

Flora
of the
H. G. Reist Sanctuary*
Niskayuna, NY

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**56 species of Fern, Club Moss, Horsetail, Moss, Liverwort and Lichen
280 Species, 77 families) of Gymnosperm, Dicot and Monocot
R. S. Mitchell and G. C. Tucker (1997) list 3,483 higher plants
for New York State.
The Sanctuary thus hosts 8% of the NYS higher-plant Flora.**

18 October, 2004

The Hudson-Mohawk Bird Club
and

The Association for the Protection of the Adirondacks

***including adjacent wild lands and grounds
of
The Association for the Protection of the Adirondacks**

What is a Flora?

Flora was the Italian goddess of flowers but we go beyond this. A flora is really two things: First, it is the array of plant species present in a particular area and this includes those which you might not see during a particular visit because they may be present only as seeds or as bulbs, corms, rhizomes or other leafless devices for survival over hard times. Second, it is the list of plants competent observers have found at the study site during visits at various times of the year. This list usually consists of both common and Latin/scientific names arranged in some manner facilitating use. A good flora takes years to produce because unlisted species are continually being found and faulty identifications are corrected. It is also important to update a flora periodically; a windstorm with thrown trees and new soil exposures will bring new species to light. Disease will displace species and shorten the list. Birds and other vectors will introduce the seeds of new species. The plant community is continually changing.

Why make a list of the plants in a particular area?

1. It is fun. There is much joy and good health in being out and in contact with ones friends and the rest of the living world. It is also the opportunity for a glorious solitude.
2. It is good training for one's observational and discriminatory skills and this training can be applied to most activities we engage in - be they surgery, accounting, basketball or cooking.
3. The listed flora becomes more and more valuable with time because of its historical character. There is a common need to know what things were like in a certain place and at a certain time. We thus judge the rate and form of change in our world. The outcomes can be disappointing or encouraging. It is sad to learn that a certain species such as the American Chestnut is no longer present, or reduced to small saplings. It is good to learn that another species has reclaimed a habitat after a long period of absence. Proof of this value is the importance people place on early lists of plants – and animals – made by our ancestors.

4. The building of a flora inevitably leads to other questions, and questions are the best fodder for a hungry mind: Why are the leaves of a certain plant shaped as they are? How old is this plant and how long will it live? Where did this plant come from and how did it get here? Is this plant poisonous? Is it a healthful herb? Is this plant an alien and if so should we “control” it? How does this plant survive with its roots submerged in oxygen-free mud? How do you tell one kind of plant from another? How are the different plants related to one another?

5. A flora is essential to wise interaction with a certain place. If there are rare or endangered species present it is important that we know this and work to preserve and enhance them. If a new alien form appears, should we eradicate it before it overwhelms the natives? Knowing the presence and location of various species serves to tell their stories – and each species has a wondrous lore. Consider the stories one can tell in the presence of a Pitch Pine, a White Hellebore or a White Pine. We also learn the health of each species we encounter and this often alerts us to challenges to the whole forest or our own safety and well-being. Further, scholars and scientists often need to know the whereabouts of certain species to best conduct their studies. Further guidance on rare and endangered species is the web page of the Natural Heritage Program within the NYS Department of Environmental Conservation:
<http://www.dec.state.ny.us/website/dfwmr/heritage/plants.htm>

6. Finally, the development of a flora inevitably leads to a hunger for a better understanding of a still bigger picture. How do animals fit in? Shouldn't a fauna and a list of the fungi also be made? Isn't there a great deal of sound pollution? Do motorcycles really need to be so loud? What is the site like at night or in deep winter? How vulnerable is the site to fire or trail bikes? Do dangerous mosquitoes breed in the wetter areas? Why are there so few lichens growing on the tree trunks?

Personnel of the New York Natural Heritage Program and the Thursday Naturalists working in cooperation with the members of the Hudson-Mohawk Bird Club and the Association for the Protection of the Adirondacks produced this flora following the taxonomy of R. Mitchell and G. Tucker as used in the *Checklist of New York State Plants*. It is dedicated to the memory of Dr. and Mrs. Reist, donors of the Reist Sanctuary to the Hudson-Mohawk Bird Club. The Reists are among the elite who have given happiness and well-being to multitudes and their generosity lives on.

Henry Gerber Reist

Dr. Henry Gerber Reist was born 27 May 1862, in Mount Joy, PA. He was an outstanding student going on to earn a degree in mechanical engineering at Lehigh University in 1886, the same school awarding him an honorary doctoral degree in 1922. In 1908, he married Margaret Breed of Lynn, Massachusetts.

After several earlier positions, Dr. Reist joined General Electric in Schenectady in 1894 taking charge of design of alternating current machinery. He remained head of this department of GE until his retirement in 1931. During his tenure he oversaw design of some of the most important and prestigious power generating equipment in the world, e.g. the Conowingo generators in Maryland, the Keokuk and Cedar Rapids generators on the Mississippi River in Iowa and the Niagara water wheels in western New York.

Dr. Reist was a botanist, horticulturist, painter, photographer, member of the Union College faculty, member and officer of the Schenectady Park Board, a member of various honorary and professional societies, holder of many patents in electrical engineering (especially those related to fabricated castings), a widely published author of engineering studies and author of an important family genealogy. He was widely traveled with several trips including Japan and China.

He acquired the Sanctuary lands in the late 1920s or early 1930s, lands which had been the farm of the Pearse family, one of the founding families of Niskayuna. In 1934, he contracted with Paul Schaefer for the restoration of the still-standing Pearse homestead on St. David's Lane. In exchange for his services, Paul received a three-acre portion in the northeastern corner of the

farm that became the site of his home, now the Center for the Forest Preserve of the Association for the Protection of the Adirondacks.

Dr. and Mrs. Reist lived in the Realty Plot in Schenectady until his death on 5 July 1942, at the age of 80. Mrs. Reist assigned this land, 109 acres in extent, to the Hudson-Mohawk Bird Club on 17 November 1965, with expressed limitations:

“ . . . that the premises here in conveyed shall forever be held as a bird sanctuary and nature preserve for scientific, educational, and esthetic purposes, and shall be maintained as far as practical in their natural state and managed in accordance with sound conservation practices, including the undertaking of scientific research projects, the maintenance of fences and foot trails and provided that a nature center and/or club headquarters may be constructed thereon”.

People who have the good sense to set land aside for parks, preserves and wild areas are among the wisest of the wise. Consider the number of happy and therapeutic hours generated by Central Park in NYC and every other public and private park and sanctuary - and the hours keep piling up!

The Setting

The Reist Sanctuary, because of a small addition, is now 111.238 (!) acres (c. 45 ha.) in extent and is located in the Town of Niskayuna of Schenectady County. A 2.9-mile series of Roads, providing a set of access points, circles the Sanctuary. Saint David's Lane. Brendan Lane, Consaul Road, Balltown Road, Oakmont Drive, Heather Lane, Village Road, Morgan Avenue and back to Saint David's Lane. The relief is gentle, ranging from a high point of 472 feet above sea level (asl) in its northwest corner to a low of 378 feet asl in the southwest – a range of nearly one-hundred feet. It is traversed by a sewer line running east-west, the right-of-way of which is maintained free of trees and brush by the Town providing the interesting ecological diversity of the Hidden River Trail.

The stratigraphic sequence begins at the top with surficial sands, probably of Aeolian origin thus suggesting that the mounds of the northern sector were once sand dunes. Rounded stones occur in a few rock walls and shallow streams courses in the Sanctuary. The heavy and well-tested rocks

best evident in the waterways have been brought south by either glaciers or floating ice from parental sites in the Adirondacks and elsewhere.

A feature of the Sanctuary is the vernal pools in the northeast sector and the forested wetlands or swamps of the southern part. The physiological adaptations of plants to wetland soils and the ecological relationships of the swamp community are thus ideal topics for teaching, study and research.

Beneath the sands is a varved bed of bluish-gray glacial lake clay - although this stratum is yet to be confirmed, this perhaps through the questioning of the contractors engaged in nearby construction. Beneath the clay beds are 2,000 foot thick Middle to Late Ordovician strata of the Snake Hill Formation, some 450 million years old. These are composed of alternating horizontal layers of shale and more durable turbidite, the latter a fine-grained, light gray stone resulting from deep-sea deposits laid down by turbidity currents. These layers result from sediments slumping from the coastal slopes and entraining much water to flow at great speed (40 mph) into the oceanic depths. The source of these sediments is the ancient islands once emerging to the east. There are no exposures of the shale or turbidite strata on the Sanctuary although pieces of the turbidite - called greywacke - can occasionally be found. The absence of oxygen and acid conditions in the oceanic depths result in its dark color and relative paucity of plant nutrients.

Settlement, forest clearing, grazing and cultivation began in the 1600s with the Pearse Family being among the early, local settlers. The Pearse Homestead, restored by Paul Schaefer in 1934, survives to the southeast of the Sanctuary on Saint David's Lane. The remains of other early buildings probably exist on the Sanctuary; these are suggested by rectangular depressions. Several "kitchen middens" as marked by broken glass and pottery, rusting basins and pales, and other home ware, suggest the activities of early farm days. Dr. Henry Reist and Paul Schaefer established two Red Pine plantations in the mid-1930s. The Reist biography above details the Sanctuary's assignment to the Hudson-Mohawk Bird Club

Dr. Nicholas Delisa developed the first sanctuary trails and wetland traverses in the early 1980s. His judicious choice of black ash for the piers and stringers of the many small bridges has resulted in their great longevity. Richard Johnson, working on a BSA Eagle Scout project, removed larger and more flagrant dumped materials such as lawn mowers and furniture in

1995. In 1998 Patrick Dunlavey, working on a BSA Eagle Scout project, measured trail lengths and provided a set of green and yellow signs providing guidance.

In 2002-03, the old bridges were replaced with new materials, again accenting black ash for piers and stringers. Black locust planking from the TNC Albany Pine Bush preserve and cross sections from from Old Maids' Woods were also installed by Robert Ringlee, Joseph Coticchio, Wade Beltramo, Jay Quaintance, Michael Palmiotto and others. Colorful trails markers have also been added defining the trail system. In several bridges, a new composite of wood fiber and resin produced by Fiberon Co. of North Carolina has been used in planking. Unlike pressure treated wood, this material is quite free of copper, arsenic, chromium and other toxic materials.

The Yellow Trail:

Beginning at the Center for the Forest Preserve on St. David's Lane and forming a large central loop

Red entry trails and trail heads connecting with central Yellow Trail:

St. David's Lane Red Trail - St. David's Lane.

Morgan Ave, Red Trail - end of Morgan Ave.

Thackeray Court Red Trail - Thackeray Court

Hummingbird Manor Red Trail - Hummingbird Manor

Brendan Lane Red Trail - Brendan Lane.

The Northern Blue Trail:

Connecting the entry trail from the Center for the Forest Preserve and the northern reach of the Yellow Trail.

The Southern Blue Trail:

Connecting the entry trail from Brendan Lane and the southwest reach of the Yellow Trail.

The Hidden River Orange Trail

Running east west and connecting St. David's Lane and Heather Lane.

A Few Suggestions on Good Books*

How can this long list of plants be of any use to the novice? Sadly, the answer is “very little” unless equipped with one or more good field guides with good illustrations and a good index – or the company of a competent naturalist! A hand lens is also a generally needed aid to observation of details. Bookstores offer many field guides but how should one choose from among them? The two main related criteria are **completeness** and **usability**. Guides lacking these criteria discourage many budding botanists.

- **Completeness** – Field guides frustrate users if the plant at hand isn’t in the book, so select one that covers only the Northeast.
- **Usability** – Choose a guide that has some systematic shortcut to finding your plant. Guides with plants arranged by color or with a simple dichotomous key are the most common. Color photos are beautiful, but line drawings better show the whole plant and its diagnostic features.

Wildflowers

Newcomb, Lawrence. 1986 edition. *Newcomb’s Wildflower Guide*. Little, Brown and Co., Boston, New York and London. 490 pp. This is by far the best guide and is used by both professionals and amateurs. A bonus is the inclusion of flowering shrubs and vines.

McKenny, Margaret & Peterson, Roger Tory. 1998 edition. *A Field Guide to Wildflowers: Northeastern and North-central North America*, Peterson Field Guide Series. Houghton Mifflin Co., Boston and New York. Less complete than Newcomb, but this popular guide is preferred by many who dislike using a key.

Trees

Graves, Arthur H. 1992 *Illustrated Guide to Trees and Shrubs: A Handbook of the Woody Plants of United States and Adjacent Canada* Revised Edition. Dover Publications. This guide has excellent illustrations and both summer and winter keys at a great under ten dollars price.

Petrides, George A. 1998 edition. *A Field Guide to Eastern Trees: Eastern United States And Canada, Including the Midwest*. Peterson Field Guide Series. Houghton Mifflin Co., Boston and New York. 424 pp. Photos, distribution maps, diagnostic drawings and currency combine to make this long standing classic a good purchase at about nineteen dollars.

Watts, May T., *Tree Finder*, Nature Study Guild Publishers, PO Box 10489, Rochester, NY 14610, 64 pages, \$3.50. This small pocket-sized book covers all native and many naturalized deciduous and evergreen species east of the Rockies and north of Florida. Keyed with pictorial symbols, this book is fun and easy to use. The *Winter Tree Finder* enables tree identification using winter twigs and buds.

Ferns

Cobb, Boughton. 1999 edition. *A Field Guide to Ferns and their related families. Northeastern and Central North America*. Peterson Field Guide Series. Houghton Mifflin Co., Boston and New York. Also including horsetails and club mosses, this complete guide has excellent detailed illustration. Under twenty dollars.

Hallowell, Barbara G. and Hallowell Anne C. Updated edition. *Fern Finder: A guide to Native Ferns of Central and Northeastern United States and Eastern Canada*, Nature Study Guild Publishers, Nature Study Guild Publishers, PO Box 10489, Rochester, NY 14610, 64 pages, \$3.50. Flowerless ferns can be difficult to identify, but books in the Finder series make identification fun and relatively easy. Consider other booklets in the series to identify berries, winter weeds, etc.

Mosses, Lichens, Etc.

Shuttleworth, Floyd S. and Zim, Herbert S. *Non-Flowering Plants: Ferns, Mosses, Mushrooms and other Fungi* Golden Nature Guide, Western Publishing. Except for ferns, there are no easy-to-use popular guides to non-flowering plants. This small out-of-print, but still available guide has over 400 species illustrated in full color. A nice comprehensive introduction to the subject at about five dollars.

*Special thanks are extended to Frank Knight for his guidance with this section

Higher Plants of the Reist Sanctuary and Vicinity

Identification: Steve Young, Ruth Schottman, Ed Miller, Carl George et al.
Alphabetical order by Latin-Scientific name followed by common name(s) in accord with the *Revised Checklist of New York State Plants* by Richard S. Mitchell and Gordon C. Tucker (1997). Species appearing in bold type are discussed in individual biographies in the Scaffold Project. Species followed by an asterisk are introduced/alien to the Sanctuary.

Acer negundo, Box Elder, Ash-leaved Maple*

Acer pensylvanicum, Striped Maple

Acer platanoides, Norway Maple*

Acer rubrum, Red Maple

Acer saccharinum, Silver Maple

Acer saccharum, Sugar Maple

***Actaea pachypoda.*, White Baneberry**

Agrimonia gryposepala, Agrimony, Cocklebur, Harvest-lice, Stickseed

Agrostis stolonifera, Creeping Bent, Carpet Bent

Ailanthus altissima, Copal-tree, Tree-of-heaven*

Ajuga reptans, Bugle or Bugle Weed*

Alisma triviale, Water-plantain

Alliaria petiolata*, Garlic Mustard

Alnus incana var. *rugosa*, Hazel Alder, Hoary Alder, Speckled Alder

Ambrosia artemisiifolia, Common ragweed

Amelanchier arborea, Serviceberry, Shadbush

Amelanchier laevis, Serviceberry, Shadbush

Amphicarpaea bracteata, Hog-peanut

Apios americana, Ground-nut, Potato or Wild Bean

Apocynum cannabinum, Dog Bane, Indian Hemp

Arabis glabra, Tower-mustard

***Aralia nudicaulis*, Wild Sarsaparilla**

Arctium minus, Common Burdock*

Arisaema triphyllum, Jack-in-the-pulpit

Asarum canadense var. *canadense*, Wild Ginger, Asarabaca

Asclepias syriaca, Common Milkweed

Aster acuminatus, Mountain- or Wood-aster

Aster cordifolium, Blue Wood Aster

Aster divaricatus, White Wood Aster

***Aster lateriflorus*, Calico Aster**

Aster macrophyllus, Big-leaf Aster

Aster puniceus, Purple-stemmed Aster

Barbarea vulgaris, Common Winter-cress, Cressy-greens, Yellow Rocket*

Berberis thunbergii*, Japanese Barberry

***Betula alleghaniensis*, Yellow Birch**

***Betula papyrifera*, Paper birch**

Betula populifolia, Gray Birch, Fire Birch, Oldfield Birch

Bidens tripartita, Swamp Beggar-ticks, Stick-tights*

Bidens frondosa, Beggar-ticks, Stick-tights

Campanula rapunculoides, Creeping Bellflower, Roving Bellflower*

***Caltha palustris*, Marsh-marigold**

Cardamine pensylvanica, Pennsylvania Bitter Cress

Carex annectens, Sedge

Carex bebbii, Bebbi's Sedge

Carex blanda or *leptonervia*, Sedge

Carex brunnescens, Sedge

Carex bromoides, Brome-like Sedge

Carex cristatella, Sedge

Carex debilis var. *rudgei*, Sedge

Carex digitalis, Finger Sedge

Carex gracillima, Sedge

Carex gynandra, Gynandrous Sedge

Carex intumescens, Sedge

***Carex laxiflora*, Nodding Sedge**

Carex lupulina, Sedge

Carex normalis, Sedge

Carex pensylvanica, Pennsylvania Sedge

Carex radiata, Radiate Sedge

Carex rosea, Rose-colored Sedge

Carex cf. *sparganioides*, Sedge

***Carex stricta*, Sedge**

***Carex swanii*, Swan's Sedge**

Carex tenera, Sedge

***Carpinus caroliniana*, American hornbeam**

Carya cordiformis, Bitternut Hickory

***Carya ovata*, Shagbark Hickory**

***Castanea dentata*, American Chestnut**

Catalpa bignonioides, Catalpa*

***Celastrus orbiculata*, Asiatic or Round-leaved Bittersweet ***

Chelidonium majus, Greater Celandine, Swallow-wort*

Chelone glabra, Balmony, Snakeheads, Turtleheads

Chenopodium album var. *album*, Goosefoot, Lamb's Quarters*

Chimaphila umbellata, Pipsissewa, Prince's Pine

Chrysosplenium americanum, Golden Saxifrage, Water-carpet, Water-mat

Cichorium intybus, Common Chicory, Blue Sailors, Cornflower*

Cicuta maculata, Water-hemlock

Cinna arundinacea, Wood-Reedgrass, Stout Wood-reed

Circaea lutetiana ssp. *canadensis*, Enchanter's Nightshade

Cirsium vulgare, Bull-thistle, Common Thistle*

Clematis virginiana, Virgin's Bower

***Collinsonia canadensis*, Horse-balm**

Convallaria majalis, Lily-of-the-valley*

Conyza canadensis, Butterweed, Hogweed, Horseweed

Cornus alterniflora, Alternate-leaved Dogwood

Cornus cf. *amomum*, Kinnikinnik, silky Dogwood

Cornus florida, Flowering dogwood

Cornus cf. *foemina*, Gray Dogwood

Corylus cf. *americana*, American filbert or Hazelnut

Crataegus sp., Hawthorn

Daucus carota, Wild Carrot*

Descurainia sophia, Herb Sophia, Flixweed*

Desmodium nudiflorum, Tick-trefoil

Desmodium sp., Tick-clover

Dianthus armeria, Deptford Pink

Digitaria sp., Crab Grass*

***Echinocystis lobata*, Wild Cucumber**

Epipactis helleborine, Helleborine, Weed-orchid

Erechtites hieracifolia, Fireweed, Pilewort

Erigeron annuus, Daisy-fleabane

Euonymus europaeus, Flame Bush. European Spindle Tree*

Eupatorium fistulosum, Trumpetweed

Eupatorium maculatum, Spotted Joe-Pye-weed

Eupatorium perfoliatum, Boneset, Thoroughwort

***Eupatorium rugosum*, White Snakeroot**

Euphorbia cyparissias, Cypress Spurge

Euthamia graminifolia, Bush-goldenrod or Flat-top Goldenrod
Fagus grandifolia, American Beech
Festuca sp., Fescue
***Fragaria virginiana*, Virginia or Wild Strawberry**
***Fraxinus americana*, American or White Ash**
***Fraxinus pennsylvanica*, Green or Red Ash**
Galeopsis tetrahit var. *bifida*, Hemp-nettle*
Galium circaezans, Wild Licorice
Galium palustre, Ditch Bedstraw, Marsh Bedstraw
Galium sylvaticum, Scotch-mist, Baby's Breath*
Galium triflorum, Sweet-scent Bedstraw, Three-flowered Bedstraw
Galium cf. *woodruffii*, Woodruff's Bedstraw
Gaultheria procumbens, Wintergreen, Checkerberry, Ivory-leaf, Mountain-tea
Gaylussacia baccata, Black Huckleberry
***Geranium maculatum*, Spotted Cranesbill**
Geum canadense, White Avens
Glechoma hederacea*, Ground-ivy, Gill-over-the-ground
Glyceria striata, Fowl-manna Grass
Hackelia virginianum, Beggar's-lice, Stickseed
***Hamamelis virginiana*, Witch Hazel**
Helianthus tuberosus, Jerusalem Artichoke
Hemerocallis fulva, Orange Day Lily, Canadian Day Lily*
Hesperis matronalis, Dame's Rocket*
Hieracium sp., Hawkweed*
Hydrangea sp., White Hydrangea*
Hypericum perforatum, Common St. John's Wort*
Hypericum punctatum, St. John's Wort
Ilex verticillata, Winterberry, Black Alder
***Impatiens capensis*, Spotted Jewelweed**
***Impatiens pallida*, Pale Touch-me-not, Pale Jewelweed**
Iris versicolor, Blue Iris, Poison Flag, Wild Iris.
***Juglans cinerea*, Butternut, White Walnut**
***Juncus tenuis*, Slender Trail Rush**
Juniperus virginiana, Red Cedar, Savin
Lactuca biennis, Blue Lettuce, Wild Lettuce
Lactuca canadensis, Wild Lettuce
Lamium galeobdolon, Yellow Archangel*

Lapsana communis, Nipplewort*

Leersia virginica, Whitegrass, Cutgrass

Leonurus cardiaca, Motherwort*

Linaria vulgaris, Butter-and-eggs, Wild Snapdragon, Common Toadflax*

***Lindera benzoin*, Benjamin-bush**

Lobelia inflata, Indian Tobacco

Lonicera morrowi*, Fly Honeysuckle

Lonicera tatarica*, Tartarian Honey Suckle

Luzula campestris, Field-woodrush

Lycopus uniflorus, Bugleweed, Water-horehound, Bugle-weed

Lysimachia ciliata, Fringed Loosestrife

Lysimachia nummularia; Moneywort, Creeping Loosestrife

***Maianthemum canadense*, Canada Mayflower, False Lily of the Valley**

Maianthemum racemosa, (formerly *Smilacina*), False Solomon's-seal

Maianthemum stellata, (formerly *Smilacina*), Star-flower

Malus pumila, Common Apple, Paradise Apple*

Medeola virginiana, Indian Cucumber-root

Mentha x piperita, Peppermint, Bergamot Mint*

***Mitchella repens*, Partridge Berry**

Monarda didyma, Bee-balm, Oswego Tea

***Monotropa uniflora*, Convulsion Root, Indian-pipe**

Morus alba, White Mulberry*

Myosotis scorpioides, True Forget-me-not*

***Nyssa sylvatica*, Black, Sour or Tupelo-gum, Tupelo**

Origanum vulgare, Marjoram, Oregano*

***Ostrya virginiana*, American Hop-hornbeam, Ironwood**

***Oxalis stricta*, Lady's Sorrel**

***Parthenocissus quinquefolia*, Virginia Creeper**

Parthenocissus tricuspidata, Boston Ivy , Japanese Ivy, Cottage Ivy

Phlox paniculata, Fall Phlox, Perennial Phlox, Summer Phlox*

***Phragmites australis*, Common Reed, Reed Grass**

Picea abies, Norway Spruce*

Picea glauca, White spruce

***Pilea pumila*, Clearweed, Coolwort, Richweed**

***Pinus resinosa*, Red Pine**

***Pinus rigida*, Pitch Pine**

***Pinus strobus*, White Pine**

***Phytolacca americana*, Pigeonberry, Poke, Pokeweed, Scape**
Plantago lanceolata, Buckhorn, English, or Narrow-leaf Plantain*
Plantago major, Broad-leaf Plantain, Common Plantain, Dooryard Plantain*
***Podophyllum peltatum*, May-apple, Wild Mandrake**
Polygonatum pubescens, Solomons-seal
Polygonum cuspidatum*, Japanese Knotweed, Japanese Bamboo
Polygonum hydropiper, Common Smartweed, Smartweed, Water-pepper*
Polygonum hydropiperoides, Mild Water-pepper, Smartweed
Polygonum sagittatum, Arrow-leaved Tearthumb, Arrow-vine, Scratchgrass
Polygonum virginianum, Jumpseed
Populus deltoides, Cottonwood
Populus grandidentata, Big-tooth or Large-tooth Aspen
Populus tremuloides, Quaking Aspen
Potentilla canadensis, Dwarf Cinquefoil, Canadian Cinquefoil, Five Fingers
Potentilla simplex, Oldfield-cinquefoil
Prenanthes alba, Rattlesnake-root, White Lettuce
Prunella vulgaris*, Heal-all, Self-heal, Prunella
Prunus pensylvanica, Bird-cherry, Fire-cherry, Pin-cherry
***Prunus serotina*, Black Cherry**
Prunus virginiana, Choke Cherry
***Pyrola elliptica*, Shinleaf, Wild Lily-of-the-valley**
***Quercus alba*, White Oak**
***Quercus bicolor*, Swamp White Oak**
Quercus coccinea, Scarlet Oak
Quercus palustris, Pin Oak
***Quercus prinus*, Chestnut Oak**
***Quercus rubra*, Red Oak**
***Quercus velutina*, Black, Dyer's, Yellow-bark Oak**
Ranunculus abortivus, Chicken Pepper, Kidney-leaf Buttercup
Ranunculus acris*, Common Buttercup, Field Buttercup
Ranunculus recurvata, Hooked Buttercup
Rhamnus cathartica*, Black Buckthorn
Rhamnus frangula, Alder-buckthorn, Smooth-buckthorn*
Rhododendron cf. periclymenoides (Michx.) Shinnery, Pinkster-flower
***Rhus hirta*, Staghorn Sumac**
Ribes rubrum, Cherry-currant, Garden-red Currant*
Robinia pseudo-acacia, Black Locust*
Rorippa nasturtium-aquaticum, Watercress*

Rosa multiflora, Multiflora Rose*

***Rubus allegheniensis*, Highbush Blackberry, Northern Blackberry**

Rubus idaeus, Red Raspberry

Rubus occidentalis, Black-cap, Black Raspberry

Salix sp., Willow

Salix cf. fragilis, Brittle or Crack Willow

Sambucus canadensis, Black Elderberry, Common Elder

***Sanguinaria canadensis*, Bloodroot, Puccoon**

Sanicula marilandica, Black Snakeroot, Sanicle

***Sassafras albidum*, White Sassafras**

Scirpus atrovirens, Black Bulrush

Scrophularia sp., Figwort

Scutellaria galericulata, Common Skullcap, Hooded Skullcap

Scutellaria lateriflora, Mad-dog Scullcap, Comon Skullcap

Sedum telephium var. *purpurea*, Live-forever, Garden Opine*

Setaria pumila Foxtail, Pigeongrass, Yellow Foxtail*

Silene latifolia, White Champion, White Cockle*

Sisymbrium officinale, Hedge-mustard*

Sisyrinchium cf. angustifolium, Bue-eyed Grass

Smilax herbaceae, Carrion-flower, Jacob's-ladder

Solanum dulcamara, Bittersweet, Trailing Nightshade, Climbing Nightshade*

Solidago bicolor, Silverrod, White Goldenrod

***Solidago caesia*, Blue-stem Goldenrod, Wreath Goldenrod**

***Solidago canadensis* var. *scabra*, Tall, Canada, Common Goldenrod**

Solidago flexicaulis, Zig-zag Goldenrod

Solidago gigantea, Late Goldenrod

Solidago juncea, Early Goldenrod

Solidago patula, Rough-leaf Goldenrod, Spreading Goldenrod

Solidago rugosa, Rough-stem Goldenrod, Butterweed

Sorbus aucuparia, European Mountain Ash*

Spiraea cf. latifolia, Canada Tea, Meadow-sweet

***Symplocarpus foetidus*, Skunk Cabbage**

Tanacetum vulgare, Common Tansy, Golden Buttons*

Taraxacum officinale, Common Dandelion*

Taxus sp., Japanese cf. Larch*

Thalictrum dioicum, Early Meadow Rue

***Thalictrum pubescens*, Late Meadow-rue, Tall Meadow-rue**

***Tilia americana*, American Basswood**
***Toxicodendron radicans*, Poison-ivy, Poison-oak**
***Trientalis borealis*, American Star-Flower**
Trifolium cf. aureum, Hop-clover, Yellow Clover*
Trifolium repens, White Clover, Lawn-clover, Dutch-clover*
***Trillium erectum*, Purple Trillium, Stinking Benjamin**
***Tsuga canadensis*, Northern Hemlock**
***Typha latifolia*, Broad-leaf Cattail, Common Cattail**
***Ulmus americana*, American Elm, White Elm**
Ulmus rubra, Red Elm, Slippery Elm
Uvularia sessilifolia, Bellwort, Wild-oats
***Vaccinium angustifolium*, Lowbush Blueberry, Low Sweet Blueberry**
***Vaccinium corymbosum*, Highbush Blueberry, Swamp-Blueberry**
***Veratrum viride*, False Hellebore, White Hellebore, Indian Poke**
Verbascum thapsis, Common Mullein*
Verbena urticifolia, White Vervain
Veronica officinalis*, Common Speedwell, Gypsyweed
***Viburnum acerifolium*, Maple-leaved Viburnum**
Viburnum lentago, Black-haw, Nannyberry, Sheepberry, Wild Raisin Tea
Viburnum opulus or *V. trilobum*, Highbush Cranberry
Viburnum rafinesquianum, Downy Arrowwood
Viburnum recognitum (*V. dentatum* var. *recognitum*) Arrow-wood
Vinca minor, Common Periwinkle, Lesser Periwinkle, Running Myrtle*
Viola conspersa, American Dog-violet
Viola sp., violet
Vitis aestivalis, Summer Grape
***Vitis riparia*, Dune-, Frost- or Riverbank-grape**
Waldsteinia fragarioides, Barren or False Strawberry
Zizia aurea, Golden Alexanders

Ferns and Allies

Athyrium filix-femina, Lady Fern
Dryopteris intermedia, Intermediate Wood Fern
Dryopteris marginalis, Wood Fern
Onoclea sensibilis, Sensitive Fern
Osmunda claytoniana, Interrupted Fern
Osmunda cinnamomea, Cinnamon Fern

Osmunda regalis, Royal Fern
Polystichum acrostichoides, Christmas Fern
Pteridium aquilinum, Bracken Fern
Thelypteris palustris, Marsh Fern

Lycopodium dendroideum, (formerly *L. obscurum*), Princess Pine
Lycopodium digitatum (formerly *L. complanatum* var. *flabelliforme*),
Running Pine
Lycopodium clavatum, Running Cedar

Equisetum arvense, Horsetail

Mosses and Liverworts

(Identification: Lois Quillinan, 6 Dec., 2001; spelling checked 16 Dec.):

Amblystegium riparium (vernal pools; edges of swamps, running water)
Amblystegium tenax
Atrichum undulatum
Aulacomnium palustre
Brachythecium ssp. (1.)
Brachythecium ssp. (2)
Brachythecium ssp. (3)
Bryhnia novae-angliae
Bryum spp.
Callicladium haldanianum
Dicranella heteromalla
Dicranum flagellare (vernal pools but very common on rotting wood)
Entodon cladorrhizans
Entodon seductrix
Eurhynchium hians
Eurhynchium pulchellum
Fissidens ssp.
Hypnum imponens
Hypnum lindbergii
Hypnum pallescens
Leskea cf. *gracilescens*
Leskea cf. *polycarpa*

Leucobryum glaucum

Mnium cuspidatum

Orthotrichum ssp.

Pohlia ssp.

Plagiothecium laetum

Plagiothecium latebricola (vernal pools, swamps, varying water levels)

Polytrichum commune

Tetraphis pellucida (vernal pools but very common on rotting wood)

Thuidium delicatulum

Liverworts:

Calypogeja muelleriana

Frullania eboracensis

Lichens

(identification: Claire Schmitt, 2001)

Candelaria concolor (Dickson) Stein (trunks/branches, fallen poplar near Red Pine plantations)

Cladonia squamules (on bark)

Flavoparmelia caperata (L.) Hale (tree trunks several feet above the ground)

Hypocenomyce scalaris (Ach.) Choisy (uncommonly, on conifer bark)

Lepraria sp. (old cottonwood; lacking thallus; ID based on soredia)

Parmelia sulcata Tayl. (common, fallen branches/lower trunks of Red Oak)

Phaeophyscia rubrapulchra (bark of cottonwoods and woodpiles near CFP)

Physcia millegrana Degel. (common on branches of the canopy)

Physcia stellaris (L.) Nyl (common on branches of the canopy)

Flora of the Reist Sanctuary -Arranged by Family

Division Lycopodiophyta

Lycopodiaceae

Lycopodium dendroideum, (formerly *L. obscurum*), Princess Pine, Tree Club Moss

Lycopodium digitatum (formerly *L. complanatum* var. *flabelliforme*), Running Pine

Lycopodium clavatum, Running Cedar

Division Equisetophyta

Equisetaceae

Equisetum arvense, Horsetail

Division Polypodiophyta

Dennstaedtiaceae

Pteridium aquilinum, Bracken Fern

Dryopteridaceae

Athyrium filix-femina, Lady Fern

Dryopteris carthusiana, Spinulose Wood Fern

Dryopteris intermedia, Intermediate Wood Fern

Dryopteris marginalis, Wood Fern

Onoclea sensibilis, Sensitive Fern

Polystichum acrostichoides, Christmas Fern

Osmundaceae

Osmunda claytoniana, Interrupted Fern

Osmunda cinnamomea, Cinnamon Fern

Osmunda regalis, Royal Fern

Thelypterdiaceae

Thelypteris noveboracensis, New York Fern

Thelypteris palustris, Marsh Fern

Division Magnoliophyta

Taxaceae

Taxus sp., Japanese cf. Larch

Pinaceae

Pinus resinosa, Red Pine

Pinus rigida, Pitch Pine

Pinus strobus, White Pine

Picea abies, Norway Spruce*

Picea glauca, White spruce

Tsuga canadensis, Northern Hemlock

Cupressaceae

Juniperus virginiana, Red Cedar or Savin

Lauraceae

Lindera benzoin, Benjamin-bush, Benzoin-bush, Spicebush

Sassafras albidum, White Sassafras

Aristolochiaceae

Asarum canadense var. *canadense*, Wild Ginger, Asarabaca

Ranunculaceae

Actaea oachypoda, White Baneberry

Caltha palustris, Marsh-marigold

Clematis virginiana, Virgin's Bower

Ranunculus abortivus, Chicken Pepper, Kidney-leaf Buttercup

Ranunculus acris, Common Buttercup, Field Buttercup, Tall buttercup

Ranunculus recurvata, Hooked Buttercup

Thalictrum dioicum, Early Meadow Rue

Thalictrum pubescens (*T. polygamum*), Late Meadow-rue, Tall Meadow-rue

Berberidaceae

Berberis thunbergii, Japanese Barberry

Podophyllum peltatum, May-apple, Wild Mandrake

Papaveraceae

Chelidonium majus, Greater Celandine (CFP)
Sanguinaria canadensis, Bloodroot, Puccoon

Hamamelidaceae

Hamamelis virginiana, Witch Hazel

Ulmaceae

Ulmus americana, American Elm, White Elm
Ulmus rubra, Red Elm, Slippery Elm

Moraceae

Morus alba, White Mulberry*

Urticaceae

Pilea pumila, Clearweed, Coolwort, Richweed

Juglandaceae

Carya cordiformis, Bitternut Hickory
Carya ovata, Shagbark Hickory
Juglans cinerea, Butternut, White Walnut

Fagaceae

Castanea dentata, American Chestnut
Fagus grandifolia, American Beech
Quercus alba, White Oak
Quercus bicolor, Swamp White Oak
Quercus coccinea, Scarlet Oak
Quercus palustris, Pin Oak
Quercus prinus, Chestnut Oak
Quercus rubra, Red Oak
Quercus velutina, Black, Dyer's or Yellow-bark Oak

Betulaceae

Betula alleghaniensis, Yellow Birch
Betula papyrifera, Paper birch
Betula populifolia, Gray Birch, Fire Birch, Oldfield Birch
Carpinus caroliniana, American hornbeam

Corylus americana, American filbert or Hazelnut (trailside plant near CFP)
Ostrya virginiana, American Hop-hornbeam, Ironwood

Phytolaccaceae

Phytolacca americana, Pigeonberry, Poke, Pokeweed, Scape

Chenopodiaceae

Chenopodium album var. *album**, Goosefoot, Lamb's Quarters, Pigweed (CFP)

Caryophyllaceae

Dianthus armeria, Deptford Pink, (CFP)
Silene latifolia, White Champion, White Cockle

Polygonaceae

Polygonum cuspidatum, Japanese Knotweed, Japanese Bamboo
Polygonum hydropiper, Common Smartweed, Smartweed, Water-pepper
Polygonum hydropiperoides, Mild Water Pepper, Smartweed
Polygonum sagittatum, Arrow-leaved Tearthumb, Arrow-vine, Scratchgrass
Polygonum virginianum, Jumpseed

Clusiaceae

Hypericum perforatum, Common St. John's Wort
Hypericum punctatum, St. John's Wort

Tiliaceae

Tilia americana, American Basswood

Violaceae

Viola conspersa, American Dog-violet
Viola sp., violet

Cucurbitaceae

Echinocystis lobata, Wild Cucumber

Salicaceae

Populus deltoides, Cottonwood
Populus grandidentata, Big-tooth or Large-tooth Aspen

Populus tremuloides, Quaking Aspen
Salix sp. (CFP)
Salix cf. fragilis, Brittle or Crack Willow

Brassicaceae

Alliaria petiolata, Garlic Mustard
Arabis glabra, Tower Mustard, Tower-cress
Barbarea vulgaris, Common Winter-cress, Cress, Cressy-greens, Yellow Rocket
Cardamine pensylvanica, Pennsylvania Bitter Cress
Hesperis matronalis, Dame's Rocket
Rorippa nasturtium-aquaticum, Watercress
Sisymbrium cf. officinale, Hedge-mustard

Ericaceae

Gaultheria procumbens, Wintergreen, Checkerberry, Ivory-leaf, Mountain-tea
Gaylussacia baccata, Black Huckleberry
Rhododendron cf. periclymenoides (Michx.) Shinnery, Pinkster-flower
Vaccinium angustifolium, Late Sweet, Low Sweet or Lowbush Blueberry
Vaccinium corymbosum, Highbush or Swamp-Blueberry

Pyrolaceae

Chimaphila umbellata, Pipsissewa
Pyrola elliptica, Shinleaf

Monotropaceae

Monotropa uniflora, Convulsion Root, Indian-pipe

Primulaceae

Lysimachia ciliata, Fringed Loosestrife
Lysimachia nummularia; Moneywort
Trientalis borealis, American Star-Flower

Grossulaceae

Ribes rubrum., Cherry-currant, Garden-red Currant

Crassulaceae

Sedum telephium var. *purpurea*, Live-forever

Saxifragaceae

Chrysosplenium americanum, Golden Saxifrage, Water-carpet, Water-mat

Rosaceae

Agrimonia gryposepala, Agrimony, Cocklebur, Harvest-lice, Stickseed

Amelanchier arborea, Serviceberry, Shadbush

Amelanchier laevis, Serviceberry, Shadbush

Cornus florida, Flowering dogwood

Crataegus sp., Hawthorn

Geum canadense, White Avens (CFP)

Malus pumila, Common Apple, Paradise Apple

Potentilla canadensis, Dwarf Cinquefoil, Canadian Cinquefoil, Five Fingers

Potentilla simplex, Oldfield-cinquefoil

Prunus pennsylvanica, Bird-cherry, Fire-cherry, Pin-cherry

Prunus serotina, Black Cherry

Prunus virginiana, Choke Cherry

Rosa multiflora, Multiflora rose

Rubus allegheniensis, Highbush, Northern, Sow-teat Blackberry

Rubus idaeus, Red Raspberry

Rubus occidentalis, Black-cap, Black Raspberry

Sorbus aucuparia, European Mountain Ash

Spiraea cf. *latifolia*, Canada Tea, Meadow-sweet

Waldsteinia fragarioides, Barren or False Strawberry

Fabaceae

Amphicarpaea bracteata, Hog-peanut

*Apios americana**, Ground-nut, Wild Bean

Desmodium nudiflorum, Tick-trefoil

Desmodium sp., Tick-clover

Robinia pseudo-acacia, Black Locust

Trifolium cf. *aureum*, Hop-clover, Yellow Clover

Trifolium repens, White Clover (CFP)

Onagraceae

Circaea lutetiana ssp. *canadensis*, Enchanter's Nightshade

Nyssaceae

Nyssa sylvatica, Black, Sour, Tupelo-gum, Tupelo

Cornaceae

Cornus alterniflora, Alternate-leaved Dogwood

Cornus cf. amomum, Kinnikinnik, Silky Dogwood

Cornus florida, Flowering dogwood

Cornus cf. foemina, Gray Dogwood (CFP)

Celastraceae

Celastrus orbiculata, Asian, Round-leaved Bittersweet

Euonymus europaeus, Flame Bush, European Spindle Tree

Aquifoliaceae

Ilex verticillata, Winterberry, Black Alder (protected by NYS law)

Euphorbiaceae

Euphorbia cyparissias, Cypress Spurge (CFP)

Rhamnaceae

Rhamnus cathartica, Black Buckthorn

Rhamnus cf. frangula, Alder-buckthorn, Smooth buckthorn

Vitaceae

Parthenocissus quinquefolia, Virginia Creeper

Parthenocissus tricuspidata, Boston Ivy

Vitis aestivalis, Summer Grape

Vitis riparia, Dune-, Frost- or Riverbank-grape

Aceraceae

Acer negundo, Box Elder, Ash-leaved Maple

Acer pensylvanicum, Striped Maple

Acer platanoides, Norway

Acer rubrum, Red Maple

Acer saccharinum, Silver Maple

Acer saccharum, Sugar Maple

Anacardiaceae

Rhus hirta (syn. *Rhus typhina*), Staghorn Sumac

Toxicodendron radicans (formerly *Rhus*), Poison-ivy, Poison-oak

Simaroubaceae

Ailanthus altissima, Copal-tree, Tree-of-heaven

Oxalidaceae

Oxalis stricta, Lady's Sorrel

Araliaceae

Aralia nudicaulis, Wild Sarsaparilla

Apiaceae

Cicuta maculata, Water-hemlock

Daucus carota, Wild Carrot

Sanicula marilandica, Black Snakeroot, Sanicle

Zizia aurea, Golden Alexanders

Geraniaceae

Geranium maculatum, Spotted Cranesbill

Balsaminaceae

Impatiens capensis, Spotted Jewelweed

Impatiens pallida, Pale Touch-me-not, Pale Jewelweed

Apocynaceae

Apocynum cannabinum, Dog Bane, Indian Hemp (CFP)

Vinca minor, Common, Periwinkle, Lesser Periwinkle, Running Myrtle

Asclepiadaceae

Asclepias syriaca, Common Milkweed

Solanaceae

Solanum dulcamara, Bittersweet, Trailing Nightshade, Climbing Nightshade

Polemoniaceae

Phlox paniculata (CFP)

Hydrangeaceae (possibly out of order)

Hydrangea sp., White Hydrangea (CFP)

Boraginaceae

Hackelia virginianum, Beggar's-lice, Stickseed

Myosotis scorpioides, True Forget-me-not

Verbenaceae

Verbena urticifolia, White Vervain

Catalpaceae

Catalpa bignonioides, Catalpa

Lamiaceae

Ajuga reptans, Bugle or Bugle Weed (CFP)

Collinsonia canadensis, Horse-balm

Galeopsis tetrahit var. *bifida*, Hemp Nettle

Glechoma hederacea, Ground-ivy, Gill—over-the-ground

Lamium galeobdolon, Yellow Archangel, Mint Family (alien; a colony with bright green foliage c. 15' diameter and c. 10" max. high growing to east of trail at Morgan entry, probably garden escape but growing vigorously here raising question on value of removal at this time before it becomes more widespread; covered with black plastic anchored in place with soil and wood debris in early September, 2002; greatly reduced in abundance in September, 2003, following control efforts)

Leonurus cardiaca, Motherwort

Lycopus uniflorus, Bugleweed, Water-horehound

Mentha cf. *piperita*, Peppermint (alien)

Monarda didyma, Bee-balm (several plants in seed along the HRT)

Origanum vulgare, Marjoram or Oregano (alien, added by SY 2 Nov., 2001)

Prunella vulgaris, Heal-all, Self-heal

Scutellaria galericulata, Common Skullcap

Scutellaria lateriflora, Mad-dog Scullcap

Plantaginaceae

Plantago lanceolata, Buckhorn, English, of Narrow-leaf Plantain
Plantago major, Broad-leaf Plantain, Common Plantain, Dooryard Plantain

Oleaceae

Fraxinus americana, American or White Ash
Fraxinus pennsylvanica, Green or Red Ash

Scrophulariaceae

Linaria vulgaris, Butter-and-eggs
Scrophularia sp., Figwort
Verbascum thapsis, Common Mullein (CFP)
Veronica officinalis, Common Speedwell, Gypsyweed

Campanulaceae

Campanula rapunculoides, Creeping or Roving Bellflower
Lobelia inflata, Indian Tobacco

Rubiaceae

Galium palustre, Ditch- or Marsh Bedstraw
Galium sylvaticum, Scotch-mist (CFP)
Galium triflorum, Sweet-scent Bedstraw, Three-flowered Bedstraw
Galium cf. woodruffii, Woodruff's Bedstraw
Mitchella repens, Partridge Berry

Caprifoliaceae

Lonicera morrowi, Fly-honeysuckle
Lonicera tatarica, Tartarian Honeysuckle
Sambucus canadensis, Black Elderberry, Common Elder (several gangly plants near swamp)
Viburnum acerifolium, Maple-leaved Viburnum
Viburnum lentago, Black-haw, Cowberry, Nannyberry, Sheepberry, Sweet-berry, Wild Raisin, Wild Tea
Viburnum opulus (or *V. trilobum*), Highbush Cranberry
Viburnum rafinesquianum, Downy Arrowwood
Viburnum recognitum, also *V. dentatum* var. *recognitum*, Arrow-wood

Asteraceae

Ambrosia artemisiifolia, Common ragweed

Arctium minus, Common Burdock
Aster acuminatus, Mountain- or Wood-aster
Aster cordifolius, Blue Wood Aster
Aster divaricatus, White Wood Aster
Aster cf. Lanceolatus, Tall White Aster, Panicked Aster
Aster lateriflorus, Calico Aster
Aster macrophyllus, Big-leaf Aster
Aster cf. Novae-belgii, Aster
Aster puniceus, Purple-stemmed Aster
Bidens frondosa, Beggar-ticks, Stick-tights
Bidens tripartita, Swamp Beggar-ticks, Stick-tights
Cichorium intybus, Common Chicory, Blue Sailors, Cornflower
Cirsium vulgare, Bull or Common Thistle (CFP)
Conyza canadensis, Butterweed, Hog-weed, Horseweed
Erechtites hieracifolia, Fireweed, Pilewort
Erigeron annuus, Daisy-fleabane
Eupatorium fistulosum, Trumpetweed
Eupatorium maculatum, Spotted Joe-Pye-Weed
Eupatorium perfoliatum, Boneset, Thoroughwort
Eupatorium rugosum, White Snakeroot
Euthamia graminifolia (formerly *Solidago*), Bush-goldenrod or Flat-top Goldenrod
Helianthus tuberosus, Jerusalem artichoke
Hieracium sp. (CFP)
Lactuca biennis, Blue or Wild Lettuce
Lapsana communis, Nipplewort
Prenanthes alba, Rattlesnake-root, White Lettuce
Solidago bicolor, Silverrod, White Goldenrod (scattered widely in the forest, flowering)
Solidago caesia, Blue-stem Goldenrod, Wreath Goldenrod
Solidago canadensis var. *scabra*, Tall, Canada or Common Goldenrod
Solidago flexicaulis, Zig-zag Goldenrod
Solidago gigantea, Late Goldenrod
Solidago juncea, Early Goldenrod
Solidago patula, Rough-leaf Goldenrod, Spreading Goldenrod
Solidago rugosa, Rough-stem Goldenrod, Butterweed
Tanacetum vulgare, Common Tansy, Golden Buttons
Taraxacum officinale, Common Dandelion

Alismataceae

Alisma triviale, Water-plantain

Araceae

Aralia nudicaulis, Wild Sarsaparilla

Arisaema triphyllum, Jack-in-the-pulpit

Symplocarpus foetidus, Skunk Cabbage

Juncaceae

Juncus tenuis, Trail Rush (identified by Steve Young, 2 Nov., 2001)

Luzula campestris, Field-woodrush (identified by Steve Young, 2 Nov., 2001)

Cyperaceae

Carex bebbii, Bebbi's Sedge

Carex brunnescens, an unnamed Sedge

Carex gynandra, Gynandrous Sedge

Carex lupulina, Hop Sedge (growing with more common *C. stricta*)

Carex pensylvanica, Pennsylvania Sedge

*Carex cf. sparganioides**, no common name

Carex stricta, Upright Sedge

Scirpus atrovirens, Black Bulrush

Poaceae

Agrostis stolonifera, Creeping Bent, Carpet Bent

Cinna arundinacea, Wood-Reedgrass, Stout Wood-reed

Digitaria sp., Crab Grass (at the CFP)

Festuca sp., Fescue

Glyceria striata, Fowl-manna Grass

Leersia virginica, Whitegrass, Cutgrass

Phragmites australis, Common Reed, Reed Grass

Setaria glauca, Foxtail, Pigeon-grass (CFP)

Typhaceae

Typha latifolia, Broad-leaf Cattail, Common Cattail

Liliaceae

Hemerocallis fulva, Orange Day Lily, Canadian Day Lily

Medeola virginiana, Indian Cucumber-root

Trillium erectum, Purple Trillium, Stinking Benjamin

Uvularia sessilifolia, Bellwort, Wild-oats

Veratrum viride, False Hellebore, White Hellebore, Indian Poke

Ruscaceae

Convallaria majalis, Lily-of-the-valley (CFP)

Maianthemum canadense (formerly *Smilacina*), Canada Mayflower, False
Lily-of-the-Valley

Maianthemum racemosum (formerly *Smilacina*) False Solomon's-seal

Maianthemum stellatum (formerly *Smilacina*) Star-flower

Polygonatum pubescens, Solomon's-seal

The four North American genera assigned to Ruscaceae are *Convallaria*, *Maianthemum*, *Ophiopogon* and *Polygonatum*. Most sources assign these genera to the Liliaceae or Convallariaceae. See the 1986 study of James V. LaFrankie (*Taxon*, vol. 35) in defense of the change. The revision also brings members of the former genus *Smilacina* into the genus *Maianthemum*.

Iridaceae

Iris versicolor, Blue or Poison Flag, Wild Iris.

Sisyrinchium cf. angustifolium, Blue-eyed Grass

Smilacaceae

Smilax herbacea, Carrion-flower, Jacob's-ladder

Orchidaceae

Epipactis helleborine, Helleborine, Weed-orchid

Generalizations and Issues Regarding the Site

Importance and uniqueness of its swamps and vernal pools

Possible response of community to biting insects originating in the Sanctuary

Little likelihood of forest or ground fires on the Sanctuary

Paucity of species typical of mature woodlands
Relative abundance of alien species
Storm sewer traverse providing “old-field habitat”
Relative absence of other clearings and open areas
Merits of creating open areas within the preserve
Diverse Influence of human neighbors
Presence of two Red Pine plantations probably planted c. 1935
Absence of Red Pine reproduction
Presence of well marked trail system providing dry access to swamplands
Attractive sites with mature Red Oak, Black Oak, White Pine, Red Maple
Vestiges of an early farm: stone fences, stone piles, kitchen middens
Importance of sand as an edaphic factor
100 feet of relief but floristic importance of this relief
Great aesthetic potential of the maturing forest
Relatively little use by human visitors
Little abuse by bikers, campers, ATV, snowmobile and equestrians
Recent survey defining the boundaries and detection of intrusion
Presence of a good document file regarding the site
Need for the gathering of additional historical records for the site.
Need for a survey of the vertebrate fauna
Need for a survey of the invertebrate fauna
Need for a survey of plant diseases, especially those impacting the sylvia
Need for detailed biographies for prominent plants and animals
Increasing danger of damage to Sanctuary by adjacent development
Need for photographic and other forms of documentation
Need for management guidelines on responses to challenges

Early Survey Events Basic to the Flora

The following is a detailed listing of the original survey events basic to the flora. It is clear that many people have been involved and for their generous assistance we offer heart-felt thanks. Later surveys have added to the list but, for conciseness we no longer define these in this record.

Survey of 31 July, 200, 0900-1200h conducted by Steve Young, Frank Knight, Margaret Schadler, David Gibson, Monica Judd, Ken Rimany, and Carl George

(A pleasant, dry day with some insect irritation with most time spent on lands of the Center for the Forest Preserve - CFO - and the adjacent lands of the Reist Sanctuary)

Survey of 21 August, 2001, 0900-1200h conducted by Steve Young, Frank Knight, David Gibson, Linda Champagne, Helen and Robert Ringlee, Bill and Christine Lee and Carl George

(A pleasant dry day with few insects. The vernal pools are now dry allowing easy access to the islands and the fallen “nurse trees”. Deer tracks are evident. How have the depression holding the vernal pools formed?)

Survey of 29 August, 2001, 0830-1230h conducted by Joseph Coticchio, and Carl George

(A very pleasant day in the high 70s F with a delightful absence of biting insects, but remarkably dry. No water was seen in any of the vernal pools and the maple-leaved viburnum was wilting. A dump with glass and crockery shards of the 1930s (license plate dated 1935) was found in the SW sector, another with earlier remains was found between the first and second stream crossings entering from St. David’s Lane on the Blue Trail. Cobbles and boulder glacial erratics were found more abundantly in the SW sector.)

Survey of 6 December 2001, 0930-1200 h conducted by The Thursday Naturalists: Ruth Schottman, Sarah P. Ingalls, Peg Wallingford, Lois Shapland, Emily S. Hart., Mary Dunham, Anne Coggeshall, Mary Brennan, Win Bigelow, Lois Quillinan (bryologist) and Bernice Stiner, with Carl George guiding.

(Another pleasant day with AT in the low 60s and cloud cover of about 95%; trails and vernal pools quite dry; “Hidden River Trail” recently “brush-hogged”; group access at Morgan with walk to CFP and return)

Survey of 15 May 2002, 0900-1300h, conducted by Steve Young and Carl George

(On a pleasant day, following prolonged and drenching rains, but with little impact on the trails or vernal pools of the Sanctuary. Shade tolerant forms such as the American Beech and Norway Maple, the various under story forms such as Witch Hazel, the viburnums, Bush Honeysuckle, and the ground cover including the resplendent Skunk Cabbage, Canada Mayflower, various ferns and Mandrake were well leafed out; the light demanding members of the canopy, however, were more reserved in their emergence. The absence of biting flies added greatly to the enjoyment of the survey.)

Survey of 23 May, 2002, 0930-1230h conducted by The Thursday Naturalists as led by Ruth Schottman with Carl George recording

(A pleasant morning in the 60s F under clear skies and negligible air movement with the first hint of black flies and mosquitoes. The survey began at the Morgan Ave. entry with due attention being given to the nearby patch of the alien Yellow Archangel pleasantly in bloom. The trek then continued to the Hidden River Trail then following the main loop trail counterclockwise back to the Hidden River Trail and the starting point. Except for the shallow channels, the trails were dry and easily passable. The Thursday Naturalists were remarkable for their ability to discover examples of species missed in earlier studies. Some 23 species were added to the flora.)

Survey of 13 September, 2002, 0930-1130h conducted by Steve Young, Claire Schmitt and Carl George

(A pleasant, dry , and warm day with the flora of the Hidden River Trail – HRT – vigorously blooming and thus contributing significantly to the flora. Frank Knight toured the Sanctuary on 11 September to record the presence of Turtle-heads or Balmony, *Chelone glabra*. Standing water is now absent from the entire sanctuary. Claire Schmitt, a specialist in the lichens, noted that the paucity of lichens in the sanctuary is due to the lack of rock surfaces, air pollution and the density of the canopy - thus reducing sunlight. Close inspection of the limestone surfaces of the CFP revealed few lichens. The slate roofing, however, needs close inspection.

Survey of 2 October, 2002, 1000-1200h conducted by Steve Young with Carl George recording.

(Another pleasant, sunny and warm day notable for the delay in the appearance of fall foliage color. Recent rains have moistened the swampy areas of the Sanctuary. The first frost is yet to occur and a few mosquitoes are evident.)

**Survey of 5 May, 2003, 0830-1200h by The Thursday Naturalists
With Ruth Schottman and Ed Miller leading, Carl George recording**

(A pleasant day in the 60s F, the bush honeysuckle greening, the skunk cabbage and white hellebore filling the swamplands with lush foliage. The few serviceberry are flowering. The Red-bellied Woodpeckers call. The water levels are high and waterproof boots prove useful. A group of ten or more large Butternut growing along the main entrance trail deserve special attention.)

**Survey of 24 June, 2004, 0900-1300h by The Thursday Naturalists
with Carl George recording.**

(A pleasant day with some 15 additional species discovered by a team of 15 people led by Ruth Schottman and Ed Miller, the trails relatively dry and in good condition, the spring flowering ended and the summer flowering underway.)

**Survey of 10 September, 2004, 1300-1500h by Steve Young and Carl
George,.**

(The vernal pools still well watered; *Alisma trivialis*, *Bidens frondosa*, *Carex gynandra*, *Erechtites hieracifolia*, *Festuca sp.*, *Glechoma hederacae*, *Polygonum hydropiperoides*, and *Scirpus atrovirens*, are added to the *Flora*. The invasive mint Yellow Archangel, *Lamium galeobdolon*, still survives as seedlings near the Morgan St. Trailhead. Some 40 young plants were pulled at the site. The summer has been an exceptionally wet one and *Impatiens pallida* reaches a height of 9 feet at the St. David's Lane entrance in response. *Impatiens capensis* is also well represented on the Hidden River Trail. Mosquitoes are a challenge.)

Survey of 14 October, 2004, 0930-1230h by Ed Miller and Carl George

(A colorful, pleasant fall day with some of the swamp-side Red Maples brilliant and the vernal pools of the northeast sector still wet.; *Picea abies*, *Morus alba*, *Rhododendron cf. periclymenoides*, and *Scrophularia sp.* are added to the list. Several more plants escaped identification – a small *Viburnum* and a *Desmodium*. We walked the northern part of the Sanctuary leaving the trail to discover new colonies of Pipsissiwa and a large, old Pinkster about 50 feet north of the St. David's Lane Trail and west of the swamp. Another large Black Gum (55 cm DBH) was found at the southwest edge of a vernal pool north of the Schaefer Trail.)

When I would recreate myself, I seek the darkest wood, the thickest and most interminable, and to the citizen, most dismal swamp. I enter a swamp as a sacred place – a sanctum sanctorum. There is the strength, the marrow of nature. The wild-wood covers the virgin mould – and the same soil is good for men and trees.

Thoreau.

Henry David