

# Journey of the Stickleback Species Pair: Game Image Key

# **Native Species**



#### Cattails

Cattails are found in shallow wetlands and lakes. They are distinguished by long stalks, up to 3 metres tall, and cylindrical, brown flowers at the top. They provide both food and shelter for many native species



# Yellow pond lily

Yellow pond lilies have long stems, floating leaves, and yellow flowers. They provide food and shelter to fish and aquatic insects.



#### Coastal cutthroat trout

These fish have dark green to greenish-blue backs and spotted sides. They prey upon sticklebacks.



### Western painted turtle

These turtles love to bask on logs in the sun. They eat plants as well as frogs and fish, including stickleback eggs.



## Great blue heron

This tall bird stands motionless along the shoreline until a fish, amphibian, or other small animal passes by. Then it uses its strong bill to spear the prey and swallow it whole.



## Rough-skinned newt

Rough-skinned newts are considered indicator species as they are sensitive to pollution and habitat changes. If you see newts, it likely means the habitat is healthy.



# **Dragonfly**

Dragonflies are fierce predators and can fly faster than many other insects. Their young develop in the water, where they are an important food source for many species.

# **Invasive Species**



### **Bullhead**

Brown bullheads (native to eastern North America) caused the stickleback species pairs in Hadley Lake to go extinct after they were introduced into the lake.



## American bullfrog

Bullfrogs are the largest species of frogs in BC. They will eat almost anything they can fit in their mouths, including other bullfrogs.



## Crayfish

American signal crayfish were introduced to Enos Lake and contributed to the extinction of the Enos Lake stickleback species pair. They fed on aquatic vegetation which the sticklebacks depended on.



#### Goldfish

Goldfish have been introduced into ponds and lakes by people releasing their pet goldfish. They reduce the water clarity, which is important for stickleback species pairs during mating.



# Red-eared slider

Although they look similar to Western painted turtles, they have a distinct red patch behind their ears. They outcompete native turtles and feed on aquatic plants, insects, snails, tadpoles, and fish.



# **English ivy**

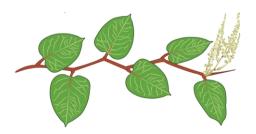
English ivy grows as a thick mat on the forest floor where it smothers native plants. It also grows as thick woody vines growing upwards on trees, strangling them and causing them to fall over or die.

# **Invasive Species**



**Eurasian watermilfoil** 

Eurasian watermilfoil can form thick mats and tangled stems, outcompeting native vegetation and reducing water quality.



Japanese knotweed

Knotweeds can grow quickly and outcompete native vegetation necessary for sticklebacks.

They can also alter water quality and nutrients available for aquatic insects.



# **Purple loosestrife**

Dense stands of purple loosestrife could reduce nesting habitats for stickleback. They can produce up to 2.5 million seeds per plant.



# Yellow flag iris

Yellow flag iris outcompetes native plants that are important for native animals. They can spread to new areas when fragments of their roots break off and drift.

## **Best Practices**



#### **PlantWise**

Being PlantWise means planting native and non-invasive plants in your garden instead of invasive ones!



## **Clean Drain Dry**

Anytime you go out in the water, make sure to clean off all plants, animals, and mud from your boat and gear. Drain all water from your boat and gear onto land. Finally, dry all parts of your boat and gear completely to prevent the spread of aquatic invasive species.



#### Don't Let It Loose

Don't release pets, like goldfish and redeared slider turtles, or dump aquariums into the wild. Never use live bait while fishing.



## I Observe, I Report

If you observe an invasive species, report it through the Report Invasives App or through iNaturalist.



# Play Clean Go

When you do any outdoor recreation, remove any plants, insects, and mud from your boots, gear, and pets. Check your tires on bikes and ATVs. Clean your gear before entering and leaving a recreation site.