April 9th, 2025

Committee of Inland Fisheries and Wildlife c/o Legislative Information Office
100 State House Station
Augusta, ME 04333

Re: Testimony In Support of LD 1364- Resolve-Authorizing a Study on the Impact and Risks of Lead based Ammunition

Dear Senator Baldacci, Representative Roberts, and Members of the Committee on Inland Fisheries and Wildlife:

My name is Gina Garey- I'm from Portland where I serve as State Director for the Center for a Humane Economy and Animal Wellness Action. I'm here to testify in support of LD 1364, A Resolve Authorizing a Study on the Impact and Risks of Lead-based Ammunition.

I'd like to thank Representatives Bridgeo and Dill, and Rep. Roberts for co- sponsoring this bill, an important first step to fully engage the Department in eliminating lead ammunition. A phase out of lead ammo is already well underway in Maine following USFWS's decision to phase out lead ammunition on eight National Wildlife Refuges, including two in Maine, beginning October of 2023.The Rachel Carson and Great Thicket NW Refuges.

The science is clear when it comes to the toxicity of lead to humans, the environment and all mammals. The phase out of lead lures and sinkers to protect loons was an important, necessary step forward to eliminate lead toxins and the existential threat to our environment and wildlife. The shift to non- toxic ammunition is long overdue. So is ending the suffering of wildlife that ingest lead fragments from carrion in the Maine woods. Unfortunately, suggesting a shift will not change human behavior in this regard. We cannot afford to ignore the continued distribution of lead in our environment. We no longer permit its use in paint or gasoline and haven't for decades. So why are we still doing this to our wildlife, lands and waterways?

To say this bill is anti- hunting would be misguided, as the bill's intention clearly aligns with the mission and responsibility of the Department to protect and conserve healthy wildlife populations for future generations, including hunters. This step is an opportunity for stakeholders to map the best path forward, while creating a lead ammunition phase out schedule that works for Maine, and its varied species and habitats. Costs for alternatives have dropped significantly, a difference of just $3-4 per box.

We have pages of scientific findings and evidence on the impact and risks of lead ammunition to the environment and all inhabitants. So, I've provided excerpts from those findings. (I'll be sending each of you links to the documents for your work session preparations.)

From the Federal Register: Final rulemaking by USFWS:

The impacts of lead on human health and safety have been a focus of several scientific studies. We are familiar with studies that have found the ingestion of animals harvested via the use of lead ammunition increased levels of lead in the human body (*e.g.,* Buenz, E. (2016). Lead exposure through eating wild game. American Journal of Medicine, 128: p. 458).

From Research Outreach: by Dr. Jon M. Arnemo, DVM, PhD is a professor and wildlife veterinarian at the Inland Norway University of Applied Sciences. His major research topics include One Health, translational medicine, ecotoxicology and anaesthesia. He has been involved in wildlife projects in Europe, Asia, Africa, North America, and South America. He is also a dedicated hunter.

According to Arnemo, contrary to the widespread belief among hunters, lead shot also fragment when striking an animal. As well as shards of lead dispersing in the animals, they can dissolve and poison the surrounding tissues. Both the fragments and the contaminated meat are poisonous when consumed.

From USGS: The paper, **"Demographic Implications of Lead Poisoning for Eagles Across North America,"** was published in the journal *Science*. Led by scientists from the U.S. Geological Survey, Conservation Science Global, Inc., and U.S. Fish and Wildlife Service, researchers evaluated lead exposure in bald and golden eagles from 2010 to 2018.

"Studies have shown lethal effects to individual birds, but this new study is the first to show population-level consequences from lead poisoning to these majestic species at such a wide scale," said Anne Kinsinger, USGS Associate Director for Ecosystems. We now know more about how lead in our environment is negatively impacting North America's eagles," said Todd Katzner, USGS wildlife biologist and lead USGS author.

Media

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This bald eagle was admitted to The Raptor Center in St. Paul, MN where it was determined by veterinarians to be poisoned by lead. The bowed head, drooped wings, and green stained tail feathers are all typical signs of lead poisoning of raptors.

In this study, almost 50 percent of the birds sampled showed evidence of repeated exposure to lead. Short-term exposure was more frequent in winter months. Both eagle species in the study are scavengers and use dead animals as a food source year-round, but particularly rely on them during the winter months when live prey is harder to find.

It's hard to believe that these policies at the state and federal level even require debate, with 500 studies showing the toxic effects of lead ammunition on wildlife and humans.
This couldn't a better time to vote unanimously "ought to pass" on LD 1364. Thank you.

Sincerely,

Gina E. Garey, MS

Maine State Director-Animal Wellness Action &

The Center for a Humane Economy

Gina Garey
Animal Wellness Action
LD 1364

Addendum to testimony:

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Lead Is Not Meant to Be Ingested by Any Living Creature

With an atomic number of 82, lead has had its poisonous characteristics on display for more than 2,000 years. Its intrusion into the body has the potential to diminish the function of every organ. But plumbism is best known for its effects on the brain and cognitive function.

According to one peer-reviewed study published in 2022 in the Proceedings of the National Academy of Sciences, exposure to leaded gasoline lowered the IQ of about half the population of the United States. The study focused on people born before 1996 — the year the U.S. banned gas containing lead.

"[Plumbism] can lead to a variety of neurological disorders, such as brain damage, mental retardation, behavioral problems, nerve damage, and possibly Alzheimer's disease, Parkinson's disease, and schizophrenia," according to the National Institutes of Health.

For these reasons, lead has been banned for use in toys, paint, gasoline, and other commercial products.

But state wildlife agencies—often repeating the mantra that they engage in science-based wildlife management — continue to allow and excuse lead bullets in all states but one. In California, state lawmakers deflected arguments from the guns and ammo lobby — without a single hunting group in favor — and passed a bill to ban lead ammo in 2013. The phase-in of non-toxic shot was completed in July 2019. The transition, more or less, has been seamless. And sales of hunting licenses have increased.

More than a generation ago, also over the objections of the National Rifle Association (NRA) and other extreme hunting groups, the U.S. Fish and Wildlife Service banned the use of lead ammunition in waterfowl hunting in 1991. "Plumbism [lead poisoning] was first seen in ducks in 1874," wrote conservation writer Ted Williams. "But it wasn't until 1991 that the U.S. Fish and Wildlife Service got around to banning lead shot for waterfowl." The ban is estimated to have saved as many as 1.4 million mallards a year, along with perhaps a million other migratory birds.

That shift in policy is one of the great animal welfare and conservation success stories in 20th-century American wildlife management. But supposed leaders in the hunting community, quick to hold up a banner as conservationists, have often acted as impediments to halting the use of poisonous ammunition.

Here are just a few facts:

•Copper, steel, tungsten, and other elements and alloys are widely in use by hunters who do believe that they should only kill to eat and not leave a trail of other victims in the forests in the weeks after their hunting excursion.

•Non-toxic ammunition has plenty of killing power. The U.S. Army now uses only non-lead ammo for all of its small caliber weapons.

•There are more than 130 species of wild animals who perish from spent lead.

•Ammo companies introduced copper bullets in the mid-1980s — not to prevent plumbism in wildlife, but to kill game more effectively. As the New York Department of Environmental Conservation (DEC) reports, "Fortunately, today's harder copper and other copper alloy bullets and [shotgun] slugs typically remain intact on impact, transferring more energy to the target by folding downward into 'petals' that greatly expand the surface area. The result is a very effective, quick, humane kill."

It's all so thoroughly preventable. Just use the wide range of alternatives.

But sadly, the NRA contrives a conspiracy even when it's in its self-interest to seek reform. Poke around on the websites of the biggest ammo manufacturers, and even there you'll find the firearms industry singing the praises of lead alternatives.

“Looking for premium performance without the premium price?” asks one brand-name maker of steel shot. Others note that steel ammo “delivers denser patterns for greater lethality and is zinc-plated to prevent corrosion.”