



THE WILDLIFE SOCIETY

5410 Grosvenor Lane • Bethesda, MD 20814-2144
Tel: (301) 897-9770 • Fax: (301) 530-2471
E-mail: tws@wildlife.org

3 October 2014

Benjamin Lewis
VDGIF Hunting Over Bait Committee
3801 John Tyler Memorial Hwy.
Charles City, VA 23030
benjamin.lewis@dgif.virginia.gov

RE: Comments for the Committee's Senate Joint Resolution No. 79 Report

Dear Committee Member Lewis:

Thank you for providing The Wildlife Society the opportunity to comment on the ongoing examination by your committee into the potential effects of allowing hunting over bait in Virginia.

The Wildlife Society, founded in 1937, is a non-profit scientific and educational organization of nearly 10,000 wildlife professionals, dedicated to excellence in wildlife stewardship through science and education. Our mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation.

The use of hunting over bait can have substantial ecological, biological, and social impacts. We believe policy decisions regarding the management of wildlife populations should be science-based, and offer the following insights into the wildlife science related hunting over bait:

- Wildlife baiting can increase hunter success, especially among bow hunters (Kilpatrick 2010; Langenau 1985). Baiting as a method to enhance hunting opportunities is a part of human history. From our earliest days, hunters would put feed out for wildlife to improve their harvest of food and fur.
- The risk of infectious disease is increased by prolonged exposure to other individuals concentrated by baiting practices. This can contribute to the spread of wildlife diseases such as chronic wasting disease (CWD) and bovine tuberculosis in ungulates (Thompson 2010; Ramsey 2014; Bollinger 2004). The spread of CWD is a particular concern for the Commonwealth of Virginia, as multiple cases of the disease have been confirmed in the state since 2009.
- Non-target species are also directly affected by wildlife baiting. Extra food provided by baiting can attract migratory birds, game birds, small mammals, and other wildlife not targeted by the bait (Gray 2004, Turner 2008). Crowding, as with target species, increases disease risk, stress, and habitat damage and disrupts natural ecological interactions.

Baiting, if conducted over longer periods of time and/or in large quantities can have ecological and biological impacts that are similar to supplemental feeding programs. Anthropogenic food resources, such as those provided through supplemental feeding or long-term baiting practices can have these implications:

- Artificially provided food resources can lead to higher densities and smaller home ranges of wildlife than would occur naturally (Boutin 1990). Wildlife may concentrate around anthropogenic food resources, which is the base cause for many secondary problems.
- In black bears, anthropogenic food sources can reduce home range sizes which can result in heavily skewed sex ratios towards males and changes in female reproductive success (Beckman and Berger 2003).
- Habitat damage from trampling and overgrazing can be caused by higher densities of animals (Doman 1944; Murden 1993), which can have negative implications for the larger ecosystem when occurring over an extended period of time.
- Wildlife can become habituated to anthropogenic food sources. Wildlife may come to rely on anthropogenic sources of food, returning to human dominated landscapes more often. This can lead to increases in potentially harmful human-wildlife conflicts, including automobile and property damage (Hristienko 2007). Black bears have a strong tendency to adapt to the presence of people, increasing the chance for harmful human-bear interaction (McCullough 1982). Once bears are food-conditioned, it is very rare for them to revert to wild behavior and incidences of nuisance behavior can rise (McCullough 1982, Hristienko 2007).
- Attention and resources from other science-based wildlife habitat management activities may be diverted to enforce, regulate, and manage the ecological repercussions of anthropogenic food resources (Williams 2002, Horan 2005, McCullough 1982).

We trust the committee will fully consider the science-based impacts hunting over bait could potentially have on Virginia's wildlife resources. If you have any further questions, please contact Keith Norris, Assistant Director of Government Affairs at keith.norris@wildlife.org or (301)897-9770 x309.

Sincerely,



Jon Haufler, President
The Wildlife Society

Further Information: *Baiting and Supplemental Feeding of Game Wildlife Species*. 2006. The Wildlife Society, Technical Review 06-1.

<http://wildlife.org/documents/technical-reviews/docs/Baiting06-1.pdf>

Literature Cited

- Beckman, J. P., and J. Berger. 2003. Rapid ecological and behavior changes in carnivores: the responses of black bears (*Ursus americanus*) to altered food. *Journal of Zoology*(London) 261: 207-212.
- Bollinger, Trent, P. Caley, E. Merrill, F. Messier, M. W. Miller, M. D. Samuel, and E. Vanopdenbosch. 2004. Chronic wasting disease in Canadian wildlife: an expert opinion on the epidemiology and risks to wild deer. Canadian Cooperative Wildlife Health Centre: Newsletters and Publications 19.
- Boutin, Stan. 1990. Food supplementation experiments with terrestrial vertebrates: patterns, problems, and the future. *Canadian Journal of Zoology* 68(2): 203-220.
- Doman, E.R., and D. I. Rasmussen. 1944. Supplemental feeding of mule deer in northern Utah. *Journal of Wildlife Management* 8: 317-338.
- Gray, R. M., M. R. Vaughan, and S. L. McMullin. 2004. Feeding wild American black bear in Virginia: a survey of Virginia bear hunters, 1998-99. *Ursus* 15(2): 188-196.
- Horan, R. D., and C. A. Wolf. 2005. The economics of managing infectious wildlife disease. *American Journal of Agricultural Economics* 87(3): 537-551.
- Hristienko, H., and J. E. McDonald Jr. 2007. A perspective on trends and controversies in the management of the American black bear. *Ursus* 18:72-88.
- Kilpatrick, Howard J., A. M. Labonte., and J. S. Barclay. 2010. Use of bait to increase archery deer harvest in an urban-suburban landscape. *Journal of Wildlife Management* 74(4): 714-718.
- Langenau, E. E., Jr., E. J. Flegler, Jr., and H. R. Hill. 1985. Deer hunter's opinion survey, 1984. Wildlife Division Report No. 3012, Michigan Department of Natural Resources, Lansing, Michigan, USA.
- McCullough, Dale R. 1982. Behavior, bears, and humans. *Wildlife Society Bulletin* 10(1): 27-33
- Murden, S. B. and K. L. Risenhoover. 1993. Effects of habitat enrichment on patterns of diet selection. *Ecological Applications* 3:497-505.
- Ramsey, David S. L., D. J. O'Brien, M. K. Cosgrove, B. A. Rudolph, A. B. Locher, and S. M. Schmitt. 2014. Forecasting eradication of bovine tuberculosis in Michigan white-tailed deer. *Journal of Wildlife Management* 78(2): 240-254.
- Thompson, Abbey K., M. D. Samuel, and T. R. Van Deelen. 2010. Alternative feeding strategies and potential disease transmission in Wisconsin white-tailed deer. *Journal of Wildlife Management* 72(2): 416-421.
- Turner, A. S., L. M. Conner, and R. J. Cooper. 2008. Supplemental feeding of northern bobwhite affects red-tailed hawk spatial distribution. *Journal of Wildlife Management* 72(2): 428-432.
- Williams, E. S., M. W. Miller, T. J. Kreeger, R. H. Kahn, and E. T. Thorne. 2002. Chronic wasting disease of deer and elk: review with recommendations for management. *Journal of Wildlife Management* 66(3): 551-563.