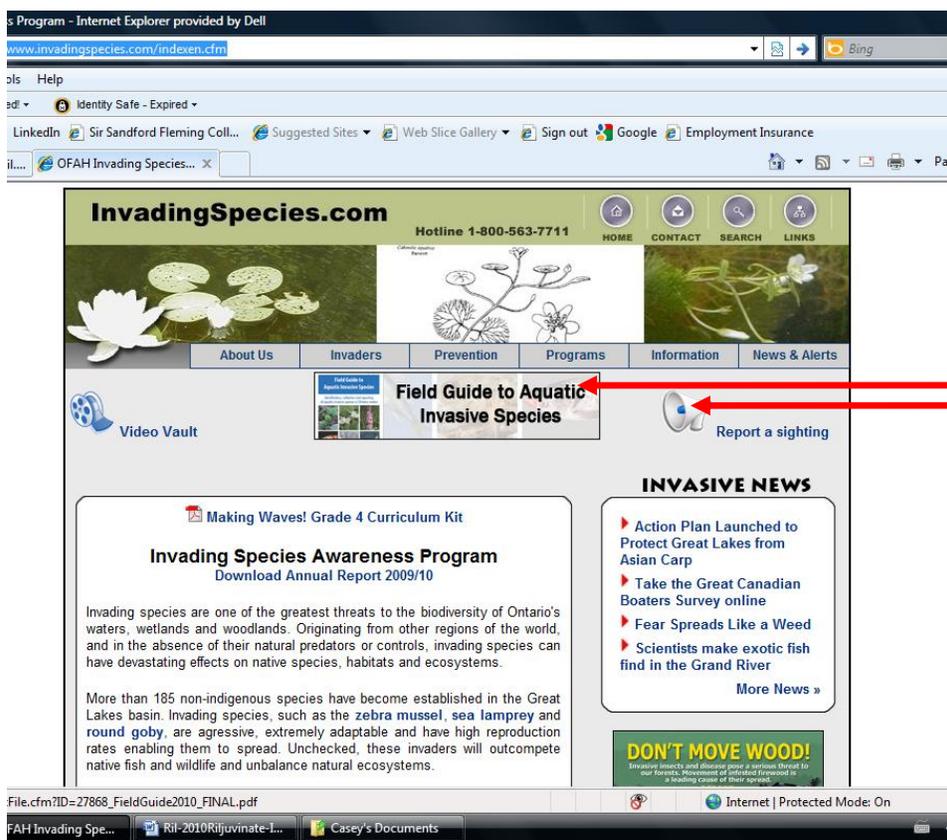


Invasive Species and the Threat to Ril Lake

Casey Cook, July 2011

Invasive species are a growing threat to ecosystems around the world. Alien invasive species are becoming more prevalent in many areas of Canada and in reference to our own “backyard” Ontario, we should be aware of their increase and threat to ecosystems and the biodiversity of these areas.

Invasive “alien” species are spread by humans by way of ballast water from ships, attachment to fishing lines, boats and trailers, mishandling of bait fish and can be hidden in crating and cargo from other countries; they have already caused significant human, economic and environmental damage. The Federal Government has developed a plan to control the spread of invasive species and more information can be found at the following link; <http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=1A81B051-1> There are several links to additional information such as “Where are Alien Invasive Species Found in Canada” at: <http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=805A5D5C-1> Closer to home, the Ontario Federation of Anglers and Hunters (OFAH) have developed a strategy to identify and report any sightings in order to monitor the spread and threat of invasive species. The following link is the gateway to learning more of these species and how you can participate to assist in the continued efforts to **Keep Ril Lake Clean**. <http://www.invadingspecies.com/indexen.cfm> The 2 arrows ← indicate the the link to identifying both terrestrial and aquatic invasive species and the step-by-step procedure to report a sighting.



OFAH Invading Species, 2011

Ril Lake currently has recorded sightings in several locations of Dydimo (Figure 1 & 2), over the past 2 years which will continue to be monitored. The most common invasives are listed below with a brief description of how they were introduced, features and general information. Many of these species are in the Muskoka area and it is important we are actively monitoring their spread in order to protect our indigenous species, ecosystems and maintain a healthy Ril Lake.

The Spiny Water Flea (*Bythotrephes longimanus*) is a very serious threat to lakes, rivers and streams and has been sited in Muskoka. A study by Dr. Shelley Arnott of Queen’s University studied lakes invaded by the spiny water flea and results showed a 70% reduction of zooplankton in this upper area of the lake. Zooplankton are an essential part of the food chain to fish and controls algae in lakes, rivers and streams.

Figure 1 & 2 – Didymo (*Didymosphenia geminata*)



Didymo on Fresh-water Clam (Cook, 2010)



Didymo Attached to Submerged Woody Debris (Cook, 2010)



Submerged Island on Ril Lake, Cobble Sized Rock with Didymo (Cook, 2010)



Submerged Island Ril Lake, Size Comparison with Small Minnow (Cook, 2010)



Kim Martin & Cheryl Wittick, Didymo from Ril Lake on Clam (More, 2009)



Didymo at Ril Lake Boat Launch (Cook, 2009)