

The Aquatic Plants found in Greenan and Lepine by the Stewardship Rangers Summer 2018

Water Shield (*Brasenia schreberi*) Leaves: Oval and not split; 4-10 cm long; floating; underside is very slimy; stem is attached to the centre of the leaf.

Stem: Submerged, slimy, attached to the centre of the leaf.

Flowers: Dull purple-red colour; 3-parted with 3 petals and 3 similar sepals; sits slightly above the water surface on stalks; June-August.

Habitat: Quiet, shallow lakes and ponds.



Yellow Pond Lily (*Nuphar variegata*) is recognized by its heart shaped leaves with rounded lobes. Its stems are flat on one side and may be up to 2 metres in length.

Accompanying the large 10-25 cm long leaf is a showy yellow flower which ranges from 4-6 cm wide. In mid to late summer, yellow pond lily produces red berries. A favourite food of moose, this lily also provided food for native people. The seeds can be cooked as corn or popcorn, and the rhizomes (roots) as potatoes.



Northern Water Milfoil (*Myriophyllum sibiricum*) – has leaves that resemble feathers and are whorled along the stem. However, the leaf whorls are spaced apart along the stem, leaving much of the stem exposed. At the tip of a stem, the whorls of leaves become bunched and take on a “knob-like” shape. Northern water-milfoil leaves have 11 or fewer leaflets on each side of the leaf. The stem and tip of the branches may show some red colour late in the summer. This plant harbours many invertebrates, and is an important food source for waterfowl and habitat for fish.



Fragrant White Water Lily (*Nymphaea odorata*) has round leaves, with a V-shaped split, and pointed lobes. The 7-30 cm long leaves have long, thin stems that attach them to the underground roots. This lily gets its name from its fragrant white flower, which is 7-20 cm wide. The flowers will float on the water surface and open only from mid morning to early afternoon. The Ojibway ate the flower buds and used the rhizomes (roots) as medicine for several ailments. The shady environment created by this lily provides excellent habitat for largemouth bass and sunfish, and it is therefore best left alone.



Richardson's Pondweed (*Potamogeton richardsonii*) – Richardson's pondweed has leaves that clasp, or wrap around, the stem at their base. The leaves are usually less than 10 cm long and 2 cm wide, and can appear opposite when they are closely spaced. The leaves can vary from circular to long and narrowing at the tip. They have wavy margins, and are well spaced along the stems. Where the leaves join the stem, there may be a bunch of white hairs which can be fairly coarse.



Pickerel Weed (*Pontederia cordata*) produces 1 **spike** of small flowers. The plant is often 3 feet tall, with long, heart-shaped leaves. The **flowerstem** rises above the leaves except 1 leaf that grows behind the flowers. The deep blue flowers are on a **spike** about 6 inches long and bloom in succession from the bottom up, prolonging the flowering period for several days. This emergent aquatic, with its leaves and flowers above water and portions of the **stem** under water, is found typically in shallow, quiet water. The seeds can be eaten like nuts and the young leaf-stalks cooked as greens. Deer also feed on these plants.



Photo credit; D Gordon E Robinson

Floating-leaved Burreed (*Sparganium fluctuans*)

Leaves: Elongated, flat, 2-10 mm wide, 20-100 cm long, floating.

Flowers: Male flower heads sit above bur-like female heads (1-2 cm thick).

Stems: Floating, up to 1 metre long.

Habitat: Marshes, rivers, creeks, ponds.



Tape Grass, or Wild Celery (*Vallisneria americana*)

All of its leaves originate from one point on the lake bottom; however, they can grow very long (up to 1 m). The leaves are flat, 3-10 mm wide, ribbon-like, and vary in colour from light green to reddish. They are limp when removed from the water. The pattern on the leaves is very distinctive: veins are darker/meatier in the centre of the leaf and almost translucent on the edges. This plant spreads by underground roots and will usually be connected to other plants. All parts of the plant are eaten by waterfowl and muskrats, and diving ducks are especially fond of tape grass.



Broad-leaved Arrowhead (*Sagittaria latifolia*)

Flower: White; 2-4 cm wide; 3 white petals and 3 green sepals; bract <1 cm long; 2-8 whorls of 3; July-October.

Leaves: Distinctive arrow-shaped, up to 40 cm long.

Stem: Smooth

Height: 0.2-0.8 m.

Habitat: Occurs in shallow standing water.

Interest: The plant is considered by some to be emblematic of war.



Common Bladderwort (Utricularia vulgaris)

Flower: Yellow; 1-2 cm long; 2 equal lips; lower lip is spurred; occurs above the water on a stalk up to 10 cm tall; July-August.

Height: Flower stalk up to 10 cm tall.

Leaves: Up to 5 cm long, finely divided with many bladder-like "bulbs" scattered among the leaflets.

Habitat: Quiet waters in lakes and rivers.

Other: The bladders trap prey that brush against them. This is how the plant supplements its nutritional intake.



Duckweed (Lemna minor) Free-floating plant.

Leaves: This type of plant is not differentiated into a leaf and stem. Small green flattened oval or rounded "leaf". Less than 6 mm across.

Other: Has thin root hanging below the "leaf", under the water. May occur as a single plant or in colonies of plants. Ducks eat these plants.



Spiny-spored Quillwort (Isoetes echinospora) It bears 10-30 green to yellow leaves and a two-lobed corm. The velum covers one to three quarters of the sporangium, which are 10 millimeters long. Round white megaspores are about 480 micrometers in diameter and are covered with spines. Kidney-shaped microspores are about 26 micrometers long with smooth, fine spines.



©2003, Gary Fewless

Ribbon-leaved Pondweed (*Potamogeton pectinatus*) It has two types of leaf. The submersed leaves are sessile 5–25 cm long and 0.1–1 cm wide, translucent, linear in shape and ribbon like, red-brown to light green in colour with a blunt to acute tip.[3] The floating leaves are similar to the floating leaves of other *Potamogeton*, petiolate and opaque, up to 8 centimeters long and 3 wide.

The inflorescence is a small spike of flowers that arises from the water on a peduncle 1.5–5 (rarely up to 16) cm.[3]

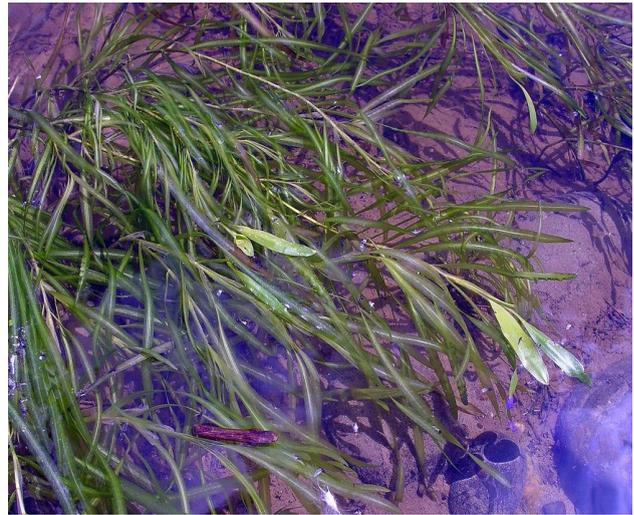


Photo Credit: Arthur Haines 2018

Pipewort (*Eriocaulon aquaticum*) Flower: White; single long-stalked, button-shaped flower head, 4-6 mm in diameter on stalk that is 3-20 cm tall; usually raised above water; minute flowers; hairy sepals and basal bracts; late-July to September. Leaves: 2-5 mm wide; 2-10 cm long; parallel veins; basal rosettes. Stem: Leafless flowering stalk, 3-20 cm tall; taller in water. Height: up to 20 cm. Habitat: Acidic lakes, on floating fen mats, muddy shoreline; may form dense turfs in shallow water.



2011 © Peter M. Dziuk

Large-leaved Pondweed (*Potamogeton amplifolius*) has large (3-7cm wide, 8-20 cm long), brown, wavy-edged, submersed leaves with large parallel veins. The large leaves “amplify” in size along the stem towards the tip. Floating leaves are also present later in the season. These leaves are elliptic, leathery, and waxy on the upper surface. Identifying these plants by floating leaves alone is tricky, but the submersed leaves are unmistakable. The plant provides habitat for fish and aquatic insects, and food for waterfowl.



Horse Tail (*Eleocharis equisetoides*)

(Endangered)

Horsetail Spike-rush is an aquatic, perennial plant in the sedge family. It reaches about 50 to 100 centimetres in height and grows in water four to 35 centimetres deep.

Horsetail Spike-rush flowers in the late spring and produces fruit from July to October. The fruits are found at the tip of the stem and are covered in light brown scales. The plant has pale green, hollow, straw-like leaves that grow in tufts from a rhizome or tuber.



Acknowledgements: to the MNR's Stewardship Rangers for their 2018 Aquatic plant inventory and identification in Greenan and Lepine Lakes

REFERENCES:

Andy's Northern Ontario Wildflowers
Kawartha lakes Stewardship Association
Lady Bird Johnson Wildflower Center
Mississippi Lakes Association
New England Wildflower Society
Ontario Government
University of Washington Go Botany
Wikipedia

