

On the Watch for Invasive Species

The Ontario Federation of Anglers and Hunters (OFAH) and the Ontario Ministry of Natural Resources (MNR) have created a partnership called the Invading Species Awareness Program. An initiative under this partnership is “Invading Species Watch” which is a free volunteer based lake monitoring program for aquatic nuisance species.

Redstone Lake Cottagers Association have participated in the program since 2004 in an effort to help us all increase our local awareness of the potential threat of zebra mussels and other aquatic nuisance species such as the Spiny Water Flea. In addition it is important that we all know how we can help to prevent further spread of these critters along with their adverse ecological impacts to our lake systems.

Much of the remainder of this article has been taken from a combination of the FOCA Lake Stewardship newsletter and the OFAH web site.

The Zebra mussel is considered to be perhaps the worst invasion worldwide as measured in dollar cost. Zebra mussels filter plankton from the surrounding water at a rate of up to one litre per day. The mussels are relatively small (3 cm in length) and live approximately 2-3 years. Their shell is brown, cream and yellow striped and triangular in shape with one edge flattened. Small threads called byssal threads attach the mussel to hard surfaces. They will build up on these hard surfaces and have been known to clog water intakes.

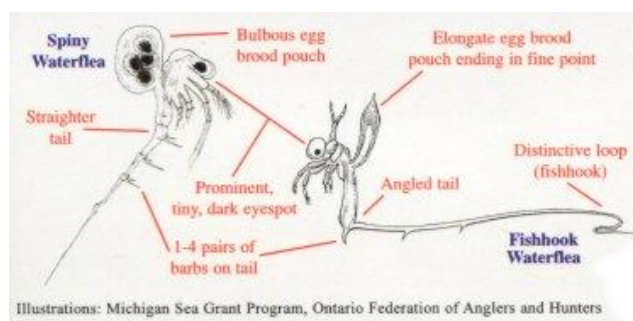
Since the invasion of the zebra mussel, little has been heard of new invasions in cottage country. However, new species are being introduced and continuing to spread from lake to lake. Three of these are:

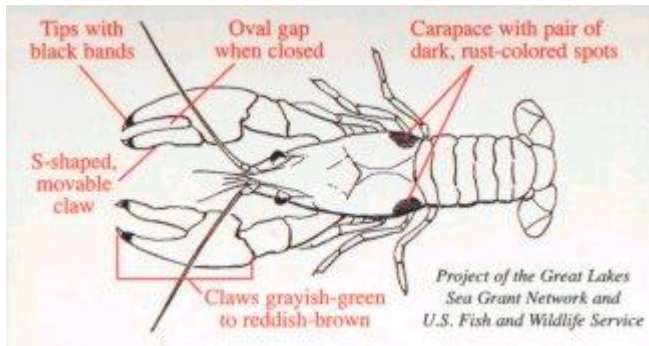
- The Spiny Water Flea
- The Fishhook Water Flea and
- The Rusty Crayfish

The Spiny Water Flea is a small floating animal, or zooplankton that has a diet of smaller zooplankton. Since these smaller zooplankton feed on algae, that algae population may increase when the spiny water flea invades and the smaller zooplankton population is reduced. Increased algae mean a murkier

lake. Big fish savour these spiny fleas, but smaller fish can not eat them. Although they are invisible to the average cottager, they make their presence noticed by their very annoying habit of becoming entangled in fishing lines.

The Fish Hook Water Flea is a cousin of the spiny. It is about the same size with a much longer, thinner tail. Similar to the spiny, these water fleas are capable of clogging fishing lines. They mass together on the lines, looking and feeling like wet cotton batten. Its effect on the food chain is expected to be similar to that of the spiny water flea.





The Rusty Crayfish is an “invisible” invasive, not because it is small, but because it looks so similar to native crayfish. Crayfish native to the lake could be replaced by rusty crayfish within a few years, and even crayfish gatherers may not notice. Impacts of rusty crayfish invasion vary, even between two very similar lakes. Apart from reducing the diversity of the

crayfish population, (there are nine species of crayfish in Ontario), their most important impact is reduction of aquatic plants. This is especially noticeable in northern lakes that have less abundant weed beds. This in turn can reduce fish populations. Rusty Crayfish will become much more numerous than the natives, and they tend to eat more, so they will affect the food web of the lake.

Once these invisible invasives are in our lake, they are here to stay. There exists no environmentally sound ways to eradicate or even control these species, so prevention is the only cure. Unfortunately, recent sampling in 2009 has shown the existence of the Spiny Water Flea in the stomach of a Lake Trout sample taken as part of the MNR sampling program. We must all be diligent and work together to keep other invasive species out of our waters. If you visit other lakes, do not transport water from lake to lake. Wash your boat and drain it. Wash and dry your fishing equipment.

For more information on invading species, visit the OFAH Invading Species information at <http://www.invadingspecies.com>.