

COMMON WETLAND PLANTS OF OHIO field guide DIVISION OF NATURAL AREAS & PRESERVES DIVISION OF WILDLIFE



## **INTRODUCTION**

#### by Rick Gardner

This field guide provides basic information on Ohio's precious wetland resources that are so important to wildlife and humans. Historically wetlands were abundant in Ohio, covering thousands of square miles. Today, it is estimated that less than 10% of Ohio's original wetlands remain. These wetlands include bogs, fens, wet prairies and swamp forests, to mention a few of the dozens of different types.

This guide introduces the reader to some of Ohio's common wetland plants, wetlands' importance to water quality and wildlife, wetland restoration, and species currently available from nurseries in Ohio and adjacent states. The Ohio Department of Natural Resources has long been a leader in wetland restoration and preservation. The Department anticipates this guide will be an often-used reference and an inspiration for the reader to learn more about Ohio's valuable wetlands.

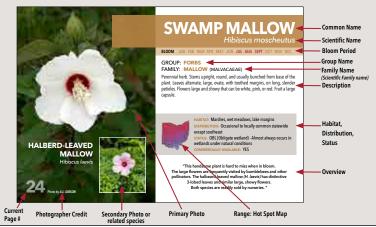
The range map represents the plants found in Ohio. The warmer the color (red) the more likely a species resides in that area, the cooler the color (blue) the less likely it is found in that area.



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## HOW TO USE THIS BOOKLET



### COMMON WETLAND PLANTS OF OHIO TABLE OF CONTENTS

Species Index	7-9	Ferns	66-72	Shrubs
Benefits of Wetlands	10-49	Forbs	73-75	Trees
Types of Wetlands	50-65	Graminoids	76-77	Glossary

## **SPECIES INDEX**

#### FERNS

- 07 Marsh Fern
- **08** Cinnamon Fern
- 09 Sensitive Fern

#### FORBS

- 10 Arrow-arum
- 11 Cardinal Flower
- 12 Common Bur-reed
- 13 Canada Anemone
- 14 Marsh-marigold
- 15 Broad-leaved Cat-tail
- 16 Swamp Milkweed
- 17 Bottled Gentian
- 18 Southern Blue Flag
- 19 Lizard's-tail
- 20 Seedbox
- 21 Swamp Loosestrife
- 22 Winged Loosestrife
- 23 Common Monkey Flower
- 24 Swamp Mallow

- 25 American Bugleweed
- 26 Mad-dog Skullcap
- 27 False Nettle
- 28 Turtlehead
- 29 Long-leaved Pondweed
- 30 Queen-of-the-prairie
- **31** Arrow-leaved Tear-thumb
- 32 Mild Water-pepper
- 33 Pennsylvania Smartweed
- 34 Water Smartweed
- 35 Small-flowered St. Johns-wort
- 36 Ditch Stonecrop
- 37 Bristly Aster
- 38 Bur-marigold
- 39 Common Boneset
- **40** Giant Sunflower
- 41 Spotted Joe-Pye-Weed
- **42** American Sweet-flag
- 43 Blue Vervain
- 44 Pickerelweed

- 45 Spatterdock
- 46 White Water-lily
- 47 Common Arrowhead
- 48 Water-plantain
- 49 Water-shield

#### GRAMINOIDS

- 50 American Reed
- 51 Canada Bluejoint
- 52 Fowl Manna Grass
- 53 Rattlesnake Manna Grass
- 54 Rice Cut Grass
- 55 Rough Barnyard Grass
- 56 Dudley's Rush
- 57 Soft Rush
- 58 Blunt Spike-rush
- 59 Dark Green Bulrush
- 60 Fringed Sedge
- 61 Gray's Sedge
- 62 Lake Sedge
- 63 Northern Fox Sedge

- 64 Soft-stem Bulrush
- 65 Tussock Sedge

#### SHRUBS

- 66 Silky Dogwood
- 67 Winterberry
- 68 Common Elderberry
- 69 Buttonbush
- 70 Ninebark
- 71 Swamp Rose
- 72 Pussy Willow

#### TREES

- 73 Pin Oak
- 74 American Elm
- 75 American Sycamore

# **BENEFITS OF WETLANDS**

### Importance of Wetlands and H2Ohio

This field guide is associated with Governor DeWine's H2Ohio initiative to improve water quality in the state of Ohio. Wetlands play an important part in water quality, flood control and biological diversity. Wetlands absorb nutrients such as nitrogen and phosphorous out of the water. Wetlands reduce flooding by holding water during major rain events. Lastly and certainly equally as important, wetlands provide habitat for thousands of plants and animals. In addition to these benefits to humans, they are also a source of recreation such as hunting, birdwatching, plant and animal viewing.

One part of the H2Ohio initiative is to create, restore and enhance wetlands to improve water quality. Most of the plants in this guide are available commercially for wetland creation and restoration projects. Others included in this guide are plants you will likely see in a wet meadows, marshes, swamps and riverine wetlands throughout Ohio plus a few uncommon species you may see in a region of Ohio.



TO LEARN MORE ABOUT **H2Ohio** VISIT **http://h2.ohio.gov/** 

# **BENEFITS OF WETLANDS**

### How Wetlands Benefit Wildlife

Wetlands are a tremendous food source for many native wildlife species, and in turn, pollinators are critical to the survival of the flowers. There is much buzzing about as bees, flies, wasps, and other pollinators rush about. The flowers and leaves provide a source of food for deer, turkeys, box turtles, and many species of moths and butterflies. Caterpillars feed on the plants, which in turn are snatched up by migrating birds. Many wetlands are stunning to view and photograph, because of their unique location, or wildlife residents. Included in this guide are plants you will likely see in wet meadows, marshes, swamps and riverine wetlands throughout Ohio plus a few uncommon species you may see in a region of Ohio. Look as you adventure outside and discover more about wetlands and their importance to our wildlife and the great outdoors.

## **TYPES OF WETLANDS**

Ohio has a wide variety of wetlands – bogs, fens, marshes, wet meadows, wet prairies, shrub swamps, and swamp forests. These wetlands have water at or near the surface for at least a portion of the year and have plants adapted to saturated conditions. Wetlands listed here are general wetland types and can be split into subtypes.



BOGS are acidic peatlands dominated by Sphagnum moss. Bogs with their unique ecology have a composition of highly conservative plants and animals. Bogs are most common in northeast Ohio. FENS are peat-forming, alkaline, groundwaterfed wetlands that are sedge dominated and rich in bio-diversity. Fens are most common in west central and northeast Ohio.





and may contain a few

scattered shrubs

VERNAL POOLS are forested small, shallow pools that reach maximum water depth in the spring and lack established fish populations. Understory vegetation is typically sparse.



SHRUB SWAMPS

are seasonally to permanently wet depressions or parts of larger wetland complexes dominated by shrubs.

#### **SWAMP FORESTS**

are seasonally wet, flatlands. There are two major types – nonriverine and floodplain swamp forests. WET MEADOWS are open, sedge dominated grasslands that are seasonally wet.

WET PRAIRIES are very similar to wet meadows but are dominated by grasses instead of sedges. Today it is one of the rarest community types in Ohio.





### MARSH FERN Thelypteris palustris

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FERNS FAMILY: MARSH FERN (Thelypteridaceae)

Colony-forming, rhizomatous fern. Sterile and fertile fronds somewhat different. Sterile fronds appear first, blade lance-shaped and widest below middle, tapering to tip with 14-20 pairs of pinnae that are sessile and long-tapering. Fertile fronds appear later, narrower and taller with margins of pinnae folded to cover the sori.



HABITAT: Fens, wet meadows DISTRIBUTION: Occasional statewide except southeast corner STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This species can form large colonies in neutral to slightly basic soils."



### CINNAMON FERN Osmundastrum cinnamomeum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FERNS FAMILY: ROYAL FERN (Osmundaceae)

Large, clumping fern. Sterile and fertile fronds different. Sterile fronds clustered, arching with 20-25 pairs of pinnae and a tuft of rusty hairs on underside of pinnae where it meets the rachis. Fertile fronds appear in center of clump. Fronds start green, mature cinnamon orange-brown, and are ephemeral.



HABITAT: Bogs, shrub swamps, swamp forests, marshes DISTRIBUTION: Eastern Ohio except a few counties in the northwest corner of the state STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Cinnamon fern is a large fern of acidic wetlands. The spores are green and short-lived, an unusual character. Its large fiddleheads are covered with silvery-white hairs in the spring. It too is a "living fossil," with a fossil record dating back 75 million years."



### SENSITIVE FERN Onoclea sensibilis

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FERNS FAMILY: WOOD FERN (Drypteridacaeae)

Colony-forming, rhizomatous fern. Sterile and fertile fronds different. Sterile fronds broadly triangular with 5-11 pairs of pinnae, a winged rachis, and die back after a frost. Fertile fronds brown, erect, and shorter than sterile fronds with bead-like segments of sporangia which persist through winter.



HABITAT: Marshes, wet meadows, shrub swamps DISTRIBUTION: Common statewide STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This species can form large colonies in a variety of wetlands. It can spread rapidly and for that reason can be a good addition to large wetland restoration projects. Its common name, sensitive fern, refers to its sensitivity to frost. It is a "living fossil," as the species has changed very little in over 55 million years!"



### ARROW-ARUM Peltandra virginica

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: ARUM (Araceae)

Perennial herb. Often colony-forming. Leaves basal, oblong-triangular (but can be quite variable), and on long, thick petioles. Flowers whitish-green, tiny and borne on a cylindrical spadix surrounded by a narrow green-yellow spathe. Fruit a large green-brown berry.



HABITAT: Shrub swamps, bogs DISTRIBUTION: Occasional throughout northern Ohio, rare south of I-70. STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Similar to other members of this family, the flowers give off a fetid or foul odor to attract flies. The berries are a food source for waterfowl. Arrow-arum will bury its fruit in the muck which leads to dense colonies. The leaves superficially resemble arrow-head (Sagittaria latifolia)."

### CARDINAL FLOWER Lobelia cardinalis

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: BELLWORT (Campanulaceae)

Perennial herb. Stems erect and usually unbranched. Leaves alternate, lanceshaped, and coarsely toothed. Flowers in a spike-like raceme, bright red and tubular, with the upper lip split into two lobes, the lower lip into three. Fruit a small capsule.



HABITAT: Swamp forests, shrub swamps, riverine wetlands DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"The bloom of the Cardinal flower is striking and unmistakable. Cardinal flower is frequently visited by the ruby-throated hummingbird."

### **COMMON BUR-REED** Sparganium eurycarpum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: BUR-REED (Sparganaceae)

Perennial herb. Stems thick, branched. Leaves basal, bright green, linear shaped and keeled. Inflorescence branched and zigzagged with numerous male flowerheads above fewer female flowerheads. Fruit a beaked achene.



HABITAT: Marshes, wet meadows, shrub swamps DISTRIBUTION: Most common north of I-70; occurs statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Common bur-reed was a common species of the Lake Erie coastal marshes. It is an important species for waterfowl and other birds in providing shelter, nesting habitat and food. American bur-reed (*S. americanum*) is similar to common bur-reed but differs in shorter stature. It is more common further south. The underground stems of both species are a food source for muskrats."

AMERICAN BUR-REED

Sparganium americanum PHOTO BY JUDY SEMROC

12 PHOTO BY TOM ARBOUR

### CANADA ANEMONE Anemone canadensis

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: BUTTERCUP (Ranunculaceae)

Perennial herb. Colony-forming, rhizomatous. Leaves basal and deeply divided into 3-5 primary lobes. 1-3 long-stemmed flowers above tier of opposite leaves, 5 white petal-like sepals with center of numerous yellow stamens. Fruit a round cluster of flattened, beaked achenes.



HABITAT: Wet meadows, wet prairies DISTRIBUTION: Most common in wet meadows near Lake Erie; occasional to rare south STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This attractive plant with large showy, white flowers can form large colonies in sedge meadows."

### MARSH-MARIGOLD Caltha palustris

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: BUTTERCUP (Ranunculaceae)

Perennial herb. Stems smooth, hollow. Leaves mostly basal, heart or kidneyshaped with two lobes at the base. Flowers bright yellow with 4-9 petal-like sepals and numerous yellow stamens. Fruit a follicle that splits and releases seeds.



HABITAT: Marshes, wet meadows, shrub swamps, swamp forests, fens DISTRIBUTION: Frequent north of I-70; occasional to rare south; especially in southeast STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Large populations of marsh-marigold provides an incredible early spring golden hue to a wetland. The non-native, aggressive plant, lesser celandine (*Ranunculus ficaria*), may be mistaken forthis beautiful wildflower."

### BROAD-LEAVED CAT-TAIL Typha latifolia



BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: CAT-TAIL (Typhaceae)

Perennial herb. Colony-forming, *rhizomatous*. Stems erect, stout. Leaves upright, linear, and succulent-like. Flowers typically contiguous or rarely with very narrow gap on the spike. Male flowers whitish-yellow and above the larger, brown female flowers. Fruit a large, cylindric collection of windborne achenes.



HABITAT: Marshes, fens, wet meadows DISTRIBUTION: Occasional statewide; rare southeast corner STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Broad-leaved cat-tail has declined significantly due to the rapid spread of the more aggressive, narrow-leaved cat-tail (*Typha angustifolia*) and the hybrid between the two species, glaucus cat-tail (*T. X glauca*). Narrow-leaved cat-tail and the hybrid are considered invasive species in Ohio. Broad-leaved cat-tail is important for nesting sites for Red-winged Blackbirds, American Bittern and other birds. It is muskrat's favorite food. Native Americans used this plant in many different ways including a food source. Cat-tails are important species for absorbing phosphorous and other minerals."

### SWAMP MILKWEED Asclepias incarnata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: DOGBANE (Apocynaceae)

Perennial herb. Stems erect, slender, and smooth. Leaves opposite, lanceshaped, and hairy below. Flowers pink to deep rose in color. On umbels at end of the stem and in upper leaf axils. Fruit a follicle, seeds with silky tufts of hair.



HOTO BY RICK GARDNER

HABITAT: Marshes, wet meadows, shrub swamps DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Swamp milkweed's foliage is more palatable for monarch caterpillars than common milkweed (*A. syriaca*). In areas with dense populations of this wildflower, dozens of monarchs can be observed."

### **BOTTLED GENTIAN** Gentiana andrewsii

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: GENTIAN (Gentianaceae)

Perennial herb. Stems smooth, erect, single or in small bundles. Leaves opposite, lance-shaped, with entire margins fringed with hairs. Flowers usually clustered at top or in upper leaf axils. Corollas deep blue and tube-like, their petal lobes finely fringed and remaining closed. Fruit a capsule.



HABITAT: Shrub swamps, wet meadows, marshes DISTRIBUTION: Common in northern Ohio; less frequent south STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This stunning plant is one of the last blooming plants of the growing season. The flowers are almost completely closed even in full bloom and only bumblebees can force their way into the flower to reach the nectar. Carpenter bees will sometimes chew through the sides of the flowers to steal nectar. This species and other gentians are often grazed by white-tailed deer."

### SOUTHERN BLUE FLAG Iris virginicus var. shrevei

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: IRIS (Iridaceae)

Perennial herb. Colony-forming, *rhizomatous*. Stems fleshy and round. Leaves sword-shaped and erect to arching, usually longer than flowering stems. Flowers blue-violet with the petal-like sepals featuring prominent yellow patches. Fruit a capsule.



HABITAT: Wet meadows, marshes, edges of lakes and ponds, riverine wetlands DISTRIBUTION: Occasional to common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This handsome iris is Ohio's most common and widespread iris. It is visited by bumblebees and other pollinators. Foliage is slightly toxic. The similar northern blue flag (*I. versicolor*) occurs mostly in northern counties near Lake Erie."



### LIZARD'S-TAIL Saururus cernuus

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: LIZARD'S-TAIL (Sauraceae)

Perennial herb. Stems branched and jointed. Leaves alternate, heart-shaped to ovate with entire margins and the petiole's base surrounding the stem. Flowers white in single or paired spikes at end of stems that are often lax to nodding at the tips. Fruit a nutlet.



HABITAT: Shrub swamps, ponds, riverine wetlands DISTRIBUTION: Occasional to locally common in western Ohio STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This attractive plant, with its arching spike of white flowers, is often associated with riverine system wetlands, growing in oxbows, backwaters and sloughs. Its clonal habit make it an aggressive colonizer of wetlands and its large colonies provide shelter for wildlife."



#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: LOOSESTRIFE (Lythraceae)

Perennial herb. Stems erect, smooth-hairy, and branched. Leaves alternate, lance-shaped with entire margins, and the petiole short or absent. Flowers borne singly from the leaf axils with four yellow petals. Fruit a box-like capsule.



HABITAT: Marshes, wet meadows DISTRIBUTION: Common throughout except absent in west central. STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Its common name refers to its square-shaped seed capsules. Seedbox can be found in wetlands with full or partial sun. Bees are a common pollinator."

### SWAMP LOOSESTRIFE Decodon verticillatus

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: LOOSESTRIFE (Lythraceae)

Perennial herb (can be woody near the base). Stems long and arching, angled on sides, and can root at the ends. Leaves usually in whorls of 3-4 and lance-shaped with entire margins. Flowers occur in dense clusters in leaf axils, their petals pink-purple. Fruit a round capsule.



HABITAT: Bogs, shrub swamps, marshes DISTRIBUTION: Most common in northeast Ohio; scattered in other parts of the state STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Swamp loosestrife is a common species in bogs. Waterfowl feed on the seeds and a number of moth caterpillars feed on the foliage. Its stems often arch and root at the tip which can trip a person walking through a colony of this plant. For wetland creation or restoration, swamp loosestrife grows in stagnant waters."

### WINGED LOOSESTRIFE Lythrum alatum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: LOOSESTRIFE (Lythraceae)

Perennial herb. Stems erect, smooth, and branched above. Lower leaves usually opposite, upper alternate. Leaves lance-shaped, entire margins, with petioles absent. Flowers single, short-stalked from upper leaf axils, with six pink-purple petals. Fruit a capsule.



HABITAT: Wet meadows, wet prairies DISTRIBUTION: Most common central to northern Ohio; rare or absent south STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This attractive summer bloomer occurs in open wetland habitats and it may be confused for the non-native, invasive purple loosestrife (*Lythrum salicaria*). Winged loosestrife flowers attract a variety of bees."

### COMMON MONKEY FLOWER Mimilus ringens



MONKEY FLOWER Mimilus alatus BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: LOPSEED (Phrymaceae)

Perennial herb. Stems smooth, four-angled, and occasionally winged. Leaves opposite, lance-shaped, petioles absent with base of the leaf clasping the stem. Flowers single from upper leaf axils on slender stalks. Corolla blue-purple. Fruit a capsule.



HABITAT: Wet meadows, shrub swamps, pond margins DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"The common name refers to the shape of the flower resembling a monkey face. Ohio has another less frequent species of monkey flower (*M. alatus*), which has leaves that taper to a distinct petiole (see inset)."

**23** PHOTOS BY ANDREW GIBSON



HOTOS BY ANDREW GIBSON

### **SWAMP MALLOW** Hibiscus moscheutus

JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC BLOOM

#### GROUP: FORBS FAMILY: MALLOW (Malvacaeae)

Perennial herb. Stems upright, round, and usually bunched from base of the plant. Leaves alternate, large, ovate, with toothed margins, on long, slender petioles. Flowers large and showy that can be white, pink, or red. Fruit a large capsule.



HABITAT: Marshes, wet meadows, lake margins **DISTRIBUTION:** Occasional to locally common statewide except absent west central STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This handsome plant is hard to miss when in bloom. The large flowers are frequently visited by bumblebees and other pollinators. The halbeard-leaved mallow (H. laevis) has distinctive 3-lobed leaves and similar large, showy flowers. Both species are readily sold by nurseries."

### **AMERICAN BUGLEWEED** Lycopus americanus

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: MINT (Lamiaceae)

Perennial herb. Stems erect, often branched. Leaves opposite, lance-shaped, with their margins irregularly deeply toothed and/or lobed, and petioles very short or absent. Flowers in dense, whorled clusters in the leaf axils. Petals white with occasional pink/purple dots. Fruit a nutlet.



VIRGINIA

**BUGLEWEED** 

Lycopus virginicus

PHOTO BY SHAUN POGACNIK

HABITAT: Marshes, wet meadows, shrub swamps, wet meadows DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"American bugleweed with its narrowly pinnatifid (lobed) lower leaves, it is one of the more easier species to identify in this group. Its common name refers to its bugle-shaped flowers which are visited by a number of different pollinators. This group of mints do not have a fragrance."

### MAD-DOG SKULLCAP Scutellaria lateriflora

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: MINT (Lamiaceae)

Perennial herb. Stems branched and four-angled. Leaves opposite, ovate to lance-shaped, and coarsely toothed. Flowers blue-purple and two-lipped in elongated racemes from the leaf axils. Fruit a nutlet.



HABITAT: Wet meadows, marshes, shrub swamps, swamp forests DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Mad-dog skullcap is the most common wetland skullcap in Ohio. The common name refers to its historical use for treating rabies. This species is not an important food source for wildlife."





PHOTO BY JUDY SEMROC

Urtica dioica var. procera

PHOTO BY SHAUN POGACNIK

### FALSE NETTLE Boehemeria cylindrica

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: NETTLE (Urticaceae)

Perennial herb. Stems erect and usually unbranched, without stinging hairs. Leaves opposite, rough-textured, on long petioles, and coarsely toothed. Flowers greenish in compact clusters on upward arching spikes. Male and female flowers usually on separate plants. Fruit an achene.



HABITAT: Marshes, wet meadows, shrub swamps DISTRIBUTION: Common throughout STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"False nettle is common throughout Ohio and is similar in general appearance to stinging nettle (Urtica procera) but it has no stinging hairs on its foliage. Flowers are wind pollinated so not afood source for bees. This species is a host plant for red admiral, comma and question mark butterflies.

Slender nettle (*Urtica dioica var. procera*) is native. The true stinging nettle (*Urtica dioica var. dioica*) is European and is less common than our native variety."



### **TURTLEHEAD** Chelone glabra

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: PLANTAIN (Plantaginaceae)

Perennial herb. Stems erect and four-sided. Leaves opposite, lance-shaped, margins with many forward-pointing teeth, and the petiole very short or absent. Flowers occur in dense spikes atop the stem. Corolla white to light pink. Fruit a capsule.



HABITAT: Marshes, wet meadows, fens, shrub swamps, swamp forests, riverine wetlands DISTRIBUTION: Common to occasional throughout Ohio STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"There are three varieties known from Ohio that differ in leaf width and habitat. Turtlehead is the host plant for the Baltimore checkerspot butterfly. The common name refers to the flower resembling a turtle's head."

### **LONG-LEAVED PONDWEED** Potamogeton nodosus

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: PONDWEED (Potamogetonaceae)

Perennial aquatic herb. Stems submerged, round, to 6+ feet long. Submerged leaves lance-linear, translucent, and commonly decayed by fruiting time. Floating leaves oval-shaped, thin, tapered at both ends, with free and persistent stipules. Flowers inconspicuous in dense, cylindric spikes. Fruit a red-brown, beaked achene.



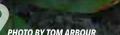
FLOATING PONDWEED

Potamogeton natans

PHOTO BY SHAUN POGACNIK

HABITAT: Marshes, ponds and lakes **DISTRIBUTION:** Frequent throughout Ohio except portions of west central **STATUS:** OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: NO

"There are 23 native pondweeds in Ohio. Long-leaved pondweed is one of the more widespread and frequent floating-leaved pondweeds in the state. Pondweeds are important indicators of water quality, as many species are sensitive to turbity and eutrophication. The rare floating pondweed (P. natans) differs by its floating leaf's stalk is bent at a 90° angle. Floating pondweed is most common in northern Ohio with a few scattered locations in south of Interstate 70."



## QUEEN-OF-THE-PRAIRIE Filipendula rubra

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: ROSE (Roseaceae)

Perennial herb. Stems smooth, erect, and unbranched. Leaves alternate, palmately compound and divided into 5-9 deeply lobed segments. Inflorescence is a terminal, multi-branched panicle with flowers pink-purple in color. Fruit an erect reddish capsule.



PHOTO BY ANDREW GIBSON

HABITAT: Wet meadows, wet prairies, fens DISTRIBUTION: Uncommon; west central Ohio with a few scattered sites in the northeast STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Royalty of wet meadows, this summer bloomer is one of Ohio's most attractive plants. When in full bloom, it stands out among the other vegetation by its beauty and height. This species is found in high quality wetlands and is not common in the state."

# **ARROW-LEAVED TEAR-THUMB**

Persicaria sagittata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: SMARTWEED (Polygonaceae)

Annual herb. Stems four-angled, weak and sprawling, with downward pointing prickles. Leaves alternate, lance-shaped with arrowhead-shaped base. Leaves widely spaced with lower leaves on long petioles, upper leaves on short and/or absent petioles. Flowers whitish-pink in rounded racemes on end of branches or in upper leaf axils. Fruit a dark, shiny achene.



HABITAT: Wet meadows, marshes, shrub swamps **DISTRIBUTION:** Common throughout except rare to absent in west central. **STATUS:** OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: NO

"When you read "tear-thumb" it cannot be good, right? Arrow-leaved tear-thumb can inflict painful cuts to your skin from the barbs on its stem. This defense is effective deterrent against most herbivores. The flowers are frequented by pollinators and the seeds are important food for waterfowl. Halberd-leaved tear-thumb (P. arifolia) is also frequent in Ohio (see inset)."



HALBERD-LEAVED TEARTHUMB P. arifolia PHOTO BY TOM ARBOUR

PHOTO BY JUDY SEMROC

### MILD WATER-PEPPER Persicaria hydropiperoides

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: SMARTWEED (Polygonaceae)

Perennial herb. Colony-forming. Stems erect to sprawling, usually branched. Leaves alternate, entire, linear to lance-shaped, with membranous stipules. Flowers white-green-pink and arranged in narrow, slender racemes at the end of branches. Fruit a shiny, black achene.



HABITAT: Marshes, shrub swamps, ponds DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This perennial is often found in higher quality wetlands and it can easily tolerate fluctuating water levels. The flowers attract a number of pollinators, mostly bees. Its common name, mild water-pepper, refers to the low or nonexistent pepper taste of the foliage."

### **PENNSYLVANIA SMARTWEED** Persicaria pensylvanica



BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: SMARTWEED (Polygonaceae)

Annual herb. Tends to be weedy. Stems erect, unbranched to widely branching. Leaves alternate, lance-shaped, toothless, and has hairless stipules with jagged margins. Flowers pink-white in dense racemes with glandular hairs. Fruit a dark, shiny achene.



HABITAT: Wet meadows, marshes, shrub swamps **DISTRIBUTION:** Common statewide **STATUS:** FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"The annual species can form large patches in newly created or restored wet meadows and marshes. Pennsylvania smartweed is an important food source in late fall and winter for waterfowl and sparrows."

### WATER SMARTWEED Persicaria amphibia

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: SMARTWEED (Polygonaceae)

Perennial herb with aquatic and terrestrial forms. Submerged plants smooth, leaves oval-shaped and on petioles. Terrestrial plants hairy, leaves with short and/or absent petioles. Flowers pink-red in erect, spike-like clusters on branch tips. Fruit a hard, dark achene.



HABITAT: Marshes, lakes, ponds, wet meadows DISTRIBUTION: Frequent statewide except southeast STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Water smartweed is an important food source for waterfowl and sparrows. This species is versatile it is perfectly content in water and on drier ground after water levels drop in the summer. It may superficially be confused with pondweeds (Potamogeton spp.). Water smartweed has a strong pepper taste and has been used as an addition to salads."

### SMALL-FLOWERED ST. JOHNS-WORT Hypericum mutilum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: ST. JOHN'S-WORT (Clusiaceae)

Annual or short-lived perennial herb. Stems usually many-branched with a bushy appearance. Leaves opposite, sessile, and oblong-oval with smooth margins. Flowers small, orange-yellow in branched, leafy clusters at the end of stems or in leaf axils. Fruit a capsule.



PHOTO BY JUDY SEMROC

HABITAT: Wet meadows, marshes, edges of lakes and ponds DISTRIBUTION: Common statewide STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: NO

"This small, annual is common in a variety of natural and man-made wetlands. This species is the most frequent annual St. John's-wort there are a number of other similar species, some of which are very rare in Ohio."

### DITCH STONECROP Penthorum sedioides

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: STONECROP (Crassulaceae)

Perennial herb. Stems smooth and round below but angled and hairy above. Leaves alternate, lance-shaped, toothed, and short or absent petioles. Flowers white-green, star-shaped, perfect, and in branched clusters on the ends of stems. Fruit a capsule that turns red-brown.



HABITAT: Marshes, wet meadows DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Ditch stonecrop crimson-red fruit are beautiful in the fall. This species has been placed in the families, Saxifrigaceae or Penthoraceae. Its importance to wildlife is still mostly unknown."



## BRISTLY ASTER Symphyotrichum puniceum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: SUNFLOWER (Asteraceae)

Perennial herb. Stems stout, reddish-purple with long, stiff hairs. Leaves alternate, lance-shaped, and toothed Leaf petioles absent with the bases clasping the stem. Flowers in branched clusters at the top of the stem and in upper leaf axils. Ray flowers blue-purple to faint purple, disc flowers yellow turning reddish with age. Fruit a windborne achene.



HABITAT: Wet meadows, shrub swamps, marshes DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Another common name is purple-stemmed aster referring to its dark purple stems. It is an important nectar and pollen source in late summer to early fall. For its importance to pollinators, it is a great addition to a wetland plant seed mix for wet meadow habitats."



# BUR-MARIGOLD Bidens cernua

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: SUNFLOWER (Asteraceae)

Annual herb. Stems usually smooth or with short hairs. Leaves opposite, simple, lance-linear and coarsely toothed. Composite flowerheads yellow and usually nodding at maturity. Fruit an achene with barbed awns.



HABITAT: Wet meadows, shrub swamps, marshes DISTRIBUTION: Throughout Ohio, most common in northern Ohio STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Bur-marigold is one of numerous species in the genus *Bidens* in Ohio. Most species in this genus lack ray flowers and are easy to miss. The fruit in this species and others in the genus have two barbed antenna-like extensions or awns for the seed to attach to fur or clothes. The flower heads are often nodding which helps separate it from other showy members of the group."

# COMMON BONESET Eupatorium perfoliatum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: SUNFLOWER (Asteraceae)

Perennial herb. Stems erect and densely covered with long, spreading hairs. Leaves opposite, lance-shaped, hairy, and joined around the stem (perforated). Flowerhead white in a flat-topped inflorescence. Fruit a black, windborne achene.



HABITAT: Wet meadows, wet prairies, marshes, shrub swamps, fens DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This species occurs in a variety of open to partial shaded wetlands. It is an important plant for a variety of insects. Common boneset is easily identified by its leaves which the bases surround the main stem. This species is an excellent species to include in a wetland restoration. Its common name refers to its use in treating breakbone fever, an illness that caused severe bone pain."

# GIANT SUNFLOWER Helianthus giganteus

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: SUNFLOWER (Asteraceae)

Perennial herb. Stems tall, erect, purple-red, and can be smooth or have coarse hairs. Lower leaves opposite, upper leaves alternate. Leaves are lance-shaped and rough-to-the-touch on upper surface with the petiole very short or absent. Inflorescence open and branched with large flowerheads. Ray and disk flowers yellow. Fruit a smooth, windborne achene.



HABITAT: Wet meadows, wet prairies, marshes DISTRIBUTION: Occasional statewide STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Our tallest sunflower often rises well above other forbs in wet meadows and prairies. It can reach heights of 10 feet!"

### SPOTTED JOE-PYE-WEED Eutrochium maculatum



BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: SUNFLOWER (Asteraceae)

Perennial herb. Stems erect, greenish-pink with purple spots. Leaves in whorls of 4-5, lance-shaped and toothed. Flowerheads made of dense clusters of pink-purple disk flowers in a flat-topped inflorescence. Fruit a black, windborne achene.



HABITAT: Wet meadows, wet prairies, fens DISTRIBUTION: Occasional in northern Ohio with a few locations south of I-70; most common in northeastern corner of the state. STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands

COMMERCIALLY AVAILABLE: YES

"Spotted Joe-pye-weed is a tall, attractive summer bloomer of open wetlands. Its large flowers attract long-tongue insects such as butterflies."

### AMERICAN SWEET-FLAG Acorus americanus

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: SWEET-FLAG (Acoraceae)

Perennial herb. Colony-forming, rhizomatous. Leaves basal, sword-like with 2-6 observable, equally raised parallel veins. Tiny yellow-green flowers on a cylindrical, finger-like spadix emitting from middle of an erect, green, and very leaf-like spathe. Produces fertile fruit.



HABITAT: Fens, wet meadows, marshes DISTRIBUTION: Rare in Ohio; most common in north central STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"American sweet-flag is rare in Ohio with scattered populations occurring north of 1-70. Its Eurasian cousin, sweet-flag (*Acorus calamus*,) was introduced into North America and now occurs throughout Ohio. It differs from the native sweet-flag by its glossy leaves that have a prominent, raised, single vein. The base of the plant releases a pleasant fragrance when bruised. Muskrats feed on the underground stems."

SWEET-FLAG Acorus calamus PHOTO BY SHAUN POGACNIK

PHOTO BY ANDREW GIBSON



### BLUE VERVAIN Verbena hastata

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: VERVAIN (Verbenaceae)

Perennial herb. Stems erect, stout, four-angled. Leaves opposite, lance-shaped to oblong, coarsely toothed with short petioles. Flowers blue-purple, small, and numerous. Flowers arranged in long, narrow, erect spikes at end of stems. Fruit a four-parted nutlet.



HABITAT: Wet meadows, wet prairies, marshes DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Due to its square stems, non-flowering plants may be confused with mints. Flowers are visited by a number of pollinators. It is the larval host for the Buckeye butterfly."



### PICKERELWEED Pontederia cordata

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: WATER-HYACINTH (Pontederiaceae)

Perennial herb. Colony-forming. Stems stout, erect, and bearing a single leaf. Leaves lance-shaped, entire, with a heart-shaped base and petioles that sheath the stem. Flowers numerous, blue-purple, and upper lips with two yellow spots. Borne on a spike subtended by a bract-like sheath.



HABITAT: Marshes, margins of lakes and ponds DISTRIBUTION: Frequent in northern Ohio STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Pickerelweed is one of the more attractive and recognizable aquatic plants in Ohio. Flowers attract bumblebees and some other pollinators. Waterfowl and other birds feed on the seeds. Pickerelweed provides shelter for wildlife by forming dense colonies. It is one of the more frequently sold water garden plants."



# SPATTERDOCK Nuphar advena

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: WATER-LILY (Nymphaeaceae)

Perennial aquatic herb. Leaves mostly emergent, heart-shaped, and usually held above water on erect stems. Submerged leaves are absent. Flowers borne singly, globular with 6 bright yellow-orange petals and a yellow center.



HABITAT: Marshes, lakes and ponds DISTRIBUTION: Common statewide; less common southwest STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Spatterdock is one of Ohio's more frequent aquatic plants of marshes and shallow waters of ponds. It is a food source for birds, turtles, muskrats, beavers, beetles, moths and other insects. Spatterdock forms large colonies with its large rhizomes. These rhizomes are a food source for beavers and muskrats."

# WHITE WATER-LILY Nymphaea odorata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

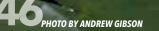
### GROUP: FORBS FAMILY: WATER-LILY (Nymphaeaceae)

Perennial aquatic herb. Leaves float on surface. Leaves round with narrow notch, green above, and red-purple undersides. Flowers with numerous white (rarely pink) petals and fragrant. Flowers open in morning and close by afternoon or in cloudy conditions.



HABITAT: Marshes, lakes and ponds DISTRIBUTION: Common in northern Ohio; less frequent south STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"White water lily is one of the most recognized aquatic plants. Flowers attract a number of different pollinators. The leaves are important for dragonflies and damselflies. Turtles feed on the leaves and fruits."



# COMMON ARROWHEAD Sagittaria latifolia

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: FORBS FAMILY: WATER-PLANTAIN (Alismataceae)

Perennial herb. Colony-forming. Stems usually erect. Leaves variable, arrowshaped, their lobes usually narrow in deeper water. Flowers clustered in round heads with three white petals, the male flowers above and females below. Fruit a winged achene.



HABITAT: Marshes, margins of lakes and ponds DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"A variety of pollinators visit common arrowhead's flowers. The leaves of this species are highly variable and can be confusing. The rare deer's-tongue arrowhead (*S. rigida*) has rounded leaves, rarely with some short lower lobes. This species occurs mostly in Lake Erie coastal marshes with a few scattered populations south, mostly in abandoned canals. Waterfowl feeds on the seeds of both species. Common arrowhead produces starchy tubers that are food for muskrats and beavers."



DEER'S-TONGUE ARROWHEAD Sagittaria rigida PHOTO BY MIA YEAGER





PHOTO BY RICK GARDNER

WATER-PLANTAIN Alisma subcordatum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: FORBS FAMILY: WATER-PLANTAIN (Alismataceae)

Perennial herb. Stems erect, smooth. Leaves basal, oval-shaped, on long petioles and appear thick and fleshy. Flowers small, white with three petals. Appear on branched, diffuse inflorescence. Fruit a flat ring of achenes.



PHOTO BY SHAUN POGACNIK

HABITAT: Marshes, wet meadows, shrub swamps, riverine wetlands DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Water-plantain is a very common semi-aquatic plant occurring in a variety of wetland types. Its fruit is an important food source for waterfowl. Great water-plantain (*Alisma triviale*) is larger in stature, has a bluish tinge to the stem, and flowers twice the size of water-plantain. It is also less common, occurring almost entirely north of I-70, especially near Lake Erie."



BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

GROUP: FORBS FAMILY: WATER-SHIELD (Cambombeaceae)

Perennial aquatic herb. Leaf blades bright green, oval-shaped, the petiole attached at center of blade underside. Leaves float on the surface. Underwater parts covered in slippery jelly-like mucilage. Flowers reddish-purple.



HABITAT: Ponds, lakes, marshes DISTRIBUTION: Northeastern Ohio with scattered locations elsewhere STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"The floating leaves may at first appear to be a pondweed (*Potamogeton*) or a water-lily. The jelly-like substance on the foliage is unmistakable and it's very slimy! Water-shield provides habitat for fish and a food source for waterfowl. This species has a worldwide distribution."



# **AMERICAN REED** *Phragmites americanus*

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Rhizomatous perennial forming loose colonies. Stems stout, erect, smooth, and red colored. Leaves green to yellowish-green with loose sheathes. Flowering head a feather-like, many-branched panicle that becomes fluffy with age.



HABITAT: Wet meadows, wet prairies, marshes, fens DISTRIBUTION: Rare in Ohio; most frequent in counties bordering Lake Erie with scattered locations south to west central Ohio STATUS: (OBL) (Obligate wetland) - Almost always occurs

in wetlands under natural conditions

"This rare species is often confused with the non-native, common reed (*Phragmites australis*,) which is one of the worst non-native, invasive species in Ohio and throughout North America. Common reed has persistent sheaths, lacks the red stem nodes and is a more robust plant compared to American reed. American reed was likely a common grass of northern wetlands prior to habitat alteration and loss, plus the invasion of common reed."

### CANADA BLUEJOINT Calamagrostis canadensis

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Perennial. Stems erect and in small clumps. Leaves flat, green to blue-green, and rough to the touch. Flowering head an open panicle with upright, spreading branches.



HABITAT: Wet meadows, wet prairies, fens, marshes DISTRIBUTION: Occasional to rare north to south. STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Canada bluejoint is an attractive grass that forms solid colonies in open, wet grasslands. Rarely grows in forested wetlands. Its habit of forming solid colonies and good height provides important shelter for a variety of wildlife. It is sometimes confused with the non-native, invasive reed canary grass (*Phalaris arundinacea*), but it's smaller in size and has narrower leaves."

# FOWL MANNA GRASS Glyceria striata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Loosely clumped perennial. Stems erect and slender. Leaves can be flat or folded and smooth. Flowering heads an open, loose panicle with lax-drooping branches. Spikelets green-purple with 3-5 florets.



HABITAT: Wet meadows, marshes, fens, shrub swamps, swamp forests, riverine wetlands, vernal pools DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"One of our most common wetland grasses occurring in a wide variety of habitats. It is an early colonizer of shaded wetlands especially. Judging by its common name it is important to waterfowl; however, it is not an important food source and waterfowl may not feed on the seeds at all."

# **RATTLESNAKE MANNA GRASS** Glyceria canadensis

BLOOM

JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Perennial. Stems erect and single or a few together. Leaves rough to the touch with a prominent midvein. Flowering head an open panicle with airy, drooping branches. Spikelets mostly near tips of branches. Spikelets a cluster of florets that turn brown with maturity.



HABITAT: Shrub swamps, wet meadows, marshes **DISTRIBUTION:** Occasional in northern Ohio **STATUS:** OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This attractive wetland grass is uncommon in Ohio. When in fruit, it is very distinctive and not hard to miss (for a grass). It is one of the more available wetland grasses available in the nursery trade due to its attractive appearance."



# RICE CUT GRASS Leersia oryzoides

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Loosely clumped perennial. Stems weak and usually sprawling. Leaves and sheathes have stiff, sharp hairs that can cut bare skin. Flowering head an open, pyramidal panicle with lax branches. Spikelet lemmas covered with bristly hairs.



HABITAT: Wet meadows, marshes, shrub swamps, swamp forests DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This common wet meadow grass has sharp hairs to protect its foliage and stems. These hairs can cause dozens of small cuts to exposed skin. It should not be removed from a wetland as the grass is an important food source for waterfowl and other wildlife. It is not a true rice. Its grains resemble rice grains."

# ROUGH BARNYARD GRASS Echinochloa muricata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: GRAMINOIDS FAMILY: GRASS (Poaceae)

Annual. Somewhat weedy in nature. Stems erect, round, and smooth. Leaves green-blue green. Flowering head a green to purple (sometimes dark purple) branched, spreading panicle. Spikelets with long awns.



HABITAT: Wet meadows, marshes, edges of lakes and ponds DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: NO

"Rough barnyard grass (*E. muricata,*) is the most wide spread of the two native barnyard grasses. Walter's barnyard grass (*E. walteri*) is found mostly in counties bordering Lake Erie. This grass is the more attractive of the two. Both species reach a large size and can often tower above other vegetation. Both species are 'seedbank' species and found on mudflats."

### DUDLEY'S RUSH Juncus dudleyi

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: **GRAMINOIDS** FAMILY: **RUSH** (Juncaceae)

Clumped perennial. Stems erect and round in cross-section. Leaves basal, not septate, and their auricles rounded, thick, and leathery. Terminal inflorescence that is compact to somewhat open. Flowers perfect and arranged singly. Fruit an ellipsoid capsule with tiny seeds and tepals longer than capsule.



LARGE PATH RUSH

Juncus anthelatus PHOTOS BY SHAUN POGACNIK HABITAT: Wet meadows, marshes, fens DISTRIBUTION: Common statewide STATUS: (FACW-) (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Dudley's rush is one of our more common rushes. Large path rush (*J. anthelatus*) is a recently described species that is very similar to Dudley's rush and grows in similar habitats. It has a larger, more diffuse flowering cluster than its close relative (see inset). It is less common occurring throughout most of Ohio except southeast."

56



# SOFT RUSH Juncus effusus

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: **GRAMINOIDS** FAMILY: **RUSH** (Juncaceae)

Densely clumped perennial. Stems erect and round in cross-section. Leaves reduced to bladeless sheathes. Flowers in many-flowered clusters appearing from the side of the stem near its apex. Fruit a capsule with tiny seeds and tepals as long as capsule.



HABITAT: Wet meadows, wet prairies, marshes, shrub swamps, swamp forests DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Soft rush is highly variable and occurs around the world. In Ohio, we have only subspecies solutus. A new species, Pylae's rush (Juncus pylaei) has recently been recognized that is very similar to soft rush. It has fewer ridges than soft rush (10-25 compared to 25-50) than soft rush. Both species provide food and shelter for birds and other wildlife."

# BLUNT SPIKE-RUSH Eleocharis obtusa

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: **GRAMINOIDS** FAMILY: **SEDGE** (Cyperaceae)

Clumped, fibrous-rooted annual. Stems slender and round in cross-section. Spikelets ovate to cylindric, wider than the stem, and green turning brown in color. Achenes lens-shaped, brown, with a flattened-triangular tubercle. Bristles present.



HABITAT: Wet meadows, wet prairies, marshes, shrub swamps, margins of lakes and ponds, riverine wetlands DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Blunt spike-rush is our most common spike-rush growing about any place, where water stands for several months. It can vary considerably in size based on habitat conditions and when a seed germinated. Engelmann's spike-rush (*Eleocharis engelmannii*) looks very similar but has small or no bristles on the achene or fruit and the tubercle is flattened."

PHOTOS BY ANDREW GIBSON

Eleocharis engelmannii

**ENGELMANN'S** 

SPIKE-RUSH

### **DARK GREEN BULRUSH** Scirpus atrovirens

JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC BLOOM

#### GROUP: GRAMINOIDS FAMILY: SEDGE (Cyperaceae)

Loosely clumped perennial. Stems three-angled and leafy. Leaves mostly on lower half of stem and ascending. Spikelets many, crowded into rounded heads at end of the stem and surrounded by long, leaf-like bracts. Achenes light colored, and triangular bearing bristles.



**GREEN BULRUSH** cirpus hattorianus PHOTO BY PAT DEERING



PHOTO BY ANDREW GIBSON

HABITAT: Marshes, margins of lakes and ponds **DISTRIBUTION:** Common statewide: most common in northern counties adjacent to Lake Erie **STATUS:** OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

This common leafy bulrush has two very similar species, green bulrush (Scirpus hattorianus) and Georgia bulrush (Scirpus georgianus.) Green bulrush differs from dark green bulrush by having few raised cross connections (botanical term: septate-nodulose) at the base of its sheath compared to many on dark green bulrush. All three of these species provide food and shelter for waterfowl and other wildlife.



# FRINGED SEDGE Carex crinita

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: **GRAMINOIDS** FAMILY: **SEDGE** (*Cyperaceae*)

Large, densely clumped perennial. Leaf sheathes are smooth to the touch. Spikes narrowly cylindrical and drooping on slender stalks. Perigynium green, round in cross-section and abruptly tapered to a tiny beak. Female scales have a long, conspicuous awn. Achene lens-shaped.



HABITAT: Wet meadows, marshes, shrub swamps, swamp forests, riverine wetlands DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"This graceful sedge is a frequent sedge of partially shaded to fully shaded wetlands and less common in open, wet meadows. The rare variety (*var. brevicrinis*) is known from south central and extreme northeast parts of the state."



# GRAY'S SEDGE Carex grayi

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: **GRAMINOIDS** FAMILY: **SEDGE** (Cyperaceae)

Perennial. Stems single or forming small clumps and rough to the touch on angles. Spikes with terminal male flowers, the female flower rounded with leaf-like bracts. Perigynium 10-30 per spike that spread in all directions, are strongly nerved, dull (not satiny), and tapered to a pointed beak. Achenes with persistent style.



HABITAT: Swamp forests, shrub swamps, vernal pools DISTRIBUTION: Common statewide STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Gray's sedge with its mace-shaped fruiting heads, it is the most recognizable sedge in our flora. The inflated perigynia allows the achene or seed float in water to new locations. It is most common in riverine bottomland wetland systems. This sedge is named in honor of one of North America's most famous botanists Asa Gray. Bladder sedge (*Carex intumescens*) is a common swamp forest species often bordering vernal pools. It differs from Gray's sedge by not having perigynia radiating down from central axis (see photo inset.)"



# LAKE SEDGE Carex lacustris

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: GRAMINOIDS FAMILY: SEDGE (Cyperaceae)

Large, clumped perennial. Stems erect, three-angled, rough to the touch. Leaves about or longer than stems with a V-shaped ligule. Spikes with male terminal flowers, the female spike cylindrical, stalkless, and upright with long, leaf-like bracts. Perigynium densely packed, green-olive, short female scales, and the body with raised nerves. Achenes three-angled.



HABITAT: Swamp forests, shrub swamps, wet meadows DISTRIBUTION: Common northern Ohio; rare or absent south STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Lake sedge is important for food source for birds and various insects. It also provides shelter for small mammals and birds. Sweet marsh sedge (*Carex hyalinolepis*) is very similar to lake sedge but differs in having hairy basal sheaths and a rounded ligule. Sweet marsh sedge is rare in Ohio, occurring in northern Ohio mostly in counties bordering Lake Erie. Both species can tolerate long periods of inundation."

# NORTHERN FOX SEDGE Carex stipata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: **GRAMINOIDS** FAMILY: **SEDGE** (*Cyperaceae*)

Densely clumped perennial. Stems slightly winged and three-angled. Leaf sheaths cross-wrinkled on front. Spikes with male terminal flowers, the female spikes numerous and grouped into dense heads. Fruiting spikes start green and mature to dull brown color. Perigynium spreading, long-tapered to the tip, and spongy-thickened at base. Achenes lens-shaped.



HABITAT: Swamp forests, shrub swamps, vernal pools, wet meadows DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Northern fox sedge is a common sedge of many types of wetlands. The large variety (var. *maximum*) occurs sparingly in south central Ohio near the Ohio River. The less common and more conservative, smooth-sheathed fox sedge (*C. laevivaginata*) has a smooth upper sheath."

SMOOTH-SHEATHED FOX SEDGE

Carex laevivaginata

PHOTO BY ANDREW GIBSON

### SOFT-STEM BULRUSH Schoenoplectus tabermaemontani

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: **GRAMINOIDS** FAMILY: **SEDGE** (*Cyperaceae*)

Perennial. Often colony-forming. Stems stout, smooth, erect, and round in cross-section. Easily flattened between two fingers. Leaves reduced to sheathes on stem. Spikelets red-brown in color, single or in drooping clusters of 2-5 at end of stalks. Achene flat on one side, convex on other and brown-black.



HABITAT: Marshes, margins of lakes and ponds, wet meadows DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Soft-stem bulrush can tolerate salty water and has colonized roadside ditches throughout the state. The underground stems or rhizomes help buffer shorelines of lakes and ponds from wave action. This species is important for wildlife in a number of ways, including nesting habitat for waterfowl and other birds."

# TUSSOCK SEDGE Carex stricta

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: GRAMINOIDS FAMILY: SEDGE (Cyperaceae)

Densely clumped perennial forming large, raised hummocks. Stems threeangled, rough-to-touch, and longer than the leaves. Fruiting spikes narrow cylindric with the lowest bract leaf-like. Perigynium nearly flat to convex on both sides, oval in shape, and green turning brown. Achene lens-shaped.



HOTO BY SHAUN POGACNIK

HABITAT: Wet meadows, fens, swamp forests DISTRIBUTION: Most common in west central and northeast parts of the state; rare or absent southern Ohio STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Tussock sedge is an important component of sedge meadows and fens. Its habit of forming dense tussocks in wet meadows arehard on the ankles. Tussock sedge may be called "ankle-sprain sedge" for that reason. Its latter-like fibrous-sheaths are a quick-identification field character."

# SILKY DOGWOOD Cornus amomum

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: SHRUBS FAMILY: DOGWOOD (Cornaceae)

Multi-stemmed shrub. Often colony-forming. Bark gray, smooth turning rough with age. Twigs green-purple-red turning gray with age and a brown pith. Leaves alternate, simple, 4-6 lateral veins on each side and finely hairy underneath. Flowers small, creamy white in flat-topped clusters. Fruit a round, blue-white berry-like drupe.



HOTO BY ANDREW GIBSON

HABITAT: Shrub swamps, swamp forests, wet meadows and edges of marshes and fens DISTRIBUTION: Occasional throughout the state. Most common in the northeastern corner. STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Silky dogwood can form dense thickets and provide shelter for wildlife. The bright, blue berries are a favorite food source for many birds. Red-osier dogwood (C. sericea) is another frequent dogwood and can be identified by its bright red branches and clonal habit."

### WINTERBERRY Ilex verticillata

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: **SHRUBS** FAMILY: **HOLLY** (Aquifoliacaeae)

Shrub to 10-15 feet tall. Bark smooth and grayish with pale lenticels. Twigs smooth, start green and turn gray-brown. Leaves alternate, simple, and finely toothed. Flowers small, white, and borne in the leaf axils. Male and female flowers usually on separate plants. Fruit a red-orange berry-like drupe that persists into winter.



HABITAT: Shrub swamps, swamp forests, edges of bogs, wet meadows, vernal pools DISTRIBUTION: Most common in northern Ohio; scattered southern part of the state STATUS: FACW+ (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This attractive shrub is one of the few native Ohio shrubs regularly sold in nurseries. The attractive red berries of summer to fall are easily found by birds. Winterberry grows in acidic soils."

### **COMMON ELDERBERRY** Sambucus canadensis

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: **SHRUBS** FAMILY: **HONEYSUCKLE** (Caprifoliaceae)

Thicket forming shrub to 10 feet tall. Stems soft and smooth when young, becoming warty and gray-brown with age. Leaves opposite and pinnately compound with 5-11 (typically 7) leaflets. Flowers small, white, and numerous that are borne on large, flat-topped clusters in late spring. Fruit a round, black-purple, berry-like drupe, edible.



PHOTO BY JUDY SEMROC

HABITAT: Marshes, shrub swamps, wet meadows, swamp forests, stream banks, riverine wetlands and margins of lakes and ponds DISTRIBUTION: Common statewide STATUS: FACW- (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Common elderberry provides nectar to a variety of pollinators and the fruits are prized by birds and other wildlife. For wetland creation/restoration project, common elderberry is a good shrub to include since it tolerates a variety of soil types and moisture levels. It will not grow in long standing water."



### **BUTTONBUSH** Cephalanthus occidenatlis

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: SHRUBS FAMILY: MADDER (Rubiaceae)

Shrub or small tree. Bark and branches green-brown turning gray-brown with age and covered with lenticels. Leaves opposite, sometimes in whorls of three. Leaves bright green and shiny above with entire-wavy margins. Flowers small, perfect, and white in many-flowered round heads with their styles projecting out. Fruit a round head of reddish-brown cone-shaped nutlets.



HABITAT: Marshes, shrub swamps, swamp forests, vernal pools, stream banks, and margins of lakes and ponds, riverine wetlands DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Easily recognizable by its white, spherical flowers, buttonbush is a commonly occurring shrub in a variety of wetland types. Ducks and other wildlife feed on the seeds and a number of birds nest and hide in its dense thickets. Buttonbush is also a host plant for sphinx moths. Other wildlife such as frogs, reptiles, salamanders, and various mammals use the thickets for shelter. It a great shrub for wetland restoration projects. Our buttonbush is the only species in the western hemisphere, other species occur in Africa and Asia."

### **NINEBARK** *Physocarpus opuifolius*

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: SHRUBS FAMILY: ROSE (Roseaceae)

Shrub. Many-branched and growing to 10 feet tall. Bark brown-gray and smooth becoming shaggy with age. Leaves alternate, simple, mostly 3-lobed, and irregularly toothed. Flowers white and five-parted in clusters at branch tips. Fruit a reddish-brown pod, clusters drooping.



HABITAT: Fens, wet meadows DISTRIBUTION: Occasional throughout most of the state STATUS: FACW- (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"This attractive shrub is one of the few native Ohio shrubs regularly sold in nurseries. There are a number of cultivars in addition to the wild variety."



# SWAMP ROSE Rosa palustris

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: SHRUBS FAMILY: ROSE (Roseaceae)

Prickly, many-branched shrub. Twigs red-brown, smooth, with prickles at the nodes (absent between). Leaves alternate, pinnately divided with typically 7 leaflets. Leaf petioles present with narrow stipules. Flowers pink with five petals and occur singly at end of branches or in small clusters. Fruit a red-orange hip with gland-tipped hairs.



HABITAT: Shrub swamps, marshes, swamp forests, edges of bogs, wet meadows DISTRIBUTION: Common statewide STATUS: OBL (Obligate wetland) - Almost always occurs in wetlands under natural conditions COMMERCIALLY AVAILABLE: YES

"Swamp rose has large pink, fragrant flowers that provide some beautiful color in early summer and are frequented by a number of pollinators. It can be distinguished from the non-native multiflora rose (*R. multiflora*) by its deep red to purplish stems and straight thorns. It is the only rose found in wetlands in Ohio."



## PUSSY WILLOW Salix discolor

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: SHRUBS FAMILY: WILLOW (Salicaceae)

Shrub or small tree. Single or multiple trunks. Bark brown-gray and furrowed when older, smooth and reddish-gray when young. Leaves dark green and smooth above, the undersides white-waxy (hairy when young). Catkins appear before leaves in spring. Fruit a hairy capsule.



HABITAT: Marshes, shrub swamps, wet meadows, fens, riverine wetlands, stream banks, and margins of lakes and ponds DISTRIBUTION: Common statewide STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Pussy willow is widespread and very common shrub or small tree of a variety of wetlands. The leaves can be variable and it may be confused with similar willows. It is one of 15 native willows in Ohio. Pussy willow is a host plant for viceroy and mourning cloak butterflies. This willow also flowers in late winter to early spring and is an important pollen source for early pollinators. Pussy willow and its cultivars are sold in nurseries. It is also a good species for stream restoration/bank stabilization projects."



# **PIN OAK** Quercus palustris

#### BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

#### GROUP: TREES FAMILY: BEECH (Fagaceae)

Medium to large tree. Can reach 75+ feet in height and 3+ feet in diameter. Crown narrowly rounded with drooping lower branches. Bark light to dark brown and very shallowly furrowed. Buds smooth and clustered at branch tips. Leaves alternate and divided into 5-7 bristle-tipped lobes. Acorns small, dark brown with light brown vertical stripes.



HABITAT: Swamp forests, vernal pools DISTRIBUTION: Common statewide STATUS: FACW (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"One of the faster growing oaks, this species will quickly colonize wet meadows if close by. One of pin oaks' distinguishing characteristics is the lower branches that typically point downward and often remain after dying. Pin oak is a frequent tree in swamp forests and margin of vernal pools."



### AMERICAN ELM Ulmus americana

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: TREES FAMILY: ELM (Ulmaceae)

Medium to large tree. Can reach 75+ feet in height and 3+ feet in diameter. Crown broadly rounded to flat-topped. Bark gray-brown and furrowed that becomes plated with age. Leaves alternate and simple, the margins coarsely double-toothed. Leaf base strongly asymmetrical. Fruit a one-seeded oval with winged, hairy margins.



HABITAT: Swamp forests, stream banks, vernal pools DISTRIBUTION: Occasional to common statewide STATUS: FACW- (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

"Canopy size trees of American elm are less common today due to Dutch elm disease; however, you can still come across this species in swamp forests, floodplains and moist, rich woods. The tree is a major component of elm-ash-maple swamp forests, a common forested wetland in Ohio. The rare rock elm (*Ulmus thomasii*) resembles American elm and it occasionally occurs with it in swamp forests. This tree often has corky twigs which helps identify it in the field."

### AMERICAN SYCAMORE Platanus occidentalis

BLOOM JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

### GROUP: TREES FAMILY: PLANE-TREE (Platanaceae)

Large tree. Can reach 100+ feet in height and 6+ feet in diameter. Crown broad and spreading. Bark reddish brown when young, breaks into thin, flat sections as it ages which fall away to reveal greenish-white inner bark. Twigs smooth and light brown. Leaves alternate and divided into 3 or 5 sharp-pointed lobes. Fruit a round, drooping brown ball.



HABITAT: Stream banks, swamp forests DISTRIBUTION: Common statewide STATUS: FACW- (Facultative wetland) - Usually occurs in wetlands, but occasionally found in non-wetlands COMMERCIALLY AVAILABLE: YES

American sycamore is most common along streams and rivers and plays an important role in stabilizing stream banks, but occasionally occurs in swamp forests especially young stands. Historical accounts of some of the old-growth individuals of this massive tree are hard to thathum today. Some trunks were reported to be large enough for a home for early pioneers. A historical sycamore tree in Scioto County was reported to be large enough to shelter 13 men on horseback. American sycamore is an important tree for aquatic and terrestrial wildlife, including the Bald Eagle.

# **GLOSSARY**

ACHENE: a one-seeded, dry, indehiscent fruit with the seed coat not attached to the mature wall of the ovary.

**ANNUAL**: completes its entire life cycle in one growing season then dies.

APPRESSED: lying flat or pressed against the surface.

AQUATIC: growing or living in water.

AURICLE: a small, ear-like appendage, usually at the base of a leaf.

**AWN**: slender bristle or hair, usually at the tip of a structure.

BASAL: Arising at the base of the plant.

BERRY: pulpy or juicy, multi-seeded indehiscent fruit.

**BRACT**: a reduced leaf at the base of a flower or inflorescence.

BRISTLE: a hair-like projection.

CALYX: outer layer of a flower's perianth.

**CAPSULE**: a dry, dehiscent, fruit splitting into three or more parts.

**CATKIN**: spike-like inflorescence of same-sexed flowers (male or female).

**COMPOUND**: of more than two similar parts (e.g. compound leaf).

CONCAVE: curved inward.

CONVEX: curved outward.

COROLLA: collectively, all the petals of a flower.

DEHISCENT: opening at maturity.

**DIFFUSE**: loosely branching or spreading.

**DISK**: in the Asteraceae, the central part of the flowerhead, composed of tubular flowers.

**DRUPE**: a fleshy fruit with a single large seed (e.g. a cherry).

EMERGENT: growing out of and above a water surface.

EPHEMERAL: lasting for only a short time.

**FACULTATIVE (FAC)**: Equally likely to occur in wetlands and non-wetlands.

FACULTATIVE WETLAND (FACW): Usually occurs in wetlands, but occasionally found in non-wetlands.

**FLORET**: a small flower in a dense cluster of flowers; common in grasses and Asteraceae.

**FOLLICLE**: a dry, dehiscent fruit that splits along one side at maturity.

FROND: the leaf of a fern.

GLANDULAR: bearing glands; often on tips of hairs.

GLOBULAR: round, spherical.

HIP: the fleshy, red fruit of a rose.

HUMMOCK: a small, raised mound.

**INDEHISCENT**: not opening at maturity.

INFLORESCENCE: a cluster of flowers.

KEEL: a prominent ridge, like the keel of a boat.

LANCE-SHAPED: broadest near the base and tapering to the tip.

**LEAF AXIL**: the point of the angle between a stem and a leaf.

LEAFLET: individual leaf in a compound leaf.

LEMMA: in grasses, the lower bract enclosing a flower.

**LENTICEL**: a corky, porous spot on bark; for gas exchanges.

**LIGULE**: a tongue-like appendage at the juncture of the leaf sheath and blade in sedges and grasses.

LINEAR: narrow and elongate with ± parallel sides.

MUCILAGE: slime or slime-like material.

NERVE: a vein or ridge.

NODE: point on a stem at which a leaf or branch arises.

NUTLET: a tiny, one-seeded indehiscent fruit.

**OBLIGATE WETLAND (OBL)**: Almost always occurs in wetlands under natural conditions

 $\textbf{OBLONG}: \text{ longer than broad with } \pm \text{ parallel sides}.$ 

OVATE: egg-shaped.

**PALMATE**: lobed or divided in a palm or hand-like manner.

PALMATELY COMPOUND: leaflets all attached at a common point.

**PANICLE**: loosely structured compound inflorescence of pedicellate (stalked) flowers.

PEDICEL: supporting stalk of a single flower.

PERENNIAL: Living for multiple years.

**PERFECT FLOWER**: a bisexual flower bearing both male and female parts.

**PERIANTH**: the cup a flower sits in; the calyx and corolla.

**PERIGYNIUM**: the membranous or papery sack-like structure that envelopes the achene in the sedge genus Carex (plural: perigynia).

PETIOLE: supporting stalk of a leaf.

**PINNA**: The primary or first division in a fern frond (plural: pinnae).

**PINNATELY COMPOUND**: leaflets arranged on both sides of a central axis (rachis); terminal leaflet usually present.

PITH: the soft tissue in the center of stems.

**RACEME**: an elongate, unbranched inflorescence with pedicellate (stalked) flowers.

RACHIS: central axis or stem of a leaf or inflorescence.

**RAY**: in Asteraceae, the petal-like outer flowers of the flowerhead.

RHIZOMATOUS: with subterranean modified stems.

**RHIZOME**: an underground stem with nodes, buds, and roots.

SEPAL: a division of a calyx.

SEPTATE: with cross-partitions; jointed.

SESSILE: attached without a stalk.

**SHEATH**: tube-shaped membrane around a stem, especially for part of the leaf in sedges and grasses.

**SORI**: clusters of sporangia borne on either the margins or undersurface of fern leaves.

SPADIX: a thick, fleshy spike in the Araceae.

**SPATHE**: a leafy bract that subtends and often partially surrounds an inflorescence (e.g. a spadix).

**SPIKE**: a group on sessile (unstalked) flowers along an unbranched, elongated stalk.

**SPIKELET**: a small spike; the flower cluster (inflorescence) of grasses and sedges.

SPORANGIA: the spore-producing structure of a fern.

STAMEN: the pollen-bearing organ of a flower.

**STIPULE**: a leaflike outgrowth (usually paired) at the base of a leaf stalk.

**STYLE**: the stalk-like part of the pistil between the ovary and the stigma.

**TEPAL**: sepals or petals not differentiated from one another (e.g. lilies and rushes).

TUBERCLE: a small swelling or projection.

**UMBEL**: an inflorescence in which multiple pedicels arise from a common point (e.g. Apiaceae).

WHORL: leaves arranged in a circle around the stem.



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For more information about Ohio's native wildlife, please contact the Ohio Division of Wildlife: **1-800-WILDLIFE** 

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# OTHER OHIO DIVISION OF WILDLIFE BOOKLETS

Pub 5127 - Stream Fishes of Ohio Pub 5140 - Common Spiders of Ohio Pub 5204 - Butterflies & Skippers of Ohio Pub 5320 - Dragonflies & Damselflies of Ohio Pub 5334 - Sportfish of Ohio

#### Pub 5344 - Mammals of Ohio Pub 5348 - Amphibians of Ohio Pub 5349 - Warblers of Ohio Pub 5354 - Reptiles of Ohio Pub 5386 - Raptors of Ohio

Pub 5414 - Common Birds of Ohio Pub 5418 - Waterbirds of Ohio Pub 5423 - Owls of Ohio Pub 5467 - Moths of Ohio Pub 5473 - Common Lichens of Ohio Pub 5488 - Common Bees & Wasps of Ohio Pub 5494 - Spring Wildflowers of Ohio Pub 5509 - Trees of Ohio Pub 5517 - Freshwater Mussels of Ohio Pub 5526 - Millipedes of Ohio



**DIVISION OF NATURAL AREAS & PRESERVES DIVISION OF WILDLIFE OHIO DEPARTMENT OF NATURAL RESOURCES** 



PARTNERS IN CONSERVATION

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THE FILTERING PROCESS OF WETLANDS IMPROVES WATER QUALITY.



The H2Ohio Fund will help ensure safe and clean water across Ohio by providing the resources necessary to plan, develop, and implement targeted long-term water solutions.



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