

# Don't Let it Loose!

## Invasive Species

### What is an Invasive Species?

An **invasive species** is a type of plant or animal living in an ecosystem which it was unnaturally introduced to. Invasives take away food, energy, and space from native species; the plants and animals normally found in an ecosystem.

People transport invasive species accidentally or on purpose, for example gardening with a species from another country.

Invasive species can be harmful to people and local **biodiversity** which means the variety of plants and animals in an ecosystem.

### Fun Fact:

Many species of non-native plants and animals are not labeled invasive. Your dog, veggies in your garden, and common species like dandelions are called *alien species*. They are outside their normal range but don't pose a risk to other species.

## 1. Invasive Species Crime Scene

Visit [www.invadingspecies.com](http://www.invadingspecies.com) to research common invasive species in eastern Georgian Bay and to identify the suspects for each crime in the crime scene report below.

Who am I?	Clues:	My Crime:
1.	<ul style="list-style-type: none"> <li>Grass, up to 5 meters tall</li> <li>Large, dense seed head, beige stem</li> <li>Grows in thick stands</li> <li>From Eurasia</li> </ul>	<ul style="list-style-type: none"> <li>Crowds out native vegetation</li> <li>Reduces biodiversity</li> <li>Doesn't provide food/habitat for wildlife</li> </ul>
2.	<ul style="list-style-type: none"> <li>A mussel that attaches to docks, boats, and beaches</li> <li>2-4 cm long and triangular shaped</li> <li>Black/brown with zigzagged pattern</li> <li>From the Black Sea region</li> </ul>	<ul style="list-style-type: none"> <li>Clogs pipes that take in water for power and water treatment plants</li> <li>Filters plankton from water</li> <li>Causes toxic algae to grow</li> <li>Cut swimmers feet on sharp shell</li> </ul>
3.	<ul style="list-style-type: none"> <li>Type of zooplankton</li> <li>Single dark eye, four pairs of legs</li> <li>From Eurasia</li> </ul>	<ul style="list-style-type: none"> <li>Reduce food supplies for small fish and young of larger fish</li> <li>Harm fishing, tail spines clog nets</li> </ul>
4.	<ul style="list-style-type: none"> <li>Small, bottom-dwelling fish</li> <li>Large frog-like eyes on top of head</li> <li>Black spot on dorsal fin</li> <li>Brown/olive body with dark spots</li> <li>From Asia</li> </ul>	<ul style="list-style-type: none"> <li>Eats the eggs and young of native fish, and competes for food sources</li> <li>Linked to botulism and spreads the infection to birds and fish</li> </ul>

## 2. Build a Bee-autiful Home

There are over 100 species of *solitary* bees in Ontario - they don't live in a hive. Solitary bees rarely sting because they don't protect a queen. Their number one priority is finding food... and pollinating!

Help promote biodiversity by giving solitary bee's eggs a safe place to develop, a bee box! You'll need pipe cleaner or string and 6" pieces of hollow stemmed reeds. (Phragmites is perfect! See Invasive Species activity)

1. Wrap the pipe cleaner around the reeds and tie securely.
2. Hang the bee box in a visible place. It's that easy!
3. Monitor to see if a pollinator has laid eggs there. You'll be able to see by plugged appearance at the end of the reeds. It can take months for the *larvae* to come out!
4. Try different materials and locations to see if the bees like some more!



## 3. Help a Pollinator in Need: Monarch Butterflies

We celebrate the return of the Monarch butterfly each summer. Monarchs have not been doing well. The Monarch is a species *at risk* in Ontario and overall in Canada. Some people estimate Monarch populations have declined by 80% since the 1990s. **You can help!**

**Opt for Native Plants:** Native plants are the safest bet when it comes to creating or improving habitat and gardens for pollinators. They support other wildlife such as birds.

**Choose No 'Cides:** Pesticides and insecticides do not only kill "bad bugs". Pesticides are designed to kill all insects. Even "organic-approved" insecticides can harm pollinators and wildlife.

**Let it Grow:** As a family, discuss where you are currently mowing grass that might not be necessary. Let it grow and be amazed at the variety and beauty you'll see!

**Mission Monarch:** Mission Monarch is a research project dedicated to Monarch conservation through citizen science. Help scientists understand Monarch breeding habits: [www.mission-monarch.org](http://www.mission-monarch.org)

**Limit Your Consumption of Avocados and Avocado Oil:** Avocado sales have exploded in Canada... they're delicious! But avocado demand is increasing illegal logging in Monarch overwintering habitat in Mexico. It will take many people to influence this issue, so spread the word!

**Learn more:** Check out *Memengwanh, The Monarch Butterfly: A Guide for Eastern Georgian Bay*. This guide helps people understand Monarchs, problems they face, and ways to help: [www.gbbr.ca/conservation-guides](http://www.gbbr.ca/conservation-guides)

