

Invasive Species stations

Print slides off either as 1, 4 or 6 slides per sheet depending on what size you would like. I personally did 1 slide then put them in page protectors, placed them around the room on the lab benches and students visited each station recording the information. I knew they were finished because they had to return to their seats to answer the questions at the end. Pictures should be printed in colour if possible. Student answer sheet is a word document. The information on invasive species is not my own. It is from: <u>http://www.invadingspecies.com/invaders/</u>

European Green Crab



(Sean Macneill/Fisheries and Oceans Canada/Handout/Canadian Press)

The European green crab preys on mussels, clams and other crabs, threatening shellfish stocks on the Atlantic coast. It's a naturally aggressive and territorial crab species, found near Prince Edward Island, Quebec's Magdalen Islands, Nova Scotia's Cape Breton Island and the waters off southern Newfoundland, where it was first discovered in 2007, brought in by ship ballasts. According to Fisheries and Oceans Canada, unless controlled, the crab's impact will surely be felt in Newfoundland's ecosystem.

Purple Loosestrife



(Jim Lavrakas-Anchorage Daily News/Associated Press) Purple loosestrife, a European invader introduced to Canada in the 1800s as a decorative plant for ponds, degrades wetlands. It can decimate and choke out native plants that make up the habitats where fish, birds and animals feed, seek shelter and rear their young. A single plant can produce over 300,000 seeds. The plant grows in ditches, irrigation canals, marshes and even standing water. In some locations, purple loosestrife has also begun invading dry habitats like pastures and cropland.

Zebra Mussel



(U.S. Department of Agriculture/Associated Press)

Industries with operations on the Great Lakes spend millions of dollars a year dealing with zebra mussels, which multiply so quickly that they clog intake pipes and sink navigational buoys. They also filter out large amounts of phytoplankton, affecting the local food chain. They can also end up strewn over beaches, leaving behind sharp shells and foul odours when they die and decay. The mussels are native to the Black Sea and Caspian Sea regions of Asia, arrived in ship ballasts.

Sea Lamprey



(Dave Olson/The Columbian/Canadian Press)



(http://www.glfc.org/sealamp/)

The sea lamprey is a primitive, parasitic fish that has made its way from the Atlantic Ocean into our waterways by stowing away on cargo ships. These eellike creatures with suction-cup, bloodsucking mouths can kill more than 18 kg of the fish they prey on during their 12- to 20-month adult life stage. Their circular mouths puncture through the skin of fish, ensuring that prey die from blood loss or the after-effects of the wounds. Sea lampreys entered the Great Lakes through a man-made canal system and by 1938 were present in all five Great Lakes.

Emerald Ash Borer



(Jerry S. Mendoza/Associated Press)

 The transport of firewood is banned in certain parts of Quebec and Ontario to curb the spread of this beetle. The emerald ash borer originated in eastern Asia and was first found in Canada in 2002 in Windsor, Ont. Its larvae burrow through the inner bark of ash trees while the young beetles feed on leaves, damaging and eventually killing the tree. The pest is very difficult to detect early, as infested trees often aren't found until a year or more after the infestation occurs.

Asian Long-horned Beetle



(Stephan Savoia/Associated Press)

This beetle from China attacks hardwood trees such as maples. It first appeared in North America in 1996 in New York state. In Canada, it was first found in 2003 in an industrial park between Toronto and the city of Vaughan. Officials are trying to eradicate it, and affected areas are placed under strict quarantine. The pest is believed to have been brought to North America in packaging materials used in shipping. Canada's temperate climate is well suited to the insect, whose larvae spend winters burrowed deep within trees to protect themselves from harsh winter conditions, then tunnel through the living tissue of the tree stopping the flow of water and nutrients, killing it.

Gypsy Moth



(Mel Evans/Associated Press)

Larvae of the gypsy moth are known to eat the leaves of about 300 plants, causing widespread damage. The European species was first introduced in the 19th century and is considered a major pest. The moths are well established in Ontario and Quebec and have been threatening parts of southern New Brunswick and Nova Scotia for many years. Birds and small mammals are gypsy moth predators and useful as natural enemies of the bug. The gypsy moth will also eat blueberries, hazelnuts and several other important crops.

Round Goby



(M. Spencer Green/Associated Press)

This aggressive fish is known for stealing bait from fishermen. It was introduced to Ontario's St. Clair River from eastern Europe in the late 1980s by ships and has multiplied so quickly that there are now more than 100 per cubic meter of water in some areas. Round goby prefer waters with rocky and sandy bottoms. They feed aggressively and out compete native fish on insects and other small organisms found on lake and river bottoms. Adult round goby eat large quantities of zebra and quagga mussels, and occasionally small native fish and fish eggs. Their aggressive eating habits and ability to spawn several times each season have helped them multiply and spread quickly.