LAKEHEAD REGION
CONSERVATION AUTHORITY

THE WONDERS OF WETLANDS

MISSION ISLAND MARSH CONSERVATION AREA

Vegetation and wildlife flourish in wetlands, where this unique ecosystem is used for nesting, spawning and protection from predators. Let's find out more about the wonders of wetlands here at Mission Island Marsh.

A wetland is a permanently or periodically flooded area of land supporting a diverse number of aquatic plant and animal species.

Did you know that wetlands are one of the most productive and diverse ecosystems in the world, second only to the rainforests, and that they represent about 14% of Canada's land surface.

Wetland ecosystems are essential for the health and survival of many plant, animal, bird and aquatic communities. The wetlands have significant implications for migratory fish and waterfowl species, as well as marsh inhabitants.

Some amazing species you may see include; cattails (sometimes called bull rushes), broad-leafed Arrowhead, leopard frogs, willows, mallards, common mergansers, minks, beavers, turtles, dragonflies and damselflies.

Wetlands have the ability to absorb excess water during heavy rainstorms and slowly release stored water during times of drought, and are therefore often referred to as nature's sponge. The water managing abilities of wetlands offer our communities amazing flood protection services by acting as large sponges, soaking up spring runoff and high precipitation levels. Conversely, during dry spells, swamps may alleviate drought conditions by slowly releasing absorbed water.

Wetlands also filter contaminants, provide erosion control, and help to improve water quality and are therefore also referred to as nature's kidneys.

There are 4 major types of wetlands: fens, bogs, marshes and swamps. Here at Mission Island Marsh we find this beautiful series of marshes along the shores of where the McKeller River meets Lake Superior.

Bogs are quite common in northern Ontario and are considered "old" wetlands, characterized by highly acidic peat soils below, are “nutrient poor” and blanketed by a layer of sphagnum moss.

Fens are also quite common in northern Ontario. The open water tends to be bordered by sedges and mosses, and further inland by trees such as tamarack or cedar. Fens generally have high water tables but are poorly drained due to the near flat slopes. They have a more moderate pH range and nutrient level. In terms of wildlife diversity, fens are not very productive wetlands.

Marshes are the most productive of all wetland types. They usually have open water and may be as much as two metres deep. Lush vegetation such as spiked rushes and cattails are common. Waterfowl and certain fish use marshes as prime nesting and spawning areas. Waters are usually fairly neutral with a pH of 7. Here at Mission Island Marsh fish species such as pike, carp and sucker are common in these waters.

Swamps can be simply defined as "wooded marshes". The vegetation in such areas may consist of dense stands of conifers or deciduous forests and/or tall shrubs. Some prevalent tree species include red maple, dogwood and cedar. Because swamps are more dense in tree and shrub cover, animals such as rabbits, hares, owls, raccoons, coyotes, black bears, deer and woodpeckers are more common.

The important functions of wetlands include:

- Provide important cover, food and habitat for many species of furbearers, game and non-game birds, warm-water fish (spawning) and mammals, as well as many rare and endangered species of plants and animals.
- Help reduce flooding, act as natural reservoirs and increase stream flows in dry summer months.
- Provide many opportunities for fishing, hunting, bird-watching, education , research and nature appreciation.
- Contribute to local economies through the harvest of timber, furbearers, baitfish and through industries catering to outdoor recreation.

Activity/ Challenge:

Make a card with the name and a picture of each plant and animal that you find at a wetland. Firstly, group producers, consumers and decomposers into groups. Then try creating a food chain with 3 or more species. Next, create an ecosystem pyramid out of the cards. Using the cards made a mobile using string and a hanger.