

STUDY SHOWS HARM OF SOFT PLASTIC LURES

IF&W urges anglers to swi

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THE MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE (IF&W)

is strongly encouraging anglers to protect Maine's fish by changing from soft plastic lures to biodegradable ones.

Maine fisheries biologists are reporting increasing numbers of angled trout and salmon with indigestible soft plastic lures in their stomachs, according to John Boland, IF&W Fisheries Division Director. A discarded soft plastic lure consumed innocently by a brook trout from the bottom of a freshwater shoal likely remains in that fish's stomach for the rest of its life and may cause health issues such as ulcers and weight loss.

Soft plastic lures are most commonly used by bass anglers, often in waters shared with trout and salmon. IF&W is cooperating in studies on the effects of soft plastic lure ingestion by trout and salmon, including one recent experiment at Unity College, which was conducted by IF&W Pathologist Dr. Russ Danner, Unity College Professor Jim Chacko, PhD., and IF&W Fisheries Biologist Francis Brautigam, and in another study currently underway at Southern Maine Community College.

The study conducted at Unity College found that 65 percent of brook trout voluntarily consumed soft plastic lures if they simply were dropped into water.

"We found that fish retained the lures in their stomachs for 13 weeks without regurgitating them," said Dr. Danner. "They also began to act anorexic and lost weight within 90 days of eating a soft plastic lure."

Without regard to the chemical toxicity of ingested soft plastics, the fact that these lures are occupying space in a trout's stomach limits the amount of space available for natural food. There is a lot of veterinary medical evidence that foreign bodies in the digestive tract cause ulcers, weight loss, and anorexia.

"We strongly encourage anglers to voluntarily purchase biodegradable and food-based lures rather than soft plastic ones," Dr. Danner said. "Also, we are asking anglers not to discard plastic lures into any waters, and also to attempt to

retrieve any soft plastic lures that have become unhooked".

For millennia, trout and salmon have foraged the waters of Maine for nutritious natural forage such as small fishes, insects and other invertebrates. In the last 20 years, food mimics made of soft plastic has begun to compete with these nutritious natural forage items. The effects of soft plastic lure pollution on freshwater ecosystems are not well understood yet, but it is unlikely that eating soft plastic lures will be found to be a good thing.

"The wide assortment of soft plastic fishing lures is staggering," Dr. Danner said. "Soft plastic lures come in every color, a myriad of sizes, and resembling every swimming, crawling, and flying creature a fish could imagine eating. Large fish searching the waters of Maine are bound to come upon brightly colored soft plastic lures lost or discarded by anglers and consume these imitators of natural food items."

There are estimates that as much as



**IF&W Pathologist
Dr. Russ Danner**

20 million pounds of soft plastic are being lost in freshwater lakes and streams annually in the U.S. The average life expectancy for soft plastic lures is more than 200 years.

"We need all anglers to do their part to protect Maine's valuable fisheries from this serious threat," Dr. Danner said. "Natural lure alternatives are available at many retailers and online, and should become the choice of people who love to fish Maine's waters".

To learn more about the experiment conducted at Unity College, a report was published in the Northern American Journal of Fisheries Management and is available at <http://afs.allenpress.com/perlser/v/?request=get-abstract&doi=10.1577%2FM08-085.1>.



A soft plastic lure is removed from a lake trout. the lure fills up most of the stomach.

Switch to biodegradable lures



This artificial lure was removed from this brook trout.

L.L. Bean to Sell Biodegradables Only by August 1

By August 1, L.L.Bean Retail Stores will no longer be offering traditional soft plastic lures. Instead, the retailer “will be proud” to only offer biodegradable alternatives.

According to Mac McKeever, an L.L.Bean Senior Public Relations Representative, biodegradable alternatives cost about the same as traditional soft plastic lures, are just as effective and durable, and breakdown naturally in water within 60-90 days and within 30 days in a fish's stomach.

The Freeport-based company began considering making a switch last fall, but after reading a IF&W report on how soft plastic lures are harming Maine's fish, it decided to make the transition sooner.

“I'm hoping that your fantastic study will inspire people to consider alternatives and spawn additional studies in other states,” McKeever said. “In concert, it is my hope that L.L.Bean will set a positive example for others by only offering biodegradable alternatives. We're doing it because we have had a long history of environmental benevolence. We're doing it because it's simply the right thing to do.”

The new assortment of biodegradable alternatives closely mirrors the broad assortment previously represented by the traditional soft plastic lures L.L.Bean was offering, McKeever said.

The catalog and website soon will follow suit.

Honoring The Past, Cherishing The Present, Planning For The Future.

The Maine Warden Service dates back to 1880, when the first wardens were appointed to enforce laws giving Maine's moose and deer their first legal protection. The service's first enforcement action occurred on March 12, 1880 when two men were apprehended for killing a doe in closed season.

From this modest beginning, the Maine Warden Service now has a complement of 124 uniformed members and is the largest of three bureaus in the Department of Inland Fisheries & Wildlife. The main headquarters is located in Augusta and three divisions with a varying number of districts. Division headquarters are located in Gray, Greenville, and Ashland. Each division is administered and supervised by a Lieutenant and sectional Sergeants. Warden districts cover the entire state; they are generally geographically smaller in southern Maine where the population is higher, and larger in the more sparsely populated Northern sections.

Today, the Maine Warden Service is a modern, professional, highly effective law enforcement agency. Members are certified law enforcement officers who use state-of-the-art equipment, including four-wheel drive trucks, boats, snowmobiles, ATV's, personal computers, a two-way radio repeater network, portable radios, GPS, forensic mapping equipment, fixed wing aircraft, and night vision equipment, in carrying out their responsibilities. In addition, the service maintains its own forensic laboratory, Dive team, K-9 unit, Firearms Team, Forensic Mapping Team, ERT Team, and aircraft division. These aircraft enable Wardens to patrol remote sections of their assigned districts, effectively respond to emergency situations, participate in fish stocking, conduct angler surveys, and oversee boating activity.

