February 8, 2019

Testimony by Dr. Clinton W. Epps, Associate Professor, Department of Fisheries and Wildlife, Oregon State University regarding House Bill 2294

To Whom It May Concern:

I hold a Ph.D. in Environmental Science, Policy, and Management from the University of California, Berkeley. I have studied large mammals since 1999, including bighorn sheep, deer, elk, and various African species. I have been an assistant, then associate, professor of Wildlife Science in the Department of Fisheries and Wildlife at Oregon State University since 2008. During that time, I have conducted wildlife management-related research, including investigation of effects of wildlife disease. I have worked closely with the Oregon Department of Fish and Wildlife and other state and federal agencies while serving as principal investigator on research projects on deer, elk, bighorn sheep, and other mammals in Oregon and North America.

I support HB2294’s proposal to require that commercial cervid-urine-based scent lures be from herds certified as free of chronic wasting disease (CWD). CWD is a fatal and transmissible disease that has spread through deer and elk populations around much of North America, but has not yet spread to Oregon. An infectious protein (prion) causes the disease, which is similar to BSE (“mad cow”) in cattle and Creutzfeldt-Jakob disease in humans. CWD causes high mortality, leading to declines in deer and elk populations (Edmunds et al. 2016), and raises concern about potential human health consequences if the meat is consumed. Although transmission of CWD to humans has not been reported, the Center for Disease Control recommends that humans not consume meat from CWD-infected animals. In other states, appearance of CWD in native deer and elk populations has resulted in declining hunter participation (Vaske and Lyon 2011). Keeping CWD out of Oregon, particularly by avoiding human transport and use of infectious material, is key to maintaining healthy deer and elk populations and protecting recreational and subsistence hunting in the state.

A recent study byPlummer et al. (2017) determined that CWD-infected elk, mule deer, and white-tailed deer can shed the prion protein causing this disease in their urine, even before they exhibit symptoms of CWD themselves. Urine is collected from captive deer and elk herds and sold to hunters who use it to attract animals when hunting. Deer and elk are likely to sniff or lick places where attractant has been applied or rubbed off from the hunter’s clothing. Prions are not destroyed by standard microbial or viral disinfection procedures, can be transmitted environmentally (for instance through contaminated soil), and remain infectious for years. Moreover, CWD has been detected in many captive herds of deer and elk (e.g., Keane et al. 2008; see current map at https://www.usgs.gov/media/images/distribution-chronic-wasting-disease-north-america-0), and reliably screening and maintaining CWD-free status in such facilities may be difficult particularly where native populations are infected. Thus, I believe that urine collected from infected captive deer or elk and sold commercially could be a route by which CWD enters Oregon.
At least seven other states have restricted commercial sale of urine from captive deer and elk, and synthetic alternatives are available. Thus, beyond supporting restriction of sale of urine from any herd not certified as CWD-free, I suggest banning use of cervid urine altogether, in favor of synthetic alternatives now available on the market. A recently published survey of deer hunters belonging to the National Deer Alliance found that those hunters generally were supportive of bans on urine from captive deer and elk, especially if risks of CWD were communicated effectively to the community (Song et al. 2019).

Sincerely,

Clinton W. Epps
Associate Professor
Oregon State University

References cited


