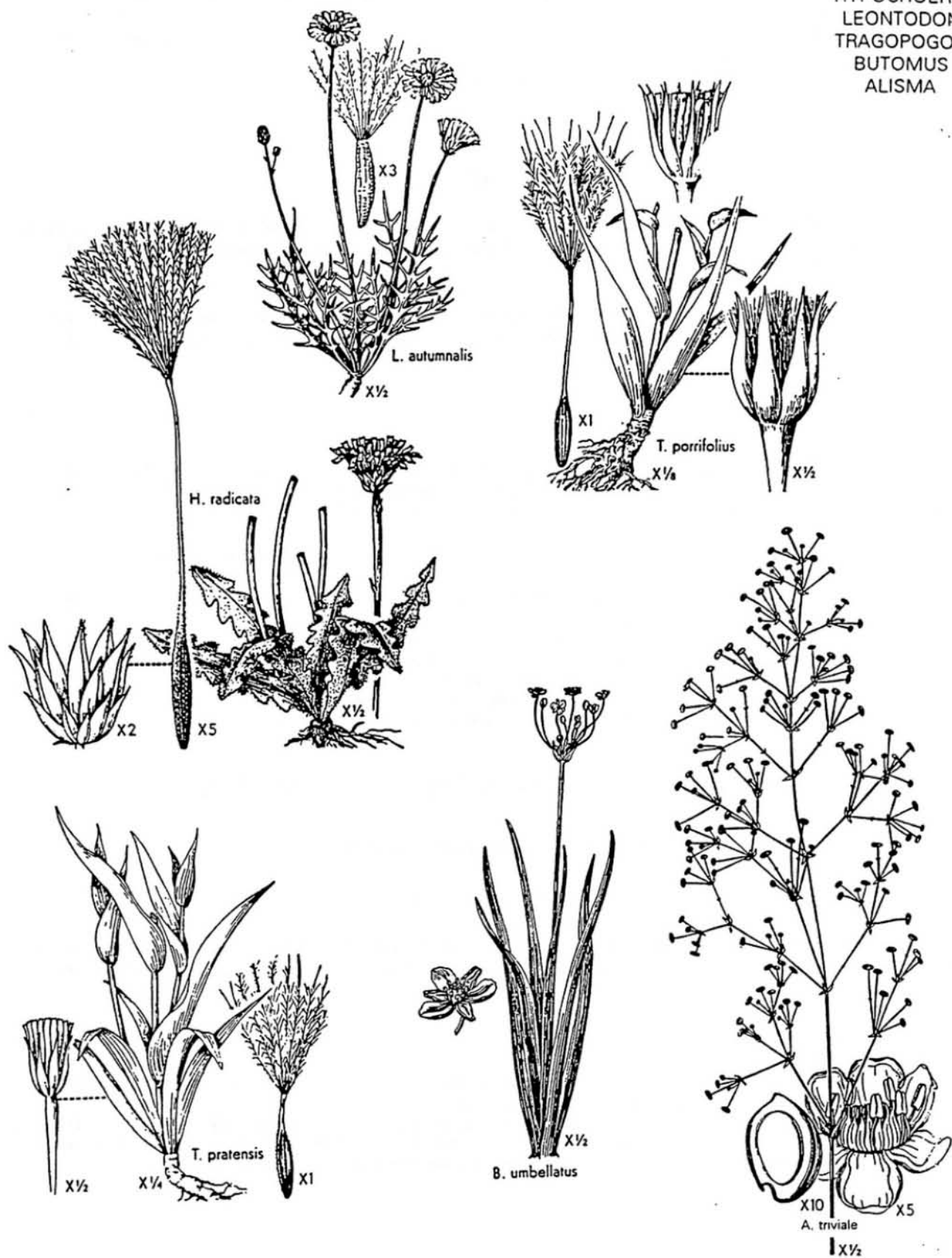


HYPOCHOERIS
LEONTODON,
TRAGOPOGON
BUTOMUS
ALISMA



Leaves basal, lanceolate or oblanceolate, entire to pinnatifid; heads terminal on branched or unbranched scapes; phyllaries of different lengths; receptacle fimbriate, villous, or honeycombed; corollas all ligulate, yellow.

1. **Leontodon autumnalis* L.

Fall Dandelion, Hawkbit

Adventive (native of Eurasia)

Scape sometimes branched, bracted; pappus of equal plumose bristles.

REFERENCE: Fisher 1988:232 (illus. p. 231).

HERBARIUM RECORD: 1942—Cols., C. Jones.

59. TRAGOPOGON L. Goat's-beard

Glabrous, succulent; leaves alternate, entire, linear or lanceolate, parallel-veined, clasping; heads large, solitary at ends of branches; phyllaries in 1 series, nearly equal; corollas all ligulate; pappus of plumose interwebbed bristles; achenes beaked.

a Corollas purple, shorter than the phyllaries; peduncles hollow and enlarged below the heads. 1. *T. porrifolius*

a' Corollas yellow, equaling or longer than phyllaries; peduncles not enlarged below the heads or enlarged a little in fruit. 2. *T. pratensis*

1. **Tragopogon porrifolius* L.

Salsify

Cultivated Escape (European cultigen)

May-Jun.

REFERENCES: Craig 1890:87 (escaped from cultivation in the grass-plot field and N of the garden near the culvert, 29 May 1882, 3 Jun 1884, 27 May 1887; a var. with yellow flowers was found in the former locality which perhaps runs into ...).

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Fisher 1988:234 (illus. p. 235).

2. **Tragopogon pratensis* L.

Yellow Goat's-beard, Showy Goat's-beard

Naturalized (native of Europe)

Leaves acuminate-tipped, curled downward at maturity; corollas yellow, equal or longer than phyllaries.

Roadsides, fields & waste places. May-Jun.

REFERENCES: Craig 1890:87 (a single specimen of which was found 27 May 1889); Fisher 1988:234 (illus. p. 235).

HERBARIUM RECORDS: Spring 1889—near Cols., Craig; 11 Jun 1900—Cols., W. Kellerman; 7 Jun 1987—Highbanks Metro Park (Delaware Co.), Morawetz; 26 May 1988—0.1 mi. N of Sharon Hill on Linworth Rd., Gerberick 46; 11 Jun 1989—SE corner of Henderson & Kenny Rd., Perry Twp., Lowden 4135; 11 Jun 1989—RR tracks on Highland Dr., W of Olentangy River Rd., Clinton Twp., Lowden 4141; 19 May 1990—just S of the Plain/Jefferson Twp. Line, intersection of Blacklick Creek with Morse Rd., Jefferson Twp., Lowden 4320.

CLASS LILIOPSIDA, MONOCOTYLEDONS

BUTOMACEAE, Flowering-rush Family

1. BUTOMUS L. Flowering-rush

Tall herb growing in mud or shallow water; leaves linear, basal; flowers hypogynous, regular, bisporangiate, about 2 cm wide, on slender pedicels in a 3-bracted umbel; sepals 3; petals 3, pink; stamens 9; carpels 6, slightly united at base; fruit an aggregate of follicles.

1. **Butomus umbellatus* L.

Flowering Rush

Naturalized (native of Eurasia)

Tall herb growing in mud or shallow water; leaves linear, basal; flowers hypogynous, regular, bisporangiate; sepals 3; petals 3; stamens 9; carpels 6; fruit an aggregate of follicles.

REFERENCE: Roberts 1972:83-85 [Cols.: 11 Sep 1971—five colonies in the Olentangy R. between Fifth and Lane Avenues at the OSU campus, in 6 inches of water along marshy shore on E bank, Roberts 2047; 3 Oct 1971—one clump 1½ feet in diameter in the Scioto R. at Whittier St. Extension, ¼ mi. above Greenlawn Dam, in one foot of water in sandy substrate, approx. 15 yards from shore, Roberts 2241].

HERBARIUM RECORDS: 11 Sep 1971—W of OSU campus along Olentangy R., near Tower Dorms & Battelle, Cols., *Roberts 2047*; 3 Oct 1971—Scioto R., approx. ½ mi. N of Whittier St. bridge, Cols., *Phillips & Roberts 2241*; 19 Aug 1977—E bank of Olentangy R., OSU campus, N of Drake Union & W bank by Woodruff bridge, *W. Carr 715*; 8 Jul 1979—Scioto R., downtown Cols. at Independence Park just S of Broad St., from broad to Greenlawn bridge, *Roberts 5066*; 23 Jul 1982—OSU campus, E bank of the Olentangy R., just S of the Woody Hayes Dr. bridge, Cols., *T. Lammers 4786* (KE, OS); 10 Jul 1986—OSU Campus, banks of the Olentangy R., *E. King 4*; Summer 1988—along the Olentangy R., OSU campus, Cols., *Delong*; 5 Jul 1991—E bank of Olentangy R., between Lane Ave. & King Ave. bridges, Clinton Twp., *Lowden 4772*; 23 Sep 1991—Scioto R., occasional in shallow water along edges of gravel bars, just N of I-270, Hamilton Twp., SW Cols. Quad., *McCormac 4346*.

NOTE: Not mentioned for Franklin Co. by Braun 1967:57.

ALISMATACEAE, Water-plantain Family

Aquatic or marsh herbs; monoecious or dioecious; leaves simple, basal, long-petioled; flowers hypogynous, monosporangiate or bisporangiate, regular, bracted, verticillate in racemes or panicles; sepals 3, separate; petals 3, separate; stamens 6-many; carpels few to many, separate; fruit an aggregate of achenes. (Alismaceae)

- a Carpels in one circle; flowers bisporangiate; achenes flattened but not winged. 1. **ALISMA**
- a' Carpels in spirals, in fruit becoming a globular cluster of achenes; upper flowers usually staminate, lower usually carpellate or bisporangiate; achenes flattened, winged on margins. 2. **SAGITTARIA**

1. ALISMA Water-plantain

Leaf-blades elliptic to ovate, base cordate, rounded, or tapering; inflorescence a large panicle; petals white or pink; stamens 6-9; carpels 10-25.

- a Petals more than 3 mm long; fruit 4 mm wide or more; rare in Ohio. 1. *A. triviale*
- a' Petals less than 3 mm long; fruit less than 4 mm wide. 2. *A. subcordatum*

1. †*Alisma triviale* Pursh

Northern Water-plantain

Fruiting heads 4-7 mm in diameter; achenes 2.5-3 mm long; bracts ovate to ovate-lanceolate.

HERBARIUM RECORDS: 7 Aug 1890—Jaeger's Pond, Cols., *Selby*; 9 Aug 1890—Cols., *Hine*; 9 Aug 1990—S side of Hibbs Rd., 1 mi. E of Rt. 104, Jackson Twp., *Lowden 4541*.

NOTE: Not mapped for Franklin Co. by Braun 1967:51.

2. *Alisma subcordatum* Raf.

Southern Water Plantain

Fruiting heads 3-4 mm in diameter; achenes 1.5-2.5 mm long; bracts lanceolate. Syn.: *A. plantago* L., *A. plantago-aquatica* of many American authors

REFERENCES: Riddell 1834:158 (marshes); Sullivant 1840:44, 61; Craig 1890:54, 106 (#420, University Farm Sep 1887; common near the iron spring, and in wet places E of the island, 9 Aug 1882, 29 Jul 1887, 1 Jul 1888); Selby & Craig 1890:16; Braun 1967:51 (illus. p. 50).

HERBARIUM RECORDS: 3 Sep 1892—Cols., *Bogue*; 25 Sep 1892—Cols., *W. Kellerman*; 15 Aug 1982—Blendon Woods, *Owens*; 6 Nov 1984—Gahanna Woods State Nature Preserve, SW corner of preserve, *Tyrell*; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek, Galloway Quad., *Delong*; 5 Aug 1989—Godown Rd. ditch, between Commerce Pl. & Le Anne Marie Circle, Perry Twp., *Lowden 4247*; 8 Aug 1990—swampy pond, Elliot Rd., ½ mi. NW of Scioto-Darby Creek Rd., Brown Twp., *Lowden 4511*.

2. SAGITTARIA L. Arrow-head

Leaves with sagittate or unlobed blades or without blades; petals white or purple at base, to 3 cm long; stamens 7-many; achenes winged.

- a Leaves usually sagittate; filaments smooth.
 - b Beak of achene broad-based, erect or recurved, not minute; pedicels of carpellate flowers 1-2 cm long.
 - 1. *S. brevirostra*
 - b' Beak of achene horizontal; bracts boat-shaped, ovate. 2. *S. latifolia*
- a' Leaves without blades or blades usually not sagittate; filaments hairy. 3. *S. rigida*

1. *Sagittaria brevirostra* Mack. & Bush

Midwestern Arrow-head

ALISMA
SAGITTARIA
ELODEA



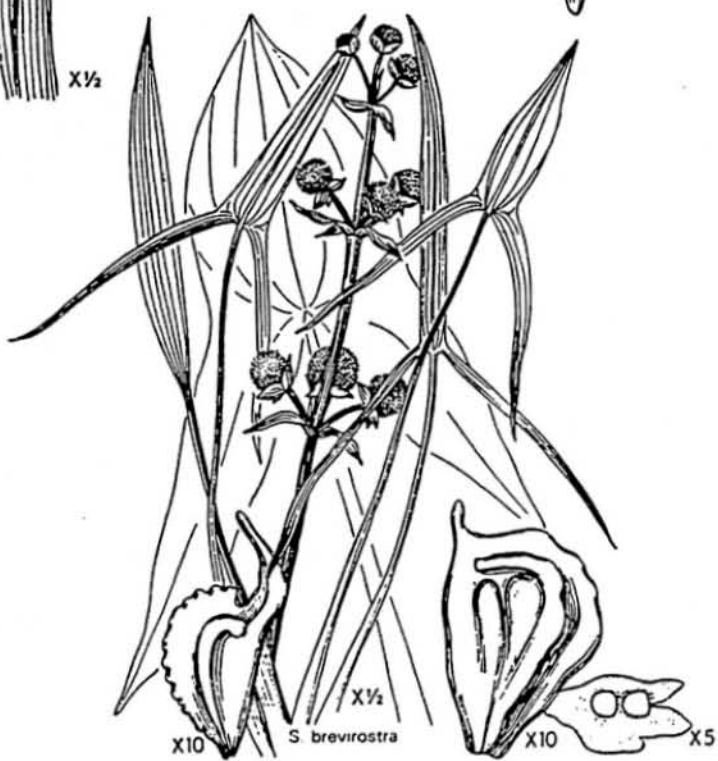
A. subcordatum



S. latifolia



S. rigida



S. brevirostra



E. canadensis

The long-acuminate or attenuate bracts of the inflorescence and ascending or recurving beak of the achene distinguish this species from the similar *Sagittaria latifolia*. Leaves with prominent basal lobes. Syn.: *S. engelmanniana* J.G.Sm. var. *brevirostra*

REFERENCE: Braun 1967:55 (illus. p. 54).

HERBARIUM RECORDS: 31 Jul 1882—Olentangy R., *W. Green*; 30 Jul 1883—Olentangy R., University Farm, *Devol*; 12 Sep 1991—E side of Hoover Dam Park, N of entrance off Cabbage Rd., inlet to reservoir, Blendon Twp., *Lowden 4828*.

2. *Sagittaria latifolia* Willd.

Common Arrowhead

Distinguished by the broad, ovate, obtuse (rarely acute) bracts in the inflorescence, and by the almost horizontal beak of the achene which points away from the dorsal keel; leaves with prominent basal lobes. Syn.: *S. hastata*, *S. obtusa*, *S. sagittifolia* L., *S. variabilis* Engelm. var. *diversifolia* A.Gray, *S. variabilis* Engelm. var. *gracilis* Engelm., *S. variabilis* Engelm. var. *hastata* Pursh, *S. variabilis* Engelm. var. *latifolia* Willd., *S. variabilis* Engelm. var. *obtusata* Willd.

REFERENCES: Riddell 1834:158 (wet prairies, marshes); Sullivant 1840:44; Craig 1890:54, 106-107 (#421-426; University Farm Sep 1887; vars. are found in the ponds E of the island, 19 Jul 1882, 16 Jun 1887); Selby & Craig 1890:16 (#856-861); Braun 1967:53 (exceedingly variable species) (illus. p. 64).

HERBARIUM RECORDS: 19 Jul 1882—Hayden Falls, *Devol*; 10 Aug 1882—SW of Cols., *W. Green*; 30 Jul 1883—Cols. & Olentangy R., University Farm, *Devol*; 7 Aug 1890—near St. Mary's Convent, *Selby*; 3 Sep 1892—Cols., *Bogue*; 22 Aug 1899—S Cols. & canal near Cols., *Selby*; 5 Aug 1910—Scioto R., Cols., *L. Miller*; 20 Jul 1934—Scioto R., *Blaydes*; 22 Aug 1952—Olentangy R. bank, by Fifth Ave. dam, Cols., *Laufersweiler*; 11 Sep 1971—W of OSU campus along Olentangy R. near Tower Dorms & Battelle, near Battelle, Cols., *Roberts 2046*; 25 May 1986—W campus of OSU, N side of pond, *R. Burnes 44*; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek, Galloway Quad., *Delong*; Summer 1988—along the Olentangy R., OSU campus, Cols., *Delong*; 18 Sep 1989—Highbanks Metro Park (Franklin Co.), sandbar S of county line in Olentangy R., *Watts 494* (OS, OWU); 9 Aug 1990—S side of Hibbs Rd., 1 mi. E of Rt. 104, Jackson Twp. *Lowden 4540*.

The following variety is distinguished:

†var. *pubescens* (Muhl.) J.G.Sm.

Hairy Arrowhead

Similar to typical *Sagittaria latifolia* except this variety has rachis, bracts, and calyx pubescent.

REFERENCE: McCance 1984:A-32.

HERBARIUM RECORD: [no date]—Cols., *Selby*.

NOTE: Not mentioned for Franklin Co. by Braun 1967:53.

3. †*Sagittaria rigida* Pursh

Sessile-fruited Arrowhead

Stem bent at about base of raceme; lowest carpellate flowers sessile or short-pedicelated; leaves submersed or emersed, all or most without basal lobes. Syn.: *S. heterophylla* Pursh, *S. heterophylla* var. *elliptica* Engelm., *S. heterophylla* var. *elliptica* A.Gray

REFERENCES: Craig 1890:107 (#427 & 428, rare; occasionally met with in these ponds, the leaves being usually submerged); Selby & Craig 1890:16 (#854 & 855).

HERBARIUM RECORDS: 9 Aug 1840—Big Walnut, 5 mi. SE of Cols., *J. Paddock Collection* (ILL); 30 Jul 1883—Cols., *Devol*.

NOTE: Not mapped for Franklin Co. by Braun 1967:55 (illus. p. 56).

HYDROCHARITACEAE, Frog's-bit Family

Submersed aquatics; dioecious; fruit indehiscent; seeds few to many.

a Leaves cauline, whorled or opposite, 1-3 cm long, many. 1. **ELODEA**

a' Leaves basal, alternate, long and ribbonlike. 2. **VALLISNERIA**

1. **ELODEA** Michx. Waterweed

Flowers subtended by sessile or nearly sessile spathes; staminate flowers with 3 sepals, 3 petals, and 9 stamens; carpellate flowers epigynous, with 3 sepals, 3 petals, 1-loculed ovary with 3 parietal placentae, and 3 stigmas, these flowers, at anthesis, at surface of water as a result of elongation of hypanthium. (*Anacharis* Rich.)

1. *Elodea canadensis* Michx.

Ditch Moss

Stems leafy; leaves narrow, whorled or opposite, usually obtuse, in width from less than 2 mm to about 4 mm, averaging about 2 mm. Syn.: *Anacharis canadensis* (Michx.) Planch., *Udora canadensis* Nutt.

REFERENCES: Riddell 1834:158 (standing pools); Craig 1890:103 (#393, very abundant in the lagoon E of the island and N of the road, 25 May 1889).

HERBARIUM RECORD: 1840—Cols., *Sullivant*.

NOTE: Not mapped for Franklin Co. by Braun 1967:59.

