

Wed - Nov 20

alg -

A
Pocket List
of

Flora

in

Montgomery County
Parks



Published by
The Maryland National Capital
Park and Planning Commission

Dr. H. David Hammond
Department of Botany
Howard University

A Pocket List of Flora

By
Dr. H. David Hammond
Assistant Professor of Botany
Howard University

Published By
The Maryland-National Capital
Park and Planning Commission

W. C. Dutton, Jr., Chairman
Mrs. Caroline Freeland, Vice-Chairman

Walter Bucher John L. Pyles
Gordon Lamb Mrs. Benjamin E. Cosca
Malcolm D. Rivkin Theodore L. Miazga
James H. French F. Richard Malzone

John P. Hewitt
Director of Parks

Stanton G. Ernst
Senior Park Naturalist

1968

Price - \$1.00

INTRODUCTION:

This annotated flora concerns itself mainly with Wheaton Regional Park, but also contains some records from contiguous or nearby stream-valley parks, all in Montgomery County, Maryland, and all under the jurisdiction of the Maryland-National Capital Park & Planning Commission.

Wheaton Regional Park is some 500 acres in extent. It is comprised of several old farms and woodlots assembled during the 1950's into one large, roughly rectangular area lying to the east of Georgia Avenue, south of Randolph and Glenallen Ave., west of Kemp Mill Road, and north of Arcola Avenue. It lies wholly within the drainage basin of the Northwest Branch of the Anacostia River.

According to Mr. Bradford Armstrong, a long time resident of the area, the area now comprising the picnic, playground and Pine Lake area, some one-hundred acres in extent, was originally the Stubbs farm. In 1865, one Edward Stubbs owned a good bit of what is now the Park—probably several hundred acres. Indeed, he owned land out to Georgia Avenue. Access originally was by a road to the south of the present Shorefield Road entrance. Shorefield Road was built by the County in exchange for the land adjacent to Georgia Avenue. The Stubbs family owned much of this land until about 30 years ago, (i.e., about 1937). The farmhouse, built in Civil War time, is now the Park Police Headquarters building.

There has not been much, if any, farming in the present park area since the 1920's, before which time it was a part-time general farm and a marginal operation at best. It was probably leased out by the Stubbs family.

To the south of the Stubbs property, as it existed in later years, was a 50 acre farm owned by the Magruder family. It was probably originally owned by the Stubbs family. The frame farmhouse which the little train now circles was their residence.

Another small farm, opening to Arcola Ave., lay to the south and east of the above-mentioned properties. A man named Case owned this land at one time.

Part of the park along Glenallen Ave., where the arboretum and greenhouse now are, was acquired from Stadler's Nursery. This originally was part of a 50 acre farm owned by a man named Hull.

Unlike the stream-valley parks so common in Montgomery and Prince Georges Counties, Wheaton Park is largely upland,

with elevations ranging around 400 feet above sea level. The land is gently sloping to occasionally steeply sloping in the wooded sector bordering Kemp Mill Road. There are only a few minor rock outcroppings and no cliffs such as you see in the stream-valley parks to the east. In consequence, no polypody fern or columbine, for example, have been found in the park.

In other areas, principally the southeast quadrant, but also to the south and to the north of the Pine Lake area, the vegetation is relatively undisturbed and is in woodland or reverting to it. The northeast quadrant has been in woodland for quite some time, for the most part, and many rather mature oaks, hickories, and tulip poplars can be seen in the Brookside Nature Center and camping areas. It has all been cut over in the past, however, and stumps and multi-trunked oaks (sprouted from stumps) attest to this. The highest areas here support some over-mature Virginia Pine, now being rapidly replaced by hardwoods. Younger woodland, with scrub-pine, young oaks, large-toothed aspen, etc., are found in the southeastern portion, which is dry and acid. This woodland would seem to be about 20 years old at most. Woodland more typical of stream-bottoms is found both south and north of Pine Lake. (The small, occasional, stream feeding Pine Lake flows first north-northeast and then northeast, joining another small stream running parallel to Glenallen Ave. past the Nature Center, before joining Northwest Branch.) Old field succession can be seen in the southeast part of the park also, in that part of the park originally part of the Case property. Young persimmons, sassafras, oaks, dogwoods, wild cherries, etc., are appearing in fields now supporting grasses, goldenrods, smilax, poison ivy, and much else.

The stream - valley parks, where limited collecting has taken place, include the small park along Long Branch Creek, a tributary of Sligo Creek, Paint Branch, and Northwest Branch, the streams ultimately forming the Anacostia River; and Upper Rock Creek Regional Park. The latter also includes much upland, until quite recently in dairy farming and other farm pursuits, but the collecting was in the creek valley. These parks are mostly rather steep-sided, narrow valleys, with rock outcroppings and small cliffs not uncommon, especially as one goes eastward. Such areas afford habitats for polypody fern, columbine, saxifrage, hepatica, sarsaparilla, etc., rare or absent from Wheaton Park.

The whole eastern part of Montgomery County, including the above-mentioned areas, is underlain by crystalline rocks of the eastern Wissahickon formation, of pre-Cambrian age. According to Hopson (1964, p. 13), this " . . . consists largely of micaceous schists and semi-schists, weathers readily, and is very poorly exposed. It is easily mapped, nevertheless, because the schist disintegrates to saprolite and soil made distinctive by glistening flakes of muscovite [mica]. Fresh exposures of the schist are mostly found in the larger stream valleys . . ."

Elsewhere, Hopson (1964, p. 70), says that "The Wissahickon Formation is a thick sequence of metamorphosed argillaceous and sandy sedimentary rocks . . ." These were originally marine sediments deposited in fairly deep water and were predominantly shales at the bottom of the sequence, but sandy beds increase in amount higher up. The metamorphosis entailed recrystallization. Quartz segregated into thin lenses and irregular knots. This can be seen near the Nature Center, incidentally. Micas and chlorite segregated into thin layers. Garnet is also found in some areas.

The soils derived from such substrate are various. Most of the park, according to Mathews *et al.*, (1961), possesses soils of the Glenelg series. Mostly these are Glenelg silt loams or

channery silt loams with slopes of three to 15 percent, and classified as moderately to severely eroded. Smaller areas in the woodland just south of the Nature Center are Manor silt loams. The stream valley soil is called Worsham silt loam. The Glenelg series consists of moderately deep, well-drained soils. Their moisture-holding capacity is from moderately good to poor, depending on steepness and degree of erosion. At Wheaton, much of the park gets quite dry and suffers badly those years when late summer rain is scanty. The Manor series are rather shallow, somewhat excessively drained soils, with a weakly developed subsoil. Bedrock exposure and quartzite stones are more common here. In both soil series, the surface soil (A horizon) is brown in color and blocky in structure. The subsoils (B horizon) are brown to yellowish-red. The Worsham silt loam is poorly drained, with a moderately fine textured, slowly permeable subsoil. It is developed from mica schist and gneiss. The surface soil consists mostly of silty material washed from adjacent, higher areas. Soils of this type are also seen in the larger stream valley parks. The glistening mica is very obvious.

In consequence of all the past history of the area, we have quite a variety of habitat for the native or naturalized plants. The building of Pine Lake, for instance, has provided a habitat for fresh-water aquatics such as pond-weed, cat-tail, and arrow-head. Seepage from slopes below the ball fields provide other new habitats for moisture-loving plants.

Up to the time this was written, approximately 485 species, native, naturalized, and exotic, have been collected and identified. Quite a few more species, mostly grasses, sedges, and other difficult things, have been collected but not yet identified. Some rarities, known to occur in the park, and some very common species are not on the list, which includes only those species collected in good flowering or fruiting condition and represented in the herbarium at Howard University or the one at Wheaton Park. The circa 485 species are distributed among about 245 genera and 82 families.

I have had the valuable assistance, at various times, both in the field and the herbarium, of Howard University students Walter E. Davis, Dolores Harrell, and Theodore Osgood. Dr. John A. Churchill, presently at the National Institute of Mental Health, has graciously assisted in identifying many species in the grass and sedge families, and some violets, and has located a number of rarities, an avocation he delights in. Howard University's Botany Department Herbarium is the repository for these collections and almost full duplication exists at Wheaton Park. Mr. John P. Hewitt, Director of Parks and Mr. Stanton Ernst, Senior Park Naturalist, have given much encouragement and assistance in this work.

The nomenclature follows, usually, the standard work for this part of the U.S., the 8th edition of *Gray's Manual of Botany* (Fernald, 1950). Where it differs, Gleason's *Illustrated Flora* (1952) or Gleason and Cronquist's *Manual of Vascular Plants* (1963) was followed.

Symbols used in the body of the work are as follows:

WRP = Wheaton Regional Park

URCP = Upper Rock Creek Park

NWBP = Northwest Branch Park

LBCP = Long Branch Creek Park

PBCP = Paint Branch Creek Park

The numbers following these symbols are the collection numbers for the specimens in the two herbaria. All numbers not preceded by a name are those of the author, the others are those of various former Howard University students, except for Dr. Churchill's.

Lycopsidea

Lycopodiaceae

Lycopodium complanatum L., var. *flabelliforme* Fern. Club Moss. Common in open dry, acid oak-pine woods. WRP: 1039, 3229, Bacon-, Duffy 20, Greaves 31, James 84, Lucas 51.

L. lucidulum Michx. Shining Ground Pine. Infrequent patches in low, shady moist woods. WRP: 1003, 3230, 3273, 3348, Duffy 73, Greaves 30; PBCP: 157.

L. obscurum L. Tree Club Moss. Infrequent patches in shady, moist, low woods. WRP: 987, Duffy 78, Franklin 91, Greaves 37, James 86, Simpkins 5.

Sphenopsida

Equisetaceae

Equisetum arvense L. Common Horsetail. Rare. WRP: 3258, Daniels-.

Pteropsida-Filicineae

Ophioglossaceae

Botrychium dissectum Spreng., var. *dissectum*. Grape Fern. Occasional; under scrub pine and open areas. WRP: 3779, 3832, 4003c.

B. dissectum Spreng., var. *obliquum* (Muhl.) Clute. With the type. WRP: 4003a, b.

B. virginianum (L.) Sw. Rattlesnake Fern. Frequent in low moist woods. WRP: 1007, 3305, 4610, Bacon—; LBCP: 175.

Osmundaceae

Osmunda claytoniana L. Interrupted Fern. Occasional in low, shady, moist woods. WRP: 3631.

Polypodaceae

Adiantum pedatum L. Maidenhair Fern. Uncommon, on slopes in shady, mature woods. WRP: 4860; PBCP: 188

Asplenium platyneuron (L.) Oakes. Ebony Spleenwort. Infrequent in open, dry, acid oak-pine woods, along paths, etc. WRP: 1038, 2028, 3316; LBCP: 180.

Athyrium felix-femina L. Roth, var. *asplenioides* (Michx.) Farw. Lady Fern - Fairly frequent in shady, moist woods. WRP: 3530, 4200

Camptosorus rhizophyllus (L.) Link. Walking Fern, Very rare, PBCP: 189

Cystopteris fragilis (L.) Bernh., var. *mackayii* Lawson. Bladder Fern. Uncommon. PBCP: 191.

Dennstaedtia punctilobula (Michx.) Moore. Hay-scented Fern. Infrequent in moist rich soil of slopes above stream. WRP: 3325.

Onoclea sensibilis L. Sensitive Fern. Common in low sunny, marshy areas. WRP: 4850, Osgood-; LBCP: 209.

Polypodium virginianum L. Common Polypody Fern. On rock out-crops, steep-sided stream valley. NWBP: 4586; PBCP: 204.

Polystichum acrostichoides (Michx.) Schott. Christmas Fern. Very common on wooded slopes and low woods. WRP: 3212, 3288, 3346, 4145; PBCP: 206.

Thelypteris hexagonoptera (Michx.) Weatherby. Broad Beech Fern. Occasional on wooded slopes. WRP: 3632, 3780.

T. noveboracensis (L.) Nieuwl. New York Fern. Family common in moist, shady woods. WRP: 4201.

Pteropsida-Gynospermae

Pinaceae

- Pinus strobus* L. White Pine. Cult. WRP: 4320.
P. sylvestris L. Scotch Pine. Cult. WRP: 4238.
P. virginiana Mill. Scrub Pine. Very common in dry second-growth woods, capping hill tops in more mature woods, etc. WRP: 995, 3345, Lucas 22.

Cupressaceae

- Juniperus virginiana* L. Red Cedar. Second growth in dry, sunny field. Occasional. WRP: 3233.

Pteropsida-Angiospermae-Monocotyledoneae

Zosteraceae (Najadaceae: Potamogetonaceae)

- Potamogeton spirillus* Tuckerman. Pondweed. Common in Pine Lake. WRP: 3560, 4328, 4862.

Alismataceae

- Alisma subcordatum* Ref. Water Plantain. In and around Pine Lake. etc. WRP: 3546.

- Sagittaria latifolia* Willd. var. *pubescens* (Muhl.) J.B. Smith. Arrowhead. In and around Pine Lake. WRP: 3558.

Gramineae

- Anthoxanthum odoratum* L. Sweet Vernal Grass. Common in old field areas. WRP: 4602, 4626.

- Echinochloa muricata* (Beauv.) Fern. (*E. Crusgalli* (L.) Beauv.). Barnyard Grass. Occasional in disturbed sunny areas. WRP: 4321; URCP: 4536.

- Festuca obtusa* Biehler. Nodding Fescue. Prevalent in low woodlands. WRP: Churchill-.

- Glyceria striata* (Lam.) Hitch. Fowl Mannagrass. Openings along brooks. WRP: Churchill-.

- Holcus lanatus* L. Velvet Grass. Dry sandy fields. WRP: Churchill-.

- Hystrix patula* Moench. Bottle-brush Grass. Occasional, along paths in open woods. WRP: 3477.

- Lolium perenne* L. English Rye Grass. Cult. Fields. WRP: 3562.

- Panicum clandestinum* L. Deertongue Grass. Edges of woodland and along brooks. WRP: Churchill-.

- Phleum pratense* L. Timothy. Old fields, etc. Occasional. WRP: 4126, 4192.

- Poa autumnalis* Muhl. Flexuous Spear Grass. Woods. WRP: Churchill-.

- Setaria geniculata* (Lam.) Beauv. Bristly Fox-tail Grass. Occasional in disturbed areas of old fields, etc. WRP: 3782.

- Setaria glauca* (L.) Beauv. ? Fox-tail Grass. Occasional. WRP: 3781.

- Sphenopholis nitida* (Biehler) Scribn. Slender Eaton Grass. Low moist woods. WRP: Churchill-.

Cyperaceae

- Carex annectens* Bickn. Sedge. Marshy soil by Pine Lake. WRP: Churchill-.

- C. blanda* Dew. Sedge. Wooded slopes. WRP: Churchill-.

- C. convoluta* Mackenz. Sedge. Shady woods, moist soil. WRP: 3303; Churchill-(2).

- C. digitalia* Willd., var *macropoda* Fern. Sedge. low, shady, moist woods. WRP: Bacon-.

- C. frankii* Kunth. Sedge. In mud and shallow water. Pine Lake. WRP: 4217.

- C. gracilescens* Steud. Sedge. Openings in woods. WRP: Churchill-.

- C. gracillima* Schwein. Sedge. Rich woods. WRP: Churchill-.

- C. laevivaginata* (Kükenth.) Mackenz. Sedge. Along streams. Uncommon. WRP: Churchill-.

- C. laxiculmis* Schwein. Sedge. Moist woods. WRP: Churchill-.

- C. laxiflora* Lam. Sedge. Along creek, in sunny areas. WRP: Churchill-.

- C. lurida* Wahl. Sedge. Marshy soil along streams and at Pine Lake. WRP: 3286, 4150, Churchill-.

- C. prasina* Wahlenb. Sedge. Along creek in woods. WRP: Churchill-.

- C. rosea* Schkuhr. Sedge. Damp, disturbed soil, sunny. WRP: 1949, Churchill-.

- C. stipata* Muhl. Sedge. Marshy soil, upper end of Pine Lake. WRP: Churchill-.

- C. tribuloides* Wahl. Sedge. Moist soil. Pine Lake margin. WRP: 4147, Churchill-.

- C. virescens* Muhl. Sedge. Open moist woods. WRP: Churchill-.

- C. vulpinoidea* Michx. Sedge. Marshy soil in partial shade, or sun. WRP: 3285, 4140, Churchill-.

- Cyperus ovularis* (Michx.) Torr. Galingale. Moist sunny slopes. WRP: Churchill-.

- C. strigosus* L., Moist soil in sunny areas. WRP: 3633, 3784.

- Eleocharis obtusa* (Willd.) Schultes. Spike Rush. Frequent around Pine Lake. WRP: 3634, 4218.

- Fimbristylis autumnalis* (L.) R. & S., var. *mucronulata* (Michx.) Fern. Moist soil in sun. WRP: 3601.

- Rhynchospora capitellata* (Michx.) Vahl. Beak-rush. Moist soil in sun. WRP: 3527.

- Scirpus polyphyllus* Vahl. Bulrush. Moist soil, shady streambanks. WRP: 3602.

Araceae

- Arisaema triphyllum* (L.) Schott. Jack-in-the-pulpit. Common in low, shady moist, woods. WRP: 788, 1024, Duffy 67, Greaves 23, Lucas 46; LBCP: 290.

- Symplocarpus foetidus* (L.) Nutt. Skunk Cabbage. Frequent in marshy areas and stream bottom woods. WRP: 3217.

Commelinaceae

- Commelina communis* L. Day Flower, Infrequent. WRP: 3636, 3637.

- Tradescantia virginiana* L. Spiderwort. Very rare in Wheaton. WRP: 4159.

Juncaceae

- Juncus acuminatus* Michx. Rush. WRP: 41448.
J. bufonius L. Toad Rush. Common in sunny wet and disturbed areas. WRP: 4255.
J. effusus L., var. *costulatus* Fern. Rush. WRP: 3563.
J. secundus Beauv. Rush. Wet areas. WRP: 4170.
J. tenuis Willd. Path Rush. Common. WRP: 4130, 4141.
Luzula campestre L. Wood Rush. Quite common in open, mature woods. NWBP: Franklin 21.

Liliaceae

- Allium oleraceum* L. Wild Garlic. A common weed. WRP: 3493.
A. vineale L. Wild Garlic. A common weed. WRP: 3278, 4271.
Asparagus officinalis L. Asparagus. Escape. Rare. WRP: 4646.
Erythronium americanus Ker. Trout Lily. Common in moist shady woods near streams and seepage. WRP: 1012, 4004, Duffy 76, Simpkins 3; NWBP: Franklin 20; PBCP: 320.
Hemerocallis fulva L. Day-Lily. Occasional patches in seepage areas in sun or light shade and along streams. WRP: 3364.
Lilium superbum L. Turk's-cap Lily. Rare, in low, moist, open areas along streams. WRP: 4852.
Maianthemum canadense Desf. False Lily-of-the-Valley. Mature woods, around bases of trees. Not too common. WRP: 4603.
Medeola virginiana L. Indian Cucumber. Quite common in the moist woodlands. WRP: 1043, 1054, 3321, 3638, Duffy 52, Greaves 61, James 81; LBCP: 314.
Ornithogalum umbellatum L. Star-of-Bethlehem. Open slope. An escape. WRP: 4632.
Smilacina racemosa (L.). Desf. False Solomon's Seal. Quite common in moist, low woods. WRP: 1047, 3539, 4237, Daniels-, Duffy 63, Greaves 60, James 82, Osgood-; LBCP: 307.
Smilax glauca Walt. Catbrier. Common in thickets. WRP: 3603, 3785, 4155, 4162, 4875. Daniels-Greaves 63.
S. pulverulenta Michx. Carrion-flower. Occasional in low stream-side woods. WRP: 4645, 4651.
S. rotundifolia L. Catbrier. Openings in woods, often dry. WRP: 1046, 3213, 3319, Duffy 51, James 78.
Uvularia perfoliata L. Bell-wort. Common in low moist woods. WRP: 1030, 3270, 4240, 4608, 4857, Daniels-, James 92; LBCP: 296; PBCP: 296.

Dioscoreaceae

- Dioscorea quaternata* (Walt.) Gmelin. Wild Yam. Occasional in shady, moist woods. WRP: 3337, 4861.
D. villosa L. Wild Yam. Occasional, in shady, rich woods. LBCP: 326.

Iridaceae

- Sisyrinchium atlanticum* Bickn. Blue-eyed Grass. Amongst grass in partial sunlight. Occasional. WRP: 3311, 3328.

S. graminoides Bickn. (*S. angustifolium* Mill., *S. gramineum* Curtis). Blue-eyed Grass. Along paths, field margins, etc., in partial shade. Occasional. WRP: 3474, 3525, 4149.

Orchidaceae

- Corallorhiza odontorhiza* (Willd.) Nutt. Coral-root. Infrequent in rich, mature woods. WRP: 3786, 3833.
Cypripedium acaule Ait. Moccasin-flower; Lady Slipper. Rare, in open woods, especially near pine. WRP: 4037.
Goodyera pubescens (Willd.) R. Br. Rattlesnake Plantain. Occasional in low moist woods. WRP: 3639, 3834, 4858.
Liparis liliifolia (L.) Rich. Twayblade. Very rare, open second growth woods. WRP: 3604.
Orchis spectabilis L. Showy Orchis. Fairly common in shady, moist woodland near stream. WRP: 991, Daniels-, Greaves 67, James 79.
Tipularia discolor (Pursh) Nutt. Crane-fly Orchis. Occasional in rich, moist, mature woods. WRP: 4881.

Pteropsida-Angiospermae-Dicotyledoneae

Salicaceae

- Populus grandidentata* Michx. Large-toothed Aspen. Infrequent, singly or in small groves in most areas or margins of woods. WRP: 4027, 4160.
Salix babylonica L. Weeping Willow. Probably cultivated only. WRP: 3222, Franklin 36.
S. humilis Marsh. Upland Willow. Infrequent in openings and woods margins. WRP: 4023, 4596.
S. nigra Marsh. Black Willow. Uncommon, sunny areas along streams. WRP: 4630.
S. sericea Marsh. Silky Willow. Open flood-plain woods, on stream bank. NWBP: 4591.
S. tristis Ait. Dwarf Upland Willow. Uncommon in dry woods openings. WRP: Franklin-, Irving 16.

Juglandaceae

- Carya cordiformis* (Wang.) K. Koch. Bitter nut. Infrequent. Often in fence rows. WRP: 4402.
C. tomentosa (Poir.) Nutt. Mockernut. Family common especially in fence rows. WRP: 4305; LBCP: 356.
Juglans nigra L. Black walnut. Rare WRP: 4301.

Betulaceae

- Alnus serrulata* (Ait.) Willd. Common Alder. Quite common in low woods and streambanks and marshy areas. WRP: 3094, 3215, 4600; LBCP: 359.
Betula pendula Roth (*B. alba* L.). European Birch. Rare. Escape. WRP: 4038, 4243.
Carpinus caroliniana Walt. Hornbeam; Blue Beech. Common in low woods. WRP: 2029, 3320, 4312, Franklin 47, Simpkins 6; NWBP: 4584, Franklin 47, 48.
Corylus americana Walt. Hazel; Filbert. Common in low, moist woods. WRP: 3214, 3641, 4311, 4314, 4611.

Fagaceae

- Castanea dentata* (Marsh.) Borkh. American Chestnut. Two or three large, partially alive, trees and many root sprouts, etc. WRP: 4302.

C. pumila (L.) Mill. Chinquapin. Infrequent in fence rows, and open, dry, pine-oak woods. WRP: 3314, 3340, 3642, 4180, 4874.

Quercus alba L. White oak. Frequent in drier parts of woods. WRP: 4035, 4399, 4606, LBCP: 218.

Q. borealis Michx. f., var. *maxima* (Marsh.) Ashe. Red Oak. Common in mature woods. WRP: 3349, 4400.

Q. falcata Michx. Spanish Oak. Frequent in drier parts of woods. WRP: 3787, 4036, 4203, 4605.

Q. imbricaria Michx. Shingle Oak. Frequent. WRP: 3274, 3304, 3643, 4628.

Q. muehlenbergii Engelm. Chinkapin Oak. Occasional in drier woods. WRP: 4030, 4873.

Q. palustris Muench. Pin Oak. Frequent, fence rows, old fields. WRP: 4040, 4303, 4607.

Q. stellata Wang. Post Oak. Fence rows and dry oak-pine woods. WRP: 4189, 4304.

Q. velutina Lam. Black Oak. Infrequent. WRP: 4046.

Moraceae

Morus alba L. White Mulberry. Rather occasional in open second-growth woods. WRP: 3312.

M. rubra L. Red Mulberry. Uncommon in second-growth. LBCP: 372, 373.

Urticaceae

Boehmeria cylindrica (L.) Sw. False Nettle. Shady, rich, moist, low woods. Occasional patches. WRP: 3522, 4411.

Aristolochiaceae

Asarum canadense L. Wild Ginger. Uncommon in small patches on stream bottom land. NWBP: 4589.

Polygonaceae

Polygonum aviculare L. Knotweed. Common wood, WRP: 3547.

P. caespitosum Blume, var. *longisetum* (DeBruyn) Stewart. Smartweed. Common weed in sunny wet areas. WRP: 1055, 3344, 3485, 3665, 3644.

P. hydropiperoides Michx. Smartweed. Uncommon. WRP: 3646.

P. pennsylvanicum L., var. *laevigatum* Fern. Smartweed. Occasional. WRP: 3645, 3789.

P. persicaria L. Smartweed. Occasional. WRP: 3548, 4865.

P. punctatum Ell. Smartweed. Sunny wet areas. Occasional. WRP: 3517; URCP: 4527.

P. sagittatum L. Arrow-leaved Tear-thumb. Fairly common in sunny wet areas. WRP: 2030, 3788.

P. scandens L. Climbing False Buckwheat. Uncommon, moist areas. LBCP: 387.

P. virginianum L. (*Tovara virginiana* (L.) Raf.). Jumpseed. Occasional in low woods along streams. WRP: 3605; LBCP:387. LBCP: 389.

Rumex acetosella L. Sheep Sorrel. Frequent patches in sunny, disturbed, dry areas. WRP: 989, 1048, Duffy 19.

R. crispus L. Dock. Infrequent in disturbed, sunny areas. WRP: 3545.

R. pulcher L. Fiddle Dock. Sunny wet areas. Rare. WRP: 3279.

Phytolaccaceae

Phytolacca americana L. Pokeweed. Rare in disturbed areas. WRP: 3455, 3647.

Aizoaceae

Mollugo verticillata L. Carpet weed. Occasional, sunny, dry, disturbed areas. WRP: 4258.

Portulacaceae

Claytonia virginica L. Spring Beauty. Very common in stream bottomland, etc. WRP: 1017, 3231, 3255, Franklin 11, Greaves 28, Lucas 48, PBCP: 394.

Caryophyllaceae

Arenaria serpyllifolia L. Thyme-leaved Sandwort. Rare, in sunny dry soil. WRP: 3460.

Cerastium viscosum L. Mouse-ear Chickweed. Occasional, in dry, disturbed areas. WRP: 4604.

C. vulgatum L. Common Mouse-ear Chickweed. Common in dry soil of sunny disturbed areas. WRP: 4135, 4634.

Dianthus Armeria L. Deptford Pink. Frequent in sunny dry areas. WRP: 1056, 2031, 3291, 3329, 3648.

Paronychia fastigiata (Raf.) Fern. Whitlow-wort. Rare, in dry, stony soil. WRP: 3466.

Silene antirrhina L. Sleepy Catchfly. Rare, edge of open woods. WRP: 4143.

S. caroliniana Walt. Catchfly. Hillsides, dry acid woods. Scattered. LBCP: 409. var. *pennsylvanica* (Michx.) Fern. PBCP: 408.

Stellaria graminea L. Stitchwort. Partly sunny marshy area. Rare. WRP: 3292.

S. media (L.) Cyrillo. Common Chickweed. Common in waste areas. WRP: 994, 3216, Greaves 26.

S. pubera Michx. Woodland Chickweed. Frequent in open, moist woods, especially on slopes. WRP: 1016, Franklin 12, Lucas 38; LBCP: 411.

Ranunculaceae

Anemone virginiana L. Thimbleweed. Open, dry acid, second-growth pine, oak woods. Infrequent. WRP: 2032, 3649.

Anemonella thalictroides (L.) Spach. Rue Anemone. Rather uncommon, on slopes, in mature woods. WRP: 1020, Duffy 42, Greaves 27; NWBP: 4588; LBCP: 49, PBCP: 50.

Aquilegia canadensis L. Columbine. Uncommon on rocky slopes. PBCP: 52.

Cimicifuga racemosa (L.) Nutt. Black Snakeroot; Bugbane. Common in moist, shady, mature woods. WRP: 3350, 3520, 3650.

Clematis virginiana L. Virgin's Bower. Uncommon, in openings along streams. WRP: 3095.

Hepatica americana (D.C) Ker. Liver-leaf. Uncommon, on steep slopes in mature woods. NWBP: 4587; PBCP:60.

Ranunculus abortivus (L.) Spach. Buttercup. Moist shady woods. LBCP: 63.

R. acris L. Buttercup. Uncommon. WRP: 3473.

R. bulbosus L. Bulbous Buttercup. Occasional in fields. WRP: Irving-

R. hispidus Michx. Buttercup. Uncommon. WRP: 4197.

R. recurvatus Poir. Small-flowered Buttercup. Common on moist, shady stream bottomland. WRP: 1010, 1025, 4621, 4644, Daniels-, Duffy 26, 72.

Thalictrum dioicum L. Early Meadow-rue. Moist, shady woods. Not common. PBCP: 75.

T. polygamum Muhl. Tall Meadow rue. Occasional, along streams and other wet places. WRP: 1057, 3516, 4206.

Berberidaceae

Berberis thunbergii D.C. Japanese Barberry. Rare escape in open woods. WRP: 3369.

Podophyllum peltatum L. May-apple. Frequent patches in open moist, mature woods. WRP: 3323, 3251, Duffy 33, Franklin 51, Greaves 22, Lucas 47; LBCP: 436.

Magnoliaceae

Liriodendron tulipifera L. Tulip-tree. Common in old fields and in low woods, especially along streams. WRP: 1029, 4864, Duffy 81, Greaves 62, James 94.

Lauraceae

Lindera benzoin (L.) Blume. Spice-bush. Common in low moist woods. WRP: 3790, 3835, 4156.

Sassafras albidum (Nutt.) Nees. Sassafras. Old fields and dry pine-oak, second-growth woods. Frequent. WRP: 992, 3267, 3470, 3651, Duffy 92, Franklin 39, Irving 20.

Papaveraceae

Sanguinaria canadensis L. Bloodroot. Frequent, on slopes of moist mature woods. WRP: 1021, 3224, Duffy 65, Greaves 18, Lucas 45; LBCP: 446; PBCP: 445.

Fumariaceae

Corydalis flavula (Raf.) D.C. Yellow Harlequin Fumewort. Dry, open, stream-bottom woods, sandy alluvial soil. Occasional. NWBP: 4007, 4581.

Cruciferae

Alliaria officinalis Andrz. Garlic Mustard. Rare, low moist areas near stream. WRP: 4637.

Arabidopsis thaliana (L.). Heynh. Mouse-ear Cress. Sunny, dry, often disturbed areas. WRP: 1001, 3260, 4595, 4648, Duffy 75, Greaves 34, Lucas 30.

Barbarea vulgaris R. Br. Winter Cress. Quite common in sunny fields, especially in disturbed areas and in moist soil. WRP: 1004, 1015, 1036, 3259, 3332, Greaves 32, Lucas 43; NWBP: 4583. var. *arcuata* (Opiz.) Fries. WRP: 4001, 4158, Randall 93, Simpkins 2.

Brassica rapa L. Turnip. Waif. WRP: 4026.

Capsella bursa-pastoria L. Shepherd's Purse. Weed in open places. WRP: Franklin 47.

Cardamine bulbosa (Schrieb.) BSP, Bitter Cress. Stream banks in open areas, in moist deep, rich soil. WRP: 1019, 1026, 3263.

C. hirsuta L. Bitter Cress. Marshy soil, open sunny meadow. WRP: 3218, 4123.

C. pennsylvanica Muhl. Bitter Cress. In rich soil along streams, shady woods. WRP: 993, James 93.

Dentaria laciniata Muhl. Toothwort. Slopes of open, moist woods. WRP: 1018, Duffy-, Greaves 25, Lucas 42; NWBP: 4580, Franklin 13; LBCP: 453.

Draba verna L. Whitlow Grass. Uncommon, amongst grass in low meadow. WRP: 4005.

Hesperis matronalis L. Dame's Violet; Rocket. Escape or waif, low moist ground. WRP: 4638.

Lepidium campestre (L.) R. Br. Cow Cress. Common weed in sunny, dry, usually disturbed areas. WRP: 990, 1033, 3333, Franklin 52, Greaves 38, James 29, 85, Lucas 35.

L. virginicum L. Pepper Grass. Occasional weed of dry, sunny areas. WRP: 3284.

Nasturtium officinale R. Br. Water Cress. In streamlet, with grasses and sedges. WRP: 3292.

Crassulaceae

Penthorum sedoides L. Ditch Stone-crop. Rare, in sandy, gravelly, wet soil of stream courses, sunny areas. WRP: 3552, 4323.

Saxifragaceae

Deutzia scabra Thunb., var. *candidissima* (Froebel) Rehd. Deutzia. Escape? WRP: 3296.

Hydrangea arborescens L. Hydrangea. Occasional, on steep slopes. LBCP: 423.

Rosaceae

Agrimonia parviflora Ait. Agrimony. Occasional, at edges of fields in moist soil. WRP: 4417; LBCP: 464.

A. pubescens Wallr. Agrimony. Occasional, at edges of fields in moist soil. WRP: 3096.

A. rostellata Wallr. Agrimony. Moist areas. UMN. WRP: 4250.

Amelanchier arborea (Michx. f.) Serviceberry. Understory shrub in open woods. WRP: 1008.

A. canadensis (L.) Medic. Serviceberry. Understory shrub in green woods. WRP: 4599.

Arunco dioicus (Walt.) Fern. Goat's Beard. Moist slopes above stream and shady woods. WRP: 1058, 3327.

Fragaria ananassa Duchesne. Strawberry. Occasional, along paths, edges of grassy fields. WRP: 996, Duffy 74; LBCP: 476.

F. virginiana Duchesne. Wild Strawberry. Common in dry, sunny, grassy fields. WRP: 3261, 3297, Franklin 45, Greaves 33, Lucas 31.

Geum canadense Jacq. Avens. Occasional in moist, open woods. WRP: 1060, 3523, 4195, 4242.

G. laciniatum Murr. Avens. Marshy soil. WRP: 3454.

Photinia villosa (Thumb.) D.C. Photinia. Abandoned nursery stock. WRP: 3836.

Physocarpus opulifolius (L.) Maxim. Ninebark. Rare, on stream bank. WRP: 1061, 4259.

Potentilla canadensis L. Cinquefoil. Open, sunny, dry, acid oak-pine woods and along paths, etc. WRP: 998, 1051, Duffy 21, 70, Greaves 68, Lucas 33; var. *villosissima* Fern. WRP: James 88, PBCP: 484.

P. norvegica L. Cinquefoil. Edges of sunny fields, in disturbed, dry soil. Occasional. WRP: 1059, 4194, 4210.

P. recta L. Cinquefoil. Open sunny area, dry clay soil. Uncommon. WRP: 3313.

P. simplex Michx. Cinquefoil. Along paths and in dry, acid, second-growth oak-pine woods. WRP: 1031, 1040, 4594, Duffy 71.

Prunus avium L. Sweet Cherry. Low bottom-land woods. Escape? WRP: 3253.

P. persica (L.) Batsch. Peach. Occasional, escape and around old farmyard. WRP: 4300, Franklin 48.

P. serotina Ehrh. Black Cherry. Fence-rows and second-growth woods. Frequent. WRP: 1042, 3471, 3653, Franklin 17.

Pyrus floribunda Lindl. Choke-berry. Cult. WRP: 3837, 4041, Duffy 29.

P. malus L. Apple. Occasional escape, in fence rows and old orchard. WRP: 3452, 3652, 4034.

P. prunifolia Willd. Chinese Crab-apple. One tree, in open woods on alluvial soil. NWBP: 4593.

Rosa carolina L. Rose. Rare, in dry, sunny area, in fence row. WRP: 4178.

R. multiflora Thunb., var. *thunbergiana* Thory. Multiflora Rose. Seems to be establishing itself along streams and other sunny moist places. Uncommon as yet. WRP: 3289, 4298.

R. virginiana Mill. Rose. Sunny dry area, rare. WRP: 4179.

R. wichuraiana Crep. Memorial Rose. Escape? Near stream, in moist soil. Sunny area. WRP: 4213.

Rubus cuneifolius Pursh. Sand Back-berry. Sunny areas. WRP: 4181.

R. enslenii Tratt. Southern Dewberry. Occasional, in sunny dry areas. WRP: 4172, 4625.

R. occidentalis L. Black Raspberry. Moist soil, sunny thicket. Rare. WRP: 3458.

R. pennsylvanicus Poir. Blackberry. Moist soil, sunny thicket. Fairly common. WRP: 3457.

R. phoenicolasius Maxim. Wineberry. Shady, moist, fence line. WRP: 4124.

Spiraea prunifolia Sieb. and Zucc., var. *plena* Schneid. Spiraea. Margin of swampy, sunny meadow. Escape? WRP: 4032.

Leguminosae

Albizia julibrissin Duraz. Silk-tree; "Mimosa". Occasionally naturalized in open, sunny areas. WRP: 4872.

Amphicarpa bracteata (L.) Fern. Hog Peanut. Uncommon, low moist woods. LBCP: 532.

Apios americana Medic. Groundnut. Open field, in moist soil. Uncommon. WRP: 3608, Osgood-.

Cassia nictitans L. Wild Sensitive Plant. In muddy soil of disturbed area. Sunny. Not common. WRP: 3606, 3655, 3791; LBCP: 530.

Cercis canadensis L. Redbud. Cult. WRP: 3266, 3492.

Coronilla varia L. Crown-vetch. Cult. WRP: 3607.

Crotalaria sagittata L. Rattlebox. Muddy, disturbed soil. Sunny. WRP: 3656, 4405.

Desmodium glutinosum (Muhl.) Wood. Tick-trefoil. Frequent in open, mature woodland. WRP: 4856.

D. marilandicum (L.) D.C. Beggar's-tick. Fairly common. WRP: 3807.

D. nudiflorum (L.) D.C. Beggar's-tick. Quite common in mature woods. WRP: 3609, 4854.

D. nudiflorum (L.) D.C., forma *foliolatum* (Farwell) Fassett. Tick-trefoil. WRP: 4855.

D. paniculatum (L.) D.C. Beggar's-tick. Common in mature woods. WRP: 2033, 3657, 3792, 3809; LBCP: 528.

D. viridiflorum (L.) D.C. Beggar's-tick. Uncommon in mature woods. WRP: 3808.

Gleditsia triacanthos L. Honey Locust. Rare. WRP: 4401.

Lathyrus latifolius L. Everlasting Pea. Rare, edge of woods. WRP: 3335.

Lespedeza cuneata (Dumont) G. Don. Bush-Clover. Uncommon. URCP: 4535.

L. intermedia (Wats.) Britt. Bush-clover. Uncommon. URCP: 4528.

L. procumbens Michx. Bush-clover. Uncommon in open, dry areas. WRP: 3806.

L. striata (Thunb.) H.&A. Bush-clover. Dry sunny disturbed areas. WRP: 3658.

L. virginica (L.) Britt. Bush-clover. Dry sunny disturbed areas. Uncommon. WRP: 3793; LBCP: 524.

Robinia pseudo-acacia L. Black Locust. Very common in dry, young second growth woods. WRP: 3554.

Strophostyles umbellata (Muhl.) Britt. Wild Bean. Rare, in low fields. WRP: 4419.

Trifolium agrarium L. Hop Clover. Frequent, in dry open sunny fields. WRP: 3339.

T. arvense L. Rabbit-foot Clover. Dry disturbed soil, sunny areas. Locally abundant. WRP: 1053, 3459, 4870.

T. hybridum L. Alsike Clover. Occasional. WRP: 3317, 4163.

T. pratense L. Red Clover. Occasional. WRP: 1034, 4139, Duffy 53.

T. procumbens L. Hop Clover. Dry, clay soil. WRP: 3277, 4137.

T. repens L. White Clover. Occasional. Mostly cult. WRP: 1035, Greaves 69.

Vicia angustifolia Richard. (V. *Sativa* L.). Vetch. Cult. and escaped. WRP: 4044.

V. dasycarpa Tenore. Vetch. Rare. WRP: 4157.

V. sativa L. Vetch. Edges of old fields. Cult. and escaped. WRP: Duffy 28, Greaves 65, James 83.

V. villosa Roth. Hairy, or Winter Vetch. Rare. WRP: Duffy 22.

Linaceae

Linum floridanum (Planch.) Trel. Flax. Rare, in moist, sunny, disturbed areas. WRP: 1062.

L. medium (Planch.) Britt. Flax. Uncommon, in moist, sunny, disturbed areas. WRP: 3532, 3610, 4398.

Oxalidaceae

Oxalis corniculata L. Wood Sorrel. Occasional. WRP: 1027, 3456, 4647, James 91. We follow Gleason and Cronquist here.

Oxalis dillenii Jacq. Wood Sorrel. Occasional. WRP: 4138.

Oxalis stricta L. sorrel. Occasional. WRP: 4415.

Geraniaceae

Geranium carolinianum L. Crane's-bill. Weed in dry, disturbed areas. Occasional. WRP: 3281.

G. maculatum L. Wild Geranium; Crane's-bill. In shady moist woods. WRP: 1013, 3250, 4618, Duffy 47.

Polygalaceae

Polygala curtissi Gray. Milkwort. Rare. WRP: 4310.

P. verticillata L., var. *isocycla* Fern. Milkwort. Rare. WRP: 3533.

Euphorbiaceae

Acalypha gracilens Gray. Three-seeded Mercury. Occasional, in dry, sunny disturbed areas. WRP: 3821.

A. virginica L. Three-seeded Mercury. Occasional, in dry, sunny disturbed areas. WRP: 3795.

Euphorbia corollata L. Flowering Spurge. Frequent in dry, sunny, overgrown fields. WRP: 1063, 3611, 3660, 4251, 4420, Osgood-.

E. maculata L. Wartweed. Weed in open, dry, sunny areas. WRP: 3659.

E. preslii Guss. Wartweed. Weed in open, dry, sunny areas. WRP: 3794.

Phyllanthus caroliniensis Walt. Moist soil of ditch. Sunny. Rare. WRP: 3661.

Callitrichaceae

Callitriche stagnalis Scop. Water Star-wort. Rare, in streams. WRP: 3219, 3287.

Anacardiaceae

Rhus aromatica Ait. Fragrant Sumac. Cult. WRP: 4239, 4640.

R. copallina L. Dwarf Sumac. Edges of fields, dry sunny areas. Infrequent. WRP: 3612, 3662, 4863.

R. glabra L. Smooth Sumac. Edges of fields, dry, sunny areas. Infrequent. WRP: 4212, 4260.

R. radicans L. Poison Ivy. Very common in old fields, openings in woods, etc. WRP: 4878.

R. typhina L. Staghorn Sumac. Edges of fields, dry sunny areas. Fairly common. WRP: 3484, 3543, 4183, Lucas 60.

Aquifoliaceae

Ilex opaca L. American Holly. Common understory tree in shady, moist bottomland woods. WRP: 3220; PBCP: 579.

Aceraceae

Acer negunde L. Box-elder; Ash-leaved Maple. Occasional, on streambank and edges of old fields. WRP: 4297; NWBP: 4590, 4880.

A. rubrum L. Red Maple. Common in low moist woods. WRP: 3225, 3226, 3997, Franklin 90, Irving 22.

Balsaminaceae

Impatiens biflora Walt. Touch-me-not. Common in wet, swampy areas. WRP: 2035, 3544.

Rhamnaceae

Ceanothus americanus L. New Jersey Tea. Occasional in openings in dry, oak-pine woods. WRP: 1045, 1067.

Vitaceae

Parthenocissus quinquefolia (L.) Planch. Virginia Creeper. Very common, especially in second-growth woods and old fields. WRP: 4879.

Vitis aestivalis Michx. Summer Grape. Occasional in thickets. WRP: 3556, 4876.

V. labrusca L. Fox Grape. Frequent in thickets. WRP: 3307.

Malvaceae

Malva neglecta Wallr. Common Mallow; Cheese Plant. Uncommon weed in sunny, dry, disturbed areas. WRP: 3479.

Hypericaceae

Ascyrum hypericoides L., var. *multicaule* (Michx.) Fern. St. Andrew's Cross. Dry, sunny, field edges. WRP: 3097, 3614.

Hypericum canadense L. St. John's Wort. Uncommon, in sunny, moist areas. WRP: 3664.

H. gentianoides (L.) BSP. St. John's Wort. Uncommon, in sunny, moist areas. WRP: 3613.

H. mutilum L. St. John's Wort. Occasional, in sunny, moist areas. WRP: 3615, 3665, 3796.

H. perforatum L. St. John's Wort. Frequent in dry, sunny fields and clearings. WRP: 3526, 4153.

H. punctatum Lam. St. John's Wort. Frequent in dry, sunny fields and clearings. WRP: 1068, 2036, 3524, 3663, 4191.

Cistaceae

Lechea intermedia Legget. Pinweed. Uncommon in dry sandy soil, sunny areas. WRP: 3616.

L. Jeggettii Britt. & Hollick. Pinweed. Uncommon in dry, sandy soil, edges of fields. WRP: 3098.

Violaceae

Viola affinis Le Conte. Violet. Common in moist, grassy areas. WRP: 4633.

V. conspersa Reichenb. Dog Violet. Uncommon, in moist, shady woods. WRP: Lucas 39.

V. cucullata Ait. Marsh Violet. Very common in moist areas. WRP: 1050, 3265, 4033, 4612. NWBP: 4582.

V. eriocarpa Schw. (*V. pennsylvanica* Michx.). Smooth Yellow Violet. Frequent in low, moist, open woods. WRP: 1011, 3272, Duffy 83, 89, Franklin 12, Greaves 35.

V. hirsutula Brainerd. Violet. Occasional. WRP: 4133; PBCP: 607.

V. kitaibelliana R & S., var. *rafineskii* (Greene) Fern. Field Pansy. Occasional patches in moist meadows. WRP: 3227; LBCP: 609; PBCP: 608.

V. papilionacea Pursh. Meadow Violet. Common. WRP: 3254; NWBP: 4579; LBCP: 611.

V. primulifolia L., Primrose-leaved Violet. Sunny, wet, sandy areas. PBCP: 612.

V. sagittata Ait. Arrow-leaf Violet. Frequent in dry sunny fields. WRP: 1002, 4029, 4031, 4636, Duffy 77, Greaves 36, Lucas 49.

V. stoneana House. Violet. Frequent in mature woods, along paths. WRP: Franklin 57.

V. sororia Willd. Woolly Blue Violet. Occasional along paths in woods. WRP: 4623.

V. triloba Schw. Lobed-leaf Violet. Frequent in moist, mature woods. WRP: 1051, 4043. var. *dilatata* (Ell.) Brainerd. WRP: 988, James 95.

Elaeagnaceae

Elaeagnus umbellata Thunb. Cherry Elaeagnus. Cult. WRP: 3838, 4039.

Melastomaceae

Rhexia virginica L. Meadow Beauty. Rare, in sunny moist areas. WRP: 3541.

Onagraceae

Circaea quadrisulcata (Maxim.) Franch. & Sav., var. *canadenisa* (L.) Hara. Enchanter's Nightshade. Frequent in low, moist, shady woods, WRP: 1069, 3521.

Ludwigia alternifolia L. Seedbox. Occasional, in wet soil, sunny areas. WRP: 2037, 3535.

L. palustris (L.) Ell. Wet soil, edge of lake, etc. WRP: 3518, 4216.

Oenothera biennis L. Evening Primrose. Old fields, fairly frequent. WRP: 3666, 4319, 4326.

O. parviflora L. Evening Primrose. Old fields, not common. WRP: 3797.

O. tetragona Roth. Sundrops. Open, sunny field. Not common. WRP: 3338, 4184. var. *fraseri* (Pursh) Munz. WRP: 4244.

Araliaceae

Aralia nudicaulis L. Wild Sarsaparilla. Uncommon, on rocky slopes. PBCP: 647.

Panax trifolium L. Dwarf Ginseng. Rich soil, stream bottomland. Uncommon. WRP: 1014, Duffy 43, Greaves 19, Lucas 50; PBCP: 650.

Umbelliferae

Angelica venenosa (Greenway) Fern (*A. villosa* (Walt.) BSP). Angelica. Rare, low, moist woods. WRP: 4236.

Cicuta maculata L. Water Hemlock. Infrequent, along water courses. WRP: 3559, 3617, 4214.

Cryptotaenia canadensis (L.) D.C. Hone-wort. Occasional in moist open woods. WRP: 1071, 3486, 3529, 4196.

Daucus carota L. Wild Carrot. Occasional, in dry sunny fields. WRP: 2038, 3667.

Hydrocotyle ranunculoides L. F. Water Pennywort. Rare, wet ditches, springy areas, in shade. WRP: 1070.

Osmorhiza longistylis L. Sweet-root. Occasional in moist open woods. WRP: Duffy 60.

Sanicula canadensis L. Black Snake-root. Occasional in shady moist woods. WRP: 3476, 4193, 4247, 4859.

Cornaceae

Cornus amomum Mill. Red "Willow", or Osier. Along streams and other wet areas fairly common. WRP: 1065, 3483, 3668.

C. florida L. Flowering Dogwood. Common understory tree. WRP: 1006, 1066, 3099, 3257, 3268, Duffy 68; LBCP: 665, 667; PBCP: 666.

Nyssa sylvatica Marsh. Black, or Sour Gum. Common understory tree. WRP: 2039, 4177; LBCP: 643.

Pyrolaceae

Chimaphila maculata (L.) Pursh. Spotted Wintergreen. Uncommon, in sunny, dry, pine-oak woods. WRP: 1037, 1072, 3100, 3350, 3798, Duffy 54, Greaves 24, James 90; PBCP: 670.

C. umbellata (L.) Bart., var. *cisatlantica* Blake. Prince's Pine; Pipsissewa. Rare, in dry, acid, oak-pine woods. WRP: 3232, 3390.

Pyrola rotundifolia L., var. *americana* (Sweet) Fern. Shinleaf. Frequent in mesic woods. WRP: 3322, 3491.

P. secunda L. One-sided Shinleaf. Rare, in shady, moist woods. WRP: 3451.

P. elliptica Nutt. is also present but not yet collected.

Monotropaceae

Monotropa hypopithys L. Pinesap. Rare, in moist, mature woods. WRP: 4851.

M. uniflora L. Indian Pipe. Not uncommon in moist woods. WRP: 3495, 3669, 4853.

Ericaceae

Epigaea repens L. Trailing Arbutus. Rather rare, on slopes of dry, open, acid oak-pine woods. WRP: 3228, 3999.

Gaylussacia baccata (Wang.) K. Koch. Black Huckleberry. WRP: 4642.

Rhododendron nudiflorum (L.) Torr. Pinkster; Wild Honey-suckle. Fairly common in mature woodland. WRP: 4617, Franklin 70; PNCP: 701.

Vaccinium atrococcum (Gray) Heller. Early Highbush Blueberry. Occasional. WRP: 4154.

V. stamineum L. Deerberry. Common in open, dry, acid pine-oak woods. WRP: 1073, 4649. var. *interius* (Ashe) Palmer & Steyer. WRP: 3300.

V. vacillans Torr. Lowbush Blueberry. Common in open, dry, acid pine-oak woods. WRP: 997, 4028, 4202, Bacon-, Duffy 69, Lucas 44, Irving 15.

Primulaceae

Anagallis arvensis L. Scarlet Pimpernel. Uncommon, in sunny moist places. WRP: 1074, 4867.

Lysimachia ciliata L. (*Steironema ciliatum* (L.) Raf.). Loosestrife. Occasional in partly sunny, wet areas of fields, stream margins. WRP: 1075, 3618, 4209.

L. quadrifolia L. Loosestrife. Uncommon, in dry, sunny old field. WRP: 4173.

Ebenaceae

Diosypros virginiana L. Persimmon. Frequent pioneer on old fields. WRP: 3342, 3465, 4175.

Oleaceae

Fraxinus americana L. White Ash. Along Streams. Not common. WRP: 4316; NWBP: 4592.

Ligustrum vulgare L. Common Privet. Escape. WRP: 3334.

Syringa vulgaris L. Common Lilac. Cult. WRP: 4609.

Gentianaceae

Sabatia angularis (L.) Pursh. Rose-pink. Rare, in sunny wet areas. WRP: 3619.

Apocynaceae

Apocynum cannabinum L. Dog-bane. Frequent in old fields. WRP: 3453, 3542, 4174, 4866.

Asclepiadaceae

Asclepias incarnata L. var. *pulchra* (Ehrh.) Pers. Swamp Milkweed. Uncommon, in sunny wet areas of fields. WRP: 3557, 4317, URCP: 4545.

A. syriaca L. Milkweed. Uncommon, in sunny moist areas of fields. WRP: 4215, 4261.

A. tuberosa L. Butterfly Weed. Rare. WRP: 4309.

Convolvulaceae

Convolvulus arvensis L. Bindweed. Frequent weed in sunny, dry, grassy areas. WRP: 4176.

C. sepium L. Hedge Bindweed. Occasional, in sunny field margins, etc. WRP: 4423. var. *fraterniflorus* Mack. & Bush. WRP: 4313.

Cuscuta compacta Juss. Dodder. Rare. On elderberry in low moist woods. WRP: 3221, 3670.

Ipomoea lacunosa L. Morning-glory. Rare, in dry sunny places. WRP: 3799.

I. pandurata (L.) G.F.W. Meyer. Wild Potato Vine. Rare, in old fields. WRP: 4877.

Polemoniaceae

Phlox maculata L. Phlox. Rare, along sunny streambank. WRP: 3553.

Boraginaceae

Lithospermum arvense L. Corn Gromwell. Infrequent weed in sunny dry areas. WRP: 4025.

Mertensia virginica (L.) Pers. Virginia Bluebells. Infrequent patches in rich, moist, open, stream bottomland. NWBP: 4585.

Verbenaceae

Verbena hastata L. Blue Vervain. Sunny, marshy areas of fields. Uncommon. WRP: 2040.

V. urticifolia L. White Vervain. Frequent in open woods, dry to moist. WRP: 2041, 3519.

Labiatae

Agastache nepetoides (L.) Kuntze. Giant Hyssop. Rare, in moist soil. 3839.

Collinsonia canadensis L. Horse-balm; Stoneroot. Common, in shady woods. WRP: 3671; LBCP: 754.

Glechoma hederacea L. Gill-over-the-ground. Frequent weed, especially damp areas. NWBP: Franklin 16; PBCP: 751.

Hedeoma pulegioides (L.) Pers. Penny-royal. Uncommon, in dry, open, pine-oak woods. WRP: 4409.

Lamium purpureum L. Dead Nettle. Frequent weed in partly sunny moist areas. WRP: 1009, Greaves 20; NWBP: Franklin 15.

Lycopus americanus Muhl. Bugle-weed; Water Horehound. Uncommon. Ditches. WRP: 3622, 3672.

L. virginicus L. Bugle-weed; Water Horehound. Commoner than preceding. Ditches. WRP: 3622, 3672.

Mentha arvensis L., var. *glabrata* (Benth.) Fern. Wild Mint. Rare. WRP: 4318.

M. spicata L. Spearmint. Rare. WRP: 3674.

Perilla frutescens (L.) Britt. Perilla. Rare. URCP: 4541.

Prunella vulgaris L. Heal-all. Frequent, especially moister soil. WRP: 2042 Osgood-, var. *lancoolata* (Bart.) Fern. WRP: 3621, 3675; URCP: 4542.

Pycnanthemum flexuosum (Walt.) BSP. (*Koellia flexuosum* Walt.). Mountainmint. Fairly frequent in dry, sunny, acid fields. WRP: 1077, 3534.

Salvia lyrata L. Cancerweed. Rare, in woods. WRP: 3488.

Satureja vulgaris (L.) Fritsch. Wild Basil. Occasional, in open dry, acid woods. WRP: 1076, 3620, 3676, 4249; URCP: 4531.

Scutellaria elliptica Muhl. Hairy Skull-cap. Rare, in woods. WRP: 3487.

S. integrifolia L. Skullcap. Rare, in grassy areas. WRP: 3489, 3536.

Stachys nutallii Shuttlew. Hedge Nettle. Sunny areas along streams. Occasional. WRP: 4204, 4246.

Trichostema dichotomum L. Bluecurls. Occasional, at edge of dry, sunny field, acid soil. WRP: 3101, 3800; URCP: 4543.

Solanaceae

Solanum americanum Mill. Nightshade. Rare weed. WRP: 3801.

S. carolinense L. Horse-nettle. Uncommon weed in fields and grass. WRP: 2043, 3528; LBCP: 967.

S. dulcamara L. False Bittersweet. Occasional weed, especially in moist thickets. WRP: 4245, 4299.

S. nigrum L. Black Night-shade. Rare weed. WRP: 3677.

Schrophulariaceae

Gerardia purpurea L. Purple Gerardia. Rare, in moist soil, sunny area. WRP: 3802.

Mazus japonicus Kuntze. Rare. Escape? WRP: 1078, 4643.

Mimulus alatus Ait. Monkeyflower. Uncommon. Wet patches in fields, ditches. WRP: 3624.

M. ringens L. Monkeyflower. Occasional, in wet, sunny parts of fields, ditches. WRP: 2044, 3678.

Verbascum blattaria L. Moth-mullein. Occasional, in shady field margins. WRP: 3478.

V. thapsus L. Mullein. Occasional. WRP: 3623.

Veronica arvensis L. Speedwell. Frequent weed in moist areas of old fields. WRP: 1000, 3262.

V. officinalis L. Speedwell. Frequent on dry soil of open, acid oak-pine woods. WRP: 3102, 3301, 4199.

V. persica Poir. Speedwell. Uncommon weed in grass. WRP: Franklin 19.

V. serpyllifolia L. Speedwell. rare, in grass. WRP: 4629.

Plantaginaceae

Plantago aristata Michx. Buckhorn. Dry, sunny soil. Rare. WRP: 4167, 4869.

P. lanceolata L. English Plantain. Common weed in dry, disturbed areas. WRP: 1032.

P. rugelii Dene. Plantain. Occasional weed in dry, disturbed areas. WRP: 3482, 3564.

P. virginica L. Plantain. Frequent weed in dry, disturbed areas. WRP: 1028, 4254, Greaves 66, James 76.

Rubiaceae

Diodia teres Walt. Buttonweed. Rare, in dry, sunny, disturbed areas. WRP: 3803, 4406, 4868.

Galium aparine L. Bedstraw; Cleavers; Goosegrass. Common weed, especially partly sunny, moist areas. WRP: 3256, 3288, 4125, 4598.

G. circaezans Michx. Wild Licorice; Bedstraw. Shady, moist oak woods. Not common. WRP: 3302, 3472.

G. pilosum Ait. Bedstraw. Uncommon. WRP: 3625. var. *punctulosum* (Michx.) T. & G. WRP: 3103.

G. triflorum Michx. Bedstraw. Shady moist woods. Occasional. WRP: 3540. var. *asprelliforme* Fern. WRP: 4248.

Houstonia caerulea L. Bluets; Quaker Ladies. Family common at edges of dryer woods. WRP: 4045, 4624.

H. purpurea L. Houstonia. Moist soil. open woods. WRP: 1082, 3275. var. *calycosa* Gray (*H. lanceolata* (Poir.) Britt.). Open, dry, sunny fields. WRP: 3336, 4166.

Mitchella repens L. Partridge Berry. Common in dry, open, acid woods. WRP: 3104, 4132, Duffy 46, Greaves 21, James 89, Lucas 41; PBCP: 822.

Caprifoliaceae

Lonicera japonica Thunb. Japanese Honey-suckle. Omnipresent in open woods, especially moister areas. WRP: 1079, 3106, 3330.

Sambucus canadensis L. Elderberry. Occasional in marshy areas and along streams. WRP: 2045, 3462, 4208, 4315.

Viburnum acerifolium L. Dockmackie; Maple-leaved Viburnum. Common understory shrub. WRP: 3306, 3681.

V. dentatum L. Arrow-wood. Shady, low, moist woods. WRP: 1080, 3309, 3680.

V. opulus L. European Cranberry Bush. Abandoned nursery stock. WRP: 4253. var. *roseum* L. Snowball. Old nursery stock. WRP: 4639.

V. prunifolium L. Black Haw. Frequent in fence rows, old field margins, second growth woods. WRP: 1081, 3105, 4042, 4182, 4601.

V. recognitum Fern. (*V. dentatum* L., var. *lucidum* Ait.). Arrowwood. Marshy area, shady, WRP: 3308.

V. tomentosum Thunb. Double-file Viburnum. Cult WRP: 4207, 4631.

Weigela florida (Sieb. & Zucc.) A.D.C. Weigela. Cult. WRP: 3294.

Campanulaceae

Specularia biflora (R. & P.) Fisch. & Mev. Venus' Looking-glass. Weed in disturbed areas. WRP: 1083.

S. perfoliata (L.) A. DC. Venus' Looking-glass. Common weed in sunny disturbed areas. WRP: 3299, 331, 4142.

Lobeliaceae

Lobelia cardinalis L. Cardinal Flower. Rare. Stream bank. WRP: 3682.

L. inflata L. Indian Tobacco. Moist, sunny areas. Not common. WRP: 3626, 4404.

Compositae

Achillea millefolium L. subsp. *lanulosa* (Nutt.) Piper. Yarrow; Milfoil. Frequent in dry sunny fields and openings in second-growth woods. WRP: 1085, 1086, 3315, 3683; Osgood-.

Ambrosia artemisiifolia L. Ragweed. Infrequent weed in sunny disturbed areas. WRP: 3684, 3811.

A. trifida L. Ragweed. Less common than preceding. WRP: 3810—

Antennaria neglecta Greene. Pussy-toes. Old field, dry, sunny, acid ground, with scrub pine. WRP: 4002. Franklin 408. var. *attenuata* (Fern.) Cronq. (*A. neodicia* Greene). Similar habitat. WRP: 4024, Irving 24, Simpkins 4.

Antennaria plantaginifolia (L.) Richards. Pussy-toes. Frequent on slopes and path edges in open, dry, acid woods. WRP: 999, Duffy 23, Franklin 41, Greaves 29, Irving 14, James 87, Lucas 39; PBCP: 903.

Anthemis arvensis L. Corn Chamomile. Old fields, in disturbed, dry soil. Sunny. Uncommon. WRP: 3280, Daniels, Greaves 64, James 80.

Aster divaricatus L. Aster. Open woods, especially slopes and path edges. WRP: 3686.

- A. ericoides* L. Aster. Sunny old fields, dry soil. WRP: 3843.
- A. lateriflorus* (L.) Britt. Aster. Occasional in moister areas of old fields. WRP: 3110, 3842; URCP: 4526.
- A. pilosus* Willd. Aster. Frequent, in open woods, field edges. WRP: 3111, 3844.
- A. puniceus* L. Aster. Low, moist areas of fields. WRP: 3685, 3841; URCP: 4533.
- A. simplex* Willd. Aster. Low, moist meadow. URCP: 4532, 4538.
- A. undulatus* L. Aster. Dry, open woods, acid soil. Occasional to frequent. WRP: 3108; URCP: 4534.
- A. vimineus* Lam. Aster. Edges of fields and dry open woods, in acid soil. WRP: 3112; URCP: 4539.
- Bidens bipinnata* L. Spanish Needles. Dry, sunny, disturbed areas. LBCP: 877.
- B. polylepis* Blake. Beggar-tick. Low, sunny areas in moist soil. Not common. WRP: 3107.
- Chrysanthemum leucanthemum* L. Oxeye Daisy. Frequent in sunny old fields. WRP: 3295, 4134.
- Chrysopsis mariana* (L.) Ell. Golden Aster. Dry, acid, open second-growth oak-pine woods, in clearings and field edges. Occasional. WRP: 3804, 4422, 4424; LBCP: 871.
- Cirsium arvense* (L.) Scop. Canada Thistle. Rare. WRP: 4306.
- C. discolor* (Muhl.) Spreng. Plumed Thistle. Rare, in clearings of dry woods. WRP: 4407.
- Erigeron annuus* (L.) Pers. Daisy Fleabane. Not common. WRP: 3283, 4131.
- E. canadensis* L. (*Conyza*). Horseweed. Rare. WRP: 3630; URCP: 4537.
- E. strigosus* Muhl. var. *strigosus*. Daisy Fleabane. Common in fields. WRP: 3282, 3481, 4165, 4190, 4327. var. *beyrichii* (Fisch. & Mey) T. & G. Rare. WRP: 1087, 3318.
- Eupatorium album* L. Thoroughwort. Old fields and thickets. Frequent. WRP: 3816, 4416.
- E. coelestinum* L. Mistflower; Blue Boneset. Sunny areas in moist fields. Uncommon. WRP: 3689, 3812, 3840.
- E. fistulosum* Barratt. Joe-pye Weed. Moist soil in openings of woods. WRP: 3691, 4412.
- E. hyssopifolium* L. Thoroughwort. Dry sunny field. Not very common. WRP: 3688, 3814; LBCP: 849.
- E. perfoliatum* L. Boneset. Moist, shady areas. Occasional. WRP: 3815, 4413.
- E. purpureum* L. Joe-pye Weed. Moist, shady areas. Occasional. WRP: 3690.
- E. rugosum* Houtt. White Snakeroot. Woods. LBCP: 848.
- E. sessilifolium* L. Upland Boneset. Uncommon. WRP: 4324, 4882.
- Gnaphalium obtusifolium* L. Everlasting; Catfoot. Dry areas. Uncommon. WRP: 3813.
- Helianthus decapetalus* L. Sunflower. Dry, open areas. Rare. WRP: 4322, Osgood.
- Hieracium florentinum* All. Hawkweed. Openings in dry second-growth woods. Rare. WRP: 4161.
- H. gronovii* L. Hawkweed. As with the preceding. WRP: 3820.
- H. pratense* Tausch. Hawkweed. As with the preceding. WRP: 4144.
- H. scabrum* Michx. Rough Hawkweed. As with the preceding. WRP: 4421.
- Krigia occidentalis* Nutt. Dwarf Dandelion. Rare. Along paths through dry oak-pine second-growth. WRP: 1041, James 75.
- Lactuca canadensis* L., var. *latifolia* Kuntze. Lettuce. Dry, sunny areas, disturbed soil. Not common. WRP: 4307. var. *obovata* Wieg. Occasional. WRP: 4308, 4410, 4410.
- L. floridana* (L.) Gaertn. Wild Lettuce. Rather common in openings of dry woods, margins of woods, etc. WRP: 3693, 4408. var. *villosa* (Jacq.) Cronq., WRP: 3776.
- L. scariola* L. (*L. serriola* L.). Prickly Lettuce. Sunny old fields, disturbed soil. Uncommon. WRP: 2047. var. *integrata* Gren. & Godr. WRP: 3692.
- Rudbeckia hirta* L. Black-eyed Susan. Occasional at margins of woods and in clearings. WRP: 1088, 3629, 3694.
- Rudbeckia laciniata* L. Coneflower. Low, moist, stream bottomland. Infrequent. WRP: 3627; LBCP: 940.
- R. serotina* Nutt. Black-eyed Susan. More common than *R. hirta*; in old fields. WRP: 2046, 3531, 4211.
- Senecio aureus* L. Golden Ragwort. Low shady moist woods and along streams. Occasional. WRP: 3264, 4622, Lucas 37.
- S. smallii* Britt. Groundsel. Sunny grassy slopes. Frequent. WRP: 1084, 3298, 3351, 4164. 1084 was first identified as *S. pauperculus* Michx., but it no doubt is simply a small *S. smallii*.
- Solidago altissima* L. Goldenrod. Old fields. Common. WRP: 3847.
- S. bicolor* L. Silverrod. Not common. Dry, open, acid woods. URCP: 4544.
- S. caesia* L. Goldenrod. Low, moist, open woods; not common. WRP: 3115; URCP: 4530, 4540.
- S. canadensis* L. Goldenrod. Old fields. Common. URCP: 4525.
- S. graminifolia* (L.) Salisb. Goldenrod. Not common, in dry, sunny fields. WRP: 3818.
- S. juncea* Ait. Goldenrod. Common, in old fields. WRP: 2049, 3628, 3695, 3696, 4418.
- S. nemoralis* Ait. Goldenrod. Common, in old fields, dry areas. WRP: 3114, 3697, 3817, 3819, 3846.
- S. rugosa* Ait. Goldenrod. Frequent, in old fields. WRP: 3113, 3849; URCP: 4529. var. *aspera* (Ait.) Fern. WRP: 3848.
- Taraxacum officinale* Weber. Dandelion. Occasional in opening in woods. WRP: 3269.

Vernonia noveboracensis (L.) Michx. Iron weed. Uncommon. WRP: 3687, Osgood-

REFERENCES

- Armstrong, Bradford. 1967. Personal interview.
- Fernald, M. L. 1950. *Gray's Manual of Botany*. Ed. 8. American Book Co., New York.
- Gleason, H.A. 1952. *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*. Vols. 1-3. New York Botanical Garden, N.Y.
- Gleason, H.A., and A. Cronquist. 1963. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. D. Von Nostrand Co., Princeton, New Jersey.
- Hopson, Clifford A. 1964. The crystalline rocks of Howard and Montgomery Counties. In: *The Geology of Howard and Montgomery Counties*. Maryland Geological Survey.
- Mathews, E.D., E.Z.W. Compy and J.C. Johnson. 1961. *Soil Survey of Montgomery County, Maryland*. United Maryland Agricultural Experiment Station. Series 1958, No. 7.

ABOUT THE AUTHOR

A long list of accomplishments is attached to the name of the Assistant Professor of Botany at Howard University, H. David Hammond, the author of this booklet.

Attending Rutgers University on a New Jersey State Scholarship, Dr. Hammond received his BS degree in Agriculture in 1945 and then an MS degree in Botany in 1947. In 1952, Dr. Hammond received his PH.D. in Systematic Botany from the University of Pennsylvania.

Since coming to Howard University in 1958, the author has taught courses in plant ecology, taxonomy, physiology, biochemistry and general evolution. His research interests of late have been largely in plant physiology. However, he has an abiding interest in taxonomy—the orderly classification of plants according to their natural relationships—and has, over the past five years, greatly increased the herbarium at Howard University, with collections from areas up and down the Atlantic seaboard as well as locally collected specimens.

Dr. Hammond presently holds the office of Vice President of the Botanical Society of Washington and is a member of numerous local and national professional organizations. He has been the recipient of three study grants and awards for continuous study.

At the urging of Mr. Stanton Ernst, Senior Park Naturalist for the Commission and President of the Association of Interpretive Naturalists, Dr. Hammond, assisted by a number of his students, undertook an intensive survey of the flora in the Montgomery County parks, principally Wheaton Regional Park.

In publishing the results of that survey, the Maryland-National Capital Park and Planning Commission wishes to express its sincere appreciation to Dr. Hammond, his assistants, and the Howard University for the cooperation and generous efforts which made it possible.