FLORA OF HASTINGS

A List and Description of Plants Found in Hastings and Adjacent Communities with a Simplified Strategy for Plant Identification

Third Edition, 2008

Hastings-on-Hudson, Westchester County, N.Y.



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PREFACE

The *Flora of Hastings* is a list and description of nearly 700 plant species identified in the village and nearby communities. Plants listed in the guide are grouped in 10 distinct categories: trees, shrubs, vines, herbaceous (flowering) plants, ferns, horsetails, grasses, sedges, rushes and fungi.

The common name, when there is one, of each plant is given in alphabetical order, followed by the scientific name, and the plant family taxonomic botanists have established as the appropriate category, based on identifiable characteristics.

The plant's location is indicated by using acronyms, such as FP for Fulton Park or HP for Hillside Park, which are listed and identified in the front of the guide. Almost all entries indicate when leaves, flowers or fruits, or other distinguishing characteristics appear. Italics are used to indicate plant characteristics to focus attention on when attempting to identify a plant.

The geography and geological formations of Hastings are especially conducive to a variety of environmental situations that support a diverse and abundant plant life. This diversity of plant habitats, from the shores of the Hudson River, to the woods and vegetated rocky slopes, to private yards and gardens, to playing fields and dense woods, provide an ecology that supports conditions leading to the quality and abundance of plant life that establishes the green character of the village. Colored photographs in the center of the guide illustrate this diversity in Hastings.

The guide is intended to encourage recognition of plants in the green surroundings of the village and to promote appreciation of the quality of environment in which they grow. A strategy is provided for ready identification of plants, without requiring detailed knowledge of what to look for on a particular plant. Knowing the name of a tree and how to identify it, for example, is more rewarding than having to admit knowing little about the green environment surrounding us. The guide will help those with scarce knowledge of plants and help those who do know plants where to find them. Hastings has such a distinctive plant life that the more residents learn about it, the more that life is likely to be preserved and protected.

Abbreviations and Symbols Used In Text

bl	black
blu	blue
br	brown
cm	centimeter (0.394 inches)
cult	cultivated
DBH	Diameter Breast Height
escp	escape
flwr, flwrs	flower, flowers
frt, frts	fruit, fruits
gr	green
Gk	Greek
hds	heads
L	Latin
lf, lvs	leaf, leaves
lflt, lflts	leaflet, leaflets
mm	millimeter(s)
N,S,E,W	North, South, East, West
rd	round
wh	white
уg	young
ylw	yellow
"	inches
'	feet
+	or more
<	less than
>	greater than

Acronyms Indicating Where Plants Were Found

ADM	Andrus Dyckman Memorial
A&P	Atlantic and Pacific Supermarket area
BE	Burke Estate
CPP	Croton Point Park
DP	Draper Park
DPO	Draper Park Observatory
FP	Fulton Park
HP	Hillside Park
HS	Hillside School
HW	Hillside Woods
KPP	Kingsland Point Park
MA	Maple Avenue
MCo	Mercy College
MWP	MacEachron Waterfront Park
NTRA	North Tarrytown Recreation Area
OCA	Old Croton Aqueduct State Historic Park
P.O.	Post Office
QLT	Quarry Lane Trail
RBT	Rowley's Bridge Trail
RBTEXT	Rowley's Bridge Trail and Extension
RE	River Edge
RF	Reynolds Field
RH	Rockwood Hall
RSPP	Rockefeller State Park Preserve
RVP	Riverview Park
RVRStr	River Street
SP	Sugar Pond
SSA	Southside Avenue
ТМ	The Meadow
VFW	Veterans of Foreign Wars Park
VP	Vernal Pond
ZCG	Zinsser Community Gardens
ZP	Zinsser Park

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INTRODUCTION

Plants listed and described in this guide grow within the two square miles of Hastings, although a few very interesting plants found outside this area are noted in the main text and listed in an annex. Since the guide describes plants in a relatively limited area, identification is narrowed geographically and by number of species. This limits coverage to a much smaller group of plants then those described in references cited in the **INTRODUCTION** and thus makes identification easier than referring to these more comprehensive references. Maps showing habitats where plants have been found in Hastings are reproduced in the annex.

In this revised edition of the *Flora of Hastings* and adjacent areas, plants are grouped in 10 major categories: trees, shrubs, vines, herbaceous plants, ferns, horsetails, grasses, sedges, rushes, and fungi. The guide notes where plants are or were found before intentional or unintentional removal. It gives the meaning of the scientific name, the family name botanists use to classify them, essential characteristics, such as color, size and shape of flowers, stems and fruits, and special peculiarities, such as fragrance or sensitivity (to humans) to touch or taste.

The number of plants in this revised edition was enhanced by establishment of the Rowley's Bridge Trail and by donations from many organizations and individuals. An annex lists plants found on the trail, including fungi. Donations of plants on the Rowley's Bridge Trail and Extension include the following donors and suppliers: Hastings Beautification Committee, Dobbs Ferry Garden Club, Graham-Windham School, Thom Forbes, Tom Donohoe, David Wood, Village of Hastings-on-Hudson, River Edge Apartments, VFW and Boulanger renovation and Fulton Park landscapers.

References Consulted

General Taxonomic

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Trees and Shrubs

Alfred Rehder, *Manual of Cultivated Trees and Shrubs* George A. Petrides, *Trees and Shrubs* C. Frank Brockman, *Trees of North America* Roger Phillips, *Trees of North America and Europe* Charles Sargent, *Manual of the Trees of North America* George W. D. Symonds, *The Tree Identification Book* George W. D. Symonds, *The Shrub Identification Book* Roger Phillips and Mertyn Rix, *Shrubs*

Wildflowers

Lawrence Newcomb, *Newcomb's Guide to Wildflowers* Peterson and McKenny, *A Field Guide to Wildflowers*, Petersen Field Guide Series

<u>Ferns</u>

Boughton Cobb, A Field Guide to the Ferns Anne G. Hallowell and Barbara G. Hallowell, Fern Finder, Nature Study Guild, 1981

<u>Grasses</u>

A.S. Hitchcock, Manual of the Grasses of the United States

Aquatics

Norman C. Fassett, Manual of Aquatic Plants

<u>Fungi</u>

Kent H. McKnight and Vera M. McKnight, *Mushrooms*, Peterson Field Guide Series, 1987

Giovanni Pacioni and Gary Lincoff (editor), *Guide to Mushrooms*, Simon and Schuster, 1981

Mushrooms and Toadstools, How to Find and Identify Them, Crescent Books, 1972

The meaning of scientific names of plants was paraphrased from *Gray's Manual of Botany*, Rehder's *Cultivated Trees and Shrubs*, Hitchcock's *Manual of Grasses*, D. Gledhill's *Names of Plants*, the Third Edition of *Webster's Unabridged Dictionary* and *Cassell's Latin and English Dictionary*. Reference was also made to the *Concise Columbia Encyclopedia* and the *American Heritage Dictionary* to identify geographical locations and historically important botanists, herbalists, physicians, naturalists and explorers.

Acknowledgements

Some plants identified by Dorothy Balme, former resident of Hastings, are included in the lists. Plants in Hillside Park, identified by Wm. Wayt Thomas, Associate Curator, The New York Botanical Garden, also a resident of Hastings, were used as a checklist for identifying plants not found earlier. Dr. Thomas also helped identify plants in the Sugar Pond area and drew attention to the presence of the dodder vine and the field horsetail on the north slope of the high school parking lot. Dr. Edward Frankel, Environmental Consultant, reviewed the entire 1999 edition and made many useful suggestions, particularly in revisions to the nomenclature, that were incorporated in this revision. David Wood, a certified arborist and professional gardener from Hastings, added a number of cultivated trees and shrubs to the guide and planted nearly 400 herbaceous plants on the Rowley's Bridge Trail, some donated by Tom Donohoe; Susie Arnold, former Hastings resident, and David Rome, Hastings resident and amateur mycologist, provided information on the fungi. Beth Flanz loaned photos of a Crape-Myrtle and puffball.

Computer assistance was provided by Jacqueline Lhoumeau, resident of Hastings who formatted the text and spent hours in preparing the index. The Trailway Map of Hastings-on-Hudson, 2007 and Rowley's Bridge/OCA Trailway are included in the annex.

Louise Hubbard gave countless hours of whole-hearted support and assistance to this project. Her delight and interest in the world about us is a constant joy. Appreciation is expressed to all those who contributed knowledge, skills and encouragement in preparing this revised edition of the guide.

HOW TO USE THE GUIDE

A user of the guide who knows plants and wishes to see a certain species may find its name in the alphabetized list in the appropriate group, such as tree, shrub, vine or herbaceous plant. Where a plant might be found is given in the guide for most plants. The time of year that the plant is likely to flower, leaf, fruit and so on, is also given in the detailed descriptions.

A phenological table (a list of first observed occurrence of a natural event) is reproduced in the annex for certain plants to illustrate the importance of place and time in identification.

If an unknown plant is found in a shady wooded area, or in an open field or wetland, comparison of its observable characteristics in the appropriate plant group (flowering plant, e.g.) with those in italics in the descriptions will enable a user to identify it by running through each entry until a match is found. To confirm identification, a user can also relate the location and habitat to that given in the guide, for example, wooded area, Hillside Park.

The herbaceous plant, **White Snakeroot**, *Eupatorium rugosum*, can illustrate the approach described above. If a user finds a white-flowering plant on rich soil in a shady area of Rowley's Bridge Trail in late summer or fall, an examination will note a white, showy, flat-topped cluster of flowers at the end of a 3-4 foot stalk, with leaves that are opposite one another on the stem and have coarse teeth on the margin. The "user friendly" alphabetical list of plants, as well as the cross-listed names in the index, can lead a user to the appropriate page and description.

This approach is based on an alphabetical listing of plants in each category by common name. Detailed information about the plants is given under the common name, not the scientific name. Scientific names are also listed alphabetically and refer to the common name. Since many plants have several common names (and usually only one scientific name), an index at the end of the guide will help locate the respective names of plants in the text. The shrub **Spicebush**, also known as **Wild Allspice**, **Feverbush** and **Benjamin Bush**, *Lindera benzoin*, is an example of a plant with several common names.

Suggested Procedure for Finding and Identifying Known and Unknown Plants

A systematic and simple procedure for finding familiar plants in the Hastings area and for identifying plants unknown to an observer is tabulated below.

To Find a Known Plant

- 1. Refer to appropriate plant group in guide
- 2. Find name of plant In that group
- Note place and date where and when plant can be found by referring to the guide
- 4. Find plant in area indicated under Alphabetized common name in guide
- 5. Verify identification by comparing plant with description
- 6. Record data for assurance of identification as season progresses

To Identify an Unknown Plant

- 1. Note environmental situation of plant in question and when seen
- 2. Refer to appropriate group in the guide
- 3. Examine main characteristics of plant; see **What To Look For**, etc.
- 4. Compare with observed characteristics of plant
- 5. Identify plant
- Record data to determine need for additional information as season progresses

To locate a familiar plant, use steps 3 to 5 in the left hand column to find a known plant at a place and time listed in the guide; to reinforce identification, review should first be made of the alphabetized descriptions of plants before visiting the area where the plant is likely to be found.

The procedure for identifying an unknown plant is in steps 3 and 4 on the right side of the table. An observer will be aided in recognizing its characteristics by referring to "**What To Look For When Identifying Plants,**" in **HOW TO USE THE GUIDE**. Examine a plant carefully to find the ERIs (Easily Recognizable Identifiers). ERIs are italicized in each entry for the respective plants in the main plant groups. Italicized ERIs can be found by running through (like fingers in the yellow pages) entries of the main groups, eliminating all plants with inappropriate characteristics until coming to the ERI most closely matching the plant observed, leading to quick identification, supported by the detailed descriptions.

Finding a Known Plant

To find a known plant (a plant likely to be listed in the guide), an observer only needs to find the name of the plant under the appropriate group, note where it could be found and visit the site at the time of year indicated in the guide. If Dutchman's Breeches is the sought-after plant, the herbaceous plant group of the guide will indicate that Dutchman's Breeches will be blooming in Hillside Park, south of Chemka pool, in April. A description of it is given in the alphabetized entry. The plant will be found there unless, of course, some disturbance to it and/or the area has occurred. For example, the long-stalked, yellow-flowered **Cynthia** that appears in Draper Park in June, is cut in a July mowing, leaving only the basal rosette leaves; this perennial plant will produce flowers again the next year.

Identifying an Unknown Plant

Follow steps 2-4 on the right side of the table and begin by correlating the observer's position with the area where the unfamiliar plant was found, such as woodland, open field or wetland.

What to Look For When Identifying Plants

Although experience will soon enable an observer to identify many plants after only a glance, observations should be made carefully to avoid misidentification. Guide users will easily recognize an American beech by its tall, straight and smooth barked trunk, a sycamore by its yellow-blotched trunk, or an Indian Cigar Tree (Catalpa) by its pendant seed pods; herbaceous plants especially will require careful examination to distinguish one species from another because they vary in color, number and arrangement of flowers, leaf size and shape and arrangement on the stem or stems.

Effective use of the approach depends on an observer's skill in recognizing distinguishable and readily identifiable characteristics of plants. The following items listed below (actually questions a user should ask when examining plants) will help focus attention on key characteristics.

Trees

- Where does it grow, e.g., in woods, open fields, in parks, along sidewalks, in gardens, adjacent to parking lots, as a fence in yards, etc.
- Evergreen (i.e. with needles) or deciduous (i.e. broad leaved); broad-leaved trees usually drop leaves in fall; most evergreens do not
- Size and shape: is leaf simple or compound (see glossary for terms)
- Arrangement of leaves on the stem: opposite, alternate, whorled (see glossary)
- Color of leaf above and below; presence or absence of hair on leaf and veins
- Type of flowers, e.g. large, small, color, in clusters or singly, thorny trunk or limbs, small paired thorns on limbs, etc.
- Type of fruits: when do they appear, round, flat, winged, length, color, size, etc.
- Color and type of bark, e.g., smooth, long flat slabs, scaly, resinous, etc.

Shrubs

• All the above, under Trees

Vines

- Items under Trees
- Presence or absence of tendrils (slender, herbaceous green growths usually from leaf-axils; may or may not be coiled and may or may not be forked). The Grape Vine is a familiar example
- Sprawl over other plants (Cucumber Vine) or climb on trees (English Ivy or Poison Ivy)

Herbaceous Plants

- Where does it grow, in open fields, in woods, on roadsides, in lawns, sidewalk cracks, on walls, etc.
- When do flowers or leaves or fruits appear
- Height of plant, e.g. low, creeping, tall, etc.
- Flower color, location of flower on plant, characteristics, e.g. petals joined, separate, with lips, difficult to see, etc.
- Characteristics and location of leaf on stem: e.g., opposite, alternate, whorled, leaves on stem or none, basal leaves only, etc.
- Characteristics of stem, e.g., round, square, grooved, triangular, rough, hairy or not, etc.

Ferns

- Where does it grow: e.g., in wetlands, on dry soil, on walls, etc.
- Grows in clumps or singly, lax, erect, clustered, etc.
- Shape: broadest at base, tapered at base, branched, etc.
- Size: large (3'+), middle (<1'), smaller; delicate or coarse
- Divided or not: once, twice, three times
- Arrangement of leaflets (pinna, see glossary) on stem: opposite, alternate, sessile; margins of pinna
- Presence or absence of lobes at base of each leaflet
- Characteristics of stipe and rachis (see glossary): scaly, hairy, smooth, colored, etc.
- Presence or absence of variously-shaped sori (see glossary) under leaf, and their arrangement

Horsetails

- Where does it grow, in waste places, on slopes, on level surface, in weedy plots, etc.
- Whorled branches on stem or no branchlets
- Tall, slender stem with cone-shaped tip, no branchlets
- Internal characteristics of stem when cut lengthwise, e.g. hollow, solid, partitioned
- Color and arrangement of scales at nodes

Grasses

- Where does it grow, in woods, in open fields, near sidewalks, in waste areas, etc.
- Height, low, medium, tall, etc.
- Leaves grooved or keeled, rough, soft, hairy, smooth, etc.

- Arrangement of flowering heads, branched, spiked, single, bunched, etc.
- Stems: grooved, branched, unbranched firm, lax, round, triangular, colored, hairy or not, etc.

Sedges and Rushes

- Where does it grow, e.g. in woods, open areas, along fences, etc.
- Height, i.e. low, medium, tall
- Stems grooved, branched, unbranched, round, triangular, hollow, solid, partitioned, etc.
- Leaves grooved or keeled, rough, hairy, smooth, etc.
- Arrangement of flowering heads, branched or spiked
- Stem firm, lax, round, grooved, triangular, colored, hairy or not
- Grows in clumps or singly

Fungi

- Where is it found: on trees, limbs, flat ground, single or in clumps, on wood chip piles, etc.
- Shape: e.g. flat or rounded cap, cup shaped, bracket, coral-like, puffball shaped
- Color of cap, upper and lower surface, color of cup inside and out
- Surface of cap: e.g. streaked, zoned, mottled, margin fringed
- Undersurface of cap, i.e. gills, pores, spikes, gills separate from stalk or attached, notched
- Stalk :e.g. thick, woody, attached to cap, color, texture, ring below cap, bulbous at base

Order of Recording Data

The order in which data are recorded is described below. Since herbaceous plants vary considerably, they require a more specific descriptive format. Not all items are included in the alphabetized descriptions because data were not available at the time of identification or were inadvertently unrecorded.

1. Alphabetical list of common and scientific names

Common and scientific names are listed alphabetically. Common names are listed as the main entry; the general grouping, if there is one, comes first with a comma between, e.g., **Oak**, **White**. When the scientific name is listed, reference is made to the common name, e.g., *Quercus alba*, see **White Oak** (sometimes more than one common name is listed).

2. Order of scientific names and their meaning

The accepted scientific name, generally as given in Gleason and Cronquist, is used. The genus, species, subspecies, variety, forma, etc., are next (sometimes more than one scientific name is listed), followed by the common name in generic order, e.g., *Acer saccharum*, see **Maple, Sugar**, or *Aster cordifolius*, see **Aster, Heart-Leaved**

The meaning or origin of the scientific name, usually from Greek or Latin, is given in parentheses; these entries were taken from sources listed in the

References Consulted, e.g., *Stellaria media* (*stella*, *star*; *media*, intermediate).

3. Family names

Common and scientific names are followed by the scientific name of the family, e.g., Rosaceae, followed by the common name, Rose Family. A list of all family names used in the guide is given in an annex.

4. Location of plant

The specific location of the plant is given next, e.g., Burke Estate (BE), or Fulton Park (FP). When a specific location is not indicated, a general location is given, e.g., Hillside Park (HP), or E of Sugar Pond (SP). If a location is not cited, it was inadvertently unrecorded.

5. Plant occurrence

If a plant is easy to find almost anywhere in the Hastings area, has a long period of growing or flowering and is found in a variety of locations, it is noted as common or very common, such as dandelions, and reference to a specific location is unnecessary. Cultivated plants or cultigens that have arisen from cultivation or escaped from cultivation are then noted as cult or escp in the descriptions.

6. General growth characteristics (note: order and data differ for herbaceous plants)

Trees, shrubs, vines and grasses, etc., generally have more similar growth characteristics within their group than do herbaceous plants. Trees have woody trunks, shrubs have several woody stems, vines sprawl and grasses usually have leafy stems. The order for data on herbaceous plants was revised to account for variation by indicating characteristics such as prostrate or sprawling, in clumps or mats, low, tall, floating or climbing, rosettes, basalleaved, in woods or open places, growing from cracks in walls or sidewalks, and so on.

7. Flowering time or time of appearance of identifiable plant characteristics

The date when a plant was first recorded to flower, produce leaves or fruits, for example, is given next. Leaves of some plants appear before the flowers; flowers of some appear before the leaves and some produce flowers and leaves simultaneously.

PLANT GROUPS

Names and descriptions of plants listed in the guide in alphabetical order are given below for plants in 10 groups. With the exception of the sedges, each plant has a common name, stated in bold type, followed by the scientific name in italics.

Although the number of plants in the guide is extensive, comprehensive coverage of plants in Hastings is not presumed. Additional plants, especially cultigens, are likely to be found in the future or brought into the area. Nevertheless, observations on followup field trips to collection sites indicate that quite a complete and substantial list has already been compiled.

TREES

A perennial woody plant having a single main stem that may be short, but is usually considerably elongated, has generally few or no branches on its lower part and is crowned with a head of branches and foliage. Usually differs from a shrub by having a single trunk.

Abies balsamea, see Fir, Balsam

Acer negundo, see Box Elder, Ash-Leaved Maple

- A. nigrum, see Maple, Black
- A. palmatum, see Maple, Japanese
- A. platanoides, see Maple, Norway
- A. platanoides, var. schwedleri, see Maple, Schwedler
- A. pseudoplatanus, see Maple, Sycamore
- A. rubrum, see Maple, Red
- A.saccharinum, see Maple, Silver, White, Soft, River
- A. saccharum, see Maple, Sugar

Aesculus hippocastanum, see Horsechestnut

Ailanthus altissima, see Tree-of-Heaven

Albizzia julibrissin, see Mimosa, Silk-Tree

Alder, European Black, Alnus glutinosa (L. Alnus, name for alder; gummy), Betulaceae, Birch Family, W side NTRA pond, *If tips square or notched, toothed, twigs gummy*, trunk dark with warty stripes, *buds on stalks, small "pine" cones*

Alnus glutinosa, see Alder, European Black

- Apple, Domestic, Pyrus malus (classical name; L. for apple tree), Rosaceae, Rose Family, RBT, cult, 4/28/05, low tree, 5 pink-wh petals, 5 pink-tipped sharply pointed sepals, calyx hairy, lvs tomentose, oblong-ovate, teeth rounded to serrate, many stamens, anthers ylw, 5 styles, pedicels long, hairy, 3 bundle scars
- Apple, Siberian Crab, Pyrus baccata (classical name; berry-like, or Malus baccata L. for apple tree), Rosaceae, Rose Family, W of entrance to Chemka pool, escp, April, flwrs wh, Ivs sharply-toothed, 1-3", shiny above, hairless, ovate, petioles 1-2", frts formed 8/20/99, ylw with red cheeks

- Ash, Black, *Fraxinus nigra* (classical L. name for ash; black), Oleaceae, Olive Family, ZCG/Edgars Lane, April-May, 7-11 *lflts, toothed, not stalked, buds bl,* frts blunt, both ends, June-September
- Ash, European, F. excelsior var. verrucosa (see note on Fraxinus; excelsior, higher; warty), Oleaceae, Olive Family, Hudson Road (Swedish House), N of MCo Campus, Irvington, cult, April, IfIts 9-11, toothed, not stalked, pointed, buds bl, frts winged, notched, br in fall, branches warty
- Ash, Green, *F. pennsylvanica* var. *subintegerrima* (see note on *Fraxinus*; Pennsylvanian; almost entire), Oleaceae, Olive Family, RVRStr, adjacent to Hastings station, ZP at Edgars Lane, common, April, *IfIts 7, toothed, stalked , veins hairy beneath, petioles grooved, nodes purple*, hairy, *buds br*
- Ash, White, *F. americana* (see note on *Fraxinus*; American), Oleaceae, Olive Family DP, 7/25/97, *IfIts 5-9, toothed, stalked, wh or pale beneath, If scars deeply notched*, buds br, twigs rd, hairless
- Aspen, Big-toothed, Populus grandidentata (classical L. name; big-toothed), Salicaceae, Willow Family, SSA, Ivs longer than broad, coarsely toothed, yg Ivs wh below, petioles flat, bark smooth, ylw-gr
- **Balm of Gilead**, *Populus gileadensis* (see note on *Populus*; of Gilead, an Egyptian mountain range), Salicaceae, Willow Family, SSA, escp, 8/15/97, *Ivs heart-shaped, hairy below* and on petioles and twigs, *petioles rd, buds gummy, fragrant*
- **Basswood, Linden**, *Tilia americana* (classical L. name; American), Tiliaceae, Linden Family, large tree (3.5' DBH) on OCA above ZP and ZCG, RBT, common, 6/15/99, flwrs ylw, in cymose clusters on glabrous pedicels, 5 separate petals, 5 sepals, ovate, acuminate, hairy inside, many ylw stamens, bilocular anthers, *Ivs toothed, heart-shaped at base, bases uneven*, tufts of stellate hairs in axils of lower sides of If, flwrs borne on strap-shaped bracts on long glabrous pedicels arising from middle of bract, yg frts wh tomentose, later turning greenish, *round hard nutlets on strap-shaped Ivs*, axillary buds scales overlap, lower one tufted, 3rd scale opposite, longer than other two
- Beech, American, Fagus grandifolia (phagein, to eat; large-leaved), Fagaceae, Beech Family, HP, common, *lvs egg-shaped, coarsely toothed, 9-14 pairs of veins ending at teeth on edge of lf*, young lvs silky-hairy, buds 1 ½" long and sharply pointed, opening 4/10/00, brownish, *bark smooth, gray*
- Beech, Cut-Leaved, Fern-Leaved Beech, Fagus sylvatica lacinata (see note on Fagus, of the forest; cut), Fagaceae, Beech Family, W side OCA on Columbia Labs Campus, cult, Ivs ovate, 4", deeply toothed, turning reddish-brown in fall, buds sharply pointed, scales br, petioles hairy
- Betula allegheniensis, see Birch, Yellow
- B. lenta, see Birch, Black, Sweet Cherry
- B. papyrifera, see Birch, American White
- B. pendula, see Birch, European White
- B. pendula var. dalecarlica or B. laciniata, see Birch, Cut-Leaved Birch
- *B. populifolia*, see **Birch**, **Gray**

- Birch, American White, Betula papyrifera (Betula, L. name for pitch; bearing paper), Betulaceae, Birch Family, SW corner of high school at Farragut Avenue, Ivs oval, doubly-toothed, trunk wh, peeling, narrow horizontal lines
- Birch, Black, Sweet Cherry, B. lenta (see note on Betula; tough or flexible, from the twigs), Betulaceae, Birch Family, N of SP and OCA, Pinecrest Drive to Washington Avenue, RBT, 8/17/97, Ivs toothed, bark smooth, bl, with short horizontal stripes, twigs spicy odor
- Birch, Cut-Leaved, *B. pendula* var. *dalecarlica* or *B. laciniata* (see note on *Betula*; drooping; Dalecarlian; jagged), Betulaceae, Birch Family, VFW, *Ivs deeply cut, limbs droop, trunk whitish with bl V*'s, Ivs ylw in late October
- Birch, European White, *B. pendula*, see note on *Betula*; drooping), Betulaceae, Birch Family, DPO, 4/7/00, pendulant staminate catkins 4", *Ivs toothed, wedge-shaped base, Ivs and twigs hairy, buds gummy, limbs droop*, Ivs fall in October
- Birch, Gray, *B. populifolia* (see note on *Betula*; poplar-leaved), Betulaceae, Birch Family, front of RE, MA, male aments 4/27/00, greenish, 2", female aments (cones) brownish, 3/4", *Ivs alternate, triangular, doubly-toothed, pointed, chalky wh bark with many dark chevrons on trunk*
- **Birch, Yellow**, *B. allegheniensis* (see note on *Betula*; Alleghenies; formerly, *B. lutea*, yellow), Betulaceae, Birch Family, HP, S of Chemka pool, adjacent to brooklet, catkins formed, 4/30/00, immature strobiles formed 7/28/00, scales hairy, lvs alternate, doubly-serrate, oblong-ovate, acuminate at apex, rounded at base, gr-br hairy beneath, petioles and buds hairy, *stems wintergreen odor when scratched, bark shiny ylw, peels in small thin curls, lenticels*
- Box Elder, Ash-Leaved Maple, *Acer negundo* (*Acer*, L. name of maple; negundo, Sanskrit name for a box elder-like tree), Aceraceae, Maple Family, ZCG, SSA, RBT, common, 3/28/00, male flwrs appear with 3-5 *coarsely toothed yg Iflts, end lflt lobed, twigs glossy, wh-powdery*, frts paired "keys" (samaras) form in May

Broussonetia papyrifera, see Mulberry, Paper

Carpinus caroliniana, see Ironwood, Musclewood, Blue Beech

Carya cordiformis, see Hickory, Bitternut

- C. glabra, see Hickory, Pignut
- C. laciniosa, see Hickory, Shellbark
- C. ovalis, see Hickory, Sweet Pignut
- C. ovata, see Hickory, Shagbark
- C. tomentosa, see Hickory, Mockernut

Castanea dentata, see Chestnut

Catalpa bignonioides, see Catalpa, Catawba, Indian Cigar Tree

- Catalpa, Catawba, Indian Cigar Tree, Catalpa bignonioides (aboriginal name; like Bignonia), Bignoniaceae, Trumpet-Creeper Family, Baker Lane, RBT, May, flwrs wh, ylw-purple spots inside, *Ivs 6-13", heart-shaped, soft, opposite or in 3's, long cigar-shaped pendant pods* form in September and persist
- Cedar, Red, Juniper, Juniperus virginiana (L. name; Virginian), Cupressaceae, Cypress Family, common cult, evergreen, 3-sided needle-like and opposite scale-like lvs, branchlets 4-sided, frts rd, wh-gr berries, fragrant

Cedar, White, Arbor Vitae, *Thuja occidentalis* (*Thuja*, or *Thua*, ancient Gk. name of a resin-bearing evergreen; Western), Cupressaceae, Cypress Family, common cult, evergreen, lvs small, scale-like, hugging twigs, flattened, pleasant odor when crushed

Celtis occidentalis, see Hackberry

Cercidiphyllum japonicum, see Katsura

Cercis canadensis, see Redbud

- Cherry, Black, *Prunus serotina* (L. name of plum; late-ripening), Rosaceae, Rose Family, HP, common, 5/22/99, *wh flwrs in long racemes* of 20 flwrs, short pedicels, 15 stamens, 1 stigma, sepals gr, triangular, *Ivs bright gr, finetoothed, oblanceolate*, veins inconspicuous, *midrib br hairy below, petioles red, yg bark reddish*, dark, marked with short horizontal lines, crushed stems with strong odor, old bark rough
- Cherry, Choke, *P. virginiana* (see note on *Prunus*; Virginian), Rosaceae, Rose Family, OCA, N of ZP, common, 4/8/99, *flwrs wh in long pendant clusters, lvs sharply-toothed, oval, hairless below*, frts in May-June, old bark gray-br, smooth
- Cherry, Cornelian, Cornus mas or mascula (L. from cornu, a horn, referring to hardness of wood and English dagge, a dagger or sharp-pointed object; mas or mascula, bold, male), Cornaceae, Dogwood Family, DPO, 3/25/00, flwrs before lvs, small ylw flwrs in clumps, subtended by hairy pinkish bracts, 4 ylw oblanceolate sepals, 4 ylw anthers, 1 style, capitate stigma, *Ivs ovate, 4 1/2", lustrous above, 3-5 pairs of veins,* hairs in axils of veins below, stems ridged, branches opposite, frt dark red, *bark ylw, flaky*
- **Cherry, Kwanzan**, *P. serrulata* var. *sekiyama* (see note on *Prunus*; finely serrate; *sekiyama*, Japanese word for sacred mountain), Rosaceae, Rose Family, FP, front of VIP on Warburton and CITIBANK, Main Street, cult, 4/26/00, *Ivs reddish when appearing with large pink-wh flwrs, bark smooth and rough*
- Cherry, Sour or Pie, *P. cerasus* (see note on *Prunus*; classical name for cherry), Rosaceae, Rose Family, E side OCA near Elm Place and N end DP, early April, *flwrs wh, Ivs egg-shaped, doubly-toothed, 6-8 pairs of veins, frts red*
- Cherry, Sweet or Bird, Mazzard, *P. avium* (see note on *Prunus*; refers to a bird), Rosaceae, Rose Family, HP, N end, near Judson Avenue, April, *flwrs whpinkish, lvs egg-shaped, base wedge-shaped, doubly-toothed, tipped, teeth curved forward*, sparsely hairy beneath, petioles hairy
- **Chestnut**, *Castanea dentata* (Gk. *Castana*, classical name of chestnut; toothed), Fagaceae, Beech Family, 6/18/06, 150 Farragut, HW, Algonquin Trailway, SE of brooklets, rocky hill, *Ivs 4-8", sharply-toothed, lanceolate, involucre of frt pods bristly*, 3-seeded, concave inside, convex outside, 10/27/99, styles 1 cm, all parts hairy inside of shell, brownish tomentum, base marked with conspicuous oval scar

Cladrastis lutea, see Yellowwood

Coffee Tree, *Gymnocladus dioica* (Gk. *gymnos*, naked; *klados*, branch; two-housed, referring to separation of sexual parts of plants), Caesalpiniaceae, Caesalpinia Family, S of St. Matthew's School, May, flwrs wh, *lvs large, twice compound, lflts numerous,* entire, pods br, up to 10", September

Cornus florida, see Dogwood, Flowering

- C. racemosa, see Dogwood, Red-Panicled
- C. sericea, see Dogwood, Red-Osier

C. or Benthamia japonica, see Dogwood, Kousa

- C. mas or mascula, see Cherry, Cornelian
- **Cottonwood, Common**, *Populus deltoides (*ancient name for poplar; deltoid, referring to shape of leaf), Salicaceae, Willow Family, ZCG, RBT, male catkins form and fall before lvs appear, 4/12/99, anthers numerous, purple, bracts fimbriate, fringed, pistillate catkins 4/12/00, *lvs alternate, large-toothed, truncate at base,* ciliate when yg, *petioles flat with 2 glands at base of lf*, buds 6-7 br scales, gummy, yg twigs ylw, ridged, wh speckles, mature bark dark and deeply ridged
- Crab Apple, Siberian, *Pyrus baccata* (classical name of pear tree; berry-like), or *Malus baccata* (L. for apple tree; berry-like), Rosaceae, Rose Family, W of entrance to Chemka pool, escp, April, *flwrs wh, Ivs sharply-toothed, 1-3", shiny above, hairless, ovate,* petioles 1-2", frts formed 8/20/99, ylw with red cheek
- **Crab Apple, Toringo**, *P. sieboldi* or *Malus sieboldii* (see note on *Pyrus*; named for Philipp Franz von Siebold; *Malus*, L. apple tree), RBT, cult, *flwrs pink to wh*, styles 3-4, *Ivs pubescent both sides*, ovate, acuminate, serrate, some 3-5 lobed, *twigs pubescent*

Crataegus crus-galli, see Hawthorn, Cockspur

- Dogwood, Flowering, Cornus florida (L. from cornu, a horn, referring to hardness of wood and English dagge, a dagger or sharp-pointed object; flowering),Cornaceae, Dogwood Family, MA, 4/3/98, RBT, common ornamental, May, 4 wh notched bracts surround small gr flwrs, lvs egg-shaped, entire, 5-6 pairs of veins parallel margin, bark checkered, frts gr, turning bright red, 9/8/99, lvs reddish-purple in October
- **Dogwood, Kousa**, *C.* or *Benthamia japonica* (see note on *Cornus*; named for George Bentham; Japanese), Cornaceae, Dogwood Family, FP, 5/29/99, *flwrs (bracts) wh, on long stems on one side of branch*, lvs bright gr above, scarlet in fall, *veins parallel slightly-toothed margins*, frts in August
- **Dogwood, Red-Osier**, *C. sericea* (see note on *Cornus;* silky-hairy),Cornaceae, Dogwood Family, NE corner library (sometimes cultivated small tree), and HP, N of SP, RBT, May, flwrs small, wh, flat-topped clusters, *lvs elliptic, 2-5*", *6-7 pairs of veins, wh below, stems red, sometimes gr*, pith wh, frts wh, July
- Dogwood, Red-Panicled, *C. racemosa* (see note on *Cornus*; in a raceme on elongate inflorescence from unbranched stalk), Cornaceae, Dogwood Family, HP, N side SP, June, flwrs small, wh, racemose, *Ivs egg-shaped, 3-5 pairs of veins, whitish below, twigs brownish*, pith br, *stems red*, frts wh, July

Elaeagnus angustifolia, see Oleaster, Russian-Olive

Elm, American, Ulmus americana (classical L. name; American), Ulmaceae, Elm Family, W of Sheldon Wagner Plaza behind fence, *Ivs doubly-toothed, rough above, smooth below, base of If uneven*, frts 4/17/99, 3/8" broad, elliptic, densely ciliate margins, flat sides, glabrous, reticulate, on long pedicels, fascicled, buds br, dark-edged scales, *stems br, glabrous*

- Elm, Chinese, U. parvifolia (see note on Ulmus; small-leaved), Ulmaceae, Elm Family, curb planting, W side Warburton Avenue, S of William Street, and SSA, Ivs small, simply toothed, stipules narrow, hairy, base of Ivs rounded, slightly unequal, flwrs in fall
- Elm, English, *U. procera* or *U. campestris* (see note on *Ulmus*; *procea*, tall; *campestris*, of the plains), Ulmaceae, Elm Family, curb planting, E side Warburton Avenue, *Ivs toothed, somewhat sandpapery above, twigs hairless, buds bl*
- Elm, Slippery or Red, *U. rubra* (see note on *Ulmus*; red), Ulmaceae, Elm Family, RBT, common on OCA, ZCG, *Ivs oval, double-toothed margins, rough above,* pointed, in frt 5/9/99, oval, not fringed, *stems and buds reddish hairy, under bark slimy*

Fagus grandifolia, see Beech, American

F. sylvatica lacinata, see Beech, Cut-Leaved, Fern-Leaved Beech

Ficus carica, see Fig Tree

- Fig Tree, *Ficus carica* (ancient name for fig; from Caria, province of Asia Minor), Moraceae, Mulberry Family, Ridgedell and MA, cult, 7/29/00, *Ivs alternate, deeply 3-5 lobed*, ovate, elliptic, entire, *palmately veined*, scabrous above, yg Ivs pubescent beneath, thin, leathery, 7", *frt September, edible*
- Fir, Balsam, Abies balsamea (Abies, L. name of an Old World species; balsamic, oil from balsam), Pinaceae, Pine Family, S side of entrance to DPO, RBT, *evergreen*, steeple-shaped tree, needle bases circular, twigs smooth when needles removed, 2 wh stripes beneath flat needles arranged in flat sprays, cones 1-3", fleshy
- Fir, Douglas, Pseudotsuga menziesii (Gk. pseudos, false; tsuga, common form of the Japanese name; named for Archibold Menzies; or P. taxifolia, taxus, the Yew; folia, leaf, i.e., yew-like leaf, or P. Douglasii for David Douglas), Pinaceae, Pine Family, Community Center, cult, March, needles 1-1.5" long, petioled, stick out in all directions from branch, cones 3", scales with 2 bracts

Fraxinus americana, see Ash, White

- *F. excelsior* var. *verrucosa*, see Ash, European
- *F. nigra*, see **Ash**, **Black**
- F. pennsylvanica var. subintegerrima, see Ash, Green
- Ginkgo biloba, see Maidenhair Tree

Gleditsia triacanthos or inermis, see Locust, Honey

- **Golden Chain Tree**, **Common Laburnum**, *Laburnum anagyroides* (ancient L. name; *ana*, upward; *gyroidal*, spiral), Fabaceae, Pea or Bean Family, cult, Ridgedell Avenue and MA, 5/18/99, St. Matthews Luthern Church, 5/13/06, *pendant ylw flwrs, lvs trifoliate*, alternate, all parts of plant poisonous
- **Gum, Black or Sour**, *Nyssa sylvatica* (*Nyssa*, a nymph, growing in water; of the woods), Cornaceae, Dogwood Family, E side of Chemka pool road, May, *Ivs shiny, hairless, egg-shaped, entire, leathery, turning scarlet in fall*, pith chambered, bark dark and checkered

Gymnocladus dioica, see Coffee Tree

- Hackberry, Celtis occidentalis (Gk. name of a tree with sweet fruit; Western), Ulmaceae, Elm Family, OCA S of Washington Avenue and OCA near Elm Place, RBT, common, 4/15/98, flwrs and lvs appear together, *lvs toothed, sandpapery above, base uneven, long-pointed, bark with abrupt ridges or warts*, older lvs with cone-shaped galls
- Hawthorn, Cockspur, Crataegus crus-galli (Gk. kratos, strength; spur of a cock), Rosaceae, Rose Family, front of library, 5/17/00, simply toothed ovate lvs, leathery, flwrs wh, stout thorns 3"+, frt dull red
- Hemlock, Tsuga canadensis (Tsuga, Japanese name of hemlock cedar; Canadian), Pinaceae, Pine Family, DP, common, evergreen, needles wh below, small, stalked at base, cones to 1"
- Hickory, Bitternut, Carya cordiformis (Gk. name for walnut; heart-shaped, from the fruit), Juglandaceae, Walnut Family, S side entrance to 645 Broadway, HP, RBT, IfIts 7-9, somewhat hairy below, buds bright ylw-powdery, frt gr, 7/18/00, 4 distinct ridges, bark tight, smoothly ridged
- Hickory, Mockernut, C. tomentosa (see note on Carya; tomentose), Juglandaceae, Walnut Family, HP, SW Chemka pool, 6/27/97, *IfIts 7-9, wooly (orange-br) below, fragrant when crushed*, bark light and tight, deeply furrowed
- Hickory, Pignut, C. glabra (see note on Carya; smooth, referring to the fruit), Juglandaceae, Walnut Family, ZP, HP at HS, *lflts 5, hairless, twigs red-br, hairless*, bark dark, tight, frt forms in July
- **Hickory, Shagbark**, *C. ovata* (see note on *Carya*; ovate, from shape of fruit), Juglandaceae, Walnut Family, S side entrance to DPO, HP, SW of Chemka pool, 6/11/99, *IfIts 5-7*, hairless or tufts on teeth, twigs red-br, hairy to shiny, *bark light, shaggy*
- Hickory, Shellbark, C. laciniosa (see note on Carya; full of flaps or folds, referring to the bark), Juglandaceae, Walnut Family, HP, SW of Chemka pool, 6/11/99, *Iflts 7-9, velvety or hairless below, twigs orange-br*, hairless or slightly hairy, *bark very shaggy in long strips*
- **Hickory, Sweet Pignut** *C. ovalis* (see note on *Carya; oval),* Juglandaceae, Walnut Family, HP, SW of Chemka pool, 6/11/99, *Ivs pinnately compound, 7 lflts, ylwpowdery beneath when yg*, sparsely hairy on veins beneath, terminal lflt oblanceolate, toothed, petioles and rachis glabrous, grooved, buds glabrous, not overlapping, *bark light gray, separating at maturity into long plates*
- Holly, American, *llex opaca* (*llex*, ancient name for Holly-Oak; dull or opaque), Aquifoliaceae, Holly Family, front of library, May-June, flwrs 4-merous, clustered along bases of minutely pubescent branchlets, calyx segments acute, ciliate, *lvs oval-elliptic, coriaceous, evergreen, spiny-toothed*, stipules bl, *frts* (a drupe) *red* (or ylw in forma *xanthocarpa*, ylw-fruited), nutlets grooved on back, August-June
- Holly, Highclere, *I. altaclarensis* (see note on *llex*; tall, clear), listed in trade as *I. aquifolium*, Aquifoliaceae, Holly Family, 11 Villard, cult, 20', *evergreen, lvs leathery, elliptic, 2 1/2-4", margins slightly undulate with few spiny teeth, berries bright red*, globose, 4-angular seeds in a pulpy mass

Hornbeam, Ostrya virginiana (Gk. for a tree with very hard wood; Virginia), Betulaceace, Birch Family, SE end Cropsey Lane parking lot and SSA near Zinsser bridge, flwrs April-May, *Ivs oblong,* sharply serrate, *lanceolate, narrowed to slender point at apex,* cordate at unequal base, petioles br hairy, veins hairy, *frt abruptly narrowed in sac-like clusters* (strombiles), 6/18/00, yg stems hairy, bark flaky, red-tinged, stems br, glabrous, ylw warts

Horsechestnut, Aesculus hippocastanum (ancient name of mast-bearing tree; like a horsechestnut), Hippocastanaceae, Horse-chestnut Family, N of St. Matthew's School on Villard Avenue, entrance to ZP, *wh flwrs 4/29/99, end buds large, sticky, 7-9 radiate toothed lflts, 4/7/00, greenish frts spiny outside, brown smooth nuts inside*, September

llex altaclarensis, see Holly, Highclere

I. opaca, see **Holly, American**

Ironwood, Musclewood, Blue Beech, Carpinus caroliniana (early L. name of hornbeam; Carolinian), Betulaceae, Birch Family, Dan Rile Park, April, *Ivs eggshaped, doubly-toothed, rd or wedge-shaped at base*, petioles slightly hairy, buds br, scale margins hairy, *frt inclosed in dense, leafy bracts*, trunk smooth, *bark looks "muscular"*

Juglans nigra, see Walnut, Black

Juniper, Dwarf, Common, Juniperus communis (L. name; in clumps), Cupressaceae, Cypress Family, E of Hastings station, *low evergreen, scaly Ivs with wh margins, cones small, with whitish bloom*

Juniperus communis, see Juniper, Dwarf, Common

J. rigida, see Juniper, Temple, Needle Tree

Juniper, Temple, Needle Tree, Juniperus rigida (L. name; rigida, stiff), Cupressaceae, Cypress Family, W entrance to DP on Washington Avenue, sharp-pointed needles about 3/4", in whorls of 3, evenly spaced along br stems, limbs droop

- J. virginiana, see Cedar, Red, Juniper
- Katsura, Cercidiphyllum japonicum (cercis, ancient name of the oriental Judas-tree; phyllon, a leaf, refers to shape of leaf; Japanese), Cercidiphyllaceae, Katsuratree Family, cut down in 2006 at Veterinarian's Office on Warburton Avenue, lvs ovate, serrate, cordate at base, purplish in spring, form 4/16/99, ylw in fall

Koelreuteria paniculata, see Pride-of-India, China-Tree

Laburnum anagyroides, see Golden Chain Tree, Common Laburnum Lagerstroemia indica, see Myrtle, Crape

L. tomentosa, see Myrtle, Crape

- Larch, American, Tamarack, *Larix laricina (larix*, classical name of European species; *laricina*, larch-like), Pinaceae, Pine Family, N of Chemka pool and N side DP, OCA E of ZP ball field, *needles thin, in clumps at end of short spurs, up to 1", deciduous*, bark sheds in small pieces
- Larch, European, L. decidua (see note on Larix; decidua, deciduous), Pinaceae, Pine Family, 6 Main Street, ylw needles (lvs) fall in October, 1"+, in clumps on short spurs, bark sheds in large plates

Larix decidua, see Larch, European

L. laricina, see Larch, American, Tamarack)

Linden, Small-Leaved European, Greenspire, Littleleaf Linden, *Tilia cordata* (classical L. name; *cordata*, heart-shaped),Tiliaceae, Linden Family, front of P.O. and MA, 6/6/99, flwrs ylw, 5 separate petals, 20 stamens, ovary tomentose, 1 style, lobed, flwrs on long peduncle adnate to strap-shaped pale bracts in cymose clusters, stellate hairs in axils of *gr heart-shaped toothed lvs, principal tips pointed, br hairs in axils of lvs below* (some may be *Tilia platyphyllos;* flat-leaved), frts with 5 prominent ribs, pendant, fragrant

Liquidambar styraciflua, see Sweetgum

Liriodendron tulipifera, see Tulip Tree

- Locust, Black, Robinia pseudoacacia (named for Jean Robin; false acacia), Fabaceae, Pea or Bean Family, ZCG/ZP, OCA at Edgars Lane, RVP, common, 5/20/99, flwrs wh, pendulous raceme, fragrant, *lflts 3-10 pairs, ovate, opposite, Ivs alternate*, pods flat, 2-3", *paired thorns at nodes of natural trees, bark deeply ridged,* crosshatched
- Locust, Honey, *Gleditsia triacanthos* or *inermis* (named for Johann G. Gleditsch; three-thorned; *inermis*, wanting), Caesalpiniaceae, Caesalpinia Family, Main and Warburton Avenue, Broadway at Travis Place, MWP, 5/25/00, *lvs twice compound, pods up to 18", flat, twisted, br pulp*, September, *branched thorns on dark scaly bark*, long longitudinal ridges

Maclura pomifera, see Osage Orange

Magnolia, Bigleaf, Umbrella Tree, Magnolia macrophylla (named for Pierre Magnol; large-leaved), Magnoliaceae, Magnolia Family, OCA near Clinton Avenue, Irvington, flwrs wh with purple spots, 10", *Ivs up to 36", sometimes evergreen, wh hairy below*, velvety, largest above middle, *base cordate,* twigs gr, hairy, *end buds tomentose*, 2", If scars hairy, large, many bundle scars, frts globular, 2"+, rose-colored, October

Magnolia macrophylla, see Magnolia, Bigleaf

Magnolia, Sargents, Magnolia sargentiana Rehd. (named for Pierre Magnol and C. S Sargent), Magnoliaceae, Magnolia Family, 37 Whitman Street, common cult, 3/28/00, stipular spathe that splits in spring exposes large pink-wh petals, lvs 18", end buds 1", whitish, very fuzzy, leathery, red cones appear in fall

Magnolia sargentiana Rehd., see Magnolia, Sargents

Magnolia tripetala, see Magnolia, Umbrella

- Magnolia, Umbrella, Magnolia tripetala (see note on Magnolia; three petals) Magnoliaceae, Magnolia Family, 663-683 Broadway and BE, May, flwrs wh, frts ovoid, pinkish, 3-4", 8/16/00, Ivs 14", clustered at end of stem (like an umbrella), entire, deciduous, thin, lance-obovate, acuminate, base acute, end buds 1 1/2", glabrous, sharply pointed, twigs stout, pith not chambered, bark smooth, gray, warty
- Maidenhair Tree, Ginkgo biloba (Ginkgo, silver fruit in Chinese; biloba, two lobes, referring to 2 lobes of each leaf), Ginkgoaceae, Ginkgo Family, front of Cropsey Foundation, 645 Broadway and lower Washington Avenue, *lvs fanshaped, deeply lobed, conspicuously forked veins*

- Maple, Black, Acer nigrum (Acer, L. name of maple; nigrum, black), Aceraceae, Maple Family, N end Warburton Avenue Bridge, flwrs and Ivs appear together 4/22/00, flwrs gr-ylw, long pedicels, Ivs similar to Sugar Maple, but shallowly 3-lobed, If edges droop somewhat, petioles enlarged at base, yg samaras Ushaped
- Maple, Japanese, A. palmatum (see note on Acer, radiately lobed), Aceraceae, Maple Family, MA, DP, small tree, common cult, 4/6/00, flwrs bright red, *lvs* opposite, 5-7 lobed, deeply cut, toothed, pointed, turn red in October
- Maple, Norway, A. platanoides (see note on Acer, like a palm tree), Aceraceae, Maple Family, Chauncey Lane, adjacent to RF tennis courts, common, lvs opposite, long gr petioles, 3-5 acuminate lobes, few large teeth, tufts of br hairs at axils of veins on lower surface, milky juice when petioles detached, edges of opposing If scars meet, samaras horizontally winged, fall in August
- Maple, Red, A. rubrum (see note on Acer, red), Aceraceae, Maple Family, N side North Street and MA, common, 4/6/99, red flwrs in clusters on branches of previous year, appearing before 3-5 lobed, coarsely toothed lvs, terminal lobe broad, wh below, twigs and buds reddish, lvs red in October
- Maple, Schwedler, A. platanoides, var. schwedleri (see note on Acer; like a palm tree; named for Prof. Schwedler?), Aceraceae, Maple Family, SSA and MA, cult, like Norway Maple but lvs red-purple above and below in spring and fall
- Maple, Silver, White, Soft, River, *A. saccharinum* (see note on *Acer*, sugary), Aceraceae, Maple Family, MA and North Street, RBT, common, 3/6/00, reddish-gr flwrs appear before lvs in clumps, some flwrs with long exserted parts (male), some with two reddish spreading branches (female), most of latter silky-hairy, and some with both male and female parts (rare), but if so, not silky-hairy, *Ivs deeply 5-lobed, toothed, silvery-wh below*
- Maple, Sugar, *A. saccharum* (see note on *Acer*, L. for sugar), Aceraceae, Maple Family, Municipal Building, 4/4/00 and 17 Villard, very common, 2/28/99, bisexual flwrs on slender pedicels, 4 joined sepals, 8 stamens, 2-branched stigmas, *Ivs opposite, bright gr above, paler below, 5-lobed, no sharp teeth,* flwrs on long gr stalks
- Maple, Sycamore, A. pseudoplatanus (see note on Acer, false plane tree), Aceraceae, Maple Family, OCA between Washington Avenue and Five Corners woods, RBT, common, long drooping 4" flwr spikes formed, 5/9/00, 8 anthers, base of pistil hairy, appears 3-lobed, 8 gr sepals, *lvs opposite, 5lobed, whitened beneath, wavy-edged, petioles long and reddish*, yg lvs reddish
- Mimosa, Silk-Tree, Albizzia julibrissin (named for Filippo degli Albizzi; julibrissin, a Persian name), Mimosaceae, Mimosa Family, OCA at Bakers Lane and 26 MA, RBT, 6/30/00, flwrs pink, like powder puffs, in clusters, lvs large, ternately compound, fern-like, frts bean-like

Mockernut Hickory, see Hickory, Mockernut Morus alba, see Mulberry, White M. rubra, see Mulberry, Red

- **Mulberry, Paper**, *Broussonetia papyrifera* (named for August Broussonet; bearing paper), Moraceae, Mulberry Family, OCA N of Pinecrest, April, *Ivs heart-shaped and/or lobed, fine-toothed, sandpapery above, velvety below, sap milky*, frts red, twigs rough-hairy, bark ylw-br
- Mulberry, Red, *Morus rubra* (classical namae for Mulberry; red), Moraceae, Mulberry Family, Five Corners wooded area, 5/3/98 and OCA at Baker Lane, 7/26/00 (no frts), male flwrs in spikes, *Ivs coarsely toothed, rough above, lobed or unlobed, veins conspicuous and hairy below*, pith continuous at nodes, sap milky, buds gr-br, dark scale borders, bark red-br, smooth ridges
- Mulberry, White, M. alba (see note on *Morus*; white), Moraceae, Mulberry Family, ZP, ZCG and between Pinecrest Drive and Washington Avenue on OCA, 5/9/99, *flwrs gr in cylindric catkins*, 4 stamens with long thickened filaments, *Ivs glabrous, toothed, sometimes lobed like mittens*, *frts berry-like*, wh-pink to nearly bl, buds red-br, bark ylw-br
- Myrtle, Crape, Lagerstroemia indica (named for Magnus von Lagerstroem; Indian), Lythraceae, Loosestrife Family, 11 Villard, cult, August, *flws fuchsia*, in panicles, petals clawed, numerous coiled stamens grow between sepals, ovary rounded, *lvs alternate, obovate to oblong, tipped or rounded, branches 4-angled, bark smooth*
- **Myrtle, Crape**, *L. tomentosa* (see note on *Lagerstroemia*; tomentose), 11 Villard, cult, similar to *L. indica*, but *midrib hairy below*, calyx ribbed, ovary ribbed, purple pubescent, nut-like, many internal partitions and small seeds
- Nannyberry, Viburnum lentago (Viburnum, L. name for the Wayfaring Tree; lentago, flexible), Caprifoliaceae, Honeysuckle Family, N side DP, early April, *lvs toothed, petioles winged and pink-tinged, winter buds long, br, curved and pointed*

Nyssa sylvatica, see Gum, Black or Sour

- Oak, Black, Quercus velutina (classical L. name for oaks; velvety, referring to young foliage), Fagaceae, Beech Family, S end St. Matthew's School and Wagner Plaza, 5/1/99, yg lvs hairy, older lvs moderately lobed, bristly tipped, somewhat hairy below, end bud scales wh-ciliate, gray-hairy, 4-angled, acorn cup gray, hairy, cup covers half of nut, fringe-like scales, bark bl, in blocks
- Oak, Chestnut, Q. prinus or Q. montana (see note on Quercus; Gk. name for European Oak; mountainous), Fagaceae, Beech Family, HP path to SP, below HS, Washington Avenue, S. of Rowley's Bridge, *Ivs 7-16 pairs of rounded teeth, slightly hairy beneath, veins hairy, Ivs rather leathery*, end buds narrow, sharp, clustered, bark dark, deeply-ridged
- **Oak, Chinquapin**, *Q. muhlenbergii* (see note on *Quercus*; named for Gotthilf H.E. Muhlenberg), Fagaceae, Beech Family, HW north of VP, *Ivs 8-13 pairs of sharp teeth, bark gray*
- Oak, Pin, Q. palustris (see note on Quercus; of marshes), Fagaceae, Beech Family, 25 Main Street, 4/26/00, *Ivs deeply lobed, lobes taper toward tips,* base wedge-shaped, end buds smooth, hairless, twigs hairless, *branches droop, many stubby pin-like branches*, acorn cups saucer-like, frts fallen 8/25/99

- **Oak, Red**, *Q. rubra* (see note on *Quercus*; red), Fagaceae, Beech Family, 2 large trees (DBH 4.9' and 4.3') ZP children's play area and S side RF, 5/8/99, RBT, yg lvs appear with staminate flwrs, staminate aments 6", 4 bilocular anthers on short stalks, 4 red-tipped calyx teeth, hairy, thin, *Ivs 4 deep lobes, thin, bristly tipped, hair on midribs below*, end buds hairless, *yg branches reddish, bark long flat shiny strips*, acorn cups saucer-like, drop in September
- **Oak, Scarlet**, *Q. coccinea* (see note on *Quercus*; scarlet), Fagaceae, Beech Family, E side of Warburton Avenue, S of Washington Avenue, *Ivs deeply lobed, bristle-tipped, end buds scraggly hairy*, twigs hairless, bark dark and finely grooved
- **Oak, Shingle**, *Q. imbricaria* (see note on *Quercus*; overlapping, as with wooden shingles), Fagaceae, Beech Family, commemorative tree for Kristen Nelson, front of high school, replaced with a dogwood, December 2006, *Ivs lanceolate, single bristle at tip, hairy below*, end buds silky
- **Oak, Swamp White**, *Q. bicolor* (see note on *Quercus*; two colors, referring to whitish underleaf), Fagaceae, Beech Family, E side of Hook and Ladder Co. No. 1, male catkins 5/3/99, 4 cm long, slender pedicels, gr, calyx toothed, hairy, 4 stamens, *Ivs 6-lobed, lobes cut to about 1/3 midrib, veins of each lobe extend to rounded tip, hairy above, wh tomentose below*, cuneate base, end buds blunt and hairless, acorn cup bowl-shaped, *stalks longer than If stalks*
- **Oak, White**, *Q. alba* (see note on *Quercus*; white), Fagaceae, Beech Family, S side RF, common, staminate catkins formed in April, anthers 4-8, short filaments, twigs hairless, *Ivs 3-4 lobed, finger-like, rounded, tomentose beneath when yg*, end buds br, hairless, bark whitish, acorn cups cover acorn, 1/3 or less
- Oleaster, Russian-Olive, Elaeagnus angustifolia (elaia, olive; agnos, Gk. name of Chaste-tree, Vitex Agnus-castus; angustifolia, narrow-leaved), Elaeagnaceae, Oleaster Family, SE corner high school (Mt. Hope Blvd and School Street), June, thorny, twigs hairy, Ivs long, narrow, whitish beneath, curl in fall
- **Osage Orange**, *Maclura pomifera* (named for William Maclure; pome-bearing), Moraceae, Mulberry Family, S end of St. Matthew's School, RBT, escp, 6/12/99, *Ivs egg-shaped, long-pointed, entire, acuminate*, margins ciliate, veins below sparsely hairy, form pinnate enclosures toward margins, 1-8", *thorns at nodes, sap milky, frt orange-like, bark orange-br, fibrous*
- Ostrya virginiana, see Hornbeam

Oxydendrum arboreum, see Sourwood

- Pagoda-Tree, Japanese, or Chinese Scholar Tree, Sophora japonica (Arabic name for tree with pea-shaped flowers; Japanese), Fabaceae, Pea or Bean Family, S of Main Street, Irvington, late summer, *flwrs in large wh/ylw panicles, lvs pinnate, lflts opposite, acute*
- Paulownia tomentosa, see Princess Tree
- Pear, Calleryana, Pyrus calleryana graciliflora Rehd. (Pyrus, classical name of pear tree or Calleryana graciliflora, small flowers), Rosaceae, Rose Family, front of Municipal Building, dedicated to Charles Aschmann, 4/5/99, and in front of St. Matthew's Church, 3/30/99, flwrs wh, stamens 20, anthers pink, styles 2, lvs scarlet in October, frts hard, br, rd, October

Peach, , Prunus persica (L. for plum tree; peach), NW end of Warburton Ave bridge, Rosacea, Rose Family, tree, cult, lvs, lance-oblong, alternate, serrate, axillary buds br, pink flwrs before lvs, petioles glandular, in frt 8/20/04, ovary slightly hairy, rounded, red on sunside, stone sculptured, edible, smells peach-like

Pyrus sieboldii, see Crab Apple, Toringo

Picea abies, see Spruce, Norway

P. glauca, see Spruce, White

- **Pine, Austrian**, *Pinus nigra* (L. name of pine; black), E. side FP, lvs in 2's, stiff, resin ducts medium, short prickle on center of scale of cone, cones subsessile
- Pine, Himalayan White, Bhutan Pine, Blue Pine, Pinus wallichiana (L. name of pine; named for Nathaniel Wallich), Mt. Hope Blvd and Valley Place, branchlets glabrous, glaucous, *lvs in fascicles of 5 to 8", limbs droop*, gray-gr cones cylindrical, 6-12"
- Pine, Scotch, P. sylvestris (see note on Pinus; of woods or forests), Pinaceae, Pine Family, MCo Campus, cult, 2 lvs in fascicles, 1 1/2-3", cones 1 1/2", sharppointed, non-bristly scales, older bark orange
- Pine, Umbrella, Japanese Umbrella Pine, Sciadopitys verticillata (Gk. skias, skiados, umbrella, and pitys, pine, alluding to position of leaves; arranged in whorls), Taxodiaceae, Bald Cypress Family, Terrace Avenue, cult, flwrs April-May, lvs 2", flat in whorls of 20-30 and scale-like, grooved above and below, two wh stripes below, stems grooved, peel in strips, axillary buds scales br
- **Pine, White**, *P. strobus* (see note on *Pinus*; name for an incense-bearing tree), Pinaceae, Pine Family, 5 trees, W side of OCA, Elm Place, RBT, *3-4" soft lvs in bundles of 5*, cones 3", often wh resinous

Pinus nigra, see Pine, Austrian

- P. strobus, see Pine, White
- P. sylvestris, see Pine, Scotch

P. wallichiana, see Pine, Himalayan White, Bhutan Pine, Blue Pine Platanus occidentalis, see Sycamore

- Platanus occidentalis, see Sycamore
- Poplar, Balsam, Populus balsamifera (ancient name for poplar; balsamic; oil from balsam), BE near Broadway in wet area, 4/1/00, pistillate aments 3 1/2" formed, pendulous, 2 styles, stigma lobed, subtended by br fimbriated scales, ovary hairless, *Ivs forming 4/6/00, mostly triangular shaped, fine-toothed*, yg petioles hairy, veins hairy below, side buds 2 scales, *terminal bud 1 1/4", sticky, pleasant odor*, 3 bundle scars on raised If scar
- **Poplar, Black**, *P. nigra* (see note on *Populus, arbor populi*, tree of the people; black), Salicaceae, Willow Family, MWP, 3/25/00, *Ivs deltoid, truncate at base, abruptly tipped, teeth slightly incurved, petioles flat*, twigs ylw-gray
- **Poplar, Lombardy**, *P. nigra* var. *italica* (see note on *Populus*; black; Italian), Salicaceae, Willow Family, SSA, *Ivs deltoid, small-toothed, petioles pink, flat, buds nearly flat against stem, wh narrow lenticels on yg stems*

- **Poplar, White**, *P. alba* (see note on *Populus*; white), Salicaceae, Willow Family, W of library and MWP, 3/25/00, pistillate catkins pendulant, ovary gr, ovoid, ascending to top-like peak, 2 bifid stigmas, corolla not lobed, pedicels and yg stems tomentose, seeds fall (like snow) 5/9/99, *Ivs bright gr above, wh wooly below, margins wavy,* twigs wh hairy, bark light at top of trunk, black and ridged at base
- Populus alba, see Poplar, White
- P. balsamifera, see Poplar, Balsam
- P. deltoides, see Cottonwood, Common
- P. gileadensis, see Balm of Gilead
- P. grandidentata, see Aspen, Big-toothed
- P. nigra, see Poplar, Black
- P. nigra var. italica, see Poplar, Lombardy
- Pride-of-India, China-Tree, Koelreuteria paniculata (named for Prof. Joseph G. Koelreuter; panicled), Sapindaceae, Soapberry Family, front of St. Matthew's Lutheran Church, cult, flwrs ylw in loose panicles, lvs alternate, pinnately compound, coarsely toothed, frts large ylw pods, turning red, 8/27/00
- **Princess Tree**, *Paulownia tomentosa* (named for Aana Pavlovna, daughter of Paul I of Russia; tomentose), Bignoniaceae, Trumpet-Creeper Family, RVRStr, W of Hastings Station, 5/6/99, RBT, 5/23/00, *flwrs purplish with ylw stripes inside*, 2 1/2", 5-lobed, hairy at base, 4 stamens, long filaments contained within corolla, *lvs form after flwrs, large, heart-shaped, soft, paired, large nutlets persist in winter*

Prunus avium, see Cherry, Sweet or Bird, Mazzard

P. cerasus, see Cherry, Sour or Pie

- P. persica, see Peach
- P. serotina, see Cherry, Black
- P. serrulata var. sekiyama, see Cherry, Kwanzan
- P. virginiana, see Cherry, Choke

Pseudotsuga menziesii, see Fir, Douglas

Pyrus baccata, see Crab Apple, Siberian

P. calleryana graciliflora Rehd, see Pear, Calleryana

Pyrus malus, see Apple, Domestic,

Pyrus sieboldii, see Crab Apple, Toringo

Quercus alba, see Oak, White

- Q. bicolor, see Oak, Swamp White
- Q. coccinea, see Oak, Scarlet
- Q. imbricaria, see Oak, Shingle
- Q. muhlenbergii, see Oak, Chinquapin
- Q. palustris, see Oak, Pin
- Q. prinus or Q. montana, see Oak, Chestnut
- Q. rubra, see Oak, Red
- Q. velutina, see Oak, Black

Redbud, Judas Tree, Cercis canadensis (ancient name of the oriental Judas-tree; Canadian), Caesalpiniaceae, Caesalpinia Family, VFW Park, 4/26/00, Fulton Park South, 5/1/07, flwrs purplish-pink, calyx 5-lobed, veined, 10 stamens, petals partially united, flowers in peduncled clusters, *Ivs heart- shaped*, entire, hairless, frt a 4" pod

Rhododendron maximum, see Rhododendron, Great Rosebay

Rhododendron, Great Rosebay, *Rhododendron maximum* (Gk. a rose tree; greatest), Ericaceae, Heath Family, E side of Chemka pool road, in clumps, 6/26/00, flwrs numerous, large, in umbel-like inflorescence, pink, *Ivs large, leathery, evergreen, toothless, long-obovate, clustered at twig tips, whitish below, stems hairy*

Robinia pseudoacacia, see Locust, Black

Salix babylonica, see Willow, Weeping

- S. discolor, see Willow, Pussy
- S. eriocephala, see Willow, Diamond
- S. nigra, see Willow, Black
- Sassafras, Sassafras albidum (Spanish salsafras, Saxifraga, referring to medicinal properties; albidum, white), Lauraceae, Laurel Family, ZP, S on OCA, near Pinecrest Avenue and DP, 4/15/99, S end DP, RBT, flwrs ylw-gr, in clumps, terminal, peduncled, 6 gr sepals, 9 stamens, anthers 4-locular, 3 filaments with paired glands at base (staminoidia), perigynous, *Ivs alternate,* entire, *simple or lobed*, oval-lanceolate, yg Ivs hairy below, *stems gr, dotted, aromatic, brittle,* older bark reddish and furrowed

Sassafras albidum, see Sassafras

Sciadopitys verticillata, see Pine, Umbrella, or Japanese Umbrella Pine Sophora japonica, see Pagoda-Tree, Japanese, or Chinese Scholar Tree

- **Sourwood**, Oxydendrum arboreum (Gk. oxys, sour, dendron, tree; arboreum, becoming a tree), Ericaceae, Heath Family, B&F Offices, Washington Avenue, and S side entrance to DPO, 7/13/00, flwrs wh, on one side of stem, Ivs oblong, lanceolate, fine-toothed
- **Spruce, Norway**, *Picea abies (Picea*, L. name of a pine, from *pix*, pitch; *abies*, L. name of an Old World species), Pinaceae, Pine Family, North Street, FP, cult, *evergreen, needles square, stiff, sharp pointed*, rough when removed, *branches droop*, cones 4-6", fall when ripe
- **Spruce, White**, *P. glauca* (see note on *Picea*; blue-green), Pinaceae, Pine Family, entrance to RE, evergreen, needles square, 3 wh lines beneath, cones 1-2" with flexible scales, branches do not droop
- Sweetgum, Liquidambar styraciflua (liquidus, fluid, Arabic ambar, amber, referring to fragrant juice; styraciflua, flowering gum), Hamamelidaceae, Witch Hazel Family, ZCG/Edgars Lane, 5/7/99, staminate hds ovoid, terminal raceme, stamens numerous, anthers 4-locular, *Ivs 5-lobed, pointed, fragrant, frt scaly, rd*, br in fall and winter

- Sycamore, Platanus occidentalis (Platanus, platys, broad, referring to the leaves; Western), Platanaceae, Plane-tree Family, large tree (DBH 4.3'), E of OCA, SW of old quarry, ZP, RBT, common, *Ivs 3-5 lobed, coarsely toothed, maplelike in appearance*, stipules present, *older bark mottled*, flwr heads globular, achenes hairy, long-peduncled, 6/6/00, *hanging frt balls persist in winter*
- **Tamarack, Larch, American**, *Larix laricina* (*Larix*, classical name of European species; *laricina*, larch-like), Pinaceae, Pine Family, N of Chemka pool, and N side DP, *needles thin, in clumps at end of short spurs, up to 1", deciduous*, bark sheds in small pieces

Thuja occidentalis, see Cedar, White, Arbor Vitae

Tilia americana, see Basswood, Linden

Tilia cordata, see Linden, Small-Leaved European, Greenspire, Littleleaf Linden

Tree-of-Heaven, Ailanthus altissima (Ailanthus, a Moluccan designation referring to height; tallest), Simaroubaceae, Quassia Family, E end of RF, and W of Hastings station, RBT, common, 6/19/99, flwrs small, wh-ylw, 5 sepals, 10 stamens, filaments wh hairy, petals separate, hairy at base, pedicels short, glabrous, anthers bilobed, ylw, *Ivs alternate, pinnately compound, up to 2' long, lflts up to 40, a pair of gland-tipped teeth at base of lflts*, large triangular If scars, bark smooth or with narrow light-colored grooves, frts winged, form 7/21/00, *Ivs unpleasant odor when crushed*

Tsuga canadensis, see **Hemlock**

Tulip-Tree or **Tulip Poplar**, *Liriodendron tulipifera* (Gk. *lirion*, lily or tulip; *dendron*, tree; old name for tulip-bearing tree), Magnoliaceae, Magnolia Family, HP, S of Chemka pool, RBT, common, 4/8/99, flwrs large, petals gr and orange, center (pistil) cone-like, stamens numerous, anthers long, orange/ylw, *lvs bright gr, smooth, 3-lobed, terminal lobe abruptly notched or truncate,* form 4/30/00

Ulmus americana, see Elm, American

U. parvifolia, see Elm, Chinese

U. procera or U. campestris, see Elm, English

U. rubra, see Elm, Slippery or Red

Viburnum lentago, see **Nannyberry**

- Walnut, Black, Juglans nigra (from Jovis glans, i.e., the glands of Jupiter; nigra, black), Juglandaceae, Walnut Family, Edgars Lane entrance to ZP, 7-17 narrow, toothed aromatic lflts, end lflt often absent, pith chambered, frts large gr spherical nuts formed 7/22/00
- Willow, Black, Salix nigra (Salix, classical L. name; black), Salicaceae, Willow Family, RBT, *Ivs long, narrow,* 1-6", base rd or V-shaped, toothed, petioles hairy, *stipules conspicuous*, flwrs Apri-June
- Willow, Diamond, S. eriocephala; (see note on Salix; cottony headed), Salicaceae, Willow Family, W end RF, shrubby, grew on bleachers, 6/28/99, *Ivs oblonglanceolate, gr above, paler below, coarsely toothed, mucronate, margins, buds, petioles pink, hairy, stipules reniform*, veins hairy, serrulate, young stems tomentose

- Willow, Pussy, S. discolor (see note on Salix; multi-colored), Salicaceae, Willow Family, E side SP, BE near Broadway, RBT, staminate catkins 3/22/00 before Ivs, wh hairy appearance, sessile, thick cylindric, anthers copious, ylw, pinktipped, bilocular-grooved, pistillate flwrs early April, catkins before Ivs, Ivs elliptic, wh below, ciliate on margins, toothed below middle, buds reddish, twigs reddish, br hairy when yg, frts lanceolate, beaked, in wet places
- Willow, Weeping, S. babylonica (see note on Salix; Babylonian), Salicaceae, Willow Family, E side OCA, N of Travis Place, BE near Broadway, SSA, alternate lateral buds open, exposing fuzzy interior, 3/8/00, wh hairs beneath single ylw-tawny scale, br at tip of split scale, pointed, narrow, slightly incurved, ovary on slender spikes, 4 br stigmas, slender teardrop-shape, *Ivs thin, narrow, long-pointed, wh below, limbs droop*
- Yellowwood, Cladrastis lutea (Gk. klados, branch, thraustos, brittle; lutea, yellow), Fabaceae, Pea or Bean Family, one-half mile S of OCA ventilator 19 (S of Odell Avenue), 5/23/98, flwrs wh, pendulous, fragrant terminal panicles, lvs compound, soft, alternate, lflts large, entire, terminal lflt large and abruptly pointed

SHRUBS

A woody plant of relatively low height, distinct from a tree by having several stems rather than a single trunk; a bush.

Aeschulus parviflora, see Horsechestnut, Dwarf Akebia quinata, see Akebia, Five-Leaf

Akebia, Five-Leaf, Akebia quinata (Akebia, Japanese name; in fives), Lardizabalaceae, Lardizabala Family, OCA, SW corner of old quarry, low vine-like or woody climbing shrub, May, 5 lflts from central point, semievergreen

Alnus serrulata, see Alder, Smooth, Common

Alder, Smooth, Common, Alnus serrulata (L. alder; finely-toothed), Betulaceae, Birch Family, HP, NE end of SP, February, Ivs egg-shaped, pointed, doublytoothed, wavy margins, thinly pubescent on the veins below, If bases rounded, buds stalked, cones upright

Amelanchier arborea, see Shadbush, Downy Serviceberry, Juneberry Amorpha fruticosa, see Indigobush, False, Dull-Leaf

Andromeda, Japanese, Lily-of-the-Valley Bush, Pieris japonica (Pieris, a muse; Japanese), Ericaceae, Heath Family, front of Echo Hills and 645 Broadway, RBT, cult, 3/19/00, flwrs wh, bell-shaped, in racemes, Ivs oblanceolate, 3", serrulate, glabrous, leathery, dark gr above, paler below, frts 10/18/99, gr-ylw, capsules on long-stalked pedicels, well-spaced panicle, pinkish, copious, terminal, scattered pink glands, stems gr, woody, stringy

Aralia spinosa, see Hercules Club, Devil's Walking Stick

Arbor Vitae, Japanese Cedar, *Thuja japonica* or *T. standishii* (*Thyia* or *Thya*, ancient name of a resin-bearing tree; Japanese; named for John Standish?), Cupressaceae, Cypress Family, common hedge, *Ivs with wh triangular marks underneath, scales in 4-5 pairs*

Aronia (formerly Pyrus) arbutifolia, see Chokeberry, Red

- Arrowwood, Viburnum buddleifolium (L. for the Wayfaring Tree; named for Adam Buddle; leaf), Caprifoliaceae, Honeysuckle Family, 55 MA, cult, 4/27/00, flwrs wh, small, in dense cymes 3" across, corolla funnelform, *Ivs oblonglanceolate, to 6", slightly toothed, grey-tomentose beneath, variegated*
- Arrowwood, Northern, Viburnnum recognitum (see note on Virburnum; restudied), Caprifoliaceae, Honeysuckle Family, HP and DP, RBT,May-July, Ivs eggshaped to rd, coarsely toothed, single main midrib, twigs ridged, 6-sided, not hairy, frts blackish, July-September, seeds grooved
- Arrowwood, Southern, V. dentatum (see note on Viburnum above; toothed), Caprifoliaceae, Honeysuckle Family, HP, S of SP, May, like Northern, but twigs velvety-hairy
- Azalea, Swamp, White Swamp, *Rhododenron viscosum* (Gk. a rose; sticky), Ericaceae, Heath Family, RBT, cult, June-September, *flwrs wh-pink, fragrant*, appear after lvs, funnelform, 2", glandular outside, 5 stamens exerted, lvs *narrowly ovate*, 2 1/2", glossy above, *gr-wh below*, bristly ciliate, *branchlets bristly-hairy*, buds hairy, winter buds rounded or bristle-tipped

- Barberry, American, or Allegheny, Berberis canadensis (Berberis, Arabic name of the fruit; Canadian), Berberidaceae, Barberry Family, Boulanger Plaza behind bench on Main Street, flwrs ylw, 5/1/01, petals and sepals in 2 series, sepals red tinged, capitate stigma, six stamens with Chirst of the Andes shaped anthers, petiols reddish, *Ivs leathery, spiny marginal teeth, grayish-wh beneath, 3 pointed axillay spines*
- Barberry, Common, European, B. gagnepainii var. lanceifolia (see note on Berberis; named for Francois Gagnepain; leaf tapered at both ends), Berberidaceae, Barberry Family, N side Olinda Avenue and Edgars Lane, cult, flwrs bright ylw, 4/18/00, 3 sharp 1"+ thorns at base of spiny coriacious linear and whorled evergreen lvs, axillary buds br, very fragrant flwrs
- Barberry, Japanese, *B. thunbergii* (see note on *Berberis*; named for Carl Pehr Thunberg), Berberidaceae, Barberry Family, common hedge, Chauncey Lane opposite RF and OCA at Washington Avenue, May, *Ivs wedge-shaped, toothless, thorny, sometimes 2 at a node, red frts* formed 7/23/00
- Bayberry, Northern, Cloudberry, Myrica pensylvanica (Gk. name for Tamarisk, possibly from myrizein, to perfume, referring to aromatic foliage; Pennsylvanian), Myricaceae, Bayberry Family, HW/TM, RBT, abundant clumps, low shrub, frts 2/15/99, *Ivs egg-shaped, tips pointed, ylw glands both sides of Ivs and stems*, twigs gray-hairy, *fragrant*

Berberis canadensis, see Barberry, American or Allegheny

- B. gagnepainii, see Barberry, Common, European
- B. thunbergii, see Barberry, Japanese
- Blackberry, Common, *Rubus allegheniensis* (Roman name, related to *ruber*, red; Alleghenies), Rosaceae, Rose Family, HP, W of Chemka pool, June, *stems arch*, *flwrs wh*, *lflts 5, when 5-7, palmately compound, glandular-hairy on veins below, gr-wh, soft, toothed, tipped, lvs long petioled,* stipules narrow, stem prickles flat at base, scattered, petiole prickles hooked, *older stems grooved, stout*
- Blackhaw, Smooth, Viburnum prunifolium (L. for the Wayfaring Tree; plum-leaved), Caprifoliaceae, Honeysuckle Family, HW/VP, 5/16/99, flwrs in dense cyme without peduncles, 5 wh petals, stamens exserted beyond campanulate corolla, sepals small, pink-tipped, *Ivs egg-shaped, finely toothed,* tips point forward (antrorse), margins pinkish, veins not extend directly to teeth, *Ivs mostly glabrous, a few petioles winged and pink*, side twigs short, stiff, trunk dark, squarish blocks, frts bl, October
- Blueberry, Common Highbush, Vaccinium corymbosum (L. vaccinus, of cows, as German folk name Kuhteke; bearing corymbs or flat-topped flower cluster), Ericaceae, Heath Family, HP, S of Chemka pool, May, Ivs elliptic, toothless, gr beneath, bark stringy, frts blu-bl with whitish powder, June-July
- Blueberry, Early Low or Hillside Blueberry, Vaccinium vacillans (see note on Vaccinium; vacillans, vacillating, or V. pallidum, pale, or V. angustifolium, narrow-leaved), Ericaceae, Heath Family, HP, S of Chemka pool, RBT, low shrub, April, Ivs egg-shaped, entire, variable in size, lighter beneath, 2", hairless, frts dark blu with wh powder, July

- **Boxwood**, *Buxus sempervirens* (*Buxus*, name used by Virgil for the plant; always green), Buxaceae, Box Family, 160 Mt. Hope Blvd, cult, *Ivs opposite, broad below middle, Ivs crowded, short petioled, entire, coriaceous, glabrous, ovate, notched at tip, stems 4-angled, distinctive odor*
- **Broom, Andreanus**, *Cytisus dallimorei* or *C. multiflorus x C. scoparius (Cytisus*, ancient Gk. name of a medicago-like plant; named for William Dallimore; many-flowered; broom-like), Fabaceae, Pea or Bean Family, Villard Park, 8', 5/17/00, *flwrs pink-purplish with crimson or ylw wing petals* axillary along stems, abundant but spaced, reflexed calyx, 2-lipped, short, stamens connate, shorter than capitate style, petioles flat, winged, *stems evergreen, grooved, aromatic*
- **Broom, Scotch**, *C. scoparius* (see note on *Cytisus;* broom-like), Fabaceae, Pea or Bean Family, 645 Broadway and ZCG, 5/10/99, 3', *flwrs ylw, pea-like*, reflexed terminal racemes, calyx campanulate, 2-lobed, hairy, reddish tipped, pedicel hairy, *lflts 3, hairy when yg,* small stipules, reddish, hairy, frts hairy, *forked pods 2",* July, *stem evergreen, grooved, stiff, aromatic*

Buddleja davidii, see Butterfly Bush, Orange-eye Butterfly Bush

- Burning Bush, Winged, Spindle Tree, Euonymous alatus (Gk. eu, good, onoma, name; winged), Celastraceae, Staff-tree Family, ZP, HP and DP, common hedge, flwrs 5/4/99, gr-ylw, 4-merous, calyx 4-5 toothed, short, declined, *Ivs form in March, opposite, serrate,* subtended by hairy reddish lflts, axils of Ivs with weak hairs, *stems winged, 4-angled and grooved*, red-gr-rusty branches
- Butterfly Bush, Orange-eye Butterfly Bush, Buddleja davidii (for Adam Buddle and Armand David), Buddlejaceae, Butterfly bush family, 4'+, front of library, cult, 6/25/99, flwrs lilac with orange eye, in spikes, corolla tube elongate, campanulate, 4 petals, 4 sepals, 1 style, *Ivs opposite, 10", finely toothed, tomentose beneath, very fragrant*
- Buttonbush, Cephalanthus occidentalis (Gk. cephale, a head and anthos, flower; western), Rubiaceae, Madder Family, HW/VP, RBT, 9/17/00, 4'+, flwrs wh, in firm ball-shaped heads, corolla tubular, 4 pink-tipped petals, lvs opposite, 4-8", oblong-lanceolate, entire, 6-8 veins parallel If margins

Buxus sempervirens, see **Boxwood**

Catawba Rhododendron, Mountain Rosebay, Azalea, *Rhododendron catawbiense* (Gk. a rose tree; from Catawba River, N.C.), Ericaceae, Heath Family, 645 Broadway, RBT, cult, May, *flwrs large, purple, lvs 3-8", clustered at tip of twig, hairless, edges rolled, lf base and tips rounded*, frts hairy capsules

Cephalanthus occidentalis, see Buttonbush

Chaenomeles japonica, see Quince, Lesser Flowering

Chokeberry, Red, *Aronia* (formerly *Pyrus*) *arbutifolia* (Gk. Medlar tree; bearing strawberry-like flowers), Rosaceae, Rose Family, HP, east ridge, above HS, RBT,*Ivs fine-toothed, hairy beneath, midrib bears tiny raised glands on top*, twigs gray wooly, frts hard, red, October

Clethra alnifolia, see **Pepperbush, Sweet**, **White Alder**, **Coastal White Alder** *Cornus amomum*, see **Dogwood, Silky**

Cornus racemosa, see Dogwood, Red-Panicled

Cornus sericea, see Dogwood, Red-Osier

Corylus americana, see Hazelnut, American, Filbert

Cotinus coggygria, see Smoke Tree

Cotoneaster horizontalis, see Cotoneaster, Rock

- **Cotoneaster**, **Rock** *Cotoneaster horizontalis* (L. *cotonea*, quince and *aster*, a kind of; horizontal), Rosaceae, Rose Family, mostly low and prostrate, above wall at VFW park, in frt 10/26/99, berries red, 3-seeded, single in axils of If, *Ivs entire, evergreen, rounded, mucronate, shiny above, paler below, alternate*, stems hairy
- **Cranberry, Highbush**, **Cranberry Viburnum**, *Viburnum opulus* (L. for the Wayfaring Tree; old generic name for guelder tree or *V. trilobum*, three lobes, or *V. americanum*, American), Caprifoliaceae, Honeysuckle Family, S of HS, in frt 7/28/00, RBT, *Ivs opposite, palmately veined, 3-lobed, toothed, hairy on veins below, petioles reddish, grooved, pairs of globular glands at base of leaf*, slender stipules, *frts reddish-wh, shiny, hard*, on long peduncles, numerous, seeds flat, not grooved

Cytisus dallimorei or C. multiflorus x C. scoparius, see Broom, Andreanus

C. scoparius, see Broom, Scotch

Deutzia gracilis x parviflora, see Hydrangea

Diervilla lonicera, see Honeysuckle, Northern Bush

- **Dogwood, Red-Osier**, *Cornus sericea* (L. from *cornu*, a horn, referring to hardness of wood and English dagge, a dagger or sharp-pointed object; silky-hairy), Cornaceae, Dogwood Family, NE corner library (sometimes cultivated small tree), and HP, N of SP, RBT, May, flwrs small, wh, flat-topped clusters, *lvs elliptic, 2-5", 6-7 pairs of veins, wh below, stems red, sometimes gr*, pith wh, frts wh, July
- Dogwood, Red-Panicled, *C. racemosa* (see note on *Cornus;* in a raceme on elongate inflorescence from unbranched stalk), Cornaceae, Dogwood Family, HP, N side SP, June, flwrs small, wh, racemose, *Ivs egg-shaped, 3-5 pairs of veins, whitish below, twigs brownish*, pith br, *stems red,* frts wh, July
- **Dogwood, Silky**, *C. amomum* (see note on *Cornus;* L. for some shrub), Cornaceae, Dogwood Family, HP, E side SP, RBT, June, flwrs small, wh, clustered, *lvs broadly egg-shaped with wide-rounded If base, branches and twigs dull purple, frt blu*, August

Elaeagnus umbellata, see Olive, Autumn or Japanese Silverberry

Elderberry, Common, Sambucus canadensis (Gk. sambuce, a musical instrument, because of use for flutes and whistles; Canada), Caprifoliaceae, Honeysuckle Family, HW/TM, RBT, 8-9', 6/10/99, flwrs wh, small, in terminal cymes, 5 petals, 5 stamens, style short, *Ivs pinnately compound, opposite, 7 lflts, serrate margins*, pith wh, yg stems grooved, older br with lenticels, *frts bl*, July

Euonymous alatus, see Burning Bush, Winged, Spindle Tree

Firethorn, *Pyracantha coccinea* (Gk. *pyr*, fire, *acanthos*, thorn; scarlet; also listed as *Cotoneaster pyracantha*, *cotonea*, quince, *aster*, a kind of), Rosaceae, Rose Family, One North Street, 3/18/99, *small wh flwrs in corymbs, Ivs narrow, lanceolate, acute*, slightly toothed, glabrate, shiny, dark gr above, paler beneath, 3 1/2 x 1 1/4", *thorns 1/2*", in frt 9/21/99, *berries scarlet, numerous*, terminal clumps on slender pedicels, yg stems wh, tomentose, older br, *evergreen*

Five-Leaf Akebia, see Akebia, Five-Leaf

- **Forsythia, Golden Bell, Greenstem**, *Forsythia intermedia* (named for Wm. Forsyth; a hybrid), Oleaceae, Olive Family, common cult, 3/25/00, bright ylw flwrs with 4 petals in axils of stem, with raised warts, lvs toothed above middle
- **Gallberry, Low Holly** or **Inkberry**, *Ilex glabra (Ilex*, L. for Holly-Oak; without hairs), Aquifoliaceae, Holly Family, FP, *evergreen*, lvs blunt-tipped, *leathery*, notched near tip, entire or wavy-edged above middle, twigs gray-hairy, frts bl
- **Gooseberry, Smooth**, *Ribes hirtellum* (*Ribes*, Danish, ribs of Red Currant, or Persian for acid; bristly), Grossulariaceae, Gooseberry Family, Farmer's Lane E of RF, June, 1-3 short thorns at nodes, Ivs alternate, coarsely toothed, deeply lobed, hairy below, yg stems gr and grooved, older bark flaky, frt I", smooth, veined, July

Hamamelis vernalis, see Witch-Hazel

Hamamelis virginiana, see Witch-Hazel, Common

- Hazelnut, American, Filbert, Corylus americana (Gk. corys, a helmet, from the involucre; American), Betulaceae, Birch Family, HP, S of Chemka pool, April, *Ivs heart-shaped, 2-5", double-toothed*, 2-5", twigs and petioles stiffly hairy, *nuts enclosed in thin, flattened, hairy, ragged-edged husks*, September
- Hercules Club, Devil's Walking Stick, Aralia spinosa (from French-Canadian Aralie; spiny), Araliacae, Ginseng Family, Dobbs Ferry High School woods, Dan Rile Park, July, flwrs wh, *Ivs large, twice compound, frts bl, stems and petioles prickly*

Hibiscus syriacus, see Rose-of-Sharon

- Holly, English, European, *Ilex aquifolium (Ilex*, L. for Holly-Oak; sharp-leaved), Aquifoliaceae, Holly Family, 11 Villard, cult, 5', 4/15/98, flwrs wh in fascicles, *Ivs thick, leathery, dark gr, glossy, elliptic*, 1-2", *margins thickened, undulate, teeth stiff, spiny, spreading, frt bright red, globose*, 7-10 mm, stalked, yg branches glabrous
- Holly, Japanese, Box-Leaved Holly, I. crenata (see note on Ilex above; with small rounded convex leaves), Aquifoliaceae, Holly Family, low shrub, 135 Farragut Avenue, Farragut-Rosedale Lane, Harvest On Hudson garden, 6/4/00, flwrs 4-merous, anthers arrow-shaped, alternate with jointed wh petals, stigmas lobed, Ivs numerous, dark gr above, paler below, convex above, concave below, leathery, oval, crenate or serrate above middle, stems hairy, purplish, small stipules, petioles short, midrib prominent, frt globose, bl
- Honeysuckle, Japanese, Lonicera japonica (named for Adam Lonitzer; Japanese), Caprifoliaceae, Honeysuckle Family, ZCG and parking lot opposite P.O., May, *flwrs ylw*, stamens exserted, *lvs opposite, obovate, entire, high-twining*, pubescent

- Honeysuckle, Northern Bush, Diervilla Ionicera (named for Dr. N. Diereville, French traveller who brought specimen from Canada to Tournefort; Ionicera, from resemblance to Honeysuckle; named for Adam Lonitzer), Caprifoliaceae, Honeysuckle Family, Warburton Avenue, E of William Street, June, *flwrs ylwcrimson, tubular, Ivs egg-shaped, opposite, fine-toothed, pointed*, stalked, twigs ridged, frts long-pointed dry capsules
- Honeysuckle, Tartarian, Lonicera tatarica (named for Adam Lonitzer; Tartarian), Caprifoliaceae, Honeysuckle Family, W side BE near Broadway, mid-April, flwrs pink on hairy stalks, Ivs opposite, stems hollow
- Horsechestnut, Dwarf, Aeschulus parviflora (ancient name of mast-bearing tree; like a horsechestnut; small-flowered), Hippocastanaceae, Horse-chestnut Family, OCA, SW corner of old quarry, escp, 6/29/00, *flwrs small, wh, on stalks in 1' raceme, lvs palmately compound, 7 toothed lflts,* broadest near middle, petioles long and pink
- **Hydrangea**, *Deutzia gracilis* x *parviflora* (named for Jon von Deutz; graceful; smallflowered), Hydrangeaceae, Hydrangea Family, cult, in privet hedge on OCA and Washington Avenue, 5/8/98, *wh flwrs in panicles, filaments look like "Christ of the Andes," Ivs toothed, lanceolate, opposite*
- **Hydrangea, Oak-leaved**, *Hydrangea quercifolia* (Gk. Hydor, water and aggeion, a vessel, from the shape of the capsule; oak-leaved), Saxifragaceae, Saxifrage Fam, FP, in flwr 6/15/04, cult, 4 wh petals, ovate, veined, compound cyme, lvs large, coarsely lobed, wooly beneath, upper glabrous or nearly so, lvs opposite, shrub, 4-6'

Hydrangea quercifolia, see, llex aquifolium, see Holly, English, European

I. crenata, see Holly, Japanese, Box-Leaved Holly

I. glabra, see **Gallberry**, Low Holly or Inkberry

Indigobush, False, Dull-Leaf, Amorpha fruticosa (Gk. amorphos, deformed, referring to petals; shrubby), Fabaceae, Pea or Bean Family, MWP, 6/4/00, flwrs purple in racemose spikes, corolla tubular, 10 exserted stamens, anthers golden, *Ivs pinnately compound, 15*"+, lflts petioled, obovate, entire, small tip at end, ylw glands below, *frts curved,* with resin dots

Jetbead, White Kerria, *Rhodotypos scandens* (Gk. *rhodon*, rose, *typos*, type; climbing), Rosaceae, Rose Family, behind library, HP/VP, RBT, low shrub, cult and escp, 4/23/99, *flwrs wh, 4 petals, lvs simple and toothed, berries shiny bl,* formed 8/16/00

Kalmia latifolia, see Laurel, Mountain

Kerria japonica, see **Rose, Japanese**

Laurel, Mountain, Kalmia latifolia (named for Pehr Kalm; broad-leaved), Ericaceae, Heath Family, RBT, cult, flwrs wh-purple, clustered, lvs hairless, leathery, pointed, entire, light gr beneath, twigs hairless, frts rounded capsules, gnarled evergreen tree or shrub Laurel, White, Rosebay, *Rhododendron maximum (GK.* a rose; largest), Ericaceae, Heath Family, E side entrance to Chemka pool, 6-8', 6/26/00, *flwrs pink-wh, sticky on long pink pedicels*, numerous in umbel-like inflorescence, corolla interior wh, some ylw, *lvs leathery, 10", evergreen, oblong-ovate, scurfy tomentose below, shiny glabrous above*, edges slightly rolled, acutely tipped, narrowed at base, stems hairy

Ligustrum vulgare, see **Privet**

Lilac, Common, Syringa vulgaris (Gk. syrinx, a pipe; common), Oleaceae, Olive Family, Baker Lane and Broadway, MA, escp, common, 4/18/00, flwrs small, clustered, purple or wh, lvs opposite, 2-3 1/2", heart-shaped, entire, pointed, stalked

Lindera benzoin, see **Spicebush**, **Wild Allspice**, **Feverbush**, **Benjamin Bush** *Lonicera japonica*, see **Honeysuckle**, **Japanese**

L. tatarica, see Honeysuckle, Tartarian

Lycium halimifolium, see Matrimony Vine

- Mahonia aquifolium or Berberis aquifolium, see Grape, Oregon, Holly Grape, Holly Barberry
- Matrimony Vine, Lycium halimifolium (Gk. lycion, a prickly shrub growing in Lycia; leaves of Halimus), Solanaceae, Nightshade Family, behind library, vine or shrub, September, flwrs small, purple, lvs narrow, entire, clustered, stems ridged, thorny, frts red, October
- Mock Orange, Philadelphus virginalis (named for Ptolemy Philadelphus, King of Egypt; virginal), Hydrangeaceae, Hydrangea Family, FP, cult hybrid of doubtful origin, 5/29/99, flwrs wh, 1"+, 5 separate petals, 2", calyx gr, hairy, sepals point-tipped, one- nerved, campanulate, many ylw stamens, 4 styles, connate below, stigma capitate, *Ivs opposite, gr, hairless above, hairy below, 3*"+, strongly 3-nerved, scarcely toothed, long-tipped, 3-4 carpels, many seeds
- **Mock Orange, Common, Syringa**, *P. inodorus* (note on *Philadelphus;* odorless), Hydrangeaceae, Hydrangea Family, RE/MA, common cult, May, *flwrs wh, lvs* opposite, egg-shaped, pointed, coarsely toothed, veins parallel margins of lvs, yg branches papery, frts dry capsules
- Multiflora Rose, Rosa multiflora (rose; many-flowered), Rosaceae, Rose Family, OCA, ZCG, E end RF, common, 6/1/00, flwrs wh, abundant, lflts 7-11, alternate, toothed, obovate, stipules fringed, stems prickly, frt (a hip) red, September

Myrica pensylvanica, see **Bayberry**, **Northern**, **Cloudberry**

- Nannyberry, Viburnum lentago (Viburnum, L. name for the Wayfaring Tree; lentago, flexible), Caprifoliaceae, Honeysuckle Family, N side DP, early April, *Ivs toothed, petioles winged and pink-tinged, winter buds long, br, curved and pointed*
- Olive, Autumn, Japanese Silverberry, *Elaeagnus umbellata* (elain, the olive and agnos, Gk. Chaste-tree; with umbels), RBT, cult, 1-5', *flwrs silvery ylw*, fragrant, June-July, lvs egg-shaped-elliptic, silver-br and scaly, gr above, smooth to waxy-edged, twigs br with *silvery scales, thorny*, frts reddish, fleshy

Pepperbush, Sweet, White Alder, Coastal White Alder, Clethra alnifolia (ancient Gk. name for alder; alder-leaved), Clethraceae, Clethra Family, HP, N of SP and S of HS, 7/28/00, RBT, flwrs dense in wh-pink spikes, 5 slightly lobed petals, obscurely veined, sepals greenish, wh, hairy, tightly fixed to petals, stamens 10, anthers orange, sagittate, styles and ovary hairy, pedicels hairy, *Ivs alternate, short- pointed, sharply-toothed above middle, teeth hooked, margins ciliate, petioles densely wh hairy*, end buds, young stems pale gr, hairy, *older stems red br, bark br, stringy, shreddy, red-br, separating into strips exposing lighter bark*, one bundle scar, fragrant, *usually in wet areas*

Philadelphus inodorus, see **Mock Orange**, **Common**, **Syringa** *P. virginalis*, see **Mock Orange**

Pieris japonica, see Andromeda, Japanese Lily-of-the-Valley Bush

Pinkster, **Pink Azalea**, *Rhododendron periclymenoides* (Gk. rose tree; Dioscorides' name for a twining plant), Ericaceae, Heath Family, HP, N of SP, 4/30/00, *flwrs pink, lvs dull above, gr below, margins ciliate, clustered at ends, twigs hairy*, buds glabrous

Privet, Ligustrum vulgare (L. privet, from Ligus, Ligurian; common), Oleaceae, Olive Family, MA and Maple Lane, RBT, escp, common hedge, 5'+, May, flwrs wh, small, fragrant, in cone-shaped terminal clusters, corolla funnel-formed, lvs firm, oval-elliptic, shiny, entire, opposite, 2 1/2", leathery, mucronate, frts small, bl, September

Pyracantha coccinea, see Firethorn

- Quince, Lesser Flowering, Chaenomeles japonica (Chaenomeles, Gk. chainein, to split and meles, apple; Japanese), Rosaceae, Rose Family, 86 Maple Avenue, 4/14/99, flwrs pink-orange, lvs obovate, glabrous, alternate, toothed, stipules kidney-shaped, branches spiny, yg shoots tomentose, frts small, apple-like
- Raspberry, Black, *Rubus occidentalis* (Roman name, related to *ruber*, red; western), Rosaceae, Rose Family, HP, W of Chemka pool, common, May, *lflts 3-7, wh beneath, stems thorny, bl frts* in June-August
- **Raspberry, Purple-Flowering**, **Thimbleberry**, *R.odoratus* (see note on *Rubus*; fragrant), Rosaceae, Rose Family, E slope RBT, 6/18/00, *flwrs rose-purple*, 5 petals, numerous stamens turning br, sepals long and slender tipped, numerous pink glands, ovary glandular, *Ivs 3-lobed, maple-like, glandular, alternate, stems glandular, branched*
- Raspberry, Red, *R. idaeus* (see note on *Rubus*; *idaeus*, L. Mt. Ida), Rosaceae, Rose Family, HP and DP, common, 5/26/99, *lflts 3-7, wh beneath, stems rd, whitish, bristly*, red frts in July

Rhododendron canadensis, see Rhodora Azalea

- R. catawbiense, see Catawba Rhododendron, Mountain Rosebay, Azalea
- *R. maximum*, see Laurel, White, Rosebay
- R. periclymenoides, see Pinkster, Pink Azalea
- *R. viscosum*, see Azalea, Swamp, White Swamp

- Rhodora Azalea, *Rhododendron canadensis* (Gk. a rose tree; Canadian) Ericaceae, Heath Family, E.side entrance to Chemka pool, 3+, 10/22/99, flwrs tubular,. divided into 3 segments, purplish, appear before lvs, lvs deciduous, narrow, oblong, br hairy, ciliate margins, mucronate, shiny above, twigs hairless, buds hairy
- Rhodotypos scandens, see Jetbead, White Kerria
- Rhus aromatica, see Sumac, Fragrant
- *R. typhina*, see **Sumac**, **Staghorn**
- Ribes hirtellum, see Gooseberry, Smooth
- Rosa multiflora, see Multiflora, Rose
- Rosa, rugosa, see Rose, Rugosa or Japanese Rose
- Rose, Japanese, Kerria japonica (named for John B. Ker; Japanese), Rosaceae, Rose Family, OCA at Baker Lane, 4/18/00, Hook and Ladder No. 1 trail, 5/7/01, flwrs ylw, stems green, lvs alternate
- **Rose, Rugosa** or **Japanese Rose**, *Rosa rugosa (rose; wrinkled),* Rosaceae, Rose Family RBT, flwrs pink to wh, petals large, spreading, lvs dark gr, wrinkled above, pinnately compound, 3-11 serrate lflts, stipules large, fastened to petiole, frt colored, fleshy, stems densely prickly and wooly
- Rose-of-Sharon, *Hibiscus syriacus* (ancient Gk. and L. for a large mallow; Syrian), Malvaceae, Mallow Family, Ridgedell Avenue at MA, and Aqueduct Lane at Washington Avenue, 7/23/00, *flwrs large, like hollyhocks, pink, lvs alternate, 3-lobed*, rd-toothed, hairy beneath
- Rubus allegheniensis, see Blackberry, Common
- R. idaeus ,see Raspberry, Red
- *R. occidentalis*, see **Raspberry**, **Black**
- R. odoratus, see Raspberry, Purple-Flowering
- Sambucus canadensis, see Elderberry, Common
- Scotch Broom, see Broom, Scotch
- Shadbush, Downy Serviceberry, Juneberry, Amelanchier arborea (Amelanchier, Provençal name of a European species; tree-like), Rosaceae, Rose Family, N side Farlane Drive, S of Chemka pool, RBT, FP, 8', 5/21/99, flwrs small, 5 wh petals, 15 stamens, ovary hairy, 3-5 stigmas, upper stems hairy, Ivs ovate, tapering at base, teeth bl-tipped, hairy below when young, folded at early leafing (4/30/00), berries bl, turn bright red in October
- Smoke Tree, Cotinus coggygria (old name for wild olive; coccygea, ancient name), Anacardiaceae, Cashew Family, Chauncey Lane, W of S Calumet, 160 Mt. Hope Blvd, 6/11/00, flwrs orange, widely branched, hairless terminal purplish panicles with numerous small flwrs on slender divaricate pedicels, *lvs* obovate, simple, alternate, entire, small-tipped, conspicuously veined, mature female flwrs give cloud-like appearance in fall, stems gr, wood ylw, odorous
- Snowball, Viburnum, Double-File, Viburnum plicatum or tomentosum (L. for the Wayfaring Tree; folded lengthwise; tomentose), Caprifoliaceae, Honeysuckle Family, E of OCA above ZP, cult, 5/14/99, flwrs wh, numerous on 2 rows (plicate) on upper part of branch, lvs ovate, 4", toothed

Spicebush, Wild Allspice, Feverbush, Benjamin Bush, Lindera benzoin (named for Johann Linder; an Arabic name), Lauraceae, Laurel Family, Edgars Lane entrance to ZP, 3/27/00, RBT, HW, 10/10/05, *flwrs ylw, 6-7 mm wide, appear before lvs*, in dense opposite clusters, sepals 6, stamens 9, inner 3 with ylw lobed glands, anthers introrse, *lvs vary in size, aromatic odor when crushed, red frts*, 6/26/98, bark br, lenticels

Spindle Tree, Winged Burning Bush, Euonymous alatus (Gk. eu, good, onoma, name; winged), Celastraceae, Staff-tree Family, ZP, HP, DP, common hedge, 5/4/99, flwrs gr-ylw, 4-merous, calyx 4-5 toothed, short, declined, *Ivs form in March, opposite, serrate*, subtended by hairy reddish lflts, axils of Ivs with weak hairs, *stems winged, 4-angled and grooved*, red-gr rusty branches

Spirea corymbosa, see Spirea, Dwarf

- Spirea, Dwarf, Spirea corymbosa, (Gk. speria, wreath or band; a flat-topped raceme) Rosaceae, Rose Family, entrance to library on MA, cult, 5/1/99, flwrs wh in corymbs, 2-4", lvs 1-3", ovate, rounded at apex, coarsely toothed from middle, stems purple
- **Spirea, Japanese**, S. *japonica* (Gk. spirea, wreath or band; from Japan), Rosaceae, Rose Family, ZCG, cult, June, *flwrs in dense pink clusters, lvs long-pointed, toothed, twigs gray-hairy*
- Spirea japonica, see Spirea, Japanese
- S. nipponica, see Spirea, Tosa
- **Spirea, Tosa**, *S. nipponica* (see note on *Spirea;* Nipponese), Rosaceae, Rose Family, entrance to Municipal Building parking lot, cult, May, 5 wh petals, 5 gr sepals, flwrs in racemose umbels, on long peduncles, 5 styles, 15+ stamens, *Ivs obovate to oval, crenate on rounded apex, gr above, pale gr below, Ivs alt, stems reddish*
- Sumac, Fragrant, *Rhus aromatica* (Gk. and L. for sumac; aromatic), Anacardiaceae, Cashew Family, KPP entrance, June, flwrs pale ylw, clustered in dense spikes, *lvs of 3 lflts, coarsely toothed, pleasant odor when crushed, twigs br, bark smooth, frts small, hairy, red, ball-shaped*, July
- Sumac, Staghorn, *R. typhina* (see *Rhus;* like *Typha*, cattail, from the velvety branches), Anacardiaceae, Cashew Family, HP, SP area, RBT, July, *flwrs reddish, hairy, in dense hds, 12-24", lvs of 11+ lflts, lflts oval, pointed, toothed, pale beneath, twigs hairy, bark br, smooth, many raised cross streaks*
- Syringa, Common Mock Orange, Philadelphus inodorus (named for Ptolemy Philadelphus, King of Egypt; odorless), Hydrangeaceae, Hydrangea Family, RE/MA, common cult, May, flwrs wh, Ivs opposite, egg-shaped, pointed, coarsely toothed, veins parallel margins of Ivs, yg branches papery, frts dry capsules

Syringa vulgaris, see Lilac, Common

Taxus baccata, see Yew, English

T. canadensis, see **Yew**, **American Ground Hemlock**

T. cuspidata, see **Yew**, **Japanese**

Thuja japonica or *T. standishii*, see **Arbor Vitae**, **Japanese Cedar** *Vaccinium corymbosum*, see **Blueberry, Common Highbush**

V. vacillans, see Blueberry, Early Low or Hillside Blueberry

Viburnum acerifolium, see Viburnum, Mapleleaf

V. buddleifolium, see Arrowwood

V. dentatum, see Arrowwood, Southern

V. lantana, see Wayfaring Tree

V. lentago, see Nannyberry

- Viburnum, Mapleleaf, Viburnum acerifolium (L. for the Wayfaring Tree; mapleleaved), Caprifoliaceae, Honeysuckle Family, HP, W and S of Chemka pool, common, 5/20/99, flwrs wh, some pink, 5 joined petals in slender peduncled cyme, subtended by 2 lanceolate bracts, *Ivs soft, 3-lobed, coarsely toothed, base cordate, 3 main veins from base of hairy, tufted leaf*, pale below, axils tufted, lanceolate stipules, frts purple-bl, stone with 3 shallow grooves on one side, 2 on other, in frt 8/18/99
- V. opulus, see Cranberry, Highbush, Cranberry Viburnum
- V. plicatum or tomentosum, see Snowball, Viburnum, Double-File
- V. prunifolium, see Blackhaw, Smooth
- V. recognitum, see Arrowwood, Northern
- Viburnum, Siebold, V. sieboldii (see note on Viburnum; named for P.F. von Siebold) Caprifoliaceae, Honeysuckle Family, 25 MA, cult, late April, flwrs wh, in broad clusters (cyme), yg lvs wh-hairy beneath, lvs ovate, coarsely toothed, opposite

V. sieboldii, see Viburnum, Siebold

- Wayfaring Tree, V. lantana (see note on Viburnum; flexible, bending), Caprifoliaceae, Honeysuckle Family, opposite Ardsley-on-Hudson station, adjacent to apartment garage entrance, cult, Ivs appear before flwrs in mid-April, flwrs small, wh, in peduncled cymes, May-June, ovary flat on one side, ribbed, Ivs opposite, oblong-ovate, 2-5", slightly toothed, hirsute above, spidery veined with fine gray hairs below, If scars triangular, stems warty, covered with gray hairs, bark splits, frts red-bl, seed with 3 grooves, September
- Weigela, Korean, Weigela coraeensis (named for Christian E. von Weigel; Korean), Caprifoliaceae, Honeysuckle Family, parking lot opposite P.O., 3-4', 5/29/99 *flwrs pink*, 5 petals, tube constricted below middle, 5 ylw stamens, filaments long, slender, 1 style, longer than stamens, capitate, sepals lanceolate, pedicels long, hairy, *Ivs opposite, abruptly pointed, hairy on veins below, oblong-lanceolate, toothed*
- Weigela, Japanese, *W. japonica* (see note on *Weigela*; Japan), , Caprifoliaceae, Honeysuckle Family, 3 m+, DPO, S side of entrance road, 6/6/99, flwrs in axillary cymes, *wh turning to carmine*, corolla campanulate-funnelform, constricted at base, peduncles 3-flowered, densely hairy, 5 narrow sepals, spreading, pinkish, ciliate, *Ivs elliptic, obovate, becoming long acuminate, hairy on veins below, opposite, entire*

- Witch-Hazel, Hamamelis vernalis (ancient Gk. for Medlar, i.e., Mespilus or a similar tree, or Hama, together with, and melor, fruit; of spring), Hamamelidaceae, Witch Hazel Family, OCA, 103 Farragut Avenue, 2/9/02, RBT, 9/03, cult, 4 ylw, strape-shaped petals, ½" veined, 4 orbicular sepals, margins ciliate, dull red inside, grey outside, flwrs in sessile clusters, 4 stamens, reddish anthers, stigma twice branched, reddish, fragrant, lvs wavy-toothed, uneven leaf base, flwrs winter-early spring
- Witch-Hazel, Common, *H. virginiana* (see note on *Hamamelis;* Virginian), Hamamelidaceae, Witch Hazel Family, HP S of Chemka pool, 10/03, tree or shrub, November, *flwr clusters ylw, petals ribbon-shaped, lvs oval, pinnately veined, wavy margins, bases uneven, buds hairy, stalked*, bark small patches, sometimes rough with cross stripes, frts August-October
- Yew, American Ground Hemlock, *Taxus canadensis* (Gk. a bow, as in bow and arrow; Canadian), Taxaceae, Yew Family, *common hedge, evergreen*, mature branches gr, older reddish br, Ivs abruptly narrowed to a fine point, dark gr and convex above, *2 impressed bands below,* twigs smooth, *frts oblong, sessile, gr, tinged with purple*
- Yew, English, *T. baccata* (see note on *Taxus*; berry-like), Taxaceae, Yew Family, *common hedge, evergreen*, lvs to I-1/4", gradually acuminate, glossy gr above, paler below, 2 pale gr bands below, abruptly narrowed to short gr petiole, branches greenish, bark reddish, flaky, *frts fleshy, cup-shaped, open* at one end, seed visible at base of red capsule (cone)
- Yew, Japanese, T. cuspidata (see note on Taxus; sharp rigid point), Taxaceae, Yew Family, common hedge, Ivs 2-ranked with the ranks often upright to form a Vshaped trough, becoming sharply tipped, dull gr above, 2 ylw bands below, twice as broad as gr margin, bark reddish br, frts fleshy, cup-shaped, open at one end, seed visible at base of red capsule (cone)



TREE Sargents Magnolia, Whitman Street



TREE

Golden Chain Tree or Common Viburnum in Flower, May, Member of Bean Family, Cultivated, Ridgedale Avenue



TREE

Balsam Poplar (Leafless) and Pussy Willow in Flower on Burke Estate Near Broadway, April-May



TREE Crape Myrtle, 11 Villard Avenue



VINES English Ivy, Maple Lane



Lesser Celandine on Villard Avenue, April



HERBACEOUS Chicory at Riverview Place



HERBACEOUS

New England Aster, Rowley's Bridge Trail at Scenic Overlook



HORSETAIL

Meadow Horsetails, Southside Avenue, Adjacent to Railroad Tracks, April



GRASS Reed Grass, Phragmites, Zinsser Community Gardens



HERBACEOUS Rose Campion, Rowley's Bridge Trail



FERN Cinnamon Fern, North of Sugar Pond, Hillside Park



SEDGE Yellow Nutsedge, Zinsser Community Gardens



FUNGUS Puffball

VINES

A plant that has a woody or herbaceous stem that is too slender, flexible or weak to hold itself erect and that supports itself in nature by climbing over an object (as a wall, fence, or trellis) or other plants by tendrils (a slender clasping or twining outgrowth on a stem) or by twining, or that extends itself horizontally by running along the ground.

Actinidia kolomikta, see Kiwi, Hardy Arctic Beauty

Ampelopsis brevipedunculata, see **Porcelain Berry**, **Asian Ampelopsis** Amphicarpa bracteata, see **Hog-Peanut**

Apios americana, see Ground Nut, Wild Bean, Potato Bean

- **Bean, Pink Wild**, *Strophostyles umbellata* (Gk. *strophe*, a turning, and *stylos*, a style; umbelled), Fabaceae, Pea or Bean Family, HP, SP area, July, *flwrs pink, 3 lflts, oblong, narrow, blunt-pointed, entire,* long-petioled, stipules needle-like
- Bean, Trailing Wild, S. helvola (see note on Strophostyles; yellowish), Fabaceae, Pea or Bean Family, CPP, trailing, wet area, 9/5/97, flwrs greenish-purple, in long-stalked terminal umbels, lvs egg-shaped, 3 blunt lobes, stem hairy
- Bindweed, Field, Convolvulus arvensis (to entwine; of fields), Convolvulaceae, Morning-glory Family, hedge in front of library, early July, RBT, flwrs solitary, wh-pink, bell-like, I", Ivs 1-2", arrow-shaped (not blunt) at base
- Bindweed, Hedge, Wild Morning Glory, Calystegia sepium (calyx cover; of hedges), Convolvulaceae, Morning-glory Family, front of library, ZCG, RBT, 8/24, 2006, common, flwrs solitary, campanulate, 1-3", wh-pink, sepals 5, campanulate, subtended by 2 pink-tipped gr ovate bracts, sharply pointed, 2 wh stigmas, 5 wh stamens, petioles almost as long as acuminate entire lvs with deep basal sinus and blunt basal lobes
- Bittersweet, American, Celastrus scandens (Gk. celastros, for some evergreen tree; climbing), Celastraceae, Staff-tree Family, behind ball field fence, HS, flwrs clustered at end of stem, Ivs egg-shaped, finely serrate, long-pointed, frts (orange/red) split in October (less common than Asiatic)
- Bittersweet, Asiatic, C. orbiculatus (see note on Celastrus; rounded), Celastraceae, Staff-tree Family, ZP, RBT and RVRStr on Kinnally Cove fence, RBT, very common, 5/20/99, flwrs gr, in axils of lvs, *lvs abruptly tipped, orbiculate*, teeth rounded, *frts (orange/red) split in October*
- Buckwheat, Climbing False or Climbing False Bindweed, Polygonum scandens (poly, many, gonu, knee or joint, referring to the nodes; climbing), Polygonaceae, Smartweed Family, HP, Edgewood Avenue, RBT and FdEmp park near Main and Broadway, sprawling, 9/1/00, flwrs gr-wh in axils of lvs, 5 wh petals, joined, 8 stamens, 3-lobed capitate stigma, calyx 3-winged, wavy, lvs heart-shaped, entire, cordate at base, red midribs, stems red, wavy

Calystegia sepium, see **Bindweed**, **Hedge**

Celastrus orbiculatus, see Bittersweet, Asiatic

C. scandens, see Bittersweet, American

Clematis, Yam-Leaved, *Clematis dioscoreifolia*, (Dioscorides' name for a climbing plant with long and lithe branches, from *clema*, a shoot; like leaves of Dioscorea), Ranunculaceae, Buttercup Family, ZCG, August, flwrs wh (4 sepals only), many stamens, *lvs compound, 5 lflts, leathery, entire, terminal lflt long, frts feathery*, October

Clematis dioscoreifolia, see Clematis, Yam-Leaved

- **Clematis, Purple, Virgin's Bower**, *Clematis verticillaris* (Dioscorides' name for a climbing plant with long and lithe branches, from *clema*, a shoot; whorled, from the flowers in axils of paired leaves; also named *C. occidentalis,* western), Ranunculaceae, Buttercup Family, DP, May, *flwrs purple, petioles twine about other plants, 3 heart-shaped lflts, twigs angled, frts feathery*, October
- C. verticillaris, see Clematis, Purple, Virgin's Bower
- C. virginiana, see Virgin's Bower or Old Man's Beard

Convolvulus arvensis, see Bindweed, Field

- Cucumber, One-Seeded Bur, Sicyos angulatus (Gk. cucumber; angular), Cucurbitaceae, Gourd Family, RBT and OCA S of Pinecrest, 7/23/00, flwrs wh, 5 petals, calyx 5-toothed, flwrs in axils, *Ivs 3-5 lobed, coarsely toothed, deep basal sinus*, soft, hairy, veins conspicuous beneath, *frts prickly clusters,* form in September, one-seeded, seed ovoid, smooth, *tendrils gr-ylw, coiled,* stems hairy
- Cucumber Vine, Wild Balsam-Apple, Echinocystis lobata (Gk. echinos, a hedgehog, cystis, bladder, from the prickly fruit; lobed), Cucurbitaceae, Gourd Family, RBT, 6/21/00 in If, flwrs wh, 6 petals, flwrs of 2 types, staminate and pistillate clusters solitary in axils, *Ivs 3-5 lobed, slightly tipped, soft, hairy*, petioles long, hairy, *single large fleshy gr frt, 2", covered with prickles, tendrils forked*

Cuscuta gronovii, see Dodder, Common, Love Vine, Strangle-Weed

Cymbalaria muralis, see Ivy, Kenilworth, Coliseum Ivy

Dioscorea villosa, see Yam, Wild

Dodder, Common, Love Vine, Strangle-Weed, Cuscuta gronovii (an Arabic name; named for Jan Fredrik Gronovius), Cuscutaceae, Dodder Family, SSA, adjacent to RR tracks, RBT, 7/03, ZP, W. of parking lot, HW/VP, sprawling and twisting over other plants, June-October, flwrs gr-wh, 5-merous, 5 anthers, 2 capitate styles, inconspicuous, inflorescence widely spread over stem, stems orange-ylw, lvs linear, frts October, glabrous, parasitic vine

Echinocystis lobata, see Cucumber Vine or Wild Balsam-Apple

Fleece Vine, China, Silver Lace Vine, Polygonum aubertii (poly, many, gonu, knee or joint, referring to the nodes; named for George C. Aubert), Polygonaceae, Smartweed Family, SSA, hedge at Cropsey Lane parking lot, cult, 10/8/00, *flwrs wh with green stripes*, inflorescence a raceme, 5 sepals, 8 stamens, filaments wh, hairy at base, 3-lobed gr stigma, *achene 3-winged, lvs ovatelanceolate, wavy margins*, stems somewhat woody

- Grape, Cat, Red Catbird, Vitis palmata (L. for grape; palmate-leaved), Vitaceae, Vine Family, HP and ZCG, 6/22/98, RBT, Ivs deeply lobed, coarsely toothed, cordate, hairy on veins below, otherwise glabrous and pale, petioles long, glabrous, tendrils forked, missing at third joint, stems red, hairy, pith partitions woody
- **Grape, Muscadine**, *V. rotundifolia* (see note on *Vitis*; round-leaved), Vitaceae, Vine Family, Chauncey Lane, RF and HP, N of SP, June, *Ivs hairless, coarsely toothed, twigs dotted, tendrils not forked*, pith br and continuous, frts purplebl, September
- Grape, Oregon, Holly Grape, Holly Barberry, see Mahonia aquifolium or Berberis aquifolium
- Grape, Summer, V. aestivalis (see note on Vitis; of summer), Vitaceae, Vine Family, HP, SP area and DP, 7/12/00, RBT, Ivs red-wooly or wh below, twigs redhairy on new growth, frts gr in August
- **Grape, Winter**, *V. cinerea* (see note on *Vitis;* ashy), Vitaceae, Vine Family, HP, W of Chemka pool, *Ivs heart-shaped, maple-like, 3 lobes, terminal pointed, coarsely toothed*, soft, pale below, *tendrils absent each 3rd joint,* tendrils branched, bark stringy
- Greenbrier, Common, Smilax rotundifolia (Gk. for an evergreen oak; round-leaved), Liliaceae, Lily Family, HP, S of Chemka pool and HW/VP, 7/10/97, evergreen, Ivs oval, leathery, many stout thorns, tendrils, frts blu-bl
- Ground Nut, Wild Pink Bean, Potato Bean, Apios americana (Gk. a pear, referring to rootstock; American), Fabaceae, Pea or Bean Family, HP, sprawling, July, flwrs purple-br, pea-like, in short thick clusters in If axils, Ivs pinnately compound (3-5 lflts), pointed, fragrant, tuberous

Hedera helix, see lvy, English

- **Hog-Peanut**, *Amphicarpa bracteata* (Gk. *amphi*, of both kinds, and *carpos*, fruit, referring to the two kinds of fruit; bracted), Fabaceae, Pea or Bean Family, OCA, S of Washington Avenue, *trailing*, August-September, *flwrs lilac, purple or wh*, 2 types, pea-like flwrs in racemes in axils and flwrs without petals at base of plant, *3 lflts, alternate, egg-shaped and pointed*, beans of 2 types of pods, curved with 3-4 mottled beans and fleshy, 1-seeded pods, stems br hairy
- Honeysuckle, Asiatic, Japanese, Lonicera japonica (named for Adam Lonitzer; Japanese), Caprifoliaceae, Honeysuckle Family, RBT, common, evergreen, April, flwrs wh-ylw, hairy inside, lvs opposite, toothed, stamens exserted, frts bl, September
- Honeysuckle, Tartarian, L. tatarica (see note on Lonicera; Tartarian),
 Caprifoliaceae, Honeysuckle Family, OCA, SW corner of old quarry and BE,
 W side near Broadway, April, *flwrs pink*, stamens exserted, *lvs opposite*,
 hairless, elliptic, twigs hairless, hollow, berries red, June
- Hop, Common, Humulus lupulus (L. name of Germanic origin; early generic name), Cannabaceae, Indian Hemp Family, RBT, 9/15/97, flwrs small, gr in axillary clusters, *lvs 3-5 lobed, coarsely toothed, stems rough*, no tendrils, *frt a cluster* of overlapping (hop-like) frts

Hop, Japanese, *H. japonicus* (see note on *Humulus;* Japanese), Cannabaceae, Indian Hemp Family, RBT, escp, in If 5/30/00, lvs 5-9 lobed, opposite, upper smaller than lower, toothed, palmate, coarse, stems grooved, hairs bent backward, petioles hairy, coarse, longer than If blade

Humulus japonicus, see Hops, Japanese

Humulus lupulus, see Hops, Common

Ipomoea hederacea, see Morning Glory, Ivy-Leaved

I. lacunosa, see Morning Glory, Small White

- *I. purpurea*, see Morning Glory, Common
- **Ivy, Boston**, *Parthenocissus tricuspidata* (Gk. *parthenos*, virgin, and *cissos*, ivy; three cusps), Vitaceae, Grape Family, planter in front of Veterinarian's office, Warburton Avenue, escp, *Ivs trifoliate, coarsely lobed, dull gr, lflts toothed, petioles pink, tendrils short and branched, with disks, woody stems* and roots
- **Ivy, English**, *Hedera helix* (L. for ivy, perhaps from L. *prehendere*, to seize; twining), Araliaceae, Ginseng Family, ZP, RBT, common, 8/26/00, flwrs wh-gr in umbels on long stalks, *Ivs alternate, dark gr, leathery, wh veins, fan-lobed but much variation*, berries bl
- **Ivy, Kenilworth**, **Coliseum Ivy**, *Cymbalaria muralis* (c*ymbalum*, a cymbal, from the round leaves; of walls), Scrophulariaceae, Figwort Family, 29 MA, escp, May, *flwrs violet with ylw palate, stems slender, hairless, lvs kidney-shaped*
- Kiwi, Hardy Arctic Beauty, Actinidia kolomikta (Gk. actis, ray, referring to the radiating styles of the ovary; Japanese name), Actinidiaceae, Actinidia Family, ZCG, cult, 6/2/00, flwrs in groups of 3's, 5 gr-wh separate petals, 5 wh sepals, margins ciliate, pink-fringed, anthers on long wh filaments, brownish, numerous, ovary short, globose, stigmas ylw-orange, *Ivs ovate, membranaceous, cordate, glabrous, sharply toothed and tipped, petioles reddish* 1 1/4", sparsely hairy, grooved, frts globose, 3/4", 6/6/03, edible, September
- **Kudzu Vine**, *Pueraria lobata* (named for M.W. Puerari; lobed), Fabaceae, Pea or Bean Family, near Odell Avenue, W side of OCA, 9/30/05, opposite Riverpointe development, *sprawling and climbing vine, flwrs purple, fragrant* (grape odor), *lvs pinnately 3-lobed*, long petioles, stems reddish-hairy, older stems woody, thick

Lathyrus latifolius, see Pea, Everlasting

Lonicera japonica, see Honeysuckle, Asiatic, Japanese

L. tatarica, see Honeysuckle, Tartarian

Menispermum canadense, see Moonseed

- Moonseed, Menispermum canadense (Gk. men, moon, and spermis, seed; Canadian), Menispermaceae, Moonseed Family, RBT, June, flwrs wh in axillary clusters, Ivs large (5-10"), oval, broad, entire, shallow-lobed, tips pointed, If peltate, no tendrils, frt bl, whitish powder, grape-sized, September
- **Morning Glory, Common**, *Ipomoea purpurea* (Gk. *ips*, a worm, and *homoios*, resembling, from the twining habit; purple), Convolvulaceae, Morning-glory Family, common, July, *flwrs purple-wh, lvs heart-shaped*, stems pubescent

Morning Glory, Ivy-Leaved, *I. hederacea* (see note on *Ipomoea* above; *hedera,* resembling English Ivy), Convolvulaceae, Morning-glory Family, 29 MA, cult, *flwrs wh-pink, Ivs 3-lobed, hairy,* large pointed sepals

Morning Glory, Small White, *I. lacunosa* (see note on *Ipomoea*; air spaces, from venation of the leaves), Convolvulaceae, Morning-glory Family, 29 MA, common, cult, September, flwrs 1/2-1", *Ivs 3-lobed or heart-shaped*

Parthenocissus quinquefolia, see Virginia Creeper

P. tricuspidata, see Ivy, Boston

- **Pea, Everlasting**, *Lathyrus latifolius (Lathyrus*, a leguminous plant of Theophrastus, *la*, very, and *thuros*, passionate, referring to alleged aphrodisiac quality; broad-leaved), Fabaceae, Pea or Bean Family, Chauncey Lane opposite entrance to RF, sprawling, vine-like, escp, 7/18/97, *flwrs large, pink, pea-like,* petals veined, *Ivs opposite, lanceolate, entire, petioles winged, tendrils much branched, stems winged and flat*
- Periwinkle, Myrtle, Vinca minor (from Pliny's Vincapervinca, from Italian Pervinca; smaller), Apocynaceae, Dogbane Family, South Calumet and Chauncey Lane, MWP, Riverview Place and OCA at Villard, RBT, escp, *trailing*, 3/10/00, *flwrs blu*, axillary, 5-merous, funnelform, peduncled, *Ivs opposite, entire, glossy, ovate, evergreen*
- **Poison Ivy**, *Toxicodendron radicans* (poison-tree; rooting, from the aerial root), Anacardiaceae, Cashew Family, ZP, RBT, common, vine or shrub, 6/4/00, 3 *Iflts, shiny when yg, usually toothed, long-stalked terminal lflt,* old vines with many rootlets, *frts wh*, rd, 7/21/00+
- Polygonum aubertii, see Fleece Vine, China, Silver Lace Vine
- P. sagittatum, see Tearthumb, Arrow-Leaved
- P. scandens, see Buckwheat, Climbing False
- **Porcelain Berry**, **Asian Ampelopsis**, *Ampelopsis brevipedunculata* (Gk. *ampelos*, the vine, and *opsis*, appearance; short-peduncled), Vitaceae, Vine Family, DP, OCA, and ZCG, RBT, common, escp, 7/13/98, *Ivs 3-lobed, coarsely toothed, tips acuminate, cordate at base but variable, forked tendrils present or absent, hairy, purplish, stems hairy, purplish on one side*, pith wh, *frts purple-wh*, 8/11/00
- Pueraria lobata, see Kudzu Vine

Sicyos angulatus, see Cucumber, One-Seeded Bur

Smilax rotundifolia, see Greenbrier, Common

Strophostyles helvola, see Bean, Trailing Wild

S. umbellata, see Bean, Pink Wild

Swallowwort, Black, Vincetoxicum nigrum (ancient name, poison beater, antidote to snakebite; black), Asclepiadaceae, Milkweed Family, below OCA weir, Sleepy Hollow Cemetery, 6/11/98, 6-10 dark purple flwrs, lobes fleshy, fragrant, in umbelliform cymes in axils of lvs, lvs oblong-ovate, pointed, entire, opposite, subcordate at base, frts like milkweed pods, but slender

Tearthumb, Arrow-Leaved, *Polygonum sagittatum* (*poly*, many, *gonu*, knee or joint, referring to the nodes; arrow-shaped), Polygonaceae, Smartweed Family, HP, N of SP, sprawling over other plants, 9/18/00, flwrs small, wh-pink, terminal and axillary racemes, lvs lanceolate, alternate, entire, sagittate at base, stem square, jointed, sheathed, prickles backward-curved

Toxicodendron radicans, see Poison Ivy

Vetch, Four-Seed, Vicia tetrasperma (classical L. name, 4-seeded), Fabaceae, Pea or Bean Family, N side RF, *in mats*, 6/7/00, *flwrs blu, long stalked, lflts narrow, 3-5 pairs, stems weak, tendrils forked*, stipules entire, frt flat, glabrous, much branched

Vicia tetrasperma, see Vetch, Four-Seed

Vinca minor, see **Periwinkle, Myrtle**

Vincetoxicum nigrum, see Swallowwort, Black

- Virginia Creeper, Parthenocissus quinquefolia (Gk. parthenos, virgin, and cissos, ivy; five-leaved), Vitaceae, Vine Family, ZP, RBT, common, escp, June, flwrs small, gr-wh, 5 lflts, radiate, toothed, pointed tips, tendrils with adhesive disks
- Virgin's Bower, Old Man's Beard, Clematis virginiana (Dioscorides' name for a climbing plant with long and lithe branches, from *clema*, a shoot; Virginian), Ranunculaceae, Buttercup Family, ZCG, RBT, common, August, *flwrs wh, in If axils*, *3 coarsely-toothed lflts, frts gray, silky plumes*, 8/25/99

Vitis aestivalis, see Grape, Summer

V. cinerea, see Grape, Winter

V. palmata, see Grape, Cat, Red Catbird

Wisteria, Wisteria frutescens (named for Prof. Casper Wister; shrubby), Fabaceae, Pea or Bean Family, E of HP tennis courts and Maple Lane, common, 5/4/99, flwrs purplish-wh. in clusters, lvs compound, 9-15 lflts, frt pods hairy, September

Wisteria frutescens, see Wisteria

Yam, Wild, *Dioscorea villosa* (dedicated to Dioscorides; soft hairy), Dioscoreaceae, Yam Family, ZCG lane, flwrs gr-ylw, in drooping racemes, *Ivs long-pointed, heart-shaped at base, entire, lower in whorls of 3, others alternate*, tendrils present, frts gr, October

HERBACEOUS PLANTS

Herbaceous plants have the characteristics of an herb, little or no woody tissue, and persist usually for a single growing season; they are distinguishable from woody plants by having a green and leaf-like appearance and character.

Abutilon theophrasti, see Velvetleaf, Butterprint, Pie-Marker Acalypha virginica, see Copperleaf, Three-Seeded Mercury Achillea millefolium, see Yarrow, White, Pink Milfoil

Aconite, Winter, Eranthus hyemalis (er, spring, anthos flower; of winter), Ranunculaceae, Buttercup Family, 11 Villard Avenue, cult, 4-6", February, RBT, 4/1/06, flwrs ylw, cup-shaped, sepals 5-8, petaloid, petals modified into 2 small nectaries, lvs palmately lobed

Actaea pachypoda, see Baneberry, White, Doll's Eyes, Cohosh

Adder's Tongue, Yellow, Dogtooth Violet, Trout Lily, Erythronium americanum (erythros, red; American), Liliaceae, Lily Family, HP, E of Chemka pool, woods W of DP, behind Hook & Ladder Co. No. 1, Dan Rile Park, 4-10", 4/8/00, flwrs ylw, Ivs fleshy, lanceolate, mottled, stems pinkish

Ajuga genevensis, see Bugle, Erect, Standing

A. reptans, see Bugle, Carpet Bugle

Alexanders, Golden, Zizia aurea (named for Johann B. Ziz; golden-yellow), Apiaceae, Carrot Family, ZP, behind Hook and Ladder Co. No. 1, 2'+, 4/10/00, flwrs small, ylw in umbels, lvs doubly compound, 3 divisions divided again into 3's, toothed, long grooved stem red-tinged

Alliaria petiolata, see Mustard, Garlic

Allium canadense, see Garlic, Wild

A. tricoccum, see Leek, Wild

A. vineale, see Garlic, Field, Scallions

 Alyssum, Sweet, Lobularia maritima (L. lobulus, a little lobe; of the sea), Brassicaceae, Mustard Family, in front of library, 11 Villard, wall below Washington Avenue at Warburton Avenue, cult and escp, up to 6-10", 5/16/98, flwrs small, wh, numerous, on slender pedicels, lvs linear, entire, grayish pubescence, frt rounded, flat

Amaranthus retroflexus, see Pigweed, Rough, Green Amaranth, Redroot Ambrosia artemisiifolia, see Ragweed, Common, Roman Wormwood

A. trifida var. trifida, see Ragweed, Great, Buffalo-Weed

Anemone japonica, x hybrida, see Windflower

Anemone, Rue, Anemonella thalictroides (diminutive of Anemone; like Thalictrum), Ranunculaceae, Buttercup Family, HP, 8", April, 2-3 wh flwrs, delicate, on small stalks above a whorl of 3-lobed lvs

Anemone, Wood, Anemone quinquefolia (Gk. and L. Na'man, Semitic word for Adonis, Gk. youth whose death and resurrection symbolized the seasonal cycle; five-leaved), Ranunculaceae, Buttercup Family, ZP, HP E of HS, early April-May, *Iow, delicate, flwrs solitary, wh, with 5 pink sepals, Ivs 3, toothed, in whorls, divided into 3-5 lflts*

Anemone quinquefolia, see Anemone, Wood

Anemonella thalictroides, see Anemone, Rue

Angelica, Alexanders, Angelica sylvestris (from medicinal properties; of the woods), Apiaceae, Carrot Family, OCA near Travis Place and ZCG, 5", May-June, flwrs wh in broad umbels, lvs divided into 3's-5's, toothed, stem stout, purple, upper lf attachments swollen, sheathed

Angelica, Great, Purple-Stemmed Angelica, Angelica atropurpurea (see note on Angelica; dark purple), Apiaceae, Carrot Family, ZCG, 2'+, 5/30/00, flwrs small, wh in rounded umbels, numerous, many rayed, Ivs divided in 3's, serrate, long-grooved petioles, stems sheathed, grooved, hollow, purplish at base

Angelica atropurpurea, see Angelica, Great, Purple-Stemmed Angelica

A. sylvestris, see Angelica, Alexanders

Antennaria neglecta, see Pussytoes, Field

A. plantaginifolia, see Pussytoes, Plantain-Leaved

Anthriscus cerefolium, see Chervil

A. sylvestris, see Chervil, Wild

Apocynum androsaemifolium, see Dogbane, Spreading

A. cannabinum, see Dogbane, Indian Hemp

Aquilegia canadensis, see Columbine, Wild

A. vulgaris, see Columbine, Garden

Arabis lyrata, see Cress, Lyre-Leaved Rock

Aralia nudicaulis, see Sarsaparilla, Wild

Archangel, Yellow, Lamiastrum galeobdolon var. variegatum (Lamium refers to corolla tube; weasel smell; variegated, referring to the leaf), Lamiaceae, Mint Family, HW, entrance on Edgewood Avenue, prostrate, escp, 6", 5/5/00, flwrs ylw, clustered in lf axils, hairy at nodes, 2-lipped, upper lip hairy, lower 3-lobed with red-br marks, ring of hairs inside, calyx sharp-toothed, *lvs ovate, 3*", cordate at base, coarsely toothed, in dense patches in woods

Arctium lappa, see Burdock, Great Clotbur

A. minus, see Burdock, Common, Clotbur

Arisaema atrorubens, see Jack-in-the-pulpit

Armoracia rusticana, see Horseradish

Arrowhead, Common, Wapato, Duck Potato, Sagittaria latifolia (Sagitta, an arrow; broad-leaved), Alismataceae, Water-Plaintain Family, HP/SP, in clumps *in water*, July, *flwrs wh*, 1 1/2", many stamens, *lvs large, arrowhead-shaped*, *stem succulent and partly hollow*, many cells

Artemisia absinthium, see Wormwood, Absinthe

A. annua, see Wormwood, Annual

A. biennis, see Wormwood, Biennial

A. vulgaris, see Mugwort, Common

Artichoke, Jerusalem, Helianthus tuberosus (Gk. helios, the sun and anthos, a flower; tuberous, referring to the root), Asteraceae, Aster Family, ZCG, FP opposite Hastings station, 7'+, 9/19/00, flwrs ylw, rays 8-20, veined, disk ylw, bracts long-pointed, lvs large, egg-shaped, toothed, very coarse, 3 prominent veins, lower lvs opposite, upper alternate, winged, stems stout, rough, coarsely hairy

Asarum canadense, see Ginger, Wild

Asclepias exaltata, see Milkweed, Tall or Poke

- A. syriaca, see Milkweed, Common
- A. tuberosa, see Butterfly Weed, Pleurisy Root
- Aster, Arrow-Leaved, Aster sagittifolius (Gk. aster, a star, referring to the outer floral parts; arrow-shaped), Asteraceae, Aster Family, HP, E of HS, 2', 10/11/98 and RF, 8/20/99, flwrs small ,1/4-1/2", numerous, rays wh and lavender, disk pinkish, Ivs alternate, arrow-shaped, toothed, petioles winged, stems smooth
- Aster, Bushy, A. dumosus (see note on Aster; bushy), Asteraceae, Aster Family, MWP, common, 3', September-October, *flwrs lavender to wh*, to 3/4", bracts of flwr hds narrow, lvs bluntly pointed, *flwr branches with many small lvs*
- Aster, Calico, Starved, A. lateriflorus (see note on Aster, referring to one-sided flower clusters), Asteraceae, Aster Family, HP, 4', October, flwrs wh with ylwpurplish disk, Ivs lanceolate, with 4 teeth near middle, stems purplish or gr, branched

Aster ciliolatus, see Aster, Northern Heart-Leaved

- A. cordifolius, see Aster, Heart-Leaved
- A. divaricatus, see Aster, White Wood
- A. dumosus, see Aster, Bushy
- A. ericoides, see Aster, Many-Flowered, Heath, Squarrose-White
- Aster, Eastern Lined, Panicled, A. lanceolatus var. simplex, formerly A. simplex (see note on Aster, tapering at both ends; simple), Asteraceae, Aster Family, HW/VP, ZCG, 3+', 9/10/99, ray flwrs wh, disk flwrs brownish, upper lvs numerous, toothless, lanceolate, lower 4", slightly rough on margins, few teeth, pointed tips, stems stout, gr, much branched, flowering stems wh-hairy in lines
- Aster, Flat-Topped, A. umbellatus (see note on Aster; umbel-like), Asteraceae, Aster Family, HP, 6'+, August-October, flwrs wh, faintly tinged with violet, 1/2-3/4", in flattish clusters, Ivs lanceolate, pointed tips
- Aster, Heart-Leaved, A. cordifolius (see note on Aster above; heart-leaved), Asteraceae, Aster Family, HP, W of Chemka pool, wall W of entrance to Echo Hills on Main Street, OCA at Washington Avenue, SSA, 10/6/02, RBT, common, 3'+, 7/23/00, ray flwrs purple-wh, disk flwrs purple-red, lvs heartshaped, deeply notched at base, 1 1/2"+, sharply toothed, yg lvs deep purple beneath, slightly hairy above, veins purple, petioles long and villous, winged, stems stiff, purple, rhizomatous

A. lanceolatus, see Aster, Eastern Lined, Panicled

A. lateriflorus, see Aster, Calico, Starved

- Aster, Many-Flowered, Heath, Squarrose-White, *A. ericoides* (see note on *Aster;* resembling Erica by its slender branchlets and bracteal leaves), Asteraceae, Aster Family, RVRStr at Hastings station and SSA, ZCG, RF, RBT, OCA, 10/17/05, common, 3'+, 9/18/00, *ray flwrs wh, disk ylw*, pappus wh, numerous, involucre bracts imbracted, spreading, hyaline margins, gr center stripe, dark tipped, *Ivs numerous, narrow, sessile, purple at base, with rough edges, stems stout, hairy, purple-sided, ridged and ribbed*
- Aster, New England, A. novae-angliae (see note on Aster; New England), Asteraceae, Aster Family, E side HP, RBT, 3'+, October, flwrs purple with ylw disks, stem stout, bristly-hairy, Ivs lanceolate, clasp stem
- Aster, Northern Heart-Leaved, A. ciliolatus (see note on Aster above; slightly ciliate), HP adjacent to Farlane Drive and Chemka pool road, 1', 8/18/99, ray flwrs blu, few, disks ylw, few heads on variable hairy peduncles, lvs broadly arrowhead shaped, sharply toothed, some petioles winged, stems hairy, stout

Aster novae-angliae, see Aster, New England

A. sagittifolius, see Aster, Arrow-Leaved

- Aster, Small White, A. vimineus (see note on Aster, with long slender shoots), Asteraceae, Aster Family, ZCG, 5'+, August-September, small wh crowded flwrs on branching purple stems, Ivs slender, lower toothed, with small lflts in axils
- A. umbellatus, see Aster, Flat-Topped
- A. vimineus, see Aster, Small White
- Aster, White Wood, A. divaricatus (see note on Aster, widely branching), Asteraceae, Aster Family, HP at Chauncey Lane and Farlane Drive, RF, RBT, common, 3', 9/18/00, disk flwrs ylw, ray flwrs wh, 6-9, narrow, spreading, in flattish clusters, lower lvs heart-shaped, sharply-toothed, petioled, stems purple

Aureolaria flava, see Foxglove, Smooth False, Yellow Gerardia

- Avens, Big-Leaved, *Geum macrophyllum (*herb bennet; large leaf), Rosaceae, Rose Family, HW/VP, 1'+, 9/17/00, *flwrs wh* (!), 5 petals, exceed 5 gr lanceolate hairy sepals, stamens numerous, style glandular-hairy, longhooked at tip, *lower lvs long-petioled, terminal lflt large, reniform, lobed, toothed*, lower lflts much smaller than terminal, opposite, toothed
- Avens, Rough, *G. virginianum* (see note on *Geum*; Virginian), Rosaceae, Rose Family, ZP, 20"+, April, *flwrs ylw, Ivs divided into 3 large terminal lflts, center one larger than the other 2*, coarsely toothed, stem hairy
- Avens, White, *G. canadense* (see note on *Geum*; Canadian), Rosaceae, Rose Family, RF woods, ZCG, 3', 6/22/00, *flwrs wh*, 5 petals longer than deltoid hairy sepals, stamens numerous, gr, *lvs alternate, trifoliate, coarsely toothed, frt looks bristly*, formed 7/22/00
- Avens, Yellow, *G. aleppicum* var. *strictum* (see note on *Geum*; Aleppo, Syria; erect), Rosaceae, Rose Family, Bob's Service Station back lot, ZCG, 1'+, May, *flwrs bright ylw, lvs 3-parted, stems reddish and hairy*

Azolla caroliniana, see Mosquito-Fern, Water Velvet, Water Fern

 Balloon Flower, Platycodon grandiflorus (platy, broad, codon, a bell; large flower), Campanulaceae, Bellflower Family, RBT, escp, 1', 9/28/98, 5 broad united blu petals, 5 gr narrow sepals, buds large, balloon-like before opening, 5 stigmas, 5 conspicuous anthers, lvs oblong-lanceolate, dentate, lower opposite, sessile, upper alternate, root a wh tuber, biennial

Baneberry, White, Doll's-Eyes, Cohosh, Actaea pachypoda (Gk. aktaia, old name of elder tree; with thick pedicels), Ranunculaceae, Buttercup Family, E side HP, 1'+, May, small flwrs, on separate stalks, wh clusters, *lvs pinnately compound, toothed, berries glossy wh with bl center (doll's eyes)*

Baptisia tinctoria, see Indigo, Wild

Barbarea verna, see Cress, Common Winter

- B. vulgaris, see Cress, Early Winter, Yellow Rocket
- Bedstraw, see Cleavers
- **Beechdrops**, *Epifagus virginiana (Gk. epi,* upon, *phagos,* the beech, growing on the roots of that tree; Virginian), Orobanchaceae, Broom-rape Family, HP, N of SP, 1'+, 9/17/00, upper flwrs in spikes, wh-purple, alternate, striped, corolla curved,4- toothed, calyx 5-toothed, stems brownish, somewhat hairy, grooved, *much branched, stem scales small*, parasitic on beech tree roots and only at base of American beech
- Beggar Ticks, Sticktight, Bidens frondosa (L. two-toothed, referring to the barbed fruit; leafy, referring to outer phyllaries of flower head), Asteraceae, Aster Family, SSA, 3', 9/13/99, flwr hds ylw-orange, subtended by 8-9 narrow gr leafy phyllaries (bracts), lvs pinnately compound, 5 toothed lflts, stems grooved, smooth, purple, achene with 2 divergent awns, bristly
- Beggar Ticks, Swamp, B. connata (see note on Bidens; united at the base), Asteraceae, Aster Family, S end SP, 2', 9/6/98, flwrs dull ylw, in hds on long slender pedicels, ray flwrs absent, bracts beneath hds narrow, exceeding hds, Ivs opposite, stalked, lanceolate, coarsely toothed, a few 3-cleft, stems purple, much branched, achenes with 4 barbs, bristly, September
- Beggar Ticks, Tall, *B. vulgata* (see note on *Bidens*; common), Asteraceae, Aster Family, OCA N of Washington Avenue, common, 4', September, *flwrs gr-ylw in axils of lvs,* leafy bracts exceed flwrs, *lvs opposite, stalked, divided into 3-5 lflts,* toothed, not lobed, *stems purple*, achene with 2-pronged barbed awns
- Bellwort, Lesser, Perfoliate Bellwort, Merrybells, Uvularia perfoliata (from flowers hanging, like the uvula, or soft palate: perfoliate), Liliaceae, Lily Family, HP/VP, 18", 5/2/87, flwrs ylw, bell-shaped, single, drooping from long stem, Ivs parallel veined, ovate-lanceolate, perfoliate, pointed
- **Bergamot**, *Monarda fistulosa*, (named for Nicolas Monardes; tubular), RBT, cult, 2-3', July-September, flwr hds large, dense, in whorls, corolla bilabiate, tubular, lavender, 2 exerted stamens, bracts pinkish, lvs lanceolate-ovate, accuminate, serrate, clustered at flwr heads, opposite below, aromatic

Bidens connata, see Beggar Ticks, Swamp

B. frondosa, see Beggar Ticks, Sticktight

B. vulgata, see Beggar Ticks, Tall

- Black-Eyed Susan, Rudbeckia hirta (named for Professors Rudbeck; rough), Asteraceae, Aster Family, Maple Lane, RBT, 3', August-October, 8 ylw ray flwrs, many veins, 2 conspicuous, tip indented, disk flwrs conical, bl-br, 4", corolla campanulate, 5-toothed, stamens exserted, anthers bl, coiled, flwr heads on long slightly hairy pedicels, involucre bracts reflexed, attenuate, pappus none, achenes square, purple rings at summit, lower lvs bristly-hairy, ovate, lanceolate, few sharp teeth, 3 prominent veins, petioles winged, upper lvs lanceolate, entire, stems stout with scattered hairs
- Blazing Star, Grass-Leaved Blazing Star, *Liatris graminifolia* (origin unknown; grass-leaved), Asteraceae, Aster Family, MA and Edmarth Place, RBT, cult, 4', July, *flwrs purple, in long spikes, stalked, lower lvs narrow,* entire
- Bloodroot, Sanguinaria canadensis (bleeding; Canadian), Papaveraceae, Poppy Family, HP, S of Chemka pool, RBT plateau, 12", March, flwrs wh, Ivs 5-9 lobed, surround flwr stalk, stem juice orange
- **Blue-Eyed Grass**, *Sisyrinchium atlanticum* (Gk. *sisyrinchion*, probably for an iris, but original meaning not known; Atlantic), Iridaceae, Iris Family, E side OCA near Hillside Road, Dobbs Ferry, 18", April, *flwrs blu, ylw eye, in small umbels or clusters, stems stiff, Ivs linear,* flwr stems branch from middle of main stem
- Blue Flag, Larger, *Iris versicolor* (the rainbow; variously colored), Iridaceae, Iris Family, ZCG, common escp and cult, 3', 5/18/99, *flwrs violet*, sepals downcurved, *strongly ylw veined*, *Ivs sword-like*
- Boneset, Thoroughwort, Eupatorium perfoliatum (dedicated to Mithridates Eupator; through the leaf), Asteraceae, Aster Family, N of SP, RBT, 3'+, 8/2/00, flwrs wh-purplish, forming flat terminal clusters, corolla tube-like, 5 petals, styles exserted, wh, 2-branched, ovaries purple, calyx hairy, gr, pedicels hairy, *lvs* opposite, pierced by hairy stem, rough, toothed, lanceolate, tapering to long tip, hairy on lower midrib, veins conspicuous, rough
- Bouncing Bet, Soapwort, Saponaria officinalis (sapo, soap, referring to juice that forms lather; sold in apothecaries), Caryophyllaceae, Pink Family, SSA, OCA near Travis Place, DP, in clumps, 1', 6/29/99, *flwrs wh-pinkish cymes, 5 separate petals, slightly lobed*, clawed, 2 coronal scales at base of reflexed petals, 10 stamens, filaments slender, 2 styles, calyx long, tubular, 5 gr sepals, *Ivs lanceolate, opposite, entire, nodes enlarged*, sparingly branched, glabrous, stems furrowed on 2 sides

Brassica juncea, see Mustard, Indian

B. rapa, see Mustard, Field Turnip, Rape Mustard, Moutarde

Bugbane, Rattletop, Black Snakeroot, Black Cohosh, Cimicifuga racemosa (cimex, a bug and fugare, to drive away; with racemes), Ranunculaceae, Buttercup Family, HP below Chemka pool adjacent to Farlane Drive, 4', late June, flwrs (mainly stamens) wh, stalked, on long, wand-shaped raceme, lvs ternately compound, coarsely toothed

- Bugle, Carpet Bugle, *Ajuga reptans* (from Gk. *a*, without and jugos, L. *jugum*, yolk, referring to lower lip of corolla; creeping), Lamiaceae, Mint Family, ZCG, common, *creeping*, 3/18/99, *small purple flwrs in leafy spikes*, 2-lipped, upper lip 3-parted, lobed, calyx 5-toothed, campanulate, hairy, *lvs opposite, lower spatulate*, glabrous, long-petioled, upper sessile, slightly toothed, *purplish*, stems hairy in lines, *square*, stoloniferous
- **Bugle, Erect, Standing**, *A. genevensis* (see note on *Ajuga*; Geneva), Lamiaceae, Mint Family, OCA at Baker Lane and ZCG, creeping or upright, 3/18/00, small bl flwrs in terminal spikes, bracts bluish, lvs opposite, wavy-toothed, lower long-petioled, stems square, purplish
- Burdock, Common, Clotbur, Arctium minus (Gk. arction, from arctos, a bear; smaller), Asteraceae, Aster Family, Main Street, common; 3', July, flwrs blu, thistle-like rounded heads, stalked, hooked bracts, lower lvs large, stems hollow, unfurrowed
- Burdock, Great, Clotbur, A. lappa (see note on Arctium; a bur), Asteraceae, Aster Family, W end FdEmp parking lot, common, 3', June, flwrs purple on long stems, prickly hds, Ivs large, hairy below, stems solid
- Butter-and-eggs, *Linaria vulgaris* (name from *Linum*, L. for flax, from similarity of foliage; common), Scrophulariaceae, Snapdragon or Figwort Family, MWP, common, 1', 6/30/00, *ylw flwrs in racemes at end of linear lf stalk, flwrs with long spur and orange palate*
- Buttercup, Bulbous, *Ranunculus bulbosus* (L. for a frog; referring to the enlarged rootstock), Ranunculaceae, Buttercup Family, OCA near Villard Avenue, 1', 5/10/99, *long-stemmed bright ylw flwrs*, 5 hairy sepals, *lvs ternately compound with 3-notched lflts*, terminal petiolate, peduncles furrowed at summit, base of lvs thickened, base bulbous
- Buttercup, Creeping, *R. repens* var. *villosus* or *glabratus* (see note on *Ranunculus*; creeping; hairy; becoming smooth), Ranunculaceae, Buttercup Family, ZCG, 5/18/00, flwrs bright ylw, lower stems creeping, upper upright, lvs deeply divided and toothed, palmately lobed, mottled, nodes hairy, mature stem purple, in patches, roots fibrous
- **Buttercup, Early**, *R. fascicularis* (see note on *Ranunculus*; clustered, referring to thickened root, Ranunculaceae, Buttercup Family, OCA near Villard, 5/7-18/04, flwrs bright ylw, 5 petals, oblong, lvs pedicelled, pinnately compound, lobes narrow, achenes flat, beaked
- Buttercup, Kidneyleaf, *R. abortivus* (see note on *Ranunculus*; aborted styles and petals), Ranunculaceae, Buttercup Family, OCA, 4/28/98, *flwrs small*, *ylw, petals reflexed, lvs kidney-shaped, basal*
- Buttercup, Swamp, *R. septentrionalis* or *hispidus* (see note on *Ranunculus;* northern or with stiff hairs), Ranunculaceae, Buttercup Family, ZCG, *low*, April, *flwrs ylw, lvs in 3 deeply divided segments,* short-stalked, stems weak, *hollow, smoothish*

Buttercup, Tall, Common, R. acris (see note on Ranunculus; acrid), Ranunculaceae, Buttercup Family, E end RF, common, 2'+, 6/11/98, flwrs ylw, 5 petals, long hairy pedicels, long-stemmed, 3 deeply-lobed lvs, crowfoot-like, stems erect, much branched, hairy, frt hds globose, achene beak curved, gr margined, hairy above and below

Butterfly Weed, Pleurisy Root, Asclepias tuberosa (for Aesculapius, to whom genus is dedicated; tuberous), Asclepiadaceae, Milkweed Family, dry uplands, Children's Village, N. of HW, 7/24/01, 1-1/2', flwrs in umbels, numerous, terminal, orange, petals 5, separate, hooded, shorter than slender horns, sepals 5, reflexed, separate, pistil greenish, Ivs and stems hairy, prominent midrib, alternate, linear-oblong, leafy, not milky

Camassia scilloides, see Hyacinth, Wild, Scilla or Squill

- **Campion, Bladder**, *Silene vulgaris* (referring to viscid secretions; common; formerly *S. cucubalus*), Caryophyllaceae, Pink Family, parking lot opposite P.O., 3', 6/15/97, FP 5/19/98, MWP 6/30/00, *flwrs wh, petals deeply lobed*, clawed, 10 stamens, exserted, 3 styles, 5 glabrous sepals, *calyx campanulate, bladder-shaped*, *prominently veined*, lvs linear, opposite, upper linear, abruptly pointed, entire, glabrous, nodes swollen, stipules narrow
- Campion, Rose, Mullein Pink, Lychnis coronaria (flame; like a crown), Caryophyllaceae, Pink Family, RBT, cult, 2-3', *flwrs crimson*, perfect, calyx tube 10-ribbed, toothed, 5 petals, clawed, 10 stamens, 5 styles, *lvs opposite, entire, densely hairy*
- Campion, White, White Cockle, Evening Lychnis, Silene latifolia or Lychnis alba, (see note on Silene; wide-leaved, or Gk. for a scarlet or flame-colored species; Lychnis alba, lychnos, a flame; white), Caryophyllaceae, Pink Family, SSA and opposite P.O., 2', 6/30/00, 5 wh deeply-lobed petals with lateral appendages, 5 styles protruding from center of flwr, no stamens, calyx inflated, campanulate, veined, hairy, 5 short gr sepals, ovary globular, smooth, 5 locules, many seeds, *lvs 5-veined, opposite, sessile, entire, acute, hairy, stems stout, nodes inflated, plant sticky*, much branched, becoming weak

Cannabis sativa, see Hemp, Indian Hemp

Capsella bursa-pastoris, see Shepherd's Purse

Caraway, *Carum carvi* (L. caraway; *carvi*, from Caria, Asia Minor), Apiaceae, Carrot Family, HP, 1-2', May, similar to wild carrot (Queen Anne's Lace), *flwrs wh in umbels without bracts under flwrs, hairless,* stems hollow, *lvs narrowly cut,* frts curved, ribbed, *aromatic*

Cardamine diphylla, see Toothwort, Crinkleroot

Cardamine laciniata or C. concatenata, see Toothwort, Cut-Leaved, Pepperroot C. maxima, see Toothwort, Three-Leaved or Large

C. parviflora, see Cress, Small-Flowered Bitter

C. pratensis, see Cuckooflower, Lady's Smock

Cardinal Flower, *Lobelia cardinalis (named for M. de l'Obel; cardinal red)*, Campanulaceae, Bellflower Family, RBT, *flwrs scarlet*, 2-lipped, upper 2lobed, lower 3-lobed, tube split, stamens exerted, *lvs alternate*, lanceolate, acute, dentate, upper short-petioled, upper sessile, *found in wet places*

- **Carpetweed**, **Indian Chickweed**, *Mollugo verticillata* (soft; whorled), Molluginaceae, Carpet-weed Family (formerly Aizoaceae), E of Municipal Building *on sidewalk, prostrate mats* and up to 6"+, 7/12/00, flwrs small, 5 sepals (no petals) wh on inside, 3 gr veins outside, 3 stamens and styles, flwrs on short slender pedicels in axils of 5-6 whorled, entire, spatulate lvs, with prominent central midvein
- **Carrot, Wild**, **Queen Anne's Lace**, *Daucus carota* forma *roseus* (ancient Gk. name; old generic name for carrot; rose-colored), Apiaceae, Carrot Family, W end of FdEmp parking lot, E side Five Corners woods, RVRStr, 3'+, 6/24/00, flwrs small, wh-pink in widely branched 3-4" umbels that arch upward in maturity like a bird's nest (8/12/99), sometimes *purple spot in center*, hds subtended by linear, ciliate-margined bracts, much branched, *lvs long- petioled and deeply dissected, fern-like*, stem grooved, hairy, taproot
- Carum carvi, see Caraway
- Catchfly, Night-Flowering, White Campion, White Cockle, Silene noctiflora (refers to viscid secretions; flowering at night), Caryophyllaceae, Pink Family, parking lot opposite P.O., 3', 5/20/99, 5 wh deeply-lobed petals, calyx campanulate, hairy, strongly nerved, bladder-like, 5 styles, no stamens, lvs opposite, hairy, 3-5-nerved, upper sessile, lower petiolate, stems hairy, nodes swollen, hairy
- Catnip, Nepeta cataria (L. from Nepeta, an Etruscan city; old generic name), Lamiaceae, Mint Fam, RBT, 7/1/04, cult, 1', flwrs purple-wh, bilabiate, purple dots on inner lip, spike-like inforescence, crowded, calyx narrow, sharp pointed, slighlty ciliate, lvs triangular-ovate, coarsely toothed, cordate at base, petioled, opposite, stems square
- Cattail, Common, *Typha latifolia* (Gk. *Typhe*, cattail, tuber; broad-leaved), Typhaceae, Cattail Family, N end SP and BE near Broadway, 6'+, 8/13/00, *flwrs br in dense cylindrical spikes*, upper half staminate (male), lower pistillate (female), *lvs long, parallel-veined, flat, 1" wide*
- **Celandine, Lesser**, *Ranunculus ficaria* (L. for a frog, habitat where these plants grow, applied by Pliny; *ficus,* the fig, from tuberous roots), Ranunculaceae, Buttercup Family, ZCG, OCA, Dan Rile Park, SSA, RBT, common, escp, 8", 3/6/00, 4/12/04, 8 bright ylw petals, 3 gr sepals, numerous ylw stamens, achenes numerous, beakless, pubescent, 1 ovule, *Ivs cordate, entire to coarsely-toothed, midrib purplish,* petioles grooved, *Ivs mostly basal*, some upper alternate, roots tuberous, numerous, interior wh
- **Celandine, Swallowwort**, *Chelidonium majus* (Gk. *chelidon*, the swallow, referring to use of juice for young swallows' eyes; larger), Papaveraceae, Poppy Family, RBT, ZCG, 32 Main Street, common, 4/15/00, *4 ylw petals*, 2 sepals fall early, flwrs in umbels, *frt narrow, to 1 3/4", cylindric*, glabrous, smooth, formed by 10/1/00, *Ivs alternate, deeply divided in irregularly-lobed leaflets, whitish below*, stem slightly hairy, especially at nodes, *juice saffron-colored in maturity*

Celandine Poppy, *Stylophorum diphyllum* (Gk. *stylos*, style, *phorous*, bearing a long style; two-leaved), Papaveraceae, Poppy Family, ZCG, RBT, 2', mid-April, *flwrs ylw, borne at tip of stem, lvs deeply lobed and divided, pale below, hairy, juice ylw*

Centaurea maculosa, see **Knapweed**, **Spotted Black**, **Star Thistle** *C. nigra*, see **Knapweed**, **Spanish Buttons**

Cerastium vulgatum, see Chickweed, Mouse-Ear

- **Chamomile**, *Matricaria recutitia* (*matrix*, womb, for its medical virtues; circumcised, referring to appearance of flower heads with rays reflexed), Asteraceae, Aster Family, MA and Ridgedell Avenue, cult, 2', 7/22/00, *ray flwrs wh, lobed, disk cone-shaped, flwrs ylw*, numerous, no pappus, achene ridged, *lvs alternate, branched, pinnatifid, lflts narrow, smells of pineapple*
- **Chamomile, Wild**, *Matricaria maritima* var. *argrestis* (see note on *Matricaria*; of sea shores; of fields), Asteraceae, Aster Family, ZCG, 1', 5/4/98, 12+ wh ray flwrs with 2-3 rounded toothed lobes, that are slightly grooved and reflexed, *disk ylw, cone-shaped*, phyllaries of involucre gr, overlap, *Ivs finely divided*, glabrous, stems gr, weak, odorless
- **Charlock, Jointed**, **Chinese Radish**, *Raphanus sativa* (Gk. *raphanos*, appearing quickly, alluding to rapid germination; cultivated), Brassicaceae, Mustard Family, ZCG, cult, 3', 5/15-9/7/99, *flwrs pink-purple-wh* in terminal racemes, pedicels ascending, *Ivs pinnatifid*, lower Ivs coarse, turning purple, *stem coarse, purple-gr*, frt beaked, smooth, jointed, root large, firm, tuberous, purple
- Chelidonium majus, see Celandine, Swallowwort

Chenopodium album, see Lamb's Quarters, Goosefoot, Pigweed

- *C. ambrosioides*, see **Mexican Tea**
- *C. pratericola*, see **Goosefoot**
- **Chervil, Wild**, *Anthriscus sylvestris* (probably akin to Gk. *ather*, beard or grain; of woodlands), Apiaceae, Carrot Family, OCA, E of ZP, RBT, up to 3', April to June, *flwrs small*, 6-15 rays, bractlets fringed, *wh in umbels*, upper nodes hairy, *lvs fern-like, clasp stem, branched, stem ribbed and gr-purple*
- Chervil, A. cerefolium (see note on Anthriscus; waxy), Apiaceae, Carrot Family, RBT, ZCG, OCA, 1' 6", May, 4 wh petals, umbels compound, lax, 3-6 rays, slightly hairy, 2 prominent styles, frt flat, linear, glabrous, slightly beaked, beak ribbed, grooved, glabrous, bracklets subtending pedicels, slightly ciliate, lance-linear, reflexed, *lflts deeply dissected*, axils of lf stalks hairy, *base of lf stem sheathed*
- Chickweed, Common, Stellaria media (stella, star; intermediate), Caryophyllaceae, Pink Family, base of wall below FP, N side of RF, RBT, common, matted or up to 10", 3/17/99+, small wh flwrs, 5 deeply-lobed purple-tipped petals shorter than 5 fringed, purple-tipped sepals with hyaline margins, joined at base, obovate, 3 styles, 5 stamens, lvs 1", opposite, entire, ciliate, upper sessile, lower petioled, winged, fringed at base, ciliate, stems weak, somewhat hairy, purplish, pubescent in lines

Chickweed, Giant, S. aquatica (see Stellaria; aquatic, or Myosoton aquaticum, mys, mouse, and ous ear, from the soft leaves), Caryophyllaceae, Pink Family, N side RF, adjacent to concrete bleachers, 6"+, 4/19/99, flwrs wh, 5-lobed petals exceeding gr sepals, 5 styles, 10 stamens, lvs ovate pointed, opposite, sessile, hairy, stems hairy, purplish, decumbent perennial, rhizomatous

Chickweed, Mouse-Ear, Cerastium vulgatum (Gk. cerastes, horned; common), Caryophyllaceae, Pink Family, Municipal Bulding parking lot, prostrate or upright, 6-18", 5/7/00, 5 wh deeply-lobed petals, sepals as long as, gr, purpletipped, hairy, Ivs rounded, oblong, opposite, stems hairy, purplish

Chicory, *Cichorium intybus* (an Arabic name; from a name in Virgil for wild chicory or endive), Asteraceae, Aster Family, Riverview Place and N. Broadway, common, 3', 6/9/99, *flwrs bright blu*, sessile in axils of If, spread alternately along grooved stem, *numerous 5-toothed ray flwrs, slender, strap-like*, sepals gr, ciliate, glandular, achenes hairy, Ivs alternate, basal Ivs lobed, upper Ivs entire, sessile or not

Chimaphila maculata, see Wintergreen, Spotted

Chrysanthemum leucanthemum, see Chrysanthemum, Oxeye Daisy, White Daisy

- Chrysanthemum, Oxeye Daisy, White Daisy, Chrysanthemum leucanthemum, (old Gk. name for golden flower; white flower), Asteraceae, Aster Family, grassy area N of FdEmp, 1'+, June, *flwr hds long-stalked, wh rays, ylw cone-shaped disk,* lvs alternate, narrow, lobed, few, clasp stem, *stem grooved*, hairy near base
- C. parthenium, see Feverfew

Cichorium intybus, see Chicory

Cimicifuga racemosa, see Bugbane, Rattletop, Black Snakeroot, Black Cohosh,

Cinquefoil, Common, *Potentilla simplex* (*potens*, powerful for medicinal purposes; unbranched), Rosaceae, Rose Family, HP, W of Chemka pool and N end DP and RBT, 6-12", May, *ylw flwrs in long pedicels, 5 lfts, low,* growing from short rhizomes

Cinquefoil, Rough-Fruited, *Potentilla recta* (see note on Potentilla; upright), Rosaceae, Rose Family, OCA above ZP, SSA, 2', 6/12/99, *flwrs sulphur ylw*, long stalked in cymes, 5 separate petals, calyx and bractlets lanceolate, *hairy*, *5 lflts, deeply toothed, lower lvs palmately compound*, long-petioled, stem hairy, much branched, roots numerous, thickened, woody, br

Cinquefoil argentea, see Potentilla, Silvery

Circaea lutetiana, see Nightshade, Enchanter's Cirsium arvense, see Thistle, Canada C. discolor, see Thistle, Field C. horridulum, see Thistle, Yellow C. vulgare, see Thistle, Bull

Claytonia virginica, see Spring Beauty

- **Clearweed**, **Glasswort**, *Pilea pumila* (*pileus*, Roman felt cap; dwarf), Urticaceae, Nettle Family, RF, RBT, FP, flwrs wh-gr, in axils of lf, droop, in lf 5/7/00, *lvs opposite*, cuneate to rounded at base, long-petioled, 1/2 length of blade, toothed, 3-nerved from base, stems purple and fleshy, translucent, resembling **Stinging Nettle** but no sting
- **Cleavers**, **Bedstraw**, *Galium aparine* (Gk. *gala*, milk, curdled by a species of the genus and used in cheese-making; to catch, cling or scratch), Rubiaceae, Madder Family, above wall of FP, OMQ, *sprawling*, 4/20/99, *tiny wh flwrs, bristly lvs in whorls of 8, stems square and bristly*

Cleome hasslerana, or C. spinosa, see Spider Flower

- Clotbur, Cocklebur, Xanthium chinense or X. strumarium or X. americanum (Gk. Xanthion, for a plant used to dye hair yellow, from xanthos, yellow; Chinese; strumarium, cushion-like, medicine for treating swollen necks; American), Asteraceae, Aster Family, RBT, 3'+, 9/13/99, staminate flwrs in short racemes above pistillate flwrs, Ivs maple-like, broad, 3-lobed, coarse, petioles long, coarse, purplish, stems stout, purple-speckled, bristly with reddish petioles, gr-ylw-br bur with spines
- **Clover, Bush**, *Lespedeza violacea* (named for V.M. Zespedes or Cespedes; violet), Fabaceae, Pea or Bean Family, MWP, 3', July, *flwrs purple,* few, loosely stalked, *3 small oval lflts,* stems branched
- **Clover, Pinnate Hop-, Smaller Hop**, *Trifolium campestre* (*tres*, three, *folium*, leaf; of pastures), Fabaceae, Pea or Bean Family, MWP, SSA, *prostrate*, 6/9/02, *ylw flwrs in dense heads*, 3 diagonal red viens inside hood, sepals narrow, pointed, hairy, *lvs trifoliate, petioles hairy*, rachis grooved, *terminal lflt stalked*, 1-3 mm, tipped, needle-like stipules, much branched
- **Clover, Red**, *T. pratense* (see note on *Trifolium*; of meadows), Fabaceae, Pea or Bean Family, ZCG, FdEmp parking lot, RBT, common in lawns, 6"-2', 5/31/00, *flwrs long-stalked, heads subglobose, reddish, dense*, calyx long, narrow, gr, awned, numerous wh hairs, stipules blunt, then long-awned, hairy, 3 serrulate slightly hairy *lflts, 3 cm, with pale chevrons*
- **Clover, Slender Bush**, *Lespedeza virginica* (see note on *Lespedeza*; Virginian), Fabaceae, Pea or Bean Family, 3', July, *flwrs purple in short clusters in upper If axils, 3 lflts,* narrow, alternate, longer than wide
- **Clover, White**, *T. repens* (see note on *Trifolium*; creeping), Fabaceae, Pea or Bean Family, FdEmp park and E end RF, common, 5/7/99, 3 *lflts with pale triangular mark on each, flwrs wh in rd hds* on long stalks
- Clover, White Sweet, Melilotus alba (Gk. meli, honey, lotos, a leguminous plant; white), Fabaceae, Pea or Bean Family, MWP, common, 3'+, July, flwrs wh in long tapering clusters, lvs 3-parted, toothed, petioled, stipulate, lvs fragrant when crushed
- **Clover, Yellow Sweet**, *M. officinalis* (see note on *Melilotus*; sold in apothecaries), Fabaceae, Pea or Bean Family, FdEmp parking lot, 2-5', 5/30/00, and MWP, 7/5/99, flwrs ylw, long tapering spikes, lvs 3-parted, narrow, sweet odor when crushed

Collinsonia canadensis, see Horse Balm, Richweed, Stonewort

- **Coltsfoot**, **Pas-d'Ane**, *Tussilago farfara* (*tussis*, cough; L. for coltsfoot), Asteraceae, Aster Family, E end RF, 6-18", RBT, 3/23/00, *ylw dandelion-like flwrs*, ray and disk flwrs copious, bracts purple, linear, achenes long, br, narrow, 5-ribbed, *stems with reddish scales*, lvs appear in May, long-petioled, cordate with deep narrow sinus, toothed, lobed, *wh-wooly below*
- **Columbine, Garden**, *Aquilegia vulgaris* (the eagle, claw-like; common), Ranunculaceae, Buttercup Family, parking lot opposite P.O., RBT, escp, 1-2', May, *purplish-wh flwrs with sac at back of flwr, lvs 3-lobed, in 3's*
- **Columbine, Wild**, *A. canadensis* (see note on *Aquilegia*; Canadian), Ranunculaceae, Buttercup Family, parking lot opposite P.O., 1-2', April-July, *pink flwrs with 5 long, curved, drooping spurs, lvs 3-lobed, in 3's*

Comandra umbellata, see Toadflax, Bastard

Comfrey, *Symphytum officinale* (Dioscorides' name for healing plants; sold in apothecaries), Boraginaceae, Borage Family, ZCG, 1-2', May-July, *flwrs wh, pink, purple,* in cymes, pendant on one side of peduncle, corolla tubular, 6-lobed, calyx gr, 6 sepals, tubed, hairy, 6 stamens inserted inside tube, scale-like fornices alternate with and exceed anthers, *lvs lanceolate, decurrent, stem hairy, winged*

Commelina communis var. ludens, see Dayflower, Asiatic

C. virginica, see Dayflower, Virginia

Conringia orientalis, see Mustard, Hare's-Ear

Convallaria majalis, see Lily-of-the-Valley, Muguet

Conyza canadensis, see Horseweed

- **Copperleaf**, **Three-Seeded Mercury**, *Acalypha virginica* (Gk. *Acalephe*, nettle; Virginian), Euphorbiaceae, Spurge Family, common, *growing in sidewalks and cracks of walls*, below FP, 4/26/00-September, indistinguishable flwrs in axils of petioled lanceolate lvs, lvs toothed to entire, *petioles reddish*, lower stems pubescent
- **Coralbells**, *Heuchera sanguinea (*for Johann Heucher; blood-red), Saxifragaceae, Saxifrage Family, ZCG, cult, in clumps, 1'+, 5/20/99, *flwrs red,* open inflorescence, corolla campanulate, 5 lobes, no sepals, *all parts with hairy glands*, 5 ylw anthers attached on middle of corolla tubes, ovary 2-3-parted, *basal lvs 5-9, lobed, toothed, long-petioled*

Coreopsis grandiflora, see Tickseed

Coronilla varia, see Vetch, Crown

- **Cosmos, Common**, *Cosmos bipinnatus (*Gk. a decoration; twice pinnately divided), Asteraceae, Aster Family, FdEmp park on Main and Broadway, 4',10/25/00, *ray flwers purple-pink, disk br, Ivs* opposite, whorled, *pinnately compound, segments linear*
- **Cosmos, Orange or Yellow**, *C. sulphureus* (see note on *Cosmos*;sulphur-colored), Asteraceae, Aster Family, 10/01, SSA/DPW, *5 ylw ray flwrs*, sterile, *ylw disk flwrs*, perfect, *lvs bipinnate*, *deeply dissected*, *segments narrow*
- **Cow Parsnip**, *Heracleum lanatum* or *H. maximum* (dedicated to Hercules; wooly; largest), Apiaceae, Carrot Family, RBT, to 10', in flwr 6/8/02, small wh flwrs in broad umbels, petals notched, tinged purple, *Ivs 1'+, ternately divided, toothed, hairy, base of leafstalk sheathed, stems wooly, ridged, hollow*

Cranesbill, Small-Flowered, Geranium pusillum (Gk. geranos, crane; very small), Geraniaceae, Geranium Family, OCA, N of Irvington Middle School, 8/20/00,RBT, 6/7/02, low, prostrate, *flwrs small, wh*, petals notched, veined, sepals gr, hairy, tipped, *lower lvs long-petioled, palmately lobed, toothed*, hairy, stipules present, nodes pinkish, enlarged

Cranesbill, Wild, Wild Geranium, Spotted Geranium, *G.maculatum* (see note on *Geranium*; mottled), Geraniaceae, Geranium Family, HP, E side entrance to Chemka pool and E side OCA, Pinecrest to Washington Avenue, RBT, 1'+, 3/16/00, flwrs with 5 lavender petals, lvs on long hairy stems, deeply 5-lobed, long "beaked" frt

Crepis capillaris, see Hawksbeard, Smooth

- **Cress, Common Winter Cress**, *Barbarea verna* (old name for Herb of St. Barbara; of early spring), Brassicaceae, Mustard Family, roadside adjacent to N side Mt. Hope Blvd, mid-April, *flwrs small, wh, basal lvs with lateral lobes, upper lvs smaller with linear lobes,* frts long, slender, flat
- **Cress, Early Winter**, **Yellow Rocket**, *B. vulgaris* (see note on *Barbarea; common*), Brassicaceae, Mustard Family, E of HS, common, 2', 5/6/00, *flwrs ylw, small*, *ears of lower lvs rd, upper lvs broad*, coarsely toothed, clasp stem, pods narrow, erect, hug stem
- **Cress, Field Penny**, **Stinkweed**, *Thlaspi arvense* (Gk. *thlaein*, to crush, from the flattened silicles; of cultivated land), Brassicaceae, Mustard Family, behind Bob's Service Station, in pots, 6-18", 4/22/99, *4 wh equal petals,* longer than gr sepals, cauline lvs few-toothed, sagittate, clasp stem, auricles narrow, pointed, *frt flat, notched at top, winged, strong odor*
- **Cress, Lyre-Leaved Rock**, *Arabis lyrata* (from Arabia; lyre-shaped), Brassicaceae, Mustard Family, ZCG and FP, April, *small wh flwrs, upper lvs narrow, basal rosette lvs deeply lobed,* pods long and narrow
- **Cress, Small-Flowered Bitter**, *Cardamine parviflora* (Gk. *kardamon*, a cress; small-flowered), Brassicaceae, Mustard Family, Villard Avenue/Whitman Street and ZCG, rock ledge, 4-10", mid-March, *small wh flowers, basal rosette and slender stem-lvs*
- **Crocus, Dutch**, *Crocus vernus (*from Chaldean, Babylonian name; spring), Iridaceae, Iris Family, E side OCA at Villard, ZCG, 67 Villard, RBT, cult, low, abundant, 2/27/99, *purple, star-like flwrs, throat wh*, bearded, 6 sepals, *anthers lemon-ylw, style orange-scarlet, lvs 3-4, linear,* widest at the middle, wh stripe in keeled center, single spathe, corm bristly, linear br segments

Crocus vernus, see Crocus, Dutch

Cryptotaenia canadensis, see Honewort, Wild Chervil

- **Cuckooflower**, Lady's Smock, Cardamine pratensis (Gk. kardamon, a cress; of meadows), Brassicaceae, Mustard Family, HP, *in stream N of SP*, 20", April, *flwrs pink, Ivs appear mid-April, divided into 5-15 lflts*
- Cynthia, Dwarf Dandelion, *Krigia biflora* (named for David Krig; two-flowered), Asteraceae, Aster Family, DP, 1', 6/18/00, 2 ylw dandelion-like flwrs, one lanceolate If clasping stem, basal rosette lvs

Cypress Spurge, *Euphorbia cyparissias* (*Euphorbia*, named for Euphorbus; cypress-leaved, used to describe spurges), Euphorbiaceae, Spurge Family, in grass above ZP ball field, common, escp, 12", mid-April, *ylw inconspicuous flwrs,* in umbels with long pedicels, spurge-like, *lvs numerous, linear, pale gr, milky juice*

Cypripedium acaule, see Lady's Slipper, Moccasin Flower

- Daffodil, Narcissus, Narcissus pseudonarcissus, (named for mythological Narcissus; false Narcissus), Liliaceae, Lily Family, RBT, 4/1/06, cult, flwrs ylw, solitary, horizontal, tubular crown with broad, spreading fringed segments, stem leafless, rising from the ground, lvs narrow, basal
- Daisy, Oxeye, White Daisy, Chrysanthemum, Chrysanthemum leucanthemum (old Gk. name for golden flower; white flower), Asteraceae, Aster Family, grassy area N of FdEmp, 1'+, June, *flwr hds long-stalked, wh rays, ylw cone-shaped disk,* lvs alternate, narrow, lobed, few, clasp stem, *stem grooved,* hairy near base
- Dandelion, *Taraxacum officinale* (from Arabic, *Tharakhchakon;* sold in apothecaries), Asteraceae, Aster Family, common, 2/5/99, ylw flwrs throughout summer, lvs jagged, toothed, lobed, terminal lobe larger than others, stems hollow, wh globular seedballs

Datura stramonium, see Jimsonweed

Daucus carota forma roseus, see Carrot, Wild Queen Anne's Lace

- Dayflower, Asiatic, Commelina communis var. ludens (for Commelin, communis, growing in colonies; deceiving), Commelinaceae, Spiderwort Family, Broadway at Maple Lane, E end RF, HP W of Chemka pool and FP, very common, sprawling, May, 2 upper blu petals and 3 lower wh petals, subtended by a gr, folded, heart-shaped, pointed and entire spathe open to base on one side, cordate, glabrous, long stalks, lvs alternate, lance-ovate, 11 cm, sheaths glabrous, membranaceous, fleshy, weak-stemmed
- Dayflower, Virginia, C. virginica (see note on Commelina; Virginian), Commelinaceae, Spiderwort Family, common, similar to Commelina communis but petals blu (lower not wh) and lower petals slightly smaller than upper 2, lvs narrower

Delphinium ambiguum, see Larkspur, Rocket

Desmodium canadense, see Trefoil, Showy Tick

D. paniculatum, see **Trefoil**, **Panicled Tick**

Dianthus armeria, see Pink, Deptford

Dicentra cucullaria, see Dutchman's Breeches

Diplotaxis tenuifolia, see Rocket, Slimleaf Wall

Dock, Bitter, Red-Veined, Broad, Blunt-Leaved, Rumex obtusifolius (ancient L. name for sorrel; blunt-leaved), Polygonaceae, Smartweed Family, OCA, near Travis Place, ZCG, RBT, OMQ, common, 3'+, 6/26/99, flwrs gr-wh, tufted in leafy-bracted axillary verticils spaced on divergent grooved stems, basal lvs rounded or heart-shaped at base, up to 12", upper lvs lanceolate, red-veined, toothed, valves (frts) triangular, margins spiny-toothed, bearing a large pinkish rough grain

- Dock, Curled, Yellow Dock, *R. crispus* (see note on *Rumex*; wavy margin), Polygonaceae, Smartweed Family, Five Corners woods, common, 1'+, June, gr flwrs crowded and *whorled on stems*, lvs lanceolate, *wavy margins, frt heart-shaped*, reticulate
- **Dogbane**, **Indian Hemp**, *Apocynum cannabinum* (Gk. *apo*, far from, and *cyon*, a dog; hemp-like), Apocynaceae, Dogbane Family, W side OCA, S of Pinecrest, HW/VP, 3', July, *flwrs small, gr-wh,* cymose in axils of upper lvs, lvs rounded at base, *entire, tipped, opposite, stems reddish,* If scars meet at enlarged nodes, *milky juice, frt pods 6"*, slender, in 2's, formed in October, iridescent beetles often seen on lvs
- **Dogbane, Spreading**, *A. androsaemifolium* (see note on *Apocynum*; with leaves of Androsaemum, man's blood, referring to juice of berries), Apocynaceae, Dogbane Family, RBT, HP/SP, shrub-like, 6/12-9/17/00, *flwrs pink*, corolla campanulate, *flwrs clustered at ends of stem branches, nodding*, lvs opposite, entire, egg-shaped, petioled, *pods in pairs, slender, milky juice, fragrant*
- **Doll's Eyes**, **White Baneberry**, **Cohosh**, *Actaea pachypoda* (Gk. *aktaia*, old name of elder tree; with thick pedicels), Ranunculaceae, Buttercup Family, E side HP, 1'+, May, flwrs small, on separate stalks, wh clusters, *lvs pinnately compound, toothed, berries glossy wh with bl center* (doll's eyes)
- Draba verna, see Whitlow Grass

Dracocephalum thymiflorum, see Dragonhead, Thyme-Leaved

- Dragonhead, False, Obedient Plant, *Physostegia virginiana* (Gk. *physa*, a bladder, *stege*, a covering, an allusion to the somewhat inflated calyx; Virginian), Lamiaceae, Mint Family, parking lot opposite P.O., 12 Maple Lane, RBT, 3'+, flwrs 8/21/98 to end of October, *flwrs pink*, *in terminal racemes, looks like a snapdragon,* lvs linear, toothed, opposite, *when pushed right or left flwrs obediently stay that way!*
- Dragonhead, Thyme-Leaved, Dracocephalum thymiflorum (Gk. dracon, a dragon and cephale, head, referring to form of corolla; thyme-flowered), Lamiaceae, Mint Family, 51 Main Street, cult, 1', 8/4/00, flwrs blu, 2-lipped, calyx conspicuously nerved, hairy, hds in bracted dense hairy spikes, lvs opposite, lower long-petioled, triangular-ovate, upper ovate-lanceolate, incised, stems square, fragrant

Duchesnea indica, see Strawberry, Indian

- **Duckweed**, *Lemna minor* (name given by Theophrastus to a water plant; small), Lemnaceae, Duckweed Family, SP, *small floating gr plants with a nearly symmetrical circular thallus* (frond), convex on both sides, obscurely 3-nerved, short wh roots pendant from lower surface, often found in clumps
- **Duckweed**, *Spirodela polyrhiza* (*speira*, a cord and *delos*, evident; many-rooted), Lemnaceae, Duckweed Family, SP, *small floating gr plants* with a flat thallus that is somewhat convex beneath, broadly oval, purple-red beneath, mostly 7nerved, and with 4-9 short wh pendant roots from lower surface
- Duckweed, Star, *L. trisulca* (see note on *Lemna*; three-furrowed), Lemnaceae, Duckweed Family, W side BE in stream near Broadway, *floating green mats, thallus (frond) obscurely 3-veined*, 10 mm long, notched at tip, entire, oval, opposite, one rootlet

Dutchman's Breeches, Dicentra cucullaria (Gk. dis, twice, centron, a spur; hoodlike), Fumariaceae, Fumitory Family, HP, S of Chemka pool, 4/10/00 and Dobbs Ferry High School woods, 4/18/99, 6-8", flwrs wh, ylw at summit, saclike, spurred at base, lvs divided, pale gr

Elodea cabonenadensis, see Waterweed

Epifagus virginiana, see **Beechdrops**

Epilobium ciliatum, see Willow-Herb, American

Epipactis helleborine, see Helleborine

Eranthus hyemalis, see Aconite, Winter

Erechtites hieracifolia, see Pilewort, Fireweed

Erigeron annuus, see Fleabane, Daisy, Sweet Scabious

E. canadensis, see Horseweed

E. philadelphicus, see Fleabane, Common Philadelphia

E. pulchellus, see **Plantain**, **Robin's**

E. strigosus, see **Fleabane**, Lesser Daisy

Erodium cicutarium, see Storksbill, Alfileria

Erythronium americanum, see **Trout Lily**, **Yellow Adder's Tongue, Dogtooth Violet**,

Eupatorium maculatum, see Joe-Pye Weed, Spotted

E. perfoliatum, see **Boneset**, **Thoroughwort**

E. purpureum, see Joe-Pye Weed, Sweet, Purple-Node Joe-Pye Weed

E. rugosum, see Snakeroot, White

Euphorbia cyparissias, see Spurge, Cypress

E. esula, see **Spurge**, **Leafy**

E. maculata or E. supina, see Purslane, Milk, Spotted Spurge

E. serpyllifolia, see Spurge, Thyme-Leaved

Feverfew, *Chrysanthemum parthenium* (old Gk. name for golden flower; *parthenion*, virgin), Asteraceae, Aster Family, Whitman Street, E end RF, 2', July, *ray flwrs wh, 3-notched, 2-veined, disk flwrs ylw, button-like, lvs pinnately lobed, alternate, toothed, hairy, stem grooved, aromatic*

Flax, Wild Blue, *Linum perenne* (classical name of flax; perennial), Linaceae, Flax Family, MA and Edmarth Place, 2', June, *flwrs blu, petals 5, many narrow stem lvs,* branched

- Fleabane, Common Philadelphia, Erigeron philadelphicus (Gk. eri, early, geron, old man; Philadelphian), Asteraceae, Aster Family, ZCG, common, 2'+, 5/18/00, numerous terminal flwrs, wh-pinkish, disk flwrs ylw, involucre cup-shaped, gr, slightly hairy, lvs sessile, tipped, ciliate, few on stem, hairy, stems grooved, soft
- Fleabane, Daisy, Sweet Scabious, E. annuus (see note on Erigeron; annual), Asteraceae, Aster Family, ZCG, W end FdEmp parking lot, 3', 5/31/00, ray flwrs wh-pink, disk flwrs ylw, 1/2", numerous, pappus very small, flwrs on long stalks, stem lvs sparsely but sharply toothed, soft, ciliate, lanceolate, petioles margined, stems with long wh hairs that stand out, branched, firm
- Fleabane, Lesser Daisy, E. strigosus (see note on Erigeron; with short, appressed bristles), Asteraceae, Aster Family, CPP, 3', flwr hds wh-pink, many ray flwrs, similar to Erigeron annuus, but hairs lie closer on stem, stem lvs mostly entire

- Fleabane, Marsh, *Pluchea odorata* (named for Abbe N.A. Pluche; odorous, like camphor; formerly *P. purpurascens*, purplish), Asteraceae, Aster Family, CPP, *adjacent to tidal marsh*, 1'+, October, *flwrs wh-pink, in flat-topped leafy corymb, lvs oblong-lanceolate*, slightly toothed, margins hairy, lvs hairy below, glandular, alternate, *fragrant*
- Floating Moss, Salvinia, Salvinia rotundifolia (for Antonio M. Salvini; round-leaved), Salviniaceae, Floating Fern Family, HP/SP, escp, *floating*, 8/2/00, *fronds rounded*, 1 cm or less long, somewhat cordate at base and folded along midrib, short, hairy stems, upper surface covered with neatly arranged wh forked hairs and apparent br dots, lower surface brownish hairy, muchbranched roots
- Foam Flower, False Miterwort, *Tiarella cordifolia* (*tiara* or turban, from form of pistil; heart-leaved), Saxifragaceae, Saxifrage Family, HP, 12", April, *flwrs wh, numerous*, stamens conspicuous, flwrs in terminal raceme, *basal lvs only, lvs deeply heart-shaped at base, 5-7 shallow lobes*
- Forget-Me-Not, True, Water Scorpion-Grass, *Myosotis scorpioides* (Gk. *myos*, of a mouse and *ous*, ear, referring to the soft leaves; like a scorpion), Boraginaceae, Borage Family, HP, N of SP, 10", May, *flwrs blu, ylw eye, on one-sided raceme, lvs oblong-lanceolate*, alternate, sessile, hairy, 3", stem downy, weak, branching, angled
- Four-o'clock, Heart-Leaved Umbrellawort, Mirabilis nyctaginea (wonderful; resembling Nyctago or Mirabilis), Nyctaginaceae, Four-O'clock Family, Maple Lane, 4'+, September, flwrs pink-purple, in broad, veiny, 5-lobed gr cups of jointed bracts, Ivs paired, stalked, egg-shaped, heart-shaped base
- **Foxglove, Smooth False, Yellow Gerardia**, *Aureolaria flava* (L. golden yellow; yellow, formerly *Gerardia flava*, named for John Gerarde), Scophulariaceae, Figwort Family, HW/TM, RBT, 5'+, 8/15/04, 9/6/98, *flwrs ylw, bell-shaped, 5-lobed, lower lvs deeply cut*

Galanthus nivalis, see Snowdrops, Common

Galinsoga parviflora, see Quickweed, Lesser

G. quadriradiata, see Quickweed, Common

Galium aparine, see Cleavers, Bedstraw

G. mollugo, see Madder, Wild

- Garlic, Field, Scallions, Allium vineale (onion or garlic; of the vineyards), Liliaceae, Lily Family, HP, S of Chemka pool, common in lawns and woods, *in clumps*, mid-April, *Ivs linear, bulbs wh, strong garlic smell*, persistent throughout year, frequently without flwrs
- Garlic Mustard, Alliaria petiolata (formerly A. officinalis), (garlic smell; petioled), Brassicaceae, Mustard Family, ZCG, RBT, common, 1', 4/18/00, flwrs small, 4 wh petals, clawed, 6 flattened filaments, pistil capitate, lower lvs kidneyshaped, petioled, upper lvs deltoid, toothed, frts linear, elongate, 4-angled, smells of garlic

Garlic, Wild, A. canadense (see note on Allium; Canadian), Liliaceae, Lily Family, ZCG, 2', 6/26/99, numerous terminal wh bulblets with sharp-pointed gr beak in umbels, purple-tipped, pedicels slender, 2", Ivs flat, narrow, longest on lower third of stem, slightly keeled, entire, stem round, stout, narrowly lined, leafless above, ovoid bulbs br fibrous coated, strong garlic smell

Gaura biennis, see Gaura, Biennial

Gaura, Biennial Gaura biennis (Gk. superb; biennial), Onagraceae, Eveningprimrose Family, ZP entrance, cult, 2'+, 8/21/00, *flwrs wh, turning pink, in spikes*, petals clawed, sepals reflexed, stigma cross-shaped, ovary hairy, thick-ribbed, *lvs alternate, linear, slightly toothed, hairy, pink-tipped, small lflts at axils, sessile*

Geranium maculatum, see Cranesbill, Wild, Wild Geranium, Spotted Geranium *G. pusillum*, see Cranesbill, Small-Flowered

- G. sibiricum, see Geranium, Siberian, Siberian Cranesbill
- Geranium, Siberian, Siberian Cranesbill, Geranium sibiricum (Geranium Gk. geranos, crane; Siberian), Geraniaceae, Geranium Family, SE end RF, low, prostrate, 8/6/00, 5 wh petals with 3 prominent purple veins, petals slightly emarginate, sepals separate, awned, exceed petals, villous, 10 stamens, joined at base, 5 stigmas, pedicels long slender, villous, *Ivs opposite, palmately compound,* toothed, hairy on veins below, ciliate, *stems hairy, purplish,* long, hairy petioles, stipules at enlarged nodes, hairy

Geum aleppicum var. strictum, see Avens, Yellow

- G. canadense, see Avens, White
- G. macrophyllum, see Avens, Big-Leaved
- G. virginianum, see Avens, Rough
- Gill-Over-the-Ground, Ground Ivy, Glechoma hederacea (Gk. glechon, a pennyroyal; ivy-like), Lamiaceae, Mint Family, ZCG, E of OCA on Villard Avenue, RBT, 4" and creeping, 4/2/00, small lavender flwrs in axils of upper *Ivs*, 2-lipped, hairy inside corolla, calyx 5-toothed, 4 stamens, upper pair longer, *Ivs reniform, crenate, long-petioled, stem square*, roots fibrous
- **Ginger, Wild**, Asarum canadense (Gk. asaron, referring to properties of the plant oil; Canadian), Aristolochiaceae, Birthwort Family, N end HP, 12", April, reddishbr cup-shaped flwr between 2 If stalks, Ivs large, heart-shaped, with hairy stalks, root smells of ginger
- Ginseng, Dwarf, Ground Nut, Panax trifolius (panax, Gk. pas, all, and akos, cure or all-healing, i.e., a panacea; three-leaved), Araliaceae, Ginseng Family, HP, W of entrance to Chemka pool, 4-8", 4/20/00, small wh flwrs, rounded umbel, 5 petals, solitary whorl of 3-stalked lvs divided into 3-5 stalkless lflts, frt ylw berry

Glechoma hederacea, see Gill-Over-the-Ground, Ground Ivy

Goat's Beard, Tragopogon pratensis (Gk. tragos, a goat, pogon, beard; of meadows), Asteraceae, Aster Family, SSA, 3', May, flwrs ylw, close at noon, long-pointed bracts support hds, long-stalked, lvs narrow, clasp stem

- **Goldenrod, Blue-Stemmed**, *Solidago caesia* (from *solidare*, to make whole, to heal; bluish-gray), Asteraceae, Aster Family, ZCG at Edgars Lane, behind Hook and Ladder Co. No. 1, HP/SP, common, 3', 9/18/00, *ray flwrs 3-4, ylw, disk flwrs 5-9*, pappus wh, copious, exserted, *flwrs in tufts in axils of lanceolate lvs*, involucre bracts slightly hairy, lvs toothed, margins ciliate, prominent midvein, *stems lined, blu-purple, with a wh bloom,* stems arch, *slightly zigzag,* sometimes branched
- **Goldenrod, Bog**, *S. uliginosa* (see note on *Solidago*; of marshes), Asteraceae, Aster Family, HP, SP area, 5', August, *flwrs ylw, one-sided panicles, recurved, lower lvs long,* lanceolate, clasp stem, petioles winged, shallowtoothed, *upper lvs reduced, entire*
- **Goldenrod, Common**, *S. canadensis* var. *scabra* (see note on *Solidago*; Canadian; scurfy, rough), or *S. altissima* (very tall), **Tall Goldenrod**, Asteraceae, Aster Family, ZCG, HP/SP, W of FdEmp parking lot area, 5', 8/25/00, *flwrs bright ylw, numerous in elm-shaped panicles on one side of stem, small linear lvs subtend flwrs,* much branched, drooping, lvs lanceolate, alternate, upper much reduced, few teeth or entire, *3-nerved, rough above*, hairy below, stem hairy
- **Goldenrod, Early**, *S. juncea* (see note on *Solidago*; rush-like), Asteraceae, Aster Family, SSA, HP W of Chemka pool, FP, 11 Villard, 2'+, 8/13/00, many small ylw flwrs, in racemes on one side of stem, petioled, widely branched, nodding, lflts at base of some upper lvs small, narrow, opposite, lower lvs larger than upper, long, narrow, acuminate, toothed, margins ciliate, lower stem darkpurple, grooved, stout
- **Goldenrod, Erect, Slender**, *S. erecta* (see note on *Solidago*; erect), Asteraceae, Aster Family, S end HP, 4', July, *flwrs pale ylw in large slender wand-like clusters,* lvs lanceolate, toothed, smooth, *upper lvs much smaller than lower, petioles winged*
- **Goldenrod, Lance-Leaved** or **Flat-Topped Goldenrod**, *S. graminifolia* (see note on *Solidago*; grass-leaved), or *Euthamia graminifolia* (*Gk. eu*; true, + *thamees, crowded*), Asteraceae, Aster Family, HP/SP, 4', 8/2/00, *flwrs ylw, flat-topped clusters, much branched,* flwr hds on slender pedicels, *lvs numerous, linear* (1/4"), margins rough, not toothed, 3-5 parallel veins, stems gr and grooved, fragrant
- **Goldenrod, Late**, *S. gigantea* (see note on *Solidago*; very large), Asteraceae, Aster Family, SSA, 7', August, *flwrs ylw in large terminal one-sided curved clusters,* Ivs lanceolate, toothed, uniform in size, *2 prominent veins parallel to midrib,* stems smooth, with *whitish bloom*
- **Goldenrod, Rough-Stemmed**, *S. rugosa* (see note on *Solidago*; wrinkled), Asteraceae, Aster Family, DP, 5'+, September, *flwrs ylw, in elm-like onesided racemes, stems densely br-hairy, grooved, lvs rough,* wrinkled, broad, sharply-toothed, petioles winged

- **Goldenrod, Showy**, *S. speciosa* (see note on *Solidago*; showy), Asteraceae, Aster Family, HP, W of Chemka pool, 3'+, 9/29/99, *flwrs ylw in open branched clusters*, ray flwrs 6-8, 2-3-lobed, disk flwrs 7-9, pappus wh, exceed disk flwrs, involucre bracts rounded, slightly hairy, *upper lvs small, entire, lower lvs large, egg-shaped*, irregular edges, *stems reddish, bl dotted*
- **Goldenrod, Stout**, *S. squarrosa* (see note on *Solidago*; from abruptly recurved phyllaries of flower heads), Asteraceae, Aster Family, HW/VP, 5', flwrs September to October, *flwrs ylw, with stiff recurved entire bracts of flwr hds,* basal lvs large, oval, sharply toothed, coarsely hairy, *forming a rosette,* long-petioled, stems stout, *coarsely hairy, purple-red below*
- **Goldenrod, Sweet**, *S. odora* (see note on *Solidago*; fragrant), Asteraceae, Aster Family, CPP, 3', July-September flwrs ylw, plume-like, one-sided clusters, lvs lanceolate, entire, smooth, *transparent dots, anise odor when crushed*
- **Goldenrod, Zigzag**, *S. flexicaulis* (see note on *Solidago*; flexuous-stemmed), Asteraceae, Aster Family, W side OCA S of MCo, 3', September, *flwrs ylw in axils of egg-shaped toothed lvs,* short-stalked, *stems zigzag and angled*, gr
- **Goosefoot**, *Chenopodium pratericola* (Gk. *chen*, a goose and *pous*, foot, referring to the shape of the leaf; living in grassy places), Chenopodiaceae, Goosefoot Family, MA and Maple Lane, 2'+, *flwrs gr*, sepals only, segments hooded, glandular, *upper lvs entire*, *oblanceolate*, *lower coarsely toothed*, *gr both sides*, but paler below, alternate, *2 alternate veins at base of midrib*, not further branched, *stems ridged*, *with purple at nodes*, *glandular throughout*, seeds bl, shiny, flattened, mature 7/26/00
- Great Angelica, Purple-Stemmed Angelica, see Angelica, Great, Purple-Stemmed
- Groundsel, Common, Senecio vulgaris (L. from senex, an old man, alluding to hairiness; common), Asteraceae, Aster Family, RBT, 12", September, flwrs ylw, terminal, on long slender pedicels, bl-tipped bracts cover base of flwr hds, lvs deeply lobed, leafy, plant hairy at first, then glabrous, lower lvs petioled, upper sessile, clasping, branched

Habenaria viridis var. bracteata, see Orchis, Long-Bracted Green

- Hawksbeard, Smooth, Crepis capillaris (Gk. name of a plant, from crepis, a boot; hair-like, very slender), Asteraceae, Aster Family, FdEmp parking lot, 2'+, July, flwrs ylw, dandelion-like, in branching clusters, stem lvs lobed and sparsely toothed, clasp stem
- Hawkweed, Hairy, *Hieracium gronovii* (Gk. *hierax*, a hawk; in honor of Jan F. Gronovius), Asteraceae, Aster Family, RSPP, RH, 2', July, *flwrs ylw, small, dandelion-like, most of them hairy,* oblong lvs low on stiffly erect stem
- Hawkweed, Orange, Devil's Paintbrush, *H.aurantiacum* (see note on *Hieracium*; orange-colored), Asteraceae, Aster Family, RH, 2', June, *flwrs orange on terminal pedicels, lvs a basal rosette, hairy throughout*
- Hawkweed, Panicled, *H. paniculatum* (see note on *Hieracium*; panicled), Asteraceae, Aster Family, HP, S of Chemka pool, 2', August, *flwrs small, ylw,* on slender pedicels on a widely-branched panicle, lvs alternate, lower long, lanceolate, slightly toothed, upper lvs shorter, lanceolate, entire, *stem grooved, stout*

Heal-All or Selfheal, Prunella vulgaris var. lanceolata (Prunella or Brunella, from German for quinsy, i.e., Die Braune, for a sore throat; common), Lamiaceae, Mint Family, OCA near Villard Avenue and S of Chemka pool adjacent to brooklet, RBT, OMQ, 12"+, March to 7/28/00, flwrs blu, in dense leafy spikes, bracts of inflorescence ciliate, corolla 2-lipped, upper hooded, lower lip 3-cleft and fringed, calyx 10-nerved, bilabiate, stamens 4, lower pair longer, nutlets 4, turning purple, *Ivs opposite, petioled,* lanceolate-obovate, slightly toothed, stems square, grooved, slightly hairy

Helianthus angustifolius, see Sunflower, Narrow-leaved

H. annuus, see Sunflower, Common

- H. divaricatus, see Sunflower, Divaricate or Woodland
- H. giganteus, see Sunflower, Tall
- *H. hirsutus*, see **Sunflower**, Hairy
- H. tuberosus, see Artichoke, Jerusalem
- Hellebore, False, Indian Poke, Veratrum virida (L. name for Hellebore; green), Liliaceae, Lily Family, N end HP, 4'+, spring, *flwrs ylw-green,* numerous, clustered, *star-shaped, lvs large,* alternate, *parallel-veined, strongly ribbed*, coarse
- Helleborine, *Epipactis helleborine* (name used by Theophrastus, helleborus), Orchidaceae, Orchid Family, RBT, 7/21/01, flwrs greenish, tinged purple, lip forms sac, pointed tip turned under, one-sided raceme, lvs egg-shaped or lance-shaped, strongly veined, lvs clasp stem, poisonous

Hemerocallis fulva, see Lily, Common Orange Day

- Hemp, Indian Hemp, Cannabis sativa (Dioscorides' name for hemp, possibly from Persian, Kanab; cultivated), Cannabaceae, Indian Hemp Family, SSA and RBT, 4', July, 6-9 palmately compound lvs, toothed, opposite, needle-like stipules, stem ridged, scabrous, tomentose between ridges, spreading, strangling, abundant
- Henbit, Lamium amplexicaule (L. for gullet, referring to the shape of the corolla tube; clasping), Lamiaceae, Mint Family, OCA near Villard Avenue, wall on Washington Avenue, RF W of concrete bleachers, low, *creeping*, 2/24/00, *small purple flwrs* with long hairy corolla in upper axils of hairy stem, upper lip curved over 4 stamens, medium lower lip one-lobed and cleft, purple spotted, calyx 5-toothed, linear, ciliate, subtended by rd toothed hairy bracts, *upper lvs kidney-shaped, clasp stem, lower lvs long-petioled, stems square*, somewhat hairy, *purplish ribs*, weak

Heracleum lanatum or H. maximum, see Parsnip, Cow

Hesperis matronalis, see Rocket, Dame's, Dame's Violet

Heuchera sanguinea, see Coralbells

Hibiscus palustris, see Mallow, Swamp Rose, Marsh Mallow

Hieracium aurantiacum, see Hawkweed, Orange, Devil's Paintbrush

H. caespitosum, see King Devil, Yellow

H. gronovii, see Hawkweed, Hairy

H. paniculatum, see **Hawkweed**, **Panicled**

- Honewort, Wild Chervil, Cryptotaenia canadensis (Gk. cryptos, hidden; tainia, a fillet, referring to concealed oil tubes of fruit; Canadian), Apiaceae, Carrot Family, wall W of entrance to Echo Hills, Main Street, ZCG, 2', 6/6/00, very small wh flwrs on unevenly stalked umbels, frts flattened, beaked, glabrous, gr, grooved, IfIts 3, serrate, irregularly lobed and coarsely toothed, lower lvs long-petioled, sheathed, stems grooved, glabrous
- Horse Balm, Richweed, Stonewort, Collinsonia canadensis (named for Peter Collinson; Canadian), Lamiaceae, Mint Family, One North Street, 1'+, end July, RBTEXT, 10/7/04, corolla bilabiate, pale ylw, lemon-scented, upper lip fringed, corolla tube bearded, 2 exerted stamens, style exerted, purple, flwrs in axils of opposite, toothed lvs, petioled, acuminate, glabrous, in panicles when mature, hairy, sepals gr, hairy, strem square
- Horsemint, European, Mentha longifolia (Mentha, Minthe of Theophrastus, and from a Nymph of that name; long-leaved), Lamiaceae, Mint Family, Travis Place, 2', 7/27/00, flwrs blu-purple, in separated whorls in spikes of upper stems, lvs opposite, toothed, mostly sessile, stem square, very hairy, stout, reddish, strong mint smell
- Horseradish, Armoracia rusticana (ancient name of horseradish; of wild places, rustic), Brassicaceae, Mustard Family, ZCG, cult, 4', leafy raceme, 4 wh petals with rounded tips, clawed, sepals shorter than petals, gr, united at base, pedicels 7 mm, 6 stamens of unequal length, stigma capitate, ovary elliptic-globose, Ivs alternate, upper toothed, short lanceolate, lower long lanceolate, crenate or pinnatifid, stem coarse, grooved, aromatic, long rooted
- Horseweed, Erigeron canadensis (Gk. eri, early, geron, old man; Canadian) or Conyza canadensis (name used by Theophrastus), Asteraceae, Aster Family, FP, SSA, RBT, common, 3-4', 7/6/99, flwrs very small, 1/8", wh-ylw, growing from upper leaf-axils, lvs numerous, linear, stem bristly-hairy
- Hyacinth, Wild, Scilla or Squill, Camassia scilloides (Camassia, American Indian name, quamash or camass; like Scilla), Liliaceae, Lily Family, ZCG, 2', May, flwrs blu, 6-parted stars, lvs linear, keeled

Hydrophyllum virginianum, see Waterleaf, Virginia, John's Cabbage

Hypericum parviflorum or mutilum, see St. Johnswort, Dwarf

H. perforatum, see St. Johnswort, Common

H. punctatum, see St. Johnswort, Spotted

Hypoxis hirsuta, see Stargrass, Common

Impatiens capensis, see Touch-me-not, Jewelweed or Snapweed

Indian Pipe, Corpse Plant, Monotropa uniflora (Gk. monos, one, tropos, turn, referring to flowers turned to one side; one-flowered), Monotropaceae (formerly Pyrolaceae, Wintergreen Family), Indian Pipe Family, N end HP and S of Chemka pool, *in clumps*, 8", July-September, *flwr hds nodding, wh*, 6-8 petals, 8-10 stamens deep inside tubular corolla, anthers ylw, *single nodding flwr, scales pink and wh*, stems wh, turns bl on drying

- Indian Tobacco, Lobelia inflata (dedicated to Matthias de l'Obel; inflated, referring to the enlarged calyx), Campanulaceae, Bellflower Family, S side RF, beneath bleachers, 2'+, 8/22/99, *flwrs blu, small*, numerous, in If axils on long peduncles, bracteate raceme, corolla split, lower lobe bearded at base, 5 sepals, narrow, reflexed, *calyx inflated in frt, ribbed,* lvs ovate, toothed, stems branched, *lower stem purple*, hairy
- Indigo, Wild, *Baptisia tinctoria (*Gk. *baptizein*, to dye, from species that yields an indigo dye; used for dyeing), Fabaceae, Pea or Bean Family, CPP, 3', 9/5/97, *flwrs ylw, pea-like*, in terminal racemes, *lflts small, entire*, *broad and blunt at tip*, alternate, *bluish when yg*, bl when dried, bushy, branched

Iris versicolor, see Blue Flag, Larger

- Jack-in-the-pulpit, Arisaema atrorubens (Gk. aris, and haema, blood, referring to some plants; dark red), Araceae, Arum Family, E side entrance to Chemka pool and HW/VP, 5/16/99, spathe flap-like, gr-br, curves over club-shaped spadix (the Jack), lvs 1-2, long-stalked, 3-parted, frt red berries
- Jacob's Ladder, Spreading, Greek Valerian, Polemonium reptans (Gk. polemos, war; creeping), Polemoniaceae, Phlox Family, ZCG, cult, tufted, 6-8", 5/9/99, flwrs blu, corolla campanulate, overtops stamens, style included, 5 petals, 5lobed campanulate sepals, gr, *Ivs pinnately compound, lflts 5-15*
- Jimsonweed, Datura stramonium (Dhatura, Hindustani name; stroma or strama, a swelling), Solanaceae, Nightshade Family, SSA, 2-5', 9/13/99, funnelform wh flwrs, large, 5-10 toothed, spreading border, hook-like projections on lobes, calyx gr, cylindric, 5 unequal lobes, anthers flat, hairy, 15 mm on long filaments, lvs ovate, angled at base, soft, alternate, rank smell, frt large, spiny
- Joe-Pye Weed, Spotted, Eupatorium maculatum (dedicated to Mithridates Eupator; mottled), Asteraceae, Aster Family, S of SP, 8'+, 8/15/00, flwrs pinkish in large branching flat-topped clusters, numerous, 5-merous, pedicels long, slender, hairy, purple, lvs in whorls of 5, toothed, lanceolate, hairy on veins below, conspicuously veined, stem purplish, speckled, hairy, stout
- Joe-Pye Weed, Sweet, Purple-Node Joe-Pye Weed, *E. purpureum* (see note on *Eupatorium*; purple), Asteraceae, Aster Family, HP, W of Chemka pool and OCA S of Washington Avenue, 3-4'+, 7/23/00, *flwrs wh-pink*, 3-7, *on long stalks,* involucre bracts blunt, 3-nerved, slightly hairy, *lvs in whorls of 3+,* lanceolate, toothed, tipped, *stems gr, purple at lf joints, vanilla-scented*
- Jumpseed, Virginia Knotweed, Polygonum virginianum (poly, many, gonu, knee or joint, referring to the nodes; Virginian; formerly *Tovara*, for Simon a Tovar), Polygonaceae, Smartweed Family, Maple Lane, ZCG, HP, W of Chemka pool, RBT, 3'+, 8/14/99, 8/15/04, *small wh-gr flwrs, sparsely-spread slender spikes on long upright stem,* Ivs alternate, well-spaced, ovate-lanceolate, acuminate, entire, hairy below, rough above, *nodes sheathed and fringed*, stem smooth, jointed
- Knapweed, Spanish Buttons, Centaurea nigra (Gk. Centaurie; Centaur, black), Asteraceae, Aster Family, E side SP, E end RF and BE, 3'+, 8/15/00, flwrs purple, terminal, involucre globular, pale gr, thistle-like, bracts of flwr hds spider-like, tipped with br-bl, lvs lanceolate, alternate, stem grooved, hairy

- Knapweed, Spotted Black, Star Thistle, C. maculosa (see note on Centaurea; spotted), Asteraceae, Aster Family, SSA, HP/SP, 2', 9/18/00, flwrs in dense purple hds with bl-tipped, fringed bracts at base of flwr hd, lvs pinnatifid, alternate
- Knotweed, Japanese, Mexican Bamboo, Polygonum cuspidatum (poly, many, gonu, knee or joint, referring to the nodes of the stem; abruptly pointed), Polygonaceae, Smartweed Family, Farlane Drive, HW/VP, RBT, common, 4'+, flwrs and frt 8/23/99, flwrs wh, numerous in upper axils, long-branched panicles, Ivs broad, arrow-shaped, truncate at base, prominently angled, entire, on long pink and gr stems, distinctively sheathed nodes, frts 3-angled, stems ridged
- Knotweed, Prostrate, Doorweed, P. aviculare (see note on Polygonum; from avicularis, eaten by small birds), Polygonaceae, Smartweed Family, MA and Main Street, prostrate, common sidewalk weed, 8/21/99, small flwrs in axils of *If*, 5 petals with wh margins, anthers ylw, lvs alternate, blu-gr, linear, elliptic, numerous, nodes membranaceous, silvery

Krigia biflora, see Cynthia, Dwarf Dandelion

Lactuca hirsuta var. sanguinea calvescens, see Lettuce, Hairy L. serriola, see Lettuce, Prickly

- Lady's Slipper, Moccasin Flower, Cypripedium acaule (incorrectly named from Cypris, Venus, and pedilon, shoe; stemless), Orchidaceae, Orchis Family, HW near TM, rare, 6-15", 5/15/99, bulbous inflated pink-veined sac, grooved upper surface, flwr stalks and lvs hairy
- Lady's Thumb, Polygonum persicaria (poly, many, gonu, knee or joint, referring to stem-sheaths; old name for leaves resembling Persica, the peach), Polygonaceae, Smartweed Family, SSA, 6/17/99 and MA/Maple Lane, 5/29/99, common, 1'+, flwrs small, pink, in terminal spikes, long slender bristles subtend flwrs, sepals gr and long-haired, lvs entire, usually with dark V-shaped blotch, spaced along stem, lanceolate, acuminate, with thin wh sheaths with long slender wh hairs, stems pinkish, glabrous, nodes enlarged, somewhat angled, branched, seeds bl, triangular
- Lamb's Quarters, Goosefoot, Pigweed, Chenopodium album (Gk. chen, a goose and pous, foot, referring to the shape of the leaf; white), Chenopodiaceae, Goosefoot Family, common, 2', August, flwrs wh, inconspicuous, *lvs* diamond-shaped, broadly toothed, wh below, stems reddish

Lamiastrum galeobdolon var. variegatum, see Archangel, Yellow

Lamium amplexicaule, see Henbit

L. purpureum, see Nettle, Purple Dead

Lantern Plant, Chinese, Ground Cherry, *Physalis alkekengi (*Gk. bladder, from the inflated calyx; an Arabic name), Solanaceae, Nightshade Family, 8 Villard, cult, 2-3', flwrs wh, lvs long-petioled, hairy on veins, hairs bent forward, *ovate, alternate or opposite*, coarsely toothed or wavy-margined, *calyx bladder-like, red-orange, 5*-ribbed, base indented, pedicel reddish hairy, frt red-orange, smooth, rd, many seeded

Lapsana communis, see Nipplewort

- Larkspur, Rocket, *Delphinium ambiguum (delphinus,* dolphin, refers to shape of flower; doubtful relationship; or *D. ajacis,* springing from blood of Ajax), Ranunculaceae, Buttercup Family, Nana's Garden, opposite P.O., cult, 3', 7/3/00, *flwrs blu, irregular, calyx corolla-like, spurred*, petals 4, hairy, veined, unequal, stamens 10+, filaments purple-wh, pistil 1, hairy, bent to side, follicle (frt) hairy, gr, seeds many, tubercular, wh, *Ivs palmately divided, narrow*, much branched
- Lavender, English, Lavandula angustifolia, (lavender; narrow), Lamiaceae, Mint Family, FdEmp Park, cult, 10/27/00, *flwrs purple in terminal spikes*, bilabiate, upper lips bilobed, rounded, lower 3 rounded, mid petal inserted into corolla tube, 4 stamens, golden anthers, globose purple stigmas, style long, wh, 4lobed ovary, gr, calyx 15 ribbed, tomentose, *lvs opposite, linear, tomentose below*, edges rolled, prominently ridged, *stems square, tomentose, very fragrant*
- Leek, Wild, Allium tricoccum (onion or garlic; 3-locular), Liliaceae, Lily Family, ZCG, 6", June, flwrs wh, in terminal umbels on long stalks, lvs small, 2-3, broad, smooth, parallel-veined

Lemna minor, see Duckweed

L. trisulca, see Duckweed, Star

Leonurus cardiaca, see Motherwort

Lepidium virginicum, see Peppergrass, Poor-Man's-Pepper

Lespedeza violacea, see Clover, Bush

L. virginica, see Clover, Slender Bush

- Lettuce, Hairy, Lactuca hirsuta var. sanguinea calvescens (Lactuca, lac, milk, referring to milky juice; hairy; blood-red; becoming bald), Asteraceae, Aster Family, ZCG and base of wall below FP and 11 Villard, common, 1'+, 2/10/99 small dandelion-like flwrs and lvs, stems purplish, lvs hairy on midrib
- Lettuce, Prickly, *L. serriola* (see note on *Lactuca*; endive-like, of salads), Asteraceae, Aster Family, FdEmp parking lot, common, 3'+, 7/5/99, *ylw dandelion-like flwrs*, 1/4", numerous in widely branched terminal loose clusters, 5-8 ligulate flwrs, slightly purple on ylw corolla, involucre slender, phyllaries in 4 lengths, gr, achenes bl, ribbed, spiny at summit, long beak, pappus wh, *stem lvs pinnatifid, twisted at base to stand vertically, clasp stem, numerous spiny teeth, arrow-shaped at base,* midrib bristly, *base of stem purple-red*, prickly below, grooved, not hollow

Liatris graminifolia, see **Blazing Star**, **Grass-Leaved Blazing Star** *Lilium canadense*, see, **Lily, Canada**

L. tigrinum, see Lily, Tiger

- Lily, Canada, Lilium canadense, (L. lily; Canadian), Liliaceae, Lily Family, RSPP, June, 2-5', flwrs large, ylw, orange, red-spotted, nodding like bells, lvs in whorls
- Lily, Day, Common Orange, Hemerocallis fulva (Gk. hemera, a day and callis, beauty, referring to one-day flowering; reddish-yellow), Liliaceae, Lily Family, common, escp and cult, 3-6'+, June-July, *flwrs orange-red, funnel-shaped, not spotted, face upwards,* stems leafless, lvs 2', swordlike, flwr opens one day only

- Lily, Tiger, *L. tigrinum* (L. lily; spotted like a tiger), Liliaceae, Lily Family, FP, 2-5', 6/12/99, *flwrs orange, large, spotted*, stamens strongly exserted, lvs parallel-veined, alternate, lanceolate, entire, *dark bulblets in axils of lvs*
- Lily-of-the-Valley, False, Canada Mayflower, Maianthemum canadense (L. Maius, May, Gk. anthemon, a flower; Canadian), Liliaceae, Lily Family, N end HP in large patches, 6", 5/16/99, RBT, 4/28/05, flwrs in small wh racemes, lvs 2-3, oval, heart-shaped at base, parallel veined, frt red
- Lily-of-the-Valley, Muguet, Convallaria majalis (convallis, a valley; blooming in May), Liliaceae, Lily Family, HP, W of Chemka pool, escp, 4-10", 5/16/98, *flwrs wh, 6 lobes, one-sided on angled stems, lvs oblong*, point-tipped, glossy, fleshy gr, fine parallel veins, prominent midrib, clasp stem, entire, base of stem purple, sheathed

Linaria canadensis, see **Toadflax**, **Old-Field**, **Annual Toadflax**, **Blue Toadflax** *L. vulgaris*, see **Butter-and-eggs**

Linum perenne, see Flax, Wild Blue

Lobelia cardinalis, see Cardinal Flower

- Lobelia, Great Blue, Lobelia siphilitica var. siphilitica (dedicated to Matthias de l'Obel; from reputed curative properties), Campanulaceae, Bellflower Family, ZCG, edge of brooklet, RBT, 3', 5/18/99, flwrs blu, lower lobes of corolla striped with wh, grow in axils of lvs, lvs alternate, lanceolate, pointed
- Lobelia inflata, see Indian Tobacco
- L. siphilitica var. siphilitica, see Lobelia, Great Blue
- Lobularia maritima, see Alyssum, Sweet
- Loosestrife, False, Seedbox, Ludwigia alternifolia (named for Christian G. Ludwig; alternate-leaved), Onagraceae, Evening-primrose Family, RF woods, 3', July-August, flwrs ylw, short-stalked in If axils, wide petals and sepals not reflexed, Ivs alternate, lanceolate, entire, tipped, frts short, squarish pods
- Loosestrife, Fringed, Lysimachia ciliata (lysis, a release from, mache, strife, alluding to Thracian King Lysimachus who used plant to pacify an attacking bull; with marginal hairs on petiole), Primulaceae, Primrose Family, S of SP, 3'+, early July, *flwrs ylw, face downward, petals fringed*, lvs lanceolate, entire, opposite
- Loosestrife, Gooseneck, *L. clethroides* (see note on *Lysimachia*; *clethra*, Gk. for alder), Primulaceae, Primrose Family, Baker Lane near OCA, RBT, escp, 2', 2/8/00, flwrs wh, small, in terminal recurved racemes, corolla tube short, campanulate, 5-merous, *Ivs numerous, alternate*, entire, lanceolate, point-tipped
- Loosestrife, Purple, Lythrum salicaria (lytron, Dioscorides' name for this plant; willow-like), Lythraceae, Loosestrife Family, HP/SP, SSA, ZCG, BE, 4'+, 8/4/00, flwrs purple, in dense spikes, 6 narrow petals, calyx tubular, hairy, nerved, 6 hook-like sepals, 6-12 stamens, triangular appendages between opposite (some alternate) lvs below, small, linear nearly sessile upper lvs, entire, stems ridged and grooved, 4-angled, hairy or glabrous, branched (specimen collected seems a cross with L. alatum)

Loosestrife, Spotted, Garden, L. punctata (see note on Lysimachia; dotted), Primulaceae, Primrose Family, parking lot opposite P.O., May, 2', 5/29/99, flwrs ylw in axils of upper lvs, 5 separate ylw petals, tipped, margins glandular, base of inside corolla red-purple, 5 linear sepals, tipped, 3 flwrs on slender 2 cm pedicels in axils of 3-whorled egg-shaped attenuate hairy lvs, bldotted, strong midvein, hairy below, soft, stems hairy, nodes purple

Loosestrife, Whorled, L. guadrifolia (see note on Lysimachia; four-leaved), Primulaceae, Primrose Family, woods S of HS, 1-3', late June-July, flwrs ylw with dark lines on long stalks in axils, lvs whorled, in 4's or 5's

Lotus corniculatus, see Trefoil, Birdsfoot

Ludwigia alternifolia, see Loosestrife, False, Seedbox

Lychnis alba, see Silene latifolia, Campion, White, White Cockle, Evening

Lychnis

L. coronaria, see Campion, Rose, Mullein Pink

L. flos-cuculi, see Ragged Robin, Cuckooflower

Lycopus virginicus, see Waterhorehound, Bugleweed

Lysimachia ciliata, see Loosestrife, Fringed

L. clethroides, see Loosestrife, Gooseneck

L. nummularia, see Moneywort

L. punctata, see Loosestrife, Spotted, Garden

L. quadrifolia, see Loosestrife, Whorled

Lythrum salicaria, see Loosestrife, Purple

Madder, Wild, Galium mollugo (Gk. gala, milk, curdled by a species of the genus and used in cheese-making; soft), Rubiaceae, Madder Family, OCA S of Dobbs Ferry and fence of Boyce Thompson Institute, Yonkers, sprawling, May, small wh (4 petals) flwrs numerous in loose clusters. Ivs in whorls of 7-8, narrow, tipped, stems smooth, roundly squared, ridged, much branched

Maianthemum canadense, see Lily-of-the-Valley, False, Canada Mayflower

Mallow, High, Malva sylvestris (referring to soft leaves; of woodlands), Malvaceae, Mallow Family, RBT, 3', July, flwrs purple, petals purple-veined, 2", Ivs 5lobed, coarsely toothed, stems hairy and hollow

Mallow, Swamp Rose, Marsh Mallow, Hibiscus palustris (L. name for mallow; of the marshes), Malvaceae, Mallow Family, NTRA, adjacent to tidal river, 4'+, 9/17/97, flwrs large, like hollyhocks, pink, elongate ylw pistil, lvs wh below, egg-shaped, or 3-lobed, pointed tip, base rounded or heart-shaped

Malva sylvestris, see Mallow, High

Marjorum, Wild, Origanum vulgare (Gk. oros, a mountain and ganos, armament; common), Lamiaceae, Mint Family, ZCG, 2', 7/4/99, flwrs small, purplish bluwh, clustered at ends of long pedicels but stalkless, successively smaller bracts beneath flwrs, corolla 2-lipped, upper lobes emarginate, lower 3 lobes wide, corolla tube bearded, 4 exserted stamens, 5 sepals, lobes triangular, pink tipped, lvs egg-shaped, entire, opposite, petioled and hairy, stems hairy and square, mint odor

Matricaria maritima var. argrestis, see Chamomile, Wild *M. recutitia*, see **Chamomile**

May Apple, Podophyllum peltatum (Gk. pous, foot and phyllon, leaf; shield-shaped), Berberidaceae, Barberry Family, OCA, E of ZP and OCA, Hastings Landing, 18", 4/23/99, flwrs wh, waxy, nodding, single, in crotch of 2 large deeply-lobed umbellate lvs, frt large, lemon-like berry

Meadow Rue, Early, *Thalictrum dioicum* (Dioscorides' name for a plant; dioecious, two-housed), Ranunculaceae, Buttercup Family, HP, 2', April, *flwrs gr-wh*, stamens droop, orange-tinged, *Ivs divided into roundish blunt-lobed lflts*

Medicago lupulina, see Medick, Black, Nonesuch

Medick, Black, Nonesuch, Medicago Iupulina (Medice, Gk. name of alfalfa, from Media, a Persian name for a grass; hop-like), Fabaceae, Pea or Bean Family, common in lawns, RF near bleachers, W end FdEmp parking lot, MWP, March-May, *low or prostrate*, *ylw clover-like flwrs in small heads*, *3 lflts*

Melilotus alba, see Clover, White Sweet

M. officinalis, see Clover, Yellow Sweet

Mentha longifolia, see Horsemint, European

M. piperita, see **Peppermint**

M. spicata, see **Spearmint**

- Mexican Tea, Chenopodium ambrosioides (Gk. chen, a goose and pous, foot, referring to the shape of the leaf; resembling Ambrosia), Chenopodiaceae, Goosefoot Family, 51 Main Street 8/4/98 and FdEmp north entrance, 1', 8/20/00, flwrs inconspicuous, gr, growing in axils of upper lvs, subtended by linear leafy bracts that almost equal spike, lvs lanceolate, alternate, broadly toothed, stems stout, distinctly ridged with gr and wh lines, slightly hairy, strongly aromatic
- Milkweed, Common, Asclepias syriaca (Gk. name of Aesculapius, to whom the genus is dedicated; Syrian), Asclepiadaceae, Milkweed Family, SSA, FP, common, 4', 6/12/99, flwrs pinkish, in dense pendant and rounded clusters, peduncles long, Ivs oblong-ovate, opposite, entire, petiole stems stout, smooth, follicles (pods) formed 7/6/99, large, warty, gray-gr, milky juice
- Milkweed, Tall or Poke, A. exaltata (see note on Asclepias; very tall), Asclepiadaceae, Milkweed Family, HP, W of Chemka pool, 2'+, 6/18/99, flwr hds wh, in drooping umbels with long slender pedicels, petals and sepals reflexed, lvs opposite, broadly elliptic, petioles 1 cm, soft, thin, glabrous, stem gr, stout, hairy in lines, milky juice, root gnarled, tuberous

Mirabilis nyctaginea, see Four-o'clock, Heart-Leaved Umbrellawort *Mitchella repens*, see Partridgeberry

Miterwort, False, Foam Flower, *Tiarella cordifolia (tiara* or turban, from form of pistil; heart-leaved), Saxifragaceae, Saxifrage Family, HP, 12", April, *flwrs wh*, numerous, stamens conspicuous, flwrs in terminal raceme, *basal lvs only, lvs deeply heart-shaped at base, 5-7 shallow lobes*

Mollugo verticillata, see **Carpetweed**, **Indian Chickweed** *Monarda fistulosa*, see **Bergamot** **Moneywort**, *Lysimachia nummularia* (*lysis*, a release from, *mache*, strife, alluding to Thracian King Lysimachus who used plant to pacify an attacking bull; coinlike, referring to leaves), Primulaceae, Primrose Family, E end RF and ZCG, wet area, *creeping*, 6/22/00, *flwrs ylw* on 2 1/2 cm pedicels *in axils of opposite lvs*, *corolla red-dotted*, 5 stamens, adnate at base, filaments densely glandular, single capitate style, ovary orange-dotted, *lvs rounded*, petioles short

Monotropa uniflora, see Indian Pipe, Corpse Plant

- Mosquito-Fern, Water Velvet, Water Fern, Azolla caroliniana (L. meaning unknown, but perhaps referring to inability to survive out of water; Carolinian), Salviniaceae, Floating Fern Family, HP/SP, escp, floating in mats, September, very small reddish-gr lvs that appear scale-like, branched, radiating stem
- Moss Pink, Moss Phlox, *Phlox subulata* (Gk. flame; awl-shaped), Polemoniaceae, Phlox Family, entrance to DPO, 6", end of April, *flwrs pink, petals deeply lobed, lvs fleshy, needle-like*
- Motherwort, Leonurus cardiaca (Gk. lion, and oura, tail; old generic name, from the heart), Lamiaceae, Mint Family, ZP adjacent to ball field, SSA, RBT, 2', 6/12/99, flwrs small, pink-wh in dense axillary clusters, bilobed, upper lobe wh hairy, lower with br spots, inside tube wh hairy, calyx 5-toothed, bristly tipped, 5 prominent nerves, *Ivs all cauline, opposite, 3-lobed, coarsely toothed*, veins prominent, long-stalked, *stems square, grooved*, hairy, roots fibrous, strong odor
- Mugwort, Common, Artemisia vulgaris (named for Artemisia, wife of Mausolus whose sepulcher was one of the seven wonders of the world; common), Asteraceae, Aster Family, SSA, RBT, OMQ, very common in waste places, 3'+, July, flwrs gr, inconspicuous, in spikes of upper stems, *Ivs, alternate, deeply divided, variable, wh below, aromatic,* rhizomatous
- Mullein, Common, Flannel Plant, Verbascum thapsus (L. mullein; classical name, the island of Thapsos), Scrophulariaceae, Figwort Family, Washington Avenue near B&W offices, RVRStr at Hastings station, SSA, 5'+, June, *flwrs ylw in long dense spikes, plant tomentose throughout,* lvs long, broad, mostly basal, frts gr, globular, July
- Mullein, Moth, V. blattaria (see note on Verbascum; pertaining to a moth, referring to open flowers on stems), Scrophulariaceae, Figwort Family, MA and Edmarth Place, cult and escp, 3'+, 6/14/99, *flwrs ylw, stamens purple-fringed,* stem smooth, with many stalked glands, lower lvs lanceolate, toothed, abundant, upper lvs few, *flwrs pentagonal when closed, frts gr balls* on long pedicels
- Mustard, Field, Field Turnip, Rape Mustard, Moutarde, Brassica rapa (L. name of cabbage; old generic name for a turnip), Brassicaceae, Mustard Family, ZCG, 1'+, 6/9/99, 4 ylw petals, clawed, sepals ascending, upper lvs oblong-lanceolate, dentate to entire, sessile, smooth, *lower lvs clasp stem with ear-like lobes*, broad (9 cm), petioled, *pinnately lobed*, frt pods (silique) short, rd, slender beak, on ascending pedicels, scattered on gr stem

- Mustard, Garlic, Alliaria petiolata (formerly A. officinalis), (garlic smell; petioled), Brassicaceae, Mustard Family, ZCG, RBT, common, 1', 4/18/00, flwrs small, 4 wh petals, clawed, 6 flattened filaments, pistil capitate, lower lvs kidneyshaped, petioled, upper lvs deltoid, toothed, frts linear, elongate, 4-angled, smells of garlic
- Mustard, Hare's-Ear, Conringia orientalis (named for Prof. Herman Conring; eastern), Brassicaceae, Mustard Family, ZCG, 3', late July, flwrs pale ylw, terminal, lvs oval-lanceolate, entire, succulent, clasp stem, stems smooth, lvs few, frts (siliques) 2"+
- Mustard, Indian, Brassica juncea (see note on Brassica above; rush-like), Brassicaceae, Mustard Family, ZCG, 3', May, *flwrs ylw, stems branched, lvs lobed*, upper linear with broad upper lobes, *stems angled*, frt *pods on long stems*
- **Mustard, Tumble**, *Sisymbrium altissimum* (Gk. *sisymbrion*, a bergamot or water cress; tallest), Brassicaceae, Mustard Family, ZCG, 2'+, July, *flwrs pale ylw* (4 small petals), in terminal clusters, *lvs very narrow, linear, divided,* stem branched, seedpods long, ascending

Myosotis scorpioides, see Forget-Me-Not, True, Water Scorpion-Grass Myriophyllum aquaticum or brasiliensis, see Water Milfoil, Parrot's-Feather Narcissus pseudonarcissus, see Daffodil or Narcissus

Nasturtium officinale, see Watercress

Nepeta cataria, see Catnip

- Nettle, Horse, Solanum carolinense forma albiflorum (probably from L. sol, sun and anum, neuter of -anus, belong to; Carolinian; white-flowered), Solanaceae, Nightshade Family, E side OCA near Villard, SSA, 2', 6/21/99, flwrs blu-wh, 5 separate acuminate petals, sepals campanulate, acuminate, margins purple, anthers ylw, style exserted, in racemose clusters, drooping, *lvs ovate in outline, lobed, midrib prickly below, stems prickly, hairy, straw-colored*, stout, frts rounded, gr, turning orange-ylw, poisonous
- Nettle, Purple Dead, Lamium purpureum (L. for gullet, referring to the shape of the corolla tube; purple), Lamiaceae, Mint Family, OCA near Villard Avenue, ZCG, RBT, common, 6-8", 4/1/00, flwrs in spikes, corolla tube purplish, hairy ring at base inside, two-lipped, upper rounded, concave, lower 3-lobed, calyx sharply 5-toothed, veined, lower lvs petioled, cordate, toothed, upper short-petioled, cordate, often purple, stem square, hollow, hairy, unpleasant odor
- Nettle, Stinging, Urtica dioica (classical L. name, uro, to burn; dioecious), Urticaceae, Nettle Family, ZCG, common, 3', 6/26/99, gr flwrs in strings in axils of upper lvs, stem densely covered with stinging hairs, lvs egg-shaped, coarsely toothed, base of If heart-shaped, lvs formed 4/26/00

- Nightshade, Bittersweet, Solanum dulcamara (see note on Solanum; old generic name for bittersweet), Solanaceae, Nightshade Family, common, steps to Echo Hills from Main Street and parking lot opposite P.O., ZCG, SSA, s. of Washington Ave. 3', low shrub, 5/18/00, 5 *purple petals, reflexed*, acuminate, 2 gr spots at base each petal, *anthers ylw*, connate, apical pores, lvs with 3 Iflts, margins entire, alternate, lobed, long-pointed, base broad to slightly cordate, some hastate, *purple-veined, veins opposite,* frts ovoid, shiny gr turning to red, 7/21/00, *stem angled, triangular in cross section, ridgid, purplish*
- Nightshade, Common Black, *S. nigrum* var. *virginicum* (see note on *Solanum*; black; Virginian), Solanaceae, Nightshade Family, SSA parking lot, MWP, Maple Lane, common, 1', June, *flwrs small, wh, with ylw center* (stamens) on long lateral stems in umbels, *lvs ovate to deltoid, irregularly toothed*, stems branched, weak, grooved, hairy, *frts gr July, bl September*
- Nightshade, Enchanter's, *Circaea lutetiana* (from Circes, the enchantress; *Lutetia*, from Paris), Onagraceae, Evening-primrose Family, behind Hook and Ladder Co. No. 1, Main Street, S side RF, 6/25/99, MWP and ZCG, common, 2'+, 6/25/00, *flwrs in racemes, small, wh, 2 deeply-notched petals*, 2 gr reflexed sepals, *frt small, bur-like, with hooked hairs*, lvs paired, opposite, on long, slender, grooved petioles, irregularly toothed, oblong-ovate, rounded at base, acuminate, *nodes purple*, stems glabrous, stipules needle-like
- Nipplewort, Lapsana communis (L. charlock, from Gk. lapsane or lapsana, Dioscorides' name for a salad plant; common), Asteraceae, Aster Family, Main Street on wall W of steps to Echo Hills, ZCG, RBT, 3', 6/10/00, *flwrs ylw* on ends of long branches, *lvs alternate*, ovate, one or more lobes at base, lower stems hairy

Oenothera biennis, see Primrose, Evening

O. lacinata, see Primrose, Cut-Leaved

Orchis, Long-Bracted Green, Habenaria viridis var. bracteata (habena, a thong or rein, referring to the spur; green; bracted, referring to long bracts beneath flowers), Orchidaceae, Orchis Family, Mt. Hope Blvd at entrance to Hastings Trailway, 1'+, July, stout, *flwrs gr, with long gr bracts below, dense in long spikes, lvs parallel veined*, broad oval, entire, *lower lvs clasp stem*, much reduced upward

Origanum vulgare, see Marjorum, Wild

Ornithogalum umbellatum, see Star-of-Bethlehem

Osmorhiza claytoni, see Sweet Cicely

Oxalis corniculata, see Sorrel, Creeping Wood

O. dillenii, see Sorrel, Southern Yellow Wood

O. stricta, see Sorrel, Common Yellow Wood

Pachysandra, Japanese Pachysandra terminalis (Gk. pachys, thick, andros, used for thick stamens; terminal), Buxaceae, Boxwood Family, Maple Lane, 3/29/98, HP, S. of SP, 12/28/03, matted or creeping evergreen, flwrs wh in terminal racemes, staminate flwrs with 4 sepals, 4 stamens, *Ivs alt, crowded towards summit* of erect or ascending glabrous stem, obovate to ovate, *coarsely toothed* above middle, cuneate, long petiole, cult, escp

Pachysandra terminalis, see Pachysandra, Japanese

Panax trifolius, see Ginseng, Dwarf, Ground Nut

- Pansy, Wild, Viola rafinesquii (L. name applied to several fragrant plants; for C. S. Rafinisque-Schmaltz, or Viola Kitaibeliana, for Paul Kitaibel), Violaceae, Violet Family, ZP, MA and Edmarth Place, FdEmp, cult or escp, 8", 4/12/99, flwrs on long peduncles, petals wh-blu-cream-violet, ylw eye, purple-veined, purplish sharp-pointed sepals, ciliate, auricles purplish, lvs variable, long internodes, branched, upper spatulate and toothed, stem leafy, conspicuous deeply divided stipules, middle lobe spatulate
- **Partridgeberry**, *Mitchella repens* (named for John Mitchell; creeping), Rubiaceae, Madder Family, HP, creeping, June, flwrs pink-wh, paired, 4 petals, lvs evergreen, opposite, entire, roundish, wh veins, berry red
- Peppergrass, Poor-Man's-Pepper, Lepidium virginicum (Gk. lepidion, little scale, alluding to shape of fruit; Virginian), Brassicaceae, Mustard Family, Villard near Warburton, Bob's Service Station, OMQ, 5/25/05, common, 1', 6/28/99, *flwrs small, wh in terminal racemes*, widely dispersed along terminal peduncles on short slender pedicels, nearly horizontally extended, stem lvs narrow, lanceolate, toothed, *lower lvs pinnately lobed*, petioles short and slender, *frt gr, rd, flat, ovoid, notched at tip*, formed 7/6/99
- **Peppermint**, *Mentha piperita* (*Mentha*, Minthe of Theophrastus and from a Nymph of that name; peppery), Lamiaceae, Mint Family, ZCG, 2', September, *flwrs blu-purple, in terminal interrupted clusters*, glomerules subtended by narrow lflts, lvs short-petioled, toothed, ovate-oblong, *stem glabrous, square, branched, strong mint odor*
- Phlox, Downy, Phlox pilosa (Gk. flame; soft pubescent), Polemoniaceae, Phlox Family, HW/TM, 1, May, pink-purple flwrs, narrow lvs, hairy throughout
- Phlox divaricata, see Phlox, Wild Blue, Forest Phlox
- Phlox, Garden, Phlox paniculata (Gk. flame; panicled), Polemoniaceae, Phlox Family, Villard Park, RBT, 5/11/02, escp, 3'+, June, flwrs pink in loose terminal panicles, lvs lanceolate, opposite, entire, pointed tips, lateral veins branch from midvein, upper stem hairy, stems stout

Phlox maculata forma immaculata, see Sweet William, Wild

P. paniculata, see Phlox, Garden

P. pilosa, see Phlox, Downy

P. subulata, see Moss Pink, Moss Phlox

Phlox, Wild Blue, Forest Phlox, Phlox divaricata (see note on Phlox; slightly divergent), Polemoniaceae, Phlox Family, OCA at Baker Lane, escp, 20", 4-9/17/00, flwrs blu-purple in loose terminal panicles, corolla tubular, 5 wedge-shaped petals, stamens hidden, 5 sharply-tipped calyx lobes, petals wedge-shaped, lvs opposite, sessile, lanceolate, upper stems hairy, sticky

Physalis alkekengi, see Lantern Plant, Chinese, Ground Cherry *Physostegia virginiana*, see Dragonhead, False, Obedient Plant *Phytolacca americana*, see Pokeweed, Poke, Inkberry

- Pigweed, Rough, Green Amaranth, Redroot, Amaranthus retroflexus (Gk. amarantos, unfading, referring to non-withering of the calyx; bent backward, referring to sepal tips), Amaranthaceae, Amaranth Family, parking lot opposite P.O., ZCG, common, 4', 7/22/99, flwrs gr-wh (male and female separate), crowded on long and dense terminal spikes, bristly-hairy throughout, bracts rigid, awn-like, sepals recurved, lvs rhomboid, coarsely toothed, long-petioled, seeds very small, suborbicular, smooth, bl, formed 8/15/99, stems stout, branched, scurfy, reddish below, red root
- Pilea pumila, see Clearweed, Glasswort
- Pilewort, Fireweed, Erechtites hieracifolia (Dioscorides' name for a Groundsel; with leaves like hawkweed), Asteraceae, Aster Family, HP, W of Chemka pool, 2', 8/25/00, disk flwrs wh (no ray flwrs) on long slender pedicels, base of flwr hd swollen in envelope of gr bracts, lvs 2-8", alternate, toothed, petioles short or clasping, stem grooved in parallel lines, strong smell, root fibrous
- **Pink, Deptford**, *Dianthus armeria* (*Dios*, Jupiter, *anthos*, flower, i.e. Jove's own flower; L. for thrift), Caryophyllaceae, Pink Family, RBT, E of HS, and MWP, 2', 6/24/00, *flwrs purple-pink, long-stalked*, 5 separate petals, flwrs in cymes, wh blotches on upper surface, slightly hairy on throat, petal tips rd, toothed above middle, calyx hairy, tubular, many-nerved, narrow-tipped, flwrs subtended by long slender nerved hairy bracts, *lvs long, grass-like, ciliate, opposite, form sheaths about nodes*, nodes hairy, enlarged, *stems stiff*, dry soil
- Pink, Wild, Silene caroliniana var. pensylvanica (possibly from Silenus, referring to viscid secretions, or Theophrastus' name for a catchfly; Carolinian and Pennsylvanian), Caryophyllaceae, Pink Family, HW near TM, S of HS, 10", 5/16/99, *flwrs pink*, 5 wedge-shaped petals, clawed, notched, calyx campanulate, gr nerved, hairy, *upper stem sticky, stem lvs opposite,* sessile, basal lvs long- petioled, a set of rosettes, stems simple, *very wh hairy*
- Pinkweed, Pink Knotweed, Pennsylvania Pinkweed, Polygonum pensylvanicum (poly, many, gonu, knee or joint, referring to the nodes; Pennsylvanian), Polygonaceae, Smartweed Family, FdEmp park, E end RF, HW/VP, 2'+, 9/16/00, flwrs pink, in erect spikes, lvs lanceolate, long pointed, entire, sheaths not fringed, upper stems with pink hair-like glands, joints and stems reddish, branched

Pistia stratiotes, see Water Lettuce, Water Cabbage

Plantago lanceolata, see Plantain, English, Buckthorn

Plantago major, see Plantain, Common

Plantain, Common, *Plantago major* (*planta*, L. footprint; large), Plantaginaceae, Plantain Family, RF, RBT, *common lawn weed*, May, flwrs gr arising from base on long stalks and on long spikes, *lvs basal, oval-shaped, strongly 3ribbed*, petioles grooved, frts June

- Plantain, English, Buckthorn, P. lanceolata (see note on Plantago; lanceolate), Plantaginaceae, Plantain Family, E side ZP ball field, FdEmp parking lot, common lawn weed, low to 6", 5/31/00, lvs lanceolate, 5-ribbed, small wh flwrs in spikes on long leafless stems
- Plantain, Robin's, Erigeron pulchellus (Gk. eri, early, geron, old man; handsome), Asteraceae, Aster Family, MA, 1'+, April-October, flwrs few, long pediceled, ray flwrs numerous, narrow, blu-wh, disk flwrs gr-ylw, basal lvs stalked, spatulate, broad towards tip, coarsely toothed, upper lvs much reduced, coarsely-toothed, stem lvs soft-hairy, lower stem wh-purplish, grooved

Platycodon grandiflorus, see Balloon Flower

Pluchea odorata, see Fleabane, Marsh

Podophyllum peltatum, see May Apple

Pokeweed, Poke, Inkberry, Phytolacca americana (Gk. phyton, plant, L. lacca, crimson lake, referring to crimson coloring matter of berries; American), Phytolaccaceae, Pokeweed Family, ZCG, Maple Lane, RF, DP, RBT, common, 4'+, 7/12/00, *flwrs small, wh*, 5 sepals, 10 stamens, peduncles pinkish, *long racemes*, Ivs petilolate, lanceolate, alternate, entire, wavy margined, glabrous, *stems reddish, berries gr turning purple-bl on red stalks*, *pendant*, September, juice dark purple

Polemonium reptans, see Jacob's Ladder, Spreading, Greek Valerian Polygonatum biflorum, see Solomon's Seal, Smooth

Polygonum aviculare, see Knotweed, Prostrate, Doorweed

- P. cespitosum var. longisteum, see Smartweed, Long-bristled
- P. coccineum, see Smartweed, Water
- P. cuspidatum, see Knotweed, Japanese, Mexican Bamboo
- P. lapthifolium, see Smartweed, Dock-Leaved, Nodding Pale Dock
- P. pensylvanicum, see Pinkweed, Pink Knotweed, Pennsylvania Pinkweed
- P. persicaria, see Lady's Thumb
- P. punctatum, see Smartweed, Dotted

P. virginianum, see Jumpseed, Virginia Knotweed

Portulaca oleracea, see Purslane, Common, Pusley

Potentilla argentea, see Potentilla, Silvery

P. recta, see Cinquefoil, Rough-Fruited

Potentilla, Silvery, *Potentilla argentea* (*potens*, powerful, for medicinal purposes; silvery), Rosaceae, Rose Family, FdEmp parking lot, 1' 5/28/01, 5 ylw petals, shorter than sepals, sepals hairy, stems and pedicels hairy, much branched, lflts deeply notched, palmately compound, toothed, edges inrolled, wh-hairy beneath

Potentilla simplex, see Cinquefoil, Common

Primrose, Cut-Leaved, Oenothera lacinata (name used by Theophrastus for species of *Epilobium*; slashed), Onagraceae, Evening-primrose Family, wall below FP and parking lot opposite P.O., 3'+, June, similar to O. biennis, but *Ivs incised*, stems weak Primrose, Evening, O. biennis (see note on Oenothera; biennial), Onagraceae, Evening-primrose Family, Whitman Street and Villard Avenue, RE, 8/23/04, FP, 10/1/05, SSA, 8/31/06, common, 3', 6/24/00, 4 broad ylw petals, crossshaped stigma, sepals reflexed, lvs lanceolate, slightly toothed, cylindrical pods in axils of lf, stem stout, rough, reddish

Prunella vulgaris var. lanceolata, see Heal-All or Selfheal

- Purslane, Common, Pusley, Portulaca oleracea (milk carrier; of a vegetable garden), Portulaceae, Purslane Family, curbside on Main Street and Boulanger Plaza, FP wall opposite Hastings station, prostrate to 8', 7/26-9/20/00, flwrs between 11:00 AM-1:00 PM in sunlight, flwrs small, ylw, few, single in leaf clusters, lvs fleshy, alternate, entire, glabrous, spatulate, glands scattered along reddish stem
- Purslane, Milk, Spotted Spurge, Euphorbia maculata or E. supina (named for Euphorbus; spotted, from purplish spot on leaf; lying on its back), Euphorbiaceae, Spurge Family, sidewalk in front of library and Municipal Building, *in mats*, common, 6/25/99, *small wh-pink flwrs in axils* of opposite Ivs with oblong, glabrous, sometimes *purple-red spots on reddish hairy stems, milky juice*
- **Pussytoes, Field**, *Antennaria neglecta* (referring to resemblance of pappus to insect antennae; overlooked) Asteraceae, Aster Family, Farlane Drive and W side of entrance to Chemka pool, common, *in mats*, 13", 4/10/00, *flwrs wh, terminal, on erect few-lvd stalks, lvs basal,* 1-nerved, narrow, widest above middle
- Pussytoes, Plantain-Leaved, A. plantaginifolia (see note on Antennaria; plantainleaved), Asteraceae, Aster Family, Farlane Drive, S of Chemka pool, dense mats or 6", 4/10/00, flwrs wh in dense hds, terminal, basal lvs 3-5 nerved, ovate, petioled, tomentose beneath, scapes sparsely lvd, scale-like, much smaller than basal, dry soil
- **Pyrola, Round-Leaved, Wild Lily-of-the-Valley**, *Pyrola rotundifolia* (*Pyrus*, pear tree, from resemblance in the foliage; round-leaved), Pyrolaceae, Shinleaf Family, HP, 15", 6/1/85, petals wh, separated on long erect stalk, nodding, styles exserted, *Ivs rd, long-stalked, leathery, shiny*
- Quickweed, Common, Galinsoga quadriradiata (for Mariano M. Galinsoga; fourradiated appearance, or *G. ciliata*, with marginal hairs), Asteraceae, Aster Family, entrance to ZP, RBT, 10/30/07, very common, sprawling to 18"+, 6/11/99, disk flwrs ylw, ray flwrs wh, 3-lobed, peduncles glandular, achene bl, hairy, pappus of disk flwrs awned, *Ivs opposite, ovate, coarsely toothed, hairy, stem much branched*, hairy, purplish
- Quickweed, Lesser, *G. parviflora* (see note on *Galinsoga*; small-flowered), Asteraceae, Aster Family, Boulanger Plaza and Villard Avenue near Warburton Avenue, common, sprawling to 18", 6/28/99, *flwrs small*, corolla hairy, *outer rays wh, ylw inner disk*, in If axils on slender peduncles, pappus of ray flwrs about length of corolla, fimbriate, achenes of ray flwrs not hairy, *stems much branched, lvs opposite, petioled, deltoid*, slightly coarse-toothed, differs from *Galinsoga quadriradiata* by absence of hairs about ray flwrs,

- Radish, Wild, Jointed Charlock, *Raphanus raphanistrum* (L. radish, from Gk. *raphanos*, appearing quickly, referring to rapid germination; name used by Joseph P. Tournefort), Brassicaceae, Mustard Family, ZCG, cult, 2'+, 3/29/00, 4 *whitish petals with purple veins*, clawed, exceed 4 blunt, slightly hairy sepals, 5 stamens, filaments flat, purple, anthers ylw, stamens longer than styles, stigma capitate, ovary cylindric, frt beaked, *Ivs lobed, pinnatifid,* upper reduced, entire, pedicels ascending, silique gr (7/23/00) with retrorse hairs, beak 2 cm, flat, 2 suture lines, *Ivs few, pedicels and stems purplish, hairy*
- Ragged Robin, Cuckooflower, Lychnis flos-cuculi (Gk. lychnos, a flame, for flamecolored species; cuckooflower), Caryophyllaceae, Pink Family, RSPP at 13 Bridges, OMQ, 5/14/05, 2', flwrs pink, deeply 4-cleft, linear lobes, longstalked, lvs opposite, narrowly lanceolate, entire
- Ragweed, Common, Roman Wormwood, Ambrosia artemisiifolia (Gk. and L. referring (inappropriately) to food of the gods; with leaves of Artemisia, wormwood), Asteraceae, Aster Family, common in waste places, 6', August-September, *flwrs small, gr*, inconspicuous in slender spikes, *turning ylw with hay fever-causing pollen in fall, Ivs deeply pinnately divided, both opposite and alternate*
- Ragweed, Great, Buffalo-Weed, A. trifida var. trifida (see note on Ambrosia; threecleft, referring to lobes of leaf), Asteraceae, Aster Family, common (especially vigorous along SSA and RBT), 6'+, 8/17/99, flwrs gr, inconspicuous, in long spike-like racemes, facing down, anthers turning ylw in fall with hay fevercausing pollen, involucre gr, Ivs 3-lobed, serrate, opposite, petioles winged, stems coarse and hairy, branched, grooved
- Ragwort, Golden, Senecio aureus (L. senex, an old man, alluding to hairiness; golden), Asteraceae, Aster Family, RSPP, 3', May, *flwrs ylw, flat-topped clusters*, ray flwrs 8-12, *stem lvs deeply cut, basal lvs heart-shaped*, longstemmed

Ranunculus abortivus, see Buttercup, Kidneyleaf

R. acris, see Buttercup, Tall, Common

R. bulbosus, see **Buttercup**, **Bulbous**

- R. fascicularis, see Buttercup, Early
- R. ficaria, see Celandine, Lesser

R. repens var. villosus or glabratus, see Buttercup, Creeping

R. septentrionalis or hispidus, see Buttercup, Swamp

Raphanus raphanistrum, see Radish, Wild, Jointed Charlock

R. sativa, see Charlock, Jointed, Chinese Radish

Rocket, Dame's, Dame's Violet, Hesperis matronalis (Gk. from the evening fragrance; matronly), Brassicaceae, Mustard Family, Nana's Garden, RBT, 6/0/02, 3', escape, May, flwrs pink or white, widely spread on stout pedicels, petals long clawed, blade obovate, looks like a phlox but with 4 petals, lvs alternate, lanceolate, toothed, pointed tips, stems, petioles grooved, hairy, stem hairy, seed pods to 3", mustard-like, fragrant

Rocket, Slimleaf Wall-, *Diplotaxis tenuifolia* (Gk. *diplous*, double, and *taxis*, row, referring to 2 rows of seeds; slender), Brassicaceae, Mustard Family, ZCG, to 3', September, *flwrs small* (1/2"), *ylw, terminal*, petals clawed, *lvs deeply cut, slightly toothed*, stems stout at base, frts about 1", slender, erect on 1/2" pedicels, *foetid when crushed*

Rudbeckia hirta, see Black-Eyed Susan

Rumex acetosella, see Sorrel, Sheep, Common Sorrel

R. crispus, see **Dock**, **Curled**, **Yellow Dock**

R. obtusifolius, see **Dock**, **Bitter**, **Red-Veined**, **Broad**, **Blunt-Leaved** *Sagittaria latifolia*, see **Arrowhead**, **Common**, **Wapato**, **Duck Potato**

- **St. Johnswort, Common**, *Hypericum perforatum* (Gk. *Hypericon,* refers to early use to repel evil spirits; perforated), Clusiaceae, Mangosteen Family (formerly Guttiferae, St. Johnswort Family), MWP, ZP, 2'+, 6/30/00, *petals ylw with black dots, many bl dotted stamens*, 3 styles, sepals point-tipped, dotted, *lvs linear, opposite, whitish and bl dots*, small lvs subtend larger, stems stiff, much branched
- St. Johnswort, Dwarf, H. parviflorum or mutilum (see note on Hypericum; smallflowered; cut-off), Clusiaceae, Mangosteen Family (formerly Guttiferae, St. Johnswort Family), 29 MA, escp, 6", August, flwrs ylw, 5 petals, small, lvs opposite, entire, elliptic, oval, 3-nerved, tips rounded
- **St. Johnswort, Spotted**, *H. punctatum* (see note on *Hypericum*; dotted), Clusiaceae, Mangosteen Family (formerly Guttiferae, St. Johnswort Family), SSA, 3', July, *flwrs ylw, bl dotted,* terminal, branched, *lvs* 3", oblong, with rounded tips, *bl dots*
- Salvia, Garden, Salvia officinalis (salvere, to be well, referring to medicinal properties; sold in apothecaries), Lamiaceae, Mint Family, ZCG, cult, 2', June, flwrs blu-purple, in small clusters on upper stem, lvs opposite, lanceolate, wooly, barely toothed, petioles 2", woody at base, very aromatic

Salvia officinalis, see Salvia, Garden

Salvinia rotundifolia, see Floating Moss, Salvinia

Sanguinaria canadensis, see **Bloodroot**

Sanicula trifoliata, see Snakeroot, Long-fruited

Saponaria officinalis, see Bouncing Bet, Soapwort

- Sarsaparilla, Wild Aralia nudicaulis (from French-Canadian Aralie, a species sent by Sarrasin, a French physician, to Tournefort; leafless stem), Araliaceae, Ginseng Family, woods S of HS, 2', 5/21/99 (in lf), 3 wh ball-like umbels at top of naked long-stalked pedicels, petals small, reflexed, fixed on rim of receptacle, 5 stamens, 5 styles, pinnately-compound whorled lvs, 3-5 slightlytoothed lflts, upper surface slightly reddish, base of lower lflts unequal, long stout rhizome
- Saxifrage, Early, Saxifraga virginiensis (saxum, stone and frangere, to break; Virginian), Saxifragaceae, Saxifrage Family, ZCG, 12", June, flwrs wh, 5 petals in terminal clusters,10 bright ylw stamens, lvs broadly egg-shaped in rosettes, toothed, sticky, hairy stem

Scilla nonscripta, see Scilla, Squill

Scilla, Squill, Scilla nonscripta (old L. name; non-writing, for non-veined petals), Liliaceae, Lily Family, ZCG, in clumps, 12", 5/13/99, flwrs blu and wh, nodding, on long racemose stems, petals distinct, curved downward when yg, one-veined, linear bracts subtend corolla and are of same color, anthers ylw, bilocular, filaments flattened, slightly winged, ovary ovoid, tapering to pistil, grooved, *lvs long, entire, linear, keeled*, midvein darkened above, fleshy, basal

Scutellaria parvula, see Skullcap, Small

Sedum acre, see Stonecrop, Mossy, Orpine, Wallpepper

S. ternatum, see Stonecrop, Wild

Selfheal, Heal-All, Prunella vulgaris var. lanceolata (Prunella or Brunella, from German for quinsy, i.e., Die Braune, for a sore throat; common), Lamiaceae, Mint Family, OCA near Villard Avenue and S of Chemka pool adjacent to brooklet, RBT, 12"+, March to 7/28/00, *flwrs blu, in dense leafy spikes*, bracts of inflorescence ciliate, corolla 2-lipped, upper hooded, lower lip 3-cleft and fringed, calyx 10-nerved, bilabiate, stamens 4, lower pair longer, nutlets 4, turning purple, *lvs opposite, petioled,* lanceolate-obovate, slightly toothed, *stems square, grooved*, slightly hairy

Senecio aureus, see Ragwort, Golden

- S. vulgaris, see Groundsel, Common
- Shepherd's Purse, Capsella bursa-pastoris (capsa, a box; shepherd's purse), Brassicaceae, Mustard Family, ZCG, RBT, common, 1', 3/8/00, small wh flwrs, 4 petals, 4 pinkish sepals, 4 stamens, stigma capitate, basal rosette lvs pinnatifid, toothed, upper sessile, stems with 2 purple lines, frts flat, triangular, notched at tip

Silene caroliniana var. pensylvanica, see Pink, Wild

S. latifolia or Lychnis alba, see Campion, White, White Cockle, Evening Lychnis

S. noctiflora, see Catchfly, Night-Flowering, White Campion, White Cockle

S. vulgaris, see Campion, Bladder

Sisymbrium altissimum, see Mustard, Tumble

- S. atlanticum, see Blue-Eyed Grass
- Skullcap, Small, Scutellaria parvula (scutella, a disk, referring to the appendage of the fruiting calyx; very small), Lamiaceae, Mint Family, ZCG, low, 9/5/98, flwrs purplish-blu, small, in axils of upper lvs, terminal, lvs opposite, slightly toothed, slightly hairy below and above, stems square, mint odor
- **Skunk Cabbage**, *Symplocarpus foetidus (Gk. symploce,* connection and *carpos,* fruit, foul-smelling), Araceae, Arum Family, N of SP and W of entrance to Chemka pool, Dan Rile Park, to 3', *2/21/00, flwr a shell-like spathe, mottled, gr-purple,* surrounds a rounded spadix containing stamens and pistils, *Ivs appear after flwrs,* 4/9/00, becoming large, *foetid when crushed*
- Smartweed, Dotted, Polygonum punctatum (poly, many, gonu, knee or joint, referring to the nodes of stem; dotted), Polygonaceae, Smartweed Family, HW/VP, 4', October, 5 wh sepals (some pink-tinged), gr at base, calyx dotted, spikes interrupted, *Ivs bl dotted*, lanceolate, glabrous, entire, tapering to end, petioled, *nodes enlarged*, stems stout, sheaths blunt, br, fringed, stems smooth, branched, *reddish-gr, in wet areas*

Smartweed, Long-bristled, *P. cespitosum* var. *longisteum* (see note on *Polygonum*; tufted; with long bristles), Polygonaceae, Smartweed Family, Bob's Service Station, back lot, Farlane Drive, common, 2', June, *flwrs pink, in long-stalked spikes,* lvs lanceolate, entire, *with dark triangular patch* (lady's thumb), *stems reddish*, papery long-bristled sheaths at nodes

- Smartweed, Dock-Leaved, Nodding Pale Dock, *P. lapthifolium* (see note on *Polygonum*; dock-leaved), Polygonaceae, Smartweed Family, SSA, opposite Dosins, 2', July, *flwrs pink, wh, gr, in nodding spikes*, lvs lanceolate, long, alternate, gr both sides, entire, marginal hairs pointed toward tips, sheaths not fringed
- Smartweed, Water, *P. coccineum* (see note on *Polygonum*; scarlet), Polygonaceae, Smartweed Family, ZCG *in wet area,* 2', June, *flwrs pink in 1-2 erect spikes,* Ivs lanceolate, pointed, stems grooved, *purple below, sheaths ridged, with slender whitish bristles*

Smilacina racemosa, see Solomon's Seal, False, Spikenard

- Snakeroot, Long-fruited, Sanicula trifoliata (sanare, to heal; with three leaflets), Apiaceae, Carrot Family, OCA near Pinecrest Drive, 4', 9/14/97, flwrs small, gr-wh in umbels, 3 lflts, palmate, long-stalked, toothed, longish frts appear in September
- Snakeroot, White, Eupatorium rugosum (dedicated to Mithridates Eupator; rugosum, wrinkled, referring to the leaf surface), Asteraceae, Aster Family, ZCG and HP, RBT, 9/29/03, 3'+, 9/29/99, flwr hds wh in a terminally-branched hairy corymb, stigmas 2-branched, pappus wh, involucre bracts acuminate, gr, Ivs petioled, opposite, ovate, subcordate, thin, upper much smaller than lower, coarsely toothed, pointed tip, poisonous
- **Snowdrops, Common**, *Galanthus nivalis (gala,* milk, *anthus,* flower; snowy), Amaryllidaceae, Amaryllis Family or Liliaceae, Lily Family, South Calumet and Chauncey Lane, RBT, cult, low, 1/29/00, *outer flwr segments wh, inner wh with gr marks around sinus at apex, lvs 2, 4*" long, 1/2" wide

Solanum carolinense forma albiflorum, see Nettle, Horse

- S. dulcamara, see Nightshade, Bittersweet
- S. nigrum var. virginicum, see Nightshade, Common Black
- Solidago caesia, see Goldenrod, Blue-Stemmed
- S. canadensis var. scabra, see Goldenrod, Common or Tall Goldenrod
- S. erecta, see Goldenrod, Erect, Slender
- S. flexicaulis, see Goldenrod, Zigzag
- S. gigantea, see Goldenrod, Late
- S. graminifolia, see Goldenrod, Lance-Leaved or Flat-Topped Goldenrod
- S. juncea, see Goldenrod, Early
- S. odora, see Goldenrod, Sweet
- S. rugosa, see Goldenrod, Rough-Stemmed
- S. speciosa, see Goldenrod, Showy
- S. squarrosa, see Goldenrod, Stout
- S. uliginosa, see Goldenrod, Bog

- Solomon's Seal, False, Spikenard, Smilacina racemosa (diminutive of Smilax, an ancient Gk name; racemose), Liliaceae, Lily Family, HP, 3', May, arching, zigzag stem, flwrs wh plumes at end of stem, lvs alternate, entire, short-petioled, oblong-lanceolate, parallel veined, crisp, frts wh, then red
- Solomon's Seal, Smooth, Polygonatum biflorum (Gk. poly, many and gonu, knee, referring to numerous joints of the rhizome; two-flowered), Liliaceae, Lily Family, HP, RBT, 3', May, flwrs ylw-gr, tube-like, paired, hanging from axils of alternate, sessile, many-nerved lvs, berries blu-bl
- Sonchus arvensis, see Thistle, Field Sow
- S. asper, see Thistle, Spiny-Leaved Sow
- S. oleraceus, see Thistle, Common Sow
- Sorrel, Common Yellow Wood, Oxalis stricta (Gk. oxys, sour; erect), Oxalidaceae, Wood sorrel Family, FP, ZCG and E of RF, common, 15", 4/29/00, flwrs ylw, reddish base, 5 sepals, pinkish, narrow pointed, spreading, Ivs alternate, clover-like, notched, 3 lflts on long stalks, purplish, pedicels stellate hairy, stems hairy, hairs sharp-tipped, recurved, capsule narrow, ribbed, hairy, several seeds per locule, teardrop-shaped, pointed at tip, sharply angled upward on bent stalks, tart taste
- Sorrel, Creeping Wood, O. corniculata (see note on Oxalis; horned), Oxalidaceae, Wood sorrel Family, ZCG, *low,* October, *similar to O. stricta (but seed pods bent down*), hairier, stipules larger, br
- Sorrel, Sheep, Common Sorrel, *Rumex acetosella* (ancient L. name for sorrel; slightly acid or old generic name for little sorrel), Polygonaceae, Smartweed Family, MA/RE lawn, One North Street, 9", 5/19/99, *flwrs gr-red in small interrupted hds* on short pedicels, *stem lvs arrow-shaped*, upper spatulate, stems gr, grooved, *nodes sheathed*
- Sorrel, Southern Yellow Wood, O. dillenii (see note on Oxalis; named for John J. Dillenius; or O. filipes (slender-stalked), Oxalidaceae, Wood sorrel Family, MA/RE lawn, *low*, 5/18/99, 5 ylw petals, 5 sepals in 2 whorls, stamens and styles about same length, stamens 10, pedicels spreading, 3 *lflts, lobed*, ciliate, long petioles, stipules hairy, slender, 3-4 mm, stem and peduncles hairy, hairs pointed in same direction, stoloniferous

Sow-Thistle, Common, see Thistle, Common Sow

Sow-Thistle, Field, see Thistle, Field Sow

Sow-Thistle, Spiny-Leaved, see Thistle, Spiny-Leaved Sow

Spanish Bayonet, Yucca, Beargrass, Yucca filamentosa (Haitian name; bearing slender threads), Agavaceae, Agave Family, opposite Hastings station below FP, 3'+, late June, flwrs wh, bell-like, large, on stout central stalk, lvs long, stiff, sharp-pointed, fringed with long hairs

- **Spearmint**, *Mentha spicata* (*Mentha*, Minthe of Theophrastus, and from a Nymph of that name; spiked, i.e., in long flowered stem), Lamiaceae, Mint Family, ZCG, HW/VP, 3'+, 7/4/99, *flwrs in interrupted axial clusters* along branched upper stem, subtended by narrow leafy bracts, *wh-purple with purple V's on 4-lobed corolla*, petals somewhat notched, stamens 4, 1 well-exserted style, calyx tubular, 5 lance-shaped tipped sepals, bristly-hairy, *Ivs lanceolate, sharply-toothed*, opposite, nearly sessile, slightly hairy, *stems square, grooved, aromatic*
- **Speedwell, Corn**, *Veronica arvensis* (*Veronica, vera*, true, Gk. *eicon*, image; of cultivated ground), Scrophulariaceae, Figwort Family, wall below FP, *creeping*, 4/29/99, *tiny blu flwrs nearly hidden in axils of upper lvs*, lvs slightly toothed, opposite, purplish
- **Speedwell, Field**, *V. agrestis* (see note on *Veronica*; of fields), Scrophulariaceae, Figwort Family, ZCG, 5/1/07, FP, *creeping, 4/2/00, small blu flwrs*, one pale petal, *3 blu petals with purple veins*, 1 style, 2 stamens, purple anthers, lvs bluntly toothed, short petioles
- **Speedwell, Ivy-Leaved**, *V. hederaefolia* (see note on *Veronica*; ivy-leaved), Scrophulariaceae, Figwort Family, W side exit of One North Street, ZCG, 4/17/01, FP wall, 3/6/00, *low mats, tiny blu flwrs in axils of 3-5-lobed kidneyshaped lvs, If margins ciliate*, sepals narrow, ciliate, petioles ciliate, stem lvs opposite, *upper lvs alternate, palmately veined, ciliate*
- Speedwell, Purslane, Neckweed, V. peregrina (vera, true, Gk. eicon, image; wandering), Scrophulariaceae, Figwort Family, Municipal Building parking lot, low, but upright, 4/30/00, flwrs in axils of upper lvs, 4 wh petals, 4 gr fleshy sepals, slender, strap-shaped, joined at base, upper lvs alternate, lower opposite, strap-shaped, sessile, mostly entire, stems somewhat purplish
- Speedwell, Thyme-Leaved, V. serpyllifolia (see note on Veronica; thyme-leaved), Scrophulariaceae, Figwort Family, RF, east end in grass, FP wall, 6", 5/7/00, flwrs very small, blu-wh, veined inside, 4 petals, 4 hairy sepals, 2 gr anthers, 1 purple style, ovary hairy, flat, notched, lower lvs opposite, rounded, crenate, upper alternate, linear, stems hairy
- **Spider Flower**, *Cleome hasslerana*, or *C. spinosa (Cleome*, origin uncertain, applied to some mustard-like plant; *hasslerana*, for Emil Hassler?; *spinosa*, with spines), Capparaceae, Caper Family, MA, 7/23/02, curbside, 1', *flwrs purple-pink*, widely spreading, 4 petals, long-clawed, entire, tighly folded, later spreading, 4 sepals smaller than petals, retrorse, pointed, hairy, *6 long stamens*, curved into corolla, long reddish style, caps long-stalked, ovary on long stipe, capitate, *lvs alternate, palmately compound*, 5 lflts, *petioles purple*, stem glandular pubescent, erect, strongly scented, escape
- **Spiderwort**, *Tradescantia virginiana* (named for John Tradescant; Virginian), Commelinaceae, Spiderwort Family, Maple Lane and above wall below FP, RBT, 1'+, 5/18/99, *flwrs dark purple, in umbels, lvs long, grass-like, fleshy*, stems thick, *purple-veined*

Spiderwort, Wide-Leaved, T. subaspera (see note on Tradescantia; somewhat harsh), Commelinaceae, Spiderwort Family, FP wall, 2', 6/5/99, 3 separate blu petals, 1 1/2 cm, in terminal cymes, pedicels 3 1/2 cm, purple-gr, 3 sepals, 1 cm, slightly hairy and glandular, anthers 6, gold, filaments long villous, style 1, capitate, *Ivs long, linear*, ciliate, wider than sheaths

Spirodela polyrhiza, see Duckweed

- Spring Beauty, Claytonia virginica (for John Clayton; Virginian), Portulacaceae, Purslane Family, BE, footpath toward Burnside Drive, in patches, 6-12", 4/1/00, flwrs pink-wh, 5 petals with 3 pink veins, anthers 5, pink, 3 stigmas, Ivs long, narrow, fleshy
- **Spurge, Cypress**, *Euphorbia cyparissias* (named for Euphorbus; cypress-leaved, used to describe spurges), Euphorbiaceae, Spurge Family, in grass above ZP ball field, common, escp, 12", mid-April, *ylw inconspicuous flwrs* in umbels with long pedicels, spurge-like, *Ivs numerous, linear, pale gr, milky juice*
- Spurge, Leafy, E. esula (see note on Euphorbia; from Celtic esu, sharp, from acrid juice), Euphorbiaceae, Spurge Family, Municipal Building sidewalk, 24", summer, flwrs greenish umbels, subtended by gr-ylw bracts, like Cypress Spurge, but lvs broader, oblanceolate, less numerous, milky juice
- **Spurge, Thyme-Leaved**, *E. serpyllifolia* (see note on *Euphorbia*; thyme-leaved), Euphorbiaceae, Spurge Family, ZCG, *prostrate*, September, flwrs inconspicuous, *pink-wh, in axils of lvs on short pink pedicels*, lvs opposite, oblong, toothed at least at tip, base unequal, *stem gr-reddish, milky juice*
- Star-of-Bethlehem, Ornithogalum umbellatum (Gk. ornis, a bird, gala, milk; umbellated), Liliaceae, Lily Family, NE of ZP ball field, Edgars Lane entrance to ZP, FP wall, 6", 5/7/00, north side RF, 5/1/06, RBT, 5/27/05, backs of gr petals with wh margins, 6 wh sepals, gr center, 6 stamens with flat filaments, narrow at tip, anthers bilocular, pistil gr, 6 lobes (looks like a gr pepper), grass-like lvs with pale midrib, long slender bracts at nodes, bulb rd, wh, firm, poisonous, closes without adequate light
- Stargrass, Common, Hypoxis hirsuta (hypoxys, somewhat acid; stiffly hairy), Liliaceae, Lily Family, woods S of HS, scape 6", 7/28/00, flwrs ylw, star-like, in small clusters, 3 petals, 3 sepals, distinct, stamens 6, filaments short, ylw, anthers deeply sagittate, opposite petals and sepals, sepals hairy, pedicels hairy, lvs grass-like, 16", keeled, 9 veins, hairy, appear glandular

Stellaria aquatica, see Chickweed, Giant

- S. graminea, see Stichwort, Common
- S. media, see Chickweed, Common
- Stichwort, Common, Stellaria graminea (see note on Stellaria; grass-like), Caryophyllaceae, Pink Family, Bob's Service Station pot, 5/23/01, 1', 5 wh deeply notched petals, 5 sepals, conspicuously 3 veined, margins hyaline, scarious, 10 stamens, anthers pink, 3 styles, ovary roundish, seeds tuberculate, lvs 1", opposite, narrow, nodes swollen, lanceolate, stems square, upper gr, lower reddish, flwrs spreading on long slender pedicels

Sticktight, see Beggar Ticks

- Stonecrop, Mossy, Orpine, Wallpepper, Sedum acre (from sedere, to sit on, referring to walls; pungent taste), Crassulaceae, Stonecrop Family, library wall and W of wall to entrance of Echo Hills, escp, 3" or creeping, June, flwrs *ylw*, petals pointed, *lvs and stems fleshy, stems reddish, lvs in 3*'s
- **Stonecrop, Wild**, *S. ternatum* (see note on *Sedum*; in three's), Crassulaceae, Stonecrop Family, E end of RF and Echo Hills, *prostrate stems*, sending up erect (8") stalks, 6/6/99, *flwrs wh*, 5 petals, sharp-pointed in 3-branched, terminal clusters, *lvs fleshy, entire, lower in whorls of 3*
- Storksbill, Alfileria, Erodium cicutarium (Gk. Erodios, a heron; resembling cicuta), Geraniaceae, Geranium Family, W end FdEmp parking lot, 4/10/02, MA/RE, 1'+, May-June, flwrs rose-pink, <1-2", 5 petals, clawed and bearded, in umbels, long-stalked, hairy, sepals with 3 gr veins, blunt, pinkish hairy margins, 3 purple veins inside, 5 stigmas, purple narrow filaments, joined at base around globose ovary, basal rosettes, stem lvs doubly divided, alternate, long-stalked, ciliate margins, frt long, pointed like a bird's beak, extend upward at right angles from slender horizontal pedicles
- Strawberry, Indian, *Duchesnea indica* (for Antoine Nicolas Duchesne; Indian) Rosaceae, Rose Family, ZCG, HW/TM, *low, trailing*, 5/5/00, *flwrs ylw, lflts 3, palmate*, hairy, bracts 3-toothed, *frt red, tasteless*, 7/23/00
- Stylophorum diphyllum, see Celandine Poppy
- Sunflower, Common, Helianthus annuus (Gk. helios, the sun and anthos, a flower; annual), Asteraceae, Aster Family, below FP opposite Hastings station, 10', 10/17/99, flwr hds large, ray flwrs 12, ylw, veined, disk br-ylw, involucre bracts shorter than ray flwrs, gr, linear, *Ivs heart-shaped*, long-pointed, alternate, coarsely toothed, both sides rough, petioles hairy, stem rough-hairy, purple
- Sunflower, Divaricate or Woodland, H. divaricatus (see note on Helianthus; branching), Asteraceae, Aster Family, HP, W of Chemka pool, RBT, 4', late July- August, flwrs ylw (8-15 bright ray flwrs), disk ylw, solitary hd, longstalked, gr bracts below, sharp tipped, ciliate, petioles short, lvs opposite, 3 main veins, broadly lanceolate, toothed, rough above, stems relatively smooth below, lower stem lvs absent
- Sunflower, Hairy, *H. hirsutus* (see note on *Helianthus*; stiffly hairy), Asteraceae, Aster Family, E side RF, 4', September, *disk and ray flwrs ylw*, involucre bracts marginally hairy, attenuate, *lvs opposite, lanceolate, toothed, scabrous, 3-nerved*
- Sunflower, Narrow-leaved, Helianthus angustifolius (see note on Helianthus; narrow-leaved), Asteraceae, Aster Family, June, 2004, entrance to RBT, ray and disk flwrs ylw (or purple), single stem, 12", branched above, lvs narrow, abundant, alternate, margins revolate, phylaries lanceolate, attentuate, fringed, achene br, ridged, dotted with glands on ridges, truncate at summit
- Sunflower, Tall, *H. giganteus* (see note on *Helianthus*; gigantic), Asteraceae, Aster Family, E side OCA at Baker Lane, ZCG, RBT, 10', 8/12/99 to mid-October, *flwr hds ylw, lvs alternate*, lanceolate, attenuate, toothed, short stalked, rough, *stem rough, dull reddish*

- Sweet Cicely, Osmorhiza claytoni (Gk. osme, a scent and rhiza, a root; named for John Clayton), Apiaceae, Carrot Family, OCA, common, 3', 4/19/00, flwrs small, wh, in umbels, bractlets reflexed, margins hairy, subtend pedicels of umbellated rays, *Ivs fernlike, ternately compound*, soft, *hairy, stem rd or* grooved, roots smell like anise
- Sweet William, Wild, Phlox maculata forma immaculata (Gk. flame; spotted; unspotted), Polemoniaceae, Phlox Family, OCA at entrance to old quarry, 3'+. August, flwrs wh, terminal, corolla tube elongate, lvs lanceolate, opposite, broadest above base, stems erect, spotted with purple

Symphytum officinale, see **Comfrey**

Symplocarpus foetidus, see Skunk Cabbage

Taraxacum officinale, see Dandelion

Thalictrum dioicum, see Meadow Rue, Early

- **Thistle, Bull**, *Cirsium vulgare* (Gk. from *cirsos*, a swollen vein, reputed as a cure for; common), Asteraceae, Aster Family, SSA, 3', July, *flwr hds large, reddish purple, spines ylw-tipped, stem prickly winged, lvs pale-wooly below*
- Thistle, Canada, C. arvense (see note on Cirsium; of the fields), Asteraceae, Aster Family, Villard Avenue at St. Matthew's School, #25 Main Street (in wall), ZCG, 1', 7/14/00, flwrs small, 1/2", purple, involucre bracts short bristly, purple veined, lvs lobed and strap-shaped, margins spiny, wh hairy below, stems stout
- Thistle, Common Sow, Sonchus oleraceus (ancient Gk. for a thistle; of the garden, to be cultivated), Asteraceae, Aster Family, Spring Street and MA, SSA, W of FdEmp parking lot, common, 2', 6/15/99, *flwrs pale ylw*, all ligulate in corymbose hds of several to many densely formed flwrs, achenes 3-5 ribbed, *involucre globose at base*, gr, phyllaries overlap, *lower lvs deeply lobed*, *terminal lobe deltoid*, *midrib and petioles purple*, coarsely toothed, *clasp stem*, not recurved, upper less divided, stem glabrous, hollow, *grooved*, *purplish*, tap root, milky juice
- **Thistle, Field**, *C. discolor* (see note on *Cirsium*; two colors), Asteraceae, Aster Family, SSA, FdEmp parking lot, 3', 6/10/00, *flwrs purple, in large, dense, prickly heads, very bristly throughout, lvs deeply cut, wh below*, tips longpointed
- **Thistle, Field Sow**, *S. arvensis* (see note on *Sonchus*; of cultivated ground), Asteraceae, Aster Family, FdEmp parking lot near CITIBANK fence, 3'+, 7/4/99, small numerous *ylw flwrs in corymb*, calyx gr-gray, glandular, purpletipped sepals, slightly hairy at base of each involucre bract, *lvs prickly on margins, clasp stem*, upper lanceolate, stem glabrous, stout, not hollow, *purplish, grooved*
- Thistle, Spiny-Leaved Sow, S. asper (see note on Sonchus; rough), Asteraceae, Aster Family, ZCG, One North Street, FdEmp parking lot, west end, in thick clumps, RBT, 2'+, 6/25/99, flwrs pale ylw, all ligulate, involucre top-shaped, bracts gr, overlap, achenes flat, ribbed, beakless, lvs pinnatifid, spiny, rounded, auricles clasp stem, recurved, midrib purplish, stem purplish-gr, grooved, hollow, milky juice

Thistle, Yellow, *Cirsium horridulum* (see note on *Cirsium*; somewhat bristly), Asteraceae, Aster Family, One North Street, 3', June, *flwrs large, ylw hds, lvs deeply lobed, bristly, veins purple*

Thlaspi arvense, see Cress, Field Penny, Stinkweed

Thyme, Wild, Creeping, *Thymus serpyllum* (Gk. name of thyme from *thyein*, to burn perfume used for incense; thyme-leaved), Lamiaceae, Mint Family, Villard Park in sidewalk cracks, FP, *mostly prostrate*, 6/15/04, *flwrs bilabiate,* lower lobe notched, 3 upper lobes, *small, pink-purple*, sepals ciliate in throat, 4 exserted stamens, in dense racemes, crowded at ends of branches, lvs small, oval, opposite, smooth, *stems square, glandular*, hairy, *aromatic*

Thymus serpyllum, see Thyme, Wild

Tiarella cordifolia, see Miterwort, False, Foam Flower

- **Tickseed**, *Coreopsis grandiflora* (Gk. Coris, a bug and opsis, appearance of, referring to the achene; large flowered), Asteraceae, Aster Fam, RBT, 6-7/04, cult, 1', disk flwrs ylw, ray flwrs ylw, purple at base, notched, lvs lanceolate, narrow, opposite, involucre in two rows, achene compressed, winged
- **Toadflax, Bastard**, *Comandra umbellata* (Gk. *come*, hair and *aner*, man, an allusion to hairs of the calyx lobe; bearing umbels), Santalaceae, Sandalwood Family, HP, 15", June, *small gr-wh flwrs in terminal umbels, flwrs* (no petals) *bell-shaped, lvs oblong, alternate,* parasitic root
- Toadflax, Old-Field, Annual Toadflax, Blue Toadflax, Linaria canadensis (name from Linum, L. for flax, from similarity of foliage; Canadian), Scrophulariaceae, Snapdragon or Figwort Family, One North Street among wood chips, 1-2', 5/19/99, erect, *flwrs blu in lax racemes*, corolla irregular with wh throat, lower lips 3, upper 2, calyx toothed, stamens and styles hidden in tubes, short spur, *lower lvs whorled or opposite, upper alternate, linear*, 1/2", stems glabrous
- **Toothwort, Crinkleroot**, *Cardamine diphylla (*from Gk. *kardamon*, a cress; twoleaved, or *Dentaria diphylla, Dentaria, dens*, referring to the toothed rhizome), Brassicaceae, Mustard Family, S of HP, 8-14", April, *flwrs wh, terminal clusters, stem lvs 2, divided into 3 coarsely-toothed lflts*, attached near center of stem
- Toothwort, Cut-Leaved, Pepperroot, C. laciniata or C. concatenata (see note on Cardamine; slashed; concatenata, joined together forming a chain; or D. laciniata, see note on Dentaria and Cardamine), Brassicaceae, Mustard Family, Dobbs Ferry High School woods, 12", April-June, flwrs wh-pink, terminal clusters, stem lvs 3, in whorls of lanceolate lflts, deeply toothed and lobed
- **Toothwort, Three-Leaved** or Large Toothwort, C. maxima or D. maxima (see note on Dentaria and Cardamine; largest): Brassicaceae, Mustard Family, Dobbs Ferry High School woods, 6-16", 4/18/99, flwrs wh-pink, 3-toothed lflts, segments petiolate, Ivs branch off stem at different levels

Touch-me-not, Jewelweed or Snapweed, Impatiens capensis (L. impatient, for sudden bursting of the capsules when touched; of the Cape of Good Hope), Balsaminaceae, Touch-me-not Family, ZCG and OCA, SW corner of Old Quarry, RBT, 9/03,common in wet places, 2'+, June-September, flwrs orangeylw, spotted with red, inward curved spur at back, lvs smooth, egg-shaped, coarsely toothed, stem succulent, gr pod "explodes" when squeezed, October

Tradescantia subaspera, see Spiderwort, Wide-Leaved

T. virginiana, see **Spiderwort**

Tragopogon pratensis, see Goat's Beard

- **Trefoil, Birdsfoot**, *Lotus corniculatus* (ancient Gk. name for clover-like plants; horned), Fabaceae, Pea or Bean Family, FdEmp park, 6-12", 6/12/99, and MWP, 6/30/00, *low*, weak-stemmed, *flwrs ylw, becoming orange with red in 4-8 head-like umbels* in upper axils on long slender grooved peduncles, glabrous, irregular, calyx tube campanulate, slightly hairy, sepals narrow, 2 slender hairs at tip, *lflts 5-parted* (3 upper, 2 lower, stipule-like), *pod like a bird's foot*
- **Trefoil, Panicled Tick**, *Desmodium paniculatum (*Gk. *desmos*, a bond or chain, from the jointed fruits; paniculate), Fabaceae, Pea or Bean Family, HP/SP area, *sprawling,* August, *flwrs purple, legume-like*, long-stalked, widely-branched clusters, 2 ylw patches inside upper petals, *3 long-stalked,* entire, terminal lflts, frts hairy, jointed
- Trefoil, Showy Tick, *D. canadense* (see note on *Desmodium*; Canadian), Fabaceae, Pea or Bean Family, HW/VP area, 4', 9/11/99, *flwrs purple in dense racemes, 3 lflts*, oblong-lanceolate, rough, entire, stem and petioles hairy, *pods with 3-5 joints*, slender stipules

Trifolium campestre see Clover, Pinnate Hop-, Smaller Hop

T. pratense, see Clover, Red

T. repens, see Clover, White

Trillium erectum, see **Trillium**, **Red**, **Purple**, **Stinking Benjamin**, **Wake-Robin** *T. grandiflorum*, see **Trillium**, **Large-Flowered**

- Trillium, Large-Flowered, Trillium grandiflorum (from tres, three, referring to all parts of the plant; large-flowered), Liliaceae, Lily Family, 151 Edgars Lane, to 1 ½', 4/18/00, flwrs wh, turning pink, funnel-shaped at base, flaring outward, on erect stalks, lvs broad
- Trillium, Red, Purple, Stinking Benjamin, Wake-Robin, Trillium erectum (see note on Trillium; erect), Liliaceae, Lily Family, RSPP, 20", April, 3 maroon or dark purple petals, 1 ½", stalks erect, spreading from base, 3 sessile lvs, broadovate, sharply pointed, ill-scented flwrs, rich woods
- Trout Lily, Yellow Adder's Tongue, Dogtooth Violet, Erythronium americanum (erythros, red; American), Liliaceae, Lily Family, HP, E of Chemka pool, woods W of DP, behind Hook and Ladder Co. No. 1 and Dan Rile Park, 4-10", 4/8/00, flwrs ylw, Ivs fleshy, lanceolate, mottled, stems pinkish

Tussilago farfara, see Coltsfoot, Pas-d'Ane

Typha latifolia, see Cattail, Common

Urtica dioica, see Nettle, Stinging

Uvularia perfoliata, see Bellwort, Lesser, Perfoliate Bellwort, Merrybells

Velvetleaf, Butterprint, Pie-Marker, Abutilon theophrasti (name given by Avicenna; named for Theophrastus), Malvaceae, Mallow Family, ZCG, RBT, 3'+, 9/4/99, flwrs ylw, mallow-like, 1 1/2", single in axils, carpels 5+, beaked, lvs large, cordate, velvety, long-petioled, pubescent throughout

Veratrum virida, see Hellebore, False, Indian Poke

Verbascum blattaria, see Mullein, Moth

V. thapsus, see Mullein, Common, Flannel Plant

Verbena bonariensis, see Vervain

Verbena hastata, see Blue Vervain

V. urticifolia, see Vervain, White

Veronica agrestis, see Speedwell, Field

V. arvensis, see Speedwell, Corn

V. hederaefolia, see Speedwell, lvy-Leaved

V. peregrina, see Speedwell, Purslane, Neckweed

V. serpyllifolia, see Speedwell, Thyme-Leaved

- Vervain, Verbena bonariensis (singular of L. verbenae, sacred boughs of laurel, olive or myrtle; from Buenos Aires), Verbenaceae, Vervain Family, in flwr pots, cult, corner Main and Warburton, North Street, 4', 6/3/99, *small purple flwrs in dense cyme*, corolla 5 petals, campanulate, bearded inside, hairy outside, calyx 5- toothed, sepals hairy, subtended by linear bracts, *Ivs opposite, clasping*, sharply toothed above middle, coarse, linear-oblong, stems hairy above, *sharply 4-angled*, stems hollow, branched
- Vervain, Blue, Verbena hastata, (see note on Verbana above; halbred-shaped), Verbenaceae, Vervain Family, ADM wetland, 3'+, 7/18/04, small bl flwrs, 5 petals, in elongate spikes, numerous, calyx bracts lanceolate, lvs lanceolate, sharply toothed, opposite, stems square, groved

Verbena hastata, see Vervain, Blue

- Vervain, White, V. urticifolia (see note on Verbena; nettle-leaved), Verbenaceae, Vervain Family, Five Corners woods, ZCG, SSA, 8/1/00, RBT, 9/03, 5', July, *flwrs small, wh*, 5-merous, petals united in tube, flwrs spaced along long, terminal and much- branched axillary spikes, *lvs egg-shaped, coarsely toothed*, opposite, broadly lanceolate, *prominently veined*, petiolate, *stems grooved, hairy, square*
- Vetch, Crown, Coronilla varia (a crown; variable), Fabaceae, Pea or Bean Family, OCA above ZP, RF, trailing, up to 1', 6/7/00, *flwrs wh-pink, pea-like*, on long glabrous pedicels in loose umbels in axils of *pinnately compound alternate lvs*, many ovoid-oblong lflts, entire, opposite, stem glabrous, ridged
- Vetch, Four-Seed, Vicia tetrasperma (classical L. name; four seeded), Fabaceae, Pea or Bean Family, E side RF, matted in grass, 6/7/00, small pea-like flwrs blu-wh on long slender peduncles, 1-3 cm, calyx teeth unequal, gr, 10 stamens, stigma pubescent, lvs pinnate, mucronate, small stipules, terminal If ending in long slender tendrils, frt flat, 4-seeded, stems grooved

Vicia tetrasperma, see Vetch, Four-Seed

Viola blanda, see Violet, Sweet White

V. canadense, see Violet, Canada

V. cucullata, see Violet, Marsh Blue

V. incognita, see Violet, Large-Leaved White

- V. rafinesquii, see Pansy, Wild
- V. rotundifolia, see Violet, Round-Leaved
- V. sororia, see Violet, Wooly Blue
- Violet, Canada, Viola canadense (L. name applied to fragrant plants; Canadian), Violaceae, Violet Family, HP, 8-16", spring and fall, *flwrs wh with ylw throat*, back of petals tinged with violet, bottom petal sac-like, stalks separate, *lvs heart-shaped, stems purple, short-stalked*, hairs scattered
- Violet, Large-Leaved White, V. incognita (see note on Viola; unknown), Violaceae, Violet Family, ZCG, RBT, 5", May, flwrs wh on long, separate, hairy stems, lvs heart-shaped, sinus wide, on long-stalked hairy stems
- Violet, Marsh Blue, V. cucullata (see note on Viola; cucullata, hooded, refers to inrolled young leaves), Violaceae, Violet Family, ZCG, RBT,10", late March, leafless flwr stems longer than If stems and separate from them, lateral petals bearded with knobs, purple veined, dark purple toward center of flwr, Ivs reniform, cordate, crenate, held at angles to long ascending petiole
- Violet, Pale, Cream, V. striata, (see note on Viola; with fine lines), Violaceae, Violet Family, W end ZCG, in clumps, 6-12", 5/10/99, flwrs wh-creamy on leafy stems, corolla streaked with purple-forked veins, lateral petals wh bearded, lower sac-like, stipules large, frimbriately toothed, lower lvs ovate, blunt, upper cordate, acute, small-toothed
- Violet, Round-Leaved, V. rotundifolia (see note on Viola; round-leaved), Violaceae, Violet Family, HP, 5", April, flws ylw, stemless at early flowering, roundish heart-shaped lvs close to ground, toothed
- Violet, Sweet White, V. blanda (see note on Viola; mild, or Viola incognita, unknown or little recognized), Violaceae, Violet Family, HP, 5", April, *flwrs wh, on separate stalks*, upper petals twisted, *lvs heart-shaped, stems reddish*, seed capsule purple
- Violet, Wooly Blue, V. sororia (see note on Viola; sisterly, resembling other species), Violaceae, Violet Family, HP, Iow, March, *flwrs purple, spurred,* lateral petals bearded, *downy throughout*, Ivs somewhat pointed, long-stalked, wide
- Watercress, Nasturtium officinale (L. nasus, nose, plus turtium, from torquere, to twist; sold in apothecaries), Brassicaceae, Mustard Family, ZCG, emergent, in brooklet, April-August, small wh flwrs (1/4"), Ivs divided into 3-9 lflts, terminal lf rd, larger than lower, Ivs have sharp taste
- Waterhorehound, Bugleweed, Lycopus virginicus (Gk. lycos, a wolf, pous, a foot; Virginian), Lamiaceae, Mint Family, possibly imported from Lake Sebago (grown in porch flowerpot), *low*, May, *flwrs wh*, small, in axils of upper lvs, much branched, *decussate, stems square*, somewhat hairy, *some lvs purplish*
- Waterleaf, Virginia, John's-Cabbage, Hydrophyllum virginianum (Gk. hydro, water, phyllon, leaf, referring to watery stem and petioles; Virginian), Hydrophyllaceae, Waterleaf Family, ZCG, 3', May, flwrs wh-pale violet, stamens and style exserted, Ivs pinnately 5-7 lobed, mottled whitish

- Water Lettuce, Water Cabbage, Pistia stratiotes (Gk. pistos, liquid; Dioscorides' name for an Egyptian water plant), Araceae, Arum Family, HP/SP, escp, floating plant, August, Ivs sessile, in fan-shaped rosette, 3-4" broad, Ivs 1-2", spongy, 6-7 veins arising from base, light gr above, wh tomentose below, copious pendant roots
- Water-Meal, Wolffia punctata (for Johann Friedrich Wolff; dotted), Lemnaceae, Duckweed Family, SP, floating aquatic, very small, 8/2/00, shaped like a gr snowman in two rounded and connected parts, upper surface flat, punctate, br margins, lower surface rounded, bulbous, no roots, (world's smallest flowering plant)
- Water Milfoil, Parrot's Feather, Myriophyllum aquaticum or brasiliense (Gk. myrios, numberless, phyllon, leaf, referring to leaf divisions; growing in water; from Brazil), Haloragaceae, Water milfoil Family, HP/SP, escp, submerged aquatic, September, gr, long chains, all lvs whorled, whorls about 6-8 mm apart on stem, lvs bifurcated about one-third above attachment to stem, each leaf segmented, br bristles, *translucent*, stems rd, reticulate in parallel lines
- Waterweed, Elodea canadensis (Gk. elodes, marshy; Canadian), Hydrocharitaceae, Frog's-bit Family, SP, floating aquatic, 8/2/00, flwrs wh, on slender pedicels, clawed, 9 stamens, lvs narrow, sessile, entire, 1", whorled and crowded on stems, midvein prominent, stem grooved
- Whitlow Grass, Draba verna (acrid; of early spring), Brassicaceae, Mustard Family, N end RF, W of concrete bleachers, *low mats*, 3/23/99, *tiny wh flwrs*, 4 *deeply- lobed petals*, 4 hairy sepals, *basal rosette lvs*, spatulate, toothed above middle, stems elongate, hairy at base, mostly glabrous above, *lower stems purplish*, frt a silicle, oval on long pedicels
- Willow-Herb, American, Epilobium ciliatum (Gk. epi, upon and lobon, a capsule, from the perianth surrounding the capsule; hairy, referring to the capsule), Onagraceae, Evening-primrose Family, HP, below E side SP, adjacent to foot path, RBT, 3', August-September, small wh flwrs on long pedicels, 4-lobed petals, *Ivs lanceolate, toothed*, long, narrow, ciliated frt, no root bulblets
- Willow-Herb, Northern, E. glandulosum (see note on Epilobium; bearing glands), Onagraceae, Evening-primrose Family, ZCG, E side SP, RBT, 3', 8/30/99, *flwrs small, tubed, lobed, pink and 5-veined inside, 4 petals, 4 gr sepals, narrow, acuminate, hairy at bases, nodding, long hairy pedicels, pink tinged, lvs opposite, lanceolate, toothed, tips pointed, sessile, marked with purple, stems purple, hairy in lines, seed pods long, slender, many seeds, ascending*
- Windflower, Anemone japonica x hybrida (Gk. and L., corruption of Na',am), Semitic name for Adonis; Japanese), Ranunculaceae, Buttercup Family, RBT, cult, May-June, no petals, sepals ylw-purple-violet, many stamens, lvs divided-compound, stem lvs from involucre below flwr
- Wintergreen, Spotted, Chimaphila maculata (Gk. cheima, winter, philein, to love; mottled or spotted), Pyrolaceae, Shinleaf Family, entrance to Chemka pool, 4-10", 9/10/97, Ivs whorled, variegated, toothed and lanceolate, wh pattern on midrib

Wolffia punctata, see Water-Meal

- Wood Anemone, Anemone quinquefolia (Gk. and L. Na'man, Semitic word for Adonis, Gk. youth whose death and resurrection symbolized the seasonal cycle; five-leaved), Ranunculaceae, Buttercup Family, ZP, HP, E of HS, early April-May, *low, delicate, flwrs solitary, wh, with 5 pink sepals, lvs 3, in whorls, divided into 3-5 lflts*
- Wormwood, Absinthe, Artemisia absenthium (named for Artemisia, wife of Mausolus whose sepulcher was one of the seven wonders of the world; Gk. and L. for wormwood), Asteraceae, Aster Family, SSA and MWP, common, 4', August, small ylw-gr inconspicuous flwrs, in terminal clusters, drooping, *lvs deeply divided, wh-silky both sides, tips blunt, very aromatic*
- Wormwood, Annual, A. annua (see note on Artemisia; annual, of one year's duration), Asteraceae, Aster Family, common, 3', August, flwrs in terminal clusters, lvs fern-like, aromatic
- Wormwood, Biennial, A. biennis (see note on Artemisia; of two-years' duration), Asteraceae, Aster Family, common, 3', August, flwr hds erect in long clusters or spikes and in If axils, shorter than surrounding lvs, lvs linear, forked, interspersed among flwr clusters

Xanthium chinense or X. strumarium or X. americanum, see Clotbur, Cocklebur

- Yarrow, White, Pink, Milfoil, Achillea millefolium (referring to alleged healing powers discovered by Achilles; thousand-leaved), Asteraceae, Aster Family, MA and Ridgedell Avenue, common cult, 1-2', July, *flwrs wh or pink, in dense flat hds, lvs fern-like, aromatic*
- Yellow King Devil, Hieracium caespitosum (Gk. hierax, a hawk; growing in tufts), Asteraceae, Aster Family, Ridgedell Avenue and MA, E end RF, 2', 6/14/99, flwrs ylw in corymbiform hds of 10+ flwrs, calyx gr, sepals narrowly pointtipped, many bl hairs, pedicels short, bl hairs, stems long, hairy, wh and bl hairs, few lvs above, basal lvs narrowly elliptic, hairy on veins, ciliate margins, lower stems purple, hairy

Yucca filamentosa, see **Spanish Bayonet**, **Yucca**, **Beargrass** *Zizia aurea*, see **Alexanders**, **Golden**

FERNS AND HORSETAILS FERNS

Ferns are perennial non-flowering plants bearing roots, stems and leafike fronds; they reproduce by spores that are usually borne in spore cases (sori) on fertile fronds or fertile portions of vegetative fronds. Ferns vary in size, shape and structure, but a typical fern consists of a frond or leaf made up of a blade (the expanded part of the frond) and a stipe (the stalk below the frond). Early in their development, ferns produce a leaf bud that resembles a fiddlehead, a coiled upright growth arising from an underground stem (rhizome).

Adiantum pedatum, see Maidenhair, Northern Maidenhair Asplenium trichomanes, see Maidenhair Spleenwort Athyrium filix-femina, see Lady Fern

- Beech, Long, Narrow Beech, Northern Beech Fern, Thelypteris phegopteris (old generic name for female fern; phegopteris, Gk. for Oak-fern) (formerly Dryopteris phegopteris, Gk. drys, oak, and pteris, fern), Aspleniaceae, Spleenwort Family, RSPP, 12", May, fronds tilt backward, triangular, tapering quickly to tip, lowest pinna droop forward and downward, distinctly spaced from next upper pair, pinna long, narrrow, pointed, midveins and veins scaly, hairy, veins forked, pinnules rd-tipped, sporangia rd, marginal, stipe scalyhairy
- Bracken Fern, Pteridium aquilinum (pteris, fern; an eagle, refers to shape of fiddleheads), Dennstaedtiaceae, Bracken Family, RSPP and CPP, RBT, 3'+, May-September, frond triangular, divided into 3 nearly equal parts, two lower opposite, stalked, coarse, alternate, pinnule tips blunt, not toothed, tips and mid- veins hairy, stipe rigid, smooth, grooved, gr-br, sporangia in narrow, marginal lines, fiddleheads claw-like, silvery-gray, coiled
- **Christmas Fern**, *Polystichum acrostichoides (poly*, many and *stichos*, row, refers to arrangement of sori; *acrostichum*, top row), Aspleniaceae, Spleenwort Family, HP, E of Chemka pool, HW/VP, and OCA S of Pinecrest, RBT, 3', June, in clumps, *fronds leathery*, lanceolate, taper quickly above middle of rachis, *pinna eared and short-stalked, bristle-tipped*, lowest opposite, upper alternate, sporangia numerous, rd, parallel midvein, *lower stipe scaly*, upper grooved
- **Cinnamon Fern**, *Osmunda cinnamomea* (*Osmunder*, name for Thor, god of thunder; cinnamon-colored), Osmundaceae, Royal Fern Family, HP/SP area and E end RF, 3'+, fiddleheads formed 4/29/99, fertile fronds, 5/16/99, evergreen, fronds large, coarse, fertile fronds appear before sterile, stiff, erect, club-shaped, turn br, wither by fall, sterile fronds erect or arching, *sterile pinna with cinnamon-colored tufts at base*, cut almost to axis into oblong-pointed lobes, toothed, nearly opposite, sessile, veins forked, rachis grooved, *cinnamon-colored, wooly*, sporangia stalked, gr, then cinnamon color

Dennstaedtia punctilobula, see **Hay-scented Fern** *Dryopteris goldiana*, see **Goldie's Wood Fern** Goldie's Wood Fern, Dryopteris goldiana (drys, oak, pteris, fern; named for John Golden), Aspleniaceae, Spleenwort Family, HP, N of SP, 3'+, May, evergreen, fronds I2" wide, coarse, tilt backwards, abruptly pointed at tip, leathery, golden dark gr, pinna tapered, abruptly pointed, lower pinna pointed down and forward, cut to midvein, veins forked, sporangia small, near midvein, stipes straw-colored, scales with dark center

- Hay-scented Fern, Dennstaedtia punctilobula, (named for August Dennstedt; with dotted lobes), Dennstaedtiaceae, Bracken Family, HP, 16", June, fronds ylwgr, hairy, glandular, from single stipes, lanceolate, widest at lower end, pinna close together, rd-tipped, bristly, lower surface hairy, sporangia cup-shaped, on marginal indentations of pinnules, stipe br-bl, aromatic
- Interrupted Fern, Osmunda claytoniana (Osmunder, name for Thor, god of thunder; named for John Clayton), Osmundaceae, Royal Fern Family, HP N of SP, RBT, 3', May, fronds coarse, arching, distinct interruption (fertile pinna) in center of rachis, pinnules broadest at base, tips blunt, upper sessile, joined, lower spaced, sporangia short-stalked, gr-br, stipe grooved, gr, fertile stipes longest
- Lady Fern, Athyrium filix-femina (athyros, doorless; filix, fern; femina refers to fragility), Aspleniaceae, Spleenwort Family, HP, SP area and OCA near Odell, RBT, mid-April, June, 30", fronds wide, broad, lanceolate, tips pointed and lax, pinna 8", narrow- pointed, lower slightly stalked, pinnules alternate, deeply cut to midvein, toothed, veins once- to twice-forked, sporangia curved or horseshoe-shaped, br, lower stipes scaled
- Maidenhair, Northern Maidenhair, Adiantum pedatum (unwetted, foliage shedding rain-drops; palmately forking), Adiantaceae, Maidenhair Fern Family, RSPP, 20", fronds semicircular, growing from a slender erect naked stipe, two recurved branches, each branch bearing 5-6 lflts (pinna) with nearly sessile, one-sided pinnules, sporangia on upper margin, stipe shining bl/br
- Maidenhair Spleenwort, Asplenium trichomanes (asplenon, refers to curing of spleen diseases; hair madness, Theophrastus' name for maidenhair spleenwort), Aspleniaceae, Spleenwort Family, RSPP, 5", May, fertile fronds upright, rosette form, sterile lvs usually flat, long and narrow, tapering from middle to upper and lower ends, rachis purple-br, wiry, pinna small, opposite, rounded, slightly toothed, upper crowded, lower broad, sporangia few

Matteuccia struthiopteris, see Ostrich Fern

New York Fern, *Thelypteris noveboracensis* (see note on *Thelypteris* above; noveboracensis, New York), (formerly *Dryopteris n.* see note on *Dryopteris* above), Aspleniaceae, Spleenwort Family, HP, W of Chemka pool, 18", 5/12/98, *ylw-gr, delicate*, fronds 6", taper from middle to pointed tip and to rhizome, pinna alternate, sessile, narrow-pointed, veins not forked, *lowest pinna very small*, sporangia small, few, marginal

Onoclea sensibilis, see Sensitive Fern

Sensitive Fern, Onoclea sensibilis (Gk. onokleia, closed-cup, for concealment of sori by fronds; sensitive), Onocleaceae, Sensitive Fern Family, SP and 32 Main Street, 2'+, June, fronds tapering to tip, wide below, *leathery*, long stipe, about 12 broad, opposite wavy pinna, *rachis winged*, fertile fronds 12", erect, numerous, stout branches, sporangia dark br beads when mature (when mowed, fertile fronds resemble sterile fronds), sterile fronds blacken at first frost, *fertile fronds persist throughout winter*

Osmunda cinnamomea, see Cinnamon Fern

Osmunda claytoniana, see Interrupted Fern

- **Ostrich Fern**, *Matteuccia struthiopteris* (named for C. Matteucci, Italian physicist 1800-1868), Onocleaceae, Sensitive Fern Family, RBT, coarse, *tall, arching, sterile fronds oblong lance-shaped*, widest near top, pointed tip, bases tapering, *fertile fronds stiff, hard, turning br*, hard pods formed, 2" long, rachis covered with whitish hairs
- **Polypody, Common**, *Polypodium virginianum* (*poly*, many, *pous*, foot, referring to rhizome; Virginian), Polypodiaceae, Polypody Family, wooded area S of HS, 7/8/98, RBT, 7/9/05, 12", *bright gr above, pinna sessile and grown together at rachis*, scarcely toothed, rachis gr, grooved, sori abundant, form in July, rd in 2 rows

Polypodium virginianum, see **Polypody, Common** Polystichum acrostichoides, see **Christmas Fern**

Pteridium aquilinum, see Bracken Fern

Thelypteris noveboracensis, see New York Fern

Thelypteris phegopteris, see Beech, Long, Narrow Beech, Northern Beech Fern

HORSETAILS

Horsetails, or Scouring Rush, are erect annual plants (below ground they are perennial) that are either branched or unbranched. Upright stems are cylindrical, like bamboo, with hollow stems. They have symmetrically arranged nodes with characteristic teeth. Erect horsetails develop branches from the nodes, which in turn have nodes and internodes. Stems of horsetails are grooved, ridged, and rough. Horsetails in the Hastings area are green, except for Equisetum arvense, found north of the high school soccer field.

- Horsetail, Common Field, Equisetum arvense (equinus, of the horse, seta, bristle; of fields), Equisetaceae, Horsetail Family, bank of high school parking lot N of soccer field, 6"+, mid-April, young fertile fronds whitish, nodes toothed, blackish teeth
- Scouring Rush, Common, *E. hyemale* (see note on *Equisetum;* of winter), Equisetaceae, Horsetail Family, HP, Edmarth Place and MA, in clumps in woods and cult, 2', evergreen, stems slender, simple, hollow, rough, 2 *bl bands at nodes, teeth bl*
- Horsetail, Meadow, *E. pratense* (see note on *Equisetum*; of the fields), Equisetaceae, Horsetail Family, ZCG, adjacent to brooklet, and SSA, adjacent to RR tracks, 6-18"+, sterile fronds formed 4/18/00, *single row of sharp teeth at nodes, brownish, with hyaline margins*, strobili formed 8/25/99

GRASSES

Grasses are annual or perennial herbaceous plants with narrow, long, tworanked leaves (see glossary), the base of which ensheath the stem (culm), which is jointed and often hollow between the hard nodes; the stem is round. Flowers are borne in spikelets of bracts. Leaves are alternate. The sheaths are tubular envelopes which are open or closed and often overlap, embracing the internodes of the culm. Veins of the leaf are parallel.

Arundinaria gigantea, see Cane

- Barnyard Grass, Echinochloa crusgalli (Gk. echinos, hedgehog and chloa, grass; cock's-spur), Poaceae, Grass Family, ZCG and MA, 3'+, common, spikelets formed 8/19/99, purple on one side of terminal racemes, much branched from base with long wh setae, as long as spikelets, glumes awnless, lemma with bristly hairs at base, beaked, *lower stems flattish, keeled, purplish*, upper stems grooved, lvs long, narrow, *margins coarse to touch*, sheathed at nodes and mainly hairless
- Blue Grass, Forest, Poa sylvestris (Gk. for grass or pasturage; of the forest), Poaceae, Grass Family, ZCG, adjacent to brooklet, in clumps, 3'+, few culm Ivs, many below, scabrous margins, inflorescence narrow, slender flexous branches in sets of 2-8, bearing a few spikelets, glumes scarious margined, 1st one-nerved, 2nd 2-3, lemma 5-nerved, webbed at base
- Blue Grass, Kentucky, P. pratensis (see note on Poa; of the fields), Poaceae, Grass Family, Warburton Avenue and North Street, 3'+, 7/8/00, inflorescence with spreading branches in sets of 4-5 spikelets, first glume one-nerved, keeled, sheaths glabrous, Ivs long, narrow, 5 mm, nodes enlarged, purple
- Broom Grass, Fringed, Bromus ciliatus (Gk. food, an edible grass; ciliate), Poaceae, Grass Family, 3'+, SSA, RBT, May-June, solitary and in clumps, blade sparsely hirtellous, scabrous, 3-16 mm broad, panicle arching, drooping, spreading branches, spikelets greenish, purple fringed, glumes strongly keeled, lance-altenuate, lemmes fringed

Bromus ciliatus, see Broom Grass, Fringed

- *B. japonicus*, see **Chess, Japanese**
- **Cane**, Arundinaria gigantea (arundo, a reed; very large), Poaceae, Grass Family, OCA on N side of Washington Avenue, cult, 6'+, *spikelets purplish, culms stout, lvs long, cross-veined, margins coarse*, dense clumps
- Chess, Japanese, *B. japonicus* (see note on *Bromus;* Japan), Poaceae, Grass Family, ZCG, 5/30/00, 1 m, *panicle spreading, broad, long, slender, drooping pedicels*, spikelets 2-2.5 cm long, first glume 3-nerved, second 5-nerved, lemmas awned, 9-veined
- Crab Grass, Finger Grass, Digitaria sanguinalis (a finger; blood-red), Poaceae, Grass Family, common lawn grass, August, stems creeping or ascending, 1'+, much branched, nodes and sheaths hairy, blades lax, scabrous, spikelets crowded on one side of rachis, winged, rachis in several whorled racemes

Dactylis glomerata, see Orchard Grass

Digitaria sanguinalis, see Crab Grass, Finger Grass

Echinochloa crusgalli, see Barnyard Grass

Eleusine indica, see Yard Grass, Wire Grass, Goose Grass

Elytrigia repens, see Witch Grass, Coach Grass, Quick Grass, Quack Grass

Eulalia Grass, Flame Grass, Miscanthus sinensis (Gk. mischos, pedicel, anthos, flowers; Chinese), Poaceae, Grass Family, Villard Park, in clumps, 3'+, in anthesis 10/26/99, panicle with numerous branches, racemes silky, spikelets tufted with silky hairs at base, fertile lemma long awned, lvs numerous, mostly basal, blades keeled, long-pointed, hyaline scabrous margins (see Miscanthus sinensis below)

- Fescue, Blue Grass, Sheep Fescue, Festuca ovina var. glauca (ancient Latin name of some grass; of sheep; whitish bloom), Poaceae, Grass Family, SSA island, E of FP, in clumps, cult, anthesis 5/31/00, *inflorescence open*, *spreading, spikelets flattened, pedicels gray, setaceous, grooved*, sheaths open to base, blades 0.5 mm wide, firm, setaceous
- Festuca ovina var. glauca, see Fescue, Blue Grass, Sheep Fescue
- Fountain grass, Blue, Pennisetum setaceum (L. penna, feather and seta bristle, refers to plumose bristles), Poaceae, Grass family, RBT, May-June, '04, culms tufted, 1 m tall, blades narrow, elongate, scabrous, panicle 15-35 cm, nodding, purple, cult
- **Foxtail, Bristly, Foxtail Grass**, *Setaria faberii* (*seta*, a bristle; named for Ernst Faber), Poaceae, Grass Family, E end Reynolds Field, RVRStr and MA, common, 1', 6/27/99, hds 3"+, *foxtail-like*, spikelets clustered, subtended by *long bristly awns*, second glume shorter than rugose fertile lemma, lvs 3/4" wide, 1' long, *very rough on edges, panicles nodding at maturity*
- Foxtail, Knotroot, S. geniculata (see note on Setaria; bent, like a knee-joint), Poaceae, Grass Family, ZCG, 2'+, October, lvs long, slender, flat, scabrous above and on margins, culm compressed, hairy at throat, bent at base, nodes enlarged, spikelets subtended by many long purplish-ylw bristles, rhizomes branched, knotty
- Foxtail, Pigeon Grass, Yellow Foxtail, S. glauca (see note on Setaria; whitened), Poaceae, Grass Family, North Street, in clumps, 1', spikelets formed 8/25/99, many barbed bristles below each spikelet, inflorescence erect, cylindrical, dense, gr then ylw, lvs slightly scabrous above, sheaths with hairy margins, pink-tinged, ligule bearded, first glume 3-veined, second 5

Miscanthus sinensis, see Eulalia Grass, Flame Grass

M. s. var. variegatus, see Silver Feather or Silberfeder

Muhlenbergia sobolifera, see Muhly

- Muhly, Muhlenbergia sobolifera (named for Gotthilf Muhlenberg; bearing sprouts), Poaceae, Grass Family, RF, *cespitose*, 2'+, 5/25/99, *terminal spikes 14 cm*, slender, few culm lvs, fibrous and rhizomatous roots, ligules membranaceous, sheaths and stem glabrous
- Orchard Grass, Dactylis glomerata (Gk. dactylos, a finger; gathered in bunches), Poaceae, Grass Family, One North Street and Warburton Avenue, 3-4', 5/29/99, spikelets 2-6, flat, nearly sessile, in dense fascicles in a one-sided panicle, glumes ciliate, sharp-keeled, acute, lower branches naked, tufted, stem angled, coarse

Panic Grass, Panicum clandestinum (L. ear of millet; hidden), Poaceae, Grass Family, W of Chemka pool, in clumps, 1'+, 6/6-8/20/99, OMQ, 5/29/05, panicle hidden, first glume much smaller than second, lemma hairy, veined, culm stout, erect, lvs clasp stem, hairy at nodes, veins prominent, smaller numerous veins between, lvs broad, reflexed, scabrous

Panicum clandestinum, see Panic Grass

Pennisetum setaceum, see Fountain grass, Blue

Phalaris arundinaceae, Picta, see Ribbon Grass

Phragmites australis, see Reed, Common

Poa pratensis, see Blue Grass, Kentucky

- Reed, Common, *Phragmites australis* (Gk. growing in hedges; Australian; formerly *communis*, growing in colonies), Poaceae, Grass Family, N end HP/SP, ZCG and SSA, 6'+, August, *spikelets in purplish terminal panicles*, *plume-like*, 6" long, long silky hairs on rachis and parts of upper stem, stem stout, lvs long (1'), 1" wide, *margins scabrous, 2 faint V's in middle third of leaf*
- Ribbon Grass, *Phalaris arundinaceae*, Picta, (Gk. referring to crest-like inflorescence; reed-like; marked), RBT, cult, 12-15" culms erect, 12-15", glaucous, panicle 7-18 cm, narrow, branches spreading, blades striped with wh
- Setaria faberii, see Foxtail, Bristly, Foxtail Grass
- S. geniculata, see Foxtail, Knotroot
- S. glauca, see Foxtail, Pigeon Grass, Yellow Foxtail
- Silver Feather, or Silberfeder, *M. s.* var. variegatus (see note on *Miscanthus;* Chinese; variegated), Poaceae, Grass Family, FdEmp park on Broadway and Main Street, cult, 9/1/00, similar to *Miscanthus sinensis* but with conspicuous wh midrib on blades
- Witch Grass, Coach Grass, Quick Grass, Quack Grass, *Elytrigia repens* (formerly *Agropyron repens;* Gk. *elytron*, bearing elytra or wing covers, as in beetles; creeping), Poaceae, Grass Family, MA and North Street, in clumps, 6'+, in anthesis 6/25/99, stems hollow, lvs flat, 3-10 mm wide, many narrow nerves, slightly hairy above, *spikes erect*, spikelets alternate, flat, *rachis flat on one side, rounded on other or grooved*, glumes awned or not, anthers elongate, 3-5 mm
- Yard Grass, Wire Grass, Goose Grass, *Eleusine indica* (Eleusis, town where Ceres, goddess of harvests, was worshipped; of India), Poaceae, Grass Family, front of Municipal Building, and Maple Lane, 2'+, in anthesis 7/26/99, *spikes digitate*, few, 4-6 in whorls, awnless, lvs soft, flat, *culms flattened*, *pinkish, nodes enlarged*, ligula membranaceous and ciliate, culm sheaths open, much branched, irregularly decumbent

SEDGES AND RUSHES

SEDGES

Sedges are grass-like or rush-like herbs with fibrous roots and solid stems (culms), closed sheaths, and spikelets consisting chiefly of flowers with three stamens; stems usually triangular; the leaves are three-ranked (see glossary); the fruit, an achene, is small, hard, dry and one-seeded, and does not open at maturity; commonly grow in clumps.

- **Bulrush**, *Scirpus expansus* (old name for a rush-like plant; spread out), Cyperaceae, Sedge Family, S of HS, 3'+, seeds formed 7/28/00, stems stout, single, sheaths closed, lvs long, scabrous below, keeled, many parallel veins, inflorescence branched 2-3x, numerous long rays at acute angles, scales roundish, mucronate, gr mid-stripe, achene flat on one side, rounded on other, with ridge, pale
- Carex conjuncta (Gk. keiren, to cut; joined together in pairs), Cyperaceae, Sedge Family, ZCG, 1'+, May, stamens protruding in upper spikes, *spikes interrupted, lower separate from upper, long slender bract at base*, perigyna gr, turning br, scales shorter, whitish, dorsal surface 2-4 nerved, flatly planoconvex, rounded at base, tapering to rough beak, achene br, beaked
- C. crinita var. crinita (see note on Carex; with a tuft of long soft hairs), Cyperaceae, Sedge Family, HP N of SP and HW/VP, tufted, 2-3', 5/26/99 (in anthesis), 9/17/00 (achenes formed), pistillate and staminate spikes, pistillate spikes on long drooping slender peduncles, scales extended into long bristly awn, spikes loosely spreading, no stem lvs, smooth stems longer than narrow lvs, lvs coarse, nodes hairless, bracts below perigyna narrowly awned, br margins, perigyna 2-ribbed, achenes lenticular, constricted on one side
- *C. gravida* (see note on *Carex*; heavy with fruit), Cyperaceae, Sedge Family, E end RF, *tufted*, 1'+, *stem slightly rough above*, *Ivs 5 mm*, sheath loose, thin, pale, mottled, inflorescence dense, bracts setaceous, shorter than hd, scales slender-tipped, some exceed base of perigynum beak, perigynum ylw-br at maturity, with 2-part beak, achene roundish, style base expanded into roundish body from which 2 br styles protrude

Carex hystericina, see Porcupine Sedge

C. tetanica (see note on *Carex*; rigid), Cyperaceae, Sedge Family, W side of parking lot, ZP, 1', late April, *stems triangular, lower lvs many, shorter than stem lvs*, terminal spike staminate, ylw, protruding bracts of achene hyaline, in clumps *Cyperus esculentus, see* **Yellow Nut-Grass, Yellow Nutsedge**

C retrofactus, see **Flat Sedge**

Flat Sedge, *Cyperus retrofractus* (Cypeiros, ancient Greek name; turned back), Cyperaceae, Sedge Fam, ADM, tufted perennial, stem rigid, 3 sided, rough across surface beneath and on midrib above, rays 4-13, glabrous, spikelets dull gr, crowded, widely spreading or recurved, achene trigonous, oblong, three divergent styles

- Porcupine Sedge, Carex hystericina (see note on Carex; hystricina, porcupine-like), Cyperaceae, Sedge Family, ZCG, 1'+, April-May, male flwrs (staminate) slender, terminal, female flwrs (pistillate) in 2-3 dense, prickly-appearing ovoid heads, subtended by long slender lvs, grows in clumps adjacent to wet area Scirpus expansus, see Bulrush
- Yellow Nut-Grass, Yellow Nutsedge, Cyperus esculentus (Cypeiros, ancient Gk. name; edible), Cyperaceae, Sedge Family, adjacent to children's wading pool, Chemka pool, One North Street and Broadway, ZCG, 1-2'+, 8/11/98 and 7/22/00, ylw-br spikelets, growing in umbels on long pedicels, lower involucre bracts surpass inflorescence, flattened, numerous in short cylindric spikes with bushy appearance, stigmas 3, achene 3-sided, scales nerved, stem smooth, stout, triangular, leafless above, basal below, lvs smooth, basal, sweet-scented

RUSHES

Grass-like herbs, liliaceous in structure, somewhat sedge-like; small greenish flowers in cymous clusters with grass-like glumes (sepals) and similar petals in separate whorls; 3-6 stamens, single styles, 3 filiform hairy stigmas with a superior ovary that forms a 3-parted capsule. Stems pithy or hollow, simple, glabrous to narrow, terete, filiform leaves or leafless stems.

Path Rush, Juncus tenuis (classical L. for a binder, used for weaving and basketry; slender), Juncaceae, Rush Family, ZCG and entrance path to Chemka pool, common, *in clumps, 8-10*"+, fruiting 6/26/99, *Ivs basal, grooved one side*, 1/3-1/2 height of stem, narrow, *Ivs above flwr parts exceed inflorescence*, inflorescence loosely branched, sepals 6, lanceolate, keeled, hyaline margins, exceed ovary, frt oblong-ovoid, falsely 3-parted, turning br at maturity, manyseeded

FUNGI

A group of variable saprophytic and parasitic lower plants that lack chlorophyll. Fungi originate from microscopic spores and reproduce both sexually and asexually. Fungi are the fruit of the germinating spores. They lack roots, stems, leaves, flowers and seeds. Readily observable fungi are mushrooms that have a fruiting body with a cap and stalk. The body of a mushroom is made up of slender filaments known as mycelium. Individual filaments are known as hyphae that penetrate the soil, wood, bodies of other plants or wastes such as dung, fallen leaves, twigs and logs. Fruiting may last only a few weeks or from early spring until late fall. The fruiting body may be in the form of a cup, club, cap and stalk, bracket, coral-like head or puffball.

Familiar fungi are the gill fungi that have a fruiting body made up of a stalk and cap, with sheet-like gills hanging from the undersurface of the cap. Pore fungi have a layer of tubes on the undersurface that look like small holes or pores.

Some mushrooms are edible, others are not. Only experienced collectors who know how to identify them should attempt their consumption.

- Barnyard Cup, *Peziza visiculosa* (puffball, cup-shaped; with vesicles, because of fringed ridges of cup), Pezizaceae, Cup Fungi Family, RBT, May, large, deep ylw-br cup; outer surface of cup scurfy, inner cup br, smooth, ylw-br to ylw, grows on soil on short stalk
- **Common Cavalier**, *Melanoleuca melaleuca (Gk.* incised, because of cracked cap; black and white), Tricholomataceae, Gill Fungus Family; RBT on wood chip pile, July, small to medium, thin flat, br cap with shallow depression, convex, then becoming flat, dingy white notched gills, slender brownish hairy stalk
- **Cracked Earthscale**, *Agrocybe dura* (field grass; hardy), Bolbitiaceae, Earthscales Family, RBT Extension, June, small to medium, yellowish, round to flat cap, obscure hump, irregullarly cracked, showing white flesh, firm, rigid cylindrical stalk, slightly sticky, bulbous base
- **Deer Mushroom**, *Pluteus cervinus* (L. a shelter, low wall; deer-like, tawny, stag colored), Pluteaceae, Roof and Sheath Mushroom Family, RBT, bell-shaped, gray to brownish cap, gills pinkish tinged, stalk wh to gray, firm, solid, cap separates readily from stalk, grows on decaying wood
- Inky Cap, Coprinus atramentarius (Gk. koprinos, of dung; L. inky, clothed in black),Coprinaceae, Ink Cap Family, large, *bell-like*, cap gray to brownish, tinged with br, pointed toward cap tip, becomes *ink-like in maturity*
- Oak Maze-gill, Daedalea quercina (Gk. Daidalos, referring to mythogical Daedalus, builder of Cretan labyrinth; pertaining to oak), Polyporaceae, Polypore Family, RBT, September, flattened on stumps, wh to gray, thick wavy margins, pale walls, thick, maze-like undersurface, fleshy thick wood, lacks stalk
- Puffball, Giant, Calvatia gigantea (L. bald; gigantic), Lycoperdaceae, Puffball Family, RBT, October, cap large, rd, wh, smooth, but flakes at maturity, rootlike attachment to soil, spews thousands of ylw-br spores when struck, grows in open places

- **Puffball, Pear**, *Lycoperdon pyriforme* (L. wolfsfoot, like club moss; pear-shaped), Lycoperdaceae, Puffball Family, RBT, S of MTA, 10/16/05, forms clusters of rd *pear-shaped caps*, smooth wh to brownish, attached by stringy-like strands to decaying wood, pores on top of cap may be slit-like
- **Redbelt**, *Fomitopsis pinicola* (L. tinder; pine-like), Polyporaceae, Polypore Family, Hillside Park, August, cap reddish-br, convex to hoof-shaped, grooved, large, thick woody bracket, attached at one side to wood on log, clustered, br to gray upper surface, wh to rd branched on margins
- Stinkhorn, Dog, *Mutinus caninus* (without a point, blunt; sharp-toothed), Clathraceae, Stinkhorn Family, RBT plateau, May, no cap, long, slender pointed stalk, upper stalk coated with fetid slim, stalk hollow, reddish orange, volva white to yellowish, grows in clumps
- **Stropharia, wine-red**, or **Rough-Ring**, *Stropharia rugosoannulata* (Gk. *strophos*, twist, to turn; wrinkled and ringed), Strophariaceae, Ringstalk Family, RBT, 6/4/05, large, purplish br cap, streaked, *thick dingy stalk has two-layed ring*, lower, with recurved claw-like scales, turns from bell-shaped upward or split at maturity
- **Sylvan Mushroom**, *Agaricus sylvicola* (from Greek agarikon, a fungus; growing in the woods), Agaricaceae, Field Mushroom Family, RBT plateau, June, small to medium, smooth white cap, convex, yellowish disk when mature, chocolate br gills when mature, free from stalk, stalk white, yellowish when bruised, pinkish br when mature, bulbous, hollow at maturity
- **Tufted Coincap,** *Collybia confluens* (small coin; L. confluent, because of tuft-like stalks) Tricholomataceae, Gill Fungus Family, RBT, April, small to medium, paper thin,dry, br, cap convex at first, becoming flat on slender stalk, gills free from stalk, stalk enlarged at base, hollow, hairy, grows in clumps on decaying wood
- **Turkeytail**, *Coriolus versicolor* (tough; variable or changing in color), Polyporaceae, Polypore Family, RBT, tough to woody when mature, *found attached laterally on wood*, tiny pores on whitish underside, *multicolored upper surface of narrow concentric strips* (turkeytail), brackets may overlap
- Wollystalk, Agaricus subrutilescens (from Greek agarikon, a fungus; reddishbrown), Agaricaceae, Gill Fungi Family, RBT Extension, September, grows on wood chips, bell-shaped at first, reddish brown, later expanding to humped or flat; reddish-brown scales in irregular concentric rings against dingy white background, no odor, gills free, white, numerous, stalk cylindrical, not hollow, fibrous, membranous ring, bulbous at base

ANNEX A. Glossary of Terms Used In Text

Achene	A small, hard, dry, nonsplitting fruit containing a seed
Acuminate	Tapering gradually to a narrow tip or sharp point
Acute	Ending in a sharp point
Adnate	Indicates how gills are broadly attached to stalk or stipe
Alternate	Not in pairs; attached singly on a stem
Aments	A catkin; a pendulous spike of male or female flowers subtended
	by scaly bracts, as on birches and willows
Annual	Of one year's duration
Annulus	A ring on upper part of stalk or stipe, or partial veil
Anther	Upper part of a stamen that contains pollen grains; much variation
	in shape and arrangement
Anthesis	The expansion or the time of expansion of a flower
Attenuate	Tapering very gradually to a very slender tip; more extreme than
	acuminate
Auricled	Lobed, as with the "ear" at the base of the pinna of a Christmas
	Fern
Axil	Angle between the upper side of a leaf and the stem from which it
	grows
Axillary	In or related to the axis
Basal leaf	Leaves that are located only at the base of the stem
Base of leaf	Lower portion of a leaf connected to a petiole or stem; much
	variation from leaf to leaf
Bulbous	Enlargement at base of mushroom stalk
Bristle-tipped	Leaves, bracts or phyllaries often have slender projections at their
	tips
Bristly	Stems, leaves and fruits with large, small, weak, stout, curved
	thorns or projections
Calyx	The outer perianth of a flower
Campanulate	Bell-shaped
Сар	Various shaped and colored upper part of mushroom attached to
	stalk or stipe
Cespitose	Growing in low clumps
Chambered pith	When cut longitudinally, the pith of a stem is exposed, showing
	partitions or partitions at the leaf nodes; the pith may also be an
	uninterrupted core (see pith)
Clawed petals	A slender or narrowed portion at the base of a petal
Clusters	Groups of plant heads; a bunch
Coaetanous	Flowering as leaves expand
Coarsely toothed	Margins of a leaf may have rather large teeth, some distance apart;
	dentate
Compound	Once, twice, ternately, refers to leaves that are divided once, twice,
	three times
Cordate	Heart-shaped, often referring to the base of a leaf
Coriaceous	Leathery
Corolla	Collectively, the petals of a flower; enormous variations occur

Corymb	An inflorescence in which the outer pedicels are longer than the
-	inner and the flowers appear as flat or round-topped clusters
Crenate	Toothed along margins; teeth rounded
Cultigen	A plant that has grown through cultivation
Culm	The stem of a grass or sedge
Cuneate	Wedge-shaped, or triangular, with the narrow end at point of
	attachment
Сир	Cup-shaped fruiting body of cup mushrooms
Cyme	A flat-topped or convex cluster of flowers; the terminal flower
-	usually blooms before others on the branch
Cymose	Bearing cymes or cyme-like
Decussate	Alternating in pairs at right angles to the pair above and below
Deltoid	Triangular
Dichotomous	Forking regularly by pairs
Dichotomous key	An analytical key to groups divided into two contrasting divisions
,	and contrasting pairs of subdivisions
Dioecious	Male flowers are on one plant or part of the plant, females on
	another, or another part
Disk flower	Flowers in the center of a sunflower-like plant, usually tubular and
	surrounded by ray flowers
Doubly compound	Divided into separate leaflets but united as a whole leaf
Doubly pinnate	A feather-like arrangement of leaves; leaflets are on the sides of
	the midrib
Entire	Toothless; a margin of a leaf without teeth, or any part of a plant
	without marginal appendages of one kind or another
Emarginate	Having a shallow notch at the extremity
Fascicle	A small, close bundle or cluster
Fiddlehead	The coiled early stage of a fern; looks like the head of a fiddle
Filament	A slender strand, commonly referring to the stalk supporting an
	anther of a stamen
Follicle	A fruit formed from a simple pistil that splits along a seam at
	maturity; milkweed pods, e.g.
Frond	The leaf of a fern; much variety in shape, structure and size
Frond, sterile	A frond that has no spore-bearing fruiting bodies (sporangia)
Fruit	The seed-bearing part of a plant; enormous variation
Gills	Radially arranged platelike parts on undersurface of the cap of
	gilled fungi
Glabrous	Smooth, without hair or glands
Glomerule	A dense small cluster
Glume	One of a pair of bracts at the base of a grass spike
Grooved	Many stems have channels on their surface, sometimes several
Hirsute	Hairy, with coarse or stiff hairs
Hyaline margins	Transparent or translucent edges of a leaf
Inflorescence	A flower cluster of a plant
Involucre	A circle of bracts (modified leaves) supporting a flower or flower
	clusters (as sunflowers)

Lanceolate	Shaped like a lance or sword that is narrow and pointed at the
	upper end
Leaf	The blade of a plant, simple or compound, usually with a bud at the base of a petiole. Confusing when a large leaf, made of many parts (such as Kentucky Coffee Tree), is a leaf. All the rest are leaflets
Leaflets	A part of a leaf; a leaf usually has a petiole at its base and a bud at the base of the petiole, but a leaflet does not
Leaf scar	A mark left on a stem when a leaf is removed or fallen, exposing one or more bundle scars (small dots that show where the tubes were that transmitted water and minerals up or down a stem)
Leafy spike	Flowers of some plants have variously sized and shaped leafy parts among them, especially spike-like flower heads
Lemma	One of a pair of bracts that generally subtend individual flowers in grass spikelets
Lenticels	A slightly raised area in the bark or root, circular or striped, seen on cherries, birches, young poplars
Ligule	Flattened part of ray-corolla in the <i>Asteraceae</i> ; appendage of the leaf at junction of blade and sheath in grasses and sedges
Lobed	Marginal indentations that do not reach the midvein of a leaf
Midrib	The central or main rib of a leaf or similar structure
Mucronate	Tipped with a short, sharp, slender point
Node	Where leaves or stems are attached, sometimes with stipules (see below)
Obovate	A shape like an oval but fatter
Opposite	Leaves, stems, etc., growing directly across from one another
Orbiculate	Circular; critically important in identification
Ovary	Fruit of the plant; that part containing seeds
Palate	A raised part of the lower lip of a corolla, constricting or closing the throat
Palmate	A shape of leaf with three or more divisions, the divisions radiating from one point like the palm of a hand; veins may be palmate too
Panicle	Paniculate, an elongated, diversely branching flower cluster
Parallel-veined	Veins of the leaves of grasses, e.g., run parallel to one another; veins of other leaves, such as the dogwoods, are parallel to the margin of the leaf; other veins are parallel to the midvein, as in some goldenrods
Pedicel	The stalk of a flower, of variable length
Peduncle	A primary flower stalk, supporting either a cluster or single flower
Peltate	A leaf arrangement in which the leaf is formed around a petiole
Pendant	Hanging down
Pendulous	Same as above
Perennial	Lasting year after year
Perfoliate	Describes a leaf that surrounds a stem
Perianth	The calyx and/or corolla together
Perigynium	The special bract that encloses the achene of a Carex
Perigynous	Adnate to the perianth around the ovary, not at its base

Detelo	A part of the earally comptimes concrete from any another
Petals	A part of the corolla, sometimes separate from one another,
Petiole	sometimes grown together; often colorful The stem of a leaf
Phyllary	A leafy part at the base of the head of a flower, often quite slim and
Filylialy	pointed; a bract
Pinna	A finger-like lobe of a fern's frond, present on some ferns, absent
	on others
Pinnate	Arrangement of leaflets alongside a common axis
Pinnately divided	Cut up into pinna or leaflets
Pinnatifid	Pinnately cleft
Pinnule	A subdivision of a fern's pinna, sometimes toothed, sometimes not;
	may bear sporangia
Pistil, pistillate	Female part of a flower consisting of a style or stalk-like projection, stigmas (one or more) at its tip and an ovary containing seeds at its
	base
Pith	The central core of a stem; textures and color are important to identification
Pubescent	Quite hairy
Raceme	An elongate, unbranched inflorescence where individual flowers
	are borne on short stems (pedicels) along the stalk
Racemose	Like a raceme
Rachis	The stalk of a fern on which pinna are borne; above the stipe, which is below the pinna
Radiate	Growing from a central point; star-shaped
Ranked	Two or three plant parts (leaves, needles or twigs) that appear to
	be on both sides of a stem or on three sides of a stem when looked
	at from one end; a Balsam Fir is two-ranked; a Princess Tree is
	three-ranked (or whorled); grasses are two-ranked, sedges are
	three-ranked
Ray flower	Outer part of a sunflower-like plant, also called strap flowers
D (1)	because they resemble that shape
Reflexed	Bent down, such as limbs of some trees, fronds of some ferns or
Deteros	sepals of some flowers Directed backward or downward
Retorse Rhizome	A prostrate or subterranean stem
Rhizomatous	Bearing rhizomes
Ring	Remains of partial veil (tissue covering gills of young fungi) on the
King	stipe of some gill and pore fungi
Rugose	Wrinkled
Sac-like	A bulbous shape of some flowers, like the Moccasin Orchid, or
	Dutchman's Breeches
Sagittate	Arrowhead-shaped
Samara	"Wings" of some trees containing a seed; maples are good
_	examples
Secund	Flowers or branches all on one side of the axis
Scabrous	Rough to the touch

Sepals	Parts of the flower head below the corolla or petals; often green and linear, with sharp tips; a flower without petals may have sepals
	only
Serrate	Toothed; some leaves have teeth on the teeth and thus are doubly toothed
Serrulate	Toothy
Sessile	Growing up to and/or around a stem
Sheath	A tubular envelope embracing the internodes of a grass stem (culm); a thin membrane surrounding the stem
Simple	Not compound; a leaf with a single blade is simple, such as maples
Sinus	A cleft or recess between two lobes
Spadix	Club-shaped fleshy stalk on which small flowers are located
Spathe	Large bract enclosing a flower cluster, e.g., hood of a Skunk
•	Cabbage
Spatulate	Oblong, with the basal end attenuate, like a druggist's spatula
Spike	An elongate flower cluster with sessile or nearly sessile flowers;
•	grasses are good examples
Spikelet	A small or secondary spike
Sporangia	The spore-bearing sac of a fern, located on the underside of the
	pinnule; location of the sporangia is critical to identification of the
	fern
Stamens, staminate	Male parts of the flower, bearing anthers attached by filaments
Stipe	Stalk of a fern below the pinna; stem or stalk of a fungus
Stipules	Small leafy projections growing at the nodes of leaves
Stoloniferous	Bearing stolons; basal branch that is inclined to root
Stramineous	Straw-colored
Style	Elongated part of a pistil; bears the stigmas at the upper end
Subtended	Growing below, like bracts below a flower head
Tendril	A slender coiling part of a plant that aids in support of climbing;
	may be forked or have rounded disks at the tips; an outgrowth of
	the stem. Grapevines and Virginia Creeper have tendrils
Terate	Rounded, as with many plant stems; circular in cross-section
Ternately	Divided into three parts, such as leaves of a Kentucky Coffee Tree
compound	or Devil's Walking Stick
Thallus	A plant body that is not definitely composed of stem, roots or
	leaves, as with duckweeds; also known as a frond
Tomentose	Very hairy
Trifoliate	Three-parted
Truncate	Cut off sharply, like the tip of the Tulip Tree leaf
Umbel	A special form of flower head resembling an upturned umbrella
	since branches grow upward from a central point
Volva	Universal veil at base of the stalk of a fungus
Velvety	Smooth and soft, like leaves of the Velvet Leaf or Princess Tree
Whorled	Gathered around a central point, like a node

Adapted from sources listed in Introduction

ANNEX B. Names of Individuals Cited in Plant Names

Position, dates of birth and death, Latinized name and plant associated with that name

- Aesculapius, Greco-Roman god of medicine; physician
- Albizzi, Filippo degli, Italian naturalist who introduced the tree to Europe in 18th Century, *Albizzia* (Silk-Tree, Mimosa)
- Aubert, George P., discoverer of China Fleece Vine (*Polygonum aubertii*) in 1907
- Bentham, George, 1800-1884, English herbalist and taxonomist, *Benthamia japonica* (Kousa Dogwood)
- **Broussonet, August**, 1761-1807, French physician and naturalist, Montpelier, *Broussonetia* (Paper Mulberry)
- Buddle, Adam, 17th Century English botanist, Viburnum buddleifolium
- **Clayton, John**, 1688-1773, early American botanist who contributed to the *Flora Virginica*, *Claytonia* (Spring Beauty)
- **Collinson, Peter**, 1694-1768, English botanist, *Collinsonia* (Herb-Balm, Richweed
- **Commelin, Jan**, 1629-1692, Casper, 1667-1731, Dutch botanists, *Commelina* (Dayflower)
- **Conring, Hermann**, 1606-1661, Professor at Helmstadt, Germany, *Conringia* (Hare's-ear Mustard)
- **Dennstedt, August, Wilhelm**, wrote on flora of Weimer, 1830, *Dennstaedtia* (Hay-Scented Fern)
- **Deutz, Jon van der**, patron of Thunberg, named two species of *Deutzia* in 1781, (Hydrangea)
- **Diereville, N.**, French traveller who brought specimens from Canada to French botanist Tournefort in 1699, *Diervilla* (Bush-Honeysuckle)
- Dioscorides, Greek naturalist of lst Century, Dioscorea (Yam)
- Douglas, David, 1799-1834, English botanist, Douglasii (Douglas Fir)
- Duchesne, Antoine Nicolas, 1747-1827, wrote on *Fragaria*, *Duchesnea* (Indian Strawberry
- **Eupator, Mithridates**, King of Pontus, an ancient country in NE Asia (now Turkey), who used a species of *Eupatorium* in medicine, 132-63 BC
- **Euphorbus**, physician to King Juba of Numida (NW Africa), *Euphorbia* (Milk Purslane)
- Faber, Ernst, discoverer of a Foxtail grass in 1910, Setaria (Bristly Foxtail)
- Forsyth, William, 1737-1804, Forsythia (Goldenbell)
- **Gagnepain, Francois**, 1866-1952, named for a species of Barberry, *Berberis Gagnepainii*
- Galinsoga, Mariano Martinez de M., Spanish botanist of 18th Century, *Galinsoga* (Quickweed)
- Gerarde, John, 1545-1611, herbalist, Gerardia (Smooth False Foxglove)

- **Gleditsch, Johann Gottlieb**, 1714-1786, botanist at time of Linnaeus, *Gleditsia* (Honey-Locust)
- **Gronovius, Jan Frederick**, 1690-1762, teacher of Linnaeus, *Hieracium gronovii* (Hawkweed), *Cuscuta gronovii* (Dodder)
- Ker, John Bellenden or John Ker Bellenden, 1764-1842, Kerria (Japanese Rose)
- Kitaibel, Paul, 1757-1817, Kitaibelliana, Viola (Field Pansy)
- Koelreuter, Joseph Gottlieb, 1733-1806, German natural historian, *Koelreuteria* (Pride-of-India)
- Krig, David, German physician who collected plants in Maryland in 1791, *Krigia* (Dwarf Dandelion)
- I'Obel, de, Matthias, 1538-1616, Flemish botanist who wrote *Plantarum seu Stimpium Historica*, 1576, *Lobelia* (Great Blue)
- Lagerstroem, Magnus von, 1676-1759, a friend of Linnaeus, *Lagerstromia* (Crape Myrtle)
- Linder, Johann, 1676-1723, Swedish botanist and physician, *Lindera* (Spicebush)
- Lonizter, Adam, 1528-1586, German physician and botanist, *Lonicera* (Honey-suckle)
- Ludwig, Christian Gottlieb, 1709-1772, Professor of Botany, Leipzig, Germany, Ludwigia (False Loosestrife)
- Maclure, William, 1763-1840, American geologist, Maclura (Osage Orange)
- **Magnol, Pierre**, 1683-1715, Director of Botanic Gardens, Montpelier, France, (Magnolia)
- Matteucci, C. Italian physicist, 1800-1868, (Ostrich Fern)
- M'Mahon, Bernard, 1775-1816, American horticulturist (Mahonia)
- Menzies, Archibold, 1754-1842, English surgeon and naturalist, *Menziesia* (*Mock Azalea*)
- **Mitchell, John**, 1676-1768, American botanist, a correspondent of Linnaeus, *Mitchella* (Partridge Berry)
- Monardes, Nicolas, author of tracts on medicinal and other plants in latter half of 16th century (Bergamot)
- **Muhlenberg, Gotthilf, Henry, Ernest**, 1753-1815, American botanist, *Muhlenbergia* (a grass, "Muhly") and *Quercus Muhlenbergia* (Chestnut Oak)
- Pattor, Joseph, French botanist
- Pluchea, Abbe N. A., French botanist, 18th Century, Pluchea (Fleabane)
- Puerari, M W., 1765-1845, Swiss botanist, Pueraria (Kudzu-vine)
- Rafinesque-Schmaltz, Constantine Samuel, 1783-1840, Viola var Rafinesquii (Field Pansy)
- Robin, Jean, 1550-1629, French herbalist to King Henry IV and his son, Vespasian, *Robinia* (Locust)
- Rudbeck, Olaf, 1630-1706 and Olaf, the son, 1660-1740, predecessors of Linnaeus at Uppsala (Black-eyed Susan)
- Salvini, Antonio Maria, 1636-1729, Florentine botanist, Salvinia (Floating Moss)
- Sargent, Charles S., 1841-1927, American botanist, Sargentiana (Magnolia)

- Siebold, Phillipp Franz von, 1796-1866, Dutch botanist, Sieboldii (Viburnum)
- **Theophrastus**, 370-285 B.C., "Father of Botany," Greek philosopher, botanist and author of *Historia Plantarum* (Inquiry into Plants), the oldest known botanical work, a student of Aristotle
- **Thunberg, Carl Pehr**, 1743-1828, Swedish botanist from Uppsala, *Thunbergia* (Black-eyed Susan) and *Berberis thunbergii* (Barberry)
- Tournefort, Joseph Pitton de, 1656-1706, early plant taxonomist
- Tovar, Simon a, Spanish physician in 16th Century, *Tovara* (Jumpseed)
- **Tradescant, John, the elder**, 1637, gardener to Charles the First of England, *Tradescantia* (Spiderwort)
- Weigel, Christian E. von, 1748-1831, German botanist, *Weigelia* (Bush-honey-suckle)
- Wister, Caspar, 1760-1818, American anatomist, *Wisteria* (Wisteria)
- **Zespedies** or **Cespedes**, **V.M.**, Spanish Governor of East Florida in 18th Century, *Lespedeza* (Bush-clover)
- Ziz, Johann Baptist, 1779-1829 Rhenish botanist, Zizia (Golden Alexanders)

Adapted from sources listed in Introduction

ANNEX C. Family Names

	-	
1.	Aceraceae	Maple
2.	Actinidiaceae	Actinidia
	Adiantaceae	Maidenhair
	Agavaceae	Agava
	Alismataceae	•
		Water-Plantain
-	Amaranthaceae	Amaranth
	Anacardiaceae	Cashew
8.	Apiaceae	Carrot
9.	Apocynaceae	Dogbane
10.	Aquifoliaceae	Holly
11.	Araceae	Arum
12.	Araliaceae	Ginseng
13.	Aristolochiaceae	Birthwort
14.	Asclepiadaceae	Milkweed
	Aspleniaceae	Spleenwort
	Asteraceae	Aster
	Balsaminaceae	Touch-me-not
	Berberidaceae	Barberry
	Betulaceae	Birch
-		
	Bignoniaceae	Trumpet-Creeper
	Boraginaceae	Borage
	Brassicaceae	Mustard
	Buddlejaceae	Butterfly bush
	Buxaceae	Boxwood
25.	Caesalpiniaceae	Caesalpinia
26.	Campanulaceae	Bellflower
27.	Cannabaceae	Indian Hemp
28.	Caprifoliaceae	Honeysuckle
	Caryophyllaceae	Pink
	Celastraceae	Staff-tree
	Cercidiphyllaceae	Katsura-tree
	Chenopodiaceae	Goosefoot
	Clethraceae	Clethra
	Clusiaceae	
	Commelinaceae	Mangosteen
		Spiderwort
	Convolvulaceae	Morning-glory
	Coprinaceae	Ink Cap
	Cornaceae	Dogwood
	Crassulaceae	Stonecrop
40.	Cucurbitaceae	Gourd
41.	Cupressaceae	Cypress
42.	Cuscutaceae	Dodder
43.	Cyperaceae	Sedge
	Dennstaedtiaceae	Bracken
	Dioscoreaceae	Yam
5.		

46. Elaeagnaceae 47. Equisetaceae 48. Ericaceae Heath 49. Euphorbiaceae Spurge 50. Fabaceae 51. Fagaceae Beech 52. Fumariaceae 53. Geraniaceae 54. Ginkgoaceae Ginkgo 55. Grossulariaceae 56. Haloragaceae 57. Hamamelidaceae 58. Hippocastanaceae 59. Hydrangeaceae 60. Hydrocharitaceae 61. Hydrophyllaceae 62. Iridaceae Iris 63. Juglandaceae Walnut 64. Lamiaceae Mint 65. Lardizabalaceae 66. Lauraceae Laurel 67. Lemnaceae 68. Liliaceae Lilv 69. Linaceae Flax 70. Lycoperdaceae Puffball 71. Lythraceae 72. Magnoliaceae 73. Malvaceae Mallow 74. Menispermaceae 75. Mimosaceae 76. Molluginaceae 77. Monotropaceae 78. Moraceae 79. Myricaceae 80. Nyctaginaceae 81. Oleaceae Olive 82. Onagraceae 83. Onocleaceae Orchid 84. Orchidaceae 85. Orobanchaceae 86. Osmundaceae 87. Oxalidaceae 88. Papaveraceae Poppy 89. Pezizaceae

90. Phytolaccaceae

Oleaster Horsetail Pea or Bean Fumitory Geranium Gooseberry Water milfoil Witch-hazel Horse-chestnut Hydrangea Frog's-bit Waterleaf Lardizabala Duckweed Loosestrife Magnolia Moonseed Mimosa Carpet-weed Indian Pipe Mulberry Bayberry Four-o'clock Evening-primrose Sensitive Fern Broom-rape Royal Fern Wood sorrel Cup Fungi Pokeweed

 91. Pinaceae 92. Plantaginaceae 93. Pluteaceae 94. Poaceae 95. Polemoniaceae 96. Polygonaceae 97. Polypodiaceae 98. Portulacaceae 99. Primulaceae 100. Pyrolaceae 101. Ranunculaceae 	Pine Plantain Roof and Sheath Grass Phlox Smartweed Polypody Purslane Primrose Shinleaf Buttercup
96. Polygonaceae	Smartweed
97. Polypodiaceae	Polypody
98. Portulacaceae	Purslane
99. Primulaceae	Primrose
100. Pyrolaceae	Shinleaf
101. Ranunculaceae	Buttercup
102. Rosaceae	Rose
103. Rubiaceae	Madder
104. Salicaceae	Willow
105. Salviniaceae	Floating Fern
106. Santalaceae	Sandalwood

107. Sapindaceae Soapberry 108. Saxifragaceae Saxifrage 109. Scrophulariaceae Figwort 110. Simaroubaceae Quassia 111. Solanaceae Nightshade 112. Strophariaceae Ringstalk 113. Taxaceae Yew **Bald Cypress** 114. Taxodiaceae 115. Tiliaceae Linden 116. Typhaceae Cattail 117. Ulmaceae Elm 118. Urticaceae Nettle 119. Verbenaceae Vervain Violet 120. Violaceae Grape 121. Vitaceae

ANNEX D. Flora Listed in Guide in Areas Adjacent to Hastings

TREES

Alder, European Black, W side NTRA pond Ash, European, Hudson Road, Irvington Beech, Cut-leaved, OCA, Columbia Labs Campus, Irvington Magnolia, Bigleaf, OCA, S of Clinton Avenue, Irvington Pagoda Tree, Japanese, S of Main Street, Irvington Pine, Scotch, MCo Campus, Dobbs Ferry Yellowwood, OCA S of Ventilator #19

SHRUBS

Sumac, Fragrant, near entrance to Kingsland Point Park Wayfaring Tree, opposite Ardsley-on-Hudson station

VINES

Black Swallowwort, below OCA ventilator, Sleepy Hollow Cemetery, North Tarrytown Kudzu Vine, W of OCA opposite Riverpointe development Trailing Wild Bean, CPP

HERBACEOUS PLANTS

Blue-eyed Grass, OCA near Hillside Road, Dobbs Ferry Cranesbill Small-flowered, OCA, N of Irvington Middle School Fleabane, Lesser Daisy, CPP Fleabane, Marsh, CPP Goldenrod, Sweet, CPP Goldenrod, Zigzag, OCA S of MCo Hawkweed, Hairy, RSPP, RH Hawkweed, Orange, RH Indigo, Wild, CPP Lily, Canada, RSPP Madder, Wild, OCA S of Dobbs Ferry Mallow, Swamp Rose, NTRA Ragged Robin, RSPP Ragwort, Golden, RSPP Toothwort, Cut-leaved, Dobbs Ferry High School woods Wake Robin, RSPP

FERNS

Maidenhair, RSPP Long Beech Fern, RSPP Maidenhair Spleenwort, RSPP

ANNEX E. Phenological Table 2002

Dete	Itom	Lagation Notes
Date	Item	Location, Notes
1/27	Lesser celandine in If	OCA at Pinecrest
	Cherry tree in flwr	78 Maple
1/28	Terminal buds of Sargents Maple	37 Whitman Street
	fuzzy	
	Gill-over-the ground beginning to flwr	Front of St. Matthews Church
2/13	Witch-hazel in flwr	103 Farragut Avenue
2/16	Crocus, Snowdrops, daffodils in flwr	11 Villard
	Vinca in flwr	Flower Avenue
3/3	Chickweed in flwr	RBT
	Grackle, Red-wing	RBT
	Blue, Yellow, White crocuses in flwr	RBT
3/9	Lesser celandine in flwr	ZCG
0,0	Silver maple in flwr	27 Villard
3/14	Calleryana pear buds opening	Warburton Avenue, Bob's Service
0/14	Calleryana pear bads opening	Station
	Mocking birds pairing	Maple Avenue
	Robin sighted	RBT
		SSA
	Box elder stems turned green Veronica in flwr	
0/1E		One North Street
3/15	Viburnum leafing	25 MPA
0/17	Forsythia in flwr	RBT
3/17	Andromeda flowering	RBT
	Many Robins on trail	RBT
	French pussy willow catkins forming	Sarita's shrubbery, RBT
	Rugosa rose leafing	E.slope, RBT
	Vinca in flwr	SSA
	Dandelion in flwr	One North Street
	Shepherd's purse in flwr	ZCG
	Spicebush beginning to flwr	ZCG
	Field mustard in flwr	ZCG
3/21	Sargent's Magnolia beginning to	37 Whitman Street
	blossom	
3/31	Daffodils in flwr	RBT
	Vinca in flwr	RBT
4/1	Purple dead nettle in flwr, abundant	RBT
., .	Lesser celandine, in flwr, abundant	RBT
	Spicebush in flwr	MA
	Silver maple in flwr	MA
	Speedwell (Veronica agrestis) in flwr	ZCG
1/2		VFW
4/2	Cherry (cultivated) in flwr	
	Chickadee (cleaning nest hole)	RBT
	Silky dogwood beginning to If	RBT (Max's mound)
	Henbit in flwr	One North Street

Date	Item	Location, Notes
4/19	Jetbead in flwr	RBT
4/20	Yellow Kerria, Flowering Dogwood,	Whitman Street
	Lilacs in flwr	
	Pink Dogwood in flwr	11 Villard
4/21	Garlic mustard in flwr	RBT
	Yellow Warbler hrd	RBT
4/26	2 Turkey vultures seen, chased by	RBT
1/20	redwings	
	Coltsfoot in fruiting stage	RBT
	Jetbead in flwr	RBT
4/29		ZCG
4/29	Bulbous buttercup in flwr	ML
	Alyssum in flwr	
	Squirrel corn in flwr	ML Mus Distance string to to t
4/00	White poplar seeds floating in breeze	MunBldg parking lot
4/30	Spirea in flwr, Paulownia in flwr	MA, entrance to FP lot; RBT
5/1	Orioles may have been heard	Hook and Ladder #1
5/3	Baltimore oriole, Yellow warbler	RBT
5/5	House wren, Kingbird	RBT
5/14	Common hop in If	RBT
5/21	Multiflora rose in flwr	RBT
5/25	Gill-over-the-ground	RBT
6/1	Catalpa in flwr	RBT
6/7	Daisy fleabane, Bindweed, Red	RBT
	clover, Quack grass	
6/9	Purple-flowering raspberry, Dame's	RBT
	rocket, Cow parsnip in flwr	
	Oriole in nest	RBT
6/11	Blue-eyed grass in flwr	TLW, at G-W stairs
	Purple-flowering raspberry in flwr	Ditto
	Red raspberry fruiting	WBA
6/15	Tiger lily, Bladder campion, Deptford	RBT
0/10	pink in flwr	
6/21	Crown vetch in flwr	E. end RF
6/22	Motherwort in flwr	RBT
6/29	Albizzia in flwr	26 MA
	White vervain in flwr	
7/23		RBT
0/00	Spider flower blooming	MA, curbside
9/20	New England, Flat-topped aster, Day	RBT
	flower, Touch-me-not, Bindweed,	
	White snake root in flwr. Osage	
	orange syncarp fallen	

TREES	SHRUBS	VINES	HERBACEOUS, etc.
Green Ash	Staghorn Sumac	Bur Cucumber	Mugwort
Princess Tree	Multiflora Rose	Grape, Cat	Sunflower, Woodland, High
(Paulownia)	Rhododendron	Porcelain Berry	Helleborine
Red Oak	Spicebush	Poison Ivy	Solomon's Seal
Locusts: Black, Honey	Arrowwood	Virginia Creeper	Japanese Knotweed
Ailanthus	Red Chokeberry	Japanese Hops	Lady's Thumb
Common Cottonwood	Pepperbush	Bindweed	Ragweed, Great and Lesser
Red Mulberry	Highbush	Bittersweet	Celandine, Lesser and Poppy
Osage Orange	Cranberry	Honeysuckle	Horseweed
Box Elder	Silky Dogwood	Periwinkle	Goldenrods
Maples: Sugar, Norway	Rugosa Rose	Summer Grape	Chickweed
Sycamore	Toringo Crabapple	English Ivy	Gill-over-the-ground
Willows: Weeping,	Autumn Olive	Virgin's Bower	Violets, Common Blue Marsh,
Pussy, Black	Red Raspberry	Dodder	White
White Pine	Privet	FUNGI	Dayflower
Tulip Poplar	Andromeda		Burdock
Sassafras Basswood Black Cherry Hackberry Catalpa Mimosa Slippery Elm Bitternut Hickory Sycamore Balsam Fir FERNS, etc. Maidenhair Ostrich Cinnamon	Bayberry Jetbead Prpl-flowering Raspberry Shadbush Mountain laurel Azalea, Swamp Low bush blueberry Witch-Hazel Scotch Broom Laurel Button bush	Barnyard Cup Inky Cap Mushroom Giant Puffball Turkey Tails Pear-shaped Puffball Deer Mushroom Rough-Ring Wollystalk Tufted Coincap Sylvan Mushroom Stinkhorn, Dog Oak Maze Gill Common Cavalier	Boneset Garlic Mustard Spreading Dogbane Sticktight Quickweed Common Plantain Black-eyed Susan Lamb's Quarters Oxalis Spiny-Leaved Sow Thistle Dandelion White Snakeroot Shepard's Purse Asters, Many-Flowered, N.England, Wh.Wood,
Lady	GRASSES	HERBACEOUS,	Heart-leaved.
Interrupted		etc. (cont.)	Daisy Fleabane
Bracken Horsetail	Common Reed Barnyard Foxtail	Small-flowered Cranesbill Lobelia	Pokeweed Jewelweed Snowdrops Willow Herb
TABULARSUMMARYTREES28SHRUBS26	Finger	Cow Parsnip	Bitter Dock
	Japanese Broom	Dame's Rocket	Evening Primrose
	Ice Danse (Carex	False Dragonshead	Daffodil
	morrowi)	Glasswort	Crocus
VINES14HERBACEOUS65FERNS7GRASSES9FUNGI13Totals162	Fountain grass Witch grass Ribbon grass	Jumpseed Purple Dead Nettle Motherwort Foxglove Bugle (Ajuga) Tickseed	Summer Phlox Cardinal Flower Bergamot Purple, Wild Henbit Coltsfoot Red Clover

ANNEX F. Plants of Rowley's Bridge Trail (June 2003)

ANNEX G. Maps

Trailway Map of Hastings-on-Hudson, 2007 Rowley's Bridge/OCA Trailway







Rowley's Bridge

- 2 Plateau-Hastings Beautification Committee

 - 8 MTA Turnaround/scenic viewing
 - 4 Viewing
- 5 View of Rowley's Bridge
 - 6 Pinetum I
- 7 OCA (Old Croton Aqueduct) culvert
 - 8 Footbridge/reflecting pool
 - 9 Pinetum II

cetch by Christina Griffin

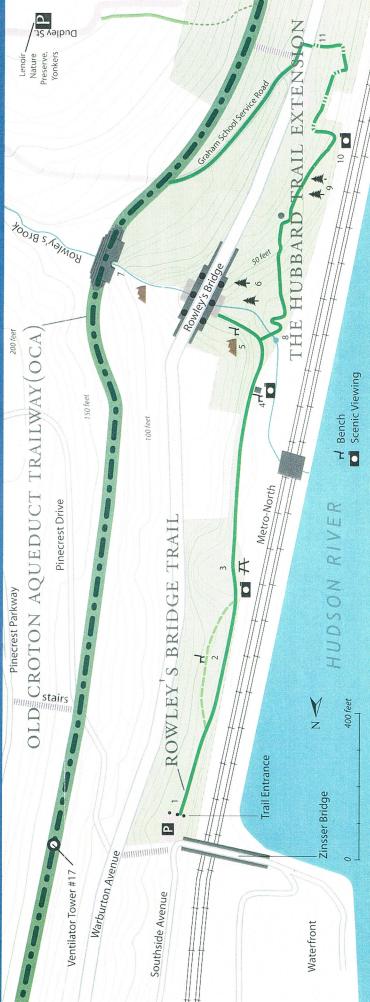
dante -

- 10 Tree stumps/scenic viewing
- 11 Trail access to Warburton Avenue and OCA

Rowley's brook and bridge are named after the Rowley family, who settled in the Pinecrest area of Hastings in 1846. They were gentleman farmers who cultivated grapevines for their vinyard. The 100-foot stone arch masonry bridge was designed in 1892 by Samuel L. Cooper and was an integral part of the Warburton Avenue Extension Program, linking Yonkers with Hastings between 1893-98. For a complete map of the OCA, call 693-5259.

• Frederick Charles

Friends of the Old Croton Aqueduct



OCA culvert above Rowley's Brook

Aconite, Winter...... 47, 63 Adder's Tongue, Yellow ... 47, 63, 93 Alder, European Black......11 Alder, Smooth, Common ... 29 Alexanders, Golden 47, 97 Alyssum, Sweet...... 47, 73 Amaranth 47, 80 Ampelopsis, Asian 41, 45 Andromeda, Japanese. 29, 36 Anemone, Rue 47, 48 Anemone, Wood...... 47, 97 Angelica, Alexanders 48 Angelica, Purple-Stemmed Apple, Domestic11 Apple, Siberian Crab......11 Archangel, Yellow 48, 71 Arctic Beauty 41, 44 Arrowhead, Common... 48, 84 Arrowwood, Northern .. 29, 39 Arrowwood, Southern. 29, 39 Artichoke, Jerusalem...49, 68 Ash, Black......12, 16 Ash, Green 12, 16 Ash, White 12, 16 Ash-leaved Maple......11, 13 Aspen, Big-toothed 12, 24 Aster, Arrow-leaved 49, 50 Aster, Bushy 49 Aster, Calico, Starved 49 Aster, Flat-topped 49, 50 Aster, Heart-leaved 49 Aster, Many-flowered ... 49, 50 Aster, New England50 Aster, Northern Heart-leaved Aster, Panicled 49 Aster, Small White......50 Aster, Squarrose-White49, 50 Aster, White Wood 49, 50

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