

REFERENCES: Sullivant 1840:54; Selby & Craig 1890:18.

NOTE: No specimens seen from Franklin Co.

4. †*Equisetum sylvaticum* L.

REFERENCE: Riddell 1834:159.

NOTE: No specimens seen from Franklin Co.

Woodland Horsetail

5. *Equisetum arvense* L.

Common or Field Horsetail

Stomates not in 2 lines in the grooves; branches of the sterile stem usually not again branched; teeth usually separate.

REFERENCES: Riddell 1834:159; Sullivant 1840:54; Selby & Craig 1890:18.

HERBARIUM RECORDS: 6 May 1928—on RR embankment, Cols., J. G. & J. H. Schaffner, 1 May 1982—Blendon Woods, Owens; 13 May 1988—Highbanks Metro Park (Delaware Co.), wet ditch along Overlook Trail, Watts 418; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave. just S of Highland Dr., Clinton Twp., Lowden 4105.

DIVISION POLYPODIOPHYTA, FERNS

OPHIOGLOSSACEAE, Adder's-tongue Family

With erect rhizomes and fleshy roots; leaf (portion of plant above ground) consisting of branched petiole, one branch sterile, bearing a green foliaceous structure (called blade, in the keys below), the other branch fertile, bearing sporangia.

a Blade lobed or compound; veins ending free. 1. **BOTRYCHIUM**

a' Blade simple, entire; veins reticulate. 2. **OPHIOGLOSSUM**

1. *BOTRYCHIUM* Sw. Grape Fern

Blade lobed or compound, sessile or stalked above common petiole; fertile branch stalked or sessile, 1-3-pinnate.

a Blade evergreen, on stalk usually 5 cm long or more above common petiole, borne near base of plant; spores ripening in late summer or autumn.

b Pinnules mostly 2-4 times as long as wide, acute at tip; blade usually bronze in autumn. 2. *B. dissectum*

b' Pinnules mostly less than twice as long as wide, rounded to obtuse; blade green in autumn. 1. *B. multifidum*

a' Blades deciduous, sessile, usually borne near or above middle of plant; spores ripening in spring or summer.

3. *B. virginianum*

1. †*Botrychium multifidum* (S.G.Gmel.) Rupr.

Leathery Grape-fern

REFERENCE: Inniswood Location 7, 10-23, 25.

NOTE: No specimens seen from Franklin Co.

2. *Botrychium dissectum* A.Spreng.

Grape Fern, Lace-frond Grape Fern

Syn.: *B. dissectum* var. *dissectum* Milde, *B. dissectum* var. *obliquum* (Muhl.) Clute

REFERENCES: Riddell 1834:159 (*Botrychium fumarioides*); Selby & Craig 1890:18; Kellerman & Werner 1893:232.

HERBARIUM RECORDS: 4 Apr 1965—Flint Ravine, rich woods, W of Rt. 23, N of Worthington, Sharon Twp., Cusick; [ca. 1982]—Blendon Woods, Owens; 18 Sep 1989—Highbanks Metro Park, woods on ridgetops E of Olentangy R., common, Watts 488 (OS, OWU).

3. *Botrychium virginianum* (L.) Sw.

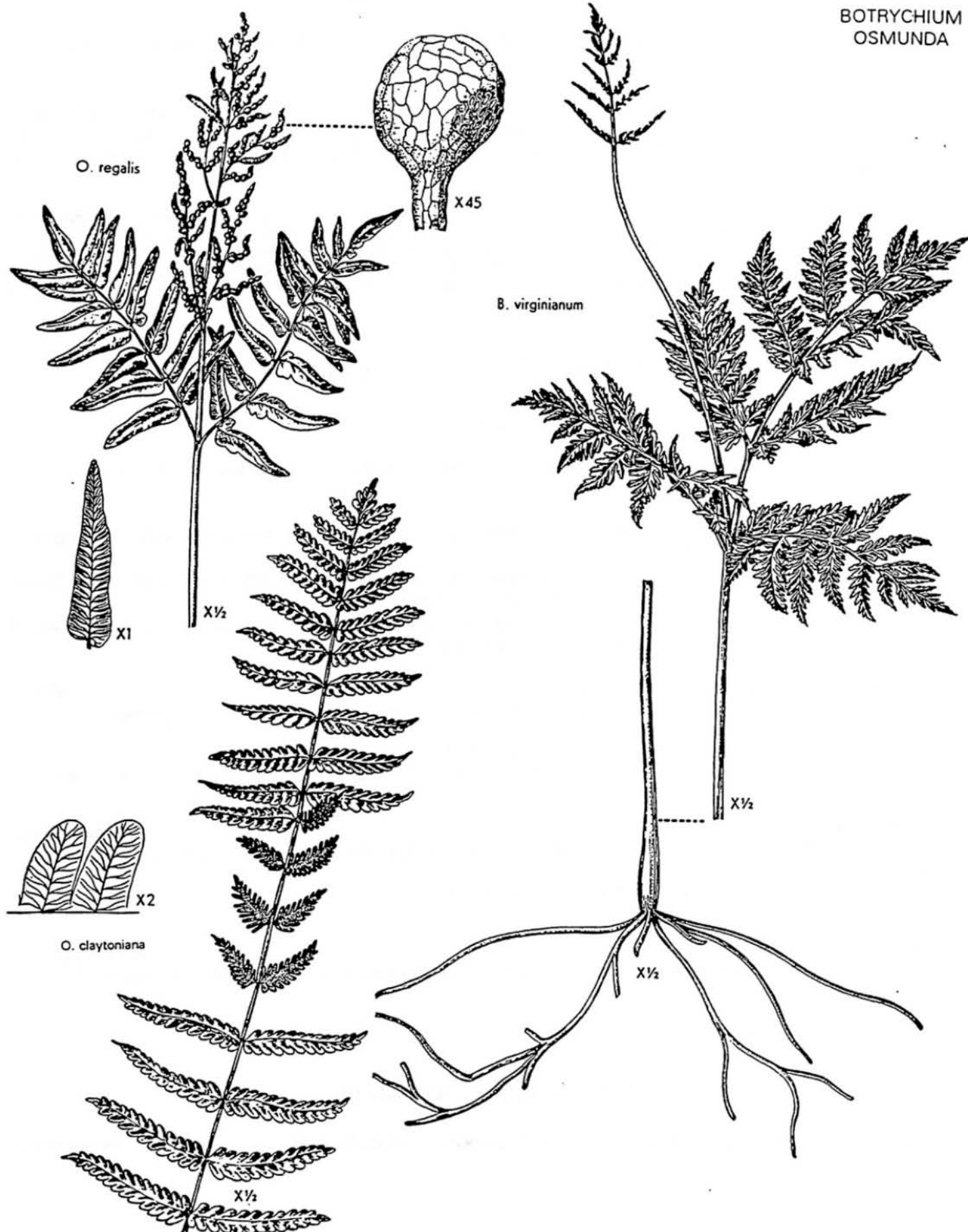
Rattlesnake Fern

Blade bipinnate-pinnatifid to tripinnate, deltoid, usually more than 10 cm wide, sessile, borne near or above middle of plants; fertile branch stalked.

REFERENCES: Riddell 1834:159; Sullivant 1840:55; Selby & Craig 1890:18; Inniswood Location 19 & 20.

HERBARIUM RECORDS: [ca. 1830s]—Cols., Lapham (URB); 6 Jun 1927—near Westerville, low woods or thickets, Seall; [ca. 1982]—Blendon Woods, Owens; 29 May 1988—Highbanks Metro Park (Delaware Co.), beech-maple woods, Morawetz 74 (OS, OWU); 11 Jun 1989—Highbanks Metro Park (Delaware Co.), woods S of Oak Coves picnic area, common, Watts 472 (OS, OWU); 29 May & 2 Jun 1991—Hoover Dam Park, W of Cabbage Rd., woodland, Blendon Twp., Lowden 4643 & 4646; 16 May 1992—Battelle Darby Creek Metro Park, day camp woods along N bank of Little Darby Creek, Pleasant Twp., Lowden 4956.

BOTRYCHIUM
OSMUNDA



2. OPHIOGLOSSUM L. Adder's-tongue

Blade entire, elliptic, sessile on the common petiole; sporangia coherent in 2 rows in a spikelike cluster with stalk about as long as common petiole.

1. *Ophioglossum vulgatum* L. var. *pycnostichum* Fernald

Adder's Tongue, Southern Adder's Tongue

Blades ovate, broadest near the base, entire, sessile on a common petiole with sporangia found in 2 rows in a stalked spikelike cluster; islets formed by principal veins not enclosing smaller islets. Syn.: *O. pycnostichum* (Fernald) Å.Löve & D.Löve

REFERENCES: Sullivant 1840:55; Selby & Craig 1890:18.

HERBARIUM RECORDS: 21 May 1933—Indian Springs, Hicks; 29 May 1933—Indian Springs Ravine, Cols., Mrs. Humphrey; 2 Jun 1933—Indian Springs, Hicks; 25 Jun 1934—Indian Springs, Cols., Chapman & J. H. Schaffner; 23 Jun 1935—Indian Springs Ravine, Cols., J. H. Schaffner; 22 Jun 1937—Indian Springs, C. Jones; 16 May 1948—open woods, N side of Cols., Bartley (BHO); 21 May 1971—N of Hudson St. on N Olentangy R., old field succession area behind housing development, extremely common, mostly in light shade, Wagner, Duncan, Young, Stevenson & Roberts 7250; 17 Jul 1971—locally abundant in dry second growth woods, Perry Twp., 1 mi. N of Rt. 161, W of Olentangy River Rd. (Rt. 315), Roberts 1334; 6 May 1983—Blendon Woods, Owens.

OSMUNDACEAE, Royal Fern Family

1. OSMUNDA L.

Tall; leaves pinnate to bipinnate, dimorphic, fertile leaves or fertile pinnae not foliaceous; sporangium opening by longitudinal (vertical) cleft.

a Leaves bipinnate; lower pinnae of fertile leaves foliaceous, only upper pinnae bearing sporangia. 1. *O. regalis*

a' Sterile leaves pinnate-pinnatifid.

b All pinnae of fertile leaves bearing sporangia, none foliaceous; mature pinnae of sterile leaves brown-tomentose at base and ciliate at margin. 2. *O. cinnamomea*

b' Middle pinnae of fertile leaves bearing sporangia, upper and lower foliaceous; mature sterile pinnae not or slightly brown-tomentose at base, not ciliate at margin. 3. *O. claytoniana*

1. *Osmunda regalis* L. var. *spectabilis* (Willd.) A.Gray

Royal Fern

Blades bipinnate; lower pinnae of fertile leaves foliaceous, only upper pinnae bearing sporangia. Syn.: *O. spectabilis* Willd.

REFERENCES: Riddell 1834:159; Sullivant 1840:55; Selby & Craig 1890:18.

HERBARIUM RECORDS: Aug 1890—E Franklin Co., Selby & W. Green; 9 Aug 1890—Taylor's Woods, Selby; 9 Sep 1892—near Wyandot Grove, Selby (OS, WOOS).

2. *Osmunda cinnamomea* L.

Cinnamon Fern

Leaves dimorphic; sterile leaves pinnate-pinnatifid, pinnae brown-tomentose at base and ciliate at margin; fertile leaves bearing only sporangia (non foliaceous).

REFERENCES: Riddell 1834:159; Sullivant 1840:55; Selby & Craig 1890:18.

NOTE: No specimens seen from Franklin Co.

3. *Osmunda claytoniana* L.

Interrupted Fern

Middle pinnae of fertile pinnate-pinnatifid leaves bearing sporangia, upper and lower foliaceous. Syn.: *O. interrupta* Michx.

REFERENCES: Sullivant 1840:55; Selby & Craig 1890:18.

HERBARIUM RECORD: 1840—Cols., Sullivant.

POLYPODIACEAE, Polypody Family

Leaves simple to decompose, often bearing scales, especially toward base; sporangia in sori on backs or margins of blades; indusia present or absent.