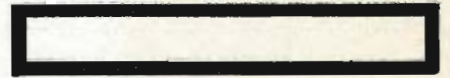


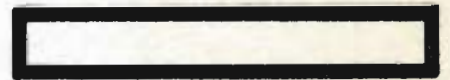
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**Common Aquatic Weeds
of Kansas Ponds
and Lakes**

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Common Aquatic Weeds

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Common Aquatic Weeds of Kansas Ponds and Lakes

By James S. Wilson* and Robert J. Boles*

Leafy aquatic plants are found in clear ponds and lakes throughout Kansas. Some of these supply small amounts of food for waterfowl and fishes. Frequently they provide hiding places in which small fish, especially bluegills and green sunfish, can escape from predator fish such as bass. Not only does this reduce the food available for these game fish, but it also allows the bluegill and sunfish to become over-populated, resulting in a stunting of all the fish in the area. Furthermore, these aquatics use the nutrients that otherwise would be available for the production of phytoplankton, the microscopic plants which serve as the basis for the food pyramid in a body of water. These aquatics often form heavy mats during the summer months which may die in the winter under a cover of ice and snow. This results in decay which reduces the oxygen content in the water to a low level and causes fish-kill. In addition, and not of least importance to the fisherman, is the interference with fishing due to the entanglement of baits and lures in the vegetation. Hence, even though leafy aquatic plants may provide a small amount of food for certain waterfowl and fish, most are of little value in our ponds and lakes.

In general, these plants can be controlled by properly applying modern herbicides such as 2, 4-D and 2, 4, 5-T. It is important, however, that the aquatic be accurately identified so that the best control methods can be used. This plant identification key is designed to facilitate the recognition of some of the more common aquatic plants that may be encountered in Kansas ponds and lakes. Included for each species is the family, generic and common name, distinguishing characteristics, general distribution in Kansas, and an illustration.

*Dr. James S. Wilson and Dr. Robert J. Boles are both Associate Professors of Biology at Kansas State Teachers College, Emporia.



Bladderwort
Uticularia spp.
2-12 in. high
Flower: yellow

A fine, net-like, submerged aquatic plant with numerous small dark sacs on the much-branched stem. The sacs act as traps for minute swimming organisms which live in the water. Infrequent, but presumably throughout the state in quiet waters.



Sedge or Carex

Carex frankii

6-18 in. high

Flower: green to brown

A grass-like plant with small green flowers (soon turning brown) usually borne at the tips of the stems in bullet-shaped heads. Common in shallow water and wet areas in the eastern half of the state. Many species of *Carex* occur in the state and several of these which are closely associated with water are used for food by various waterfowl.



Cyperus

Cyperus strigosus

4-24 in. high

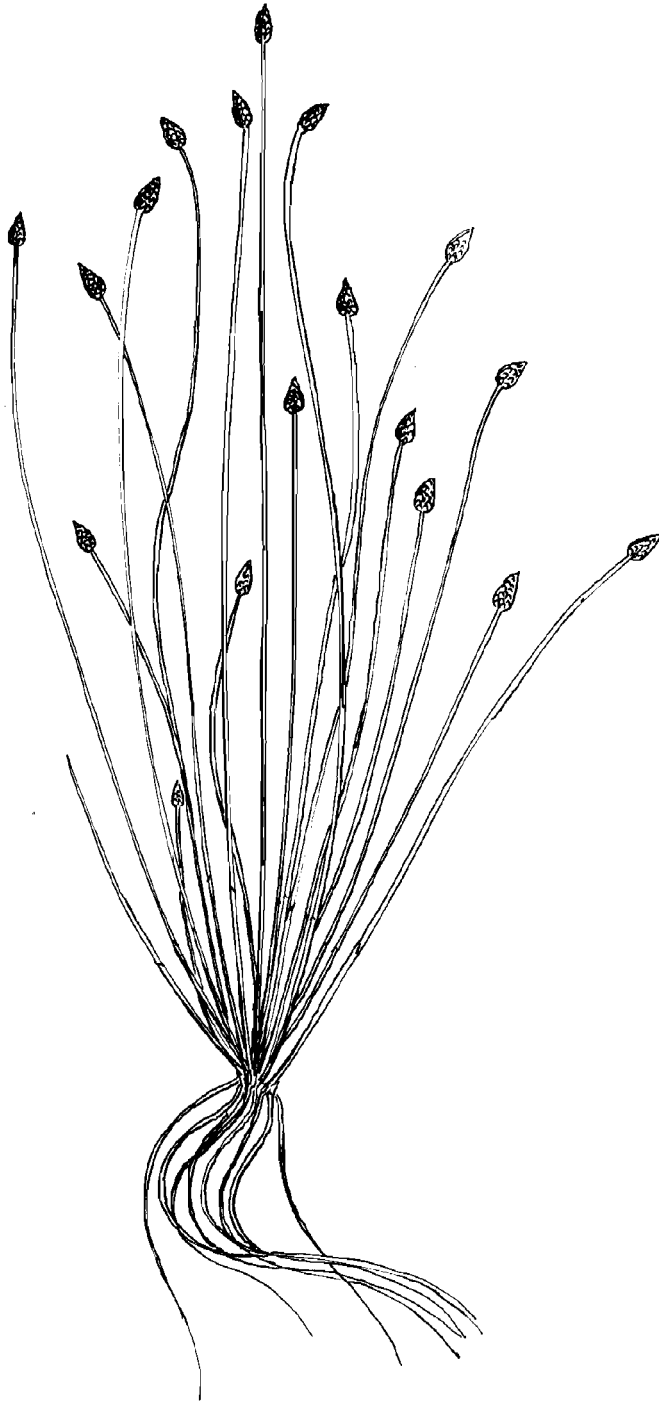
Flower: green to brown

This grass-like plant has extremely small green flowers (soon turning golden yellow in age) which are borne in structures called spikelets and these in rays or branches. The tiny seeds which are enclosed in the minute golden scales are eaten by many species of waterfowl. Common in the eastern two-thirds of the state.



Cyperus
Cyperus ferruginescens
2-24 in. high

This sedge is most easily recognized by its green or usually grayish-brown cluster of scales which house the small flowers and fruits. It occurs most frequently in dense colonies in shallow waters or mudflats. The small seed-like fruits of this and other Cyperus are eaten by many species of birds. Common throughout the state.



Spikesedge or Eleocharis

Eleocharis obtusa

4-18 in. high

Flower: green to brown

This species, as all species of *Eleocharis*, lacks leaves (blades) and is easily recognized by its green leafless stems and single terminal cluster of flowers. The seeds, which are quite small, are used by waterfowl as a source of food. Common in shallow waters, especially along the edges of rivers and streams, in the eastern half of the state.



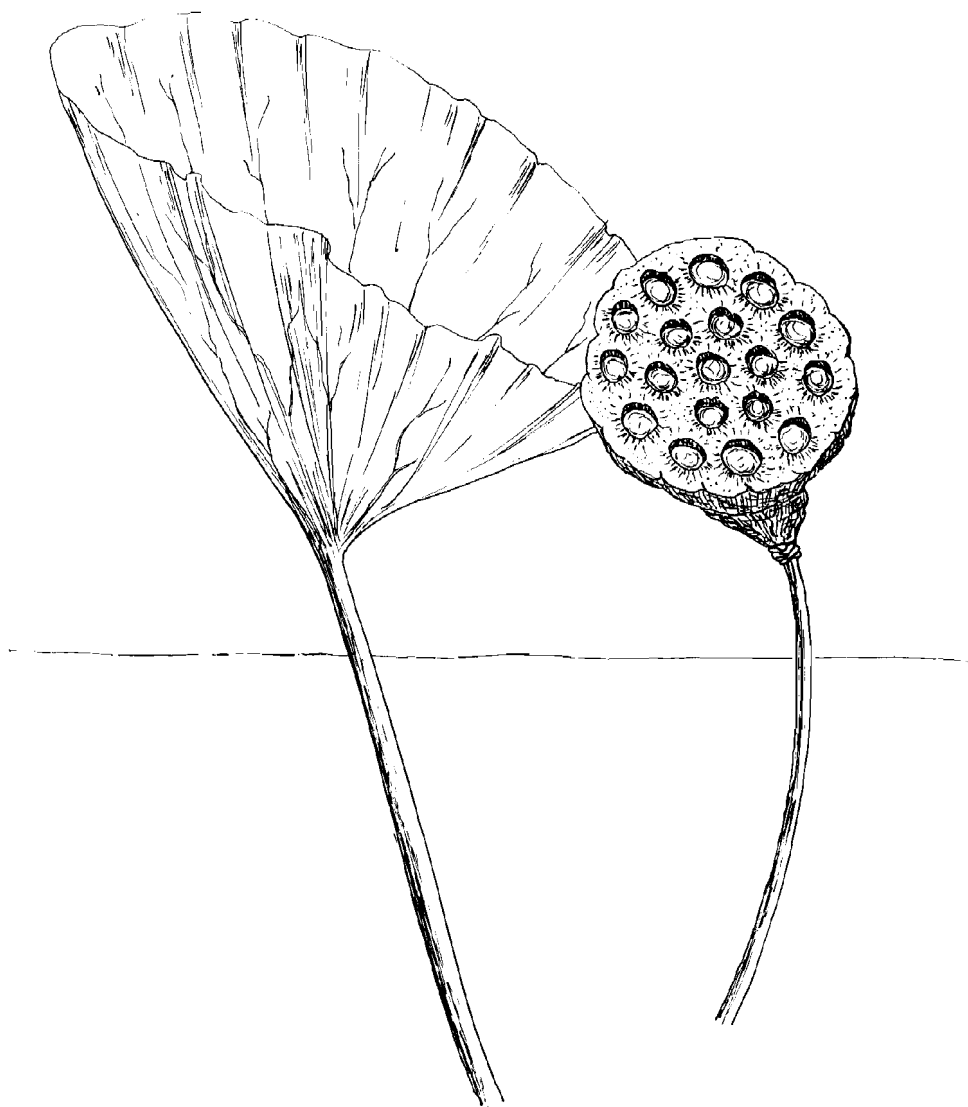
Rush or Juncus

Juncus torreyi

6-18 in. high

Flower: green to dark brown

The rushes, which often appear quite similar to the sedges and grasses, can be identified by their six small green or brown petals (absent in grasses and sedges) which partially enclose a cylindrical seed case. In this species the green flowers (turning brown with age) are borne in dense head-like clusters. Common in shallow waters throughout the state.



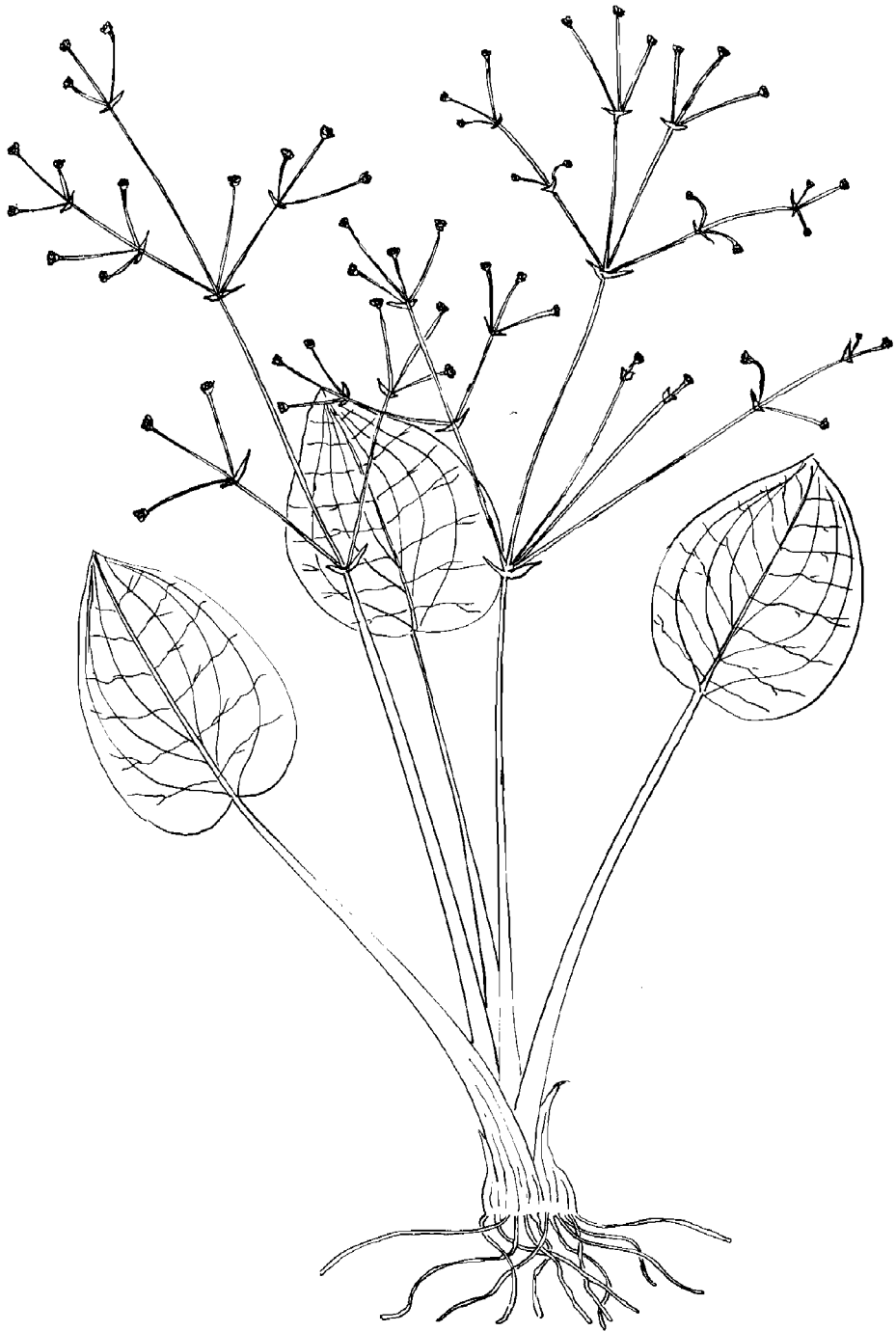
American Lotus

Nelumbo lutea

18-36 in. high

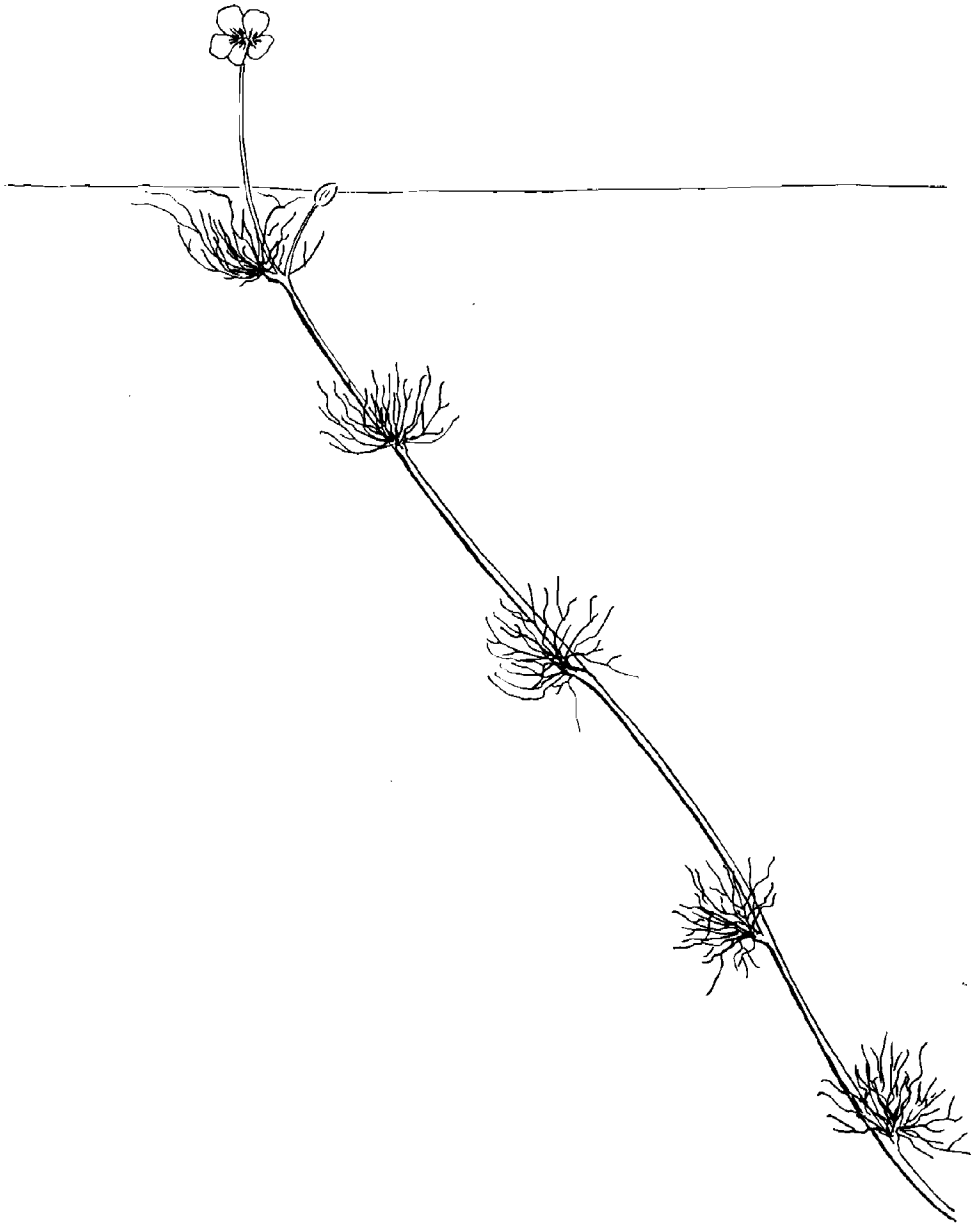
Flower: white to cream-colored

The large cream-colored flowers with numerous petals, the long-stemmed brown fruiting clusters and the large circular leaves make this plant easy to recognize. This species, a type of water lily, is often fed upon by numerous species of animals. Common in shallow waters in the eastern one-third of the state.



Water Plantain
Alisma subcordatum
6-30 in. high
Flower: white

This species has large plantain-like (oval or egg-shaped) leaves and a large much-branched inflorescence of many small white flowers. Infrequent to common in shallow waters in the eastern one-half of Kansas.



Water Crowfoot

Ranunculus spp.

4-15 in. high

Flower: white or yellow

A true buttercup which inhabits open waters, rather than wooded areas and, is most easily recognized by its thread-like leaves and small white or yellow flowers. Scattered throughout the state.



River Bulrush
Scirpus fluviatilis
2-5 ft. high

A leafy, triangular-stemmed robust sedge often forming dense colonies (much like cattails) in shallow waters. The small seeds, which are borne in the tiny scales, and the fleshy underground stems are used by many animals as a source of food. Common in the eastern one-half of the state.



Three-square Bulrush

Scirpus americana

12-36 in. high

Flower: green to brown

A two- to three-leaved triangular-stemmed sedge of shallow waters and usually sandy substrate, often forming large colonies by extensive proliferation of the underground stems (rhizomes). The seed of this and other species of bulrushes are eaten by many animals. Common throughout the state.



Common Bulrush

Scirpus validus

2-7 ft. high

Flower: green to brown

A leafless round-stemmed sedge which bears several small clusters of flowers about two inches from the top of the long stems. This well-known bulrush is most common in shallow waters of lakes and streams. Common throughout the state.



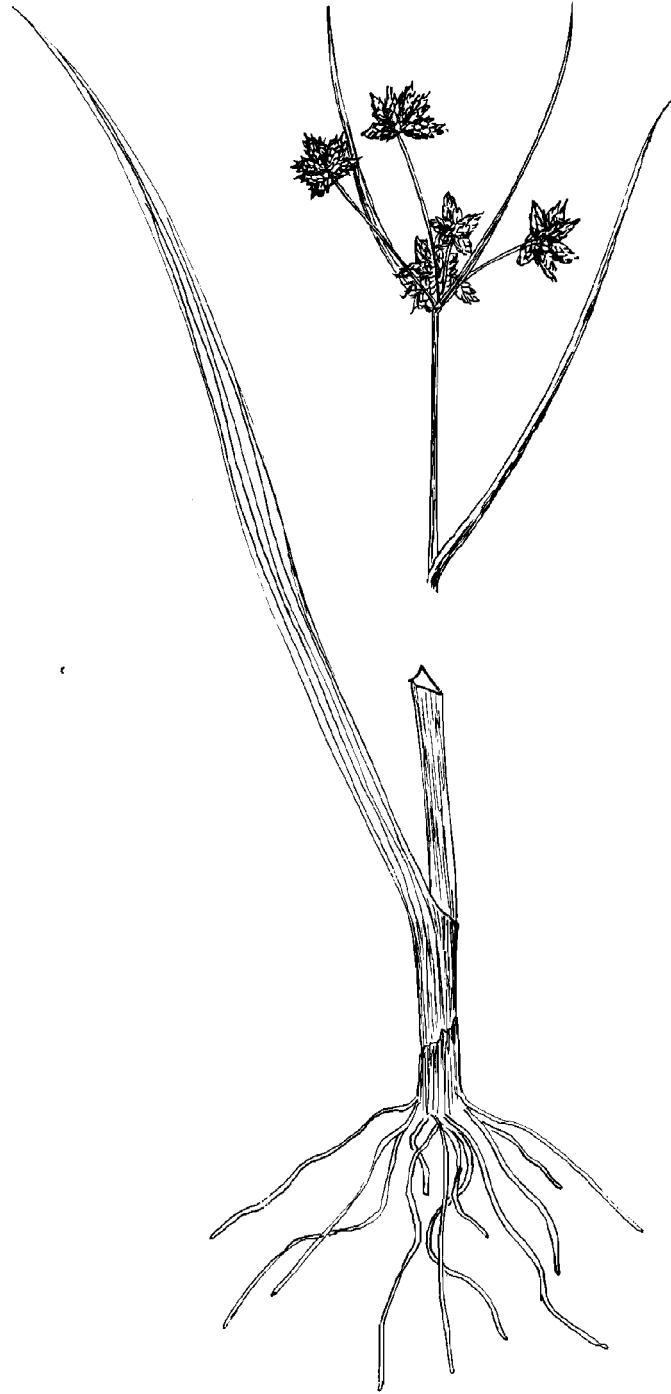
Rice Cutgrass

Leersia spp.

1-3 ft. high

Flower: green to tan

This grass has exceedingly sharp saw-edged leaves which commonly lie sprawled over other vegetation. The rice-like seeds and the underground root-stocks are often eaten by ducks. Common throughout the state.



Bulrush

Scirpus atrovirens

3-7 ft. high

Flower: green to brown

A leafy triangular-stemmed sedge with small green flowers borne in dense marble-sized clusters which turn dark brown with age. The small seeds (achenes) are used by many species of birds as a source of food. Common in shallow waters throughout the state.



Sloughgrass

Spartina pectinata

3-7 ft. high

Flower: green to tan

A common coarse grass of wet ditches, lake and pond edges, and rivers and streams. Usually forms dense colonies much like those of cattails. The flowers, which are borne in terminal spike-like branches, are at first green but become tan-colored with age. The seeds are often eaten by ducks and other animals. Common throughout the state.



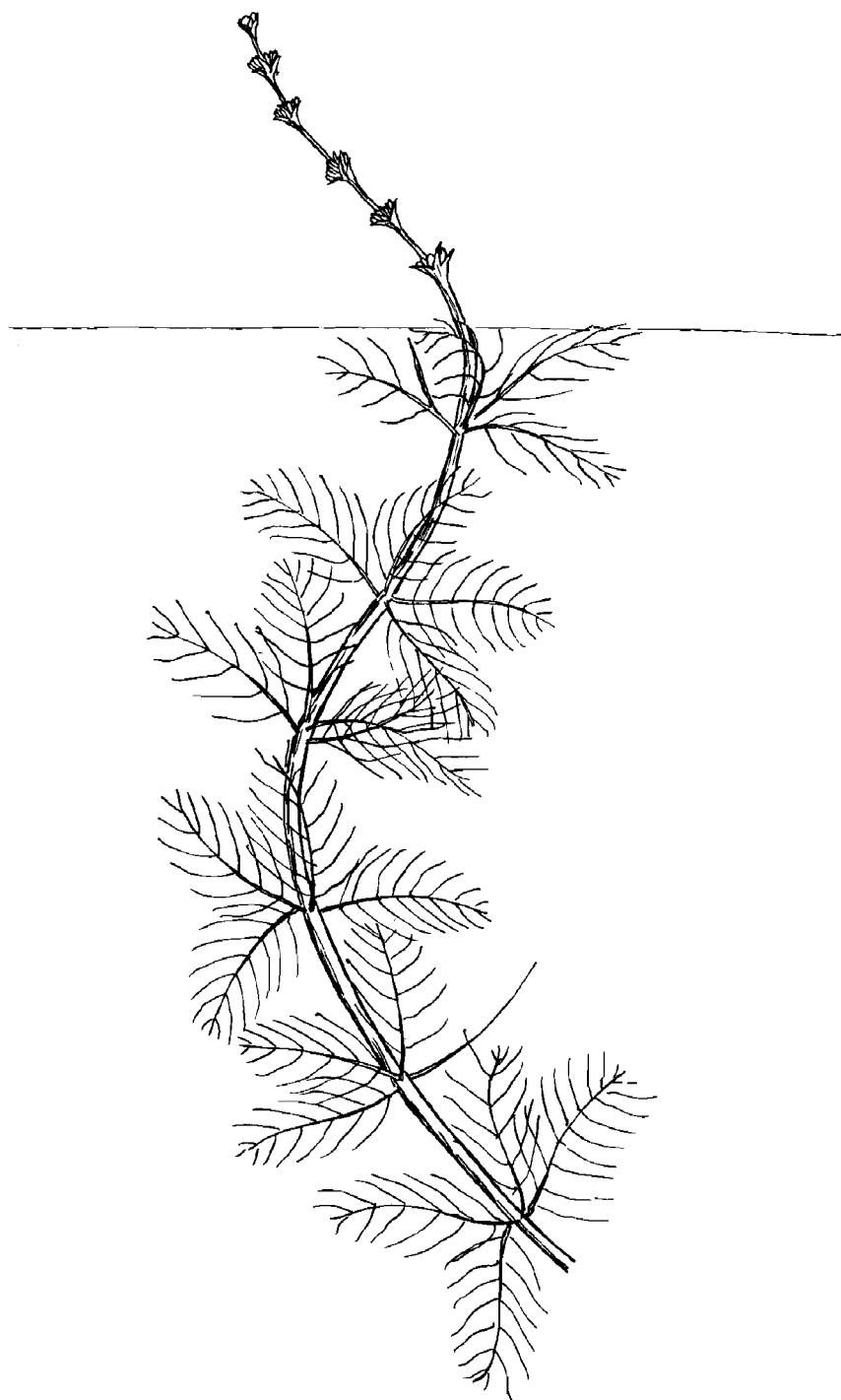
Smartweed

Polygonum coccineum

1-4 ft. high

Flower: pink to red

A vivid pink- or red-flowered species which bears numerous small hard seeds (achenes) in terminal, bullet-shaped flower clusters. These seeds, unlike those of most flowering plants, are usually formed without the process of sexual reproduction. The species occurs both as an open-water form with floating leaves and as a shallow-water form with air-borne leaves. Seeds of this species, as well as those from most other smartweeds which inhabit wet areas, are eaten by many birds. Common throughout the state.



Water Milfoil
Myriophyllum spp.
6-15 in. high

A common, floating open-water plant with feather-like leaves and inconspicuous flowers which lose their petals soon after opening. Often eaten by many species of aquatic animals. Common in the eastern three-quarters of the state in quiet, open calcareous waters.



Water Primrose

Jussiaea spp.

6-12 in. high

Flower: yellow

A common yellow-flowered aquatic which, although it only grows to a foot or less in height, often forms conspicuous mats of three or four feet in diameter by extensive growth of the horizontal stems. Common in the eastern two-thirds of the state.



Mud Plantain

Heteranthera limosa

6-12 in. high

Flower: blue

A shallow-water species, especially in calcareous waters, with attractive blue flowers. The leaves are lance-shaped, quite thick and arise from the base of the plant. Throughout the state.



Arrowhead or Arrowleaf
Sagittaria latifolia
6-24 in. high
Flower: white

A three-petalled white-flowered monocot with distinctive arrow-shaped leaves from which the plant obtains its name. The small seeds and underground stems are eaten by many species of waterfowl. Common in shallow waters and mudflats in the eastern three-fourths of the state.



Beggarstick

Bidens spp.

1-3 ft. high

Flower: yellow

A yellow-flowered species of the daisy family which usually possesses deeply dissected leaves. Common in shallow waters in the eastern two-thirds of the state.



Pondweed

Potamogeton spp.

1-5 ft. long

Flower: green

This inconspicuous green-flowered species is common in open waters. The numerous leaves are usually of two types: the submerged, which are narrow and grass-like, and the floating, which are much wider and elliptic in shape. This plant is an important food source for many aquatic animals. Common throughout the state.



Burweed
Sparganium spp.
6-24 in. high
Flower: white

This plant is easily recognized by its long grass-like leaves, globular white flowers and its marble-shaped burr-headed fruits. The seeds of these plants are eaten by many species of birds. Shallow waters and mudflats throughout the state.



Swamp Milkweed
Asclepias incarnata

2-5 ft. high

Flower: pinkish-white

The large orange-sized clusters of pinkish flowers and the long lanceolate opposite leaves which exude "milk" when broken make this plant easy to identify. Common in marshy areas throughout the state.



Marsh Purslane

Ludwigia palustris

3-12 in. high

Flower: green to reddish-green

An inconspicuous white-flowered species with opposite entire leaves. Secondary roots are often formed at the nodes of the stems. Common in shallow waters and mud flats in the eastern two-thirds of the state.



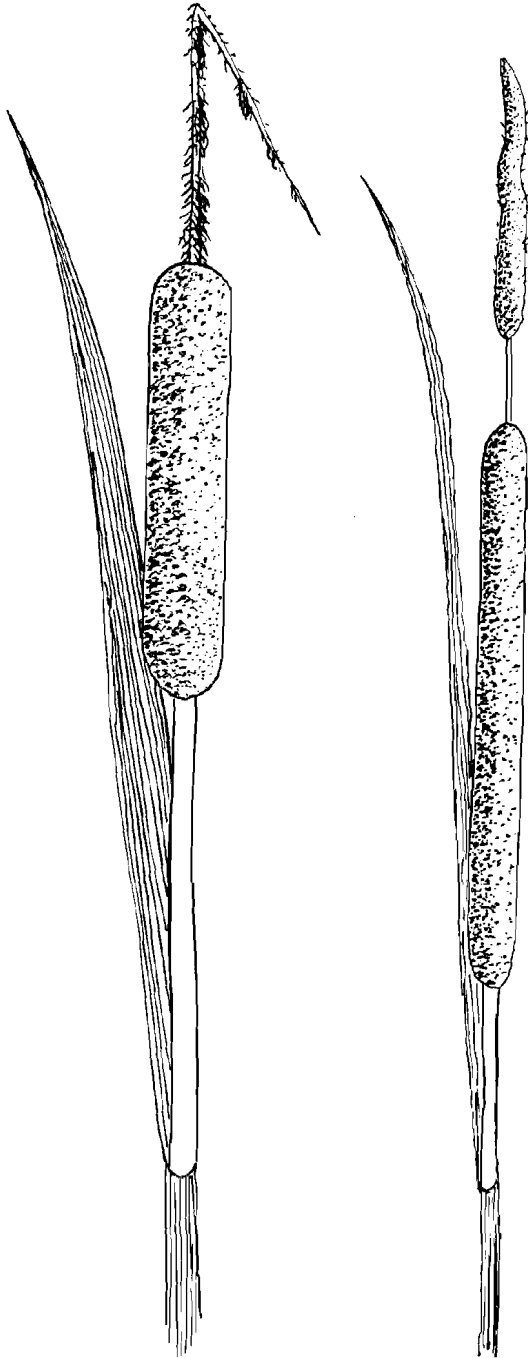
Waterweed or Elodea

Anacharis nuttallii

2-12 in. high

Flower: greenish

A plant with numerous whorled (three or more per node) leaves and small green flowers on long, slender stalks which arise from deep in the water and extend to the surface. Common in open waters in the extreme eastern part of the state.



Wide-leaved Cattail

Typha latifolia

3-7 ft. high

These long- and narrow-leaved plants are quite conspicuous in shallow waters due to their large, sausage-shaped, brown fruiting structures. The root-stocks of this and the other species of cattails are an important source of food for several species of waterfowl. Common throughout most of the state.

Narrow-leaved Cattail

Typha angustifolia

3-7 ft. high

Flower: green to fading brown

This species differs from its near relative, the wide-leaved cattail, by its narrower leaves and more slender fruit-structures. When the two species growth together, natural crosses often occur, yielding plants which are intermediate between the two parents. Less frequent than the wide-leaved species but apparently throughout the state.



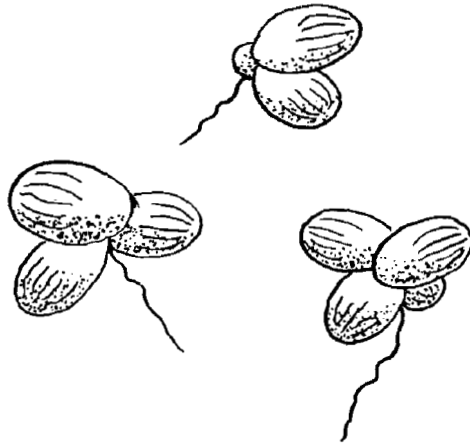
Pondweed

Potamogeton foliosus

1-5 ft. high

Flower: greenish-brown

These plants are often quite common in our clear lakes and streams. They possess long narrow leaves which flow freely in the currents. The flowers, which are borne in small clusters, grow out of the water just prior to pollination by the wind. The pollinated flowers are "pulled under" by the plants and develop the fruits, at least in part, beneath the surface of the water. Moderately common throughout the state.



Duckweed

Lemna spp.

$\frac{1}{8}$ - $\frac{1}{4}$ in. diameter

Flower: greenish

These small floating plants lack leaves and rarely flower. They and their relatives, the watermeals, are the smallest flowering plants in the world and reproduce almost entirely by asexual means. Under favorable conditions they may completely cover in a summer a pond or quite pool with their small green floating stems. Common in quiet waters throughout the state.



Burr Reed

Sparganium chlorocarpum

1-2 ft. high

Flower: cream-colored (greenish in fruit)

The large (about 1 in.) bur-like green fruiting body of this species makes it easily recognized in the field. The leaves are long, ribbon-like, and may be found in early summer floating on the surface of the water. The flowers are borne in head-like clusters with the male being borne terminally on the inflorescence. Throughout most of the state.

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