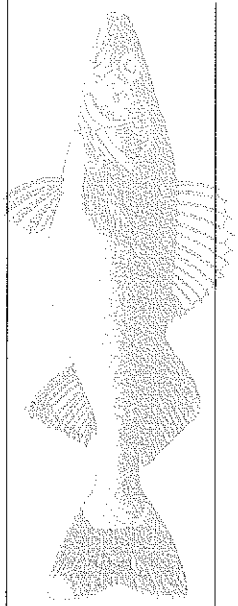
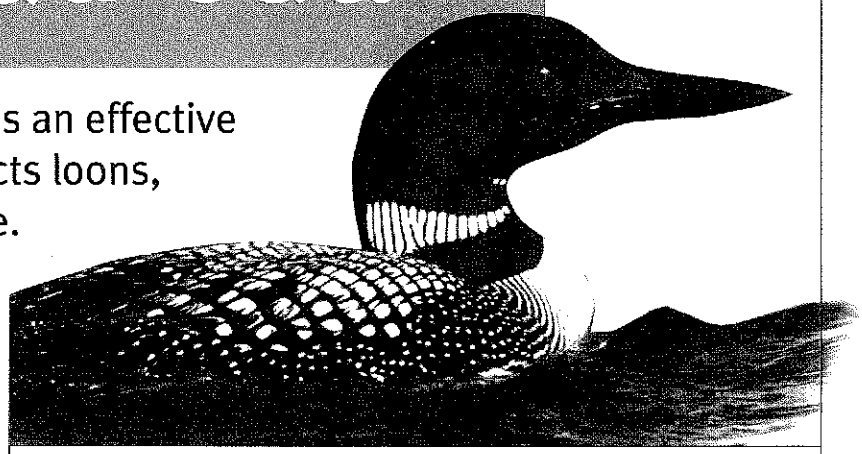
Get the lead out!



Non-lead fishing tackle is an effective alternative, and it protects loons, eagles and other wildlife.



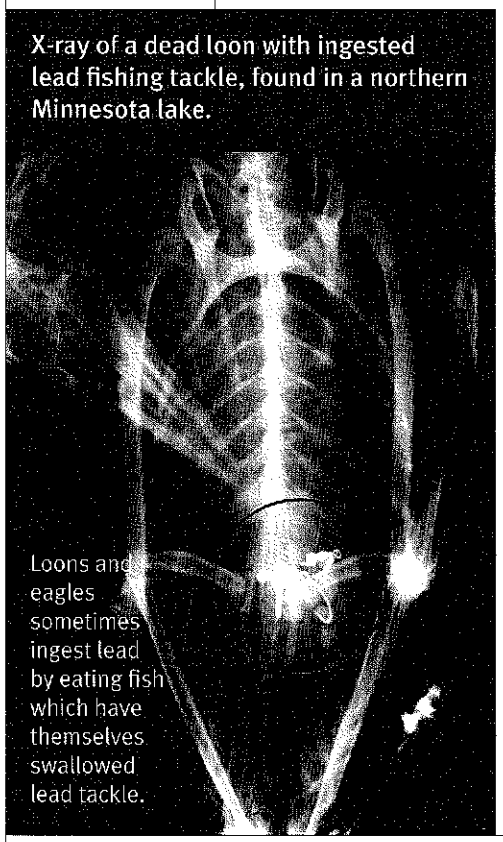
Tackling the problem

Lead is a toxic metal that, in sufficient quantities, has adverse effects on the nervous and reproductive systems of animals. Found in most fishing jigs and sinkers, this metal is poisoning wildlife such as loons and eagles.

More anglers are using fishing tackle made from non-poisonous materials such as tin, bismuth, steel, and tungsten. And these alternatives are becoming easier to find.

Sink like a stone

These pebbles and sinkers were found in the gizzard of a lead-poisoned loon from Minnesota. You can see how loons can mistake lost fishing weights for the pebbles they seek to help grind their food. Loons die within two to three weeks after swallowing a lead sinker or jig.



X-ray of a dead loon with ingested lead fishing tackle, found in a northern Minnesota lake.

Loons and eagles sometimes ingest lead by eating fish which have themselves swallowed lead tackle.

Non-lead weights and jigs

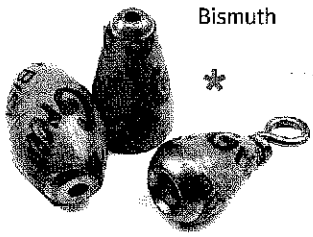
There's been an explosion of innovations in the tackle industry, and your options are becoming more plentiful each year.

Tin *

Tungsten

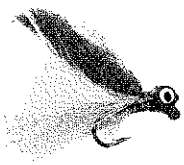
Stainless steel

Snap-on tungsten composite *

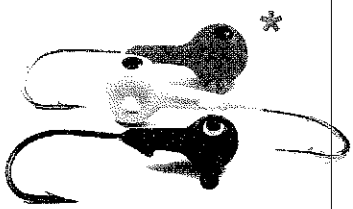


Bismuth *

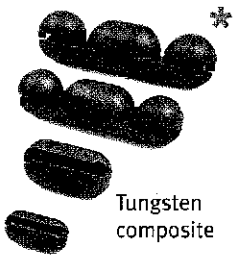
Glass *



Bismuth/tin



Bismuth/tin *



Tungsten composite *

More resources ⇢ www.moea.state.mn.us/sinkers

* **Made in Minnesota**

What's the risk? Weigh the evidence:

While it is hard to get an accurate count of water birds and birds of prey that die from ingesting lead tackle, current research indicates that lead poisoning is a serious concern.

- Research on loons from six New England states has shown that 26% of the more than 1,000 dead adult breeding loons found between 1987 and 2004 died from lead poisoning. On some "hot spot" lakes, lead caused over 50% of the documented causes of death.
- In Michigan, another 17-year study revealed that lead poisoning – primarily from lead jigs – was the second leading cause of death at 22% of the 204 loons examined.
- Although research in Minnesota is limited, a study conducted by the Minnesota Pollution Control Agency concluded that lead poisoning accounted for 12% of the dead adult loons with known causes of death.

The Raptor Center at the University of Minnesota has monitored injured bald eagles for lead since 1980. Lead poisoning has been the cause of admission of 315 out of a total of 1,398 eagles, or 23%. This percentage has remained steady in spite of 1991 federal restrictions on using lead shot for hunting waterfowl. Of increasing concern, eagles are inadvertently eating bullet fragments lodged in the flesh of big game they find in the field. Lead fishing tackle may also be a source of exposure.

Additionally, there are risks associated with the production of lead tackle. These risks can be reduced by using non-toxic materials to manufacture fishing products.

Teach your tadpoles

Outfit kids' tackle boxes with non-lead weights. They are non-toxic and safer for youngsters to handle. Plus, it's a way to help instill a strong conservation ethic.

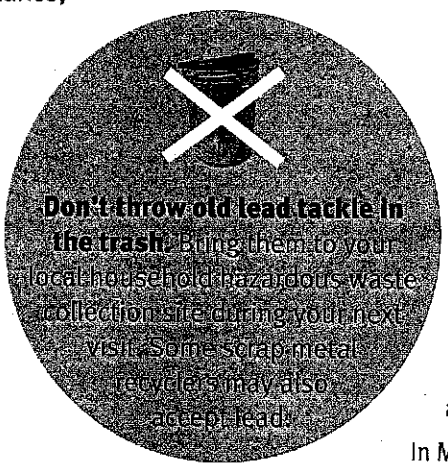
MinnAqua is a statewide DNR education program that teaches participants about Minnesota's aquatic resources through learning how to fish. The program provides hands-on learning, teaching aquatic stewardship, fish identification, management, safety and fishing skills. To learn more:

www.dnr.state.mn.us/minnaqua

Price check

You can expect to pay for non-lead tackle in general, but the difference is not great, especially for basic items. Steel is often less expensive than its leaded counterparts.

	LEAD	TIN	STEEL	TUNGSTEN
3/0 Reusable Split Shot	3¢	4¢	–	–
1/8 oz. Painted Jig	40¢	51¢	–	$1.99
1/4 oz. Worm weight	14¢	50¢	23¢	66¢



Don't throw old lead tackle in the trash. Bring them to your local household hazardous waste collection site during your next visit. Some scrap metal recyclers may also accept lead.

Trolling for Change

Minnesota is fishing country. We buy a lot of tackle. That's a big reason why our focus is on educating and partnering with others to stimulate the marketplace and speed the transition toward lead-free angling. Today, more environmentally-friendly tackle is being made and sold, and growing numbers of anglers are going lead-free.

In Minnesota, there are no bans on the sale or use of lead weights and jigs. In many areas though, non-lead tackle isn't just a good idea -- it's the law. Restrictions on lead tackle are becoming more common in the United States and other countries:

- New Hampshire has banned the use of lead sinkers that weigh less than an ounce and lead jigs smaller than an inch.
- Vermont banned the use and sale of lead sinkers weighing 1/2 oz. or less.
- Maine and New York have banned the sale of lead sinkers weighing a half-ounce or less.
- Great Britain banned the use of lead sinkers in 1987.
- In Canadian national parks and national wildlife areas, it is illegal to use lead sinkers and jigs weighing less than 50 grams, a ban that went into effect in 1997. Environment Canada is pursuing actions to prohibit the import, manufacture, and sale nationwide of lead sinkers and jigs.
- The U.S. Fish and Wildlife Service has already banned lead sinkers in three wildlife refuges and Yellowstone National Park. The Service is currently discussing restrictions on the use of lead sinkers and jigs at other national wildlife refuges where loons and trumpeter swans nest.

Minnesota Office of Environmental Assistance

www.moea.state.mn.us/sinkers