

REFERENCES: Riddell 1834:119; Cooperrider 1995:11 (illus. p. 12).

HERBARIUM RECORDS: 20 May 1897—spontaneous in greenhouses, Cols., *W. Kellerman*; 28 Aug 1909—Cols., *J. H. Schaffner*; 11 Sep 1911—Westerville, old meadows & lawns, *Hanawalt*; 28 May 1923—Westerville, *Walker*; 16 May 1980—cindery soil along RR tracks, S of Goodale Ave. at end of Northwest Blvd., NE ¼ SW Cols. Quad., *W. Carr 2754*; 1 Jun 1980—old RR bed N of McKinley Ave., 5 blks. W of Souder St., Cols., NE ¼ SW Cols. Quad., *W. Carr 2853 (KE)*; 9 Aug 1985—weed in flowerbeds, Fountain Square, S of Morse Rd., NE Cols. Quad., *Cusick 24657*; 21 May 1988—between 5921-5945 N. High St., Worthington, 1 mi. S of Rt. 161 & Rt. 23 intersection, *M. Hoffman 76*.

4. *Oxalis grandis* Small

Big Yellow Wood-sorrel

Petals yellow, more than 1 cm long; leaflets of principal leaves more than 25 mm wide, margins purple-brown; pedicels ascending.

REFERENCES: Riddell 1834:119 (*Oxalis recurva*); Selby 1891a:111a (*Oxalis recurva* Ell.); Cooperrider 1995:14 (illus. p. 10).

HERBARIUM RECORDS: 8 Jun 1882—Cols., *W. Green*; Jun 1888—Scioto R. near Wyandotte Grove, Cols., *Selby*; 2 Jun 1888—banks of Scioto R., *Selby*; May 1890—Cols., *Selby*; 4 & 5 Jul 1891—Cols., *Werner (CLM)*; 1892—Cols., *E. M. Wilcox*; 30 May 1895—N Cols., *Osburn*; 22 May 1899—Big Darby, Cols., *Selby*; 10 Jun 1901—Cols., *J. H. Schaffner*; 26 May 1922—Devil's Half Acre, creek bottom, very common, *Callahan*; 5 Aug 1982—Blendon Woods, *Owens*; 23 May 1986—Highbanks Metro Park (Delaware Co.), woods, *Watts 306 (OWU)*.

NOTE: *Oxalis recurva* was most likely misapplied and refers to *Oxalis grandis* based on Werner's and Selby's specimen labels.

5. *Oxalis violacea* L. forma *violacea*

Violet Oxalis, Violet Wood-sorrel

Aerial stems lacking; leaves basal, arising from bulb-like base; umbels few-flowered; petals violet-purple, base cream colored; sepals callous-tipped.

REFERENCES: Riddell 1834:119; Sullivant 1840:16; Selby & Craig 1890:8; Cooperrider 1995:11 (illus. p. 10).

HERBARIUM RECORDS: 14 May 1882—Cols., *Devo*; 20 Apr 1899—State Hospital Grounds, Cols., *Helfrich*; 21 May 1924—Westerville, woods, *Wetherill*; 14 May 1992—jct. Graessle Rd. & Rt. 665, bluff area, Battelle Darby Metro Park, Pleasant Twp., *Lowden 4943*; 14 May 1992—N of Harrisburg-Georgesville Rd. deadend, Battelle Darby Metro Park, Pleasant Twp., *Lowden 4953*.

GERANIACEAE, Geranium Family

Herbs; leaves opposite or alternate; flowers hypogynous, bisporangiate, in cymose or umbellate clusters or rarely solitary; perianth regular or slightly zygomorphic; sepals 5, separate; petals 5, separate, alternating with glands; stamens 10 or 5; carpels 5, united, in fruit with long erect slender beak; locules 5; stigmas 5; ovules 1 or 2 per carpel; fruit a 5-seeded capsule.

a Stamens with anthers 10 (5, in 1 species with palmately divided leaves). **1. GERANIUM**

a' Stamens with anthers 5; leaves pinnately compound. **2. ERODIUM**

1. GERANIUM L. Crane's-bill, Wild Geranium

Leaves palmately lobed or divided or rarely compound; carpels dehiscent by coiling outward from base upward, remaining attached at tip.

Geranium sanguineum L. (Blood-red Crane's-bill, Eurasian; not mapped for Franklin Co. by Cooperrider 1995:16, illus. p. 17), with erect or decumbent stems, several to many cauline leaves, and crimson-purple petals, is a garden ornamental (15 May 1986—private garden, E. Northwood Ave., Cols., *Blanco*).

a Leaves compound, the 3-5 leaflets pinnately divided; petals rose-purple; carpel-bodies, at maturity, separating from styles. **2. *G. robertianum***

a' Leaves palmately deeply divided; carpel-bodies not separating.

b Only 1 pair of cauline leaves usually present; flowers 2-3 cm wide; petals pink-purple. **1. *G. maculatum***

b' More than 2 cauline leaves present; flowers usually smaller.

c Sepals awn-tipped. **3. *G. carolinianum***

c' Sepals not awn-tipped.

d Stamens 10; carpel-bodies glabrous, wrinkled. **4. *G. molle***

d' Stamens 5; carpel-bodies pubescent. **5. *G. pusillum***

1. *Geranium maculatum* L.

Wild Crane's-bill, Wild Geranium, Spotted Geranium

Flowers pink-purple, 2-3 cm wide; leaves deeply palmately divided, in addition to basal leaves 1 pair of well-developed cauline leaves present.

REFERENCES: Riddell 1834:119; Sullivant 1840:16; Craig 1890:72 (sparingly on the bank of the lagoon a little to the N of the island spring; several specimens were found in the woods seven years ago, but there are none there now; 2 May 1882, 8 May 1883, 6 May 1884, 10 May 1885, 4 May 1887, 8 May 1888, 27 Apr 1889); Selby & Craig 1890:8; Cooperrider 1995:16 (illus. p. 17).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 1 Jun 1884—Neils Run, Cols., *H. Smith* (CINC); May 1888—Cols., *Craig*; 1889—Asylum Grounds, Cols., *Selby*; Spring 1889—Cols., *Craig*; 21 May 1892—Cols., *Werner*; 27 May 1892—Franklin Co., *Werner*; 5 May 1896—Worthington, *M. Wright*; 15 May 1899—Olentangy Park, Cols., *Helfrich*; 20 May 1900—Franklin Co., *Lamb*; [ca. 1920s]—Westerville, damp woods, *Leiter*; 5 May 1977—Ohio School for the Deaf off Morse Rd., shady woods, *Tyrrell 50*; 16 May 1981—Worthington ½ mi. W on Hard Rd. at RR crossing, *Gardner 036*; 10 May 1982—Blendon Woods, common, *Owens*; 8 May 1989—Overbrook Drive Ravine, E of N. High St., Clinton Twp., *Lowden 4000*; 13 May 1989—mesic wooded hillside along W side of Big Darby Creek, ¼ mi. S of Rt. 665, Pleasant Twp., Harrisburg Quad., *McCormac 562*; 23 May 1989—Overbrook Drive Ravine, E of N. High St., Clinton Twp., *Lowden 4074*; 23 May 1990—just E of Rt. 605 along Central College Rd., woody area, Plain Twp., *Lowden 4335*.

2. *Geranium robertianum* L.

Herb-Robert

Leaves palmately compound; leaflets 3-5, pinnately divided; petals rose-purple.

REFERENCE: Cooperrider 1995:20 (illus. p. 21).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 2 Jun 1902—Cols., *Jennings*; 24 May 1979—limestone cliffs, Indian Run, W of Rt. 745 ¼ mi. N of Rt. 33, Dublin, Washington Twp., NW Cols. Quad., *Cusick 19257*; 23 May 1991—S side of Indian Run, just W of Rt. 745, common in small ledges of vertical limestone cliffs, Washington Twp., NW Cols. Quad., *McCormac 3575*; 10 Jun 1993—S side of Indian Run, just W of Rt. 745, ledges of limestone cliffs, Dublin, Washington Twp., *Lowden 5074*.

3. *Geranium carolinianum* L.

Carolina Crane's-bill

Leaves deeply palmately divided; sepals awn-tipped; petals pale bluish white-pink; carpel-bodies pubescent, hairs 1-2 mm long, glandless; pedicels 1-2 times the length of calyx; seeds faintly reticulate.

REFERENCES: Selby & Craig 1890:8 (introduced); Cooperrider 1995:18 (illus. p. 17).

HERBARIUM RECORDS: 14 Oct 189—Cols., *Parsons*; 3 Jun 1891—Morgan Station & Midland RR near Morgan Station, Cols., *Selby*; 20 Jun 1924—Franklin Co., along RR, *R. Crane* (OWU); 1 Jun 1980—RR right-of-way N of McKinley Ave., about 3 blks. W of Souder St., common in cinders & limestone gravel, NE ¼ SW Cols. Quad., *W. Carr 2855* (KE); 8 Jun 1980—cinders and gravel along RR tracks S of Goodale Ave., end of Northwest Blvd., NE ¼ SW Cols. Quad., *W. Carr 2919*; 15 Jul 1982—Teater Park, SE corner of Ohio State Fairgrounds, SE Cols. Quad., *Cusick 21800*; 31 May 1987—Smith Farms, 3285 Watkins Rd., Cols., frequent in fields, *T. Lammers 6107*; 11 Jun 1989—Highland Dr. RR tracks, W of Olentangy River Rd., S of Henderson Rd., Clinton Twp., *Lowden 4144*; 20 May 1991—OSU campus, Neil Ave. dormitory in front of B&Z Bldg., Cols., *Stuckey*.

4. **Geranium molle* L.

Dove's-foot Crane's-bill

Adventive (native of Europe and W Asia)

Sepals not awned, acute to obtuse; petals pink-purple; carpel bodies glabrous; stamens 10.

REFERENCE: Cooperrider 1995:20 (illus. p. 21).

HERBARIUM RECORD: May 1894—Cols., *Fischer*.

5. **Geranium pusillum* L.

Small-flowered Crane's-bill

Naturalized (native of Europe)

Stamens 5; carpel-bodies pubescent.

HERBARIUM RECORDS: 10 Apr 1902—along Big Four RR N of Cols., *Tyler*; 24 May 1988—OSU campus, lawn NE of Howlett Hall, *M. Hoffman 77*.

NOTE: Not mapped for Franklin Co. by Cooperrider 1995:18 (illus. p. 19).

2. ERODIUM L. Storks-bill

Leaves pinnately compound, leaflets cleft or pinnatifid; sepals awned; petals rose-color, one a little smaller; stamens with anthers 5, filaments without anthers 5; carpel-bodies sharp-pointed at base, at dehiscence separating, the styles becoming spirally twisted.

1. **Erodium cicutarium* (L.) L'Hér.

Storks-bill, Alfilaria, Red-stemmed Filaree

Naturalized (native of the Mediterranean region)

Leaves pinnately compound, leaflets pinnately cleft; anther bearing stamens 5, flowers purple pink.

REFERENCES: Selby & Craig 1890:8 (introduced); Lazenby 1891:301; Selby 1891b:75; Selby 1891c:148; Cooperrider 1995:20 (illus. p. 21).

HERBARIUM RECORDS: 26 Oct 1890—Sellsville, *Selby*; 8 May 1924—Glen Mary, *H. Johnson*; 1 May 1966—OSU campus, S side of Dental School Bldg., Cols., *Stuckey 2739*; 2 Jun 1982—Fountain Square, S of Morse Rd., NE Cols. Quad., *Cusick 21612*; 9 Apr 1983—ODNR parking lot, *Owens*; 6 Jun 1990—OSU campus, NW corner of Women Field House, *Lowden 4374*.

GERANIUM



LIMNANTHACEAE, Meadow-foam Family

1. FLOERKEA Willd. False Mermaid

Diffuse delicate glabrous herb; leaves pinnately divided into narrow lobes; flowers small, hypogynous, bisporangiate, solitary in axils, stalked; sepals 3, separate; corolla regular; petals 3, separate, white, about 2 mm long, shorter than sepals; stamens 6; carpels 3 or 2, ovaries separate or nearly so, styles arising from base of ovaries, united at base but separate at top; carpels separating, each 1-seeded, indehiscent.

1. *Floerkea proserpinacoides* Willd.

False Mermaid

Delicate glabrous herb; leaves pinnately divided into lobes; sepals 3; petals 3, white, shorter than sepals; fruit tuberculate. Moist woodlands.

REFERENCES: Riddell 1836:4 (*Floerkea uliginosa* Muhl., Worthington); Sullivant 1840:16; Craig 1890:72 (very abundant in the woods and is found sparingly near the island, grows luxuriantly in damp shady places, 17 May 1882, 28 Apr 1889); Selby & Craig 1890:8; Cooperrider 1995:57 (illus. p. 56).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 19 May 1883—Olentangy R., University Farm, Devoil; 11 May 1885—near Cols., Landis (WOOS); 1890—OSU woods, Cols., Selby; May 1891—Central College, Selby (OS, WOOS); 12 May 1892—Franklin Co., Werner; Spring 1898—Cols., J. H. Schaffner; 14 May 1961—woods N of Big Bear supermarket, Olentangy R. floodplain, Cols., Cusick; 14 May 1972—woods near Gahanna, Bartley (BHO); 20 Apr 1973—floodplain of Scioto R. ½ mi. S of Dublin on E side at end of Martin Rd., Perry Twp., Roberts 3303; 26 Apr 1973—Don Scott Airfield, wet woods on NW side, Perry Twp., Roberts 3359 & 3364; 1 May 1982—Blendon Woods, Owens; 13 Apr 1986—Highbanks Metro Park (Delaware Co.), damp woods, day camp area, Morawetz 2 (OS, OWU); 2 May 1987—Battelle-Darby Creek Metro Park, along Big Darby Creek, 3 mi. S of Rt. 40, T. Lammers 6093; 13 May 1989—floodplain woods along W side of Big Darby Creek, approx. ¼ mi. S of Rt. 665, Pleasant Twp., Harrisburg Quad., McCormac 565; 21 Apr 1992—Camp Mary Orton (Godman Guild), along Olentangy floodplain, N of Worthington, W of Rt. 23, Sharon Twp., Lowden 4923.

BALSAMINACEAE, Touch-me-not Family

1. IMPATIENS L. Jewel-weed, Touch-me-not

Succulent herbs; leaves alternate or whorled, simple; flowers hypogynous, bisporangiate, zygomorphic; sepals 3, the lower one saccate, spurred at base; petals 5, the lateral ones united in pairs, each pair appearing as one lobed petal; stamens 5; carpels 5, united, style 1; ovary 5-loculed; capsule elastically dehiscent.

- a Flowers yellow or orange, solitary or in clusters of a few in axils of crenate-serrate long-petioled leaves.
- b Flowers orange-yellow with red-brown mottlings; spur about 8 mm long, lying parallel with the sac; sac longer than wide. 1. *I. capensis*
- b' Flowers pale yellow, sometimes sparingly dotted; spur about 5 mm long, lying at right angle to sac; sac almost as wide as long. 2. *I. pallida*
- a' Flowers purple, rose, or white, solitary or few in axils of sharply toothed short-petioled leaves. 3. *I. balsamina*

1. *Impatiens capensis* Meerb.

Orange Touch-me-not, Jewel-weed

Flowers orange-yellow with red-brown mottlings; spur about 8 mm long, lying parallel with sac. Syn.: *I. biflora* Willd., *I. fulva* Nutt.

REFERENCES: Riddell 1834:119; Sullivant 1840:16; Craig 1890:53, 72 (#82, found with *Impatiens pallida*, but is not so common, grows S of the lake, 19 Jun 1887; University Farm Sep 1887); Selby & Craig 1890:8; Cooperrider 1995:84 (illus. p. 85).

HERBARIUM RECORDS: 1840—Cols., Sullivant; Aug 1888—Cols., Craig; 7 Sep 1890—Lake Park, Cols., Selby; 20 Aug 1892—Cols., Bogue; 1911—¾ mi. NE of Westerville, damp woods, Hanawalt; 19 Jul 1982—Blendon Woods, common along woodland trails, Owens; 21 Sep 1986—Highbanks Metro Park (Delaware Co.), Higgins; Summer 1988—OSU campus along the Olentangy R., DeLong; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek, Galloway Quad., DeLong; 28 Aug 1989—N bank of Little Darby Creek, Battelle-Darby Creek Metro Park, off Gardner Rd., opposite Georgesville, Pleasant Twp., Lowden 4306.

2. *Impatiens pallida* Nutt.

Pale or Yellow Touch-me-not, Jewel-weed

Flowers pale yellow; spur about 5 mm long, lying at right angle to sac.

REFERENCES: Riddell 1834:119; Sullivant 1840:16; Craig 1890:72 (both this and [*Impatiens capensis*] are common in damp situations near the river, very abundant just S of the Catalpa grove; 11 Jul 1882, 6 Aug 1884); Selby & Craig 1890:8; Cooperrider 1995:84 (illus. p. 85).

HERBARIUM RECORDS: Aug 1888—Cols., Craig; Summer 1889—Cols., Weed; 26 Jul 1890—Cols., Hine (WOOS); 20 Apr 1892—Cols., Bogue; 21 Sep 1895—S Cols., Osburn; 31 Aug 1982—Blendon Woods, Owens; 6 Sep 1986—Highbanks Metro Park (Delaware Co.), Higgins; 16 Jun

ERODIUM
FLOERKEA
IMPATIENS
ARALIA
PANAX

