March 4, 2025

The Honorable Brian Feldman, Chair

Senate Education, Energy & Environment Committee 2 West Miller Senate Office Building Annapolis, MD 21401

Re: SB 634 – Hunting - Nonlead Ammunition, et cet. - FAVORABLE

Dear Chairman Feldman, Vice Chair Kagan, and Members of the Committee:

My name is Ted Williams. As a full-time freelance writer for the last half century, I've written exclusively about fish and wildlife for national publications such as *Outdoor Life*, *Audubon*, *Sierra*, *National Wildlife*, *Smithsonian*, *Modern Maturity*, *Yankee*, and *Slate*. I'm a life-long hunter and own a dozen guns. As a former information officer for the Massachusetts Division of Fisheries and Wildlife, I worked closely with my fellow hunters. I continue to work with them.

It baffles me why so many of my fellow hunters insist on poisoning wildlife (including their game), themselves, their children, their wives and their friends when they can use non-toxic copper bullets which perform better and cost something like \$2 more per box of 20 than lead. The added expense amounts to roughly the cost of a cup of coffee per hunting season.

Any Maryland hunter who fires significantly more than 20 rounds at deer in a season needs to brush up on his marksmanship because Maryland hunters are allowed only two whitetails a season in Region A, 3 whitetails a season in Region B, and two nonnative, invasive sika deer.

The claim I've been hearing from lead defenders that squirrel hunters can't buy non-toxic .22 rimfire ammo is patently false. It is now readily available and, like higher caliber non-toxic ammo, only marginally more expensive. What's more, tests by the Wildlife Society show that it performs as well or better than lead. (https://wildlife.onlinelibrary.wiley.com/doi/full/10.1002/wsb.1255)

Any squirrel hunter who complains that he can't find non-toxic .22 rimfire ammo hasn't looked for it recently. Readily available non-toxic .22 rimfire products include: Norma ECO Speed-2, CCI® TNT® Green .22 WMR 30 Grain Lead-Free Rimfire Ammo, and Hornady Varmint Express Rimfire 17HMR 15.5 Grain Nontoxic.

The cost difference between traditional lead .22 rimfire ammo and non-lead .22 rimfire ammo can vary depending on the brand and type of ammunition. Generally, non-lead (copper or other metal) ammo tends to be only slightly more expensive than traditional lead ammo. For example, a box of traditional lead .22 long-rifle ammo might cost around \$10-\$15 for 50 rounds, while non-lead .22 LR ammo could range from \$15-\$25 for the same quantity. An avid squirrel hunter might fire 70 rounds a season. The added cost might amount to something like the cost of a Big Mac, fries and a drink.

I have also heard complaints from hunters who use flintlocks about non-availability of non-toxic ammo. I salute these hunters for sportily handicapping themselves with ancient, single-shot, muzzle-loading flintlock rifles. I would venture that there are no more than half a dozen flintlock hunters in Maryland. I salute them all. But they also haven't looked recently for non-toxic ammo. It also is readily available. Any non-antique firearm can safely shoot non-toxic rounds.

Here are just two of many sources: TomBob Outdoors ITX Lead-Free Muzzleloading Round Balls. These round balls are made from materials with no significant traces of lead. They are available in various calibers, including .32, .45, .50, .54, and .60. Another option is Barnes VOR-TX ammunition, which is made from a full copper alloy and is available in multiple calibers. These slugs are known for their high ballistic coefficient, clean-burning properties, and deep penetration.

Defenders of lead bullets allege ruinous cost of copper, invariably comparing, say, the most expensive .308 168-grain copper rounds with old, cheap lead ones like Core Lokt or Power Point. But when you compare like products today, prices are comparable. Copper ammunition costs something like \$1.50 more per box of 20 rounds compared to premium lead.

So, for the average hunter, non-toxic ammo might cost about the price of two cups of coffee a season. A sub-par marksman might have to suffer the price of three coffees, a poor marksman maybe four.

In its program "Sportsmen Against Hunger" the Safari Club donates deer its members kill to the needy. Acting on data collected by University of North Dakota medical professor and Safari Club member Dr. William Cornatzer, the health departments of North Dakota and Minnesota impounded 17,000 pounds of donated, lead-impregnated venison.

Iowa requires this warning label on venison donated by hunters in the "Help Us Stop Hunger" program: "Lead fragments may be found in processed venison. Children under 6 years and pregnant women are at the greatest risk from lead."

The Wisconsin Department of Health Services recommends "the use of non-lead ammunition as the simplest and most effective solution to lead poisoning, in both humans and wildlife, arising from the consumption of deer killed with lead ammunition."

The U.S. Department of Agriculture certifies commercial meat lockers. But neither it nor the Food and Drug Administration regulates lead in donated venison.

The CDC reports: "No safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to negatively affect a child's intelligence, ability to pay attention, and academic achievement."

I polled the most hardcore big-game hunters I know. They serve with me on the Outdoor Writers of America Association's Circle of Chiefs. A few of their comments:

Jim Low: "I've been hunting whitetails exclusively with copper bullets -- centerfire and muzzleloader -- for about 15 years and have nothing but praise. Highly accurate, sturdy, excellent expansion and weight retention."

Matt Miller: "I have found copper superior in every way in my hunting for mule deer, whitetail, pronghorn and feral hog."

Scott Stouder: "Nothing but stellar performance and the knowledge that I'm not killing others out there from magpies to eagles."

Larry Stone: "Accurate, hard-hitting, and no fragmentation."

Mike Furtman: "As I hunted deer today, I sat within sight of the gut pile from the doe I killed two days ago. Much of it had been eaten already, but what remained was dined upon by two bald eagles, three ravens, two pileated woodpeckers, one hairy woodpecker, several blue jays, and numerous chickadees and nuthatches. Which is why I switched to copper bullets."

Ammo companies developed copper bullets not to protect wildlife or humans, but to kill game more effectively than lead bullets. They do. Hunters have known this for years. In 2012 *American Hunter*, the official publication of the National Rifle Association, selected the Barnes VOR-TX copper bullet for its "Ammunition Product of the Year Award." And *American Hunter* field editor Bryce Towsley writes that the Barnes all-copper X-Bullet "redefines what we think we know about hunting projectiles." And in a good way: "I have lost count of the game I have taken with Barnes X-Bullets in various configurations."

The North American Non-Lead Partnership -- committed to protecting wildlife from poisoning by lead bullets -- includes 46 partners, all of which represent hunters -- members like The Peregrine Fund (founded by hunters using falcons), Midwest and Northeastern Associations of Fish Wildlife Agencies, Arizona Game and Fish Department, Oregon Hunters Association, Arizona Elk Society, Wisconsin Sharp-tailed Grouse Society, and Arizona Wild Turkey Federation.

The Partnership sponsors demonstrations in which copper and lead bullets are fired into plastic bags filled with water and housed in plastic drums. Slugs and fragments fall to the bottom of the drums. In one typical demo, hosted by Allen Zufelt of the Arizona Game and Fish Department and Partnership co-founder Chris Parish, Zufelt fires a Federal Nosler AccuBond 180-grain lead bullet, then a 180-grain Federal Trophy Copper bullet. Parish retrieves and weighs the two mushroomed slugs. The copper slug weighs 179.9 grains. The lead slug weighs 137.5 grains, having shed and scattered 42.5 grains of fragments.

The toxicity of lead hunting projectiles is ancient news. George Bird Grinnell published this warning in his sporting weekly *Forest & Stream*: "Until they reach the gizzard where the wildfowl grinds his food, these pellets do no harm, but, when reduced to powder...they become a violent poison." The year was 1894.

Here are links to some of my other pieces on the poisoning of wildlife with lead bullets (and fishing tackle):

https://www.landcan.org/landcan-blog/Poison-Bullets/349

https://www.hcn.org/wotr/let-them-eat-copper/

https://blog.nature.org/2016/11/28/recovery-saving-common-loon-lead-fishing-tackle-poisoning-birds/