

**Black Bear Task Force
Report and Recommendations**

To

The Maryland Department of Natural Resources

March 28, 2003

For Maryland's bears and for those people who care about them.....

The membership of the Maryland Black Bear Task Force would like to thank the Maryland Department of Natural Resources for providing them with the opportunity to contribute to the stewardship of black bears in Maryland.

Signing this report does not imply endorsement of all recommendations contained herein. Individual comment and recommendations from Task Force members can be viewed in Appendices G through N.

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Valerie Connelly, Maryland Farm Bureau

George Falter, Jr. Private citizen (McHenry)

Brad Frantz, Garrett County Emergency Management

Gary Fratz, Maryland Wildlife Advisory Commission

Peggy Gosnell, Private citizen (Accident)

John Hadidian, The Humane Society of the United States

Michael Markarian, The Fund for Animals

Tom Mathews, DNR Wildlife Biologist – Retired

Nancy Railey, Garrett County Rental Real Estate Agents

Tom Rooney, Maryland Sportsmen Association

Jerry Zembower, Allegany-Garrett Sportsmen Association

Black Bear Task Force Mission Statement

Maryland's Black Bear Management Plan, written in 1992, expired in December 2001. The Task Force is charged with reviewing past efforts under the 1992 plan, identifying important public values to consider for bear management, and providing recommendations to DNR on the future of black bear management in Maryland.

The black bear is a charismatic species that evokes a variety of emotions and opinions from the many citizens concerned with bear management. The Task Force will solicit, and consider input from, individuals and groups that may have disparate opinions on bear management. Therefore, cooperation and an open mind will be critical toward the development of a successful management plan.

While statewide species management is a goal of the management plan, special consideration must be given to those areas of the state where citizens are currently living with bears. Additionally, there are many issues that the Task Force will evaluate, including:

- Human – bear problems (e.g. public safety, agricultural and property damage).
- Bear population dynamics to include bear population objectives and range expansion.
- Ecological, aesthetic and recreational value of bears.
- Human behavior as it impacts bears.
- Funding alternatives for managing black bears.
- Animal welfare.
- Available control methods.

Furthermore, the Task Force will review land use policies in western Maryland and offer recommendations for minimizing the impacts development may be having on bears and their habitats. The Task Force will also address the increasing recreational demands being placed on public land in western Maryland, and the potential impact it may have on bears.

Maryland DNR is depending on the Black Bear Task Force to carefully consider all management options. While DNR is responsible for the management of bears, it is through the recommendations of the Task Force that DNR will come to understand the bear management values important to the citizens of Maryland.

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Overview of Task Force Recommendations

The Maryland Black Bear Task Force (BBTF) has worked for over a year to examine past efforts under the 1992 Maryland Black Bear Management Plan, identify important public values to consider for bear management, and provide recommendations to the Maryland Department of Natural Resources (DNR) on the future of black bear management in Maryland. Following is an overview of the BBTF recommendations:

- The Task Force feels that black bears are a valued and valuable natural resource in Maryland, and that efforts should be made to conserve both the species and the habitats that sustain it. Conflicts between bears and humans will occur, and when they do, they must be addressed by practical and effective means.
- The Task Force recommends that Maryland's black bear population be evaluated as being part of the larger Appalachian Highland Regional black bear population.
- The most controversial issue addressed by the Task Force was whether to allow black bear populations to reach biological carrying capacity, or to achieve a specific population objective through appropriate management strategies. "Population management in a given area will impact the occurrence of human-bear problems. Generally as black bear populations increase, human-bear problems increase as bears encounter humans more frequently. Conversely as black bear populations decrease, human-bear problems generally decrease." (Bear Plan, Virginia Department of Game & Inland Fisheries, 1991). Ultimately the task force voted 8 to 4 to include "Bear hunting" in an Integrated Wildlife Damage Management approach to achieve a targeted population objective. This would include a systematic and comprehensive approach to identify and determine the nature and severity of damage and prioritize solutions on a scale of least to most invasive or injurious to the animal causing damage.
- "Regulated hunting of black bear populations has become a controversial social issue. Perhaps the most contentious issues involve fair chase and the ethics of certain methods of harvest." (Bear Plan, Virginia Department of Game & Inland Fisheries, 1991). The Task Force has recommended that black bear hunting methods in Maryland be fair and sportsmanlike and conform to the ethics of "fairchase". The following bear hunting techniques should not be permitted: baiting, use of dogs, and spring hunting.
- The Task Force wants to ensure that bear hunting activities are consistent with and respect the rights of private property owners and other Maryland citizens.
- The Task Force encourages DNR to provide opportunities for non-hunting recreation associated with bears in Maryland with a focus on information and education designed to minimize negative human-bear interactions.
- Maryland's bear management program should promote human safety; protect agricultural income and personal property, and address conflicts between humans and bears while attaining black bear population objectives. The Task Force encourages DNR to prioritize black bear education and information programs and to increase its aggressive public education campaign to teach residents and tourists what they can do to minimize conflicts with bears.

- The Task Force recommends that DNR establish procedures under which individual problem bears are handled. These procedures should categorize bear behavior into that which requires no action to that warranting destruction of an individual bear. These procedures may include non-transferable permits to individuals experiencing ongoing and intolerable damage to kill offending animals in the most humane manner possible.
- The Task Force recommends that DNR conduct a public attitude survey to determine the perceptions, desires, and attitudes of people in Maryland (including regional variation) concerning black bears and to enable the public to provide input on the bear management program. Public understanding and support are imperative for an effective management plan.
- The Task Force recommends that DNR use revenue from bear hunting licenses and permits, etc. as a funding source for the bear management program. If a bear hunting program is initiated, the task force recommends that the State of Maryland no longer provide monetary compensation to landowners for bear damage.
- In the event that a bear hunting program is not initiated, the Task Force recommends that the State of Maryland provides 100-percent compensation for eligible bear damage claims. The BBTF suggests that DNR submit a request to the General Assembly for a \$50,000 annual appropriation from the States General Fund as a source of funding for bear damage compensation.
- In the event that a bear hunting program is not initiated, the Task Force recommends to discontinue the sale of Black Bear Conservation Stamps as a revenue-generating program for the bear damage compensation program. The present investment in this program (time, energy, manpower and materials) is greater than the revenue generated.
- The Task Force encourages city and county governments to enact local ordinances to mandate or provide incentives for the use of bear-proof trash containers in residential areas, developments, and tourist areas where bears have become acclimated to trash as a food source.
- The Task Force encourages DNR to work with public safety agencies to develop an emergency plan to be implemented in the extremely rare event of a black bear attack on a human. Personnel who are first responders to these situations need to be adequately trained and have the proper equipment to dispatch a bear.
- The Task Force encourages the General Assembly to authorize new avenues of funding that would be directed to the DNR for the purpose of black bear management, research, education, habitat protection, and conflict resolution.
- At the present time hunting license revenues and federal excise taxes on sporting arms and ammunition provide the primary funding source for wildlife management in Maryland. In the event that a regulated bear-hunting program is not initiated, the Task Force recommends that DNR change the classification of the black bear from a “Game” to a “Non-game” species. At the same time hunting license revenues should no longer be used as the primary funding source for bear management.

Decision - Making Process

This report and the recommendations contained herein represent the product of many hours of work to collect, discuss and interpret information concerning black bears in Maryland. The Black Bear Task Force (BBTF) has undertaken this effort in a professional and responsible manner, given the diverse opinions that exist concerning the subject of black bears.

For many recommendations the task force vote was unanimous, while for others there were significant differences of opinion. The task force decided that a 60-percent majority would be necessary for a recommendation to be included in this report. The task force also felt that it was important that significant values and opinions of individual task force members be communicated to the Maryland public. Each task force member had the opportunity to provide commentary as part of this report. (See Appendices G to N)

The mission of the task force included a requirement to “identify important values to consider for bear management, and to consider input from individuals and groups that may have disparate opinions on bear management.” The BBTF thanks the more than 500 individuals who commented on the BBTF draft recommendations that were published on November 6, 2002. The overwhelming issue that persons provided comment on was the appropriateness of black bear hunting in Maryland. Approximately 4.5 to 1, of those persons who provided comment on the issue of bear hunting, voiced opposition to bear hunting. The BBTF reviewed and considered all public comment before finalizing its recommendations to the Maryland Department of Natural Resources (DNR) in this document.

Purpose and Scope of Effort

On December 11, 2001 Maryland Department of Natural Resources (DNR) Secretary J. Charles Fox announced the creation of a 12-member citizen task force that would be responsible for contributing to the development of a revised statewide Black Bear Management Plan. The current 10-year plan was adopted in 1992 and expires this year. Secretary Fox stated, “This task force, which represents a wide range of perspectives, will play an important role in charting the course for the future of black bear management in Maryland.” The membership roster for the task force can be found in Appendix A.

The BBTF held its first meeting on January 30, 2002. The first order of business was to work in concert with DNR to develop a mission statement (see page 3). The BBTF has been meeting on a monthly basis. Information on the work of the task force, including the minutes of their monthly meetings, is available on the DNR web site at www.dnr.state.md.us/wildlife.

Life History of the Black Bear (*Ursus americanus*)

Black bears number more than 600,000 in North America. They select a variety of habitats typically in relatively remote terrain, although they also can be found in housing developments. Wetlands and streams interspersed among mixed conifer and hardwood forests, with dense understory vegetation where food resources are abundant, make up prime bear habitat in Pennsylvania. In western Maryland female bears prefer evergreen and mixed forest, and wetland habitat; areas with high stream densities are selected, and large conifers are important as escape, concealment, and thermal cover. Where no wetlands exist, bears may select residential habitats in spring through summer. Brush/extractive habitats (mines, sand and gravel pits, quarries) are avoided. Class 1 (primary highways) and heavily traveled roads are

avoided and act as barriers to dispersal (and thus home-range boundaries), fragment forested habitat, and precipitate human-induced mortality from vehicle collisions. However, bears may be attracted to restricted-access roads (logging roads, lightly traveled paved roads) that can be used as travel corridors.

Most of the diet of black bears consists of soft (berries) and hard (nuts, including acorns and beechnuts) mast and vegetation, and their social organization is tied to the abundance and distribution of this food. In most areas food is distributed in scattered patches that cannot support groups of individuals, and bears are solitary. Bears congregate and form social hierarchies where food is abundant and clumped in distribution. In spring, they eat newly sprouting plants (skunk cabbage and grasses), leaves and flowers, raid ant colonies for pupae, and search for juvenile mammals and chicks. Fish and carrion are rarely available and thus not significant components of the diet. Running speed can reach 50 km per hour (30 mph) but is more useful for escape than predation. Black bears accumulate most of their fat during summer and fall. They have color vision and forage mainly in daylight, but they may become nocturnal around humans. Summer and fall foraging may take individuals up to 200 km (126 miles) from their home ranges before they return to hibernate.

Young males disperse at 1-3 years of age and travel an average of 61 km (37 miles) before establishing adult home ranges. Male home ranges average 81 km² (30 mi²) and usually overlap the ranges of several to many females. Annual female ranges in Maryland average 36 km² (13 mi²) and can reach 49 km² (18 mi²). Male home ranges are so large that they cannot be defended, so ranges overlap and males compete. Both sexes scent mark their home ranges with urine. Adult males, especially, rub and scent mark "bear trees" before and during the mating season.

Mating occurs in early summer. This species exhibits delayed implantation, with the embryo not implanting in the uterus until November. Females give birth to 1-6 cubs (usually 2-3) in dens in January. Cubs weigh 200-450 g (0.4-1.0 pounds) each at birth, the smallest newborns, relative to the mother's weight, of any placental mammal. The short gestation and small size of the young are adaptive responses to reproducing during hibernation. Cubs weigh 2-5 kg (4.4-11.0 pounds) when they emerge with their mother from the den in the spring. Males do not participate in rearing the cubs. Cubs remain with their mothers until they are about 17 months old, at which time the mothers approach estrus and force the young to disperse. At dispersal, yearlings weigh 7-49 kg (15-109 pounds), depending on food availability.

Females produce their first cubs at 2-9 years of age, depending on food availability, and mate usually every other year thereafter. They reach maximum size (about 236 kg, or 520 pounds) at about 6 years of age. Males become sexually mature at 3-4 years of age and continue to grow until 10-12 years of age, when they weigh up to 409 kg (902 pounds) and are dominant over younger, smaller males. Black bears can live more than 30 years in the wild but rarely live longer than 10 years because of encounters with humans, which account for more than 90 percent of deaths of individuals older than 18 months.

In the northern portions of their geographic range, black bears hibernate for up to 7 months (about 4 months in Maryland). During winter sleep, bears defer eating, drinking, urinating, or exercising until emergence in the spring. Weight loss during hibernation can reach up to 40 percent of body weight in lactating females. In the north, metabolic rate can be reduced 50 percent. Heart rate drops from 66-140 beats per minute in summer to 8-22 beats per minute. Body temperature drops 1-7 °C (1.8-12.6 °F), resulting in reduced circulation to the limbs and

slowed reactions to disturbances. Still, mothers remain alert enough to tend to cubs and react to danger. Fewer than 1 percent of bears die during hibernation. Native Americans revered bears for their ability to survive for months without eating. Medical research on the metabolic adaptations black bears possess for hibernation is providing information potentially important for the treatment of kidney failure, gallstones, burns and other ailments in humans.

Primary Source:

Rogers, L. L. 1999. Pp. 157-160 in *The Smithsonian Book of North American Mammals* (D. E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Additional Sources:

Dateo, D. M. 1997. Use of home ranges and influences of habitat selection on crop depredation by black bears (*Ursus americanus*) in western Maryland. M.S. thesis, Frostburg State University, Frostburg, Maryland.

Fecske, D. M., R. E. Barry, F. L. Precht, H. B. Quigley, S. L. Bittner, and T. Webster. 2002. Habitat use by female black bears in western Maryland. *Southeastern Naturalist* 1:77-92.

Status of Black Bear in Maryland

The portion of the eastern North American black bear population found in western Maryland has been expanding since the early 1980s due to improving habitat conditions and influx of bears from surrounding states in the Appalachian Highland region.

Maryland's bear population is contained primarily in the western four counties, with the majority of the bears found in Garrett and western Allegany counties. Maryland's bear population is estimated to be between 266 and 437 animals. The black bear population in Maryland from Cumberland west to the West Virginia state line is estimated to be 227 bears (27.3 per 100 square miles), with a 95 % probability that it ranges from 166-337. This represents a density of 20.0 – 40.6 bears per 100 square miles. That estimate is similar to the black bear density reported for southwestern Pennsylvania (MD DNR). According to Mark Ternent, black bear biologist for the Pennsylvania Game Commission, black bear populations average 21.7 bears per 100 square miles in Somerset, Fayette and Westmoreland counties, which are adjacent to and north of Garrett County.

For additional information regarding the status of black bears in Maryland refer to Appendix B (Black Bear Population Status Report – January 28, 2002, MDDNR).

In January of 1992, the Maryland Department of Natural Resources (DNR) released the Black Bear Management Plan. Prior to developing this plan, the Wildlife & Heritage Service (WHS) conducted a series of public meetings across Maryland in an effort to gauge public opinion toward the bear resource in the state. Many issues raised were incorporated into the development of the plan.

The black bear is a species that generates serious discussion in western Maryland. Since the development of the 1992 plan, black bears have continued to spread eastward in Maryland. The expanding bear population has resulted in additional concerns being expressed by western Maryland residents, as well as those experiencing bears for the first time (DNR).

The Black Bear Management Plan reviewed the past history of this species in Maryland. It presented factual information regarding ongoing research activities. It also listed major goals, objectives, and strategies to be used to meet these objectives

DNR staff, especially western Maryland field staff, has dedicated much time to managing the black bear resource since this plan was implemented. Some of these activities have been very successful, and the major accomplishments can be found in Appendix C (MDDNR Black Bear Management Plan, 1992-2001, Summary of Activities).

Black Bear Conservation Program Stamp & Decal

During the 1995 session of the General Assembly the Maryland Legislature established a “Black Bear Conservation Fund” as a special fund within the budget of the Department of Natural Resources. Revenue for this fund is generated by the sale of a \$5.00 Bear Conservation Stamp or Decal and other related merchandise (Lucite blocks, T-shirts, etc.), and any gifts, grants, or contributions to the state that are designated for inclusion in the fund. Annual contributions to the fund are used to reimburse farmers for agricultural damage caused by black bears. In 1996 the DNR put \$10,000 seed money into the program.

Eligible damage for compensation includes damage to beehives, fruit, crops, livestock, and poultry. Subject to available funding, a person may be reimbursed for damage of not less than \$200 and no more than \$3,000. If there is not enough money in the fund to completely reimburse all of the claims, then an equal percent will be awarded to each claim. During the period 1996 to 2001 annual damage claims have fluctuated from \$10,389 to \$41,445. During the period 1996 to 2001 the percent of claims paid has fluctuated from 41.4% to 70.0%. For additional information regarding this program see Appendix D (Black Bear Conservation Stamp Program).

BBTF Issues and Concerns

Black bears have become one of the more challenging wildlife species to manage in Maryland. Probably no other wildlife species can reflect the true feeling of “wildness” better than can the black bear. Interactions with bears are remembered and retold for years to come. The sight of a bear is proof that Maryland has extensive forest habitat for this wide ranging wildlife species.

“The opportunistic behavior of bears contributes to the number of interactions between bears and people. Black bears are highly mobile, curious, intelligent and very adaptable animals (Pelton 1982). The omnivorous food habits of bears allow them to feed on a variety of food items. Given the opportunity, bears will exploit human food sources at landfills, garbage cans, campgrounds or picnic areas and move long distances to use them (Jonkel and Cowan 1971). Bears also learn to associate food with people, coolers, backpacks, tents, trailers and vehicles and may become bold in their attempts to obtain it (Tate 1983). “Once bears learn these associations and become food conditioned, it is difficult to correct this behavior” (GSMNP 2002).

Bears can become a nuisance, particularly when they become habituated to humans and human dwellings. This may be especially problematic for people living near prime bear habitat. In Maryland conflicts between people and bears arise when bears damage personal property, pets, beehives, livestock, and agricultural crops.

There is also a concern for personal safety. Black bears are wild and their behavior is sometimes unpredictable. Although extremely rare, attacks on humans have occurred in North America, inflicting serious injuries and death.

There is much interest in how this species is managed. It was the intention of the task force to look at the present status of black bears in the state, identify concerns and opportunities, and use what we have learned in the past 10 years to identify the best strategies for the future management of bears in Maryland. Of primary concern to the task force was to continue to ensure that this species will continue to be enjoyed by Maryland citizens while minimizing bear-human conflicts.

Members of the BBTF come from different backgrounds and represent a range of values and opinions regarding the management of black bears in Maryland. The BBTF concerns for the future management of black bears in Maryland can be found in Appendix E (Black Bear Task Force Issues and Concerns.) After developing this broad list of concerns, the task force then reviewed information from biologists, private organizations, landowners, and other states to gain a perspective on how to best address these concerns. The task force has been provided information regarding nuisance bear problems, bear damage to agricultural crops, funding alternatives, public education, humane treatment of bears, bear-related recreation and biological considerations.

Public Attitude Survey

The BBTF discussed the need for a survey of public attitudes on the black bear and black bear management. Surveys developed by Michigan State University and Cornell University were solicited, reviewed, and discussed at meetings of the task force. Considering an objective of the (1992) Maryland Black Bear Management Plan was to conduct a public opinion survey which has yet to be completed, the perceived need by other states (for example, New Jersey, New York, and Michigan) with bear/human conflicts similar to our own to assess public attitudes, and a review of the two surveys alluded to above, the BBTF has requested support (including adequate financial resources) from the Maryland DNR to conduct a carefully constructed, scientific survey of public attitudes on black bears in Maryland. (See Appendix F, Letter to Paul Peditto, Director DNR WHS from Tom Mathews, Chairman, BBTF).

The results of future public attitude surveys should be considered in the final development of an updated Black Bear Management Plan for Maryland.

Recommended Goals and Strategies for inclusion in Maryland's Black Bear Management Plan for 2003

Goal 1 – Population Viability:

To ensure the long-term viability of the black bear population in Maryland through comprehensive research, monitoring, management, education, and protection programs.

Goal 2 – Maximizing Cultural Carrying Capacity (CCC):

To maintain black bear populations throughout Maryland at the maximum CCC level. CCC can fluctuate and is not a static value. (Note: The public attitude survey will be a key consideration in determining CCC).

“CCC is the maximum number of bears in an area that is acceptable to the human population. The CCC is a function of the human tolerance to bears and the benefits people derive from bears. It is different for each constituency, location, and point in time. Development of bear population management objectives to meet the CCC are subjective and involve a combination of social, economic, political, and biological perspectives.” (VDGIF 2002)

The goal of maintaining or achieving long-term population viability in Maryland should be prioritized even when CCC is exceeded. “Minimum viable bear population levels may exceed CCC objectives, especially in areas with high human densities. In these situations, long-term viability of bears may depend on recognizing potential human-bear problems. Increased knowledge and better understanding of bears could lead to increased public tolerance of bears (i.e. raise CCC nearer to the minimum viable population level.).” (VDGIF 2002)

Strategies:

- Determine by periodic survey and other means the CCC for black bears for each county.
- Employ an Integrated Wildlife Damage Management approach in meeting CCC. This would include a systematic and comprehensive approach to identify and determine the nature and severity of damage and prioritize solutions on a scale of least to most invasive or injurious to the animal causing damage.

Goal 3 – Habitat Conservation and Management:

To conserve black bear habitat in Maryland, consistent with bear population objectives and with emphasis on areas of special significance.

Strategies:

- Initiate progressive programs that identify and protect bear habitat.
- Develop a Black Bear Habitat Conservation plan in partnership with county governments with a goal of preserving, protecting, and conserving bear habitat.
- Monitor outdoor recreational demands that negatively impact bear habitat, and implement strategies to mitigate these impacts.

Goal 4– Human-Bear Conflicts:

To promote human safety, protect agricultural income, protect personal property, and address conflicts between humans and bears in such a way that maximizes CCC.

Strategies:

- Create a comprehensive black bear management plan that identifies information and monitoring needs and establishes conflict resolution strategies to ensure that a prioritized progression from non-lethal to lethal approaches are mandated. Hunting should be considered only after an acceptable plan that establishes and documents its need as a wildlife management tool to attain CCC.
- Prioritize black bear education and information programs within the DNR, and to continue an aggressive public education campaign to educate the public on black bear life history, habitat, and bear behavior. DNR needs to remain vigilant in teaching residents and tourists what they can do to minimize conflicts with bears. This information should be disseminated in the school systems and at highway rest areas, billboards, flyers to be handed out at State Parks, signs at campsites, via public service announcements, etc.
- Provide training programs for public agencies that are first responders to situations involving people and bears, e.g. training in aversive conditioning techniques.
- Encourage local governments to enact ordinances to mandate or provide incentives for the use of bear-proof trash containers in residential areas, developments, and tourist areas where bears have become acclimated to trash as a food source.
- Establish procedures under which individual problem bears are handled. These procedures should categorize bear behavior into that which requires no action to that warranting destruction of an individual. These procedures may include non-transferable permits to individuals experiencing ongoing and intolerable damage to kill individual offending animals in the most humane manner possible.
- Continue to respond in a timely manner to nuisance bear complaints, and maintain a database to ascertain any trends that may be developing. DNR needs to revamp its reporting and recordkeeping relative to reported bear complaints and make this information readily available to the public.
- Encourage DNR to work with public safety agencies to develop an emergency plan to be implemented in the extremely rare event of a black bear attack on a human. Personnel who are first responders to these situations need to be adequately trained and have the proper equipment to dispatch a bear.
- Encourage DNR to include in its messages that bears are wild and their behavior is unpredictable. Although extremely rare, attacks on humans have occurred in North America, and bears are capable of inflicting serious injuries and death. Guidelines should be published that advise the public to treat bear encounters with extreme caution.

Goal 5 – Bear Hunting:

To include black bear hunting in an Integrated Wildlife Damage Management Approach to reduce human-bear conflicts and as a means to attain CCC.

Strategies:

- Use “Regulated Hunting” to target nuisance bears and to achieve and maintain the desired population objective i.e. CCC. Adjustments to length and timing of season and methods of take will be used to manipulate the magnitude, sex composition, and age composition of the harvest.
- Employ systematic monitoring of the bear population for regional abundances and sex and age composition to evaluate the impacts of a hunting program on the desired population objective i.e. CCC.

Goal 6 – Ethics of Bear Hunting Methods:

To ensure that black bear hunting methods in Maryland are fair and sportsmanlike and conform to the ethics of “fairchase.”

Strategies:

- Consider humane issues when deciding methods of take. The following bear hunting techniques should not be permitted: baiting, use of dogs, and spring hunting.

Goal 7 – Landowner and Citizen Conflicts with Bear Hunting:

To ensure that bear hunting activities are consistent with and respect the rights of private property owners and other Maryland citizens.

Goal 8 – Non-hunting Recreation:

To provide opportunities for non-hunting recreation associated with bears in Maryland with a focus on information and education designed to minimize negative human-bear interactions.

Goal 9 – Public Values:

To consider public values when implementing various bear management options.

Strategies:

Determine the perceptions, desires, and attitudes of people in Maryland concerning black bears and to enable the public to provide input on the bear management program. Public understanding and support are imperative for an effective management plan.

Goal 10 – Animal Welfare

To ensure that all aspects of Maryland’s bear management program are conducted in a humane manner.

Strategies:

- Consider the humane treatment of bears in all aspects of black bear management.
- Investigate all reports of inhumane activities regarding bears and prosecute.
- Train and equip Law Enforcement Officers to euthanize injured bears.

Goal 11 – Funding the Bear Management Program

To provide funding mechanisms to support the attainment of black bear management goals and objectives.

Strategies:

- Use revenue from bear hunting licenses and permits, etc. as a funding source for the bear management program. If a bear hunting program is initiated, the task force recommends that the State of Maryland no longer provide monetary compensation to landowners for bear damage.
- In the event that a bear hunting program is not initiated, the Task Force recommends that the State of Maryland provides 100% compensation for eligible bear damage claims. The Task Force suggests that DNR request a \$50,000 annual appropriation from the General Assembly as a source of funding for bear damage compensation.
- In the event that a bear hunting program is not initiated, the Task Force encourages the General Assembly to pass legislation to discontinue the sale of Black Bear Conservation Stamps as a revenue-generating program for the bear damage compensation program. The current investment in this program (time, energy, manpower and materials) is greater than the revenue generated.
- The General Assembly should authorize new avenues of funding that would be directed to the DNR for the purpose of black bear management, research, education, habitat protection, and conflict resolution.
- Hunting license revenues and federal excise taxes on sporting arms and ammunition provide the primary funding source for wildlife management in Maryland. In the event that a regulated bear hunting program is not initiated, DNR should change the classification of the black bear from a “Game” to a “Non-game” species. At the same time hunting license revenues should no longer be used as the primary funding source for bear management.

Appendix A: Black Bear Task Force Membership Roster

- 1.) Valerie Connelly, Maryland Farm Bureau**
- 2.) Tom Rooney, Maryland Sportsmen Association**
- 3.) Nancy Railey, Garrett County Rental Real Estate Agents**
- 4.) Brad Frantz, Garrett County Emergency Management**
- 5.) Michael Markarian, The Fund for Animals**
- 6.) John Hadidian, The Humane Society of the United States**
- 7.) Peggy Gosnell, Private citizen (Accident)**
- 8.) George Falter, Jr. Private citizen (McHenry)**
- 9.) Gary Fratz, Maryland Wildlife Advisory Commission**
- 10.) Dr. Ron Barry, Department of Biology, Frostburg State University**
- 11.) Jerry Zembower, Allegany-Garrett Sportsmen Association**
- 12.) Tom Mathews, DNR Wildlife Biologist –Retired**

Note: Mr. Brooks Hamilton, Garrett County Farm Bureau has been serving as an alternate for the Maryland Farm Bureau.

Appendix B:

Black Bear Population Status Report

Updated January 28, 2002

2000 Population Estimate (DNA study)

Black bear populations have been expanding in western Maryland since the early 1980's. During the summer of 2000, the Wildlife & Heritage Division conducted a black bear population survey in Garrett county and Allegany county from Cumberland west. This population study utilized new technology allowing wildlife managers a more efficient means of estimating a population size of large ranging animals such as bears. Bear hairs were snared at bait sites surrounded by barbed wire, and sent to a lab for DNA analysis. This DNA data was fit into CAPTURE, a well known and widely accepted population modeling computer program used to estimate our current black bear population west of Cumberland. The study yielded an estimate of 166 – 337 (95% C.I.) bears in western Maryland. The Wildlife & Heritage Service (WHS) conservatively estimates an additional 100 bears in the state east of Cumberland for a statewide population estimate of 266 – 437 bears in the state of Maryland.

The next most recent population estimate was conducted in Garrett County in 1991, when a very intensive trap and recapture study took place. In that study, 79 – 167 bears were estimated to be in Garrett County.

Bear Scent Station Survey

The bear scent station survey is another method of monitoring the state's bear population. While this survey doesn't yield a population estimate, it does offer long-term population trend data. This survey is conducted in Garrett, Allegany, and Washington counties in mid July during the bear breeding season.

Bait is hung in trees along existing routes in known bear habitat throughout the region. Eight days later, the bait is checked, and bear visitation rate noted. In 2001, bears visited 52.7% of the sites, an increase from 29.4% in 2000. This represents a significant increase from 1993, when the survey was started. In 1993, the visitation rate was 3.9%. Eight routes in Garrett County and one in Allegany County were surveyed in both 1993 and 2001. In 1993, only two of these nine routes reported bear activity, compared with all nine of these routes in 2001. This would indicate that the black bear population has increased in the areas of these survey routes.

Bear Mortality Report

WHS has been monitoring black bear mortalities in the state since 1981. In 1981, there were two known bear mortalities in Maryland. There were 41 known bear mortalities in Maryland in 2001. This is a 36% increase since 2000, when there were 30 known bear mortalities in the state.

Table 1. Black Bear Mortality in Maryland 1995-2001

| Year | Illegal | Road Kill | Other | Unknown | Total |
|--------------|----------------|------------------|--------------|----------------|--------------|
| 1995 | 4 | 9 | 2 | 1 | 16 |
| 1996 | 0 | 8 | 1 | 1 | 10 |
| 1997 | 3 | 13 | 1 | 3 | 20 |
| 1998 | 2 | 11 | 1 | 0 | 14 |
| 1999 | 3 | 23 | 2 | 2 | 30 |
| 2000 | 7 | 20 | 2 | 1 | 30 |
| 2001 | 4 | 30 | 3 | 4 | 41 |
| Total | 23 | 114 | 12 | 12 | 161 |

Bear Sightings / Sow Observations

WHS has recorded reported black bear sightings in Maryland since the mid 1980's. Bear sightings in Garrett county have become commonplace, and are no longer recorded. However, sightings in other Maryland counties continue to be recorded. Bear sightings in western Maryland are becoming more frequent, and people are becoming accustomed to seeing them. Several sightings have been recorded in Montgomery, Carroll, Howard, Baltimore and Harford counties. Sightings have even been reported in Anne Arundel and Queen Anne counties.

Sightings of sows with cubs are also recorded in Maryland. For the past few years, 20 – 30 different sows with cubs have been reported in western Maryland.

Appendix C:

MARYLAND DEPARTMENT OF NATURAL RESOURCES BLACK BEAR MANAGEMENT PLAN 1992-2001 SUMMARY OF ACTIVITIES

Introduction

In January of 1992, the Maryland Department of Natural Resources (DNR) released the Black Bear Management Plan. Prior to developing this plan, the Wildlife & Heritage Service (WHS) conducted a series of public meetings across Maryland in an effort to gauge public opinion towards the bear resource in the state. A lot of the issues raised were incorporated into the plan development process.

The black bear is a species that generates serious discussion in western Maryland. Since the development of the 1992 plan, black bears have continued to spread eastward in Maryland. Bear populations also appear to have increased in density in Garrett County. This increasing bear population has resulted in additional concerns being expressed by western Maryland residents, as well as those who are experiencing bears for the first time.

The Black Bear Management Plan reviewed the past history of this species in Maryland. It presented factual information regarding ongoing research activities. It also provided a listing of major goals and objectives, as well as the strategies to be employed to meet these objectives. Following is a summary of the activities that have taken place in an effort to meet these goals and objectives.

Goals – 1992

- 1) To manage the black bear as a native wildlife species in western Maryland where suitable habitat exists and is compatible with other land uses.
- 2) To manage the black bear resource for the purpose of providing recreational opportunities for the citizens of Maryland.

Objectives - 1992

- 1) To promote black bears as an integral part of the ecosystem and to inform the public about ways to avoid problems with black bears.
- 2) To determine the perceptions, desire, and attitudes of people in Maryland concerning black bears and to enable the public to provide input on the bear management program.
- 3) To minimize bear-human conflicts by helping the public cope with nuisance bear problems in a manner that will be effective and have minimal adverse impact on the bear population.

- 4) To promote the hunting of black bears for the purpose of providing quality public recreational opportunities and as a means to manage the bear population at a level consistent with CCC.
- 5) To estimate parameters that influences the dynamics and ecology of black bear populations in western Maryland.
- 6) To determine both quantitative and qualitative habitat requirements for black bears in western Maryland and to develop habitat management guidelines for implementation on private lands and particularly state and federally owned and managed lands.
- 7) To obtain an annual index of abundance of black bears in western Maryland.
- 8) To develop a simulation model of the bear population in western Maryland and begin collecting data for use in that model.

DNR staff, especially western Maryland field staff, has dedicated a large amount of time to managing the black bear resource since this plan was implemented. Some of these activities have been very successful, and the major accomplishments are listed under each objective. A summary of these activities follows.

Objective 1 - Information and Education

Although the objectives are not listed in any priority order, this objective probably has the largest impact on the status of bears in the state. Informing and educating people about bears can lead to an increased tolerance of these animals. Providing information on ways to avoid or minimize bear-human conflicts would familiarize people with bears, thus reducing the chance of human or bear injuries.

This objective identified different strategies that could be utilized in order to meet this objective. In western Maryland, WHS staff have routinely made public presentations on black bears. These presentations cover basic bear biology, behavior, and nuisance avoidance techniques. Elementary school children have been the primary focus of these presentations, but additional presentations have been made to local civic groups like the Rotary and Lions Clubs, as well as any group that requests such activities.

A standardized slide show on black bears was developed in 1999 and distributed to all of the state parks in western Maryland for use in their campfire programs. Monthly articles about bear biology and activities were written in 1998 and 1999 for distribution to the western Maryland print media. Selected news releases have been distributed to the media to provide additional information on bears. Two Maryland Outdoors segments for MPT were filmed regarding black bears in the state, one in 1994 and one in 1998. Numerous interviews with radio, television and print media have been conducted in an effort to provide information about bears. Black bears have even been the featured topic at DNR=s tent at the Maryland State Fair.

Several printed items have been produced for distribution in bear country. The most popular has been “Maryland’s Bear Country-Learning to Live with Black Bears,” a full color pamphlet that was developed in 1996 and was distributed to anyone experiencing bear problems. It has also been used as a general information tool. Posters have been distributed to rental real

estate offices in Garrett County for use in rental properties. These posters explain to renters what they should and should not do to impact bears while visiting Garrett County. Information regarding bears was also distributed to the Garrett County Chamber of Commerce for distribution and display at the new Garrett County Visitors Center.

Workshops were conducted in 1998 with rental real estate agencies in Garrett County to promote the distribution of information to tourists regarding black bear nuisance situations. In addition, a workshop was held in 1998 for Garrett County residents on ways to live with bears.

Objective 2 - Public Opinion Surveys

This objective stated that attitudes of the public needed to be determined regarding black bears and their management. Various meetings have been held across the state to gauge people's attitudes towards bears. Written and verbal correspondence is received almost daily regarding the management of this species. Letters to the editors of western Maryland papers are monitored to gauge public opinion. Newspaper editorials, articles and outdoor columns are also monitored in an effort to determine the current public opinion.

A statewide public opinion survey on bear management has not been conducted. However, a public opinion survey occurred in 1996, when Garrett County farmers were surveyed regarding bear damage to agricultural crops. This survey was part of the process for the Black Bear Conservation Stamp Program.

The 1995 Bear Task Force looked at financial losses suffered by landowners as a result of bear damage. That group's recommendations were presented at four public forums held across the state. Statewide attitudes towards bears were collected at that time, although the focus of that Task Force was more specific in nature than the broad subject of bear management.

Objective 3 - Nuisance Bear Management Guidelines

This objective stated that nuisance bear management guidelines would be established and implemented in western Maryland. A Nuisance Black Bear Response Plan was developed and implemented in 1996. This plan streamlined DNR's response to nuisance bear situations. It provided guidelines to specific situations, and has been extremely helpful in identifying areas where improvements were warranted. This plan has been revised and updated, resulting in improved efficiency in responding to bear complaints. In Garrett County, a bear response team has been established and is on call 24 hours per day from April through November. In addition, wildlife staff in the four western counties are available to handle emergency bear situations at any time.

Annual meetings and training sessions are held with all the public service agencies in western Maryland (911 centers, local and state police, animal control agencies, etc.) in an effort to provide them with the latest nuisance bear information. These meetings have resulted in a more coordinated response to emergency bear situations, and have expedited bear calls getting to the appropriate DNR agency. In recent years, the meetings have been expanded to include personnel from central Maryland as well.

Objective 4 - Establish a bear hunting season

A black bear hunting season has not been implemented in Maryland. Black bear hunting has not occurred in the state since 1953. In 1995, the Black Bear Task Force recommended to DNR that a limited bear hunting season be implemented to control the bear population and to provide revenue that could be used to reimburse landowners for bear damage. The Task Force's recommendations were discussed at four statewide public meetings. Comments received at these meetings, as well as written comments, were overwhelmingly opposed to initiating a bear hunting season at that time. The hunting season recommendation was not approved.

In 2000, the Maryland Sportsmen Association presented the Wildlife Advisory Commission (WAC) with a bear hunting season proposal. The WAC reviewed this request, approved it and recommended to the Secretary of DNR that a limited bear hunting season be implemented in western Maryland. The Secretary reviewed this recommendation, and stated that no bear hunting would occur through at least 2002. Public comments were numerous regarding this proposal, and opinion was divided on this subject.

Objective 5 - Bear population dynamics

Black bear population estimates were scientifically determined in 1991 and 2000. The 1991 bear population for Garrett County was estimated to be 79 bears, with a 95% chance that it was between 0-167. In 2000, the bear population from Cumberland to the West Virginia line was estimated to be 227, with a 95% chance that it's between 166-337. This represents an area larger than that which was surveyed in 1991, but still documents an increase in bear numbers.

Allegheny County represented 21% of the study area. Reducing the 2000 population estimate by 21% would provide a minimum population estimate for Garrett County. Using the 2000 data, the bear population in Garrett County would then be 179, ranging from 133 - 270, a 178% increase from 1991. However, bear habitat in Garrett County is of a higher quality than that found in western Allegheny County, and bear densities per square mile are higher in Garrett County because of this quality habitat.

Various research to gather biological information on black bears has been done in western Maryland since 1991. Reproductive data has been collected by radio collaring females and tracking them to den sites. Between 1986-2000, 39 sows have produced 114 cubs for an average of 2.92 cubs/sow. Also, these cubs have a 56% survival rate to one year of age. No information is available on survival rates beyond the cub age class.

Several types of data have been collected in an effort to monitor the bear population. All known mortalities are recorded, as are sightings reported by the public. Since 1985, mortalities have increased from 0 to 30 in 2000. An average of 21 bears have died annually from various causes each of the last 5 years.

Sightings outside of Garrett County have also increased. In 1980, 16 bear sightings were reported outside of Garrett County. That has increased to an average of 83 sightings since 1996. Bear sightings have become more numerous east of Allegheny County in the last 5 years.

As bear populations have increased, nuisance bear problems have also increased. However, the increase in nuisance complaints cannot be directly related to bear populations. Many factors play into the amount of nuisance complaints, ranging from natural food shortages

to human encroachment into bear habitat. Nuisance bear complaints have increased from only a handful in the early 1980s to more than 500 in 2000.

Objective 6 - Identification of habitat requirements

Specific black bear habitat data is readily available from research performed throughout the range of this species. In Maryland, specific habitat parameters were identified by Webster (1994) and Dateo (1997) as part of their Masters programs at Frostburg State University. These research projects not only classified black bear habitat in Garrett County, but also determined seasonal and annual home ranges for radio-collared females. Preferred habitats on a seasonal and annual basis were also determined, and the relationship between females and these habitats were discussed in detail. The total amount of primary bear habitat was identified in Garrett County through this work.

Also, in 2000, a Gap Analysis Program (GAP) was performed to identify potential bear habitat across Maryland. Habitat requirements were identified, and various Geographic Information System (GIS) layers were screened to identify potential bear habitat in Maryland. Only one area outside of western Maryland was identified as containing potential bear habitat. That area includes the Pocomoke State Forest area in Worcester County.

Specific habitat management recommendations have not been formulated. Bears are extremely adaptable, and can utilize any areas that contain large amounts of forestland. Research has shown that bears utilize different areas for den sites, such as brush piles, rock piles, hollow trees, rhododendron thickets and the like. Protective cover and feeding areas depends on available sources, with the adaptability of these animals determining the use of these areas.

Natural food supplies may be the most variable habitat element in western Maryland. Late spring frosts can drastically affect the volume of natural foods like berries and nuts. Acorns are a preferred bear food, and when in short supply, cause bears to seek alternate foods. This will often bring bears, as they search for adequate foods, in closer contact with people. Since acorns are an important wildlife food, the WHS annually conducts a mast survey to determine the amount of acorn production. It is important that this information be maintained on an annual basis, as the trend in acorn production may also be related to cub production (more acorns, more cubs produced). Other mast crops like apples, cherries, beechnuts and hickory nuts are also monitored in an effort to identify food supplies for these forest dwelling animals. Our surveys have determined that acorn production is highly variable, and can go from boom to failure in one year.

Objective 7 - Population trend monitoring

Ideally, an annual index of abundance of black bears is critical to the proper management of this species. However, this is very difficult to determine for large ranging animals such as bears. One promising technique is the bait station survey, which utilizes selected routes that are baited with sardines. This survey is conducted annually in Garrett and Allegany counties. Initially established in 1993, only 3.2% of all bait stations were visited by bears. By 2000, the visitation rate had increased to 24.2%. According to this index, the bear population has increased, but the magnitude of increase cannot be determined from this index alone.

Objective 8 - Population modeling

Specific population models have not been developed. Population estimates have been conducted as noted above. Simulation models can be developed, but not until additional biological information is collected.

SUMMARY

The black bear is a species that fosters myriad reactions from people. While it is generally believed that black bears are a wilderness species, it is becoming apparent that bears will also co-exist with human influences. Movement of human populations into more remote landscapes has brought humans deeper into the bear's world and the resiliency of bears allows them to survive in today's world.

DNR has been closely monitoring black bears since it became apparent that resident populations had become established in the late 1970s. Specific research has been conducted, and population estimates were calculated using state of the art techniques.

The 1992 management plan set the stage for the last 10 years of work. It's quite apparent that business as usual may not be warranted in the future. Innovative ideas and cutting edge techniques may be the way of the future for bear management in Maryland. The next 10 years could determine the future of the bear resource in our state.

APPENDIX D:

Black Bear Conservation Stamp Program

Background:

During the 1995 session of the General Assembly the Maryland Legislature established a "Black Bear Conservation Fund" as a special fund within the Department of Natural Resources. Revenue for this fund is generated by the sale of a \$5.00 Bear Conservation Stamp or Decal and other related merchandise (lucite blocks, t-shirts, etc.), and any gifts, grants or contributions to the state that are designated for inclusion in the fund. Annual contributions to the fund are used to reimburse farmers for agricultural damage caused by black bears. In 1996, the Department of Natural Resources (DNR) put \$10,000 seed money into the program.

Eligible damage for compensation includes damage to beehives, fruit, crops, livestock, and poultry. Subject to available funding, a person may be reimbursed for damage of not less than \$200 and no more than \$3,000. If there is not enough money in the fund to completely reimburse all of the claims, then an equal percent will be awarded to each claim.

Bear Damage Claim Procedures:

1. The individual suffering agricultural damage contacts Wildlife & Heritage Service (WHS).
2. WHS staff conduct an on-site field investigation and confirm that the damage was caused by a black bear.
3. WHS staff forward the claim to an extension agent of the University of Maryland Cooperative Extension Service.
4. The extension agent determines the dollar value of the damage, reports it to both the individual suffering the damage and WHS.
5. DNR determines the percentage of claims to be paid according to the money available in the fund, and pays the claims.

Damage Claims and Bear Stamp Funds Paid (1996-2001):

| Year | Damage Claims | \$Paid Out | % of Claims Pd. |
|-------------|----------------------|-------------------|------------------------|
| 1996 | \$21,140 | \$ 8,758 | 41.4 % |
| 1997 | \$41,445 | \$17,407 | 42 % |
| 1998 | \$15,749 | \$ 6,615 | 42 % |
| 1999 | \$10,389 | \$ 7,272 | 70 % |
| 2000 | \$12,170 | \$ 8,519 | 70 % |
| 2001 | \$36,389 | \$21,833 | 60 % |

Stamp Sales:

Currently, Black Bear Conservation Fund items may be purchased at the Wildlife & Heritage Service (WHS) regional service centers, at western region state parks, and online at www.dnr.state.md.us.

APPENDIX E: BLACK BEAR TASK FORCE ISSUES AND CONCERNS

Human-Bear Problems

- Concerned about nuisance bear problems to include:
 - a.) Negative impacts caused by bears scavenging in residential trash and associated trash management, particularly around Deep Creek Lake.
 - b.) Timeliness of DNR's response to bear complaints, effectiveness of technical assistance, and customer satisfaction. What does a landowner do when they have followed all of DNR's recommendations but the problem persists?
- Concerned about public safety, e.g. bear-vehicle collisions, harassing campers and homeowners, and injury to humans and pets. The greater the bear population becomes the higher the risk of dealing with potentially aggressive bears. Humans are injured and or killed by black bears in North America.
- Concerned about agricultural damage caused by bears to include destruction of beehives, killing of livestock, and destroying crops (sweet corn, fruit trees, etc.).

Populations and Habitat

- Concerned about long term health and bear population viability.
- Concerned that DNR via a public participation process has not identified a black bear population objective for Maryland.
- Concerned that we may not be making the best use of available data in making management decisions regarding black bears.
- Concerned about an apparent lack of conservation law enforcement relative to the enforcement of existing black bear laws and regulations.
- Concerned that there appears not to be an integration of public policy in regards to the management of black bears as a public resource, e.g. there is no black bear habitat conservation plan in place that has inter-jurisdictional support.

Funding Alternatives

- Concerned about Maryland's Black Bear damage reimbursement program. With Black Bear damage to agricultural crops ranging from \$12K to \$20K each year, there is no reason that this fund should not be able to raise enough money to compensate farmers for 100% of eligible bear damage.
- Concerned about the overall impact of the relatively large proportion of DNR's wildlife management budget that is expended on managing bears. The bear resource is relatively expensive to manage and escalating bear management costs have resulted in a reduction in other wildlife program funding, e.g. wildlife habitat conservation and management.
- The charismatic public appeal for this species provides a unique opportunity for alternative wildlife funding initiatives. It can be understood why hunters are frustrated and do not want to continue to pay the majority of the bear management costs when DNR is on record as not supporting a bear hunting season.
- Although not acknowledged by most citizens, restoration and ongoing management (bear research and nuisance control) of the black bear in Maryland has been accomplished with funding provided by hunters. Concerned that hunting license fees and associated federal funds generated from excise taxes on hunting equipment pay for most bear management

activities in Maryland; yet DNR is on record as not supporting a regulated hunting season for bears.

Public Values (Economic, Sociological, Political) vs. Biological Considerations

- Concerned that DNR, as the public agency responsible for the management of bears, may not have an accurate perception of the desire, attitudes, and values that citizens place on black bears.
- Although diverse values and opinions associated with black bears provide a unique management challenge for the DNR, there is concern that DNR has failed to take a leadership position in managing this species. It is unclear to the public of DNR's intention to manage this species as either a "Game" or "Non-game" wildlife species. The present classification of bears as a "Game" mammal has instilled in the hunting community the expectation that at some point bear hunting will be allowed in Maryland. Traditional game management principles utilize regulated hunting as an effective mechanism to regulate the population of a game species at an acceptable level.

Public Education

- Concerned about the lack of public education in solving human-bear problems.
- Concerned about irresponsible human behavior and the subsequent negative consequences for both humans and bears.
- Concerned that there is a lack of public education regarding the benefits that black bears provide to society.
- Concerned that although it is against the law, people continue to feed bears.

Animal Welfare

- Concerned that the humane treatment of black bears is not being integrated into all aspects of DNR's bear management program.

Bear- Related Recreation

- Black bears are a public resource. The decision making process should be sensitive to the divergent recreational opportunities that bears provide to include wildlife viewing, wildlife photography, potential for regulated hunting, and intrinsic values.

**APPENDIX F: LETTER TO PAUL PEDITTO, DIRECTOR DNR WHS FROM TOM MATHEWS,
CHAIRMAN, 2002 MARYLAND BLACK BEAR TASK FORCE**

August 30, 2002

Mr. Paul Peditto, Director
MD Department of Natural Resources
Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Ave.
Annapolis, MD 21401

Dear Paul:

The Maryland Black Bear Task Force (BBTF) has met monthly since January 2002 to identify issues of concern, acquire and discuss information, and develop recommendations on the management of the black bear in Maryland, as per its charge. One of the issues the task force has discussed recently is the need for a survey of public attitudes on the black bear. Surveys developed by Michigan State University and Cornell University were solicited, reviewed and discussed at the two most recent meetings of the task force. In light of the fact that an objective of the (1992) Maryland Black Bear Management Plan was to conduct a public opinion survey which has yet to be completed, the perceived need by other states (for example, New Jersey, New York, and Michigan) with bear/human conflicts similar to our own to assess public attitudes, and a review of the two surveys alluded to above, the BBTF requests support (including adequate financial resources) from the Maryland DNR to conduct a carefully constructed, scientific survey of public attitudes on black bears in Maryland. The task force decided at its last meeting that it will proceed with initial recommendations on black bear management and provide additional and/or modify its recommendations once the analysis of the public survey has been completed.

A survey of public attitudes on the black bear is important for a number of reasons. As for any species like the black bear with high visibility, management of the resource is a public issue in part. A well-conceived survey of public attitudes would (1) be an effective instrument to communicate the problem with black bears (as we, collectively, see it) to the public; (2) identify a Social (cultural) Carrying Capacity (SCC), and perhaps a Bear Sensitivity Index (BSI - similar to those being developed for Michigan, New York, and New Jersey) for black bears in Maryland (or particular zones in Maryland); (3) assess how knowledgeable the public is about black bears; (4) disclose how the public gets its information on black bears; (5) identify the most effective vehicle(s) for providing information to the public about bears; (6) measure variability in the public's tolerance of and appreciation for the black bear; (7) reveal the public's perception of the risks bears pose to human safety, pets, agricultural crops, etc.; (8) discover the extent to which the public is actively engaged in recreational activities associated with bears; and (9) summarize the public's attitudes toward specific bear management practices (for example, regulated hunts, relocations, aversive conditioning, euthanasia). A particularly important product of the survey would be information on regional variation in public attitudes about the black bear.

The results of the Michigan State University survey revealed that "the public at large appears to be naïve about the presence of bear in the state and associated issues." Additionally, from the

results of this survey, investigators concluded that “Information and education are tools that need to be considered to: (1) reduce the frequency of negative interactions with bear; (2) prepare the public for eventual changes in bear harvest and range expansion; (3) increase public understanding of the benefits (e.g., ecological role) of bears; (4) provide a realistic understanding of risks and consequences associated with the presence of bears and; (5) provide a better-informed basis for evaluating and accepting bear management tools (e.g., nuisance bear policies).” Further, the survey showed that “The public is polarized, emotional and often uninformed regarding several of the management options.” With respect to bear management in Michigan, the report summarily stated that “The complexity of the potential issues suggests a need for a system of SCC management which involves attitudinal response, interactions, and bear population levels.” From these statements, it is apparent that the investigators believed a thorough understanding of public attitudes is important for managing bears in Michigan.

The BBTF believes the survey for which we request support is an important component of, and worthwhile investment in, successful management of the black bear in Maryland. Wildlife biologists at Frostburg State University (FSU), in coordination with the BBTF and DNR, are willing to take the lead in developing and conducting the survey if adequate resources are made available. The University can enlist its undergraduate and graduate students in the Wildlife/Fisheries and Applied Ecology and Conservation Biology programs and student chapter of The Wildlife Society in the acquisition and analysis of data. Total expenses for the survey should not exceed \$25,000 (which includes faculty time, graduate student labor, postage and telephone expenses, data compilation and analysis), and it should be completed, with a final report and M.S. thesis, within 1 year from when the survey is initiated.

The BBTF, and Drs. Ron Barry and Tom Serfass at FSU, welcome your comments and questions.

Sincerely,
Tom Mathews, Chair
Black Bear Task Force

TM/rb

Cc: Mr. Robert Beyer, Associate Director
Mr. Steve Bittner
Mr. Harry Spiker
BBTF Membership
Dr. Tom Serfass
Dr. Ron Barry

APPENDIX G: STATEMENT OF RONALD E. BARRY, BIOLOGY PROFESSOR, FROSTBURG STATE UNIVERSITY, MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

I strongly support the recommendations of the 2002 Black Bear Task Force (BBTF) to the Maryland DNR to initiate or enhance programs to 1) identify, protect, and conserve black bear habitat, 2) monitor outdoor recreational demands that negatively impact black bear habitat, 3) determine the cultural carrying capacity (CCC) for black bears for each county, 4) establish a black bear population objective for each county, 5) educate the public on black bear behavior and ways to reduce human-bear conflicts, 6) maintain detailed records of complaints about and damage by black bears, 7) replace the Black Bear Conservation Stamp program with an annual appropriation from the General Assembly for payment of bear damage claims, 8) provide “kill permits” to individuals experiencing persistent damage to property caused by individual bears, 9) develop an emergency plan that can be implemented immediately in the extremely rare event of a bear attack on a human, and 10) conduct a carefully constructed, scientific survey of public attitudes on the black bear.

At this time I do not support a hunting season on black bears for the following reasons.

1) We have 1 rigorously conducted estimate of the black bear population in western Maryland in the last 10 years. The population has not been carefully and systematically monitored for dispersal of young, recruitment rates, etc. The 2000 study conducted by Maryland DNR generated a point estimate of 227 bears for the 830 mi² west of Cumberland (27.3 bears per 100 mi²), which does not differ significantly from the 150-170 bears estimated for the 600 mi² of Garrett County (25.0-28.3 bears per 100 mi²) approximately 10 years earlier (see the January 1992 Maryland DNR Black Bear Management Plan). This suggests that the number of black bears in western Maryland, at least west of Cumberland, may not be increasing as generally assumed.

2) Incidents such as the number of sightings, bear-vehicle collisions, etc. are not reliable for estimating and monitoring black bear populations because they are necessarily biased by increases in road mileage, traffic, encroachment on bear habitat by human activities (development, recreation) and the associated increased availability of human food (garbage), etc. Such incidents would be expected to rise over time even for a stable bear population. In 2001 biologists from the University of Nevada-Reno reported that in the Sierra-Nevada since 1990 annual citizen complaints of bears had increased by 625% and the number of bears hit by vehicles annually had increased by 1350%, despite only a modest increase in the Nevada black bear population (currently estimated at 140-460 individuals). The increase in incidents was largely attributed to increased human activity and population in the Reno-Carson City area and bears traveling more in search of human food (garbage) that they have learned is increasingly available. Therefore, claims that the Maryland bear population must be increasing rapidly because sightings and encounters are increasing must be viewed with caution. Also, incidents, sometimes unsubstantiated by physical evidence, have been sensationalized in the local press or reported more than once and from other regions of the country, giving the impression of a larger number of unpleasant encounters than actually exists.

3) A bear hunt does not appear to be the most effective strategy for reducing human-bear conflicts because it does not specifically target problem or nuisance bears. “Kill permits” would seem to be more effective.

4) Western Maryland has a low density of black bears compared to other eastern states with a hunt or that are considering a hunt. For example, portions of northern New Jersey for which a hunt has been proposed have a density of 2 bears per mi², approximately 5-10X our density in western Maryland. Our bears are along the eastern extreme of the species' range in this region,

and the population is small and potentially more prone to fluctuations than larger and more established bear populations.

5) The argument that a hunting season would prevent black bear attacks on humans cannot justify a season. Bears are not aggressive, such attacks are extraordinarily rare, and the emotionalism associated with bear encounters is disproportionate to the actual threat to personal safety. The extremely infrequent attacks on humans often result from bears habituated to humans, something education would address.

6) Property damage done by bears is inconsequential compared to that caused by other forms of wildlife and does not justify nor likely will be eliminated by a black bear hunting season. Agricultural claims have not risen linearly since the Black Bear Conservation Stamp program was initiated; claims were greatest in 1997 and dropped dramatically in 1998-2000 before rebounding some in 2001. Damage to crops and livestock might be reduced with more incentive to discourage bears.

7) We have no idea of the diversity of attitudes towards bears and bear management that the public possesses, or how these attitudes vary regionally. Public attitudes should be recognized and weighed in any management decision, including establishing a hunting season and regulations. I believe it is premature to recommend a regulated hunting season on black bears before public attitudes have been measured and carefully analyzed. Public understanding and support are imperative for effective black bear management.

8) The BBTF has tied its recommendation for a regulated hunt to CCC, which necessarily relies on a survey that recognizes regional variation in public attitudes (see Goal 2 under Recommended Goals and Strategies for Inclusion in Maryland's Black Bear Management Plan for 2003). Therefore, the survey should be conducted and the data analyzed and interpreted so that CCCs for particular counties can be determined before any hunt is instituted.

APPENDIX H: STATEMENT OF TOM ROONEY, MARYLAND SPORTSMAN'S ASSOCIATION, MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

The Maryland Sportsmen's Association (MSA) believes that science should dictate management decisions on all species of animals. In the case of the black bear, the MSA believes that the species has repopulated Western Maryland to the extent that the time has come to evaluate the methods used to manage the species.

The BBTF was responsible for making recommendations not based on emotion or public opinion, but based on numerical data compiled by the DNR, and by those who consistently come into contact with black bears. The one constant theme during the meetings was that with the increasing demand put on bear habitat by humans and their insatiable need for expansion, and the growing population of bears, the citizens of Western Maryland are coming into direct contact with more bears as each year passes.

According to former Secretary of the DNR Sarah Taylor-Rodgers, "We are seeing some black bears which appear to have lost much of their fear of humans. These bears warrant concern, and the department's rapid-response teams trap, tag and aversively condition these bears. Bears which repeat behavior indicating a loss of fear of humans will either be trapped and relocated or euthanized".

The number of bears in Garrett County in 1991 was estimated to be 79 bears, and in 2000 it was estimated at 179, a 178% increase. If we allow the population to grow at the same rate, we are looking at upwards of 500 bears in Garrett County alone in 2005. The population dynamics are not isolated to this county alone, as bears have relocated to Allegany, Washington, and Frederick Counties. A few have been seen also in Carroll and Baltimore Counties. This is an indication of a viable and free ranging population of bears.

With population growth comes an increase in bear-human related problems, especially nuisance complaints and agricultural depredation. The number of bear/vehicle collisions has risen from 8 in 1997, to over 28 in 2001. The 1992 Black Bear Management plan clearly stated that an increase in bear/vehicle collisions was directly correlated to an increase in the population. The number of bear nuisance complaints has also gone up from 355 in 1997 to a high of 618 in 2000. If this trend continues, the result could very well mean the loss of human life.

The first black bear task force in 1992 recommended hunting of black bears as an option. According to the first report "It has become necessary to develop and implement a management plan for black bears in order to clearly identify management goals and to outline specific management objectives for the next ten years (1992-2001), The two goals 1) to manage the black bear as a native wildlife species in Western Maryland where suitable habitat exists and compatible with other land uses; and 2) to manage black bears in order to provide wildlife recreational opportunity." In response to that report and concerns of legislators, in 1985 black bears were classified as a Forest Game Species. This change in classification would enable implementation of a hunting season as a management tool to control the population.

Hunting is a proven method to control the burgeoning population of black bears in Maryland. Hunting provides the citizens of Maryland with many hours of outdoor recreation, while providing tax monies to local rural counties. The MSA believes that farmers, landowners and beekeepers would be more tolerable with the growing black bear population if: 1) DNR would implement a limited bear hunting season that could be used as a means to control nuisance bears; and 2) Develop a bear conservation plan that would be more sensitive to their losses. As a suggestion, we would propose the following: 1) Open a two day limited bear season in both Garrett and Allegany Counties. 2) Develop a lottery system comparable to the State Park deer management program. Determine biologically, the optimal sustained harvest that each county or zone can support. 3) Develop a non-refundable lottery application fee to be used to fund an improved black bear conservation fund. Included on the application, provide a place for sportsmen and women to give DNR permission to

release the name and phone numbers of the lottery winners to those landowners who wish to use hunters to help with nuisance black bear problems.

During the 1998-1999 hunting season Maryland sold 129,505 big game licenses. We believe that it is a fair assumption, evident of our neighboring states, that at a minimum, five percent (6475 hunters) of the hunting community would be interested in applying for a bear hunt in Maryland. A \$10 non-refundable application fee for the opportunity to hunt a Maryland black bear could provide \$64,750, using the conservative five percent figure, to be used solely to adequately reimburse those who suffer from substantial losses due to black bear damage and to improve Maryland's black bear habitat.

In closing, the MSA is an organization of men and women who value the outdoors and the rich experience one enjoys while communing with nature. In that regard we feel that decisions should be based on science with consideration for those that live with bears on a daily basis. According to part of the current BBTF's mission statement, "While statewide species management is a goal of the management plan, special consideration **MUST** be given to those areas of the state where citizens are currently living with bears."

APPENDIX I: STATEMENT OF GEORGE FALTER, JR., B.S., J.H.U., INDUSTRIAL ORGANIZATION AND MANAGEMENT, PRIVATE CITIZEN / MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

BBTF, Structure, Organization, Methodology/The Problem: A foundation was never established for an efficient, cohesive manner in which to conduct the meetings. Basic things like membership participation and voting rights, including the never-discussed use of proxy votes, the manner in which discussions would be handled i.e., put to a vote or not, quorums, number of votes required to pass a resolution or recommendation. The net result was that some non-voting members were allowed to participate in meetings while others were not. Example: The Farm Bureau had two members participating together in meetings while private citizens (my counterparts) could not. Too much time was spent hashing out who could vote, what was a passing vote, including one lengthy, chaotic discussion concerning recommendations. There were discussions about motions that had been previously voted on. Most, if not all, of the votes were taken incorrectly. A meetings schedule was not set that would have allowed rearranging one's appointments or, indeed, not making them in the first place. An inordinate amount of time was spent discussing anecdotal information; conversely, not enough time was spent discussing the facts. The net result was BBTF recommendations that were made based on factionalism rather than factualism. A misdirected attempt was made to preclude the inclusion of a minority report. Issues were discussed *ad infinitum* but rarely were the problems defined; thereby resulting in recommendations that missed the mark.

A Solution: For future BBTF's. An agreement should be made at the first meeting as to whom will be participating members, attendance requirements to be eligible to vote, and proxy votes (which I believe are invalid, especially for BBTF recommendations that are discussed **after** said proxy votes are made). Simply following Robert's Rules will solve most of the other problems including recording "ayes" "nays" and abstentions. A firm hand at the helm will help avoid repetitious recitations of anecdotal information thereby freeing up valuable time to discuss the all-important facts. At the first meeting, techniques for dealing with management concerns should be reviewed. My favorite always has been "The Seven Step Problem Solving Technique" which begins with: "First define the problem." Any new BBTF should begin with the appointment of a neutral person to head it up, someone preferably with little or no interest in black bears if possible, someone from the professional community who has a propensity for getting at the facts; perhaps a lawyer, a businessman or a scientific researcher.

BBTF, First Steps, Missteps/The Problem: During our first meeting in Jan., 2002, Mr. Bob Beyer of the Game Management Program reminded us that we "need events for public opinion surveys." The 1992 report recommended a public opinion survey. The Mission Statement, issues and concerns were all discussed early on without first having discussed unfinished business contained in the 1992 BBTF report in any meaningful way. As a result one of the most important things that we should have done, a public opinion survey, got overlooked until it was too late to do anything. Also, we could have pulled some issues and concerns directly from that report thereby freeing up time to discuss problems. Interviews were given to the press. The comments did not necessarily reflect the views of the BBTF and the subsequent news articles may have created false expectations for the people reading them.

A Solution: Future BBTF's should first review and discuss this report and perhaps even the 1992 report before doing anything else; it will be a timesaver and also should provide a "leg up" towards formulating management recommendations. Avoid giving interviews at all costs; use press releases (approved by BBTF members) instead. This applies especially to the chairperson.

Defining The Problem/The Problem: During our meetings, we discussed many, many issues and concerns but never really homed in on the problem. Example1: The *issue* for some people was that bears are inherently very dangerous. For others the *issue* was that they are usually docile and relatively harmless. *The problem* should be obvious to most people who read this report. But we skirted *that problem* and instead treated *the issues* as problems. Example2: The *issue* for some was that hunting bears would make people safer (the phrase used most often was “We better do something before someone dies.”) The *issue* for others was that hunting bears will not only do nothing to insure safety; it will likely result in a decrease in safety. We didn’t define that problem either. Example3: “It’s a local issue and should be treated as such” vs. “Bears are a state issue and should come under the purview of the state (DNR). Not defined; not resolved. And then there are all of the other real problems that we didn’t address: irresponsible human behavior/nuisance bears, lack of documentation of alleged bear attacks on animals and so-called threats to humans, the bear issue as a political football, slanted news reports and a host of other equally important problems.

A Solution: Lay the issues out side by side; the problem usually becomes evident. Have each side present the facts. Example 1: The facts are: There has never been an unprovoked attack on a human in Maryland, ever! Vs. They scare me! Education is probably the best answer. Example 2: The facts are: Recently there was a tragic event in N.Y. where a five-month-old baby was killed by a bear. There was a two-month bear hunting season extant in N.Y. when that incident occurred. Having a hunting season did nothing to protect that baby. Examine the facts and make decisions that are based on those facts. Example 3: Agreed, it is a local issue and it is also a state (DNR) issue. Discussions about specific bear/human conflicts should be confined to a solution that is based on cooperation between local officials and state officials. Statewide and out of state sportsmen’s groups’ interests and concerns should not be a major factor in any solution.

Bear Hunt, No Bear Hunt/The Problem: There are those who have very legitimate concerns about crop damage, livestock and small animal safety as well as potential threats to humans. Many of them believe that a bear hunt is the panacea to those problems. Then there are those of us who agree about the concerns but don’t believe that countywide (or statewide) hunting is a viable answer. We believe that, in fact, a bear hunt will result in a reduction in safety. This particular problem was never discussed in depth.

A Solution: Even a cursory look at the facts should make it clear to the examiner that a general bear hunt, limited or otherwise is not the answer because it doesn’t focus on problem bears. That fact and the safety concerns that some of us have for our families and friends if an influx of hunters is allowed into our communities to “help out with the bear problem” is why a bear hunt is not the answer. According to a study by Rick Bissell, PhD: “In 1990-1999, there were 289 hunting injuries in Maryland and 18 people died from hunting accidents. This is approximately 2 fatalities and 29 injuries each year. Hunting injuries and fatalities would likely increase if Maryland added a bear hunting season.” Dr. Bissell also states: “Since 1997, the complaints regarding human safety have actually *decreased* 8%, at the same time that press coverage drumming up support for a bear hunt has increased.” According to DNR there has *never* been an unprovoked bear attack on a human being in Maryland. Anecdotal information notwithstanding, the problem is not as severe as the hype indicates and can be brought under control with minimal financial costs and no net decrease in public safety. There are many facets to the problem and many aspects to a solution. A next first step should be a continuation of this BTTF; in lieu of that perhaps reconvened after a break. In any case, all of the facts should be

carefully examined, the problem(s) identified and possible solutions developed. In that way, I believe the concerns of most interested parties will be addressed to their satisfaction.

General Thoughts: Because the focus and thrust of this BBTF was on the establishment of a bear hunt, many issues were overlooked or not given their due. Following are some random thoughts and ideas that, because of restrictions imposed on the length of this paper, cannot be explained in any detail. They are simply intended as “food for thought”.

The use of video cameras as a way of documenting human/bear conflicts, sightings, complaints. Can be privately owned or state “loaners”. Non-transferable hunting permits issued to farmers and others with documented bear problems. Aversive conditioning training programs for those same people. Meetings between people who have divergent views; role-playing as a tool for understanding the other point of view. Useful information to be gleaned from studying bears. How are bears able to recycle their own urine when they are dormant? Can said information be useful for kidney dialysis patients - - - for space travel; what’s the value of that information? Hunting vs. tourism; what are the costs and benefits of having a viable bear population. What part does “just knowing they’re out there” play in cultural carrying capacity? How does that impact tourism dollars? Safari type educational programs conducted by DNR or others trained by DNR, for schools or private groups as an educational tool and a way of raising money for wildlife programs. Finally, idle conjectures, anecdotal information, vested interests are generally not conducive to solving problems.

Human/Bear Conflicts - - - One Scenario: Using the example of a report of bears repeatedly getting into a farmer’s corn, there are several ways of handling the problem. Step one requires documentation of some sort; either bear sign at the damage site or actual videotaped documentation. The latter would presumably provide more information, especially number of bears. Depending on the facts gathered, the DNR might then opt to use aversive conditioning, translocate (which usually doesn’t work), euthanize the bear(s) or issue a restricted hunting permit. Payment for crop damage would, of course, be included with any of those steps as long as bears remained a generally protected species. The farmer could also decide to take the compensation and leave the rest up to the DNR. The method used would be worked out between the farmer and the DNR representative. Sans certain overriding conditions, the choice of the farmer should be given the greater weight. The overriding conditions might be that issuing a restricted hunting permit would infringe on the rights of a neighbor and certainly safety of a neighbor would have to be taken into consideration. Ideally, steps used to mitigate (or eliminate) the problem would begin with the least intrusive, least lethal method and gradually be ramped up. Marking bears with paintballs if possible would help identify specific nuisance bears. Any restricted hunting permit would be issued only to the farmer or an immediate family member and could be for a specific time period or unlimited time period at the discretion of DNR. Said permits would not be transferable. If a farmer is unable (poor shot) to exercise his right to hunt a particular nuisance bear then the method of dealing with it would revert back to the DNR.

APPENDIX J: STATEMENT OF JOHN HADIDIAN, THE HUMANE SOCIETY OF THE UNITED STATES / MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

The HSUS supports recommendations by Maryland Black Bear Task Force (BBTF) to conserve black bears and their habitat, better understand bears and human-bear interactions through research and monitoring, and to determine and document public opinion and concerns about bears through a public attitude survey. We whole-heartedly support the concept of conflict resolution through aversive conditioning programs that are directed at bears at the immediate time and place where problems are occurring. We understand that lethal control of black bears will be called for where human safety is immediately threatened or damage to agricultural pursuits warrants such an approach after other means have been tried and failed.

We are concerned with, and do not support, recommendations and management concepts arising out of this task force initiative that establish recreational pursuit of Maryland's black bears, advocate indiscriminate killing (i.e. a general hunting season) of bears as a "management" tool, and focus on bears as a "resource" whose value is measured and weighed in terms of services provided, or conflicts caused, in interactions with humans.

The HSUS opposes the hunting of animals for sport and that opposition constitutes the basis for our rejecting this recommendation. However, we are also concerned that the concept of "recreation" and "management" are admixed in a manner suggesting that the recreational pursuit of bears could provide an effective management tool, even solution, in addressing human-bear conflicts. The task force was not presented with sufficient evidence to substantiate this proposed association. The evidence that we examined as a group from other state programs suggests that environmental factors, such as mast yield and drought, as well as human behavior resulting in the habituation of bears, influence bear-human conflicts far more substantially than general bear population numbers. In the face of such uncertainty, we feel the advocacy of even "management" hunts of Maryland's black bears would be ill advised and inappropriate.

The general concept of maintaining bear population levels at Cultural Carrying Capacity is also problematic because the level of acceptance of the Maryland public for bears has yet to be measured. Assuming acceptance to be associated with tolerance, we must acknowledge that tolerance is not a static, but a dynamic phenomenon. Education, damage compensation programs, habitat protection incentives, and the simple continued association of people and bears can all lead to increased tolerance and understanding.

The view of bears as "a valuable natural resource" resonates throughout the draft report. The HSUS regards this viewpoint as anthropocentric and advocates and endorses the opposing viewpoint encompassed by the approach often termed "biocentric." To us, bears are more than a resource to be utilized or a nuisance to be controlled. They have dignity and status as members of a biotic community, are associated with desirable environmental and ecosystem values, and should be recognized as such.

APPENDIX K: STATEMENT OF JERRY ZEMBOWER, PRESIDENT, ALLEGANY-GARRETT SPORTSMANS ASSOCIATION / MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

Bear hunting is not new to our state. From the early 1900s until the early 50's Marylanders were allowed to hunt bear, but due to low population, the hunt was abandoned until the population could once again sustain a hunt. That time is now.

With the increase in population and an increase in their range, these bear are now becoming a nuisance, from entering houses to destroying personal property. Even showing aggressive behavior towards humans more than 40 are being killed each year on the highways and by people protecting themselves here in Western Maryland. The AGSA feels this is the time for the Maryland Department of Natural Resources (DNR) to instill a hunt either as a recreational hunt or a limited hunt to help stabilize the population and this would also give the farmers some relief from the damage that is caused to crops. We also feel that bears that have caused problems and have been trapped several times should be euthanized and not just moved to another area. If a hunt is not implemented, the AGSA would recommend that the bear be reclassified as a non-game animal and that no more money be taken from wildlife for the bear that the money come from the general fund. Back in the early 90's the sportsmen of the AGSA gave several thousand dollars to the DNR Wildlife and Heritage Service to help them study the bear. No other organizations or individuals contributed any funds to help in these studies.

The animal rights groups felt that a bear stamp or conservation stamp would be the answer to help pay for damage done by the bear. This has been a complete failure and it is now tens of thousands of dollars in the red and it has never paid in full for damage caused by the bear. In short the hunters have footed this program with their dollars from the sale of hunting licenses and taxes for our hunting equipment. The AGSA also feels that bears are very adaptable and an opportunistic and could live just about anywhere in the state. Several years ago the DNR Wildlife and Heritage Service trapped and transplanted turkey from Western Maryland to every county of our fine state and since then we now have a state wide Spring Hunting Season. This could also be done with the bear so that all of the people of our state could enjoy them.

APPENDIX L: STATEMENT OF MIKE MARKARIAN, PRESIDENT, THE FUND FOR ANIMALS / MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

The Fund for Animals, on behalf of its more than 5,000 Maryland members, strongly supports the Maryland Black Bear Task Force recommendations dealing with public education, conservation of black bear habitat, and non-lethal mitigation measures to address bear/human conflicts. However, the recommendations for a bear hunting season and for additional lethal control of bears are short-sighted and ill-conceived for the following reasons:

1. The DNR does not have the biological data necessary to justify the establishment of a bear hunting season. With only 266-437 black bears estimated to exist in the entire state, any hunt or lethal control program could cause significant damage to the bear population. This should be of serious concern considering that the number of adult female productive bears is far lower than the total population estimates and since bears are one of the slowest reproducing mammal species in North America.
2. DNR representatives told the task force that Maryland's bear population could sustain a hunt, but could not provide any data to substantiate that opinion. When asked to provide data, the DNR responded that neighboring states such as Pennsylvania can sustain a bear hunt, so Maryland must be able to sustain one too. Comparing a state like Pennsylvania that has 15,000 bears to a state like Maryland that has a few hundred bears is scientifically flawed at best and intentionally misleading at worst.
3. The task force was convened because Maryland citizens are concerned about bear/human conflicts and want those problems resolved. The recommendation for a bear hunt, however, will not provide relief to the many citizens who want concrete solutions to their problems. While it will provide a recreational opportunity for the small number of people who want to hunt bears for sport or for trophies, and while it may be psychologically soothing to some legislators and officials who want to say they are "doing something" about the bear problem, hunting will not reduce bear/human conflicts.
4. The task force was given no scientific data to suggest a correlation between a reduction in the number of bears and a reduction in bear/human conflicts. The number of bear/human conflicts is likely to fluctuate depending on the annual food availability, the number of people living and recreating near bear habitat, the aggressiveness of public education regarding ways to minimize bear/human conflicts, and other factors. The assumption that a bear hunt will reduce bear/human conflicts is a faulty assumption.
5. The hunt will not reduce bear/human conflicts, because it cannot be designed to target individual "problem" bears and it will not eliminate food sources that attract bears to homes, campsites, dumpsters, and other "problem" areas. Even if a hunt is designed to target "problem" areas, it ignores temporal issues that are critical to resolving bear/human conflicts—if a bear causes damage to corn in June and a hunt begins in October, nothing has been done to alleviate future problems or ensure that the "problem" bear is even still in the vicinity of the conflict. Trying to reduce bear/human conflicts by shooting bears at random for sport or for trophies is like trying to reduce crime by shooting into a crowded room.
6. While the hunt will not provide relief to citizens and farmers experiencing bear problems, it may actually make those problems worse. In states where bears are hunted, hunters tend to take large, adult male bears from the population, leaving the juvenile males more room to expand their range. It is these young juvenile males, searching for alternative food sources, who are more likely to cause problems at homes, campsites, and farms. Hunting is not a solution to a problem, but a commitment to a permanent problem.
7. The hunt would complicate law enforcement efforts and may likely lead to increased poaching of black bears to obtain the bear gall bladders and other valuable parts.

8. The DNR already has the authority to euthanize “repeat offender” problem bears, if aversive conditioning and relocation are ineffective. Such decisions to kill problem animals should be left in the hands of trained professionals after non-lethal measures have been exhausted. These decisions should not be transferred to the public through a general hunting season or through individual “kill permits.” Assigning “kill permits” that can be transferred to other parties or used at any time amounts to a de facto hunting season and does not address individual problems in a timely manner.
9. A variety of effective, non-lethal techniques to reduce, eliminate, and/or prevent bear/human conflicts and agricultural damage are available and their use should be expanded. The Fund for Animals supports the DNR’s current use of aversive conditioning to teach bears to behave better, public education to teach homeowners and campers to store food and trash properly to prevent attracting bears, and programs that provide assistance to farmers and free electric fencing materials to beekeepers. These techniques should remain the cornerstone of any program to reduce bear/human conflicts. Such programs can be strengthened by state or municipal legislation allocating more funding for bear/human conflict resolution, prohibiting the feeding of bears and other wildlife, and mandating the use of bear-proof trash containers in problem areas.
10. The task force recommendation for a bear hunt relies heavily on “cultural carrying capacity,” while recognizing that the bear population is not overpopulated and is nowhere close to reaching its “biological carrying capacity.” A more appropriate response than hunting would be to increase public education about black bears and expand non-lethal methods to solve bear/human conflicts, which would increase “cultural carrying capacity” and tolerance for black bears in Maryland.
11. Finally, black bears were nearly extinct in Maryland only 50 years ago. It is a testament to the successful environmental and habitat conservation programs in Maryland that have allowed this unique, majestic species to make a comeback. Maryland citizens are proud of our environmental heritage and our protection of this remarkable species, and a hunting season on black bears would turn back the clock on a half century of success.

APPENDIX M: STATEMENT OF TOM MATHEWS, RETIRED DNR WILDLIFE BIOLOGIST - MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

Regulated hunting is the traditional wildlife management tool of choice used in many states to maintain bear populations at an acceptable level while insuring the continued viability of this charismatic species. Probably the most challenging issue involving bear management in Maryland surrounds the question "Should bears be hunted." Although the 1992 black bear task force and more recently the Governor's appointed Wildlife Advisory Commission have both recommended bear hunting, it has been difficult to gain political support for bear hunting partly because less than 3-percent of Marylanders are hunters in this predominately urban state.

As Maryland's black bear population has expanded, many citizens have expressed interest in them and appear to value black bears. However, relatively few citizens fund wildlife conservation programs in this state. In my opinion most citizens do not realize that the primary funding source for wildlife management in Maryland comes from hunter dollars, i.e. hunting license fees and federal excise taxes on sporting arms and ammunition. I offer it is time to take a hard look at existing funding mechanisms for wildlife management in Maryland and develop alternative funding that lessens the burden on the licensed hunter. All the people own wildlife not just the hunter who has a long history of being a wildlife conservationist. The Department of Natural Resources (DNR) is entrusted with being the steward of Maryland's wildlife resource for the benefit of all.

As a former wildlife program manager with the DNR, I witnessed the Wildlife and Heritage Service invest increasing amounts of human and financial resources in managing black bears. I often commented that relatively speaking, bears were one of the more expensive wildlife species to manage. Because of DNR's limited resources, increasing bear management costs has resulted in decreasing attention given other important wildlife conservation programs, e.g. public land wildlife habitat management in western Maryland.

Maryland's wildlife programs continue to depend primarily upon hunting license income and federal excise tax dollars. With a small percentage of Marylanders as hunters, it is not possible for hunters to fund all of the wildlife work we need to do. DNR's wildlife program has experienced declines in operating dollars and staffing during a time of growing interest in wildlife and in the demand for DNR to resolve ever-increasing conflicts between people and wildlife. The State of Maryland needs to find ways to bring all Marylanders into the mainstream of conservation work and funding. Whether we hunt bears or not, the future of bears and other wildlife species will be more secure if Maryland develops a wildlife conservation program formulated for and funded by all the citizens of this state.

I support the recommendations of the black bear task force. If DNR ultimately decides that bear hunting is not an appropriate tool for Maryland, then I suggest that hunter dollars no longer be used as the primary funding source for this program. Further, I recommend that this funding issue be used to promote alternative wildlife funding on a larger scale.

APPENDIX N: STATEMENT OF MARGARET GOSNELL / MEMBER OF THE 2002 MARYLAND BLACK BEAR TASK FORCE

In general I am satisfied with the accomplishments of the Maryland Black Bear Task Force; however, I do have some suggestions and opinions to put forth for the final copy of the recommendations. Living with bears since 1989 on my property, I feel I have opinions based on more fact than most people serving on this task force. I feel strongly that the Maryland DNR at this time could do more to contact the wildlife divisions of surrounding states with black bears. We can learn from those states that are ahead of us in population of bears and proven solutions to the conflicts between bears and humans. I would suggest that we contact the wildlife divisions from the surrounding states on a regular basis in the future, for information they have in their files and are quite willing to share with the state of Maryland. It make no sense to me to spend years and tax dollars accumulating data, when a phone call makes it possible for the MD DNR to receive thousands of pages on black bears from other state's files.

I agree with George Falter, John Hadidian, Mike Markarian and Ron Barry that this task force failed to provide factual evidence proving a hunt would result in the death of nuisance bears. I would like to thank members of DNR and especially Harry Spiker for the detailed information they have provided to the task force over the last year. Several times I requested the DNR to provide the members with information or statistics on the number of nuisance complaints rising in relation to the growing bear population. We were never presented with that information, which I felt was critical to the bear hunt vote. Since we were not presented with scientific evidence of nuisance bears being killed during hunting season in surrounding states, several members voted against a hunting season. I decided to make some phone calls myself and get in writing the facts about bear hunts and statistics on nuisance bears being killed during hunting seasons. I have enclosed copies of statements from wildlife personnel from the states of:

CALIFORNIA – “EVALUATION OF THE POTENTIAL EFFECTS OF SPORT HUNTING ON CALIFORNIA BLACK BEARS”, Timothy Burton, California Department of Fish and Game. Page 234 “Since 1982, the number of bear depredation incidents has increased and since 1987, an average of 68 nuisance or depredation bears per year have been killed.”

NEW JERSEY – “BLACK BEAR IN NEW JERSEY STATUS REPORT 2002”, Patrick C. Carr, Supervising Wildlife Biologist Black Bear Project Leader. Page 7. “Hunting is a safe, legal, responsible use of the wildlife resource and a legitimate and effective means to control the increasing population of bears, thereby reducing associated problems (vehicle collisions, home entries, livestock kills, pet kills and property damage) in a cost effective manner.” “In conclusion, the Division will focus on an integrated strategy for bear management that includes a continuing educational campaign, research and monitoring, and appropriate control measures. However, the alternate bear management strategy whose effectiveness is still being evaluated, does not address the need to reduce the ever-increasing bear population. The population expansion will result in increasing bear problems in a much greater area of the state.” Pat informed me that Pennsylvania returns tags every year from New Jersey bears hunted and killed in Pennsylvania that had been tagged as nuisance bears in New Jersey.

NEW HAMPSHIRE – I spent several hours on the phone and on email conversing with Ben Kilham, New Hampshire black bear specialist who has personally hand raised 9 black bear cubs. He has also raised 35 other cubs for the state of New Hampshire and handles their black bear behavioral research. Ben can be seen on the Discovery Channel quite frequently these days. Ben literally “lives with the bears” and is the author of the book, “Among the Bears” which so many members of the Fund For Animals referred to in their letters to the task force against a bear hunt. Ben stated to me that according to his research Eastern black bears are doubling their population every 7 years and 20% should be harvested to provide those surviving with suitable habitat. He stated that proportionally 20% of black bears harvested during hunts in New Hampshire were nuisance bears. To quote from his book, “Among The Bears”, Page 68. “But it’s the fee-paying hunters, ironically who fund the professional wildlife management that work hardest to increase bear populations.”

PENNSYLVANIA – “ DATA ON HUNTING EFFECT ON NUISANCE BLACK BEARS”, Mark A. Ternent, Wildlife Biologist, Black Bear Project Leader. “Mortality rates for 2002 were comparable to rates observed among tagged bears in recent years. Thus, vehicle collisions and hunting are among the two most common causes of death for bears in Pennsylvania. Both “conflict” and “non-conflict” bears are susceptible, and in some years, like 2002, the combined susceptibility is nearly equal for the two groups (e.g., 20.1% vs. 24.5%). Although the combined mortality rate for vehicle and hunting typically ranges between 20 and 25 percent, Pennsylvania’s bear population has increased and expanded in the past two decades.

TENNESSEE – Chuck Hester, Bear Manager Specialist at the Great Smokey Mountains National Park. Chuck stated to me by phone that the food habituated and nuisance black bears in the Great Smokey Mountains area,(where a young woman was killed in the summer of 2000, by a previously tagged nuisance bear and her cub)-are the first to get shot in a hunt, due to the fact that they are the most visible. This report has not arrived at the time of this meeting.

WEST VIRGINIA – “DATA ON HUNTING EFFECT ON NUISANCE BLACK BEARS”, Curtis I. Taylor, Chief of Wildlife Resources. “The West Virginia Division of Natural Resources have tagged 128 and 131 adult black bears in nuisance and research situations, respectively within the study area since 1999 that were available to be harvested during hunting season. To date, 27 nuisance and 32 research bears have been harvested. During the 2002 hunting season, eighteen percent of the tagged bears were harvested. In addition to hunting mortality, bears have died due to vehicle collisions, illegal activity, repeat offenses from nuisance bears, etc. Hunting has been shown to be the most effective method to control bear populations and nuisance bears in West Virginia.”

I have spent hours on the phone talking to these bear biologists and these men have a wealth of black bear information for the MD DNR to utilize. Speaking with them I discovered they are available and willing to share information they have spent years researching. All of the above listed, agree on that most important fact we missed in our research – a black bear hunt does indeed target a proportionate percentage of nuisance bears. I have attached copies of this correspondence for the task force members to review. I realize the vote on hunting was taken, but again, I think we failed to properly research available data to educate ourselves.

I think that it is obvious that no one in this state, especially hunters who support the bear programs at this time, expects to hunt bears to near extinction. That time is over and we have since learned from past necessities and mistakes. As Ben Kilham states in his email to me, people and black bears in reasonable numbers can co-exist.

Concerning the proposed public survey of black bears in Maryland, I believe that any information we would receive has already been discovered by other surrounding states. Talking with experts on black bears from surrounding states, one fact was discussed over and over – black bear population is making a remarkable comeback across the country. Every day bears are moving closer and closer to the cities - with that fact nuisance bear problems follow. It is logical that more and more citizens in many states are dealing with the negative behaviors of bears, as their populations increase.

In closing, I feel we have had a productive year and I would like to thank Tom Mathews for the excellent job he did as our chairman. The members of the DNR were an important part of our Task Force meetings – there to listen and available for most questions or request for information we needed. I for one certainly appreciate their help this last year. The DNR has come a long way over the last 3 years in their public relations work with the citizens of Maryland who live with bears on their property, as I do. I would like to thank the other members of the task force for their input and hard work. I expected to learn from our meetings and I certainly did gain more factual knowledge and insight into the feelings of others concerning black bears.

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