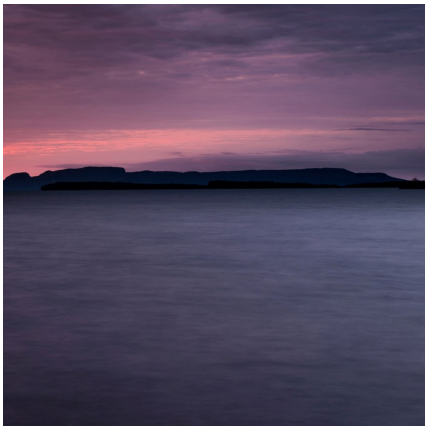
LAKEHEAD REGION
CONSERVATION AUTHORITY

AQUATIC ECOSOSYSTEMS THROUGHOUT THE SEASONS

MISSION ISLAND MARSH CONSERVATION AREA



Living in the water is very different than living on land. Animals and plants that live in the water are called **aquatic species**, while animals and plants that live on land are called **terrestrial species**. The rivers, streams, lakes, ponds and creeks are all aquatic ecosystems of the **Lakehead Watershed feed into Lake Superior**.

The aquatic ecosystems experience many **changes throughout the year**.

In the **SPRING** the lake begins to come alive!

The frogs are singing to signal their need for a mate. Jelly-like masses of eggs will be laid along pond edges and will soon hatch into tadpoles.

Dragonflies, damselflies, whirligig beetles and water striders are quick to scoot around the pond, looking for food, and avoid becoming food.

Spring is not just a time of awakening, but a time of new life when many young of all kinds are born.

In the spring both Longnose Sucker and Rainbow Smelt spawn in the river. Other fish, such as Northern Pike and Carp spawn in the warmer shallow waters of the Marsh.

Northern Pike spawn immediately after ice-breakup by scattering eggs along the bottom which attach to vegetation and are left without parental care.

The Yellow Perch is a popular sport fish that spawn in the spring in large schools, using the shallows of lakes or low-current tributary systems.

In the **SUMMER** the lake is a bustling community.

The frogs are now losing their tadpole tails and maturing into frogs with legs.

Young mammals and birds are being cared for by their parents. They are learning to hunt, swim, fly and hide from predators so that one day they can live on their own. This is an important season for all species to grow.

Lakes will increase in temperature and will stratify in layers, based on the temperature of the water, which affect the water's density. The warmest water during the summer is on the top, closest to the warm summer air. Fish like Lake Trout will stay in deeper cold waters which have higher oxygen levels.

The **FALL** is a busy time for animals, as they try to eat as much as they can before they hibernate for the winter, prepare to fly south or find areas to call home. We notice the fall brings change to the habits of many animals.

The frogs will find mud to burry into as the temperatures dip below zero in a type of hibernation.

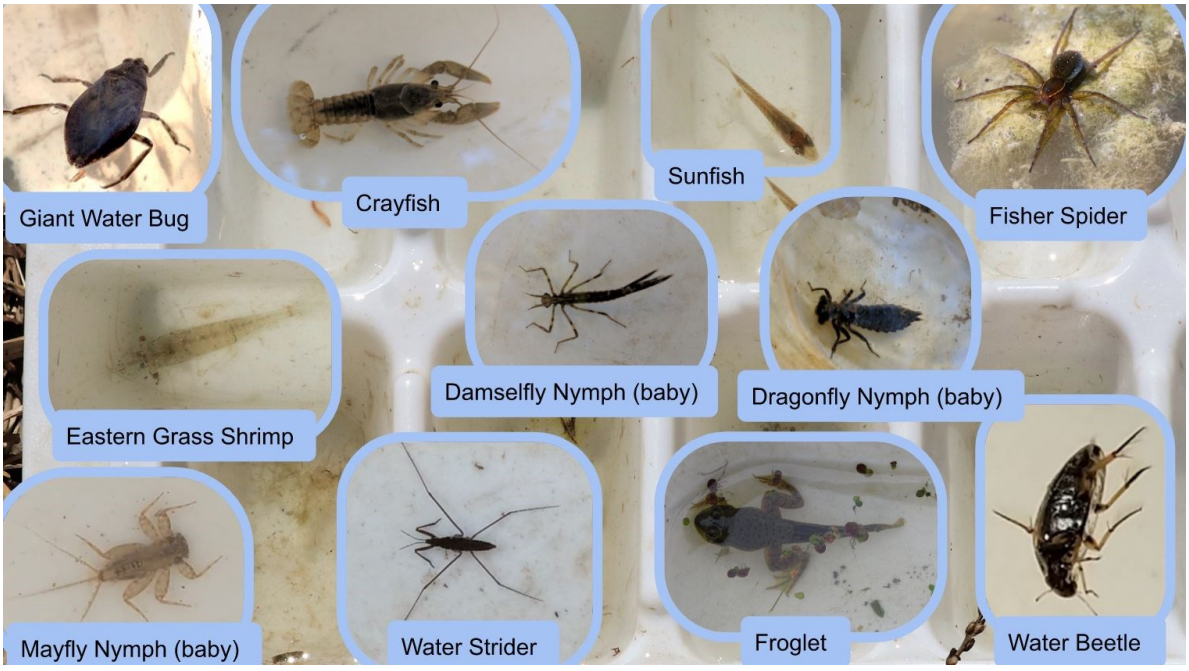
Steelhead, or migratory rainbow trout, and coho salmon spawn in the fall

In the **WINTER** the lake is frozen on the top, but the world beneath the ice can still be lively! Many fish, insects and worms retreat to the bottom of the pond where the water is warmer in the winter.

All living things go through a **life cycle**, which are the changes an animal or plant goes through to grow big and into a mature form that can reproduce. There are two different types of life cycles for wildlife.

Some animals, as they grow, change shape, colour and develop new skills like a dragonfly hatching from its water nymph stage to begin to fly, or a frog growing legs, loosing its gills and growing lungs, and losing its tail as it develops from a tadpole towards its adult frog terrestrial life. A common invertebrate that changes shape and looks different throughout their growth are the caterpillars that change into butterflies & moths. This transformation process is called **metamorphosis.**

Other animals, always look the same as they mature, they just get bigger and stronger. Some examples include; people, snakes, and black bears.



CHALLENGE: Head out to a Conservation Area or a pond near you with a dip net , a pale and an old ice -cube tray. Separate different aquatic species of invertebrates into each section of the ice cube tray and see how many you can identify.

LAKEHEAD REGION CONSERVATION AUTHORITY
130 CONSERVATION ROAD | P.O. BOX 10427 | THUNDER BAY ON P7B 6T8
P: (807) 344-5857 | F: (807) 345-9156 | INFO@LAKEHEADCA.COM
WWW.LAKEHEADCA.COM
@LAKEHEADREGION