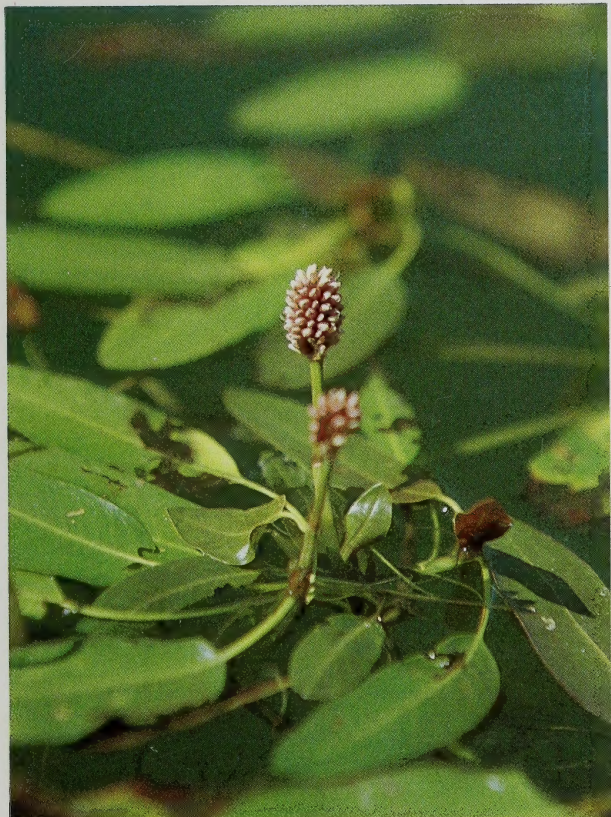


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# An Identification Guide To Alberta Aquatic Plants



**Alberta**

**ENVIRONMENTAL PROTECTION**



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**AN IDENTIFICATION GUIDE  
TO ALBERTA  
AQUATIC PLANTS**

CANADIANA

JUL 26 1994

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**Alberta**

**ENVIRONMENTAL PROTECTION  
Pesticide Management Branch**

**1994**

# Preface.

This guide is designed to provide a simplified means to identify aquatic plants. It is a field guide consisting of photographs and narrative descriptions of some of the common aquatic plants found in Alberta. The aquatic plants contained herein were chosen because of their common occurrence in Alberta. There are, of course, many more species present in the province, however, to include them all is beyond the scope of this publication.

The individual descriptions refer to easily distinguishable features that will permit identification to at least the genus level. A glossary is also provided in this guide to allay difficulties with unfamiliar terms used in the description. The photographs show the plants in a natural setting as would be viewed from a boat or from the shore. Additional photographs of individual plants indicate structures referred to in the descriptions.

The plant names used in this guide are those used by Moss 1959, and Fassett 1977. A list of references is provided for those interested in more detailed and comprehensive information on aquatic plants.

Appreciation is extended to Ms. Ann Hrabiwchuk, who began the preparation of this guide; to Dr. J.R. Allan, Dr. E.D. Allen, and Ms. P. Mitchell, for contributing photographs; and to the Aquatic Plant Management Committee of Alberta for providing suggestions and comments on the text.

# Notes

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# Glossary

- APEX:** tip of a stem, branch or root
- AXIL:** space formed by the angle between a leaf or branch and the stem
- BLADE:** the flattened or broad portion of a leaf
- BRACT:** a scale or leaf-like structure extending under a flower or flower cluster
- BUDDING:** a form of reproduction where the parent plant produces offspring vegetatively
- BULBLET:** a small bulb
- CREeping RHIZOME:** a rhizome growing on or near the soil surface
- EMERGENT:** extending above the water surface
- FILAMENTOUS:** thread-like
- FLOATING LEAVED:** leaves floating but rooted
- FREE FLOATING:** plant floating but unattached
- GREGARIOUS:** individuals living in groups
- HEAD:** a dense flower cluster on a short common axis
- HYDROSOIL:** soil covered by water

- IRREGULAR (flower):** having one or more floral organs of a series, i.e. petals, unequal in shape or size
- LANCEOLATE:** lance-shaped; wide at the base and pointed at the tip
- LATERAL:** on the side of
- LEAFLET:** a division of a compound leaf
- LINEAR:** narrow and long with parallel sides
- MACROPHYTE:** a large or fairly large plant; easily seen with the naked eye
- NODE:** a level on the stem from which leaves or roots may arise
- OBLONG:** oval but with broadly rounded ends and nearly parallel sides
- PANNICLE:** a compound raceme; a branched flower cluster, lowermost branches longer
- PEDUNCLE:** a flower stalk having a single flower or flower cluster
- PERFECT (flower):** complete flower; having both male and female organs, petals and sepals
- PETIOLE:** the stalk of a leaf
- PINNATE:** a compound leaf with leaflets arranged on both sides of a common axis
- PISTIL:** female portion of a flower

**PLANKTONIC:** suspended in the water column

**RACEME:** a group of stalked flowers arranged on a common axis

**RHIZOME:** a root producing stem, commonly underground

**ROOTLET:** a small root

**RUNNER:** a horizontal branch extending along the ground and giving rise to new roots and plants

**SAGITTATE:** shaped like an arrowhead, lobes directed downward

**SCAPE:** a flowering stalk without leaves originating at or near the ground

**SESSILE:** without a stalk

**SHEATH:** a collar-like outgrowth at a node, or the basal portion of a leaf wrapped around the stem

**SPIKE:** a group of flowers sessile or nearly so growing close together on a longitudinal axis

**STAMEN:** male portion of a flower

**STIPULE:** an outgrowth at the base of a leaf blade or petiole

**SUBMERGENT:** growing under water

**TERMINAL:** at the end of a stem, branch or root

**THALLUS:** a plant body without true roots, stems or leaves

**TUBER:** a thickened underground branch or part of a branch capable of producing new plants

**UNISEXUAL:** of one sex

**WHORL:** a group of three or more like organs such as leaves or flowers arising from a single node

**WINTER BUD:** a small hardened grouping of close leaves surviving the rest of the plant over winter and capable of producing a new plant in spring

# Introduction

An aquatic plant can be defined as a plant which, under normal circumstances, carries out its life cycle while being at least partially submerged in water. There are many forms of aquatic plants ranging from the microscopic algae to the common cattails which may reach 2.5 meters in height.

The algae are the most primitive of the aquatic plants, having no vascular system and lacking true stems, leaves or roots. For the most part, individual alga cannot be identified without detailed microscopic examination. For this reason, and because of the vast number of algal species, this guide will deal with the algae only in broad terms.

Aquatic macrophytes (individual plants easily visible to the naked eye) are treated more specifically here because many of them may be readily identified in the field and this guide is designed for that use. These plants can, in general, be classified as emergent, floating leaved, submergent or free floating depending on their growth habits and basic structure.

Each type of aquatic macrophyte will occupy a more or less distinct zone in the aquatic environment (Fig. 1). Growing close to shore in shallow water are the emergent

plants. Emergent aquatic vegetation characteristically grows with the base of the stem beneath the water surface while the remainder of the plant (stem, leaves and flowers) extend into the air. Examples of emergent vegetation are cattails and bulrushes. Occasionally, an aquatic plant classified as an emergent will be found rooted in exposed soil provided that the water table is sufficiently high.

In shallow water protected from wind and wave action, floating leaved plants such as water lily can be found. Floating leaved plants are rooted in the underwater soil (hydrosol) and have long stems or petioles connecting to broad leaves floating on or near the water surface.

Moderately shallow to fairly deep water is inhabited by submergent aquatic vegetation. These plants grow entirely beneath the water surface, and are rooted or otherwise attached to the bottom substrate. Depending on the water for structural support, submergent plants are usually flaccid when brought into the air, and lack substance when dried. Examples of submergent aquatic plants include water milfoil and pondweed.

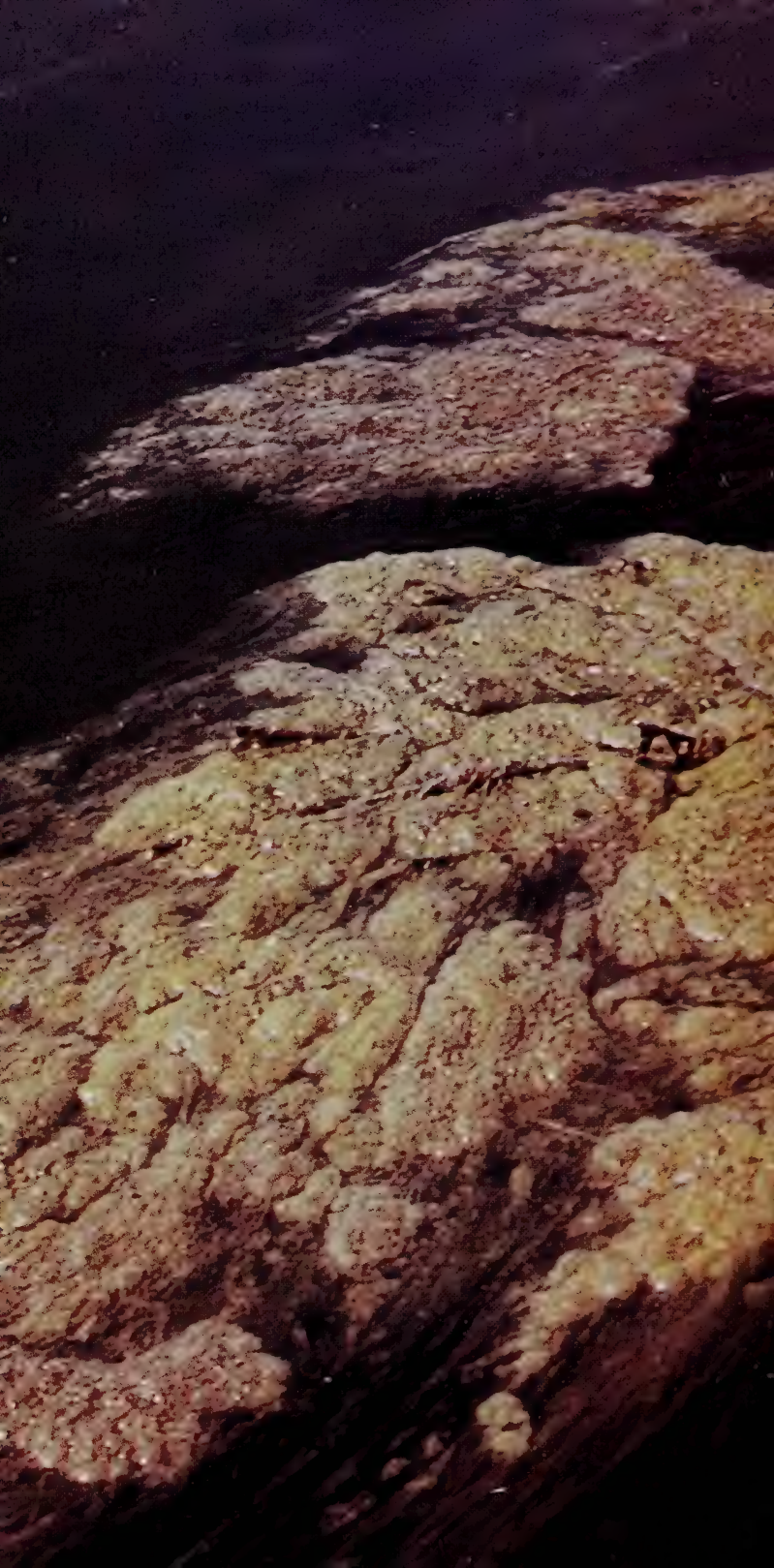
The remaining forms of aquatic vegetation belong in the free floating category. Free floating plants exist at or near the water surface and are not attached to any object. Moved about freely by wind or wave action, they occupy no distinct zone in the aquatic



environment. A good example of free floating vegetation is duckweed.

In using this guide to identify an aquatic plant, first determine to which of the above categories the particular plant belongs.

Turn to the appropriate section in the guide and match the specimen with one of the photographs. Use the descriptions in conjunction with the photographs to verify your identification.



# Filamentous Algae

## DESCRIPTION

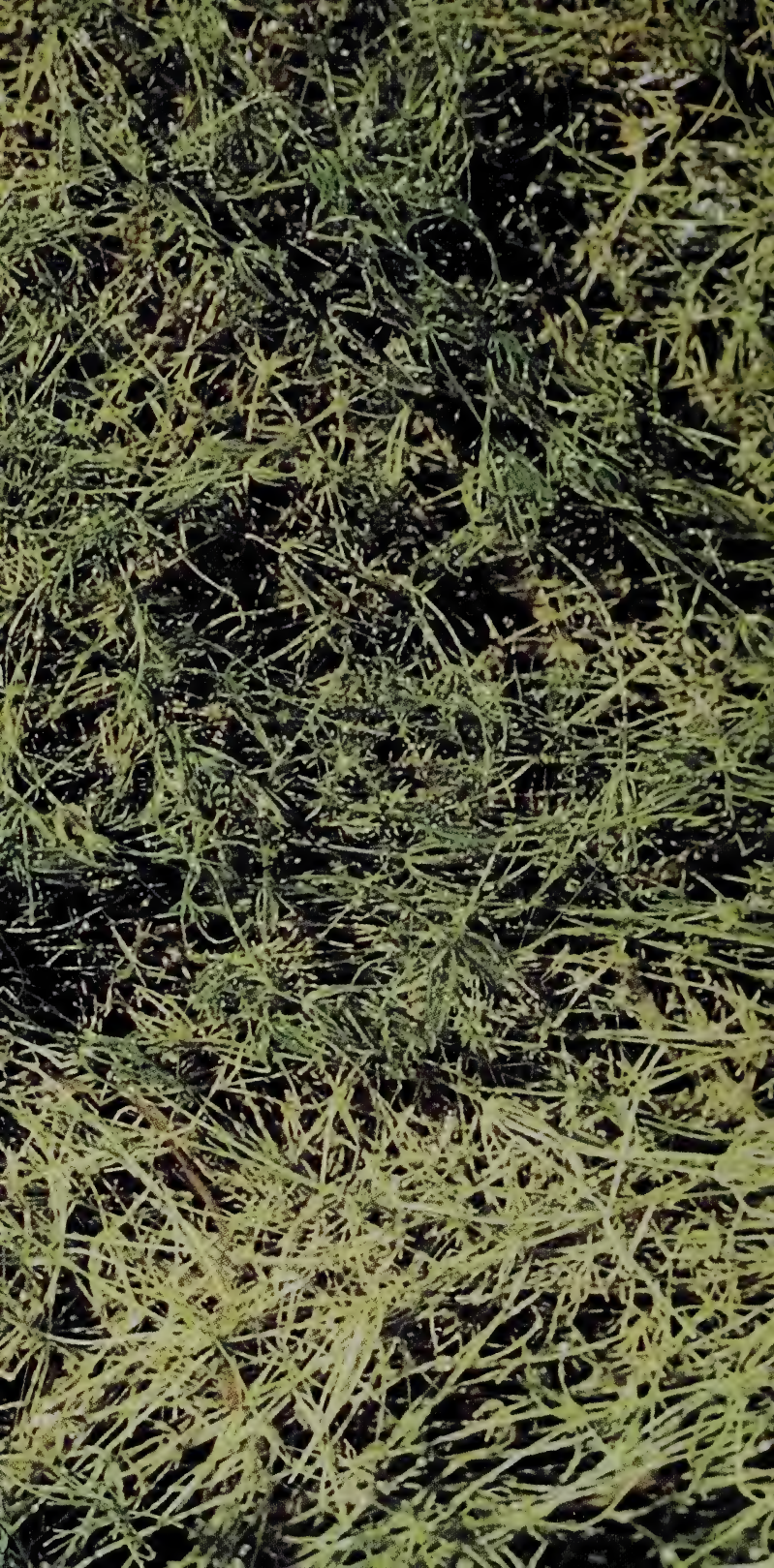
These freshwater algae are characterized by long threads or filaments of narrow cells attached to one another, end to end. These filaments are sometimes branched, forming a tuft attached to stones (they have no structure comparable to a root). In early spring they grow on the pond bottom rising to the surface during hot, sunny weather to form a bubble-filled scum. Determination of various forms of filamentous algae should be verified by microscopic examination. Common genera of filamentous algae include *Cladophora* and *Spirogyra*.



# Planktonic Algae

## DESCRIPTION

These microscopic organisms may be single or many-celled, and commonly form simple chains or clumps due to their gregarious nature. They appear green, blue-green or brown in colour and float freely within the water column. The growth of certain forms of this type of algae may become so great that the water may take on a thick pea soup appearance. "Algae blooms" collect at the surface of the water during periods of calm and are concentrated in-shore by wind. As these "algae blooms" die off and decay, the resulting oxygen depletion of the water may cause summerkill of fish populations. Some species of planktonic algae release toxins as they decay, occasionally rendering the water poisonous to livestock and wildlife. Other species may impart tastes and odors to water, making it undesirable for consumption. Types of planktonic algae which may form "algae blooms" in ponds and lakes include *Aphanizomenon*, *Microcystis*, and *Anabaena*.



# Macrophytic Algae

## DESCRIPTION

Macrophytic algae can grow sufficiently large enough that individual plants may be seen readily without the aid of a microscope. A macrophytic algae which is prevalent throughout Alberta is *Chara*.

Members of the genus *Chara* are also known as stoneworts because of a crusty lime coating which is deposited on their 'stems' and 'leaves.' They are green or grey-green in color and often emit a musky, skunk-like odor.

The stem-like axis of *Chara* bears whorls of branches and forked cylindrical 'leaves.' Reproduction may occur sexually by fruiting bodies found on the 'leaf' filaments, or vegetatively by star-shaped aggregates of cells on the lower 'stem' nodes, and outgrowths from the 'stem' nodes.

*Chara* will be found in hard water or alkaline lakes and in slow moving streams in which calcium is abundant. Thick mats of *Chara* may be encountered covering the bottom in shallow or very deep water. *Chara* provides a habitat for a wide variety of aquatic animals which act as food for fish.





# FREE FLOATING AQUATIC PLANTS

# Lesser Duckweed



# Lemna minor L.

## OTHER NAMES

Common Duckweed

## DESCRIPTION

**Flowers:** rarely present; unisexual; male flower of single stamen, female flower of single pistil; borne on the side or upper surface of the thallus

**Plant Body:** no true leaves or stems present, plant body is in the form of a flat thallus; 2 – 5 mm in length

**Roots:** single rootlet borne on the underside of the thallus

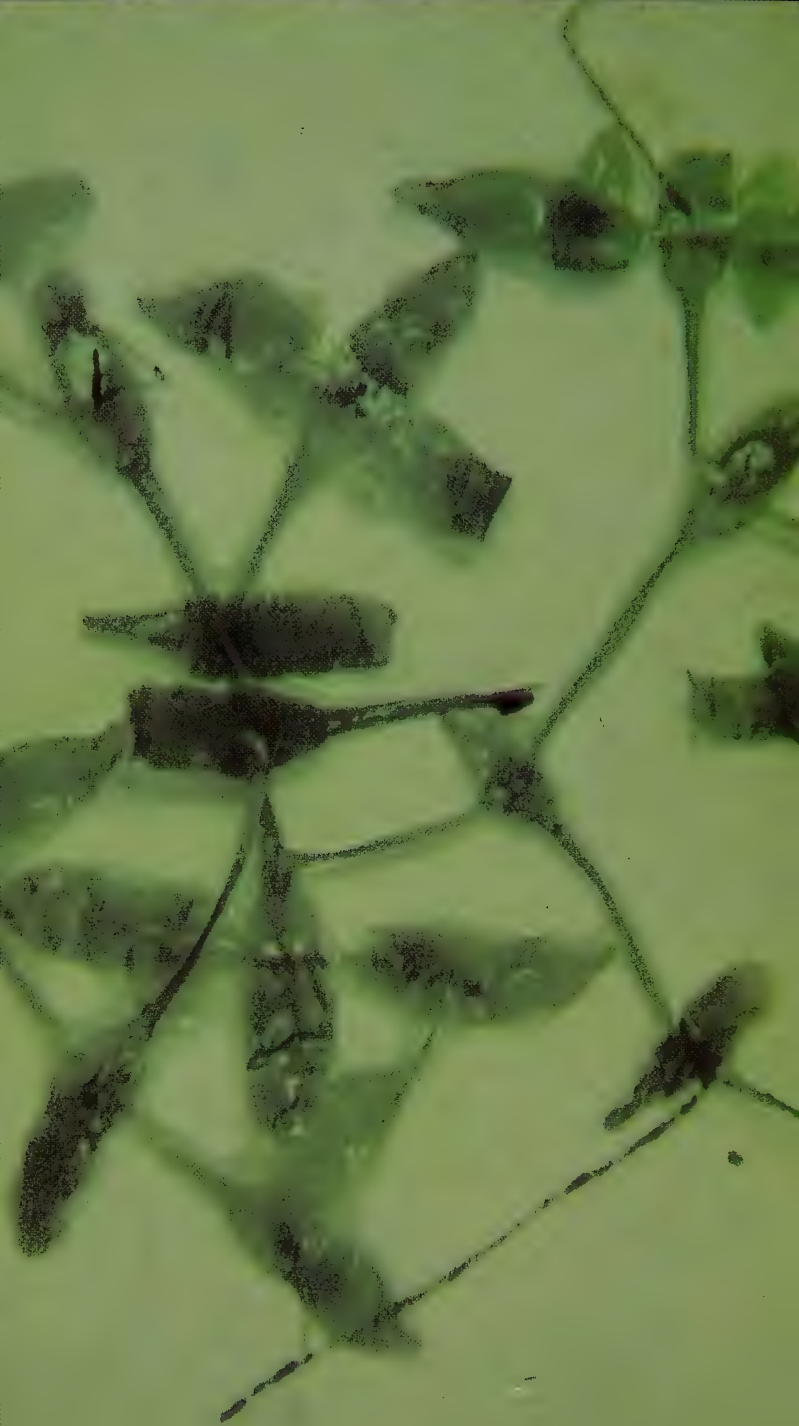
## NOTES

**Reproduction:** rarely by seeds; predominantly by budding; overwinter as bulblets formed by the thalli which sink to the bottom in fall and surface in spring

**Habitat:** floating on the surface of shallow ponds, marshes and pools; common throughout Alberta

**Ecology:** eaten by waterfowl; provides shade and cover for fish and aquatic invertebrates; in overabundance may alter existing habitat by shading out other forms of vegetation

# Star Duckweed



# Lemna trisulca L.

## OTHER NAMES

Ivy Leaved Duckweed

## DESCRIPTION

**Flowers:** rarely present; unisexual; male flower of single stamen; female flower of single pistil

**Plant Body:** a flat thallus; individual thalli often joined together forming T-shaped cross arrangements; thalli 6 – 10 mm long

**Roots:** single rootlet borne on the underside of the thallus

## NOTES

**Reproduction:** primarily by budding; seeds are rare; overwinter as bulblets formed by thalli which sink to the bottom in fall

**Habitat:** floating at or just below the water surface; common throughout Alberta in shallow ponds, marshes and pools

**Ecology:** eaten by waterfowl; provides cover for fish and aquatic invertebrates, often found in association with Lesser duckweed

# Common Bladderwort



# Utricularia vulgaris L.

## DESCRIPTION

**Flowers:** yellow; irregular; extending above the water surface on long stalks

**Leaves:** having numerous bladders 3 – 5 mm long; finely cut into numerous threadlike divisions

**Stems:** having dense foliage, 5 – 7 mm thick

**Roots:** lacking

## NOTES

**Reproduction:** seeds; winter buds formed at shoot apices

**Habitat:** lakes, sloughs and ditches throughout Alberta; floating near the surface in quiet water

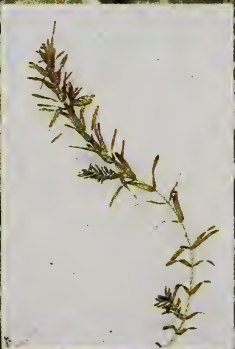
**Ecology:** eaten by waterfowl; provides good cover for fish; the bladders of this plant open to trap small aquatic animals which are used for nutrition





# **SUBMERGENT AQUATIC PLANTS**

# Canada Waterweed



# Elodea canadensis Michx.

## OTHER NAMES

Water Thyme, Ditch Moss

## DESCRIPTION

**Flowers:** unisexual, male and female on separate plants, the female plant is seen more commonly; the female flower reaches the surface on a long slender stalk; the male flower is borne on a shorter stalk which separates from the plant allowing the flower to rise to the surface and meet the female

**Leaves:** dark green, translucent; small and narrow, 1 – 3 mm wide, 10 – 15 mm long; commonly arranged in whorls of three

**Stems:** branching; ranging in length from 1 – 3 mm

**Roots:** may arise from the stem nodes; the plant is usually rooted in the hydrosol but may survive if floating

## NOTES

**Reproduction:** primarily by winter buds, rarely by seeds

**Habitat:** may produce dense stands in shallow areas of lakes, sloughs and slow moving streams

**Ecology:** provides shelter for a wide variety of aquatic organisms; eaten by waterfowl and muskrat; an efficient oxygenator of water

# Mare's Tail



# Hippurus vulgaris L.

## DESCRIPTION

**Flowers:** green; sessile; borne in the leaf axils on emergent portion of the plant

**Leaves:** sessile; 1 – 3 cm long; linear and pointed, in whorls of 6 to 12 leaves; submerged leaves flaccid, emerged leaves firm

**Stems:** unbranched; extending from a creeping rhizome; emerging above the surface

## NOTES

**Reproduction:** seeds, proliferation of the rhizome

**Habitat:** largely submergent in sheltered waters throughout Alberta; may also be found growing in muddy, exposed soils

**Ecology:** seeds and leaves eaten by waterfowl; underwater foliage is inhabited by aquatic invertebrates

# White Waterbuttercup



# Ranunculus circinatus Sibth

## OTHER NAMES

Water Crowfoot

## DESCRIPTION

**Flowers:** produced on or above the water surface; white in color; petals 5 – 9 mm long

**Leaves:** sessile; finely cut into many threadlike divisions; fairly stiff, retaining shape when taken from the water

**Stems:** branched

## NOTES

**Reproduction:** seeds

**Habitat:** commonly found in sloughs, lakes and streams in Alberta; does not readily tolerate poor water quality

**Ecology:** may grow in over abundance, forming thick mats on the water surface

# Coontail





# Ceratophyllum demersum L.

## OTHER NAMES

Hornwort

## DESCRIPTION

**Flowers:** minute; sessile in the leaf axils

**Leaves:** in whorls of 5 – 12 leaves; whorls variably spaced on the stem, crowding towards the tip, giving a “coontail” appearance; each leaf forked into 2 or 4 toothed divisions; often stiff and coarse in texture because of lime deposits

**Stems:** branching; 30 cm – 1.5 m in length

**Roots:** usually lacking

## NOTES

**Reproduction:** rarely by seeds; winter buds forming on shoot apices

**Habitat:** embedded in the hydrosol early in the season, later existing unattached

**Ecology:** eaten by muskrat and waterfowl; shelters young fish and supports aquatic insect life; moderately efficient as an aerator

# Northern Watermilfoil



# Myriophyllum exalbescens Fern.

## DESCRIPTION

**Flowers:** in whorls which are variably spaced on a terminal emergent spike; floral bracts rarely as long as the fruits

**Leaves:** feather-like; whorled, usually four to a whorl; 1 – 3 cm long; pinnate, 12 – 20 leaflets per leaf

**Stems:** branching; purplish or reddish in color, commonly about 1 m long

**Roots:** spirally twisted

## NOTES

**Reproduction:** seeds, plant fragments; winter buds

**Habitat:** sloughs, lakes, and streams throughout Alberta; at a variety of depths

**Ecology:** important as food for muskrat and moose as well as waterfowl; harbors fish food organisms

# Richardson Pondweed



# Potamogeton richardsonii (Benn.) Rydb.

## OTHER NAMES

Clasping Leaf Pondweed

## DESCRIPTION

**Flowers:** produced in thick spikes which may emerge

**Leaves:** all submerged, 3 – 12 cm long, lessening in length towards tip of stem; oval to linear; clasping stem at points of attachment; sessile; margins wavy

**Stems:** branched; extending from unspotted rhizomes

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** very common in Alberta; inhabiting lakes, ponds and slow moving streams

**Ecology:** provides good habitat for aquatic organisms; all or part of the plant is eaten by ducks, shorebirds, muskrat, beaver and moose

# Flat-Stemmed Pondweed



# Potamogeton zosteriformis Fern.

## DESCRIPTION

**Flowers:** forming a terminal spike; emerging

**Leaves:** linear, 10 – 20 cm long; with prominent midvein; nonsheathing base; stipules well developed, fibrous, 1 – 3 cm long

**Stems:** flattened; several times as wide as thick; branching

## NOTES

**Reproduction:** predominantly by tubers and winter buds; seeds

**Habitat:** common to lakes, sloughs and slow moving streams of Alberta

**Ecology:** tubers and seeds are important as duck food

# Small-Leaf Pondweed





# Potamogeton pusillus L.

## DESCRIPTION

**Flowers:** forming an emergent spike

**Leaves:** linear, 1 – 8 cm long, .3 – 1.5 mm wide; with three veins, midvein prominent

**Stems:** threadlike; branched

## NOTES

**Reproduction:** seeds; winter buds

**Habitat:** growing in clumps; usually in deeper water (depths of 2 – 3 meters); common in Alberta

**Ecology:** provides a good source of food for waterfowl; cover for fish

# Large-Sheath Pondweed



# Potamogeton vaginatus Turcz.

## OTHER NAMES

Giant Pondweed

## DESCRIPTION

**Flowers:** forming a 3 – 8 cm long spike

**Leaves:** long (10 – 40 cm) and slender; coarse in texture; lower leaves have a broadened stipular sheath (2 – 5 cm long) which is much wider than the stem

**Stems:** branching; extending from a rhizome; relatively thick compared to the leaves

## NOTES

**Reproduction:** seeds, proliferation of the rhizome

**Habitat:** lakes, larger sloughs and slow moving streams; common in Alberta

**Ecology:** may form dense stands under suitable conditions; can become problematical because of its large size

# Sago Pondweed



# Potamogeton pectinatus L.

## OTHER NAMES

Bushy Pondweed

## DESCRIPTION

**Flowers:** forming a long slender terminal spike; distance between flower whorls varies; floating at or near the surface

**Leaves:** submerged, narrowly linear; triangular in cross section; 3 – 10 cm long

**Stems:** slender, with many branches; extending from a slender rhizome

## NOTES

**Reproduction:** predominantly by tubers; seeds

**Habitat:** may inhabit a wide range of aquatic environments from shallow, swift water to fairly deep, still water; common throughout Alberta

**Ecology:** may grow in overabundance, producing large quantities of organic matter in the aquatic ecosystem; important as an oxygenator; eaten by birds and aquatic orientated mammals; tubers may be heavily fed upon by ducks

# Narrow-Leaved Water-Plantain



# Alisma gramineum Gmel.

## DESCRIPTION

**Flowers:** small; in clusters, at end of short spikes, attached in whorls to a long stalk from the base of the plant; flowers whitish or brownish

**Leaves:** long, grass-like; arising from the base of plant; in younger plants, leaves narrow and floating; in mature plants, leaves broader, with widened tips, floating or erect

**Stems:** bulb-like, with fibrous roots

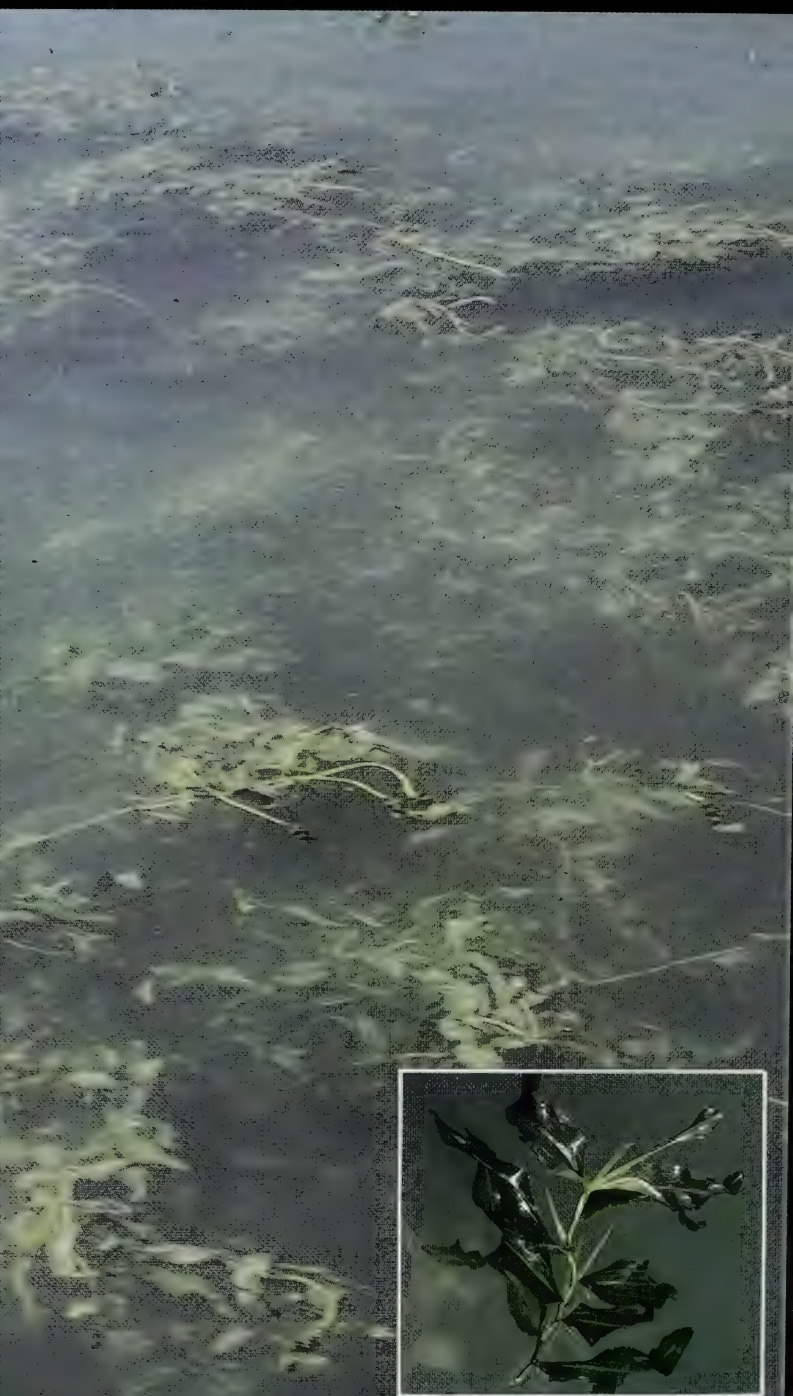
## NOTES

**Reproduction:** by seed or vegetatively from the perennial stem

**Habitat:** shallow water of ponds, sloughs, lakes, streams, ditches and canals; grows entirely submerged or emerged; common in southern Alberta

**Ecology:** seed used by waterfowl; prominent plant in irrigation canals

# Whitestem Pondweed





# Potamogeton praelongus Wulf.

## DESCRIPTION

**Flowers:** small, greenish; at end of a thick, emergent spike

**Leaves:** all submerged; large (10-13 cm long, 1-3 cm wide); becoming smaller and crowded at end of stem; apex boatshaped; bases clasp half way around stems; persistent, long whitish stipules extend along stem from leaf base

**Stems:** long, branching and usually zig-zag near top; growing to surface, often forming thick surface mats; rhizomes with rusty spots

## NOTES

**Reproduction:** from rhizomes or by seed

**Habitat:** moderately deep water of lakes; rarely inhabiting shallow or moving water

**Ecology:** provides cover and foraging areas for fish; used as food by waterfowl



# FLOATING LEAVED AQUATIC PLANTS

# Yellow Water Lily



# Nuphar variegatum Engelm.

## OTHER NAMES

Spatterdock, Cowlily

## DESCRIPTION

**Flowers:** yellow; emerging; on long stalks; tulip-like; 4 – 7 cm wide

**Leaves:** broadly oval; 10 – 30 cm long; bi-lobed; long petioles (up to 4 m); floating; young submersed leaves often red tinged

**Stems:** thick rhizomes

## NOTES

**Reproduction:** seeds; tubers; proliferation of the rhizome

**Habitat:** in sheltered waters of ponds, lakes and slow moving streams throughout Alberta

**Ecology:** leaves eaten by deer, moose and insects; rhizome is a chief source of food for muskrat; seeds eaten by birds; floating leaves provide shade and protective cover for fish and aquatic invertebrates

# Water Smartweed



# Polygonum natans (Eaton)

## DESCRIPTION

**Flowers:** pink to red in color; emergent; in form of a raceme 1 – 3 cm long

**Leaves:** floating; oblong; up to 10 cm long; petiolate

**Stems:** a rhizome trailing in the water or lying on the bottom

**Roots:** arise from the stem nodes

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** lakes, sloughs and marshy areas; may be seen as an erect terrestrial plant which differs in having a larger raceme, hairy stem and hairy lanceolate leaves

**Ecology:** used as a food source by waterfowl, shorebirds and muskrat

# Floating-Leaf Pondweed





# Potamogeton natans L.

## OTHER NAMES

Broad-leaved Pondweed

## DESCRIPTION

**Flowers:** small, green, numerous; on a thick, terminal, emergent spike

**Leaves:** numerous, broad, leathery floating leaves on petioles; occasionally long, narrow, submerged leaves up to 46 cm in length

**Stems:** rarely branched; extending from a rhizome

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** shallow or deep water of lakes, marshes

**Ecology:** seeds provide food for ducks; provide cover for fish food organisms



# EMERGENT AQUATIC PLANTS

# Reed Grass



# Phragmites communis Trin.

## DESCRIPTION

**Flowers:** forming a large, feathery panicle; tawny or purple in color

**Leaves:** large and flat; 1 – 3 cm wide, with overlapping sheaths; tip of leaf boat-shaped

**Stems:** extending from thick rhizomes; 1.5 – 3 m in height

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** quiet waters of lakes and sloughs; marshy areas and ditches

**Ecology:** important in providing cover for birds and small mammals; rhizomes fed upon by muskrat; helps in preventing erosion by holding the soil

# Common Cattail



# Typha latifolia L.

## DESCRIPTION

**Flowers:** forming a dense terminal spike; unisexual; male portion of the spike produced above the thick, cigar-shaped female portion

**Leaves:** linear; upright, sheathing the stem; up to 1 meter long and 20 mm wide

**Stems:** growing erect; up to 2.5 m high; cylindrical; extending from a rhizome

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** any wet place on marshy area; may grow on exposed soil if water table is sufficiently high (within .5 m of the soil surface); prevalent in Alberta

**Ecology:** provides excellent habitat for birds and small mammals; pheasants use cattails for cover; rhizomes are eaten by muskrat and beaver; aerial portions may be fed upon by terrestrial mammals

# Bulrush





## DESCRIPTION

Identification of Bulrush species requires detailed examination of flowers and fruits.

**Flowers:** forming spikelets, arranged laterally or terminally on the stem; minute; in the axils of scales; flower clusters subtended by one or more bracts

**Leaves:** blades often lacking; when present, linear and sheathing the stem

**Stems:** often naked; triangular or circular in cross section, may reach 2.5 m in length in some species; extending from a rhizome

## NOTES

**Reproduction:** seeds; runners; rhizomes

**Habitat:** shallow shoreline waters, wet meadows; distributed throughout Alberta

**Ecology:** bulrushes are used for food by muskrat, as nesting sites by birds and are important as soil binders

# Rush



# Juncus spp.

## DESCRIPTION

**Flowers:** produced terminally on the stem; may appear to be lateral due to a long, cylindrical floral bract extending continuous with the stem

**Leaves:** may be cylindrical or flattened in cross section, or may be reduced to bladeless sheaths

**Stems:** in clumps or arising from a creeping rhizome; circular in cross section; 20 cm – 80 cm in height

## NOTES

**Reproduction:** seeds; rhizomes

**Habitat:** shallow water along shorelines or in wet meadows

**Ecology:** thickened plant bases are eaten by muskrat; seeds are eaten by upland birds

# Arrowhead



# Sagittaria cuneata Sheld.

## DESCRIPTION

**Flowers:** in whorls of three flowers on a scape; unisexual; female flowers generally found lower on the scape; white in color

**Leaves:** aerial leaves sagittate; submerged leaves may be narrowly linear; petioles originate from the base of the plant; 20 – 40 cm in height

**Stems:** rhizomes

## NOTES

**Reproduction:** seeds; tubers; runners; proliferation of the rhizome

**Habitat:** found throughout Alberta in marshes and shallow areas or shores of lakes

**Ecology:** tubers are often sought after by ducks

# Giant Bur-Reed



# Sparganium eurycarpum Engelm.

## DESCRIPTION

**Flowers:** unisexual; forming dense spherical heads; male flowers produced uppermost on the stem

**Leaves:** long, slender and sessile; longitudinal and cross veins are present on the leaves and form a meshwork pattern

**Stems:** sturdy, 50 – 150 cm high; extending from a rhizome

## NOTES

**Reproduction:** seeds; proliferation of the rhizome

**Habitat:** in shallow water and marshy areas throughout Alberta

**Ecology:** may be fed upon by waterfowl and muskrat







N.L.C./B.N.C.



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