



Deer Feeders & Chronic Wasting Disease

THE RISK IS REAL

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For hunters and wildlife enthusiasts, deer feeders can serve many purposes. These goals may be to provide nutrition, attract deer to their property, watch deer, or other reasons. No one puts out a deer feeder with the goal of spreading disease, but new research shows that feeders may increase the risk of spreading chronic wasting disease (CWD).

The Mississippi State University Deer Lab and the Minnesota Center for Prion Research and Outreach partnered to study this risk. We compared the number of visits by and the behavior of deer and other wildlife at deer feeders, food plots, and mast trees.

The study was conducted in Mississippi's northern CWD zone—where the disease prevalence was around 30% at the time. Twelve gravity feeders were established, with permission from Mississippi Department of Wildlife, Fisheries and Parks. We maintained the gravity feeders during the fall and

winter, when natural food sources were sparser. Feeders were set up in three distinct ways:

1. Deer Feeders: No restrictions on wildlife access.
2. Raccoon Feeders: Fenced to exclude deer but with small holes to allow entry for smaller wildlife like raccoons.
3. Control Feeders: Fully fenced and not filled with feed.

Trail cameras monitored each feeder as well as several oak trees that were dropping acorns and cool-season food plots. Using the trail camera photos, our team counted how many times deer, raccoons, and other wildlife visited each site, made contact with other individuals, and touched the feeders. Additionally, feeder spouts were swabbed every 6 weeks to test for the presence of prions on the feeders, using a highly sensitive method called "real-time quaking induced conversion" or RT-QuIC.

By week 12, every deer and raccoon feeder had evidence

prions on the spouts. Deer infected with CWD can shed prions in their saliva, which means they can easily contaminate a feeder while eating directly from it. This could pose a risk to healthy deer that later eat from that contaminated feeder, exposing them to prions as a result. Raccoons are not known to be infected with CWD, so we think they picked up prions on their paws while walking in contaminated areas and transferred them onto the feeders. Four of ten hunter-harvested raccoons from the same area were found to have prions on their paws.

Food plots and areas beneath oak trees are also attractive areas to deer, so we counted and compared deer visits to feeders, food plots, and oaks that are dropping acorns

When we compared the trail camera findings, we found that deer were visiting feeders twice as often as food plots and 12x more than masting oak trees. This difference was even greater for raccoons, who were seen over 20x more often at feeders than the oak tree and food plot sites, areas they rarely visited. Feeders were also the location of more deer-to-deer contacts than oak trees. Pictures showed bucks sparring, does touching noses, and deer grooming each other, beneath and next to feeders.

These results show that deer feeders are areas of risk for disease transmission. These interactions deer have at feeders could spread disease directly between individuals. The presence of prions, which can persist in the environment for many years while

remaining infectious, could spread CWD from the feeder to a healthy deer.

For people who enjoy using deer feeders, these findings have significant implications. The use of deer feeders in areas with high CWD prevalence could unintentionally contribute to the spread of this and other diseases, impacting both deer populations and the health of the broader ecosystem. Given that CWD is a fatal, neurodegenerative disease with no known cure, the potential for feeders to act as disease reservoirs is a real concern. Infected deer can also shed prions in their feces and urine, which may be left around feeders, infecting the ground below as well. As a result, areas where feeders stood could remain contaminated with CWD prions even after the feeder is removed.

The good news is that food plots and oak trees were found to be much less risky for CWD spread since these food sources do not concentrate deer as much, thereby minimizing direct contact and potential disease transmission. By understanding the risks associated with deer feeders, hunters and wildlife managers can make informed decisions that help protect deer populations and ensure the sustainability of hunting practices. Staying up-to-date and adapting strategies based on the latest research is essential for managing and mitigating the impacts of Chronic Wasting Disease. 🐾



Raccoon on raccoon feeder.