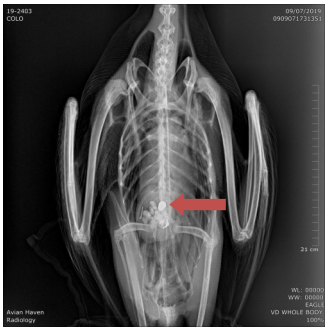
Testimony in Support of LD 958

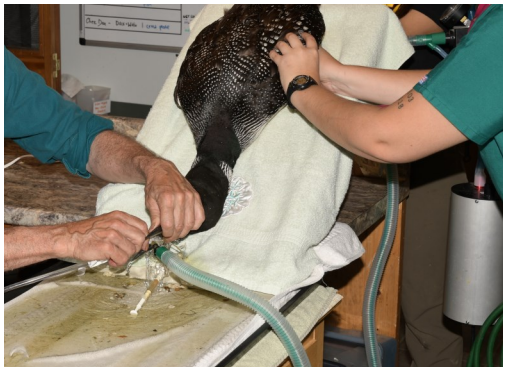
An Act to Expand Protections to Maine's Loons from Lead Poisoning
by Prohibiting the Sale and Use of Certain Painted Lead Jigs

Senator LaFountain, Representative Landry, Members of the Committee on Inland Fisheries and Wildlife: My name is Diane Winn. From February of 1999 through April of 2022, I was the Executive Director of Avian Haven, a wild bird rehabilitation center in Freedom. Avian Haven currently admits about 3,300 injured, sick, or orphaned individuals annually, and, on the basis of case load, is the largest wild bird rehab center in northern New England. Avian Haven works closely with the biologists and game wardens of MDIFW, having contacts in all of the state's regions. Common Loons are among my species of expertise as a wildlife rehabilitator, and I have been a primary caregiver of loons admitted to Avian Haven throughout the time frame noted above. In that capacity, I have collaborated on numerous loon cases over the years, not only with MDIFW personnel, but also with the loon team of Biodiversity Research Institute, with New Hampshire's Loon Preservation Committee, and with the Vermont Center for Ecostudies. I retired as Avian Haven's Executive Director in 2022, but am still considered the organization's loon specialist.

Since 2000, Avian Haven has admitted a total of 455 Common Loons, of which 41 have presented with ingested lead sinkers or jigs and extremely high blood lead levels. Lead exposures are confirmed with in-house x-rays and measurements of blood lead levels (photos to right). Loons with lead poisoning are found beached or sometimes floating listlessly close to shore. They appear to be debilitated and often seem to have difficulty breathing. By the time they are incapacitated to this point, their blood lead levels are almost always beyond the upper limit of the LeadCare® II screening instrument we use, which is 65 µg/dl (micrograms per deciliter). The loons admitted to Avian Haven with lead poisoning over the years have originated from many locations statewide, including several of the Belgrade Lakes, Lake St. George, Crystal Lake, Sebec Lake, and Megunticook Lake. Admission dates range from late June through mid-September.



Lead poisoning in wildlife is treated just as it is in humans—with a chelating drug that binds with lead ions to form a nontoxic compound that can be excreted. When lead poisoning is confirmed in a loon admitted to Avian Haven, chelation therapy is implemented. Ultimately, however, in order for chelation to be successful, lead must be removed from the bird's GI tract, specifically, from the gizzard, a specialized muscular stomach that also contains small rocks eaten to aid digestion of fish. Options for removal of sinkers and jigs from loons are limited. In general, these objects are too large and heavy to be defecated, even if the bird is given laxatives. Endoscopy is a possibility, but is time-consuming and requires considerable skill. Surgical removal is a theoretical option, but these birds are almost always too debilitated to be candidates for surgery. Current standard practice is removal by gastric lavage—a stomach flush.



The basic procedure is shown in this photo of a loon recued in 2021 from Wesserunsett Lake. A general anesthetic is delivered via a tube inserted into the trachea. The anesthetized bird is positioned at a downward angle, and a second tube is directed from the mouth, through the esophagus, and into the gizzard. The other end of this second tube is connected to a faucet. Body-temperature water delivered under pressure from the faucet to the gizzard flows back out of the mouth by gravity, carrying the contents of the gizzard.

Those contents will include the small rocks mentioned previously as well as the sinker or jig. The procedure is a four-person job—someone holds the bird, someone controls the flow of water from the faucet, someone monitors the patient's vital signs, and someone controls the lavage tube. The flush itself takes just a few minutes compared to the much longer time required for endoscopy. We performed our first lavage at Avian Haven in 2012; in the decade since then, we have removed lead objects from another 10 loons. A few of those objects are shown below. Sometimes, other pieces of fishing gear are also flushed, as was the case with the 2022 loon from Great Pond (photo to the right).

Sadly, despite lavage and chelation, none of the lead-poisoned loons admitted to Avian Haven over the years have survived. Lethal damage to body systems had already been done by the time the birds were rescued. But no matter how grim the prognosis, knowing that the loon will certainly perish if the object is not removed is an incentive to make the effort. The lavage technique has become standard operating procedure at Avian Haven (as well as at other top-notch facilities).

It is important today to note that Avian Haven has admitted lead-poisoned loons in the last 10 years with roughly the same frequency as over the years prior to the 2013 legislation—an average of just under two per year. It is tempting to speculate that this continuing trend reflects, at least in part, a failure of paint to seal off the toxic component of the object. Such speculation notwithstanding, however, perhaps the most important thing I can share with you today is a description of what happens to a loon that has ingested a lead sinker or jig after mistaking it for a small rock.

The rocks in the gizzard quickly grind lead from the object. Toxic metal is absorbed through the digestive system; from there, it is distributed to other parts of the body, affecting virtually all organ systems, particularly the circulatory system and the nervous system. Just as it does in people, lead damages red blood cells and interrupts the formation of new ones, which produces anemia. Damage to the nervous system causes, among other symptoms, muscle weakness and loss of coordination. These loons are lethargic, unable to fly or dive, and sometimes incapable of even holding their heads up. Their beathing is labored.

Ironically, the term "leaden" is an apt descriptor of lead-poisoned loons; they are listless, sluggish, and "leaden-eyed" (an adjective that in other contexts means dull-eyed or heavy-eyed). That look is evident even in photos of lead-poisoned loons. Seeing loons in this condition can be very upsetting to members of the public. They may express disbelief that lead fishing gear is still in use, given all that is known about lead poisoning in children and adult humans, and the many other efforts to remove lead from the environment.

The proposed legislation, like the one in 2013, may cause some minor inconvenience in tackle-swapping, and perhaps a small added expense. However, I believe that none of that would seem important to people who held a loon dying of lead poisoning in their arms to witness, close up, a life ending because of toxic lead fishing gear.

Senator LaFountain, Representative Landry, Committee Members: Thank you for allowing me to provide testimony on behalf of Maine's loons. I implore you to vote in favor of LD 958.

D.W.