survival of 16 months of age than cubs orphaned in late summer and fall” and that without their “mothers’ knowledge of natural feeding areas, many of these cubs concentrated their activities around human residences, supplementing their diets with garbage. This may have increased their survival through 16 months of age... but may have reduced long-term survival.\textsuperscript{cxxxvii}

\textbf{There is No Prohibition on Hunting Black Bear Cubs}

According to data released by the DEP, of the 328 bears killed by hunters in 2003, 83 of them were cubs, which is one in four. An additional 33 non-breeding yearlings were killed, meaning that 35 percent of the bears killed were either with their mothers or had just left their mothers.\textsuperscript{cxxxviii} Of the 298 bears killed in 2005, at least 36 were cubs, which is also approximately one in eight. One cub killed weighed only slightly more than fifty pounds.\textsuperscript{cxxxix}

An examination of state laws reveals that a number of states place sensible restrictions on the killing of black bears cubs, or the killing of sows accompanied by cubs. Of the 30 states that currently allow the hunting of bears, at least 19 have restrictions on the killing of cubs or sows accompanied by cubs. States such as Virginia and West Virginia require bears killed to weigh at least 100 pounds, ensuring that they are not young-of-the-year. Other states such as Alaska, California, New Mexico, Minnesota, Wisconsin, Montana, Arizona, Michigan, North Carolina, Tennessee, Georgia, Oregon, Utah, Wyoming, Oklahoma and Colorado prohibit the killing of cubs.

According to a recent poll of New Jersey voters, the vast majority strongly oppose the shooting of bear cubs, or the shooting of mother bears who are accompanied by cubs.\textsuperscript{cx}
Baiting is Unsporting and Inhumane
The DFW previously allowed the baiting of bears in New Jersey, with small exceptions. The HSUS opposes the baiting of bears both on public on private land.

Bear baiting is considered unsporting and inhumane by many, including many hunters, because it lacks the element of a fair chase. Hunters often pride themselves on this ethic, in which the animal is given a fair chance to escape his pursuer and the odds do not always favor the hunter. Fair chase hunters go to the work of finding their quarry rather than simply waiting nearby and luring the unsuspecting animal to him with a pile of garbage or rotting meat, which requires little skill.

The federal government prohibits the baiting of migratory birds because it is unfair. Most states prohibit the baiting of deer, elk and other big game for the same reason.

According to a recent poll of New Jersey voters, the vast majority oppose the baiting of bears for hunting.

Problems Associated with the Baiting of Bears
The baiting of bears for the purpose of hunting conditions bears to obtain food from humans. In many states, some bears feed for the entire bear hunting season, and when the bait is abruptly removed at the end of the season, bears often attempt to obtain the same types of food they had been feeding on from garbage cans, vehicles and homes. These bears are likely to become so-called “problem” bears, something which this hunt is purportedly designed to reduce. This is not only an unhealthy and unnatural diet for bears, but it creates a significant public safety concern and may result in significant damage to private property.

The U.S. Forest Service, The Bureau of Land Management, the U.S. Fish and Wildlife Service and the National Park Service all publish materials telling the public not to feed bears. The U.S. Forest Service, for example, publishes materials that warn, “A fed bear is a dead bear,” “Do Not Feed Bears!” and “Bears Are Dangerous!”

In a letter to the U.S. Fish and Wildlife Service, the director of the Pacific Northwest Region of the National Park Service stated his opposition to baiting on national forest lands abutting Crater Lake National Park. The director wrote, “Biologically, there is no difference between a bait station and a dump. Bait stations habituate bears to human-generated food, contributing to the potential for conflicts between bears and people in the park.”

Tom Beck, a hunter and a bear biologist with the Colorado Division of Wildlife, shares a similar opinion. “I firmly believe that baiting creates ‘nuisance’ bears,” he says. “Black bears are naturally wary, instinctively avoiding close contact with humans. But large
amounts of tasty food, easily obtained, defeats this wariness. By baiting, we create lazy bears who have been rewarded, not punished, for overcoming their fear of humans.”

If bear baiting is again allowed in New Jersey, the public can expect more scenes like one described by District Ranger Robert Reese of the Bridger-Teton National Forest in Wyoming in 1993. He stated that “Forest personnel visited the [bait station] and found one-third of a horse stuffed in a barrel with the horse’s head tied to a nearby tree. The barrel was located 10 feet from a [snow melt] drainage. It was located near White Pine Resort. The owners were worried about bears being attracted to the resort and clients seeing the horse body stuffed into a barrel. This wasn’t an experience the owners wished clients to have... Site also included many horse skulls and bones from previous year’s baiting that had never been cleaned up.”

**Allowing Bear Baiting would be Unwarranted**
The use of bait in the hunting of bears is prohibited in 39 states and should not be considered in New Jersey.

Many states kill a significantly higher number of bears each year than New Jersey did in previous years, without the use of bait to lure bears to hunters. Over the past several years, upwards of 1,800 bears were killed in California, 1,600 in Virginia, 1,700 in West Virginia, 1,000 in New York, 1,000 in North Carolina, 4,000 in Pennsylvania, and 1,000 in Washington in a given year, without the use of bait. If The FGC feels that the use of bait is necessary in order for hunters to find black bears in a portion of the state, it seriously calls into question whether there are enough bears in the state to warrant a hunt.

**Public Opinion**
Prior to the initiation of the first bear hunt in recent years, polling was commissioned by a number of New Jersey wildlife organizations. A 2003 poll found that 58 percent of registered New Jersey voters believed that the bear hunt should be stopped and 67 percent believed that the state should use non-lethal methods to reduce bear-related incidents instead of allowing a hunt.

A poll conducted by Mason-Dixon Polling and Research, from April 7 through April 8, 2010, of 625 New Jersey voters, found that 45 percent of voters oppose the hunt, while 35 percent support it. A majority of voters in all portions of the state oppose the hunt.\(^{exlii}\)

When asked if New Jersey should “place priority on policies that promote non-lethal methods to reduce conflicts between bears and people,” 74 percent said that the state should. Only 20 percent stated that the state should not.\(^{exliii}\)

In the recent Mason-Dixon poll of New Jersey voters, 82 percent of respondents opposed the shooting of cubs, while only 12 percent supported it. 81 percent opposed the shooting of mother bears with cubs, while only 11 percent supported it. 63 percent opposed the baiting of bears, while only 24 percent supported it.\(^{exliv}\) It is clear that New Jersey
residents strongly oppose these unfair and unsporiting practices, but the opinions of the majority of residents do not seem to be taken into account when wildlife management decisions are made.

Furthermore, the public does not tolerate hunting practices viewed as inhumane or unsporiting. The baiting of bears is viewed by many as an unsportsmanlike practice that gives the hunter an unfair advantage. By a large majority, most states that allow the hunting of black bears do not allow the use of bait.

An employee of the Tennessee Wildlife Resources Agency noted recently that, “The easy and lethal solution is no longer acceptable to the public. Times have changed.”

In the journal, Human-Wildlife Conflicts, it is stated that, “Our culture has become more humane and ecologically aware and no longer accepts the lethal destruction of animals, regardless of the damages these animals inflict.”

Many bear hunters publicly recognize that they hunt bears for a trophy, not to put food on the table. Polling has consistently showed that while the public may support specific types of hunting if they believe it is necessary and done to provide food, they do not support trophy hunting, which is what New Jersey’s bear hunt is. 60 percent of Americans polled do not approve of hunting, when done for sport or recreation.

Though the FGC states that it “should consider the cultural carrying capacity, which is the number of bears that can co-exist compatibly with the local human population in a given area,” the majority of the public clearly is not in favor of bear hunting in the state, revealing that black bears have not, in fact, exceeded their social carrying capacity.

While the FGC states that it “recognizes that hunters provide an important service to the public while decreasing the tax burden,” this is disingenuous at best, considering the fact that a majority of New Jersey residents do not support the hunting on black bears.

Conclusion
The HSUS strongly opposes the initiation of a bear hunt in New Jersey. The effects a trophy hunt will have on the health and stability of this slow-growing and still-fragile population are unknown. Sufficient research has simply not been done, and sufficient effort has not been placed on reducing conflicts with bears through non-lethal means. Prior to the black bear hunts in 2003 and 2005, New Jersey had a tradition of protecting black bears and there is simply no need to initiate a hunt.
Sincerely,

Megan Sewell  
Deputy Manager, Wildlife Abuse Campaign  
The Humane Society of the United States  
Washington, DC  

cc: Chris Christie, Governor  
    Bob Martin, Department of Environmental Protection  
    Jeanette Vreeland, New Jersey Fish and Game Council  

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Roger D. Applegate 146.

