MAINE AUDUBON

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

April 5, 2021

RE: LD 1015, An Act To Ban Hunting with Ammunition That Contains Lead

Dear Senator Dill, Representative Landry, and Members of the Committee:

Thank you for the opportunity to submit testimony neither for nor against LD 1015, An Act To Ban Hunting with Ammunition That Contains Lead, on behalf of Maine Audubon and our 30,000 members and supporters.

The number of bald eagles known to die from lead poisoning in Maine set a new record this past year. The cause is well-established: bald eagles and other scavengers ingest lead bullet fragments left in deer carcasses or offal (entrails and internal organs) piles. Even small amounts of lead causes damage to birds' liver and kidneys and often leads to a distressful death. Maine Audubon has worked for decades to reduce lead poisoning in common loons, and we are similarly committed to finding a solution to this problem. However, we believe that this bill, while an important initial step in engaging stakeholders in a vital conversation, does not account for the wide variety of strategies that may be used to address this problem. Further, the bill is not responsive to the immediate concerns of all stakeholders, including the hunting community. Instead, we request that the Committee commit to understanding the impact of lead poisoning from lead ammunition on wildlife and human health and pursue strategies that will lead to a lasting, broadly-supported solution.

Impact of Lead Ammunition on Wildlife

Of the 34 bald eagles brought to Avian Haven for rehabilitation in 2020, 25 had elevated blood lead levels, and only three of the 25 birds survived. Both numbers are up from 2019, when 9 of the 19 eagles brought to the center were found to have elevated lead levels (none of the 9 survived). The birds were found with a variety of injuries, including acute poisoning, as well as physical injuries, including impaired coordination and stamina, which are linked to lead ingestion. This number certainly undercounts the total number of affected birds in Maine, few of which are found alive and in good enough condition to be transported to a rehabilitator.

Bald Eagles are scavengers, and scientists believe that the primary way in which lead enters their body is through the consumption of lead bullet fragments in deer carcasses or offal piles. Authors of a 2006 study published in the Wildlife Society Bulletin searched for lead fragments in

deer carcasses supplied by hunters and in offal piles.[1] In all, 94% of samples of deer killed with lead-based bullets contained bullet fragments, and the majority of offal piles showed fragments. Lead bullets fragment upon impact, leaving hundreds of tiny pieces of lead that typically cannot be seen or otherwise sensed.[2]

Lead causes all manner of carnage inside a living body. It damages cell structures, including DNA and cell membranes. The effects vary with the amount of lead ingested, but, according to rehabilitators at the Teton Raptor Center in Wyoming, symptoms include "[w]eakness, lethargy, weight loss, a drooping head and tattered wings ... [t]hey act really depressed."[3] A lead fragment the size of a grain of rice is enough to kill an eagle.[4]

Though lead poisoning in eagles has recently dominated the headlines, many other species also suffer from lead poisoning. Coyotes are also scavengers and the bait used in coyote hunting is often contaminated with lead and is ingested by species beyond its intended target. Turkey vultures, ravens, and even blue jays have been found to have ingested unusually high levels of lead.

Impact of Lead Ammunition on People

The impact of lead ammunition ingested by people is also harmful. Lead is not safe in human blood at any level; even low levels are associated with kidney disease and cardiovascular issues, in addition to "decreased cognitive performance" and "attention-related behavioral problems."[5]

Every year, over two million pounds of game meat is donated to food banks across the United States.[6] In a 2008 study of 200 packages of venison tested from food pantries, 15% were found to contain lead, with an average concentration of 160 ppm. At such a concentration, 81% children who consumed such meat twice a month would have dangerously high blood lead levels.[7]

Of course, game is consumed well beyond food pantries. A deer processor in Pennsylvania has reported that he only finds a bullet in the carcasses that he processes 75% of the time, meaning that the likelihood of lead ingestion by those who consume deer and other game species is high. Ground venison is particularly likely to contain lead because the grinding process spreads the soft metal throughout the meat.[8]

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[1] W Grainger Hunt et al., *Bullet Fragments in Deer Remains: Implications for Lead Exposure in Avian Scavengers*, 34 WILDLIFE SOC'Y BULL. 167 (2006), available at https://doi.org/10.2193/0091-7648(2006)34[167:BFIDRI]2.0.CO;2.
[2] Sam Totoni et al., *Lead in Hunted Meat: Who's Telling Hunters and Their Families?*, ENV'T HEALTH NEWS (Feb. 25, 2020), https://www.ehn.org/lead-ammunition-in-meat-2645108170.html.
[3] Nick Lund, *2020 Set New Record for Lead-Poisoned Bald Eagles*, THE MAINE SPORTSMAN (February 2021).
[4] Aislinn Sarnacki, *Sick Bald Eagles are Flooding into Maine Rehabilitation Center, Raising Concerns About Lead Poisoning*, BANGOR DAILY NEWS (Jan. 16, 2020), https://bangordailynews.com/2020/01/15/paymeter-categories/free/sick-bald-eagles-are-flooding-into-maine-rehabilitation-center-raising-concerns-about-lead-poisoning/.
[5] Totoni, *supra* note 2.
[6] *Id*.
[7] *Id*.
[8] *Id*.

Possible Solutions

Maine Audubon is committed to pursuing strategies—and it is unlikely that there will be just one—that will help stakeholders better understand and address the problem at hand. The foremost strategy must be education. For over a year now, the Maine Department of Inland Fisheries and Wildlife ("MDIFW" or "the Department") has led a campaign to educate their constituency on the impact of lead ammunition on scavengers and the use of nonlead ammunition. Maine Audubon has been very pleased to hear from the Department that they intend to continue and expand this campaign.

At the same time, we encourage the Department to track the impact and progress of their outreach. This might be in the form of user-surveys or other contact with permit holders to gauge the extent to which their messages are reaching their intended audience. Data regarding the use of nonlead ammunition, barriers to using nonlead ammunition, and the adoption of other best practices, such as proper disposal of carcasses and offal piles would also be useful. We encourage the Department to include this information in their annual report to the Committee.

Education does not need to be the sole responsibility of the Department, however. Retailers are another key point of contact for stakeholders. They can provide educational information and highlight the availability of nonlead alternatives. Similarly, a "buy-back" program, like the lead tackle buy-back program currently implemented by Maine Audubon and the Department, could help to encourage the hunting community to make the switch from lead to nonlead alternatives. Beginning last April, participating retailers provided $10 store vouchers to anglers who turned in at least one ounce of lead tackle at participating stores. The vouchers can be redeemed towards the purchase of nonlead tackle at those same retailers. With the right funding and support, a similar program may be a good fit for lead ammunition.

In addition to tracking whether educational efforts are reaching their intended audience, the Department may also consider tracking, with the help of the private sector, the availability and cost of nonlead ammunition. Although costs of nonlead ammunition decline every year, they may not be as widely available. Tracking cost and availability may help us to understand whether demand for these products is increasing.

Finally, Maine Audubon encourages data sharing amongst stakeholders regarding the incidences of lead poisoning in wildlife. While intakes at wildlife rehabilitation centers are not a direct reflection of population-wide impacts, they may indicate progress or lack of progress. Maine may also benefit from learning about and tracking the work happening in other states.

Until Maine is confident that it has pursued education to a reasonably full extent, has a strong grasp on the practices that will best address poisoning from lead ammunition, and has considered market-based solutions, Maine Audubon does not recommend banning the use of lead ammunition in hunting. However, statutory measures may be helpful in reducing the incidences of lead poisoning from ammunition in wildlife and humans. As such, we encourage the Committee, with the help of the Department, to track the progress on addressing this issue so that they may act as appropriate.

Thank you for your consideration.

Sincerely,

Eliza Donoghue, Esq.
Director of Advocacy