

What's Going on with Bears in Virginia?

By: Jim Parkhurst, Virginia Tech

Black bears are one of the most charismatic animals among all resident fauna of Virginia and, as such, a unique relationship between the general public and bears seems to have emerged. Depending upon whom you ask, this interaction might best be described as a kind of love/hate relationship. Comments recently offered by a Roanoke County property owner provide an effective demonstration of this relationship — “Bears are great! I love seeing them and knowing that they exist here in Virginia, but only if they're not anywhere near my property.” This sentiment clearly illustrates the management dilemma biologists charged with managing black bear populations in Virginia now face — how do we, as a society, assure the continued existence of the species without creating hardship for or conflict among stakeholders? There are no easy answers to this challenge. The burden for developing realistic, science-based, and publicly acceptable management strategies falls on all of us — everyone must play a part and assume responsibility if successful co-existence with bears is to be achieved. Before examining how to do that, let's first look at some things we know about bears today and review recent trends and human-bear interactions.

Black Bears in Virginia

Here in Virginia, the black bear is one of our largest mammals; adult females typically weigh 100-200 lbs., whereas adult males are larger, weighing 150-400 lbs. Like all wild animals, they can be unpredictable and, given their size and strength, must be treated with respect and caution. Bears are inquisitive, intelligent, and display good memories, especially in relation to where reliable food resources exist, and they can be long-lived. Bears in Virginia can live 20-25 years, but rarely reach that ripe old age. Virginia currently has a healthy, and expanding, resident black bear population, the majority of which exists in two core areas: one occupies the entire region west of and including the Blue Ridge Mountains, and another lies in the southeast corner of the state, centered near the Dismal Swamp. However, bears now occupy much of the Piedmont Region as well. And, despite what the Department of Game and Inland Fisheries (VDGIF) map of occupied range for black bears in Virginia might show, residents anywhere in the state have a reasonable probability of seeing or encountering a bear today. An exact bear population in Virginia is not known, but current estimates are between 16,000 and 17,000 individuals, and growing.

Because bears are highly adaptable, they can be found in a variety of habitats, ranging from mature hardwood forests, brushy and weedy early successional patches, and riparian or wetland habitats. Riparian corridors are often used as preferred travel lanes. Although many people perceive black bears as carnivores, they should be viewed more as

omnivores; that is, animals that feed on both plant and animal material. In fact, a large proportion of a bear's diet is composed of seasonally available non-meat foods, including items such as skunk cabbage, squawroot, and tender grasses in spring, berries, fruits, and sedges in summer, and hard mast, such as acorns, beechnuts, and hickory nuts, in fall. Insects, rodents, other small mammals, and deer fawns are also consumed when available. Conflict can arise when bears seek out and use alternative foods, such as agricultural crops, the contents of beehives, and, occasionally, livestock. The use of these alternative resources typically occurs when natural foods are scarce (e.g., during periods of drought or years of poor acorn production).



Map of occupied range of black bears in Virginia. From Virginia Department of Game & Inland Fisheries: <http://www.dgif.virginia.gov/wildlife/bear/black-bear-facts/>.

Having knowledge about a bear's diet is important, but that information alone is not sufficient to understand how, or why, bear-human interactions arise. Other knowledge may be needed to better interpret (or anticipate) a bear's actions. Behavior also is influenced by time of day activity patterns, the animal's age, and range factors. Although bears may be active throughout daylight hours, most are active around dawn and again after dusk; fully nocturnal activity tends to increase as direct contact with humans increases. In terms of anticipated range size, both males and females establish overlapping home ranges, but those used by females typically are smaller (about 10-15 sq. mi.) than those of males (about 20-30 sq. mi., but may be up to 120 sq. mi.). Breeding usually occurs during June or July, but cubs (usually 2-3) are not born until January when the female is denning. Cubs remain with the female throughout that year and into the next winter denning period. They will disperse the following spring. At that time, young males leave, or are forced out of, the mother's home range, whereas young females often occupy an area close to or overlapping with that of the mother. Very often, these dispersing and inexperienced male youngsters

represent the majority of individuals involved in bear-human interactions. Dispersal is also the time of highest mortality among for bears, especially young males.

As the bear population has continued to grow and expand farther east, the number of bear-human interactions has increased markedly. People who have never before had to deal with bears are now experiencing situations for which they have little understanding. Conflicts arise most often during periodic natural food shortages when bears are forced out of the woods to find sufficient alternative resources. However, in any year, bears (and especially young dispersing males) will take advantage of easy pickings made available by people who don't know that they may be contributing to a problem. Bears that learn the benefits of making close association with humans and human-provided resources typically are the ones that become problematic. Although black bears rarely attack humans and very few deaths have been attributed to them, they can become aggressive, particularly those that have become conditioned to rely on these alternative resources. Thus, the best way to avoid such confrontations is to not tempt bears with food or encourage them to remain around the home, farmstead, or campsite in the first place.

Management Measures

To reduce the potential for a confrontation or damage to personal property, precautions should be taken before a bear develops an interest in or gains access to potential food sources. As with most wildlife damage problems, no single technique exists that will provide absolute protection from bear depredations. However, measures taken in a timely fashion, facilities that are maintained properly, and responses that are applied with an understanding of the habits or behaviors of bears can reduce the likelihood of negative outcomes.

To reduce the potential for damage by black bears, don't encourage their presence or attract them to your property. Methods to accomplish this include:

- exercise good husbandry practices around the home (i.e., be neat and clean) — don't place garbage/waste receptacles on the curb until the day of pick-up, and then only in sturdy, well secured containers. Habituation in bears often begins with access to garbage containers placed outside overnight;
- remove all potential supplemental food resources, such as readily accessible pet foods, bird feeders [especially suet feeders after mid-March], or compost facilities;
- regularly clean and secure/protect barbecue grills — residual odors associated with the grilling of meats and the grease accumulated in the collection tray of most grills will be enough to draw bears up onto backyard decks/patios;

- never feed bears; all foods in or near picnic or camp sites should be stored or hung properly outside the reach of bears — remember, black bears are excellent tree climbers.

Use non-lethal controls to prevent or deter a bear from gaining access to property or a commodity. Examples of non-lethal measures include use of:

- loud noises (e.g., horns, clapping, shouting, pyrotechnic salutes), bright lights, or other harassment measures;
- temporary or permanent electric or heavy woven-wire fencing; the effectiveness of electric fencing often can be enhanced by baiting it with peanut butter, bacon grease, or sardine oil;
- bear hounds or guard dogs to ward off depredating bears;
- habitat manipulation (e.g., removal of protective cover) to make a site unsuitable for or unattractive to bears;
- repellents — currently, only Capsaicin (concentrated hot pepper spray) is registered for use on bears as a personal protection repellent. Recognize that these devices typically have a maximum range of less than 30 feet, so effective use of this material demands that the user is close to the bear — thus, this should be viewed primarily as an emergency self-defense tool.

If all attempts to deter bear depredation with preventive or non-lethal measures fail, removal of an offending animal may be necessary. Where damage to fruit trees, crops, livestock, or personal property has occurred, the owner or lessee of the property may receive authorization to destroy an offending bear, but only after such damage has been reported to and verified by the local conservation police officer (CPO, formerly game warden). It is illegal for homeowners or private individuals to capture or kill a bear without special authorization, except during the regulated open season. An affected landowner may be issued a kill permit that imposes limitations on taking a bear (e.g., length of time permit is valid, authorized methods of kill, disposition of carcass) and establishes how such take must be reported. To report suspected damage by a bear, to receive help in removing a troublesome bear, or to request a permit to take a bear, contact your local CPO using the contact information below.

For more information about the life history and behaviors of black bears in Virginia, or to obtain suggestions on how to deal with bear-human interactions, visit the web site of the VDGIF (<http://www.dgif.virginia.gov/wildlife/bear/>). Also, to identify the CPO who serves your area, consult information on the web site relating to the location of VDGIF's regional field offices (<http://www.dgif.virginia.gov/about/offices/>).



Exercising good husbandry practices around your home can prevent black bears from becoming nuisances. Place garbage in sturdy well-secured containers to keep bears out. Photo by: Alfred Viola, Northeastern University.

Jim Parkhurst is the Extension Wildlife Specialist in the Department of Fish and Wildlife Conservation; jparkhur@vt.edu; 540-231-9283.