Flora
of F. W. Kent Park

by Joseph A. Kantor

The University of Iowa Spring 1976

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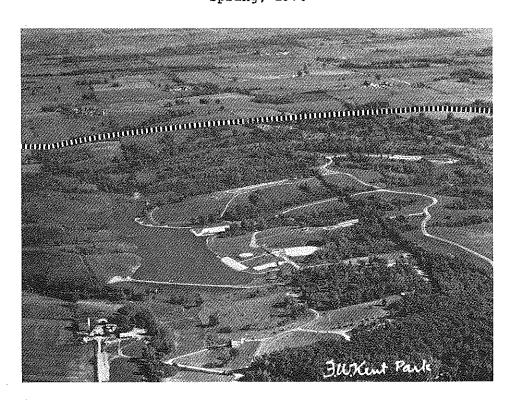


Photo by F.W.Kent

Introduction.

During the growing season of 1975, a number of collections of the vascular plants of F. W. Kent Park was made. A list of the species found is provided here, along with information regarding certain salient characteristics of each. An attempt has been made to arrange the plant families in known phylogenetic (evolutionary) order, as much as might be possible. This at least concerns the families within the major plant groups of "Trees", "Shrubs", "Woody Vines", etc. The designation of the major groups as such, and the order in which they are given, has been made primarily in the interest of facilitating plant identification and location, and is not meant to consistently imply an evolutionary progression.

Information is also provided concerning the use of this flora, and some historical details of Kent Park are included. Other aspects of the botany and ecology of the Park are discussed, and a statistical summary of the flora is finally given.

Specimens of all varieties collected are being preserved and mounted. Two sets of all specimens of all plants are being prepared. One set is to be stored in the Herbarium of the Dept. of Botany at The University of Iowa. The other set is to be stored with the Kent Park staff. Both sets are to be available for examination by those who may be interested.

A Brief History of F. W. Kent Park.

May 18, 1967: The Johnson Co. Conservation Board named the existing 200-acre park after Frederick W. Kent in recognition of his years of work in natural beauty and resource preservation. Kent, an avid birdwatcher and bird photographer, was manager of the U. of I. Photographic Service from 1947 to 1964.

July 27, 1967: The Kent Park master plan, by James Spear of Will. J. Spear and Associates, Park and Recreation Consultants of St. Charles, Ill., was approved by the Johnson Co. Conservation Board.

May 16, 1968: The Kent Park dam contract was awarded to Oliphant Engineering Co. of Cedar Rapids. The lake was to eventually cover about 30 acres, with most of the water to be about five feet deep. The earthen dam, designed by Ned L. Ashton, Iowa City consulting engineer, was to be about 850 Feet Long. The maximum depth of the water of about 30 feet was to be along the dam.

Late fall, 1969: The lake was stocked with largemouth bass and channel catfish for the first time. Since this time, Kent Lake has been stocked yearly with these and also with black crappies.

Fall, 1971: The spillway for the lake was under construction.

Dec. 22, 1971: Construction of the first two shelters at Kent Park was completed.

Nov. 7, 1972: Voters approved a \$435,000 bond issue for expansion of Kent Park. This was to triple the size from the 320 acres of Kent Part at that time.

Summer, 1973: The scenic access road along the ridge was built.

Nov. 7, 1973: The beach house at the south end of Kent Lake near the park entrance was under construction. Work was also underway on the beach. Iowa City Optimist Club members were using a memorial fund to a deceased member, and their own labor, to construct a lodge to serve throughout the year as headquarters for organized youth group and environmental education activities.

Spring, 1974: The Conservation Board approved the purchase of 17 acres of wooded land along Highway 6, east of the park entrance. This brought the park to its present size of 988 acres.

June 7, 1975: The Kent Park beach was opened. This included a 350-foot sand beach, a bathhouse, and a landscaped area at the south end of Kent Lake.

August 22, 1975: A rope tow and winter sports area, north of the beach on the east side of Kent Lake was being developed. The slope was being made suitable for such activities as skiing, tobagganing, and sledding. A new shelterhouse was opened at the top of the slope, and a large indoor fireplace in it was completed.

Also finished were a new parking area and a ramp for rowboats and canoes west of the swimming area. A several-hundred-acre area east of the present park was opened, containing two new shelters, additional picnic sites, and a wilderness youth camp. The lodge at the wilderness camp was being completed. Other long-term improvements scheduled under the County Conservation Board's 10-year plan included a 100-acre wildlife exhibit area, two family campground sites, and a second, less-developed, 35-acre lake.

Nov., 1975: The lodge was completed, and the winter sports area was opened to the public.

Description of the Area and Its Native Plants.

The habitats available to plants at Kent Park have a very wide range and variety. They include: natural prairie, rich deep timber, moist open woods, old abandoned pastureland, ponds and lakeshores, wet creekbeds, both longabandoned and recently acquired farmland, wet meadow areas, and very dry fields. Some of the open areas have been much disturbed, with several large open fields still showing signs of corn and oat stubble from having once been cultivated. The aquatic vegetation of the ponds and lake is quite significant, since the water level tends to be very stable and the level of disturbance and pollution is quite low.

As adapted from Robert A. Davidson, 1957 thesis:

Each type of habitat tends to support its own distinctive flora, with species in each habitat that are often relatively uncommon in eastern Fowa. Most species that grow without cultivation in eastern Iowa constitute a vegetation which is mostly grassland or woodland. Some species may form a shrubby cover bordering wooded areas. Other species are restricted to sandy areas, rock ledges, or may grow immersed in water. Disturbed or waste areas are usually covered by a mixture of naturalized weeds.

Many plants, especially the weeds, show a considerable tolerance to a wide range of environmental differences; such species can survive in many diverse habitats. The majority of species, however, are usually restricted to one or a few similar habitats where environmental factors are compatible with rather narrowly limited tolerances. The several to many species which grow and reproduce together in a particular habitat may be termed a plant community. The boundaries of these communities may or may not be clearly defined.

The principal environmental factors which govern the composition of the various plant communities are usually considered to be the following:

- I. Edaphic or local factors.
  - 1. Topography and drainage.
  - Soils.
- II. Climatic or meteorological factors, often locally greatly modified by the edaphic factors.
  - 3. Light.
  - 4. Temperature.
  - 5. Moisture.
  - 6. Winds.

III. Biotic or living factors.

7. Plants.

8. Animals and man.

Some noteworthy species found in the various types of communities at the habitats in Kent Park might include the following:

In the timber areas are many species that in general require shade, moisture, and often a relatively acid soil. Many of the smaller varieties frequently obtain some natural protection from extreme summer heat and drought, although some may become dormant in late summer.

Most remarkable might be:

The native Orchids:

Showy Orchis (Orchis spectabilis); quite abundant in the Park, but relatively uncommon throughout most of Iowa. Downy Rattlesnake-Plantain Orchid (Goodyera pubescens); rare in Iowa.

Some of the Ferns found: Grape Ferns (Botrychium virginianum and B. obliquum); the latter rather rare in Iowa. Northern Maidenhair Fern (Adiantum pedatum).

Sensitive Fern (Onoclea sensibilis); so-called because the fronds will wither at the slightest frost.

Attractive flowers:

Wild Ginger (Asarum canadense); frequent in the Park; prefers a cool, shaded, acid-soil situation.

True and False Solomon's-Seals (Polygonatum pubescens and Smilacina racemosa); both quite frequent in the Park and significant understory plants.

Noteworthy denizens of more open and upland woods areas: Rue-Anemone (Anemonella thalictroides) Meadow Anemone (Anemone canadensis), Yellow and Blue Woods Violets (Viola eriocarpa and V. sororia), Spotted St. John's-Wort (Hypericum punctatum), Starry Campion (Silene stellata), Wild Cranesbill (Geranium maculatum), Jacob's Ladder (Polemonium reptans), Virginia Bluebells (Mertensia virginica), Bellflower (Campanula americana), White Snakeroot and Joe-Pye Weed (Eupatorium rugosum and E. purpureum), Wood Sunflower (Helianthus strumosus), White Adder's Tongue or Trout Lily (Erythronium albidum), Wood Leek (Allium tricoccum), Jack-in-the-Pulpit or Indian Turnip (Arisaema triphyllum), and Horse-Gentian or Tinker's Weed (Triosteum aurantiacum).

Dominant trees and shrubs in the timber areas include: Hackberry (Celtis occidentalis), Shagbark and Bitternut Hickories (Carya ovata and C. cordiformis); Shaqbark Hickory makes very fine eating, as does Black Walnut (Juglans nigra); other woody plants are: White, Black, and Bur Oaks (Quercus alba, Q. velutina, and Q. macrocarpa), the Common Chokecherry and the Wild Black Cherry (Prunus virginiana and P. serotina), Black and Honey Locusts (Robinia pseudo-acacia and Gleditsia triacanthos), Linden or Basswood (Tilia americana), American and Slippery Elms (Ulmus americana and U. rubra), and Prickly-Ash (Xanthoxylum americanum).

Edible fruits, often found near or along borders of woods areas, include: Common Gooseberry (Ribes missouriense), Black Raspberry (Rubus occidentalis), Wild Blackberry (Rubus allegheniensis), Wild Strawberry (Fragaria virginiana), Hazelnut (Corylus americana), and Wild Plum (Prunus americana).

Other plants commonly found at the boundaries of woods and fields include: Smooth Sumac (Rhus glabra), Blue Wood Aster (Aster cordifolius), and Gray Dogwood (Cornus racemosus).

In the prairies and fields are species that in general require much sun, relative dryness, and a nearly neutral soil. They usually must endure extremes of weather, and many go dormant early in the summer as a self-protective measure.

Most striking would be:

Flowers such as Puccons (Lithospermum canescens and L. croceum), Pasture Rose (Rosa carolina), Horsetail Milkweed (Asclepias verticillata), Prairie Tick-Clover (Desmodium illinoense), Compass-Plant and Rosinweed (Silphium laciniatum and S. integrifolium), Heath Aster (Aster ericoides), Thimbleweed (Anemone cylindrica), Silver Cinquefoll Potentilla argentea), Bracted Plantain (Plantago aristata), Ox-Eye Daisy (Chrysanthemum leucanthemum), Wild Flax (Linum sulcatum), Deptford Pink (Dianthus armeria), Moth Mullein (Verbascum blattaria), Dogbane (Apocynum sibericum), Venus's Looking-Glass (Specularia perfoliata), and Spiderwort Gradescantia ohlensis).

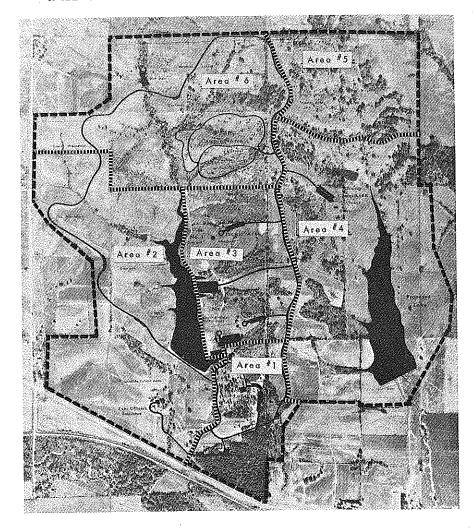
Shrubs and small trees would include: Red Haw (Crataegus mollis), Hedge-Apple or Osage-Orange (Maclura pomifera),
Eastern Red-Cedar (Juniperus virginiana), New Jersey Tea
(Ceanothus americanus), and Prairie Willow (Salix humilis).

Interesting plants of wet, marshy areas, and in or near ponds and the lake, would include: Cup-Plant (Silphium perfoliatum), Boneset (Eupatorium perfoliatum), Arrow-Vine (Polygonum sagittatum), Sneezeweed (Helenium autumnale), Sandbar Willow and Pussy Willow (Salix interior and S. discolor), Blue-Eyed Grass (Sisyrinchium campestre), Swamp Milkweed (Asclepias incarnata), Blue Lobelia (Lobelia syphilitica), Gerardia (Gerardia tenuifolia), Spike-Rush (Eleocharis acicularis), Bulrush (Scirpus atrovirens), Water-Plantain (Alisma subcordatum), Arrowhead (Sagittaria engelmanniana), and Pondweed (Potamogeton foliosus).

Using This List of Vascular Plants.

In the following list of species I have placed the common names of major groups of plants, plant families, and species, first; the botanical designation or name follows in parentheses. An asterisk before a botanical name denotes a naturalized species, or a species that has escaped from cultivation. The relative abundance or frequency of the species in Kent Park is then indicated.

The number or numbers after the botanical name indicate the area or areas of the Park where the plant was found and is most abundant, corresponding to the floristic areas indicated on the map of the Park. The type of habitat in which the plant is most commonly found is then indicated, and finally, the blooming and/or fruiting period of the plant is given.



## FLORA (VASCULAR PLANTS) OF F. W. KENT PARK.

## I. FERNS AND FERN RELATIVES ("PTERIDOPHYTES").

HORSETAIL FAMILY.

Equisetaceae.

Field Horsetail.

Equisetum arvense L. Frequent; #3, #4; Moist sandy soil; "Fruiting": May 1-31.

ADDER'S-TONGUE FAMILY.

Ophioglossaceae.

a Grape Fern.

Botrychium obliquum Muhl. Rare; #1; Deep rich woods; "Fruiting": Sept.

a Grape Fern; Rattlesnake Fern. Botrychium virginianum (L.) Sw. Frequent; #1; Deep rich woods; "Fruiting": June-July.

FERN FAMILY.

Polypodiaceae.

Sensitive Fern.

Onoclea sensibilis L.

Frequent; #1, #3; Moist woods and edges of meadows; "Fruiting":

Sept.

Brittle Fern.

Cystopteris fragilis (L.) Bernh. Frequent; #1; Moist soil in woods; "Fruiting": June-July.

Northern Maidenhair Fern.

Adiantum pedatum L.
Infrequent; #1; Rich moist woods;
"Fruiting": Aug.-Sept.

II. FLOWERS.

(ANGIOSPERMS) .

1. DICOT FLOWERS.

(DICOTYLEDONS) .

(Roses, Daisies, and Similar

Families).

BUTTERCUP FAMILY.

Ranunculaceae.

Wild Red Columbine.

Aquilegia canadensis L.

Frequent; #1; Wooded ravines;

Blooms Apr. 25-June 25.

Small-Flowered Buttercup.

Ranunculus abortivus L. Common; #1; Moist open woods; Blooms Apr. 25-May 25.

Creeping Buttercup.

\* Ranunculus repens L. Common; #1; Open woods; Blooms Apr. 25-June 20.

Meadow Anemone.

Anemone canadensis L.
Common; #1; Open woods; Blooms
May 20-July 10.

Long-Fruited Anemone.

Anemone cylindrica A. Gray. Infrequent; #3; Open woods; Blooms May 20-July 10.

Rue Anemone.

Anemonella thalictroides (L.) Spach. Frequent; #1; Dry open woods; Blooms Apr. 25-May 25. Both pink- and white-flowered forms were found.

BARBERRY FAMILY.

Berberidaceae.

Mayapple.

Podophyllum peltatum I.. Common; #1; Woods; Blooms Apr. 25-May 25.

VIOLET FAMILY.

Violaceae.

Meadow Violet.

Viola papilionacea Pursh Common; #5; Fields, woods, and roadsides; Blooms Apr. 25-June 10. Both blue- and white-flowered forms were found.

Downy Blue Violet.

Viola sororia Willd. Frequent; #4; Woods; Blooms Apr. 25-June 10.

Common Yellow Violet.

Viola eriocarpa Schw. Frequent; #1; Woods; Blooms Apr. 25-May 30.

ROCK-ROSE FAMILY.

Cistaceae.

Frostweed.

Helianthemum bicknellii Fern. Rare; #6; Sandy prairie area; Blooms June 20-July 30.

MUSTARD OR CABBAGE FAMILY.

Cruciferae (Brassicaceae).

Black Mustard.

\* Brassica nigra (L.) Koch Frequent; #2; Fields and waste places; Blooms Apr. 25-Sept. 15.

Common Wintercress.

\* Barbarea vulgaris R. Br. Common; #1, #4; Roadsides and fields; Blooms Apr. 25-June 25.

a Yellow Cress.

Rorippa islandica (Oeder) Borbas Frequent; #2; Wet ground or in water; Blooms May 15-Oct. 5.

Hedge Mustard.

\* Sisymbrium officinale (L.) Scop. var. leiocarpum DC.
Frequent; #5; Fields and waste ground; Blooms May 15-Sept. 25.

Common Peppercress.

Lepidium virginicum L. Common; #4, #5; Fields and waste places; Blooms May 15-Oct. 5.

a Peppercress.

\* Lepidium densiflorum Schrad. Infrequent; #5; Fields; Blooms May 20-July 30.

Shepherd's Purse.

\* Capsella bursa-pastoris (L.) Medic. Common; All areas; Fields, roadsides, and waste places; Blooms Apr. 25-Oct. 10.

ST. JOHN'S-WORT FAMILY.

Hypericaceae.

Spotted St. John's-Wort.

Hypericum punctatum Lam. Frequent; #1; Open woods; Blooms July 15-Aug. 25.

MALLOW FAMILY.

Malvaceae.

Cheeses.

\* Malva neglecta Wallr. Common; #2; Waste places; Blooms May 20-Sept. 30.

Butterprint; Velvet-Leaf.

\* Abutilon theophrasti Medic. Common; #5; Fields and roadsides; Blooms Aug. 10-Oct. 5.

PINK OR CHICKWEED FAMILY.

Caryophyllaceae.

Common Mouse-Ear Chickweed. \* Cerastium vulgatum L. var.

hirsutum Fries.
Common; #4, #5, Waste ground,
lawns, fields; Blooms May 15-Aug. 15.

Common Chickweed.

\* Stellaria media (L.) Vill. Common; #4; Fields and waste ground; Blooms Apr.-Oct.

a Chickweed.

\* Stellaria graminea L.
Infrequent; #4; Moist ground; Blooms May 5-June 25.

a Sandwort.

Arenaria lateriflora L. Infrequent; #4; Woods; Blooms May 5-June 25.

Starry Catchfly.

Silene stellata (L.) Ait. Infrequent; #1; Woods; Blooms June 10-Aug. 10.

Evening Campion.

\* Lychnis alba Mill. Frequent; #6; Woods; Blooms June 10-Aug. 30.

Deptford Pink.

Dianthus armeria L. Frequent; #5, #6; Fields and pastures; Blooms June 10-Aug. 30.

PURSLANE FAMILY.

Portulacaceae.

Spring Beauty.

Claytonia virginica L. Frequent; #1; Woods; Blooms Apr. 25-May 25.

GOOSEFOOT FAMILY.

Chenopodiaceae.

Lamb's-Quarters.

\* Chenopodium album L. Common; #2, #4; Waste places; Blooms July 10-Sept. 20.

AMARANTH FAMILY.

Amaranthaceae.

a Pigweed.

Amaranthus hybridus L. Common; #2; Waste ground and fields; Blooms Aug. 10-Oct. 5.

BUCKWHEAT FAMILY.

Polygonaceae.

Field Sorrel; Sour Dock.

\* Rumex acetosella L. Common; #4; Fields, roadsides, waste ground; Blooms May 10-July 20.

Curly Dock.

\* Rumex crispus L. Common; #1, #3; Roadsides, waste ground; Blooms May 20-June 30. Common Knotweed.

\* Polygonum aviculare L. Common; #4; Waste ground, roadsides;

Blooms June 15-Oct. 5.

Erect Knotweed.

Polygonum erectum L. Frequent; #4; Waste ground and disturbed soil: Blooms Aug. 15-Oct. 5.

Water-Pepper.

\* Polygonum hydropiper L. Frequent; #2, #4; Lakeshores, marshes, creekbeds; Blooms Aug. 20-Oct. 5.

Lady's Thumb.

\* Polygonum persicaria L. Common; #1; Roadsides, waste places, fields: Blooms June 1-Sept. 30.

a Knotweed.

Polygonum pensylvanicum L. Frequent; #2; Lakeshores and wet ground; Blooms Aug. 10-Oct. 5. Pink-, red-, and white-flowered forms were found.

Arrow-Vine.

Polygonum sagittatum L. Frequent; #2, #4; Wet ground; Blooms July 15-Oct. 10.

Jump-Seed:

Virginia Knotweed.

Polygonum virginianum L. Frequent; #1; Woods; Blooms

July 20-Sept. 20.

Climbing False Buckwheat.

Polygonum scandens L. Frequent; #3; Thickets and borders of woods; Blooms July 20-Oct. 10.

Black Bindweed.

\* Polygonum convolvulus L. Frequent; #4; Fields and waste places; Blooms June 20-Sept. 20.

GERANIUM FAMILY.

Geraniaceae.

Wild Geranium; Cranesbill.

Geranium maculatum L. Frequent; #1; Moist woods; Blooms May 15-June 25.

FLAX FAMILY.

Linaceae.

a Wild Flax.

Linum sulcatum Riddell Infrequent; #5; Dry fields; Blooms July 20-Sept. 20.

WOOD-SORREL FAMILY.

Oxalidaceae.

Common Yellow Wood-Sorrel.

\* Oxalis dillenii Jacq. Common; #5; Fields; Blooms May

15-Sept. 15.

Upright Wood-Sorrel.

\* Oxalis stricta L.

Common; #1; Roadsides and open woods; Blooms June 10-Sept. 20.

JEWEL-WEED FAMILY.

Balsaminaceae.

Pale Touch-Me-Not.

Impatiens pallida Nutt.
Common; #1; Moist woods; Blooms

July 20-Sept. 20.

SPURGE FAMILY.

Euphorbiaceae.

Three-Seeded Mercury.

Acalypha rhomboidea Raf. Frequent; #2; Fields, lakeshores; Blooms July 15-Oct. 5.

Nodding Spurge.

Euphorbia maculata L.

Frequent; #1; Roadsides, fields;

Blooms July 15-Sept. 20.

Milk Spurge.

Euphorbia supina Raf. Common; #3, #4; Roadsides and cultivated ground; Blooms July

15-Oct. 10.

Flowering Spurge.

Euphorbia corollata L.

Common; #3, #4, #5, #6; Dry fields;

Blooms June 20-Sept. 20.

a Spurge.

Euphorbia dentata Michx.

Frequent; #1; Roadsides; Blooms

July-Sept.

ROSE FAMILY.

Rosaceae.

Wild Strawberry.

Fragaria virginiana Duch. Common; #1, #6; Grassy banks, roadsides, woods; Blooms Apr. 25-June 25; In fruit Aug. 1-

Sept. 30.

Silvery Cinquefoil.

\* Potentilla argentea L.

Infrequent; #2; Dry sandy field;

Blooms May 20-Sept. 10.

Rough Cinquefoil.

Potentilla monspeliensis L. (P. norvegica L.)

Common; #4, #5; Fields; Blooms

May 20-Oct. 10.

a Cinquefoil.

Potentilla rivalis Nutt.

Infrequent; #4; Fields; Blooms

May 20-Oct. 10.

Common Cinquefoil.

Potentilla simplex Michx. Frequent; #5; Dry fields;

Blooms May 20-June 30.

a Cinquefoil.

\* Potentilla recta L.

Frequent; #5, #6; Dry fields and

waste ground; Blooms May 25-

July 30.

White Avens.

Geum canadense Jacq.

Frequent; #1; Woods and thickets;

Blooms June 15-Aug. 20.

Agrimony.

Agrimonia pubescens Wallr. Frequent; #1; Open woods;

Blooms July 10-Sept. 15.

PEA FAMILY.

Partridge-Pea.

Leguminosae (Fabaceae).

Cassia fasciculata Michx.

(Chamaecrista fasciculata Greene) Infrequent; #2; Rocky lakeshore;

Blooms July 15-Oct. 5.

Bird's-Foot Trefoil.

\* Lotus corniculatus L.

Common; #2; Dry fields and roadsides; Blooms June 15-Aug. 25.

\* Trifolium repens L. Common; #1, #5; Fields, roadsides,

lawns; Blooms May 15-June 30.

Red Clover.

White Clover.

\* Trifolium pratense L. Common; #4, #5; Fields, roadsides;

Blooms May 15-Aug. 15.

Low Hop-Clover.

\* Trifolium procumbens L.

Frequent; #2; Fields and waste

places; Blooms June 10-Aug. 20.

Yellow Sweet Clover.

\* Melilotus officinalis (L.) Lam.

Common; #2, #3, #4, #5, #6; Fields, roadsides, and waste

places; Blooms May 20-Sept. 10.

White Sweet Clover.

\* Melilotus alba Desr. Frequent; #2, #3, #5; Fields, roadsides, and waste places; Blooms May 20-Sept. 10.

Alfalfa.

\* Medicago sativa L.
Common; #2, #4, #5; Fields and roadsides; Blooms May 20-Sept.
20. Both blue- and white-flowered forms were found.

Black Medic.

\* Medicago lupulina L. Frequent; #5; Fields and waste places; Blooms May 10-July 20.

a Tick-Clover.

Desmodium glutinosum (Muhl.) Wood Frequent; #1; Rich woods; Blooms June 10-Aug. 20.

a Tick-Clover.

Desmodium illinoense A. Gray Infrequent; #4, #5; Moist fields; Blooms July 5-Aug. 25.

a Tick-Clover.

Desmodium canadense (L.) DC. Infrequent; #2, #6; Prairie areas; Blooms July 10-Sept. 15.

a Bush-Clover.

Lespedeza capitata Michx. Frequent; #2, #6; Sandy soil and prairie areas; Blooms Aug. 10-Sept. 15.

Hog-Peanut.

Amphicarpa bracteata (L.) Fern. Common; #1, #3; Woods; Blooms Aug. 5-Sept. 20.

## MULBERRY FAMILY.

Moraceae.

Indian-Hemp or Marijuana.

\* Cannabis sativa L.
Common; #4; Edges of fields,
along roads, in waste ground;
Blooms July 10-Sept. 15.
N.B.: This Iowa subspecies is of
little or no value for use, due
to its very minimal concentration
of tetrahydrocannabinol.

#### NETTLE FAMILY.

Urticaceae.

Common Nettle.

Urtica gracilis Ait. (U. dioica L.)
Common; #1, #3, #4, #6; Woods,
alluvial soil; Blooms July 10Aug. 25.

EVENING-PRIMROSE FAMILY.

Onagraceae.

a Willow-Herb.

Epilobium coloratum Muhl. Infrequent; #2; Wet lakeshore; Blooms Aug. 5-Sept. 15.

Common Evening-Primrose.

Oenothera biennis L. Common; #2, #4, #6; Fields, roadsides, waste places. Blooms June 15-Oct. 10.

Enchanter's-Nightshade.

Circaea latifolia Hill Common; #1, #3; Woods; Blooms June 10-July 25.

BIRTHWORT FAMILY.

Aristolochiaceae.

Wild Ginger.

Asarum canadense L. (A. reflexum Bickn. Infrequent; #1; Rich moist woods; Blooms Apr. 25-May 30.

PARSLEY OR CARROT FAMILY.

Umbelliferae (Apiaceae).

Wild Carrot or Queen Anne's Lace. \* Daucus carota L. Common; #4, #5, #6; Fields, roadsides, and waste places; Blooms July 10-Nov. 15.

Common Snakeroot.

Sanicula gregaria Bickn.
Common; #1, #3, #4; Woods; Blooms
May 15-June 30.

Wild Sweet Cicely.

Osmorhiza claytonii (Michx.) Clarke Common; #1, #3, #4; Woods; Blooms Apr. 25-June 20.

Honewort.

Cryptotaenia canadensis (L.) DC. Common; #1, #3, #4; Woods; Blooms June 10-July 30.

Golden-Alexanders.

Zizia aurea (L.) Koch Common; #1, #3, #4; Open woods; Blooms May 15-June 30.

Wild Parsnip.

\* Pastinaca sativa I. Common; #2, #6; Fields, roadsides, waste places; Blooms June 10-Aug. 20.

PRIMROSE FAMILY.

Primulaceae.

a Loosestrife.

Lysimachia ciliata L. Frequent; #1, #6; Moist woods and creekbeds; Blooms June 15-Aug. 20.

DOGBANE FAMILY.

Apocynaceae.

a Dogbane.

Apocynum sibiricum Jacq. Frequent; #2, #6; Fields; Blooms June 15-Auq. 20.

MILKWEED FAMILY.

Asclepiadaceae.

Horsetail Milkweed.

Asclepias verticillata L. Common; #2, #6; Sandy soil in fields; Blooms June 15-Aug. 20.

Common Milkweed.

Asclepias syriaca L. Frequent; #2, #6; Fields; Blooms June 15-Aug. 20.

Swamp Milkweed.

Asclepias incarnata L. Frequent; #2, #6; Banks of creeks and wet lakeshores; Blooms July 10-Aug. 20.

PHLOX FAMILY.

Polemoniaceae.

Woodland Phlox.

Phlox divaricata L.
Frequent; #1; Moist woods;
Blooms May 1-June 30.

Jacob's-Ladder.

Polemonium reptans L. Frequent; #1; Open woods; Blooms May 15-June 30.

MORNING-GLORY FAMILY.

Convolvulaceae.

American Bindweed.

Convolvulus americanus (Sims) Greene
(C. sepium L. var. communis Tryon)
Frequent; #2, #6; In fields and
along fences; Blooms June 10-Aug. 20.

Common Morning-Glory.

\* Ipomoea purpurea (L.) Roth Infrequent; #2; Fields; Blooms Aug. 5-Oct. 5.

WATERLEAF FAMILY.

Hydrophyllaceae.

Waterpod.

Ellisia myctelea L. Infrequent; #4; Waste places and formerly cultivated ground; Blooms May 1-May 30.

Waterleaf.

Hydrophyllum virginianum L. Frequent; #1; Moist woods; Blooms May 15-June 30.

NIGHTSHADE FAMILY.

Solanaceae.

Virginia Ground-Cherry.

Physalis virginiana Mill.

(P. lanceolata Michx.)

Frequent; #3, #4; Cultivated ground and roadsides; Blooms May 15-July 30.

Horse-Nettle.

Solanum carolinense L. Frequent; #5, #6; Fields, roadsides, and waste places; Blooms June 15-Sept. 20.

Buffalo-Bur.

Solanum rostratum Dunal Infrequent; #2; Cultivated ground and roadsides; Blooms July 1-Oct. 5.

Black Nightshade.

\* Solanum nigrum L.
Infrequent; #6; Cultivated ground and roadsides; Blooms June 20-Oct. 10.

Jimson-Weed.

\* <u>Datura stramonium</u> L. Infrequent; #4, #5; Cultivated ground and waste places; Blooms June 20-Oct. 10.

FIGWORT OR SNAPDRAGON FAMILY.

Scrophulariaceae.

Common Mullein.

\* Verbascum thapsus L. Common; #2, #4, #5, #6; Fields, roadsides, and waste places; Blooms June 15-Aug. 20.

Moth Mullein.

\* Verbascum blattaria L. Frequent; #2, #5; Pastures and roadsides; Blooms June 15-Aug. 20.

a Speedwell.

Veronica peregrina L. Frequent; #3; Roadsides and fields; Blooms May 20-June 20.

a Gerardia.

Gerardia tenuifolia Vahl Frequent; #1; Moist ground near Woods; Blooms Aug. 5-Sept. 20.

PLANTAIN FAMILY.

Plantaginaceae.

Common Plantain.

Plantago rugelii Dec. Common; All Areas; Waste places, roadsides, lawns, fields, and open woods; Blooms June 15-Sept. 15.

Bracted Plantain.	Plantago aristata Michx. Frequent; #2, #5; Dry fields and roadsides; Blooms June 15-Aug. 25.	a Wood-Sage.	Teucrium occidentale A. Gray Frequent; #2; Moist lakeshore; Blooms July 10-Sept. 10.
BORAGE FAMILY.	Boraginaceae.	a Skullcap.	Scutellaria lateriflora L.
Stickseed.	Hackelia virginiana (L.) I. M. Johnst. Common; #1, #3, #4; Woods and thickets; Blooms July 10-Sept. 10.	. a Giant Hyssop.	Frequent; #2; Moist lakeshores and creekbeds; July 10-Sept. 15.
Virginia Bluebells.	Mertensia virginica (L.) Pers. Frequent; #1; Open woods; Blooms	a Grant nyssop.	Agastache nepetoides (L.) Ktze. Frequent; #1; Open woods; Blooms July 15-Sept. 20.
a Puccoon or Gromwell.	May 1-May 30. <u>Lithospermum caroliniense</u> (Walt.) Mac M.	Catnip.	* Nepeta cataria L. Common; #5, #6; Pastures, roadsides, Open woods; Blooms June 15-Sept. 15.
	(L. croceum Fern.) Rare; #6; In sandy natural prairie; Blooms May 15-July 25.	Ground-Ivy.	* Glechoma hederacea L. Common; #1; Along roads, in lawns.
Hoary Puccoon or Gromwell	Lithospermum canescens (Michx.) Lehm. Infrequent; #2; Sandy prairie		and in moist open woods; Blooms May 1-June 25.
VERBENA FAMILY.	areas; Blooms May 5-June 25.  Verbenaceae.	Self-Heal or Carpenter-Weed.	* Prunella vulgaris L. Common; #2, #5, #6; Fields, waste places, roadsides, open woods; Blooms June 15-Oct. 5.
White Vervain.	Verbena urticifolia L. Common; #1, #2, #4, #5; Open woods, edges of woods, and road-sides; Blooms July 5-Sept. 15.	a Hedge-Nettle.	Stachys tenuifolia Willd. Frequent; #1; Moist open woods; Blooms July 5-Sept. 10.
Hoary Vervain.	Verbena stricta Vent. Frequent, #2, #5, #6; Fields and roadsides; Blooms June 15-Sept. 15.	a Hedge-Nettle.	Stachys palustris L. Frequent; #4; Moist fields; Blooms July 15-Sept. 10.
Blue Vervain.	Verbena hastata L. Common; #2, #4, #5, #6; Moist fields, open woods, near lakeshore; Blooms July 5-Sept. 15.	Wild Bergamot.	Monarda fistulosa L. Common; #2, #3, #6; Fields and open woods; Blooms June 20- Aug. 30.
LOPSEED FAMILY.	Phrymaceae.	a Mountain-Mint.	Pycnanthemum pilosum Nutt. Common; #2, #3, #6; Sandy fields; Blooms July 1-Sept. 5.
Lopseed.	Phryma leptostachya L. Common; #1, #3; Alluvial soil in woods; Blooms June 15-Aug. 25.	a Water Horehound.	Lycopus americanus Muhl. Common; #2, #3, #6; Wet lakeshore
MINT FAMILY.	Labiatae (Lamiaceae).		and creekbeds; Blooms July 10- Sept. 10.
a Wood-Sage.	Teucrium canadense L. Common; #1, #4; Moist ground in	MADDER FAMILY.	Rubiaceae.
	open woods, fields, and edges of woods; Blooms June 10-Aug. 20.	Goose-Grass.	Galium aparine L. Common; #1, #3; Woods and thickets; Blooms May 5-June 20.

Sweet-Scented Bedstraw. Galium triflorum Michx.

Common; #1, #3; Damp woods;
Blooms June 10-Aug. 20.

a Bedstraw.

Galium concinnum T. & G.

Common; #1, #3, #4; Dry woods
and edges of woods; Blooms June
10-July 30.

HONEYSUCKLE FAMILY.

Caprifoliaceae.

Horse-Gentian or Tinker's Weed.

Triosteum aurantiacum Bickn. Infrequent; #1; Sandy soil in open woods; Blooms May 20-June 30.

BELLFLOWER FAMILY.

Campanulaceae.

a Bellflower.

Campanula americana L. Common; #1, #3, #4; Moist woods; Blooms June 10-Sept. 15.

Venus's Looking Glass.

Specularia perfoliata (L.) A. DC. Frequent; #2, #5, #6; Dry sandy soil in fields; Blooms May 20-June 30.

Blue Lobelia.

Lobelia siphilitica L. Frequent; #1, #2, #6; Wet ground, lakeshore, banks of creeks; Blooms Aug. 1-Oct. 15.

Indian Tobacco.

Lobelia inflata L. Frequent; #1; Open woods; Blooms June 20-Oct. 10.

COMPOSITE OR DAISY FAMILY.

Compositae.

Small Ragweed.

Ambrosia artemisiifolia L. Common; All areas; Fields and waste places; Blooms Aug. 1-Oct. 15.

Giant Ragweed.

Artemisia trifida L.
Common; #2, #3, #4, #5; Fields and
waste places; Blooms July 20Oct. 15:

Cocklebur.

Xanthium strumarium L. Common; #2, #3, #4; Waste places, cultivated ground, and river banks; Blooms Aug. 10-Oct. 10.

Joe-Pye Weed.

Eupatorium purpureum L. Frequent; #1, #3, #4; Woods; Blooms July 10-Aug. 25.

Boneset.

Eupatorium perfoliatum L. Frequent; #4, #5, #6; Wet fields and banks of creeks; Blooms Aug. 1-Oct. 10.

White Snakeroot.

Eupatorium rugosum Houtt.
Frequent; #1, #3, #4; Woods; Blooms
July 20-Sept. 5.

False Boneset.

Kuhnia eupatorioides L. Frequent; #2, #6; Prairie areas; Blooms Aug. 1-Oct. 5.

Common Goldenrod.

Solidago canadensis L. Common; All areas; Thickets, roadsides, clearings, and slopes; Blooms July 20-Sept. 20.

Tall Goldenrod.

Solidago altissima L. Infrequent; #6; Prairie area; Blooms Aug. 10-Oct. 20.

Blue Wood Aster.

Aster cordifolius L. Frequent; #4, #5, #6; Dry woods; Blooms Aug. 10-Oct. 20.

New England Aster.

Aster novae-angliae I.
Frequent; #2, #3, #6; Roadsides,
moist ground, banks of creeks;
Blooms Aug. 20-Oct. 20.

Heath Aster.

Aster ericoides L. Infrequent; #6; Prairie area; Blooms July 20-Oct. 20.

an Aster.

Aster <u>ontarionis</u> Wieg. Common; All areas; Roadsides, fields, and river banks; Blooms Aug. 20-Oct. 10.

an Aster.

Aster simplex Willd. Frequent; #2, #4, #6; Moist ground and river banks; Blooms Aug. 10-Oct. 20.

an Aster.

Aster praealtus Poir.
Frequent; #4, #5; Moist ground
near creeks and in fields;
Blooms Aug. 20-Oct. 20.

Daisy Fleabane.

Erigeron strigosus Muhl.

Common; All areas; Roadsides, fields, dry open woods; Blooms May 10-

July 20.

White Top.

Erigeron annuus (L.) Pers. Common; #2, #4, #5, #6; Fields, roadsides, waste places, and open woods; Blooms June 15-Oct. 15.

a Pussytoes or Indian Tobacco.

Antennaria neglecta Greene Infrequent; #2, #6; Dry rocky fields and open wooded slopes; Blooms May 1-May 30.

a Pussytoes or Indian Tobacco.

Antennaria plantaginifolia (L.) Hook. Infrequent; #2; Wooded slopes; Blooms May 1-May 30.

Sweet Everlasting or Cudweed.

Gnaphalium obtusifolium L.
Frequent; #5; Fields and roadsides;
Blooms Aug. 15-Oct. 15.

Compass-Plant.

Silphium laciniatum L. Infrequent; #2; Prairie areas; Blooms July 20-Aug. 25.

Rosinweed.

Silphium integrifolium Michx. Infrequent; #6; Prairie area; Blooms July 15-Aug. 20.

Cup-Plant.

Silphium perfoliatum L. Infrequent; #2; Wet banks of creeks; Blooms July 25-Sept. 5.

Brown-Eyed Susan.

Rudbeckia triloba L.
Infrequent; #2; Wet banks of creeks and lakeshore; Blooms Aug. 1-Sept. 30. A "rayless" form of this species was also found.

Black-Eyed Susan.

Rudbeckia hirta L.
Frequent; #1, #3, #4, #5; Fields, roadsides, and open woods;
Blooms June 10-Aug. 15.

Pale Coneflower.

Echinacea pallida Nutt. Frequent; #2, #6; Prairie areas; Blooms June 5-July 20.

Drooping Coneflower.

Ratibida pinnata (Vent.) Barnh. Frequent; #2, #6; Prairie areas; Blooms July 1-Aug. 25.

Wood Sunflower.

Helianthus strumosus L. Common; #1, #3, #4, #6; Open woods and roadsides; Blooms July 5-Sept. 15.

a Prairie Sunflower.

Helianthus grosseserratus Martens Infrequent; #6; Prairie area; Blooms Aug. 1-Oct. 10.

Tall Tickseed.

Coreopsis tripteris L. Infrequent; #4; Border of woods and dry field; Blooms Aug. 1-Sept. 30.

Swamp Beggar-Ticks.

Bidens connata Muhl. Infrequent; #1; Marshy ground; Blooms Aug. 20-Oct. 5.

a Beggar-Ticks or Spanish Needles.

Bidens cernua L.
Common; #1, #2, #6; Wet ground,
lakeshore, and banks of creeks;
Blooms July 10-Oct. 5.

Sneezeweed.

Helenium autumnale L. Rare; #2; Lakeshore; Blooms Aug. 15-Oct. 15.

Yarrow or Milfoil.

\* Achillea millefolium L. Common; #2, #4, #5, #6; Fields and roadsides; Blooms May 15-Sept. 10.

Dog-Fennel or May weed.

\* Anthemis cotula L. Frequent; #2, #5, #6; Fields and waste places; Blooms May 15-Sept. 15.

Pineapple-Weed.

\* Matricaria matricarioides (Less.) Porter Frequent; #2; Roadsides, farmyards, and waste places; Blooms May 20-Oct. 20.

Ox-Eye Daisy.

\* Chrysanthemum leucanthemum L. Infrequent; #6; Fields and waste places; Blooms May 20-Aug. 10.

White-Sage.

Artemisia gnaphalodes
(A. ludoviciana var. gnaphalodes
(Nutt.) T. & G.)
Infrequent; #6; Sandy soil; Blooms
Aug. 15-Oct. 15.

Prairie Ragwort.

Senecio plattensis Nutt. Frequent; #4, #5; Sandy fields and sandy soil in woods; Blooms

May 15-June 30.

Common Burdock.

\* Arctium minus (Hill) Bernh. Common; #1, #2, #3, #4; Waste places; Blooms July 20-Sept. 10.

Bull Thistle.

\* Cirsium vulgare (Savi) Tenore Common; #2, #4; Fields and waste places; Blooms July 5-Aug. 30.

Field Thistle.

Cirsium discolor (Muhl.) Spreng. Common; #1, #3; Rich soil in fields and at edges of woods; Blooms Aug. 1-Sept. 25.

Chicory.

\* Cichorium intybus L.
Infrequent; #3; Edges of woods; Blooms June 15-Oct. 30.

Oyster-Plant or Salsify.

\* Tragopogon dubius Scop. (T. major Jacq.) Frequent; #2, #4, #6; Fields and roadsides; Blooms May 20-Oct. 20.

Prickly Lettuce.

\* Lactuca scariola L. Frequent; #1, #2, #6; Waste places, fields, and roadsides; Blooms July 10-Sept. 15.

Wild Lettuce.

Lactuca canadensis L. Frequent; #2, #4, #6; Fields and edges of woods; Blooms June 20-Aug. 20.

Common Dandelion.

\* Taraxacum officinale Wiggers Common; All areas; Fields, lawns, roadsides, waste places, etc.; Blooms Mar. 25-Nov. 20.

MONOCOT FLOWERS. (MONOCOTYLEDONS). (Grasses, Lilies, Orchids, and Similar Families).

WATER-PLANTAIN FAMILY.

Alismataceae.

A Water-Plantain.

Alisma subcordatum Raf. Frequent; #2; Wet lakeshore; Blooms July 15-Sept. 20.

an Arrowhead.

Sagittaria engelmanniana J. G. Sm. Frequent; #2; Wet lakeshore; Blooms July 25-Oct. 15.

PONDWEED FAMILY.

Zosteraceae.

a Pondweed.

Potamogeton foliosus Raf. Frequent: #2; Submerged in lake, near shores; Blooms July 20-Oct. 20.

LILY FAMILY.

Liliaceae.

Wild Leek.

Allium tricoccum Ait. Infrequent; #1; Rich moist woods; Blooms June 20-Aug. 10.

Turk's-Cap Lily.

Lilium michiganense Farw. Infrequent; #1; Open woods; Blooms June 20-Aug. 10.

White Adder's Tonque or White Dog's-Tooth Violet.

Erythronium albidum Nutt. Infrequent; #1; Alluvial soil in woods; Blooms Apr. 25-May 20.

Garden Asparagus.

\* Asparagus officinalis L. Infrequent; #2; Roadside and edge of field; Blooms May 15-June 30.

False Solomon's Seal.

Smilacina racemosa (L.) Desf. Frequent; #1; Rich moist woods; Blooms May 15-June 25.

True Solomon's Seal.

Polygonatum pubescens (Willd.) Pursh Infrequent; #1; Rich moist woods; Blooms May 15-June 25.

Juncaceae.

RUSH FAMILY.

Path Rush.

Juncus tenuis Willd. Common; #1, #2, #5; Paths, fields, roadsides, open woods; Blooms May 25-Sept. 10.

SPIDERWORT FAMILY.

Commelinaceae.

Iridaceae.

a Spiderwort.

Tradescantia ohiensis Raf. Infrequent; #6; Sandy prairie area; Blooms May 20-Sept. 10.

IRIS FAMILY.

Blue-Eyed Grass.

Sisyrinchium campestre Bickn. Infrequent; #6; Wet meadow; Blooms May 1-June 25.

26

### ORCHID FAMILY.

Orchidaceae.

Showy Orchis.

Orchis spectabilis L.
Common in the Park; #1, #3, #4;
Many woods areas; Blooms May 15June 25.

Downy Rattlesnake-Plantain Orchid. Goodyera pubescens (Willd.) R. Br. Very rare; #4; Acid soil in woods; Blooms July 20-Sept. 15.

## ARUM FAMILY.

Araceae.

Jack-in-the-Pulpit or Indian Turnip.

Arisaema triphyllum (L.) Schott
(A. atrorubens (Ait.) Blume)
Common; #1, #3, #4; Moist woods;
Blooms May 1-May 30.

## DUCKWEED FAMILY.

Lemnaceae.

Duckweed.

Lemna minor L. Frequent; #2, #4; Small ponds.

## CAT-TAIL FAMILY.

Typhaceae.

Common Cat-Tail.

Typha latifolia L. Frequent; #1, #2; Margins of creeks and ponds; Blooms June 15-July 25.

## SEDGE FAMILY.

Cyperaceae.

a Sedge.

Cyperus filiculmis Vahl Infrequent; #5; Along roadway in dry field; Blooms Aug. 15-Oct. 5.

a Sedge.

Cyperus strigosus L. Frequent; #2; Wet lakeshore and banks of creeks; Blooms Aug. 10-Oct. 10.

a Spike Rush.

Eleocharis calva Torr. Infrequent; #2; Wet lakeshore; Blooms May 15-July 15.

a Bulrush.

Scirpus atrovirens Willd. Frequent; #1, #2; Along streams; Blooms June 15-Aug. 15.

a Bulrush.

Scirpus cyperinus (L.) Kunth Infrequent; #1; Along streams; Blooms June 20-Aug. 25. a Sedge.

Carex vulpinoidea Michx. Infrequent; #2; Wet lakeshore; Blooms May 5-July 30.

a Sedge.

Carex albolutescens Schw.

(C. straminea Willd.)

Infrequent; #5; Wet field; Blooms
May 5-July 30.

a Sedge.

Carex brevior (Dewey) Mack.

(C. molesta Mack.)

Infrequent; #5; Roadside in field;

Blooms May 5-July 30.

a Sedge.

Carex hystricina Muhl.
Infrequent; #2; Wet lakeshore;
Blooms May 5-July 30.

a Sedge.

Carex pensylvanica Lam.

(C. heliophila Mack.)

Frequent; #1; Dry open woods;

Blooms Apr. 20-May 20.

## GRASS FAMILY.

Gramineae (Poaceae).

Smooth or Hungarian Brome.

\* Bromus inermis Leyss. Frequent; #5, #6; Fields and roadsides; Blooms May 20-June 30.

Japanese Chess.

\* Bromus japonicus Thunb. Frequent; #2, #5, #6; Fields and waste places; Blooms May 20-July 30.

Meadow Fescue.

\* Festuca elatior L. Frequent; #5; Fields, roadsides, and waste places; Blooms June 10-July 30.

Kentucky Blue Grass.

Poa pratensis L. Common; #2, #4, #5; Fields, roadsides, lawns, and woods; Blooms May 15-June 30.

Orchard Grass.

\* Dactylis glomerata L. Common; #2, #4, #5, #6; Fields and roadsides; Blooms May 15-June 30.

Quack Grass.

\* Agropyron repens (L.) Beauv. Common; All areas, esp. #5; Fields and waste ground; Blooms July-Oct.

a Wild Rye.

Elymus riparius Wieg. Infrequent; #1; Moist area in open woods; Blooms July-Sept.

Slender Wild Rye.

Elymus villosus Muhl. Infrequent; #1; Open woods; Blooms June 10-Aug. 10.

a Wild Rye.

Elymus virginicus L. Infrequent; #2; Fields; Blooms June 25-Aug. 10.

Squirreltail Grass.

Hordeum jubatum L. Common; #4, #5, #6; Fields and roadsides; Blooms June 5-July 25.

English Rye Grass.

\* Lolium perenne L. Frequent; #3; Lawns, meadows, and roadsides; Blooms June 25-Aug. 30.

Oats.

\* Avena sativa L. Frequent; #4; Edge of field, escaped from cultivation; Blooms May 20-Aug. 5.

Redtop.

\* Agrostis alba L. Common; #5, #6; Fields; Blooms June 10-Aug. 20.

Common Tickle Grass.

Agrostis hyemalis (Walt.) BSP. Frequent; #6; Dry fields; Blooms May 20-July 30.

Timothy.

\* Phleum pratense L. Common; All areas; Fields and roadsides; Blooms June 10-July 30.

Muhlenbergia.

Muhlenbergia frondosa (Poir.) Fern. Infrequent; #2; Fields; Blooms Aug. 25-Oct. 10.

Three-Awned Grass.

Aristida oligantha Michx. Frequent; #2; Dry fields; Blooms Aug. 10-Oct. 10.

Cut Grass.

Leersia oryzoides (L.) Sw. Frequent; #2; Wet lakeshore; Blooms Aug. 20-Sept. 30.

Smooth Crab Grass.

\* Digitaria ischaemum (Schreb.) Muhl. Common; All areas; Roadsides, fields and waste ground; Blooms Aug. 10-Oct. 20.

a Panic Grass.

Panicum scribnerianum Nash Frequent; #5, #6; Dry sandy fields; Blooms May 25-July 30.

a Panic Grass.

Panicum tsugetorum Nash Frequent; #5, #6; Dry sandy soil; Blooms June 5-July 30.

Barnyard Grass.

\* Echinochloa crusgalli (L.) Beauv. Frequent; #4, #5; Fields and waste ground; Blooms July 25-Sept. 10.

Giant Foxtail.

\* Setaria faberii Herm. Frequent; #3, #4; Dry fields; Blooms July 10-Oct. 10.

Yellow Foxtail.

\* Setaria lutescens (Weigel) F. T. Hubb. Frequent; #3, #4; Waste ground and roadsides; Blooms June 20-Sept. 15.

Big Bluestem.

Andropogon gerardi Vitm.

(A. furcatus Muhl.)

Infrequent; #6; Prairie area;

Blooms Aug. 20-Oct. 10.

Indian Grass.

Sorghastrum nutans (L.) Nash Infrequent; #6; Prairie area; Blooms Aug. 20-Oct. 20.

### III. TREES.

1. GYMNOSPERM TREES.

(GYMNOSPERMS).
(Trees bearing cones and needles.)

PINE FAMILY

Pinaceae.

Scotch Pine

\* Pinus sylvestris L. Infrequent; #2; In an open field, apparently once planted.

CYPRESS FAMILY.

Cupressaceae.

Eastern Red Cedar.

Juniperus virginiana L. Frequent; #2, #6; Dry sandy slopes.

2. "FLOWERING" (ANGIOSPERM) TREES. (ALL ARE DICOTS.)
 (Trees with some type of true flower; those in Kent Park all
 drop their leaves in the autumn.)

LINDEN FAMILY.

American Linden or Basswood.

Tiliaceae.

Aceraceae.

Rosaceae.

Tilia americana L.
Common; #1; Woods; Blooms June 5-July 25.

MAPLE FAMILY.

Silver Maple.

Acer saccharinum L.
Infrequent; #3; Alluvial soil near lake; Blooms Mar. 20-Apr. 30.

Box-Elder.

Acer negundo L. Common; All areas; In alluvial soil and in woods; Blooms Apr. 20-May 30.

ROSE FAMILY.

Apple.

\* Malus pumila Mill. (Pyrus malus L.)
Infrequent; #4; In old pasture,
either escaped or once planted;
Blooms Apr. 25-May 30; Fruits
Aug.-Oct.

Common Chokecherry.

Prunus virginiana L. Common; #1, #4, #5; Woods and thickets; Blooms May 5-June 5.

Leguminosae (Fabaceae).

Wild Black Cherry.

Prunus serotina Ehrh. Frequent; #4; Along fences and edges of woods; Blooms May 5-June 5.

PEA FAMILY.

Honey Locust.

Gleditsia triacanthos L. Common; #5, #6; Woods; Blooms May 15-June 30.

Black Locust.

Robinia pseudo-acacia L.
Common; #5, #6; Woods; Blooms May
10-June 20.

BEECH FAMILY.

Black Oak.

Quercus velutina Lam. Frequent; #1; Upland woods.

Fagaceae.

White Oak.

Quercus alba L. Frequent; #1; Upland woods.

Bur Oak.

Quercus macrocarpa Michx. Frequent; #1, #4; Upland woods. WALNUT FAMILY.

Juglandaceae.

Salicaceae.

Ulmaceae.

Moraceae.

Black Walnut.

Juglans nigra L.
Frequent; #1; Woods; Blooms May;
Fruits Aug.-Oct.

Bitternut Hickory.

Carya cordiformis (Wang.) K. Koch
Frequent; #1; Woods; Blooms MayJune; Fruits Aug.-Oct.

Shagbark Hickory.

Carya ovata (Mill.) K. Koch Frequent; #1; Woods; Blooms Apr.-June; Fruits Aug.-Oct.

WILLOW FAMILY.

Eastern Cottonwood.

Populus deltoides Marsh.
Common; #1, #2, #3; Edges of woods
and along streams; Blooms Mar.-Apr.

Black Willow.

Salix nigra Marsh.
Frequent; #3; Along streams; Blooms
in May.

ELM FAMILY.

American or White Elm.

Ulmus americana L. Frequent; #1, #4; Woods; Blooms in Apr.

Slippery or Red Elm.

Ulmus rubra Muhl. Frequent; #1, #4; Woods; Blooms in Apr.

Hackberry.

Celtis occidentalis L. Frequent; #1; Woods; Blooms Apr.-May.

MULBERRY FAMILY.

Red Mulberry.

Morus rubra L. Common; All areas; Woods, ravines, and along fences; Blooms May 10-June 20; Fruits July-Sept.

Hedge-Apple or Osage-Orange.

\* Maclura pomifera (Raf.) Schneid. Common; #4, #5, #6; Fields, pastures, roadsides; Blooms May 10-June 20; Fruits July-Oct. IV. SHRUBS.

(ALL IN KENT PARK ARE ANGIOSPERMS AND DICOTS.)

RUE FAMILY.

Rutaceae.

Prickly-Ash.

Xanthoxylum americanum Mill.

Common; #1, #5; Woods and thickets;

Blooms Apr. 20-May. 15.

SUMAC FAMILY.

Anacardiaceae.

Smooth Sumac.

Rhus glabra L.

Common; #1, #3, #4, #6; In open woods, along edges of woods, fences, and roads; Blooms June 15-July 20.

BUCKTHORN FAMILY.

Rhamnaceae.

New Jersey Tea.

Ceanothus americanus L. Rare; #6; Sandy prairie area;

Blooms June-July.

ROSE FAMILY.

Rosaceae.

Black Raspberry.

Rubus occidentalis L. Frequent; #1, #3; Moist ground in open woods; Blooms May 15-June 15; Fruits July 10-Aug. 20.

Common Blackberry.

Rubus allegheniensis Porter Frequent; #3; Pastures and open woods; Blooms May 15-June 15; Fruits July 10-Aug. 20.

a Blackberry.

Rubus pennsylvanicus Poir. Frequent; #1; Moist open woods and edges of woods; Blooms May 20-June 20; Fruits July 15-Aug. 20.

Japanese Rose.

\* Rosa multiflora Thunb. Infrequent; #6; Moist fields; Blooms May 20-June 25.

Pasture Rose.

Rosa carolina L.
Common; #2, #6; Dry sandy fields and former pastures; Blooms May 20-Aug. 20.

Meadow Rose.

Rosa blanda Ait. Infrequent; #6; Thickets, moist fields, open woods; Blooms May 25-June 30. a Hawthorn.

Crataegus calpodendron (Ehrh.) Medic. Infrequent; #2; Banks of streams; Blooms May 20-June 15.

a Hawthorn.

Crataegus margaretta Ashe Infrequent; #4; Thickets and fencerows; Blooms May 20-June 15.

Red Haw.

Crataegus mollis (T. & G.) Scheele Common; #3, #5; Open woods, fields, edges of woods; Blooms Apr. 25-May 30.

Wild Plum.

Prunus americana Marsh.
Frequent; #4, #5; Borders of woods;
Blooms Apr. 25-May 30. Fruits
Aug. 5-Sept. 20.

a Wild Plum.

Prunus lanata (Sudw.) Mack. & Bush (P. americana var. mollis T. & G.) Infrequent; #6; Woods; Blooms Apr. 25-May 30; Fruits Aug. 5-Sept. 20.

Hortulan Plum.

Prunus hortulana Bailey Infrequent; #4, #6; Blooms Apr. 25-May 15; Fruits June-Aug.

SAXIFRAGE FAMILY.

Common Gooseberry.

Ribes missouriense Nutt. Common; All areas; Blooms May 1-May 30; Fruits June-Aug.

Saxifragaceae.

Betulaceae.

Salicaceae.

BIRCH FAMILY.

Hazelnut.

Corylus americana Walt. Infrequent; #1; Open woods; Blooms Mar. 25-Apr. 30; Fruits Aug.-Oct.

WILLOW FAMILY.

Sandbar Willow.

Salix interior Rowlee Frequent; #2; Wet lakeshore; Blooms Apr. 20-June 15.

a Willow.

Salix rigida Muhl. Infrequent; #5; Wet ground along creeks; Blooms Apr. 20-May 30.

Pussy Willow.

Salix discolor Muhl. Infrequent; #2; Along streams; Blooms Apr. 20-May 30. Prairie Willow.

Salix humilis Marsh.

Rare; #6; Prairie area; Blooms Apr. 20-May 30.

DOGWOOD FAMILY.

Cornaceae.

Gray Dogwood.

Cornus racemosa Lam.

Common; All areas; At edges of woods and in clearings; Blooms May

25-June 30.

Red-Osier Dogwood.

Cornus stolonifera Michx.

Rare; #1; Wet ravines; Blooms June

15-July 15.

HONEYSUCKLE FAMILY.

Caprifoliaceae.

Common Elderberry.

Sambucus canadensis L.

Common; #1, #4; Moist ground along edges of woods; Blooms June 20-July 20: Fruits Aug.-Sept.

V. WOODY VINES. (ALL IN KENT PARK ARE ANGIOSPERMS.)

# DICOTS.

SUMAC FAMILY.

Anacardiaceae.

Poison Ivy.

Rhus radicans L.

Common; All areas; In woods and along fences; Blooms May 25-July 10. Fruits June 20-Sept. 15.

GRAPE FAMILY.

Vitaceae.

Riverbank Grape.

Vitis riparia Michx.

Common; #1, #5; Along banks of creeks, in open woods, on trees in fields; Blooms May 10-June 15;

Fruits Aug. - Oct.

Virginia Creeper.

Parthenocissus quinquefolia (L.) Planch. Common; #1, #2, #6; Woods and along

fencerows; Blooms June 15-July 15.

# 2. MONOCOTS.

### LILY FAMILY.

Liliaceae.

Common Greenbrier.

Smilax hispida Muhl. Common; #1, #4; Woods and thickets; Blooms May 20-June 20.

# ADDENDUM TO THE FLORA OF F. W. KENT PARK;

While climbing from the ravine at the Hickory Hill Picnic Area in Area #1, in search of uncommon species on a warm day in late May, I discovered by chance the following:

Three highly pulchritudinous young women, well gifted in all respects, sunbathing in a very nearly complete "state of exposure". The following notation was thereby duly made in the Record of Species:

#300. Discovered May 30; Not at all infrequent; Most common in #1, #2, and #3; Primarily in unshaded areas; Tend to persist until the onset of chilly climatic conditions or lengthy periods of adverse weather; Very easy to locate, but specimens unfortunately often difficult to preserve or process for future reference.

# Statistical Summary.

1. Components of the Flora of F. W. Kent Park:

Major Groups	Families	Genera	Species	
			Native	Naturalized
"Pteridophytes". Conifers (Gymnosperms). Dicotyledons. Monocotyledons.	3 2 55 12	5 2 149 43	6 1 177 40	0 1 54 14
Totals:	72	199	224	69
Dicot Flowers. Monocot Flowers. Flowering Trees. Flowering Shrubs. Woody Vines.	41 12 9 9 3	122 41 15 12 3	132 39 19 23 4	51 14 2 1 0

- Total number of species of vascular plants found: 293.
   Additional varieties or forms of species found: 6.
   Total number of different specimens collected: 299.
- 3. The most prominent plant families in Kent Park: 15 families are represented by 5 or more species:
  - 1. Caryophyllaceae (Pink or Chickweed Fam.): 7 species. Compositae (Composite or Daisy Fam.): 47 species. 3. Cruciferae (Mustard or Cabbage Fam.): 7 species. 4. Cyperaceae (Sedge Fam.): 9 species. 5. Euphorbiaceae (Spurge Fam.): 5 species. 6. Gramineae (Grass Fam.): 26 species. 7. Labiatae (Mint Fam.): 12 species. 8. Leguminosae (Pea or Bean Fam.): 16 species. 9. Liliaceae (Lily Fam.): 6 species. 10. Polygonaceae (Buckwheat Fam.): 11 species. 11. Ranunculaceae (Buttercup Fam.): 6 species. 12. Rosaceae (Rose Fam.): 23 species. 13. Salicaceae (Willow Fam.): 6 species. 14. Solanaceae (Nightshade Fam.): 5 species. 15. Umbelliferae (Parsley or Carrot Fam.): 6 species.
- 4. The largest genera of plants found in Kent Park:
  21 genera are represented by 3 or more species.

# 5. The 7 largest genera, with 4 or more species:

1. 2. 3. 4.	Aster (Aster):  Carex (Sedge):  Euphorbia (Spurge):  Potentilla (Cinquefoil):  Polygonum (Knotweed and Smartweed):	5 4 5	species. species. species. species. species.
5.	Polygonum (Knotweed and Smartweed):		species.
6.	<u>Prunus</u> (Cherry and Plum):		species.
7.	Salix (Willow):	5	species.

Concluding Remarks.

Kent Park holds great promise for future biological studies. One of the most interesting would certainly be in the area of Plant and Animal Ecology. This park is ideal for environmental education, conservation and nature studies, and outdoor recreation as well. The flora of Kent Park has proved to be remarkably varied and quite accessible for study.

Any errors or omissions which may occur in this paper are my own, and I hope they will be brought to my attention.

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