# SOCIOLOGICAL AND ETHICAL CONSIDERATIONS OF BLACK BEAR HUNTING

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The following manuscript is a summary of an open round-table discussion session. This session was prompted by two recent developments: (1) an increase in the criticism of current black bear hunting techniques before state wildlife commissions and (2) the use of ballot initiatives as a method to advance regulatory change. Each of the participants was asked by the panel moderator (TDIB) to summarize the arguments for or against a particular hunting methodology. The fact that a participant presented a specific side of the argument was not necessarily a reflection of that person's own position. All attendees of the session were free to voice opinions throughout the session; many of these were recorded by audio tape and/or notes and are included. In fairness to participants, specific comments or ideas will not be attributed to any individual.

The intent of the session was to stimulate debate, not to arrive at definitive answers. The questions of bear hunting methodology are primarily social, yet each have biological ramifications. For those seeking biological, scientific support either for or against a particular practice, you will likely be disappointed. We attempted to present all arguments and critically examine some. The ultimate decisions regarding hunting techniques will be resolved in a sociological environment, not a biological one. We do believe this manuscript will serve as a useful primer for all who choose to concern themselves with the issue of black bear hunting. This manuscript does not represent an exhaustive academic approach but rather a summation of thought which was promoted by the group interaction.

#### SHOULD BLACK BEARS BE HUNTED?

The role of state wildlife management agencies has historically been to protect and to provide. Most western agencies were established in response to overexploitation of wildlife populations and habitats. The primary focus of these agencies was to protect wildlife populations from further overexploitation and to allow for the reestablishment of depleted populations. The primary supporters of these activities, both financially and politically, were hunters and fishermen.

Role and focus of agencies.

But why do we choose to protect wildlife populations? We protect them in order to provide for some human benefits. The range of benefits goes from the abstract (I want to know they exist somewhere) to the utilitarian (I derive income from them). And with black bears, a benefit has often been the prevention of depredation.

Why protect wildlife?

Until quite recently anyone questioning whether we should hunt black bears would have been considered a heretic in any agency. We in the wildlife management profession are learning that social mores are dynamic; what was mainstream 30 years ago may now be fringe behavior. The black bear serves as an excellent case history of this dynamic situation.

Relative to other big game species in the West, black bears received protection as a game species quite late. Much of our historic attitude toward black bears revolved around the real and perceived depredations upon livestock and domestic crops. The ease with which black bears adapted to human activity led to further conflict of the nuisance variety.

These historic conflicts, and the lack of a vested-interest constituent group for black bears, resulted in both liberal hunting seasons and methodologies. A less obvious, but perhaps more important, outgrowth of these attitudes was the development of the agency philosophy that we needed to hunt black bears in order to manage them. This supposed need was easily transformed into a rationalization in support of various hunting methodologies. To argue that sport hunting is needed for black bear management implies the following:

The link between sport hunting and management goals

Black bear management:

historical

parapective

- 1. We understand the impact of hunting on population dynamics and bear behavior.
- 2. We can effectively regulate harvest to manipulate age, sex, and level of kill.
- 3. We can predictably define and influence the target population.

In reality, we cannot do any of the above consistently. There are clearly situations where control of depredating black bears is an appropriate management activity. What is less clear is how effective sport hunting can be in achieving those management objectives. We do know that black bears can be overhunted in localized areas, often quite easily. Some managers believe that such localized hunting can be an effective deterrent to human—bear conflicts, especially in areas with high density of human dwellings. The utility of this approach tends to be scale related, so that it may work for summer home congregations but not for range livestock.

The wildlife management profession has evolved into a period where we speak of hunting as a management tool rather than as an end product of our activities. While there are situations with some species where sport hunting can be an effective procedure to reach management goals, rarely is hunting the only tool available. If one bases an entire argument in support of hunting upon management need, one will find himself vulnerable to reasoned criticism. However, there are three strong economic arguments in support of hunting as a management tool. First, it is often the cheapest method to obtain desired objectives. Second, the license fees paid by hunters supports the management agency infrastructure. And third, the hunting license fee and associated hunting expenditures places an economic value on the bear beyond the aesthetic value. This economic value encourages preservation of habitat and bear populations. Whereas 20 years ago, bears were often killed in retaliation for the depredation of a single lamb, we now often see guidelines where domestic loss must exceed a specified level prior to lethal bear control. This is a direct result of the consideration of the economic value of black bears.

Hunting of black bear is a product of wildlife management which clearly provides benefit to a great many people. Because it is a product, we should be concerned not only with the quantity but with the quality of the product. While agencies routinely collect kill data for management monitoring, the number of dead bears is a poor measure of the hunting product. This difference in measured output is critical to the future of black bear hunting. If one only measures performance by the number of bears killed, how those bears were killed easily becomes irrelevant. However, if one measures the hunting activity, then how one hunts becomes a critical factor. To the non-hunting public, how we hunt appears to be a powerful factor in their acceptance of hunting. The non-hunting public appears to be concerned with two major issues:

Hunting as a management tool—economic arguments

How to hunt vs. how many to hunt.

(1) do we have a credible management program in place and (2) are hunters behaving in an ethical/responsible way.

The debates currently being waged in nearly all Western states have to do with how we hunt black bears, not whether we hunt them. Rarely is the level of hunting called into question. Generally the public trusts state agencies to protect the black bears from overexploitation. The public also supports the hunting of black bear as a valid wildlife benefit. A long-held paradigm in wildlife management is that we direct our concern to the population level, not the individual animal level. We have used this paradigm as an excuse not to consider criticism of hunting methodologies. If we are to preserve hunting as a product of wildlife management we must modify the current paradigms. All hunting must operate within two sets of concordant rules, one biological and the other sociological. Neither set can be ignored. While the biological rules set the limits for exploitation (what we can kill), the sociological rules impact modes of human behavior (how we kill).

Population vs. individual management

The principal biological consideration is protection of a black bear population from overexploitation. It is clear that unrestricted hunting can lead to catastrophic reduction in bear numbers, even extirpation. The primary methods to prevent excessive kill are (1) limited number of licenses, (2) restriction on season timing and duration, and (3) restrictions on hunting methodology. As long as the total annual kill of black bears is less than the recruitment rate, there are no right or wrong methods pertinent to the question of population survival. This concept has general validity for all wildlife. Biologically speaking, there is no compelling reason to not hunt geese in January, elk in July, or bighorn sheep in February. The fact that we do not highlights the sociological nature of most of our hunting rules.

Biological and sociological considerations

Change is rarely comfortable, either for agencies or vested interest groups. The history of natural resource management in America clearly indicates that change occurs in non-incremental steps rather than gradually. This makes resistance to change stronger and acceptance more difficult. The Colorado black bear hunting debates were a vivid example. There appeared to be many opportunities for small concessions to satisfy most of the critics. Clearly there was a small minority who would not be silenced short of banning all bear hunting. But the preoccupation with this minority prevented reasonable compromise. The result was a large change in how black bears will be hunted. Wildlife management agencies and hunters alike must share some of the blame for the criticism of the status quo. Too often agencies are preoccupied with responding to complaints from traditional vested interests while the hunters focus on maximizing their hunting opportunities with minimal regulation. Neither devotes much time to examining the role of the hunting culture within the larger mosaic of American society. This insularity, while once our strength, may now be our greatest weakness. It is in this environment that we must now confront the issues of black bear hunting methods.

The current environment of change

#### SPRING SEASONS FOR BLACK BEAR

#### RATIONALE FOR SPRING SEASONS

Proponents of spring black bear hunting generally offer one or more of the five following lines of reasoning:

- 1. Concentration and predictability of habitat use by black bears enable hunters to be successful.
- 2. Sex selectivity is possible based on differential den emergence times.
- 3. The spring bear season provides recreational opportunity during a different time of year than most other hunting seasons.

- 4. Spring hunts are part of our hunting tradition.
- 5. Hunters are fearful of the domino-theory; i.e., if we lose this season to the ANTI'S they will come back for other seasons.

Black bears do concentrate in areas which provide suitable green forage soon after den emergence. Knowledgeable hunters can utilize this trait to improve chances of seeing and killing bears. This is more noticeable in the northern Rocky Mountains than in the Southern Rockies. In areas where baiting and hounds are not allowed (e.g., Montana) this seasonal concentration is probably critical to hunter success. In areas of dense conifer vegetation, this spring period may be the only time when black bears actively forage in more open environments.

A majority of studies clearly indicates the earlier den emergence and greater early activity of male black bears. Summaries of male and female harvests at weekly intervals show a strong male bias during the earlier weeks of spring seasons. This bias wanes as spring progresses; the strong male bias generally lasts for two to three weeks. Hunters usually want long spring seasons as access to mountainous areas improves with snow melt. However, the utility of spring hunting for biasing the kill to males deteriorates rapidly with time. Data from Colorado clearly demonstrate that most bears are killed in the last two weeks of the spring season, regardless of ending date. To take advantage of differential activity to bias the sex ratio of the kill, the season needed to end by 15 May. Other states, where den emergence precedes Colorado by three to four weeks, would likely need to close earlier. Most bear managers prefer to see hunter kill directed to males, and spring seasons do clearly provide the opportunity for directing hunter kill to the male segment of the population.

With the exception of spring turkey and varmint hunting, there are few hunting opportunities from January through August. While spring bear hunting is probably a hold-over from earlier years when most Western states allowed year-round hunting of bears, hunters have increasingly been taking advantage of this opportunity, especially since the mid-1970s. As long as the spring kill does not negatively impact the health of the black bear population, why reduce or eliminate this opportunity? Hunter crowding is an issue in many states during the fall biggame seasons. For hunters seeking a big game experience with lower hunter density, the spring bear season has been a wonderful opportunity. Spring is also a great time to be out and about in the mountains, and many hunters comment on the spiritual refreshment this provides after a long winter. For these hunters, hunting bears is much more than just killing bears.

Tradition is an important part of American culture. It often serves as the source of heterogeneity in our human population, and, as a society, we usually revere tradition-based activities. The loss of a traditional activity often angers people far more than would seem reasonable from the subject lost. As hunters become a smaller minority each year the fear, and at times paranoia, about loss of hunting privileges weighs heavy on their minds. Many traditions in America continue because of the societal tolerance of minority opinion. There are also instances where minority traditions have created great strife in our society; i.e., slavery and women's suffrage. Tradition appears to be a strong argument within state agencies but not within the non-hunting public.

The domino theory is widely accepted among hunters. This theory proposes that we should defend all hunting practices against attacks, for if we ever let the anti-hunters defeat us on any hunting issue, then the entire network of sport hunting will eventually fall. The belief in this theory is pervasive and strong. In November 1992 Colorado citizens voted on a citizen-initiated ballot initiative (Amendment 10) which would prohibit spring seasons for bears and use of hounds and bait for bear hunting. Numerous citizen polls during the previous four years indicated a strong opposition to these techniques by non-hunters and also many hunters. The measure passed overwhelmingly (70% YES, 30% NO). Post-election analyses showed that most

Spring habitat use

Den emergence and sex selectivity in the harvest

Hunter crowding in the fall

Tradition and the public

Domino theory

YES voters acted out of concern for bear population health and a sense of fair chase while a sizeable portion of the NO voters did so, not because they supported the methodologies, but out of fear of subsequent attacks on hunting. Interestingly, large majorities of both groups of voters preferred that such decisions be made by appropriate state agencies rather than by ballot questions.

Committed anti-hunters will continue to oppose all hunting practices. However, they are quite candid in saying they will openly attack those behaviors which they think are most out of line with general societal norms. They will not attack white-tail deer hunting. The real power lies with the non-hunting public. Nearly all public opinion surveys show that the non-hunting public (about 70% of Americans) is tolerant and/or supportive of regulated hunting. When this group is exposed to hunting behaviors which they find inappropriate, they are not hesitant to side with anti-hunting advocates; i.e., the Colorado Amendment 10 vote. The hook-and-buller press, along with hunting advocacy groups, reinforce the fear in hunters of losing their privileges to the vocal, well-financed anti-hunting lobby. While many wildlife professionals believe the strength of belief in the domino theory is much greater than the strength of the evidence, the concern among hunters is real.

The nature of the non-hunting public contrasted with the satihunting public

#### RATIONALE AGAINST SPRING SEASONS

Opponents of spring black bear seasons also have an array of reasons:

- 1. It is ethically wrong to hunt during a time when females are nursing young because of orphaning and subsequent death of cubs.
- 2. It is wrong to harass bears during a critical period for them physiologically.
- 3. Bears are too vulnerable in the spring because of their concentration in limited habitat and declining physical condition.
- 4. Spring seasons contribute to harming other natural resources. Road damage and stream siltation are two examples.
- 5. Agencies lose credibility for supporting spring seasons.

The biggest issue is the killing of nursing female black bears. There is no way to prevent this from happening in a spring bear season, either through hunter education or timing of season. Nursing female black bears often forage at great distances from their cubs. When pursued by hounds, the female bear usually leaves the cubs in a tree and continues eluding the hounds. When she trees, she is soldom with her cubs. Many nursing females do not bring cubs to bait sites initially but will as they grow older and as she becomes less wary at the site. There remains great contention between hunters and bear biologists/managers as to the ability of hunters to accurately assess nursing status of bears. The conclusion of most biologists is that it is quite difficult to accurately determine nursing status on free-ranging black bears, even when a bear is in a tree or at a bait. The appearance of nursing females in the kill each spring supports this notion. During the last year of spring bear hunting in Colorado, the number of nursing female black bears checked was within three of the number predicted based on breeding rate of females and total female kill. In other words, there was no selection even with regulations prohibiting the taking of nursing females. Proponents of spring hunting usually point out that most states protect females with cubs by regulation. The regulation looks good on paper but is very difficult to implement in the field because of bear behavior.

The crux of the nursing female argument is the difference in the paradigms of managing for total population fitness without concern for individual animal welfare and one where individual animal welfare is important. The number of nursing females killed is irrelevant from the animal

Nursing females

Difficulty of discrimination between famales w/ or w/o cubs welfare position. They do not accept the population dynamics arguments, especially since there are alternative hunting seasons where cub death because of family group break-up is not an issue. Wildlife professionals are concerned with both individual and population welfare but perhaps have not done a good job of expressing such concerns to the non-hunters.

In most western states the spring season is a period of significant physiological stress to black bears. Available food is usually insufficient to maintain body weight, much less replenish stores of nutrients used during the long hibernation period. Because of these conditions black bears may be forced to forage in areas which provide minimal security. Of great concern at this time is the impact of long and/or repeated pursuits by hound packs. Our treatment of black bears is inconsistent with our treatment of ungulates. By regulation and education we encourage people to avoid activities which stress ungulates in the months following the winter period, primarily because of the lowered physiological condition of the animals. Natural mortality among young bears does occur during spring, especially in cold or dry periods. Added stress during these times would likely increase mortality. Such mortality may not be readily observable to hunters; e.g. leaving a young bear in a tree after a hound chase appears to be saving the bear when the chase itself may contribute to subsequent starvation.

Physiological stress during spring

Some argue that the limited habitat available during the spring season and subsequent concentration of black bears creates a situation where the bears are too vulnerable. The same behavior trait thus is used in arguments for and against spring hunting! Clearly agencies agree with this position partially, as evidenced by the trend in limiting hunting licenses during spring seasons in particular units. Limiting licenses controls the potential for over-kill although it may not address the ethical concern of hunting during a time of maximum vulnerability.

Vulnerability of bears concentrated in spring habitats

An issue relative to other natural resources is road damage and harassment of other wildlife. In order to bias the kill to males, agencies encourage hunters to hunt as early as possible. This often results in severely rutted access roads. The road condition is a valid concern to land management agencies and private landowners as bad conditions increase maintenance costs. Rutted roads also contribute to increased erosion and silting of streams. This can have a negative effect on stream fisheries, especially in highly erosive soils. Many wildlife agency personnel have grave concerns regarding impact of spring black bear hunters on ungulate populations. The fact that they appear more worried about incidental impact to other wildlife rather than the target species further agitates the critics of spring bear hunting.

Road damage

While deer and elk management finance western state wildlife agencies, smaller programs often dictate how that agency is perceived by the non-hunting, and sometimes the hunting, public. There seems to be a general perception that agencies treat black bears differently than other big game, or even wildlife in general. The perception is that there are two different ethical standards. Many in the profession agree. The perception that we hold hunters to one standard with popular game animals (deer, elk, bighorn sheep) but not with bears creates a big credibility problem for the agencies. Try suggesting a spring hunt for elk some year! As public agencies, credibility is our main currency for keeping public support.

Credibility problem of double standard

#### BAITING FOR BLACK BEAR

#### RATIONALE FOR BAITING

Proponents for baiting offer the following justifications:

1. Baiting is effective in increasing hunter success and/or implementing population control.

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- 2. Baiting provides opportunities to watch black bears.
- 3. Baiting allows for hunter selectivity for specific age and sex groups.

- 4. Without baiting or hounds, hunters would not be able to kill bears in many areas.
- 5. Baiting as a form of supplemental feeding may improve physical condition and cub production.

Baiting of black bears surely increases hunter opportunity to observe and kill a bear. As baiters are prompt to point out, baiting is not a sure thing. Placement of bait in areas naturally traveled by bears improves success. A major detriment to baiting success is when black bears avoid the bait during daylight hours. Hunters using bait in Colorado enjoyed average success rates about 50% better than hunters not using bait (30 vs. 20). If a management objective is to significantly reduce black bear density, then baiting is an effective tool. As density decreases, incidental encounters decline and baiting becomes a more effective procedure.

Anyone having the opportunity to watch bears receives some benefit. At bait sites used by individual hunters, the number of bears killed is proportionally small to the number at the site most of the time. This may not hold true for baits maintained by outfitters. While novice black bear hunters often shoot the first bear seen, more experienced hunters often wait to fill a tag, either in search of a larger bear or to prolong the hunting season. Baiting provides the opportunity for a hunter to observe more bears than other hunting techniques. This is beneficial in training hunters to recognize size and possibly age and sex of black bears. Although the situation may be artificial, the enjoyment to the hunters of watching these animals is very real. Where black bears are unusually wary, baiting provides the only successful means for nonhunters to observe bears. Some hunters continue maintenance of bait sites after seasons to provide for general observation, while many more incorporate non-consumptive watching during the hunting season.

Because of the potential for close-range observation and prolonged observation at baits, many hunters contend that the size, sex, and age (size-related) of target bears can be determined. They contend this enables them to identify nursing females and other females. Most experienced black bear biologists believe that a small percentage of bear hunters can do this. At the least, experienced hunters can accurately identify large, adult males. Smaller bears of either sex are much more difficult. Several factors make accurate determination difficult. First, the overlap of sizes among age and sex groups of black bears is large. More subtle differences like shape of face are difficult to see and not unambiguous. Most bear researchers have stories of inaccurately classifying sex of a bear at a distance of 10 ft. Second, most hunters using bait hunt with rifles and thus do not set up at close range to the balt, as do archers. Greater distance reduces the accuracy of any identification. Third, at long-maintained bait sites, most bear activity occurs just prior to dusk at low-light conditions and with the constraint of ensuing darkness to force a decision by the hunter. An examination of hunter kill data does not support a general relationship of bait hunters being selective for males. Besides the real problems of observation, the turnover among bear hunters contributes to a lot of inexperienced bear hunters. This does not negate that individual hunters can utilize bait to be very selective. Rather, the consensus is that such hunters make up a small proportion of the bear hunter population.

Black bears are animals of the forest and shrublands and only under unusual conditions do they venture far into openings. They also possess excellent senses of sight, hearing, and smell. This makes them difficult to seek out and stalk as one might an ungulate. Hunting success can vary widely based on time of year as well as method. In Colorado, black bear hunters average 3-5% success when hunting during deer and elk seasons (Oct.—Nov). Hunters in September, without bait, average 21% success. When legal, hunters using bait averaged 28% success during spring or September. While baiting clearly improves hunter success, it is not necessary to permit one a reasonable chance of killing a black bear. Hunts in Montana and Pennsylvania routinely

Improvement of

Identification of age class and sex of bear

Stalking vs. baiting success result in hunter kills in excess of 1,000—all without bait or hounds. Baiting to improve hunter success is most likely a significant factor where dealing with large proportions of novice hunters.

Baiting creates habitat. It provides a concentrated source of high quality food. It has been suggested that this supplemental feeding serves a positive effect both on individuals and the population. A bear with steady access to bait undoubtedly benefits nutritionally. The cost of this food source would vary by season. Agonistic encounters among bears is greatest in spring and negligible in fall, so the stress impacts of concentrating bears at a site would likely vary. In years of fall food failures, abundant bait may keep black bears from foraging in areas of human habitation; thus, reducing management actions against nuisance bears. Baiting in the fall may also increase cub production the following year in those years when fall foods are scarce. In food-poor years, supplemental food may also increase survival of yearling bears. The short-term impact upon population productivity may be significant. Because of the varying proportion of breeding females each year, the long-term impact may be much less. These relationships are researchable and it is unfortunate they have not been investigated. Baiting to reduce bear depredation on trees, rather than for hunting, has been shown to be both cost-effective and publicly acceptable. This type of baiting has been restricted to commercial timber forests in the Coast Range of Washington. It appears to offer a viable alternative to more traditional bear depredation approaches.

Nutritional and habitat improvements of baits

Supplemental feedings

#### RATIONALE AGAINST BAITING

Opponents to baiting offer the following rationales:

- 1. Baiting tends to congregate bears in unnatural situations; this can lead to increase in intraspecific strife and increase in vulnerability to hunting.
- 2. Baiting is an unfair method of killing an animal.
- 3. Baiting is inconsistent with the concept of fair chase as applied to nearly every other hunted species.
- 4. Baiting predisposes bears to become nuisance bears by teaching them to feed on anthropogenic foods.
- 5. Baiting may increase the susceptibility of non-target species to illegal kill.
- 6. Baiting increases management costs to regulate and enforce baiting requirements.

Black bears are highly mobile animals. Once they discover a bait site they may continue to visit it regularly. This can lead to an unnatural concentration of bears in a small area. Baiting can lead to a situation where intense hunting pressure can be exerted on a population. Whereas a bait site maintained by an individual hunter usually results in one or fewer dead bears, baits maintained by outfitters or groups of hunters can result in most of the bears visiting a bait being killed. This leads to localized overexploitation and is counter to any educational efforts to bias kill toward males. In low density habitats, baiting can be effective at extirpating bears, especially where management monitoring is minimal. Black bears are a highly social but solitary animal. The concentration of animals at one site where there is competition for food could lead to severe agonistic encounters, possibly death to young bears. This would be especially true during spring seasons when mating activity peaks.

The perception among much of the public is that people are shooting black bears from blinds while the bear has its head in a barrel of food scraps. A selection of bear hunting videos from the local video rental store will support this perception. Many people simply view this as unfair. Where are the outdoor skills that we often tout as a benefit of hunting? Hooking an

Localized overexploitation of bears due to baiting

Agonistic behavior due to competition for food or mates

Where's the sport and skill?

animal on an artificial food source, then blasting it from 200 yds, is analogous to worm fishing at a fish hatchery raceway. Where is the sport?

The question of consistency in our regulatory approach is often cited. Several western states have passed regulations prohibiting the feeding of big game, primarily because of increasing conflicts between humans and wildlife. The intent is to keep the animals wild and not habituated to man. However, many of the same agencies condone baiting of black bear. While it is often believed that this is a hold-over from earlier anti-predator attitudes, agencies are reluctant to explain the discrepancy. Why is it acceptable to shoot a bear feeding on doughnuts while the person who shoots an elk coming to rock salt or alfalfa is not only ticketed, but ostracized as something less than a real hunter? Among non-hunters, the notion of fair chase is paramount to their tolerance of hunting. While the anti-hunter may hold a spotlight on hunter behavior, the hunters have control over what is seen.

Inconsistency of baiting regulations

Where the baiting of bears is conducted, what do the bears do at the end of hunting season? Do they go back to natural forage? We know that black bears learn much of their early habitat use from their mothers. What about bears that have been using bait every year of their life? Do they even know areas of high natural food abundance? Or do bears go seeking food from familiar sources; i.e., 55-gallon barrels. The process of luring a bear to bait involves habituating that bear to human odors and presence at the bait site. What role does that habituation have in reducing the wildness of the bear and possibly predisposing it to a human-bear conflict situation? Some states (Arizona, Colorado, New Mexico, California) aggressively promote the idea that a fed bear is a dead bear. The once-common practice of trapping and moving nuisance bears is receiving critical attention. California does not move nuisance bears. If the source of conflict cannot be resolved, the bear is killed. Colorado only moves bears once, and then only after actions are taken to alleviate the source of conflict. What are the fates of translocated nuisance bears? Moving the bear does little to resolve the problem. Once the bear is habituated to human food, it will eventually wind up as a nuisance bear and ultimately will have to be killed. Does this habituation encourage bears to enter campgrounds? Will baiting contribute to a greater number of aggressive actions between humans and bears? All are valid questions which agencies have been reluctant to address.

Does baiting create habituated and nuisance bears?

Baiting may contribute to the illegal or unwanted kill of other species. This is of particular importance where grizzly bears and black bears are sympatric. The presence of otherwise unavailable animals will tempt some hunters. Also of concern is the difference in behavior of the two species of bears. How will a grizzly bear react at a bait when it discovers the hunter in the stand? If the bear becomes aggressive, the hunter may have little option in defense of life. Why create a situation where the hunter has limited options?

Impact on nontarget species

As public criticism of baiting increases, a first response of management agencies is to begin regulating the activity, rather than to ban it. Such regulations often require registering of site and post-season clean-up, or restrictions on what items are allowable and on non-containerized baiting. Regulations require enforcement. One of the more common complaints is the placement of baits. Most hunters prefer bait sites with vehicle access. This often puts them in conflict with other public land users who dislike the sight and/or smell of a bait site. There are bona fide public health concerns depending on what type of bait items are used and their proximity to water supplies. Enforcement of regulations and resolution of user conflicts requires agency manpower. As agency budgets shrink or remain static and prioritization of activity is required, other agency constituents dislike the allocation of manpower to bear baiting enforcement.

Conflict with other users of public lands

### USE OF HOUNDS IN HUNTING BLACK BEAR

#### RATIONALE SUPPORTING USE OF HOUNDS

Justification for the use of hounds for hunting black bear include the following:

- 1. Use of hounds is a traditional method of hunting with a long history.
- 2. The interaction of hounds and houndsman is a rewarding hunting experience.
- 3. Hunting with hounds does not guarantee a kill; the bear frequently gets away.
- 4. Using hounds allows hunters to select for the size, sex, and possibly age of the bear, as well as its nursing status.
- 5. These hunts can be strictly for sport (catch-and-release) without the death of a bear.
- 6. Use of hounds is the most effective way to target depredating or nuisance bears.

Bear hunting with hounds has a long history in American hunting lore. The literature of American hunting is liberally seasoned with bear hunting stories, nearly all with hounds. It is a tradition that tends to localize within families and regions. Those who participate do so with a fervor not often seen among other groups of hunters. Part of this dates to the era when we were actively pursuing bears as predators and the best hunters utilized hound packs. The lore grew around this group.

The interaction of man and dog can be spiritually strong. Few would argue with the waterman's allegiance to his retriever, the feeling of houndsmen for their dogs is no less strong. There is a symbiosis between a good handler and the dog pack. Packs often get confused on hard, bare ground; or take a back-track on a fresh scent, and it is usually the houndsman who works this out for the dogs. There is a danger to the dogs in pursuing large carnivores. Bears can easily kill dogs by drowning, biting, and swatting. There is a risk in turning dogs out on a bear and the houndsman does not take such risk lightly. The specific animal being chased is often secondary in importance to the chase. The chase is where the recreation and the reward lie.

No guarantees in using dogs

A common misperception is that once the dogs get on the track, the bear will be treed. Unfortunately a few outfitters bent on touting their prowess contribute to such falsehoods. In truth, a great many chases end with the hunter never seeing the bear. If a treed bear was guaranteed, much of the challenge would be gone from the hunt. Thus, hounding is indeed sporting. It is not uncommon for houndsmen to oppose the use of bait for bear hunting on the grounds of sportsmanship.

Houndsmen contend they can be very selective for sex and size of bear in a tree, as well as nursing status. However, in research done in Maine, it was found that houndsmen were not accurate in assessing whether the bear had cubs. In that research all cubs were left in trees other than where the female treed. Undoubtedly, if the hunter takes time and uses optics, the sex of the bear can usually be determined. However, data from California, Idaho, and Colorado all suggest that hunters using hounds are not strongly selecting for males. There does appear to be selection for older bears in Idaho. It is unlikely that houndsmen are better than any other group of hunters at estimating size of a bear, most fare poorly, as do bear biologists! The potential for selection exists but apparently other factors mitigate against more widespread use.

Houndsmen are usually strong advocates for pursuit-only seasons. They usually want these in summer months as a training and conditioning period for their dogs. Even during open seasons, many hunters leave bears in trees. Considering the sizeable investment it takes to maintain a hound pack, it is understandable that a hunter may not want to end his season on the first day. Such behaviors result in a lot of recreational activity for each bear killed.

Selection for sex and size of bear

Bond between the

houndsman and

dogs

Pursuit-only SECTIONS

The focus of animal damage control work in recent years has been to target effort on the depredating individual rather than the population. With black bears, prompt arrival of hounds to the depredation scene is the most specific technique available. While it is not totally discriminating, as bears will cross tracks, it is far superior in selectivity than traps. It is critical that the hunter arrives soon after the depredation—at worst within 24 hr. Few management agencies will financially support hound packs for their employees; thus, when hounds are needed they must go to private hunters for help. If hounding were banned, there would be no source for this preferred technique. Hounds have been used as a possible deterrent for nuisance bears. Rather than trap and transplant nuisance bears, which is costly and of unknown effectiveness, several agencies have tried hound chases as a negative reinforcement. This provides recreation for the houndsman and hopefully is enough of a deterrent to the bear to keep it away from where it was a nuisance.

Hounds and depredating bears

#### RATIONALE AGAINST USE OF HOUNDS

Opponents to the use of hounds usually cite one of the following arguments:

- 1. The bear does not have a chance; this is not fair chase.
- 2. The use of electronic collars on dogs is unfair and contributes to abuses of fair chase.
- 3. Harassment during either spring or fall seasons can have detrimental impacts on bears.
- 4. Cubs are caught on the ground and killed by the hounds.
- 5. Hounds often trespass on private property and houndsmen cannot control this.
- 6. The behavior of houndsmen does not deserve our support. They are unwilling to address the abuses among their ranks, or even acknowledge them.

Many opponents of this hunting technique believe that once the dogs strike on the bear the fate of the bear is sealed. Perhaps this perception is the result of biased reporting combined with overzealous statements by some houndsmen. Any hunting technique that results in a 100% kill is not viewed as fair chase, but rather as control. This is a situation where unbiased educational efforts could defuse some of the acrimony. There are some opponents who simply think the pursuit is wrong, regardless of outcome. They point to harassment laws which most states have that make it unlawful to harass wildlife. They question the consistency of allowing bears to be pursued by hounds in light of such statutes or regulations. This is an especially germane point relative to pursuit-only seasons since there is no attempt to kill the animal.

The intent of radio-telemetry collars on hounds is good. It enables hunters to retrieve dogs in a timely manner, thus minimizing harassment to other wildlife. In mountainous terrain with limited vehicle access, there is limited opportunity to abuse their use. However, in more moderate terrain with high road density, hunters do use the radio-collars in what is perceived to be an unfair manner. The most common complaint is that hunters do not even accompany the hounds during the chase but merely track the dogs from the road networks until the bear is treed. The hunters then track to the bear and shoot it. Few would agree that the positive rewards of hunter-hound interaction are being achieved here. The prevalence of such behavior is unknown. But, like the number of nursing females killed, it is not the total number that is important. The fact that some hunters behave this way taints all houndsmen, and houndsmen have been unwilling to acknowledge the problem or address it.

Hounds chasing black bears during the spring season may have a direct impact on mortality of young bears during food-poor years. Most individual bears are losing weight during the spring period, and the expenditure of energy during one, or several, hound chases may be more than the bear can afford. Nursing females are separated from cubs and killed, leaving the cubs to starve

Fair chase

Radio-telemetry and dogs

Mortality and physiological stress

to death or be killed by predators. Chasing of black bears in fall seasons can have negative effects in several ways. The first is in physiological stress from the extended pursuit. At this time bears have their winter pelt insulating them as well as a thick fat layer. Running generates substantial heat and bears have limited ways to dissipate heat (panting). Overheating could seriously suess bears, possibly leading to death or abortion of fetuses. In food-poor years, bears will use substantial energy escaping dogs that should be used to produce fat for the pending hibernation. Finally, bears evolved to have a short period of frenzied feeding in the fall in order to store fat. Continued chasing by dogs disrupts the feeding patterns not only of the chased bear but of nearby bears as well.

During spring seasons cubs can be caught on the ground by the hounds. When this happens the cubs are usually killed by the dogs. This occasionally does happen, but the more common instance is that the cubs go to tree and their mother continues to run. Probably more cubs die from the female being killed than from hound packs; however, the emotional power of the image of cubs being killed by dogs is a force. Ignoring the issue because of the small number of incidents and minimal impact to the population is not a prudent decision.

Once the hounds begin the chase there is no way to control where they go. Advocates of radio-telemetry collars on dogs suggest these collars help them to catch dogs before trespass. In reality, the only way to prevent hound trespass on posted, private land is not to hunt in the area. Responsible hunters acknowledge this and behave accordingly. But not all do, and this becomes an issue of great concern to many landowners.

The more we talk to opponents of hound hunting, the more obvious it becomes that the major problem is hunter behavior. There is a strong perception that houndsmen abuse the rules of fair chase routinely. The issue of radio-collars on dogs, sequential packs of dogs to keep fresh hounds on the bear, keeping bears treed for days while getting a hunter to the site, willful trespass—all of these result in a tarnished image. The perception is the reality. Houndsmen must address the abuses and the over-statements. Undercover law enforcement work that suggests heavy involvement of hunters with illegal traffic in bear parts must be addressed. Houndsmen have a credibility problem with both wildlife professionals and the public, both hunting and nonhunting. Until they, as a group, work to address these problems they will not receive support.

## MISCELLANEOUS ISSUES

Two other issues came up repeatedly during the discussions that were pertinent to all the hunting methodologies: (1) the truthfulness of messages by advocacy groups and (2) the failure of state agencies to direct research efforts toward hunting methodologies.

#### LACK OF RESEARCH

Many of the claims by advocates on either side of an issue are amenable to research. For example, how does baiting affect movement patterns and habitat use? Is there a relationship between bear use of bait and subsequent history as a nuisance bear? What are the impacts of fall hound seasons on bear feeding behavior? There are many similar questions which should have been researched. Currently we operate in an arena dominated by opinion, often stridently offered. Amidst the call to base the decisions on biology, we find there is too little biological knowledge. Our profession has been reluctant to implement research to assess impacts of hunting. This has become more pronounced as criticism of hunting has received more attention. In the dialogues which we will all participate in soon, most of us would be more comfortable with unbiased research findings than just expert opinion.

Hounds and cubs

Trespass on private property

Hunter behavior-the real problem

Lack of ecological research

As glaring as the omission of ecological research on hunting method is the omission of sociological research. We do not live in a homogenous society; there are regional and sub-regional cultures which are changing at varying rates. If we are to manage wildlife for human benefit we must first understand how the human society feels about wildlife and its uses. We can no longer afford to only listen to our traditional constituent group or to base decisions on societal norms of 50 years past. This is not to imply an abandonment of traditional support groups who have supported wildlife management financially and politically for so long. Rather it is a call to broaden the scope of dialogue in hopes of having a better feel for our current societal norms. To ignore such a process is to invite management by ballot.

Lack of sociological research

#### TRUTH IN ADVERTISING

A number of examples of untrue or misleading statements were discussed. All appeared to have one thing in common—they cast a positive light on the advocates while denigrating the opposition. Perhaps it is unavoidable given the state of our society's political system. But it does serve to both elevate emotions and destroy credibility. Once a person or group espouses a statement which is patently untrue, their credibility on all statements becomes suspect. Only those ignorant of the true nature of the situation accept future statements. Unfortunately, this often means the majority of citizens—at least on wildlife issues. Perhaps we are naive to hope for unbiased, objective statements on emotionally contentious issues. But if we have any hope of solving the issues of black bear hunting, that hope lies in all participants being truthful and forthright.

Public ability to discern truth in advertising

#### SUMMATION

In the near-term, the primary black bear management issues will continue to be over hunting methodologies. Agencies are generally ill-prepared to effectively resolve these issues because the issues are sociological in nature. However, if agencies do not resolve the issues in a timely manner then they can expect to see resolution via ballot initiatives and/or legislation. Agencies need to rapidly develop a philosophy for decision-making that includes constituents which have historically been left out of the process. The failure to do so will result in loss of agency credibility. The ballot initiative in Colorado was not over the welfare of the black bear population. There was general agreement among constituents that the agency was committed to protect the black bear population. The greatest loss in the ballot process was in agency credibility because the agency failed to listen to all constituents. Loss of public trust will make the balancing of contentious natural resource issues much more difficult.

In the long-term, black bear management will focus more on resolution of human-bear conflicts, depredation to private property, and the impacts of hunting. Encroachment of human dwellings and activities into previously secure bear habitat will continue as the gravest threat to black bear populations. While it is apparent that most management agencies were ill-prepared to deal with the issue of black bear hunting techniques, it is prudent to examine current research to ensure that it is directed toward resolution of pending problems rather than documenting general life history traits.