Lead Shot and Lead Fishing Tackle Are Toxic to Wildlife

Lead is toxic to humans and animals. It is expensive to clean up from the landscape. Lead is already banned in paint, vehicle fuel and lead tire weights. By transitioning to non-lead shot and fishing tackle, the environment will be safer for all wildlife.

Lead shot and lead fishing tackle can easily be ingested by birds and other wildlife who mistake the pieces of lead for food. Additionally some birds swallow small rocks, called gizzard stones, to grind food and aid in digestion. They can easily mistake the small pieces of lead for rocks. Once a bird or other animal ingests

the lead shot or tackle, the animal can be poisoned as the lead comes into contact with the animal's digestive juices.

Eagles who feed on gut piles can easily pick up toxic levels of lead. Birds that frequent areas where doves are hunted are exposed to large quantities of lead shot.

Lead fishing tackle can be toxic to water birds, such as herons, egrets, trumpeter swans, geese and ducks. Turtles can also be affected. Water birds can mistakenly ingest the lead sinkers and lead-headed jigs. Birds may also ingest lead when they eat fish that have the tackle imbedded into their flesh. Birds can even snag the bait from a fishing line, along with the lead weight.



Deer photo courtesy Lowell Washburn, Iowa Department of Natural Resources

Studies have shown that small fragments of lead shot can penetrate the meat and can be ingested by humans who eat the meat. Minnesota has a program similar to Iowa's Help Us Stop Hunger (HUSH) program, where hunters can donate the deer they have killed to food pantries. Beginning in 2008, the Minnesota Department of Agriculture has been x-raying all of the donated venison, looking for lead contamination. The lead contaminates the meat when hunters use lead shot to kill the deer. Minnesota authorities have tossed thousands of pounds of venison due to the contamination. The x-ray process detected pieces of lead so small that a person cannot detect them in the meat. The lead pieces separate from both rifle bullets and shotgun slugs. The shards can be detected up to 18 inches away from the wound caused by the bullet or slug. In Minnesota, the x-ray processes found lead contamination in 6,700 pounds of venison out of 94,000 pounds over a 10-year time frame. Deer kept for private consumption was not x-rayed, but using the same ratios as found in the donated venison, Minnesota hunters and their families and friends are eating 500,000 pounds of contaminated meat every year. No amount of lead is considered safe for consumption. Adults consuming lead can face nerve and kidney damage. Children exposed to lead face behavior delays, lower cognitive performance, and reduced fetal growth.

Alternatives to lead shot are available, including copper, tin, zinc and steel. Although lead shot was banned for hunting water fowl more than 25 years ago, lead shot is still used for upland hunting.

¹ "Lead contamination found in donated venison", Cedar Rapids Gazette, reprinted from the Minneapolis Star Tribune, March 21, 2021

Alternatives to lead fishing tackle, including tin, steel, ceramics, pewter, glass, bismuth and tungsten-nickel alloy, are readily available. The tackle made with these materials perform equally as well as lead. Many of these alternatives are cost-competitive with lead. Some states, including Maine, New York, New Hampshire and Vermont, have banned the sale and use of lead fishing tackle.

Solution

The Chapter supports rules that require non-lead fishing tackle and shot be used at all publicly owned hunting areas and publicly owned water bodies. County conservation boards can make their own rules banning the use of lead shot.²

Further all hunters should protect their families and friends from lead exposure by voluntarily switching to non-lead copper slugs and bullets.

Additionally, the Chapter supports prohibiting the sale of lead fishing tackle weighing an ounce or less in order to protect wildlife. Fishing tackle an ounce or smaller is easily ingested by wildlife.

Hunters can donate deer they have hunted to the Help Us Stop Hunger (HUSH) program. All deer donated to the HUSH program should be harvested using non-toxic shot and not lead shot. Iowa Department of Natural Resources should aggressively x-ray the donations so that the food banks in Iowa are not distributing poisoned venison.

Sources

The Wildlife Society and American Fisheries Society Technical Review Committee on Lead in the Environment, "Sources and Implications of Lead Ammunition and Fishing Tackle on Natural Resources," June 2008

Kelley Bouchard, "Maine lawmakers to consider expanded ban on lead fishing tackle," *Portland Press Herald*, March 25, 2013



Photo credit Lynn Betts, USDA NRCS

Center for Biological Diversity, American Bird Conservancy, Association of Avian Veterinarians, Project Gutpile, Public Employees for Environmental Responsibility, "Petition to the Environmental Protection Agency to ban lead shot, bullets, and fishing sinkers under the Toxic Substances Control Act," August 3, 2010

For details on the HUSH program in Iowa, see www.iowadnr.gov/Hunting/Deer-Hunting

"Lead contamination found in donated venison", Cedar Rapids Gazette, reprinted from the Minneapolis Star Tribune, March 21, 2021

National Institute of Environmental Health Sciences, National Institutes of Health, www.niehs.nih.gov/health/topics/agents/lead/

² The Story County Conservation Rules and Regulations address the use of non-toxic shot in section 4.4(B) "It is unlawful to hunt migratory game birds or resident game or furbearers with a firearm while possessing ammunition other than nontoxic ammunition in all SCC [Story County Conservation] owned and managed areas." Polk County Conservation bans the use of lead shot for shotgun hunting on the county conservation lands, with the exception of hunting for turkeys and deer. See www.polkcountyiowa.gov/conservation/things-to-do/hunting/