



# **Identification Guide for the Wetland and Aquatic Plants of Piseco Lake**

**David L. Moore**

## Acknowledgements

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## Introduction

This volume is directed to the non-scientific or lay person who may have a minimal background in plants or botany in general, but who nevertheless is interested in identifying the aquatic plants associated with the shores and shallows of Piseco Lake. It provides pictorial identification with brief descriptions which will assist the user to identify many of the wetland and aquatic plants encountered throughout the growing season at Piseco Lake.

Aerial maps [Google Earth] for specific portions of Piseco Lake are followed by a listing of the aquatic plants identified during the 2015 summer season in alphabetical order of scientific name. The plants are described in alphabetical order in List of Taxa, with a photo or line drawing. Many of the photos or drawings are from the USDA, NRCS. 2016. The PLANTS Database (<http://plants.usda.gov>). National Plant Data Team, Greensboro, NC 27401-4901 USA. Others are personal photos or non-copyrighted photos. In order to keep botanical terminology to a minimum for users, the short glossary will be helpful. Key morphological features are provided for easier identification.

The scientific name is important if the user wishes to seek additional information regarding a particular plant. A scientific name has three components: the Genus, a specific epithet, and the author [usually abbreviated] who named that plant:

***Chelone glabra*** L. L. stands for Carolus Linnaeus who named that plant.

Frequently later botanists have reevaluated a plant and given it an altered scientific name. That is indicated as:

***Euthamia graminifolia*** (L.) Nutt. Linnaeus originally named the plant but Thomas Nuttall later modified that name

At least one common [or “vulgar” from the Latin] name is provided. Unfortunately common names for the same plant may vary regionally and in some cases the same common name refers to a completely different plant!

***Chelone glabra* L.**

Turtlehead

Snakehead

Tête de Tortue

Gallane

Balmony



To produce this pictorial identification guide, a survey of the aquatic plants of Piseco Lake began in June, 2015 with the help of Mr. David Wilson who graciously provided his pontoon boat, capable of navigating the shallows of the lake.

Additional surveys were conducted in July and August, and September. Plant specimens were collected and later pressed in traditional plant presses, dried, and identified via keys. The principle references utilized for identification and confirmation were:

A Great Lakes Wetland Flora by Steve Chadde  
PocketFlora Press, 2002

Aquatic and Wetland Plants by Garrett Crow and Barre Hellquist,  
University of Wisconsin Press, 2000.

## Glossary

To more efficiently utilize the brief descriptions of the aquatic plants presented in this guide, the following commonly and frequently used botanical terms are provided.

**Leaves** are helpful when identifying a plant though there are many descriptive terms utilized. The following terms are particularly useful:

**Node** – the position on a stem where a leaf or leaves attach.

### Dissection

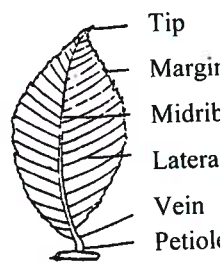
**Blade** – flat or expanded portion of a leaf.

**Petiole** – the stalk of a leaf which is attached to a stem.

**Pinnate** – like a feather; a central axis with lateral extensions.

**Palmate** – with portions radiating from a center.

### Leaf



Simple leaf



Palmately  
Compound  
leaf



Pinnately  
Compound  
leaf

**Alternate** – one leaf per node.

**Opposite** – two leaves per node

**Whorled** – three or more leaves per node.

### Leaf position



Sessile



Clasping



Perfoliate

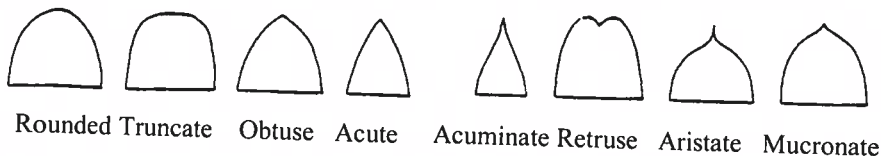


Peltate

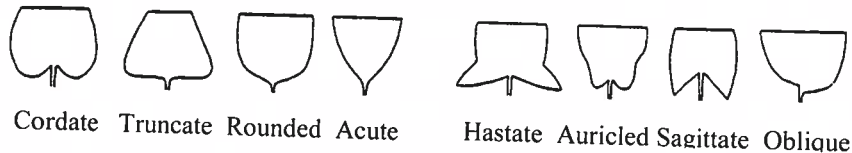
**Sessile** – a leaf without a petiole.

**Clasping** – a leaf whose base wraps around the stem.

### Leaf tips



### Leaf bases



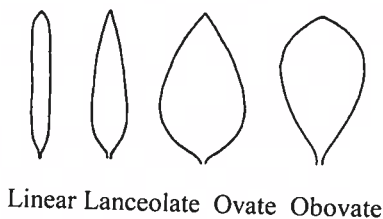
### Leaf shapes

**Acute** – gradually tapering to a point.

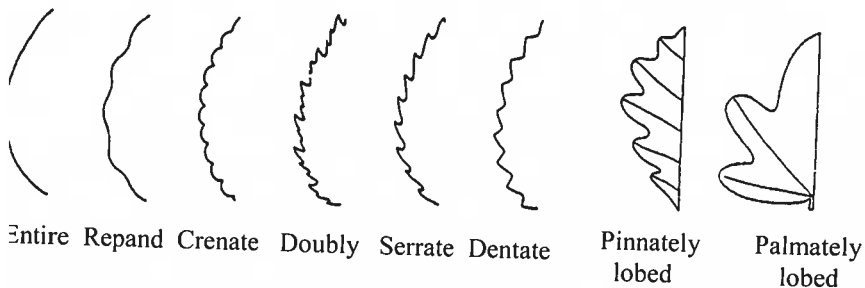
**Lanceolate** – shaped like the tip of a spear, broadest at the base and tapering to a point.

**Ovate** – broadest at the middle and tapering to each end.

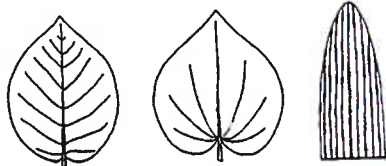
**Elliptic** – elongated with a rounded tip.



### Leaf Margins



## Leaf Venation



Pinnate

Palmate

Parallel

## Stems:

Herb or herbaceous – a stem which is “soft” as opposed to woody.

Woody – the stems of shrubs and trees and some vines.

Rhizome – a stem which grows horizontally underground or in the sediment of a lake.

Stolon – a stem that grows horizontally at the surface of the ground or sediment in a lake.

## General:

Terminal – the tip of a root, stem, or leaf.

Basal – the base of a leaf, stem, or root.

## Flowers:

Inflorescence – a group of flowers on a stem.

Spike – flowers all attached to an axis.

Raceme – flowers each with its own stalk but attached to one main axis.

Panicle – a much branched cluster of flower.

Umbel – flowers all attached at one point.

Head – a spherical cluster of flowers.

Whorl – a dense cluster of flowers around an axis at one location.



Spike

Raceme

Panicle



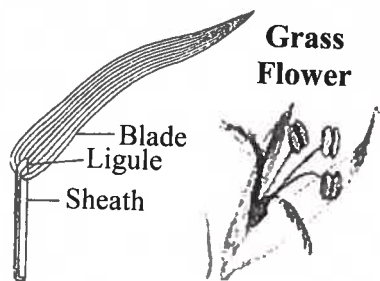
Umbel



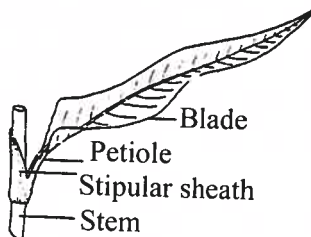
Head



## Grass leaf



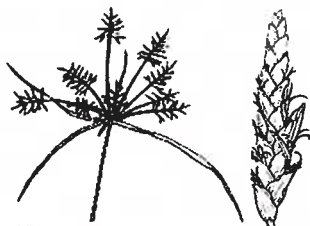
## Smartweed leaf [*Polygonum*]



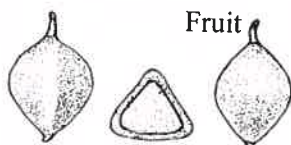
The nodes of Smartweeds have swollen nodes.

For the sedges in the genus

*Carex*, the perigynium [a vase-like sack covering the individual flowers] is a key diagnostic feature.



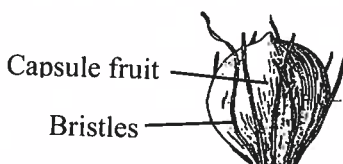
Perigynium



Flattened perigynium  
= Lenticular

Triangular perigynium =  
Trigonal

Rushes in the genus *Juncus* have small flowers much like a lily, but brown.



## Master List of Taxa

Taxon	Common Name
<i>Alnus incana</i> (L.) Moench.	Speckled Alder
<i>Alnus rugosa</i> (Villas) Lam.	Black Alder
<i>Aster tradescanti</i> L.	Lake Aster
<i>Brassenia schreberi</i> J.F. Gmelin.	Water-shield
<i>Calamogrostus Canadensis</i> (Michx.) P. Beauv.	Bluejoint grass
<i>Calla palustris</i> L.	Water Arum
<i>Cardamine pensylvanica</i> Muhl.	Pennsylvania bitter- cress
<i>Carex aquatilis</i> var. <i>aquatilis</i> Wallenb.	Water sedge
<i>Carex aurea</i> Nutt.	Golden sedge
<i>Carex echinata</i> Murray	Bristley sedge
<i>Carex exilis</i> Dewey	Coast sedge
<i>Carex gynandra</i> Schwei.	Fringed sedge
<i>Carex interior</i> L. Bailey	Inland sedge
<i>Carex lupuliformis</i> Sartwell	Knobbed hop sedge
<i>Carex lupulina</i> Muhl.	Common hop sedge
<i>Carex lurida</i> Wahlenb.	Bottlebrush sedge
<i>Carex scoparia</i> Schk.	Lance-fruited oval sedge
<i>Ceratophyllum demersum</i> L.	Coontail
<i>Chelone glabra</i> L.	Turtlehead
<i>Clematis virginianum</i> L.	Virgin's Bower
<i>Cornus racemosa</i> Lam.	Stiff Dogwood
<i>Cyperus bipartitis</i> Torr.	Shining flatsedge
<i>Cyperus dentatus</i> Torr.	Toothed flat-sedge
<i>Decodon verticillatus</i> (L.) Ell.	Buttonbush
<i>Drosera rotundifolia</i> L.	Round-leaved sundew
<i>Dulichium arundinaceum</i> (L.) Britton	Three-way Sedge
<i>Eleocharis palustris</i> L.	Creeping spike-rush
<i>Eleocharis parvula</i> (R. & S.) Link	Small spikerush
<i>Equisetum fluviatile</i> L.	Water-horsetail
<i>Equisetum palustre</i> L.	Marsh horsetail

<i>Eriocaulon aquaticum</i> (Hill) Druce	Pipewort
<i>Eriophorum virginicum</i> L.	Tawny cotton-grass
<i>Eupatorium maculatum</i> L.	Spotted Joe-pye Weed
<i>Euthamia graminifolia</i> (L.) Nutt	Common flat-topped goldenrod
<i>Gallium palustre</i> L.	Bedstraw
<i>Gentiana linariis</i> Froelich	Narrow-leaved gentian
<i>Glyceria striata</i> (Lam.) A. Hitch.	Fowl-mannagrass
<i>Gratiola aurea</i> Pursh	Golden hedge hyssop
<i>Hypericum boreale</i> (Britt) E. Bickn.	Northern St. John's- wort
<i>Hypericum boreale</i> (Britt) E. Bickn.	Aquatic form
<i>Hypericum ellipticum</i> Hook.	Pale St. John's-wort
<i>Hypericum multilum</i> L.	Slender St. Johns- wort
<i>Impatiens capensis</i> Weerb.	Spotted Touch-me- not
<i>Iris virginica</i> L.	Southern blue flag
<i>Isoetes lacustris</i> L.	Lake quillwort
<i>Juncus acuminatus</i> Michx.	Taper-tip rush
<i>Juncus brevicaudatus</i> (Engelm.) Fernald	Narrow-panicle rush
<i>Juncus compressus</i> Jacq.	Black-grass
<i>Juncus dudleyi</i> L.	Dudley's Rush
<i>Juncus effuses</i> L.	Soft rush
<i>Juncus filiformis</i> L.	Thread rush
<i>Juncus militaris</i> Bigelow	Bayonet rush
<i>Kalmia angustifolia</i> L.	Sheep laurel
<i>Leersia oryzoides</i> (L.) Sw.	Rice cut-grass
<i>Lobelia cardinalis</i> L.	Cardinal flower
<i>Lobelia dortmanna</i> L.	Water Lobelia
<i>Ludwigia palustris</i> (L.) Ell.	Water-purslane
<i>Lycopus americanus</i> Muhl.	American water- horehound

*Lycopus virginicus* L.

*Lysimachia terrestris* (L.) BSP.

*Mentha arvensis* L.

*Myriophyllum* sp.

*Najas flexilis* L.

*Nuphar variegata* Durand

*Onoclea sensibilis* L.

*Osmunda regalis* L.

*Panicum clandestinum* L.

*Phalaris arundinacea* L.

*Platanthera clavellata* (Michx.) Luer

*Polygonum amphibium* L.

*Polygonum hydropiper* L.

*Polygonum hydropiperoides* Michx.

*Polygonum persicaria* L.

*Polygonum sagittatum* L.

*Pontederia cordata* L.

*Potamogeton diversifolius* Raf.

*Potamogeton epihydrus* Eaf.

*Potamogeton gramineus* L.

*Potamogeton natans* L.

*Potamogeton richardsonii* (A. Benn.) Rydb.

*Potentilla palustris* (L.) Scop.

*Rhamnus alnifolia*

*Sagittaria latifolia* Willd.

*Salix exigua* Nutt.

*Salix amygdaloides* Anderss.

*Scirpus cyperinus* (L.) Kunth

*Schoenoplectus tabermontani* K.C. Gmel.

[*Scirpus validus* Vahl.]

Virginia water-  
horehound

Swamp Candles

Field Mint

[No flowers or fruits]

Northern water-  
nymph

Spatterdock

Sensitive Fern

Royal Fern

Deer-tongue Grass

Reed Canary Grass

Club-spur orchid

Water smartweed

Water-pepper

False water-pepper

Lady's thumb

Arrow-leaf tearthumb

Pickerelweed

Common snailseed  
pondweed

Pondweed

Variable pondweed

Floating pondweed

Richardson's  
pondweed

Marsh-cinquefoil

Alder-leaved

Buckthorn

Arrowhead

Sandbar willow

Peach-leaved Willow

Wool-grass

Soft-stem bulrush

<i>Scutellaria galericulata</i> L.	Common Skullcap
<i>Scutellaria lateriflora</i> L.	Marsh Skullcap
<i>Sisyrinchium montanum</i> Greene	Blue-eyed Grass
<i>Sium suave</i> Walter	Water parsnip
<i>Spargamuim eurycarpon</i> Engelm.	Bur-reed
<i>Sparganium americanum</i> Nutt.	American bur-reed
<i>Spiranthes cernua</i> (L.) L.C. Rich	Nodding Ladies' tresses
<i>Spirea alba</i> Duori	Meadowsweet
<i>Spirea latifolia</i> (Ait.) Borkh	Steeplebush
<i>Thalictrum daisycarpon</i> Fisher & Ave-Lall.	Purple meadow-rue
<i>Thalictrum pubescens</i> Pursh.	Meadow-rue
<i>Triadentum virginicum</i> (L.) Raf.	Marsh St. John's-wort
<i>Utricularia vulgaris</i> L.	Bladderwort
<i>Veronica scutellata</i> L.	Narrow-leaved speedwell
<i>Viburnum dentatum</i> var. <i>luvidum</i> Ait.	Arrow-wood
<i>Xyris defformis</i> var. <i>difformis</i> Chapmann	Common yellow-eyed grass

## **Piseco Lake Survey Maps Summer 2015**

**Collections made on 25 June, 24 July, 18 August, and  
12 September**

Note that those taxa at the beginning of the listings appear in June, whereas those later in the listing appear in July and August.





### **Cold Stream/Mill Stream**

#### **Taxon**

*Potentilla palustris*  
*Sagittaria latifolia*  
*Dulichium arundinaceum*  
*Carex echinata*  
*Eleocharis palustris*  
*Juncus effusus*  
*Potamogeton gramineus*  
*Glyceria striata*  
*Hypericum elipticum*  
*Sparganium americanum*  
*Carex hystericina*  
*Scirpus cyperinus*  
*Scirpus cyperinus*  
*Carex interior*  
*Eleocharis palustris*  
*Sium suave*  
*Veronica scutellata*  
*Juncus militaris*  
*Lycopus virginicus*  
*Montederia cordata*

#### **Common Name**

Marsh Cinquefoil  
 Arrowleaf  
 Three-way Sedge  
 Bristley Sedge  
 Creeping spikerush  
 Soft rush  
 Variable pondweed  
 Fowl mannagrass  
 Pale St. John's wort  
 American bur-reed  
 Porcupine sedge  
 Wool-grass  
 Wool-grass  
 Inland sedge  
 Creeping spike-rush  
 Water-parsnip  
 Narrow-leaved speedwell  
 Bayonet rush  
 Virginia water-horehound  
 Pickerelweed

*Euthamia graminifolia*

*Lobelia cardinalis*

*Polygonum sagittatum*

*Clematis virginianum*

*Oenoclea sensibilis*

*Decodon verticillatus*

*Chelone glabra*

*Utricularia vulgaris*

*Iris virginica*

*Nuphar variegata*

*Chelone glabra*

*Hypericum boreale*

*Alnus incana*

*Cornus foemina*

*Viburnum dentatum* var. *lividum*

*Juncus filiformis*

*Juncus brevicaudatus*

*Triadenum virginicum*

Common flat-topped  
goldenrod

Cardinal Flower

Arrow-leaved tearthumb

Virgin's Bower

Sensitive Fern

Swamp Loosestrife

Turtlehead

Common Bladderwort

Southern blue flag

Bullhead-lily

Turtlehead

Northern St. John's-wort

Speckled Alder

Stiff Dogwood

Arrow-wood

Thread rush

Narrow-panicle rush

Marsh St. Johns-wor





## Pine Island

*Nuphar variegata*  
*Carex aurea*  
*Eleocharis palustris*  
*Hypericum boreale*  
*Schoenoplectus tabernimontani*  
*Lobelia dortmanna*  
*Potamogeton gramineus*  
*Thalictrum pubescens*  
*Brassenia schreberi*

Bullhead-lily  
Golden sedge  
Creeping spikerush  
Northern St. John's-wort  
Soft Stem Bulrush  
Water Lobelia  
Variable pondweed  
Meadow-rue  
Water-shield



## Fall Stream

*Myriophyllum alternifolium*  
*Potamogeton epihydrus*  
*Nuphar variegata*  
*Eleocharis lacustris*  
*Sium suave*  
*Sparganium eurycarpon*  
*Uncus militaris*  
*Utricularia vulgaris*  
*Sparganium americanum*  
*Potamogeton diversifolius*

Water Milfoil  
Ribbon-leaf pondweed  
Spatterdock  
Creeping sedge  
Water Parsnip  
Bur-reed submersed form  
Bayonet rush  
Common bladderwort  
American bur-reed  
Common snailseed pondweed

*Polygonum persicaria*  
*Equisetum palustre*  
*Najas flexilis*  
*Hypericum boreale*  
*Potamogeton richardsonii*  
*Juncus militaris*  
*Pontederia cordata*  
*Isoetes lacustris*  
*Decodon verticillata*  
*Osmunda regalis*  
*Onoclea sensibilis*  
*Lycopus virginicus*  
*Solanum dulcamara*  
*Sagittaria latifolia*  
*Polygonum hydropiper*  
*Cardamine pensylvanica*  
*Sparganium americanum*  
*Scirpus cyperinus*  
*Lobelia cardinalis*  
*Impatiens capensis*  
*Scutellaria gallericulata*  
*Chelone glabra*  
*Calamagrostis Canadensis*  
*Leersia oryzoides*  
*Glyceria striata*  
*Polygonum amphibium*  
*Gallium palustre*  
*Polygonum hydropiperoides*  
*Pontederia cordata*  
*Schoenoplectus tabernimontani*  
*Mentha arvensis*  
*Potamogeton gramineus*  
*Utricularia vulgaris*  
*Carex lurida*  
*Ludwigia palustris*  
*Eleocharis parvula*  
*Clematis virginiana*

Lady's thumb  
 Marsh horsetail  
 Northern water-nymph  
 Northern St. John's-wort  
 Richardson's pondweed  
 Bayonet rush  
 Pickerelweed  
 Lake quillwort  
 Swamp loosestrife  
 Royal Fern  
 Sensitive fern  
 Virginia water-horehound  
 Nightshade  
 Common arrowhead  
 Water-pepper  
 Pennsylvania bitter-cress  
 American bur-reed  
 Wool-grass  
 Cardinal Flower  
 Spotted Touch-me-not  
 Marsh Skullcap  
 Turtlehead  
 Bluejoint  
 Rice-cut grass  
 Fowl-mannagrass  
 Water smartweed  
 Bedstraw  
 False water-pepper  
 Pickerelweed  
 Soft-stem bulrush  
 Field mint  
 Variable pondweed  
 Common Bladderwort  
 Bottlebrush sedge  
 Marsh purslane  
 Small spikerush  
 Virgin's bower



### **Higgins Bay**

*Glyceria striata*

*Lythrum terrestris*

*Sparganium angustifolium*

*Utricularia vulgaris*

*Elodea canadensis*

Fowl-mannagrass

Swamp Candles

Three-way Sedge

Common Bladderwort

Pondweed

*Eleocharis palustris*  
*Schoenoplectus tabernimontani*  
*Potamogeton diversifolius*  
*Carex parvula*  
*Lobelia dortmana*  
*Hypericum boreale*  
*Pontederia cordata*  
*Carex exilis*  
*Eleocharis erythrorhizos*  
*Juncus filiformis*  
*Lysimachia terrestris*  
*Brassenia schreberi*  
*Juncus militaris*  
*Eupatorium maculatum*  
*Thalictrum daisycarpon*  
*Pontedera cordata*  
*Dulichium arundinaceum*  
*Potamogeton natans*  
*Equisetum fluviatile*  
*Carex lupulina*  
*Panicum clandestinum*

#### **Ackerman Point**

*Nuphar variegata*  
*Brassenia schreberi*  
*Pontederia cordata*  
*Eriocaulon parkeri*  
*Lysimachia terrestris*  
*Lobelia dortmana*  
*Juncus militaris*  
*Eleocharis palustris*  
*Juncus compressus*  
*Eriocaulon aquaticum*  
*Panicum clandestinum*  
*Spiraea alba* var. *latifolia*  
*Thalictrum dasycarpum*  
*Eupatorium maculatum*

Creeping spike-rush  
 Soft-stem Bulrush  
 Common snailseed pondweed  
 Small spikerush  
 Water Lobelia  
 Northern St. John's-wort  
 Pickerel Weed  
 Coast sedge  
 Red-footed Spike-rush  
 Thread rush  
 Swamp Candles  
 Water-shield  
 Bayonet rush  
 Spotted Joe-pye-Weed  
 Purple meadow-rue  
 Pickerelweed  
 Three-way sedge  
 Floating pondweed  
 Water-horsetail  
 Common hop sedge  
 Deer-tongue grass

Bullhead Lily  
 Water-shield  
 Pickerelweed  
 Wool-Grass  
 Swamp Candles  
 Water Lobelia  
 Bayonet rush  
 Creeping spike-rush  
 Black-grass  
 Pipewort  
 Deer-tongue grass  
 Steeplebush  
 Purple Meadow-rue  
 Spotted Joe-Pye-weed

*Carex exilis*  
*Schoenoplectus tabernaemontani*  
*Cyperus dentatus*  
*Euthamia graminifolia*

*Alnus incana*  
*Cornus racemosa*  
*Aster praelatus*  
*Aster umbellatus*  
*Gentiana linearis*  
*Carex aurea*  
*Sparganium americanum*  
*Eleocharis palustris*  
*Eleocharis parvula*  
*Rhamnis alnifolia*  
*Hypericum boreale*

Coast sedge  
 Soft-stem bulrush  
 Toothed flatsedge  
 Common flat-topped  
     goldenrod  
 Speckled Alder  
 Stiff Dogwood  
 Veiny lined aster  
 Tall flat-topped white aster  
 Narrow-leaved gentian  
 Golden sedge  
 American bur-reed  
 Creeping spikerush  
 Small spikerush  
 Alnus-leaf Buckthorn  
 Submersed form



**Bonnie Brae**  
*Hypericum ellipticum*  
*Ancus dudleyi*  
*Carex echinata*  
*is virginica*

Pale St. John's-wort  
 Dudley's rush  
 Bristley Sedge  
 Southern blue flag

*Pontederia cordata*  
*Scutellaria galericulata*  
*Eupatorium maculatum*  
*Hypericum boreale*

*Thalictrum pubescens*  
*Lysimachia terrestris*  
*Lobelia dortmanna*  
*Cyperus dentatus*  
*Equisetum palustre*  
*Juncus effusus*  
*Eleocharis palustris*  
*Glyceria striata*  
*Sagittaria latifolia*  
*Carex echinata*  
*Carex exilis*  
*Carex scoparia*  
*Carex aquatilis* var. *aquatilis*  
*Carex interior*  
*Carex lupuliformis*  
*Carex gynandra*  
*Dulichium arundinaceum*  
*Lycopus americanus*  
*Sagittaria* [likely *latifolia*]  
*Sisyrinchium montanum*  
*Euthamia graminifolia*

*Xyris defformis* var. *difformis*  
*Eriophorum virginicum*  
*Scirpus cyperinus*  
*Potamogeton diversifolius*  
*Drosera rotundifolia*  
*Platanthera clavellata*  
*Gentiana liniaris*  
*Gratiola aurea*  
*Iris virginica*  
*Scutellaria lateriflora*

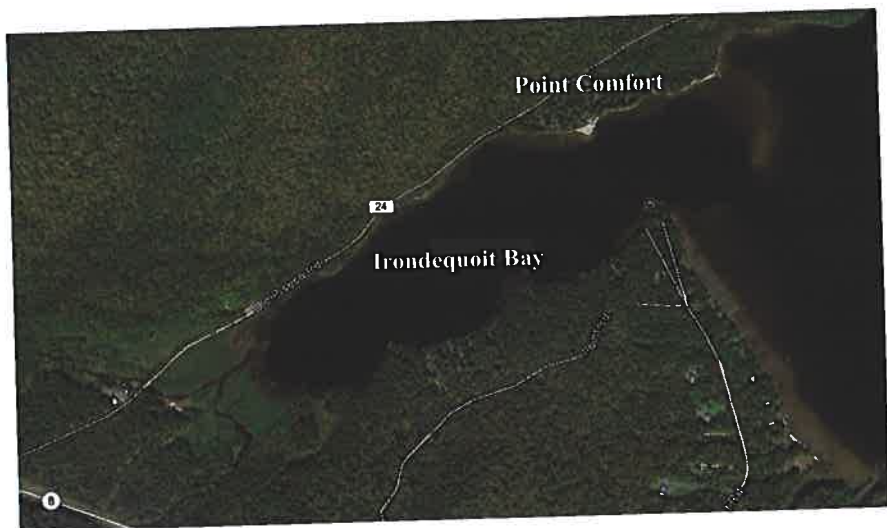
Pickereel Weed  
Skullcap  
Spotted Joe-pye Weed  
Northern St John's-wort  
    [aquatic form]  
Meadow-rue  
Swamp Candles  
Water Lobelia  
Toothed flat-sedge  
Marsh horsetail  
Soft rush  
Creeping spike-rush  
Fowl-mannagrass  
Common arrowhead  
Bristley Sedge  
Coast sedge  
Lance-fruited oval sedge  
Water sedge  
Inland sedge  
Knobbed hop sedge  
Fringed sedge  
Three-way Sedge  
American water-horehound  
submersed form  
Blue-eyed grass  
Common flat-topped  
    goldenrod  
Common yellow-eyed grass  
Tawny cotton-grass  
Wool-grass  
Common snailseed pondweed  
Round-leaved sundew  
Club-spur orchid  
Narrow-leaved gentian  
Golden hedge hyssop  
Southern blue flag  
Skullcap

*Mentha arvensis*  
*Spiranthes cernua*  
*Siun suave*  
*Hypericum multiflora*  
*Spirea alba*  
*Triadentum virginicum*  
*Eupatorium maculatum*  
*Juncus compressus*  
*Lycopus virginicus*  
*Aster tradescanti*  
*Schoenoplectus tabernimontani*  
*Cyperus bipartitis*  
*Juncus brevicaudatus*  
*Sparganium americanum*  
*Juncus acuminatus*  
*Salix exigua*

Field Mint  
 Nodding Ladies' tresses  
 Water parsnip  
 Slender St. Johns-wort  
 Meadowsweet  
 Marsh St. John's-wort  
 Spotted Joe-pye Weed  
 Black-grass  
 Virginia water-horehound  
 Tradescant's Aster  
 Soft-stem bulrush  
 Shining flatsedge  
 Narrow-panicle rush  
 American bur-reed  
 Taper-tip rush  
 Sandbar willow







### **Irondequoit Bay, Point Comfort, Sandy point and north**

*Potamogeton richardsonii*  
*Carex lacustris*  
*Sparganium eurycarpum*  
*Dulichium arundinaceum*  
*Kalmia angustifolia*

Richardson's Pondweed  
 Common Lakeside Sedge  
 Bur-reed  
 Threeway sedge  
 Sheep laurel



*Nuphar variegata*  
*Brassenia schreberi*  
*Eleocharis erythrorhizos*  
*Cornus racemosa*  
*Alnus incana*  
*Salix amygdaloides*  
*Pontederia cordata*  
*Lobelia dortmana*  
*Potamogeton natans*  
*Potamogeton epihydrus*  
*Ceratophyllum demersum*  
*Lysimachia terrestris*  
*Sagittaria latifolia*  
*Utricularia vulgaris*  
*Schoenoplectus tabernaemontani*  
*Equisetum palutre*  
*Potentilla palustris*  
*Eleocharis palustris*  
*Isoetes lacustris*  
*Ludwigia palustris*  
*Phalaris arundinacea*  
*Eriocaulon aquaticum*  
*Carex gynandra*  
*Scirpus cyperinus*  
*Euthamia graminifolia*  
  
*Gentiana linearis*  
*Panicum clandestinum*  
*Cyperus bipartitis*  
*Rhamnus alnifolia*  
*Veronica scutellata*  
*Hypericum boreale*  
  
*Juncus brevicaudatus*  
*Spiraea latifolia*  
*Eleocharis parvula*  
*Juncus compressus*

Spatterdock  
 Water-shield  
 Red-footed Spike-rush  
 Stiff Dogwood  
 Speckled Alder  
 Peach-leaved willow  
 Pickerel Weed  
 Water Lobelia  
 Floating pondweed  
 Ribbon-leaved pondweed  
 Coontail  
 Swamp Candles  
 Arrowleaf  
 Common Bladderwort  
 Soft-stem bulrush  
 Marsh-horsetail  
 Marsh-cinquefoil  
 Creeping spikerush  
 Lake Quillwort  
 Marsh purselane  
 Reed Canary Grass  
 Pipewort  
 Fringed sedge  
 Wool-grass  
 Common flat-topped  
     goldenrod  
 Narrow-leaved gentian  
 Deer-Tongue grass  
 Shining flatsedge  
 Alder-leaved buckthorn  
 Narrow-leaved speedwell  
 Northern St John's-wort  
     [submersed form]  
 Narrow-panicle rush  
 Meadowsweet  
 Small spikerush  
 Black-grass

*Polygonum hydropiperoides*  
*Sparganium americanum*  
*Nymphaea odorata* ssp. *tuberosa*  
*Nuphar variegata*  
*Mentha arvensis*  
*Potamogeton diversifolius*  
*Elodea nuttallii*  
*Typha angustifolia*  
*Sagittaria latifolia*  
*Myriophyllum*  
*Mimulus ringens*  
*Equisetum fluviatile*  
*Myrica gale*

False water-pepper  
 American bur-reed  
 White water-lily  
 Bullhead-lily  
 Field Mint  
 Common snailseed pondweed  
 Free-flowered water-weed  
 Narrow-leaved cattail  
 Common arrowhead  
 [No flowers or fruits]  
 Monkey-flower  
 Water Horsetail  
 Sweet-gale





Poplar Point

In the following **List of Taxa** the abbreviation “USDA” next to a photo signifies that the photo is adapted from the USDA-NRCS Database:

USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 298.

## List of Taxa

***Alnus incana*** (L.) Moench  
Speckled Alder

Shrub, often forming thickets.  
Leaves ovate with serrated, slightly wavy margins.  
Twigs reddish-brown with many conspicuous white (or gray) raised dots (lenticels).



***Alnus viridus*** (Villars) Lam.

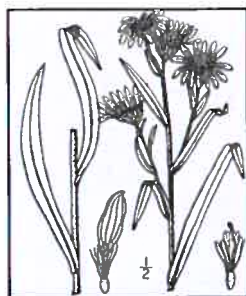
Black Alder

Shrub, often forming thickets.  
Leaves sticky when young, with small teeth  
Bark gray with scattered lenticels.



***Aster tradescanti*** L.  
Tradescant's Aster

Perennial herb  
Leaves alternate, narrowly lanceolate with entire margins or a few obscure small teeth.  
Flowers white, few per plant.  
Damp shores and stream banks.



***Brassenia schreberi* J.F. Gmelin**  
**Water-shield**

Shallow water with round peltate floating leaves.  
 Leaves and petioles with jelly-like accumulation.



***Calla palustris* L.**  
**Water Arum**

Perennial herb with broadly chordate leaves.  
 Inflorescence a spike of greenish-yellow flowers, surrounded by a conspicuous white spathe [modified leaf].  
 Marshes, wet or boggy streams or lakeshores.



***Calamagrostus canadensis* (Michx.) P. Beauv.**  
**Bluejoint grass**

Perennial grass, standing erect, often with roots forming from stem nodes when submersed.  
 The inflorescence is usually much branched [an open panicle], and tawny brown at maturity.



***Cardamine pensylvanica* Muhl.**  
**Pennsylvania bitter-cress**

Small herb with stems erect or spreading.  
 Leaves pinnately compound with a single terminal leaflet.  
 Flowers white in a raceme inflorescence.  
 Wet meadows, marshes, or lakeshores.



***Carex aquatilis* Wahlenb.**

USDA

Water sedge

Perennial in clumps with three-angled stems in cross-section, in wet meadows, marshes, or lakeshores.

Leaves somewhat waxy.

Vase-shaped sacks (perigynia) in dense spikes 1-2 inches long, pale green to brown.



***Carex aurea* Nutt.**

USDA

Golden sedge

Small perennial in loose clumps with three-angled stems in cross-section.

Vase-shaped sacks (perigynia) in dense spikes and decidedly yellow-gold at maturity.

Wet openings and lake shorelines.



***Carex echinata* Murray**

USDA

Bristley Sedge

Perennial in small clumps with three-angled stems in cross-section.

3-5 spikes of vase-shaped sacks (perigynia) somewhat star-shaped.

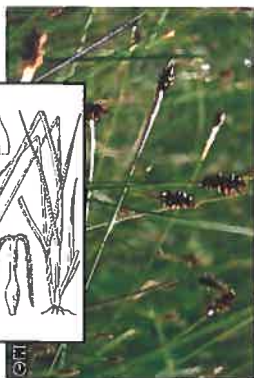


***Carex exilis*** Dewey  
Coast sedge

USDA

Perennial in dense clumps, with stiff stems.

Typically one spike of vase-shaped sacks (perigynia), brown at maturity.  
Wet meadows, marshes, or lakeshores.



***Carex gynandra*** Schwei.  
Ringed sedge

USDA

Perennial in clumps two-three feet tall.

Spike of vase-shaped sacks (perigynia), 3-5 inches long and drooping (pendulous).

Wet openings and shorelines.



***Carex interior*** L. Bailey  
Inland sedge

USDA

Perennial in clumps up to 2 feet tall

Spike of vase-shaped sacks (perigynia), about one inch long, green-brown to brown.

Characteristic of swamps, Alder thickets, wetland margins, and lake shores.





***Carex lupuliformis***

USDA

Knobbed hop sedge

Perennial in loose clumps and growing from underground stems (rhizomes), 2-3 feet tall.

Spikes of vase-shaped sacks (perigynia) erect. Swamps, ditches, marshes, often in shallow water of shorelines.



***Carex lupulina* Muhl.**

USDA

Common hop sedge

Perennial in loose clumps and growing from underground stems (rhizomes), 3 feet tall.

Spikes of vase-shaped sacks (perigynia) erect, dull green-brown and appearing more inflated than *Carex lupuliformis*.



***Carex lurida* Wahlenb.**

USDA

Bottlebrush sedge

Perennial in clumps 1-3 feet tall, stems purple-tinged at base.

Spikes of vase-shaped sacks (perigynia) erect, somewhat pale, but tightly clustered.

Rivers, swamps, wet meadows and lake shores.



***Carex scoparia* Schk.**

USDA

Lance-fruited oval sedge

Perennial in dense clumps, one-two feet tall, with stems typically taller than leaves.

Spikes of vase-shaped sacks (perigynia) short and compact, with flattened perigynia.

Wet meadows, swamps, and sandy lakeshores.





***Cephalanthus occidentalis* L.**

Buttonbush

Small to large shrub with green-brown young stems and gray-brown older stems. Leaves opposite or three per node (whorled) White flowers in distinctive spherical heads. Fruit a dense head of brown nutlets.



***Ceratophyllum demersum* L.**

USDA

Coontail

Submersed perennial, lacking any roots. Stems typically branching with dense tips which resemble a raccoon's tail. Leaves dissected, 4 per node. Typical of lake shallows.



***Thelone glabra* L.**

Turtlehead

Perennial herb, two-four feet tall with Opposite leaves. Leaves with toothed margins and acuminate. White flowers clustered at the tips of stems and resemble the head of a turtle. Thickets, river banks and lake shorelines.



***Nematis virginiana* L.**

Sperry Herbarium

Virgin's Bower

Perennial, woody vine often dense over other plants or supports. Leaves opposite with 3 leaflets. White flowers in open clusters. Fruits in feathery clusters. Swamps, streams and lake shores.



***Cornus racemosa* Lam.**  
Stiff Dogwood

Shrub 3-6 feet tall; twigs reddish,  
becoming gray or light brown with  
brown pith.

Leaves opposite with rounded tips.

Flowers small and white followed by blue berries.



***Cyperus bipartitus* Torr.**  
Shining flatsedge

Clumped and resembling a “grass”  
with triangular stems in cross  
section, usually 6-12 inches tall.

Numerous spikelets with flattened,  
overlapping scales, with purple margins.

Wet, sandy or gravelly lakeshores meadows and ditches.



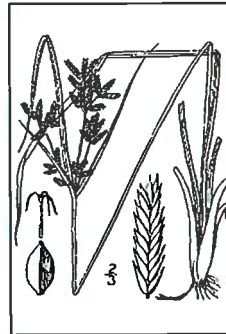
***Cyperus dentatus* Torr.**  
Toothed flat-sedge

USDA

Clumped and resembling a “grass” with  
triangular stems in cross section, 6-8 inches  
tall, and growing from rhizomes.

Numerous spikelets with flattened, overlapping  
pale red-brown scales, tipped with short  
points (awns).

Sandy lakeshores and marshes.



***Decodon verticillatus* (L.) Elliott**  
 Swamp Loosestrife

Perennial with woody bases of stems,  
 often swollen with puffy tissue  
 (aerenchyma) when submersed.  
 Stems arching with opposite leaves or  
 three to four per node.  
 Purple flowers clustered at the nodes.



***Drosera rotundifolia* L.**  
 Round-leaved sundew

Small perennial with round leaves  
 covered with sticky (glandular) hairs  
 and often reddish in full sunlight.  
 Flowers small, white in July.



***Sparganium angustifolium* (L.) Britton**  
 Three-way Sedge

Perennial appearing grasslike, but with  
 triangular stem in cross section 2-3 feet tall.  
 Leaves light green, in three rows, 2-4 inches  
 long and acuminate.  
 Shallow marshes, wet meadows and lake  
 shores, often in shallow water.



***Scheuchzeria palustris* L.** USDA

Creeping spike-rush

Perennial, spreading in clumps and  
 appearing  
 as a miniature cattail.

Terminal spikelets singular on stems, small  
 and elongate, brown to red-brown.

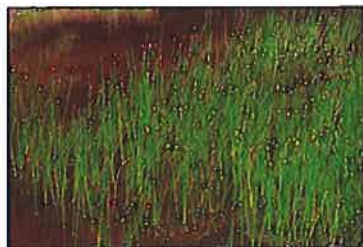
Shallow marshes, wet meadows, lakeshores, and stream banks.



***Eleocharis parvula*** (Romer & Schultes) Link  
Small spike-rush

Perennial, spreading, often in dense masses and appearing as a very small miniature cattail.

Terminal spikelets singular on stems, barely 1/8 inch long, straw-colored to brown.

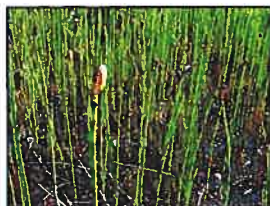


***Equisetum fluviatile*** L.  
Water-horsetail

Annual aerial stems growing from perennial, underground stems (rhizomes).

Stems hollow with relatively thin walls, with few branches at nodes.

Standing water of marshes, ponds, wetlands, and lakeshores.



***Equisetum palustre*** L.  
Marsh horsetail

Annual aerial stems growing from perennial, underground stems (rhizomes)

Stems branched at nodes, with a small central opening.

Wetlands, stream banks, and lakeshores.



***Eriocaulon aquaticum*** (Hill.) Druce  
Pipewort

Perennial, with basal tufts (rosettes) of quill-like leaves, in shallow water.

Stems erect mostly above the water's surface with a somewhat flattened disk of tiny white flowers. Shallow water or exposed sandy or peaty lakeshores.



***Eriophorum virginicum* L.**

Lawny cotton-grass

Perennial, densely-clumped, grass-like  
with terminal clumps of white  
bristles, much like cotton tufts.

Calcareous fens, meadows, or  
shorelines.



***Eupatorium maculatum* L.**

Spotted Joe-pye Weed

Perennial herb 4-6 feet tall with spotted or  
purplish stems.

Leaves lanceolate to ovate in shape with  
coarsely serrated margins.

Numerous purple flowers in a branched  
[panicle] inflorescence.

Wet meadows, marshes, swamps, fens and  
lake shorelines.



***Euthamia graminifolia* (L.) Nutt.**

Common flat-topped goldenrod

Perennial herb with alternate leaves.

Leaves narrowly lanceolate with smooth  
margins.

Small, yellow flowers in dense, flat-topped  
clusters in a branched inflorescence.

Wet meadows, springs, treambanks, and gravelly lakeshores.



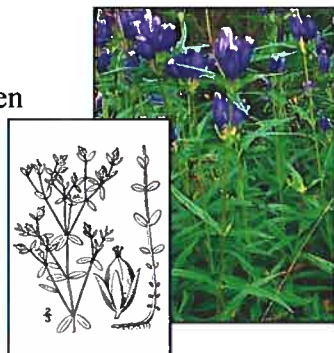


***Gallium palustre* L.** USDA Kristian Peters  
Bedstraw

Annual or perennial herb, often trailing  
with whorls of oblong to elliptic leaves.  
Small white flowers in clusters at tips of stems.  
Wet meadows and banks of streams and lakes.



***Gentiana linearis* Froelich**  
Narrow-leaved gentian  
Perennial herb 1-3 feet tall with dark green  
leaves.  
Leaves narrowly lanceolate with  
smooth margins.  
Leaves mostly opposite.  
Bottle-shaped flowers are bright blue.  
Wet meadows, streams, shorelines.



***Glyceria striata* (Lam.) A. Hitch.**  
Fowl-mannagrass

Perennial grass, loosely clumped with  
stems 3-5 feet tall.  
Inflorescence an open, freely branching  
panicle with ovate, usually purple  
spikelets and often drooping.  
Swamps, wet meadows, stream banks and gravelly Shorelines.



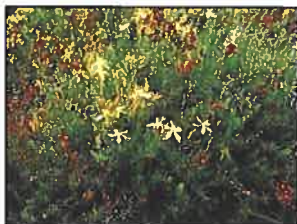
***Gratiola aurea* Pursh**  
Golden hedge hyssop

Perennial herb with creeping or  
ascending stems with opposite leaves.  
Leaves with three veins.  
Bright yellow flowers on stalks (peduncles) from nodes.  
Marshes, meadows, and sandy lakeshores.



***Hypericum boreale*** (Britton) E. Bickn.  
Northern St. John's-wort

Perennial herb 6-12 inches tall with  
oval to oblong opposite leaves,  
nearly clasping stem.  
Flowers yellow and fruit a purple capsule.  
Wetlands, low areas, and shallow shorelines.



***Hypericum boreale*** (Britton) E. Bickn.  
Northern St. John's-wort  
Aquatic form.



***Hypericum ellipticum*** Hook. USDA  
Pale St. John's-wort

Perennial herb, 1-2 feet tall, branching only  
near the top.  
Leaves opposite, 1-1 ½ inches long, elliptic  
with round tips.  
Flowers few and pale yellow.  
Stream banks and sandy lakeshores.



***Hypericum multilum*** L.  
Slender St. John's-wort

Annual or perennial herb, 1-1 ½ feet tall  
with short branches at the top.  
Leaves lanceolate to oval, and opposite,  
often clasping at base.  
Flowers yellow, few and small.  
Marshes, meadows, and sandy lakeshores.



***Impatiens capensis* Meerb.**

**Spotted Touch-me-not**

Annual herb, 3-4 feet tall, succulent.  
Leaves alternate, ovate with irregular margins.

Flowers orange-yellow with a spur filled with nectar.  
Swamps, stream banks, and shores.



***Iris virginica* L.**

**Southern blue flag**

Perennial herb growing from a thick rhizome.

Stems up to 3 feet tall, with large blue flowers.

Fruits large, sometimes pendulous, and three-angled.

Swamps, stream banks, marshes, and lakeshores.



***Isoetes lacustris* L.**

**Lake quillwort**

Perennial aquatic herb, usually submersed, growing from a compact stem (corm).

Quill-like leaves 3-5 inches long, clustered, curving outward.  
Non-flowering, bearing small egg-like sporangia at the bases of the leaves.





***Juncus acuminatus* Michx.**

USDA

Paper-tip rush

Perennial, clumped, grass-like, erect stems  
with 1-2 leaves.

Small flowers in an open, pyramid-like cluster.

Capsule fruit oval, straw-colored, with a  
short, blunt point.

Wet areas, lakeshores.



***Juncus brevicaudatus* (Engelm.) Fernald**

Narrow-panicle rush

USDA

Perennial, densely clumped, grass-like leaves  
are round in cross-section, hollow, with  
somewhat swollen joints.

Flowers in a branched, oval head.

Capsules ovate, light brown, abruptly narrowed  
to a point.

Wet areas, lakeshores.



***Juncus compressus* Jacq.**

Black-grass

Perennial, clumped, grass-like, growing from an  
underground stem (rhizome).

Capsules nearly round, light brown, barely 1/8  
inch long.



***Juncus dudleyi* Wieg.**

Dudley's Rush

Leaf blades channeled or boatlike in cross  
section.

Flowers in loose clusters at end of stem,  
followed by round, brown fruits.

Dry to wet soils in swamps and along lakeshores.



***Juncus effusus* L.**

Soft rush

Perennial, dense-clumped, grass-like stems  
2-3 feet tall.

Stems with a cluster of short-stalked flowers,  
and terminated with a long bract.

Capsules broadly ovate, olive-green to light brown  
Marshes, wet meadows, lakeshores.



***Juncus filiformis* L.**

Thread rush

Perennial stems clumped or in rows growing  
from an underground stem (rhizome).

Stems with a cluster of a few short-stalked  
flowers, and terminated with a long bract.

Capsules broadly ovate, light brown.

Stream banks, sandy, mucky, gravelly lakeshores.



***Juncus militaris* Bigelow**

Bayonet rush

Perennial, grass-like, and widely-spreading  
from underground stems (rhizomes), and  
forming expansive colonies.

Flowers in open, branched panicles.

Capsules narrowly ovate, three-angled, and  
straw-colored to brown.

Marshes and lakeshores.



***Kalmia angustifolia* L.**

Sheep-laurel  
Shrub, 3-4 feet tall.  
Leaves opposite or whorled,  
evergreen, leathery, with smooth  
margins.  
Open bogs, wet conifer forests and lakeshores.



***Leersia oryzoides* (L.) Swartz**

Rice cut-grass  
Perennial grass, typically loosely-clumped,  
with stems 3-5 feet tall.  
Leaves and stems with stiff, recurved hairs  
that will easily cut bare skin.  
Inflorescence a loosely-branched panicle with  
grains similar to small rice grains.  
River floodplains, marshes, and lake shorelines.



***Lobelia cardinalis* L.**

Cardinal flower  
Perennial herb, 1-5 feet tall, with square stems,  
and leaves opposite, and broadly lanceolate.  
Conspicuous, scarlet red flowers.  
Marshes, ditches, stream banks, and lakeshores,  
occasionally in shallow water.



***Lobelia dortmanna* L.**

**Water Lobelia**

Perennial herb, submerged or extending  
1-1 ½ feet above the surface.

Flowers few and pale blue with three larger,  
lower lobes.

Swamps, ditches, stream banks, lakeshores,  
And shallow water.



***Ludwigia palustris* (L.) Elliott**

**Water-purslane**

Perennial herb with weak stems, sometimes  
floating with opposite leaves.

Leaves lance-shaped to ovate, entire margins.

Flowers born singly at nodes, followed by  
wide capsules.

Shallow water or exposed mud of stream  
banks, ditches, and lakeshores.



***Lycopus americanus* Muhl.**

**American water-horehound**

Perennial herb with square stems 2-4 feet tall.

Leaves opposite, lance-shaped, with varying  
degree of teeth and lobes.

Small, purple flowers in dense whorls at the  
nodes.

Marshes, ditches, wet meadows and lakeshores.



***Lycopus virginicus* L.**

Virginia water-horehound / Bugleweed  
Perennial herb with square stems 2-3 feet tall.  
Leaves opposite, lanceolate to oval, lower  
surfaces felt-like, with sharp teeth.  
Small, white flowers in dense whorls at the  
nodes.

Marshes, ditches, wet meadows and  
lakeshores.

\* *Lycopus* freely hybridize complicating identification].



***Lythrum terrestris* (L.) BSP.**

Swamp Candles

Perennial herb growing from underground  
stems (rhizomes), with opposite leaves  
which are spotted with dots (glands).  
Yellow flowers are crowded in elongated  
inflorescence.

Marshes, ditches and muddy lakeshores.



***Mentha arvensis* L.**

Field Mint

Perennial herb growing from underground  
stems (rhizomes), or at the surface  
(stolons).

Stems square, 2-3 feet tall, sometime in dense  
stands, with oval, lanceolate leaves with  
coarsely toothed margins.

Flowers small, white, in dense whorls at  
nodes.

Marshes, ditches, lake shorelines.

\* *Mentha* can hybridize with *Lycopus* complicating  
identification].



***Mimulus ringens* L.**

Monkeyflower

Stems rounded or angled, 2-3 feet tall.

Leaves opposite, sessile, with serrated to dentate margins.

Blue 2-lobed flowers born singly on long peduncles.

Marshes, ditches, lake shorelines.



***Myrica gale* L.**

Sweet Gale

Shrub with evergreen, narrowly obovate alternate leaves

Inflorescences cone-like.

Shallow water along lakes and swamps.



***Najas flexilis* L.**

Northern water-nymph

USDA

Submersed aquatic herb, usually annual, growing in clear water up to 8-10 feet deep.

Stems frequently radiating from a central root mass, Streams, ponds and lakes.



***Nuphar variegata* Durand**

Bullhead Lily

Perennial aquatic herb with thick rhizomes buried in typically mucky/muddy lake sediments, floating leaves.

Leaf blades oval and notched where petiole is attached.

Singular flower cup-shaped with red-tinged inside.

Quiet streams, ponds, and lakes, often in expansive colonies.





*Nymphaea odorata* ssp. *tuberosa*  
 (Paine) Wiersema & Hellequist  
 White waterlily



Perennial aquatic herb with thick  
 rhizomes buried in typically  
 mucky/muddy slake sediments, floating leaves.  
 Leaves orbicular with a typically closed sinus [gap].  
 Petioles green with purple stripes.  
 Large, white flowers.

*Onoclea sensibilis* L.  
 Sensitive Fern



Often in clumps, sometimes extensive,  
 with leaves 1-1 ½ feet tall.  
 Fertile leaves overwintering and turning  
 dark brown.  
 Leaves deeply-lobed almost to midrib.  
 Wet areas, ditches, marshes, and lakeshores.

*Asmunda regalis* L.  
 Royal fern



Large perennial frequently 3-4 feet tall and  
 growing in shallow water.  
 Leaves with fertile portions only near tips,  
 red-brown at first, then becoming dark  
 brown.  
 Ponds, marshes, shallow lakeshores.

*Phalaris clandestina* L.  
 Beer-tongue Grass



Perennial grass in clumps, 2-3 feet tall.  
 Leaves broad [to 1 inch], acuminate.  
 Ditches and sandy lakeshores.



***Phalaris arundinacea* L.**

Reed canary-grass

Perennial grass up to 5 feet tall.

Inflorescence densely-flowered, and cylindrical, and straw-colored at maturity.

Wet meadows, marshes, ditches and lakeshores, often in expansive colonies.



***Platanthera clavellata* (Michx.) Luer**

Club-spur orchid

Small perennial, with fleshy roots, ½-1 foot tall.

Leaves mostly at base, 4-6 inches long, lanceolate, yellow-green, each with an arching spur.

Yellow-green flowers 5-15 in a cylindrical inflorescence [raceme].

Open bogs, swamps, wet ditches, and lake shorelines.



***Polygonum amphibium* L.**

Water smartweed

Perennial with either erect stems on muddy soil, or floating stems and leaves as an aquatic form.

Leaves lanceolate, alternate with smooth margins.

Conspicuously swollen nodes.

Flowers pink-red in dense cylindrical spikes.

Quiet streams, marshes, ponds, and lakes or lakeshores.



***Polygonum hydropiper* L.**

Water-pepper

Annual herb with typically erect stems, 1-

1½ feet tall, sometimes spreading.

Leaves lanceolate, tapering to a point.

White flowers, with green margins few in a thin pendulous spike.

Wet ditches, marshes, muddy shores of lakes and streams.



***Polygonum hydropiperoides* Michx.**

Also water-pepper

Perennial herb with stems to 3 feet tall.

Leaves linear to lanceolate.

Green, white, or pink flowers in spikes.

Wet ditches, marshes, muddy shores of lakes and streams.



***Polygonum persicaria* L.**

Lady's thumb

Annual herb with typically erect stems, 2-3

feet tall, sometimes spreading.

Leaves narrowly lanceolate with a conspicuous dark spot.

Flowers pink to rose in short cylindrical spikes.

Wet ditches, marshes, muddy shores of lakes and streams.

\* This species freely hybridizes with other *Polygonum*].



***Polygonum sagittatum* L.**

Arrow-leaf tearthumb

Weak-stemmed annual with a square

stem with sharp recurved prickles.

Leaves lanceolate, with a sagittate base.

Flowers small in white to pink clusters at the end of short stalks.

Wet ditches, marshes, meadows, and muddy lakeshores.



***Pontederia cordata* L.**

Pickereel-weed

Perennial herb with stout stems 2-4 feet tall.  
Leaves broadly lanceolate with chordate base  
Bright blue-purple flowers in spikes.  
Fruit a favorite of migrating waterfowl.  
Shallow water of swamps, rivers, ponds, and lakes.



***Potamogeton diversifolius* Raf.**

Common snailseed pondweed

Fully aquatic perennial with floating  
broadly ovate leaves, and narrowly-  
linear underwater leaves.  
Underwater flower spikes on 2-3 inch stalks (peduncles).  
Aerial flower spikes on short stalks.  
Shallow ponds and lakes [occasionally slow, cold streams].



***Potamogeton epihydrus* Raf.**

Ribbonleaf-pondweed

Fully aquatic perennial with floating  
narrowly ovate leaves, and linear  
ribbon-like underwater leaves.  
Flowers in dense cylindrical spikes on  
1-2 inch stalks (peduncles).  
In water 2-6 feet deep; ponds, rivers, and lakes.



***Potamogeton gramineus* L.**

Variable pondweed

Aquatic perennial with floating oval  
Leaves, 1-4 inch petioles,  
rounded bases, linear to narrowly  
lanceolate underwater leaves.  
Flowers in dense cylindrical spikes.



***Najas* *potamogeton natans* L.**

USDA

floating pondweed



Perennial aquatic with both floating and submersed leaves.

floating leaves ovate, sometimes broadly so; submersed leaves typically very narrow (linear).

Flowers in dense cylinder-shaped spikes.

Shallow water of rivers, marshes, ponds, lakes.

***Najas* *potamogeton richardsonii* (A. Benn.) Rydb.**

Richardson's pondweed



Perennial aquatic entirely underwater except for the dense spikes at the water surface.

Stems round in cross section.

Leaves lanceolate with clasping bases.

Shallow to deep waters of marshes, ponds, and lakes.

***Najas* *potentilla palustris* (L.) Scop.**

Marsh-cinquefoil



Stems 1-2 feet tall, sometimes reclining. Leaves pinnately divided or palmately divided.

Flowers dark red or purple singly or loose clusters.

Margins of bogs, swamps, and lake shores.

***Rhamnus* *alnifolia* L'Hér**

Slender-leaved Buckthorn



Shrub; leaves with 5-8 pairs of leaf veins.

Young branches have downy hairs.

Greenish-yellow flowers; fruit a bluish-black berry.

Found in moist to wet, marshy areas.

***Sagittaria latifolia* Willd.**

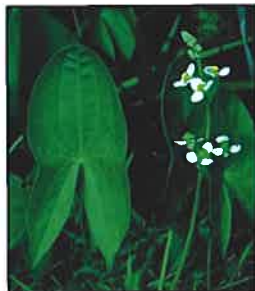
**Arrowleaf**

Perennial herb spread by underground stems (rhizomes), sometimes in large colonies.

Leaves may vary from linear when submersed to broadly sagittate when aerial.

Flowers white (male usually above female) in whorls along an erect stem.

Shallow water and shores of marshes, ponds, and lakes.



***Salix exigua* Nutt.**

**Sandbar Willow**

Shrub up to 10-12 feet tall with narrow leaves

Irregularly dentate margins and alternate.

Flowers in early spring.

Sandy ditches, shorelines of wet areas, lakes, streams, and mud flats.



***Salix amygdaloides* Anderss.**

**Peach-leaved Willow**

Small shrub or tree up to 20 feet tall.

Leaves broadly to narrowly lanceolate with serrated margins and acuminate tip.

Lakeshores and swamps often with Cottonwoods.





***Scirpus cyperinus* (L.) Kunth**

Wool-grass

Perennial herb in dense clumps, with stems 3-4 feet tall.

Leaves usually just one per stem.

Heads in open, drooping brown inflorescence.

Small fruits when mature surrounded by hairs, giving a "wooly" appearance.



***Phoenoplectus tabernimontani* K.C. Gmel.**

***Scirpus validus* Vahl. ]**

Soft-stem bulrush

Perennial herb with round leafless stems up to 3-7 feet tall.

Stems decidedly soft when crushed.

Flowers in small spikelets clustered at the tips of the stems.

Small clumps sometimes spreading to large colonies.

Shallow water and shorelines of marshes, ponds, and lakes.



***Scutellaria galericulata* L.**

Marsh Skullcap

Perennial herb with erect stems, 4-sided leaves opposite, lance-shaped, with short petioles and coarsely-toothed margins.

Blue flowers are few and relatively large at the base of leaves on the upper portion of stem.

Wet meadows, swamps, streams, and shorelines of ponds and lakes.



***Scutellaria lateriflora* L.**

**Mad Dog Skullcap**

Perennial herb with erect stems, 4-sided. Leaves opposite, lanceolate, with short petioles, and coarsely-toothed margins. Blue flowers many on short branched stems from upper portion of stem.

Wet meadows, swamps, streams, and shorelines of ponds and lakes.



***Sisyrinchium montanum* Greene**

**Blue-eyed Grass**

Small perennial in clumps 8-15 inches tall with leaves mostly at base of the plant. Blue flowers are small, but conspicuous, followed by a round, pale brown fruit. Wet meadows, ditches, and shorelines of ponds and lakes.



***Sium suave* Walter**

**Waterparsnip**

Perennial herb often in shallow water with stems 2-4 feet tall. Leaves pinnately compound, alternate. White or greenish flowers in flat-topped clusters (umbel), followed by strongly-ribbed fruits.

Wet ditches, meadows, marshes, and shorelines of ponds and lakes.





***Sparganium eurycarpon* Engelm.**  
Bur-reed

Perennial herb with erect stems 2-4 feet tall, with narrow elongated leaves strongly V-shaped near base.  
Spheres of male (white) or female flowers born along top of stem.  
Female flowers followed by spheres of fruits widest at the tops, falling and floating on the water surface and a valuable food for migrating waterfowl.  
Shallow water of wet ditches, streams, marshes, ponds, and lakes.



***Sparganium americanum* Nutt.**  
American bur-reed

Perennial herb with erect stems 1-2 feet tall, with narrow elongate leaves strongly V-shaped near base.  
Spheres of male (white) or female flowers born along top of stem.  
Female flowers followed by spheres of fruits tapered at top and bottom.  
Shallow water of streams and marshes.



***Spiranthes cernua* (L.) L. C. Rich.**  
Nodding Ladies' tresses

Perennial herbaceous orchid with stems 1- 1/2 feet tall.  
Fleshy roots.  
Leaves mostly at base of stem, oblong-lanceolate.  
White flowers in a tight spiral along the tip of the stem.  
Wet meadows, ditches, roadsides, and lakeshores.



***Spirea alba*** DuRoi  
Meadowsweet

Branched shrub, 3-5 feet tall, with leaves alternate.

Leaves oblong to broadly lance-shaped.

White flowers small, but many in a pyramid-shaped inflorescence.

Wet meadows and sandy shores of ponds and lakes.



***Spirea alba* var. *latifolia*** (Ait.) Borkh  
Steeplebush

Branched shrub, 3-5 feet tall, with leaves alternate.

Leaves oblong to broadly lance-shaped.

Pink flowers small, but many in a pyramid-shaped inflorescence.

Wet meadows and sandy shores of ponds and lakes.



***Thalictrum dasycarpum*** Fisher & Ave-Lall.  
Purple meadow-rue

Perennial herb 3-5 (6) feet tall, stem purplish.

Leaves divided into 3-4 segments with three points at tip.

White flowers in much-branched open panicle.

Wet meadows, streambanks, marshes, and lake shorelines.



***Thalictrum pubescens*** Pursh.  
Tall Meadow-rue

Perennial herb 3-6 feet tall with mostly basal, decompose leaves.

Flowers white and dense.

Wet meadows, swamps, marshes, and bogs.



***Triadenum virginicum* (L.) Raf.**

Marsh St. John's-wort

Perennial herb 1-2 feet tall with unbranched stems.

Long-ovate leaves rounded at tips.

Pink to green-purple flowers mostly near ends of stem.

Fruits are reddish-purple in the fall and football-shaped.

Wet meadows and shores of ponds and lakes.



***Utricularia vulgaris* L.**

Common bladderwort

Annual or perennial herb, floating just below the water surface or on exposed mudflats in late season.

Leaves alternate, but much divided with bladders about 1/8 inch across.

Yellow flowers on a stem 4-8 inches tall.

Upper and lower lip of flower nearly equal.

Shallow water of marshes, ponds, and lakes.



***Veronica scutellata* L.**

Narrow-leaved speedwell

Perennial herb with erect to horizontal stems often rooting at the nodes.

Leaves two per node (opposite), lance-shaped with sharp points, and

smooth margins to few scattered teeth.

Fruit very flattened at maturity.

Stream banks, pond and lake margins.



***Viburnum dentatum* var. *recognitum* Ait.**

Arrow-wood

Shrub multistemmed shrub 5-15 feet tall.

Leaves ovate-round and very coarsely dentate.

Inflorescence of small white flowers in a flat-headed panicles.

Fruit small and ovoid about 1/3 inch long, becoming dark blue-violet.

Damp thickets along streams and lakeshores.



***Xyris defformis* var. *difformis* Chapman**

Common yellow-eyed grass

Perennial herb with leafless stems 6-12 inches tall.

Narrow leaves from the base of the plant.

Yellow flowers small, but conspicuous.

Sandy to pea shores of bogs and lakes.



Dr. David L. Moore, Aquatic Botanist, retired from Utica College in 2010 as Asa Gray Distinguished Emeritus Professor of Biology. For many years he also taught a graduate course in Aquatic and Wetland Plants at Stone Lab, The Ohio State University's field station at Put-in-Bay, Ohio. He began work with aquatic plants as a M.S. student under Dr. Ronald L. Stuckey in 1972, and has continued documenting the changes in the wetland and aquatic plants associated with the islands and marshes of western Erie. This long-term data set traces back to the surveys of Adrian J. Peters in 1894.

