MAINE AUDUBON

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

May 8, 2023

RE: LD 958, *An Act to Expand Protections to Maine's Loons from Lead Poisoning by Prohibiting the Sale and Use of Certain Painted Lead Jigs*

Dear Chair LaFountain, Chair Landry, and Members of the Inland Fisheries and Wildlife Committee:

My name is Francesca Gundrum and I am Maine Audubon's Policy Advocate. Maine Audubon is a wildlife conservation non-profit – we fulfill our mission to "conserve Maine's wildlife and wildlife habitat" by engaging people of all ages in nature through a science-based approach to education, conservation, and advocacy. On behalf of Maine Audubon and our 30,000 members, supporters, and volunteers, thank you for the opportunity to submit testimony in support of LD 958, *An Act to Expand Protections to Maine's Loons from Lead Poisoning by Prohibiting the Sale and Use of Certain Painted Lead Jigs.*

Common Loons hold a special place in the hearts and minds of all who see and hear them. Their striking plumage, soulful cries, and ability to seemingly vanish under water have inspired legends of magic, mysticism, and creation for many centuries. For the past 40 years, Maine Audubon has worked to assess the status and safeguard the future of Maine's loon population. Through the Maine Loon Project we work with residents and partners statewide to promote healthy lakes, clean water, and quality habitat for loons and to understand trends in their population over time. Across Maine, there are roughly 1,500 loon conservation volunteers that dedicate time and energy to observing and protecting Common Loons. Mainers care deeply about this iconic species and are eager to support initiatives – like this bill – to help protect Common Loon habitat and health. **LD 958 will help expand protections to Maine's Common Loons by closing a deadly loophole in Maine's lead fishing tackle laws.**

ISSUE SUMMARY

For every five loons killed by other causes, including illness, old age, other loons, disease, injuries, boat collisions, disturbance, or predators, one loon is killed by ingesting lead fishing tackle.

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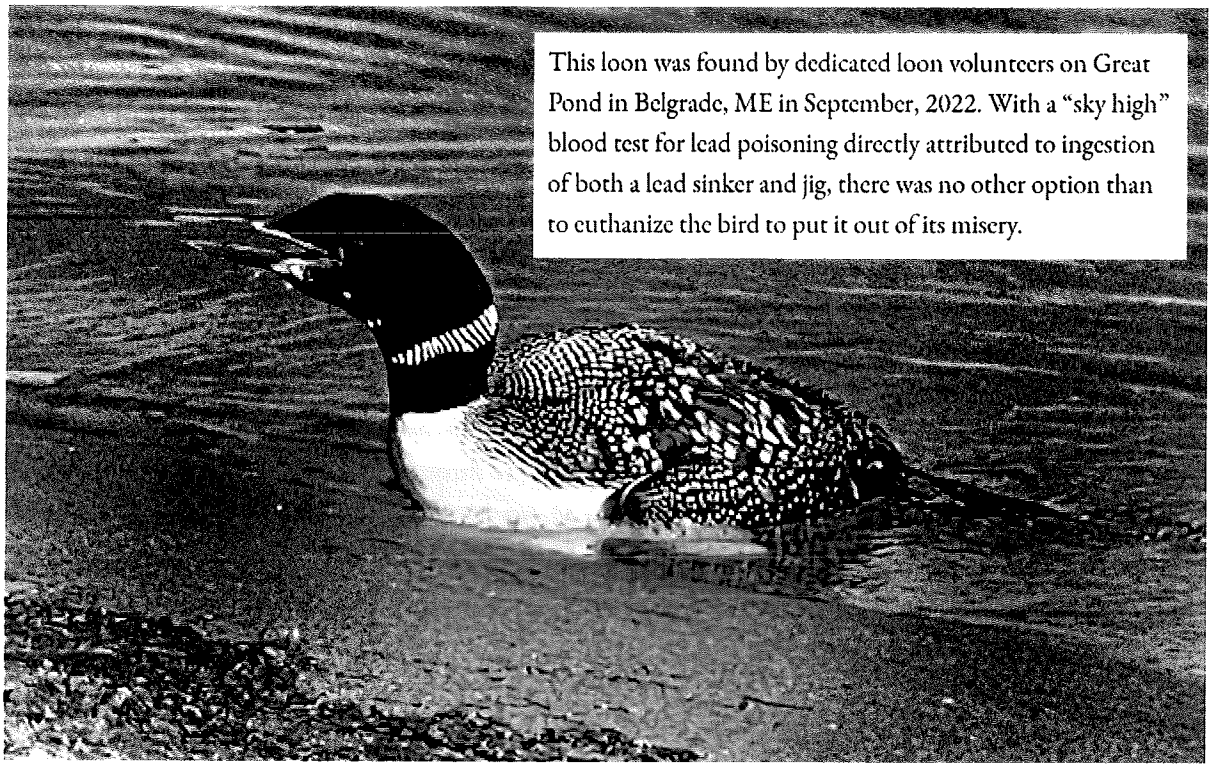
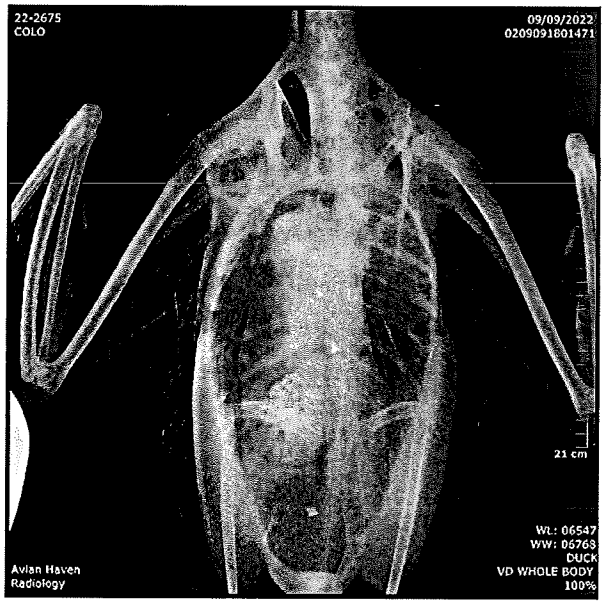
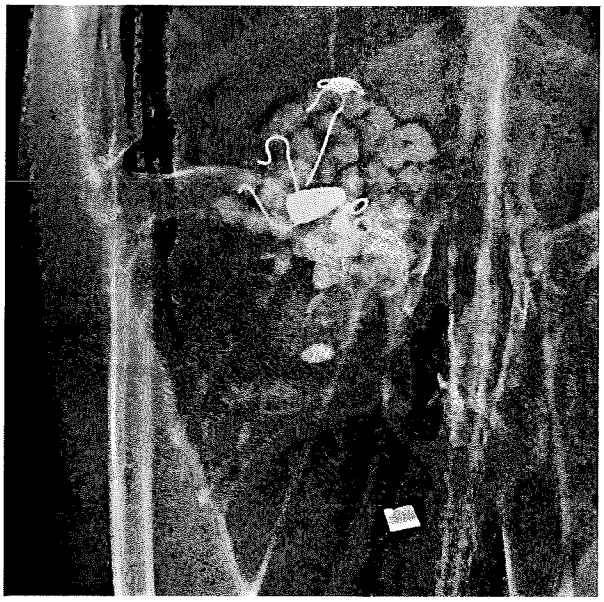
Characteristic signs of lead poisoning include: disorientation, heavy breathing, weakness, paralysis, regurgitation, extreme thirst, seizures, blindness, vocal changes, and "wing droop." Loons typically die within 2-4 weeks of ingesting lead fishing tackle.



This loon was found by dedicated loon volunteers on Great Pond in Belgrade, ME in September, 2022. With a "sky high" blood test for lead poisoning directly attributed to ingestion of both a lead sinker and jig, there was no other option than to euthanize the bird to put it out of its misery.





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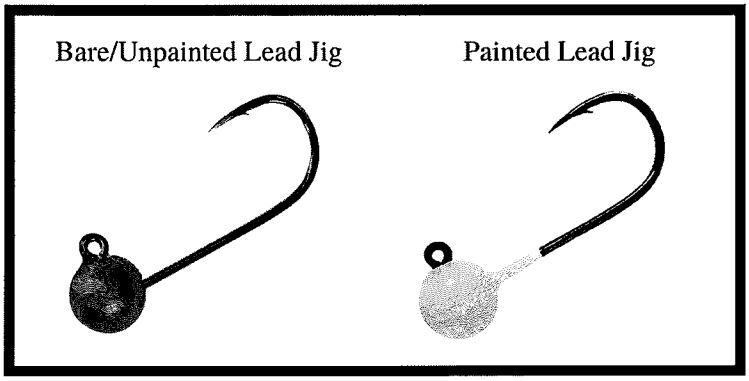

Throughout the spring and summer months, loons routinely gather and swallow pebbles from the beds of lakes and ponds throughout Maine. These gritty-substances collect in the loon's gizzard where both acidic reactions and muscular contractions help aid digestion and nutrient absorption. Unfortunately, loons are not only collecting pebbles when they perform this necessary behavior. Loons ingest a striking amount of fishing tackle that is lost or left behind, or is in fish that have ingested tackle, some of which contain hazardous and life threatening chemicals – chief among them are those manufactured with lead.

Of the lead objects taken from loons that died from lead poisoning between 1987-2013, more than half (58%) were lead-headed jigs. Recent mortality data collected by the Maine Department of Inland Fisheries and Wildlife (MDIFW), Tufts Veterinary Clinic, Center for Wildlife, Biodiversity Research Institute (BRI), wildlife rehabilitation clinics, and others indicate that the continued presence of lead in Maine's lakes and ponds is negatively impacting the health and survival of loons in Maine. In 2013, researchers determined that lead poisoning was the ultimate cause of death in ~30% of Common Loon mortalities in Maine. **Based on soon-to-be released data, lead poisoning was determined the ultimate cause of death in ~15% of known Common Loon mortalities in Maine from 2017-2022 – the years since the current ban went fully into effect.**

LEGAL BACKGROUND

In 2002, lead sinkers weighing less than ½ an oz. were banned. Following a five-year phase-out process, it has been illegal to sell and/or use lead sinkers and bare "unpainted" jigs (weighing less than an ounce in weight or measuring less than 2 ½ inches in length) in Maine since 2017. While this law and subsequent education and lead-buyback programs have proven effective in many ways, a loophole allows for the sale and use of *painted* lead jigs within these size and weight limitations, which both experts conclude and research indicate are still impacting loons.

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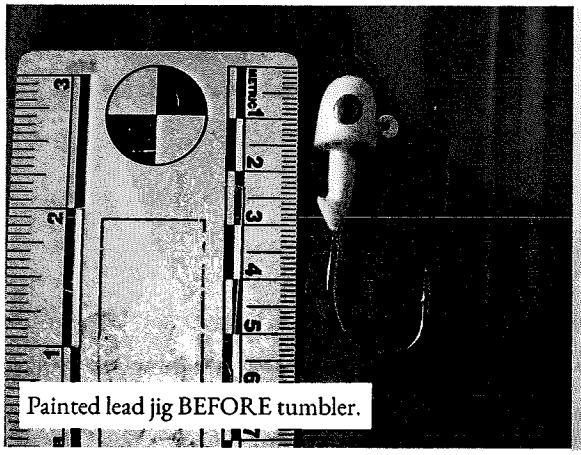
THE PROBLEM WITH PAINTED LEAD JIGS

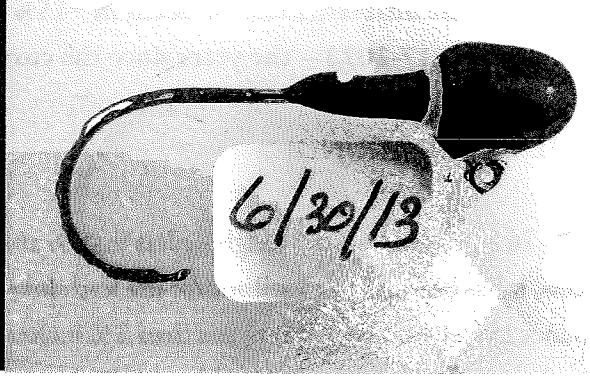
Despite specific exclusion from Maine's lead tackle laws, wildlife biologists and researchers have long believed that lead jigs coated with a layer of paint are just as deadly to loons as bare, "unpainted" lead jigs. A recent study conducted at the Cummings School of Veterinary Medicine at Tufts University addressed this very issue. Experts in wildlife toxicology found that a paint coating on fishing gear, specifically jigs, does *not* prevent the exposure of a lead-content core during the digestive process of the Common Loon. The paint sloughs off quickly in a loon's digestive system through the work of both stomach acids and mechanical scouring by lake pebbles, which are ingested and stored in the loon's gizzard to help break up food:

> *"This study simulated the function of the loon gizzard in order to document the extent to which a jig's paint coat, hook, and lead core degrade and lose mass within a seven day testing period. Lortone 3A Rotary Rock Tumblers were used to simulate the gizzard's digestive action. Small quartzite rocks and an HCl acid solution placed in the tumblers simulated the materials that are normally found in loon gizzards. This study investigated to what extent the rocks and acidic environment of the loon gizzard and a simulated contraction of its thick muscular walls will erode the paint within a week of ingestion. Both sale and usage of lead fishing gear need to be prohibited across the common loons' range, regardless of a paint coat"* (Hojsak & Pokras, 2022 – *In Press*).



Painted lead jig BEFORE tumbler.

Painted lead jig AFTER tumbler.



NON-TOXIC TACKLE ALTERNATIVES

Lead-free tackle alternatives have become more widely available, especially lead-free jigs. Lead-free jigs are made in a variety of metals – such as tin, bismuth, tungsten, steel, and others – by large and small

businesses in the U.S. and Canada. Prices are often comparable with some alternatives costing less than a dollar. Supplies are getting easier to find as more states – including New Hampshire, Vermont, Massachusetts, and others – pass and expand regulations to limit toxic lead tackle. As the market grows for lead-free tackle, economies of scale will also likely continue to help to bring relative costs down.

Company	Jig Type	Material	Weight/ Size	Cost	# per Package	Cost Each
Cabelas/ Bass Pro Shops	Eagle Claw Painted Tin Round Jighead Assortment	Tin	¼ oz.	$6.99	8	$0.87
Cabelas/ Bass Pro Shops	Bass Pro Shops Painted Jigheads 10-Pack	Lead	¼ oz.	$4.89	10	$0.49

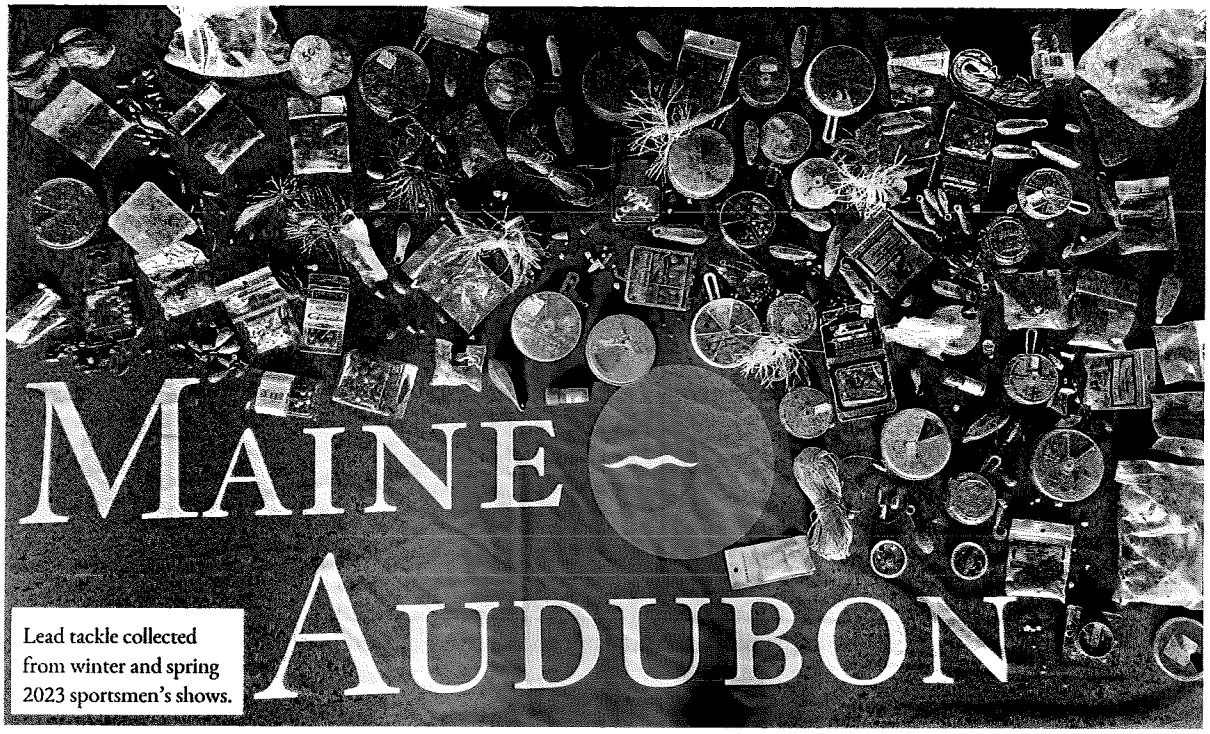
Table 1. Comparison between costs of the cheapest lead and tin painted fishing jigs weighing ¼ oz sold online at Cabelas and Bass Pro Shops.

EDUCATIONAL AND LEAD BUYBACK PROGRAMS

In addition to legislative efforts to address this issue, a diverse group of stakeholders have invested and championed educational and lead tackle buy-back and exchange programing to encourage public knowledge and compliance. Created nearly a decade ago, Fish Lead-Free is a region-wide cooperative partnership designed to help anglers switch to lead-free tackle. Maine's participating partners include Maine Audubon, MDIFW, the U.S. Fish & Wildlife Service (USFWS), Maine Lakes, B.A.S.S. Youth Nation, Sportsmen's Alliance of Maine, and The Maine Sportsman.

For several years now, Maine Audubon staff have attended angling tournaments, sportsmen shows, and more all around the state to help educate the public about lead-free tackle alternatives, help retailers participate in buy-back programs, attend outdoor industry events, help anglers exchange their tackle, provide lead-free products, help manage collection bins for lead-based tackle throughout the state, and more. **Fish Lead Free has partnered with Maine-based tackle shops to provide a $10 store**

voucher to any person who turns in one ounce or more of lead fishing tackle (including lead jigs and sinkers containing any amount of lead) and/or provide lead-free tackle samples at no cost to anglers who swap out lead tackle for non-toxic alternatives.



Lead tackle collected from winter and spring 2023 sportsmen's shows.

Between three sportsmen shows this year alone – *thanks to all the anglers who brought us lead* – we have collected a total 31 lbs., 13.1 oz , an estimated total of 2,050 pieces of lead. The Augusta show traded in 30 lb, 4oz, or roughly 2,000 pieces; Orono had 15.7 oz, or 27 pieces; and Presque Isle brought in 9.4 oz, about 22 pieces. That's 2,050 pieces that loons won't mistake for grit to help digest their food. It only takes one small piece of ingested lead for a loon to experience the effects of lead poisoning – we are proud of our collective progress and this program.

THE TIME IS RIGHT TO CLOSE THE PAINTED LEAD JIG LOOPHOLE.

Loon Health and Welfare

There are five species of loons in the world, but only the Common Loon breeds in Maine. Common Loons are protected by both state and federal laws prohibiting harassment of wildlife, yet they face a

myriad of challenges – **lead is an obstacle that we can collectively address.** Maine's 2015-2025 Wildlife Action Plan designates the Common Loon as a Priority Level 3 Species of Greatest Conservation Need (SGCN). Efforts to address lead poisoning are in line with the necessary aid and attention that accompanies said designation.

From trauma caused by boat strikes, climate change impacts, habitat loss, mercury, nest washouts from boat wakes, etc., loons face tremendous obstacles when it comes to hatching and raising chicks on Maine's lakes and ponds throughout the spring and summer months. Additionally, Common Loons do not reach breeding age until they are ~6-7 years old, which is significantly later than other water birds. **Addressing *preventable* threats will help this species survive long enough to contribute to the population and mitigate the compounding impacts faced by loons.**

To put a finer point on elevated concerns regarding climate change-related impacts to loons, the species is predicted to shift their breeding range north of Maine by 2050 at current planet-warming emissions projections. These trends indicate that one day, loons may no longer breed in Maine. Loons that are adjusting to climate challenges may be less resilient to those challenges if they are *simultaneously* combatting other significant challenges – like lead poisoning. Addressing other major threats to loons should be part of the strategy to help Maine's wildlife adapt to climate change.

Despite Maine's existing lead tackle laws and educational campaigns, lead poisoning continues to be a leading cause of death in loons where the ultimate cause of death could be determined. As stated, It takes 2-4 weeks for adult loons to die once they consume lead. Loons suffer terribly throughout this unusually painful and cruel process. Undoubtedly, there are loons that die from lead poisoning that are *never* recovered and therefore not included in mortality data, so lead poisoning could play more of a role in loon mortality than data suggests. Additionally, other fish-eating birds can consume prey with tackle in their bodies, thus this issue likely extends beyond loon mortality. Wildlife biologists have shared that in cases where loon carcasses are not recovered, lead can reenter the larger ecosystem when the loon decomposes and potentially be picked up by other wildlife, perpetuating a cycle of poisoning. Lead can kill more than once.

Banning the use and sale of painted jigs weighing an ounce or less or measuring 2.5" or less sends a clearer message to anglers about Maine's commitment to preventing avoidable deaths of loons and other wildlife from lead tackle and a more clear-cut directive for achieving that goal.

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Culture and Health of Recreational Communities

Hunters and anglers have contributed immensely to conservation efforts. The preventable suffering of loons by lead tackle is out of step with the overarching ethic of the hunting and angling community. **This bill is an opportunity to continue advancing positive perceptions of hunting and fishing culture and stewardship across Maine.**

Additionally, no amount of lead is safe for humans. Lead is a pollutant regulated by the U.S. Environmental Protect Agency (EPA), which has overseen the removal of lead from gasoline, paint, homes, cars, and other products. A growing body of evidence suggests that even low doses of lead exposure can lead to physical and cognitive impairments in humans – underestimating the potential hazards of handling lead fishing gear is dangerous. Eradicating hazardous gear from our tackle boxes and beyond will help protect the health of our anglers – including children who are especially sensitive to lead exposure – and our recreational communities.

Broad Show of Support for Expanding Protections to Common Loons

Commons Loons are an iconic wildlife species in Maine. Protecting wildlife – *especially those that are tied to the Pine Tree State* – is an essential principle of our state's shared vision to conserve priority wildlife species and habitats.

There are more than 1,500 loon conservation volunteers that dedicate time and energy to observing and protecting Common Loons all across Maine – these people care deeply about this iconic species and are eager to support this initiative.

Nearly two dozen lake and pond associations signed a letter in support of this bill (see attached). More than 1,000 Mainers added their name to a petition in support of LD 958. Anglers and bait shop owners have publicly voiced their support for LD 958 (see attached OpEd). Dozens have submitted supportive testimony and more is expected in the coming days

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As you will hear today, Mainers care deeply about this iconic species and are eager to support initiatives – like this one – to help protect Common Loons. The continued presence of lead – specifically lead painted jigs – in Maine's lakes and ponds is negatively impacting the health and survival of loons in Maine. Death by lead poisoning is avoidable.

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We have the power to put a stop to these traumatic and miserable endings for this beloved Maine species. We urge the Committee to support this bill. Thank you for your time and I am happy to answer any questions.

Sincerely,

Francesca "Ches" Gundrum
Policy Advocate

OPINION > Posted April 23

Maine Voices: What would fishing in Maine be without the wildlife?

Lead poisoning from fishing has for years been one of the leading causes of loon deaths. We want to change that.

BY JON LUND, WILL LUND, NICK LUND AND ELLIOTT LUND SPECIAL TO THE TELEGRAM

ABOUT THE AUTHORS

Jon Lund is a resident of Hallowell, **Will Lund** of Portland and **Nick Lund** and **Elliott Lund** are residents of Cumberland.

The most senior of four generations of fishermen in our family, Jon Lund, began fishing in Maine in 1935.

In his time he has fished all over the state, catching just about every kind of fish on every kind of rig. The youngest of us, Elliott, just five years old, began fishing this past summer but looked every bit the experienced angler as he yanked sunfish after sunfish out of the water using a worm on a stick rod. In between, Jon's son Will has fished his whole life and currently runs the Maine Sportsman magazine, and Will's son Nick is the advocacy and outreach manager for Maine Audubon.

Elliott (then 4) and his great-grandpa Jon (then 93) fishing last summer on Cobbosseecontee Lake. Photo courtesy of Nick Lund

Of all the things we've learned in our combined decades of fishing – the knots, the lure techniques, the secret spots – the most important lesson might be that the best part of fishing isn't catching the fish, it's being outside in Maine.

If you're fishing, you're not behind your desk but are out on the water. Even when the fish aren't biting (and even young Elliott has learned that, sometimes, they just don't bite), you're still out with the birds and the beavers and the frogs and

other creatures.

One of the most beloved of those creatures, the Common Loon, is being accidentally injured by fishermen across the state.

Loons lack teeth and can't chew their food, so they eat small stones that help to grind food up in the loon's gizzard. When anglers lose a fishing lure made of lead, the pieces can end up in the gizzards of loons either when they eat a fish that has swallowed a lead fishing lure or when the loon accidentally plucks a lead lure off of the lake bottom for use in their gizzard. It takes just one or two pieces of lead to poison a loon, and it most often leads to an agonizing death in a matter of weeks.

Lead poisoning has for years been one of the leading causes of loon mortality. The legislature took action in 2017, banning the sale of lead sinkers and jigs under 2.5 inches. Problem solved, right? Wrong. A loophole was included in the bill before it was passed that only banned the sale of unpainted lead tackle; sinkers and jigs covered in paint could still be sold. The trouble is, from the loon's perspective, that paint doesn't do anything to make the tackle any safer. Birds continue to be poisoned.

A new bill working its way through the legislature seeks to close this deadly loophole. Sponsored by Rep. Allison Hepler, LD 958 – An Act to Expand Protections to Maine's Loons from Lead Poisoning by Prohibiting the Sale and Use of Certain Painted Lead Jigs – would expand existing Maine law to phase out the sale, and eventually the use, of small-sized painted lead fishing tackle and keep these harmful metals out of the water.

We believe that this is the right change to make to protect one of our most iconic species. Non-toxic tackle alternatives are already becoming widely available thanks to laws in Maine and other New England states, and there are buy-back programs available through the Fish Lead Free group that can help anglers with information and product testing.

We can do this, and we should. Fishing in Maine just wouldn't be the same without the other wildlife, like loons, that go with it, and we owe it to ourselves and to the creatures we fish alongside to ensure that our activities aren't harmful. We're four generations of Maine fishermen, but there are many more to come. Those future anglers deserve the same enjoyable experience on a Maine lake that we do – whether or not the fish are biting.

May 8, 2023

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

RE: Expanding Protections for Maine's Common Loons from Lead Poisoning (LD 958)

On behalf of our organizations' members and supporters, we want to express our support for LD 958, An Act to Expand Protections to Maine's Loons from Lead Poisoning by Prohibiting the Sale and Use of Certain Painted Lead Jigs.

Many of the thousands lakes and ponds in Maine support nesting pairs of Common Loons, and their annual return is met with great joy. Our members follow the lives of loons with great interest, and work to help count loon pairs each year, identify and protect nests, slow our boat speeds near loons, and take other steps to ensure their well-being. Common Loons are central to the Maine brand and critical for our tourism and outdoor economy. Birdwatchers, anglers, and lake visitors actively search out lakes where loons nest, and support community businesses in the process. Renters seek out lakes where Common Loons are nesting, in part because they want to witness diligent loon parents feeding and carting their chicks around the lake on their backs and hear the wailing cries of loons calling to each other as they drift off to sleep. Yet loons face tremendous obstacles throughout the spring and summer months, including from trauma caused by boat strikes, climate change impacts, habitat loss, mercury, nest washouts from boat wakes, and more. It's essential that we do all we can to keep Common Loons returning to our lakes and ponds each year.

But local engagement is not sufficient. **We need the help of Maine's State Legislature to reduce the threat of lead poisoning, one of the top threats to loons in Maine.** Loons ingest a striking amount of fishing tackle that is either lost or left behind, or in fish that have ingested tackle. When swallowing small pebbles from the lakebed to aid their digestion, loons can sometimes accidentally swallow lead tackle that has mixed into the lakebed, and become poisoned. Some of this tackle contains hazardous and life threatening chemicals – chief among them is lead.

The problem was partially addressed most recently in 2013, when the state banned the sale of small-sized bare lead sinkers and jigs, but a loophole for painted jigs remains. Paint coatings do not prevent the exposure of a lead-content core during the digestive process of the Common Loon, and thus does nothing to reduce the danger from lead tackle. Loons remain at risk as long as painted lead tackle continues to find its way into our lakes and ponds.

LD 958 closes this regretful loophole and helps ensure that our state's beloved loons will be visiting Maine lakes and ponds for generations to come. We urge your support.

Sincerely,

Alamoosook Lake Association

Alford Lake Lermond Pond Association

Avian Haven

Center for Wildlife

Chemo Pond Lake Association

Franklin Toddy Pond Association

Friends of Lake Winnecook

Greater Pushaw Lake Association

Georges Pond Association

Lakes Environmental Association

Long Pond Lake Association

Maine Audubon

Maine Lakes

Maine Rivers

Parker Pond Association

Three Mile Pond Association

For more information, please contact Maine Audubon's Policy Advocate Francesca "Ches" Gundrum at fgundrum@maineaudubon.org.