

Erect herb; leaves ovate to lanceolate, bases cordate or sagittate; flowers and fruits on short peduncles near base of the stem.

REFERENCES: Riddell 1834:118 (dense and shady woods); Sullivant 1840:24; Selby & Craig 1890:14.

HERBARIUM RECORDS: 8 Jul 1891—Central College, *Selby*; 27 May 1933—Red Hills, *Hicks*; 12 Jun 1979—0.3 mi. W of Alkire Rd. & Koebel-Suydam Rd., Darby Creek Metro Park, Pleasant Twp., Galloway Quad., *Cusick 19358*; 10 Jun 1991—Union Cemetery, N side of Frank Rd., W of Gantz Rd., 3 large colonies under maples, Franklin Twp., SW Cols. Quad., *Cusick 29638*.

## NELUMBONACEAE, Lotus-Lily Family

Aquatic herbs; flowers hypogynous, perfect, regular, elevated above the water on long stout peduncles; perianth parts numerous, spirally arranged, a few outer ones green and sepaloid; stamens numerous; pistils numerous, sunken in the enlarged, obconic, spongy receptacle; leaves long-petiolate, with large, circular, peltate blade, some blades floating, others raised above the water.

### 1. NELUMBO Adans. Lotus-Lily

Leaves long-petioled, peltate, the circular blades emersed; flowers 5-10 inches wide, solitary, long-peduncled; perianth parts many, the outer green, the inner pale yellow; stamens many; carpels many, the 1-ovuled ovaries and nutlike indehiscent fruits embedded in the obconic flat-topped receptacle.

#### 1. *Nelumbo lutea* (Willd.) Pers.

American Water-lotus

Leaves peltate, long-petioled; circular blades floating; perianth parts many, inner ones yellow and petal-like; fruits nutlike, indehiscent, embedded in a flat-topped receptacle.

REFERENCES: Riddell 1834:117 (*Nelumbium luteum*, standing pools); Wilcox 1895:137 (seems to have established itself in a pond near the Olentangy where specimens were gathered first in 1891, by C. C. Wilcox, specimens were gathered also, last summer, although the pond has been partially drained).

HERBARIUM RECORD: Aug 1890—pond near King Ave., near Cols., *C. Wilcox*.

## NYMPHAEEAE, Water-Lily Family

Aquatic herbs; flowers perfect, regular, hypogynous to perigynous or epigynous; sepals 4-5, sometimes petaloid; petals 8-many; stamens numerous; carpels firmly united into a compound, plurilocular ovary; ovules and seeds numerous.

a Flowers yellow, often tinged with red or purple or green; sepals petaloid; petals inconspicuous. 1. NUPHAR

a' Flowers white or rarely pink; sepals green; petals conspicuous. 2. NYMPHAEA

### 1. NUPHAR Sm. Yellow Water-lily, Spatter-dock

Leaves long-petioled; blades emersed, ovate or rounded, bases cordate-sagittate; flowers hypogynous, solitary in the axils, long-peduncled, emersed, 3-5 cm in diameter; outer perianth parts greenish, yellow, or purplish; petals many, yellow, smaller than the sepals, stamenlike; stamens many; carpels several to many, united; stigmas united in an almost sessile several- to many-rayed broad disk; fruit a leathery berry, locules and seeds several to many.

#### 1. *Nuphar advena* (Aiton) W.T.Aiton

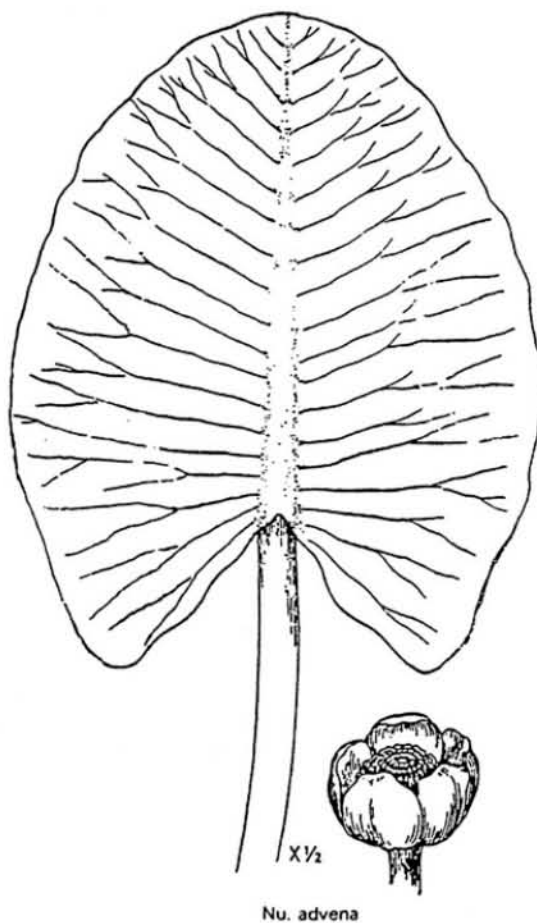
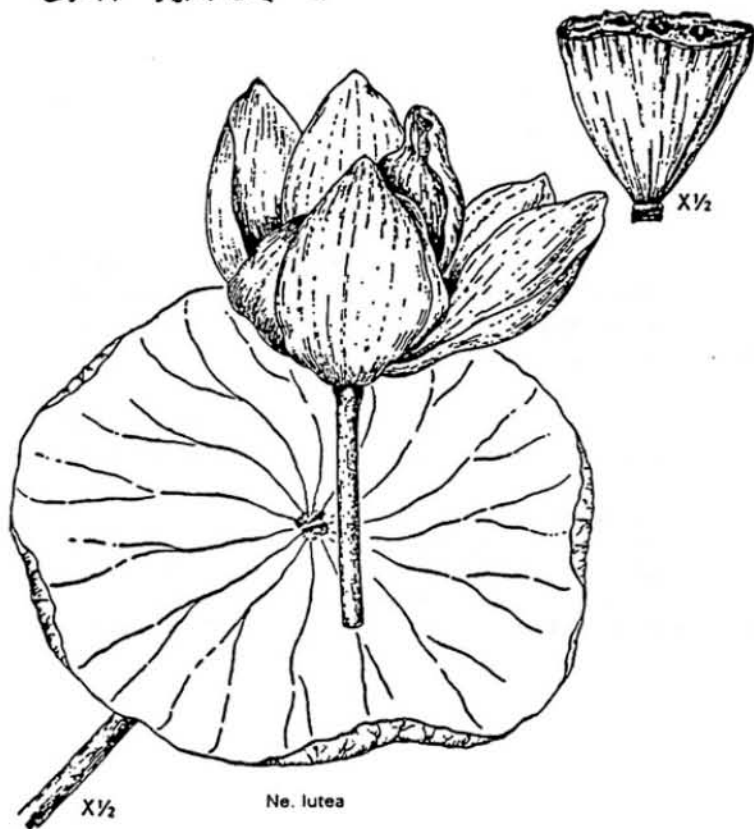
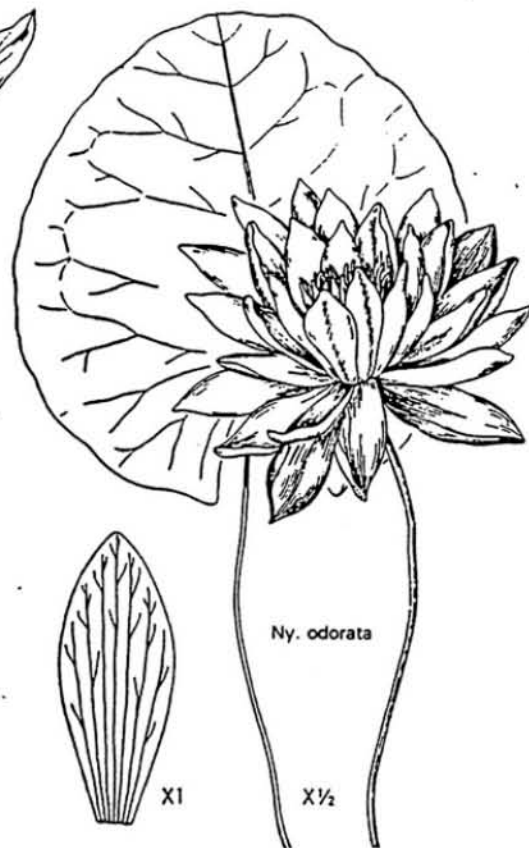
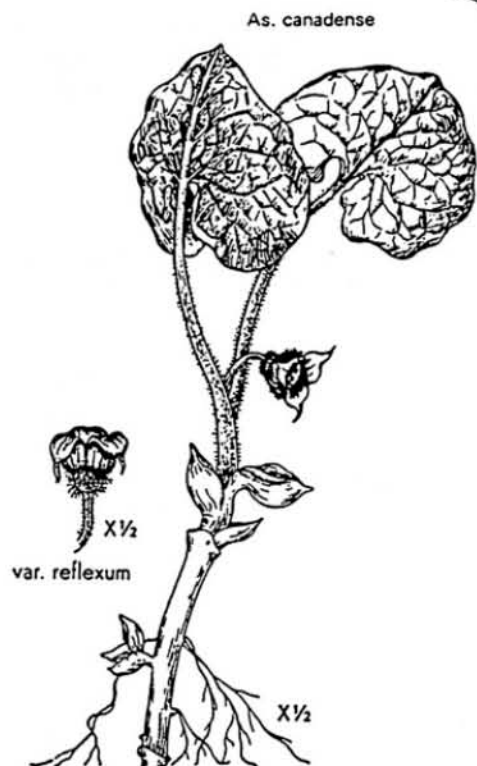
Yellow Water-lily, Spatter-dock, Yellow Pond Lily

Emersed leaves on stout petioles, basal lobes separated by a broadly triangular sinus; sepals 6, yellow within; petals and stamens inserted below ovary; carpels united.

REFERENCES: Riddell 1834:117 (standing pools); Sullivant 1840:7; Selby & Craig 1890:7.

HERBARIUM RECORDS: 1836 & 27 Jul 1839—Worthington, *J. Paddock Collection* (ILL); 17 May 1890—between Central College & Westerville, Cols., *Selby*; 17 Jun 1892—Cols., *W. Kellerman*; 18 Jun 1892—Alum Creek, near Cols., *E. M. Wilcox*; 1 Aug 1929—Baumgardner's Lake, Jackson Twp., *Thut, Gordon & Blaydes*; 16 Aug 1929—Baumgardner's Lake, Jackson Twp., *Thut*; 7 Jun 1991—Boyer Park, end of Park St., E of Rt. 3, Westerville, Blendon Twp., *Lowden 4678*; 6 Jul 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd. & E of Bowen Rd., Madison Twp., *Lowden 4982*.

ASARUM  
ARISTOLOCHIA  
NELUMBO  
NUPHAR  
NYMPHAEA



## 2. NYMPHAEA L. Water-lily

Leaf-blades floating, circular with a sinus, rarely sagittate, long-petioled; flowers large, on long flexible peduncles; sepals 4, green; petals and stamens many, inserted on sides of ovary, outer ones white or pink and obviously petals, inner ones obviously stamens; a zone of intergrades between petals and stamens, the outer of which are more petal-like, the inner of which are more stamenlike; carpels many, united, ovary subglobose, many-loculed; radiating stigmas many.

### 1. *Nymphaea odorata* Aiton

Water-lily, White-pond-lily

Flowers white, fragrant; leaves rotund, with a narrow sinus; sepals green; petals and stamens numerous, inserted on sides of ovary.

REFERENCE: Riddell 1834:117 (standing pools).

HERBARIUM RECORDS: 21 May 1986—OSU, Mirror Lake, *Blanco*; 6 Jul & 10 Aug 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd., & E of Bowen Rd., Madison Twp., *Lowden 4981 & 5019*.

NOTE: Sullivant 1840:7 and Selby & Craig 1890:7 reported on plants collected in adjacent counties.

## CABOMBACEAE, Water-Shield Family

Aquatic herbs; plants with long, slender, leafy, distally floating stems in addition to the rhizomes, with or without floating leaf-blades, often some or all of the leaves submersed and dissected; flowers perfect, regular, hypogynous; sepals and petals 3 each, petaloid, free and distinct; stamens 3-18; carpels distinct; ovules and seeds 2 or 3.

### 1. BRASENIA Schreb. Water-shield

Stems elongate, branching; leaves peltate, blades elliptic, to 10 cm long, floating; flowers axillary, long-peduncled; sepals usually 3; petals dull-purple, usually 3, 1-1.5 cm long, separate; stamens several to many; 1-2-seeded carpels 4 or more, separate, clavate and indehiscent in fruit.

### 1. *Brasenia schreberi* J.F.Gmel.

Water-shield

Submersed parts covered with mucilaginous jelly; leaves long-petioled, floating; blades peltate, elliptic and entire; flowers dull purple, stamens 12-18.

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 31 May 1922—Baumgardner's Lake, *J. H. Schaffner*.

## CERATOPHYLLACEAE, Hornwort Family

### 1. CERATOPHYLLUM L. Hornwort, Coontail

Submersed aquatics; stems elongate, branched; leaves whorled, sessile, dichotomously dissected into filiform, often toothed, divisions; monoecious; flowers minute, hypogynous, monosporangiate, solitary in axils; calyx (or calyxlike involucre) cut into 8-14 divisions; corolla none; stamens 10-20; carpel 1, style slender; ovule 1; fruit indehiscent.

a Leaves forked mostly 1-2 times; fruit ovoid, with 1 terminal spine and 2 lateral spines near base. 1. *C. demersum*  
a' Leaves forked mostly 2-4 times; fruit slightly flattened with several lateral spines; apparently rare. 2. *C. echinatum*

### 1. *Ceratophyllum demersum* L.

Hornwort, Coontail

Plants submersed; leaves forked 1-2 times, segments conspicuously serrate on one side; fruit with 1 terminal and 2 basal spines.

REFERENCES: Riddell 1834:120 (standing pools); Craig 1890:103 (abundant in the lake); Kellerman & Werner 1893:226 (this plant was not seen ... Mr. Craig said the plant he referred to as this species was something else).

HERBARIUM RECORDS: [ca. 1834]—Cols., *Lapham* (CINC); 1839—Olentangy [R.], *J. Paddock Collection* (ILL); 22 Sep 1985—Highbanks Metro Park (Delaware Co.). Olentangy R., *Witsberger 856* (OWU); 13 Oct 1991—W bank of the Olentangy R., swampy area just N of Lane Ave. bridge & S of the Fawcett Center for Tomorrow, Clinton Twp., *Lowden 4882*; 6 Jul 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd. & E of Bowen Rd., Madison Twp., *Lowden 4983*; 14 Sep 1992—Pickerington Ponds, just S of Wright Rd., Madison Twp., *Lowden 5036*.