













Most Common Invasive Animal Species (Ottawa County, Great Lakes Region)

Common Name	Scientific Name	Overview	Threat
 Emerald Ash Borer or Gizzard Shad	<i>Agrilus planipennis</i>	The emerald ash borer belongs to a group of insects known as metallic wood-boring beetles. The life cycle of this species spans one calendar year. So far, the emerald ash borer has been found to infest ash trees only.	A threat to Michigan's native flora. Native to Asia, this species is responsible for the destruction of millions of ash trees.
 Skipjack Herring or Gizzard Shad	<i>Alosa chrysochloris</i> <i>Dorosoma cepedianum</i>	Freshwater fish, native to North America. They may reach 20 inches in length and up to 7 pounds in weight. They quickly grow too large to be prey for more desirable food and sport fish.	Not yet found in Ottawa County, but believed to be on its way. These fish reproduce rapidly - one female can produce 400,000 eggs - and they compete for food sources with sport and food fish.
 Asian Longhorned Beetle	<i>Anoplophora glabripennis</i>	The Asian Longhorned Beetle is a large wood-boring insect native to China and other Asian countries. It is not currently known to be in Michigan.	Large tunnels created by larvae can cause branches or stems to break and can eventually lead to tree death. Because this beetle is not native to North America, it has no known natural enemies, and our trees have low resistance to this pest.
 Spiny Water Flea and Fishhook Water Flea	<i>Bythotrephes longimanus</i> and <i>Cercopagis pengoi</i>	Native to Great Britain and northern Europe east to the Caspian Sea, this species was first found in Lake Huron in 1984--probably imported in the ballast water of a trans-oceanic freighter. Since then, populations have exploded and they can now be found throughout the Great Lakes and in some inland lakes.	Water fleas may compete directly with young perch and other small fish for food, such as <i>Daphnia</i> zooplankton. Spiny and Fishhook water fleas also reproduce rapidly and few fish feed on them. They also accumulate on fishing lines and discourage sport fishing during peak abundance.
 Quagga Mussels	<i>Dreissena bugensis</i>	Quagga mussels are similar in size to zebra mussels; the shells are also rounder and without ridges. They have dark concentric rings on the shell and are pale in color near the hinge. They are commonly found in waters more than 90 feet deep.	They decrease food sources for zooplankton and bottom-dwelling organisms, thereby altering the delicate balance of the aquatic food web. They also increase wildlife exposure to contaminants, clog water structures, and negatively impact recreational activities and industries.
 Zebra Mussels	<i>Dreissena polymorpha</i>	Zebra mussels are a barnacle-like mollusk (mussel) native to the Caspian Sea region of Asia. Zebra mussels attach themselves to hard objects such as submerged rocks, dock pilings, boat hulls, and native clams and mussels (killing them).	They clog water intake pipes at power plants and water treatment facilities and cost millions to control each year. They multiply rapidly and contribute to toxic algal blooms, aquatic plant growth, and food web disruptions. They have contributed to declines in Great Lakes fish, such as yellow perch.

Source: Department of Natural Resources, United States Department of Agriculture, National Agricultural Library, Michigan Sea Grant, Aquatic Invasive Species, Great Lakes Information Network

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 <p>Eurasian Ruffe</p>	<i>Gymnocephalus cernuus</i>	Eurasian ruffe are small members of the European perch family. Ruffe have spread to other rivers and bays around Lakes Superior and have established a population in Thunder Bay near Alpena, Michigan.	In some areas, ruffe have shown explosive population growth and have displaced valuable native species such as yellow perch as well as emerald shiners and other forage fish. Their sharp spines make them difficult for larger fish to eat.
 <p>Muiticolor Asian Lady Beetle</p>	<i>Harmonia axyridis</i>	This beetle is native to Asia but now can be found in many areas of the United States. The multicolored Asian lady beetle can be an effective natural control for aphids, scale and other harmful plant pests.	The beetles periodically become active during the winter and may invade bathrooms, bedrooms and kitchens. When agitated or squashed, these beetles may give off a yellow fluid and unpleasant odor that can stain walls and fabrics.
 <p>Bloody Red Shrimp</p>	<i>Hemimysis anomala</i>	Bloody-red Shrimp are small crustaceans of the order Mysidacea, native to low-salinity areas of the Black, Azov, and Caspian Seas. These Mysids have eight pairs of legs.	This species was first reported in the Great Lakes at Muskegon, MI in 2006, after arriving in the ballast of ships. Multiple reproducing populations have been established throughout the Great Lakes.
 <p>Asian Carp (Silver and Bighead)</p>	<i>Hypophthalmichthys nobilis</i> <i>Hypophthalmichthys molitrix</i>	Two species of Asian carp (silver and bighead) escaped from southern aquaculture facilities into the Mississippi River in the early 1990s and have become the most abundant species in some portions of the river.	Asian carp can grow to 100 pounds, and natural resource managers fear the large fish could become a dominant species if it invades the Great Lakes.
 <p>Gypsy Moth</p>	<i>Lymantria dispar</i>	In either 1868 or 1869, the gypsy moth was accidentally introduced near Boston, MA. In 1890 the State and Federal Government began their attempts to eradicate the gypsy moth. These attempts ultimately failed and since that time, the range of gypsy moth has continued to spread.	Despite over 100 years of presence in North America, researchers are still at a loss to explain and predict the extent of the changes in forest vegetation likely to take place through gypsy moth disturbance. A major concern is the potential loss of economically critical and ecologically dominant oak species.
 <p>White Perch</p>	<i>Morone Americana</i>	Native to New England, the white perch looks similar to the striped bass and average 5 to 7 inches in length. They grow to a weight of about 8 ounces and are plentiful in shallow fresh or sea water.	They are well established in the Great Lakes and are believed to be reducing the native walleye population by competing with walleye for food and eating walleye eggs.

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Round Goby	<i>Neogobius melanostomus</i>	Round gobies are a bottom-dwelling fish that can reach 10 inches in length. Round gobies were first discovered in the St. Clair River in 1990 and have spread rapidly in the Great Lakes and some inland lakes.	Once established, gobies can displace native fish, eat their eggs and young, take over optimal habitat, spawn multiple times per season and survive in poor quality water.
Rusty Crayfish	<i>Orconectes rusticus</i>	Rusty crayfish are native to streams in the Ohio, Kentucky and Tennessee region, spread by anglers who use them as bait.	Rusty crayfish are prolific and can severely reduce lake and stream vegetation, depriving native fish and their prey of cover and food. They also reduce native crayfish populations.
Rainbow Smelt	<i>Osmerus mordax</i>	The smelt species is native to North America and prefer dark, cool waters. Adult smelt reach a body size of 7 to 9 inches and weigh 3 ounces.	Can decrease sport fish populations by eating young sport fish, and by competing with adult sport fish for food. Can also accumulate high volume of mercury.
Sea Lamprey	<i>Petromyzon marinus</i>	Sea lamprey are predatory eel-like fish that are native to the coastal regions of both sides of the Atlantic Ocean. They entered the Great Lakes through the Welland Canal in the 1920s.	Sea lamprey prey upon native fish and have had a devastating impact on lake trout.
Alewife	<i>Pomolobus pseudoharengus</i>	Member of the herring family, native to Atlantic Coast. Alewives live 6-7 years and reproduce rapidly, laying 10,000 to 12,000 eggs per year.	Competes with native species for limited food resources. During high alewife abundance mass die-offs litter beaches with decaying fish, causing aesthetic and sanitation problems for recreational and water withdrawal uses.
New Zealand Mud Snail	<i>Potamopyrgus antipodarum</i>	This minute species of freshwater snail with a spiral shell is native to New Zealand. It can inhabit lakes, ponds, streams, rivers, lagoons, estuaries, canals, ditches, water tanks, and reservoirs, and can survive in silt, sand, mud, vegetation, cobble, and gravel in a wide range of temperatures	Not yet officially recorded in Ottawa County, but believed to be here. They are believed to be entering North America in the ballast water discharged from ships. They spread quickly and can displace and compete with trout and other native species.

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