

## APPALACHIAN OAK-HICKORY FOREST

One of the more pleasant plant communities to walk through on the watershed is Appalachian oak-hickory forest. It is at least at the following three locations: on top of Bald Hill, adjacent to the east end of Holmes Hill Road and on the west side of Canadice Hill. It is the driest forest community type to be found on the watershed and it is distinguished from successional northern hardwoods at least as much by its shrub layer as by its dominant canopy trees. These canopy trees are, of course, dominated by oaks and hickories. In the case of the watershed, these are red, white and black oaks and pignut hickory. Red maple, musclewood, chestnut, white ash, hophornbeam, white pine and sassafras are also present. Shrubs include witch hazel, deerberry, lowbush blueberry and maple-leaved viburnum. In distinguishing these community types from other similar ones, it is important to see these and possibly other shrubs, such as flowering dogwood, shad, chokecherry and beaked hazelnut. In addition, sugar maple should be missing or an infrequent part of the canopy and oak seedlings should be dominant in the understory rather than white ash, beech or the aforementioned sugar maple. In the herbaceous layer, characteristic plants to look for are Pennsylvania sedge, pointed leaf tick trefoil, gaywings and bracken fern.

As explained in the introduction to this section, there may be more Appalachian oak-hickory forest on the watershed than is mapped because it is difficult to distinguish its signature on the aerial photos from other hardwood forest types. Bald Hill is the most likely place to find more of it.

Birds heard singing on an early July visit to this community included Hermit Thrush, Wood Thrush, Chestnut-sided Warbler, Ovenbird, Hooded Warbler and Rose-breasted Grosbeak.

Some of the more magnificent red and white oaks observed are neither within appalachian oak hickory forest nor actually on the watershed. Task "I" (see Methods), was to observe the "old growth oaks west of Hemlock Outlet Creek." These trees are growing on City of Rochester property in a grove of about 10 acres just north of the north border of the watershed. They have diameters of three to four feet, straight trunks and are about 100 feet tall. The understory consists of red maple, pignut hickory, hop hornbeam, musclewood and white ash. Pennsylvania sedge carpets the forest floor. The community lacks the shrub species of a typical appalachian oak-hickory forest but is nonetheless a beautiful place to visit.

## APPALACHIAN OAK-HICKORY FOREST

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
BLACK OAK	<i>Quercus velutina</i>	X	X		
RED OAK	<i>Quercus rubra</i>	X	X		
WHITE OAK	<i>Quercus alba</i>	X	X		
CHESTNUT	<i>Castanea dentata</i>		X		
IRONWOOD	<i>Ostrya virginiana</i>		X		
MUSCLEWOOD	<i>Carpinus caroliniana</i>		X		
PIGNOT HICKORY	<i>Carya glabra</i>		X		
RED MAPLE	<i>Acer rubrum</i>		X		
SASSAFRAS	<i>Sassafras albidum</i>		X		
SUGAR MAPLE	<i>Acer saccharum</i>		X		
WHITE ASH	<i>Fraxinus americana</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
BLACKBERRY	<i>Rubus allegheniensis</i>			X	
DEERBERRY	<i>Vaccinium stamineum</i>			X	
LOWBUSH BLUEBERRY	<i>Vaccinium angustifolium</i>			X	
MAPLE LEAF VIBURNUM	<i>Viburnum acerifolium</i>			X	
STRIPED MAPLE	<i>Acer pensylvanicum</i>			X	
WITCH HAZEL	<i>Hamamelis virginiana</i>			X	
BRACKEN FERN	<i>Pteridium aquilinum</i>				X
CANADA MAYFLOWER	<i>Maianthemum canadense</i>				X
GAYWINGS	<i>Polygala paucifolia</i>				X
INTERRUPTED FERN	<i>Osmunda claytoniana</i>				X
MAY APPLE	<i>Podophyllum peltatum</i>				X
PATHRUSH	<i>Juncus tenuis</i>				X
POINTED LEAF TICK TREFOIL	<i>Desmodium nudiflorum</i>				X
SEDGE	<i>Carex pensylvanica</i>				X
SEDGE	<i>Carex rosea</i>				X
SQUAWROOT	<i>Conopogon americanus</i>				X
WHORLED LOOSESTRIFE	<i>Lysimachia quadrifolia</i>				X
WOODRUSH	<i>Luzula sp.</i>		/		X
MOSS	<i>Leucobryum glaucum</i>				X

## HEMLOCK-NORTHERN HARDWOOD FOREST

On the watershed, as in other places in Western New York, hemlock-northern hardwood forest seems to occur in several varieties. Most often, as when it occurs in ravines, hemlock is joined in the canopy by sugar maple and yellow birch. In these situations, the understory shrubs are most likely to be striped maple, maple-leaf viburnum and/or hobblebush. Light levels in these ravines are low so the herbaceous flora is somewhat sparse. Ferns to look for include silvery spleenwort, fragile fern, bulblet fern and maidenhair fern. Most of the herbs present flower in the spring; some of the more unusual and/or more spectacular ones include three species of trillium (red, white and painted), squirrel corn, Oswego tea, Indian cucumber root and wild ginger.

Reynolds and Mission gullies are the best places to see this forest type. Other locations are along lower Canadice Outlet Creek and adjacent to Pokamoonshine Hollow Road.

Hemlock-northern hardwood forest of this type is also present along much of the east facing slope above Hemlock Lake. In the places sampled by this author, hemlock shares the canopy with lesser amounts of beech, sugar maple, red oak and white ash. Shrubs include striped maple, witch hazel and maple-leaved viburnum. The herbaceous layer is dominated by ferns. Species present are lady fern, sensitive fern, interrupted fern, marginal shield fern, Christmas fern and fancy fern.

Hermit Thrush and Black-throated Green Warbler are characteristic species of these slopes and ravines. During an August visit, Hermit Thrush were singing and the warblers were feeding young. Other species that inhabit these areas are Winter Wren, Peewee, Blue-headed Vireo, Red-eyed Vireo, Yellow-rumped Warbler, Ovenbird, Scarlet Tanager and Junco.

A dry variation of Hemlock-northern hardwood forest occurs on the south facing slopes of some of the ravines on the watershed. Here, the hemlock is mixed with red and/or chestnut oak and the shrub layer is more likely to include witch hazel, lowbush blueberry, and/or black huckleberry. Herbs include pussytoes in the spring and silver-rod in the fall.

In Wayland, Steuben County, there is a patch of hemlock-northern hardwood forest that occurs adjacent to a rich hemlock-hardwood peat swamp. In this variety, the canopy includes a few northern white cedar and balsam fir.

## SUCCESSIONAL NORTHERN HARDWOODS

A forest can be considered successional if the composition of the tree canopy is not the same as the composition of the seedling trees sprouting on the forest floor and if the canopy itself consists primarily of tree species which are known to be wind dispersed and have sun tolerant seedlings, such as white pine, big-toothed and quaking aspens and white ash.

Successional northern hardwoods is by far the most abundant forest community on the watershed. It appears either in the aftermath of a failed conifer plantation or as the successional step after successional shrubland. As a failed conifer plantation, the canopy may include left-over conifers like red and white pines and/or Norway spruce mixed with big-tooth aspen, white ash, red maple and black cherry. In other situations, there may be a canopy of oaks but sugar maple and beech are the young trees sprouting in the understory. If the forest's origin is successional shrubland, the understory can still be quite shrubby with such species as gray dogwood, hawthorne, autumn olive, witch hazel and multiflora rose. Herbaceous flora is difficult to characterize but garlic mustard, an invasive plant from Europe, is often present.

Chestnut-sided and Yellow-rumped Warblers nest in successional northern hardwoods, the latter especially seem to like hardwoods mixed with white pine and some hemlock.

HEMLOCK-NORTHERN HARDWOOD FOREST

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
HEMLOCK	<i>Tsuga canadensis</i>	X	X		
BALSAM FIR	<del><i>Pseudotsuga menziesii</i></del> <i>Abies balsamifera</i>		X		
BASSWOOD	<i>Tilia americana</i>		X		
BEECH	<i>Fagus grandifolia</i>		X		
BIG TOOTH ASPEN	<i>Populus grandidentata</i>		X		
BLACK BIRCH	<i>Betula lenta</i>		X		
BLACK CHERRY	<i>Prunus serotina</i>		X		
BUTTERNUT	<i>Juglans cinerea</i>		X		
CHESTNUT	<i>Castanea dentata</i>		X		
CHESTNUT OAK	<i>Quercus montana</i>		X		
HOPHORNBEAM	<i>Ostrya virginiana</i>		X		
MUSCLEWOOD	<i>Carpinus caroliniana</i>		X		
NORTHERN WHITE CEDAR	<i>Thuja occidentalis</i>		X		
PIGNOT HICKORY	<i>Carya glabra</i>		X		
RED MAPLE	<i>Acer rubrum</i>		X		
RED OAK	<i>Quercus rubra</i>		X		
SHAGBARK HICKORY	<i>Carya ovata</i>		X		
SUGAR MAPLE	<i>Acer saccharum</i>		X		
TULIP	<i>Liriodendron tulipifera</i>		X		
WHITE ASH	<i>Fraxinus americana</i>		X		
WHITE OAK	<i>Quercus alba</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
YELLOW BIRCH	<i>Betula alleghaniensis</i>		X		
ALTERNATE-LEAVED DOGWOOD	<i>Cornus alternifolia</i>			X	
BLACK HUCKLEBERRY	<i>Gaylussacia baccata</i>			X	
BLACK RASPBERRY	<i>Rubus occidentalis</i>			X	
FLOWERING DOGWOOD	<i>Cornus florida</i>			X	
HOBBLEBUSH	<i>Viburnum lantanoides</i>			X	
LOWBUSH BLUEBERRY	<i>Vaccinium angustifolium</i>			X	
MAPLE LEAVED VIBURNUM	<i>Viburnum acerifolium</i>			X	
PURPLE FLOWERING RASPBERRY	<i>Rubus odoratus</i>			X	
RIVERBANK GRAPE	<i>Vitis riparia</i>			X	
SHAD	<i>Amelanchier sp.</i>			X	
STRIPED MAPLE	<i>Acer pensylvanicum</i>			X	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>			X	
WITCH HAZEL	<i>Hamamelis virginiana</i>			X	
AGRIMONY	<i>Agrimonia gryposepala</i>				X
BEECH FERN	<i>Phegopteris sp.</i>				X
BLUE-STEMMED GOLDENROD	<i>Solidago caesia</i>				X
BLUETS	<i>Myosotis scorpioides</i>				X
BOTTLEBRUSH GRASS	<i>Elymus hystrix</i>				X
BRACKEN FERN	<i>Pteridium aquilinum</i>				X
BULBLET FERN	<i>Cystopteris bulbifera</i>				X
CALICO ASTER	<i>Aster lateriflorus</i>				X
CANADA MAYFLOWER	<i>Maianthemum canadense</i>				X
CHRISTMAS FERN	<i>Polystichum acrostichoides</i>				X
CLEAR WEED	<i>Pilea pumila</i>				X
COLTS FOOT	<i>Tussilago farfara</i>				X
CUT-LEAVED TOOTHWORT	<i>Cardamine concatenata</i>				X
FANCY FERN	<i>Dryopteris intermedia</i>				X
FRAGILE FERN	<i>Cystopteris fragilis</i>				X
GARLIC MUSTARD	<i>Alliaria petiolata</i>				X

## HEMLOCK-NORTHERN HARDWOOD FOREST

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
GERANIUM	<i>Geranium maculatum</i>				X
GINGER	<i>Asarum canadense</i>				X
GROUND PINE	<i>Lycopodium obscurum</i>				X
HEPATICA	<i>Hepatica nobilis</i>				X
INDIAN CUCUMBER ROOT	<i>Medeola virginica</i>				X
INDIAN PIPE	<i>Monotropa uniflora</i>				X
INTERRUPTED FERN	<i>Osmunda claytoniana</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
JEWELWEED	<i>Impatiens cf. capensis</i>				X
JUMPSEED	<i>Polygonum virginianum</i>				X
LADY FERN	<i>Athyrium filix-femina</i>				X
MAIDENHAIR FERN	<i>Adiantum pedatum</i>				X
MARGINAL SHIELD FERN	<i>Dryopteris marginalis</i>				X
MAY APPLE	<i>Podophyllum peltatum</i>				X
MITERWORT	<i>Mitella diphylla</i>				X
NEW YORK FERN	<i>Thelypteris noveboracensis</i>				X
OSTRICH FERN	<i>Matteucia struthiopteris</i>				X
OSWEGO TEA	<i>Monarda didyma</i>				X
PAINTED TRILLIUM	<i>Trillium undulatum</i>				X
PUSSYTOES	<i>Antennaria sp.</i>				X
RED TRILLIUM	<i>Trillium erectum</i>				X
SARSAPARILLA	<i>Aralia nudicaulis</i>				X
SEDGE	<i>Carex crinita</i>				X
SEDGE	<i>Carex gracillima</i>				X
SEDGE	<i>Carex pensylvanica</i>				X
SEDGE	<i>Carex platyphylla</i>				X
SEDGE	<i>Carex rosea</i>				X
SEDGE	<i>Carex scabrata</i>				X
SENSITIVE FERN	<i>Onoclea sensibilis</i>				X
SHINING CLUBMOSS	<i>Huperzia lucidula</i>				X
SILVER-ROD	<i>Solidago bicolor</i>				X
SILVERY SPLEENWORT	<i>Deparia acrostichoides</i>				X
SQUIRREL CORN	<i>Dicentra canadensis</i>				X
STINGING NETTLES	<i>Urtica dioica</i>				X
TURTLEHEAD	<i>Chelone glabra</i>				X
TWO-LEAVED TOOTHWORT	<i>Cardamine diphylla</i>				X
WHITE SNAKEROOT	<i>Eupatorium rugosum</i>				X
WHITE TRILLIUM	<i>Trillium grandiflorum</i>				X
WHITE WOOD ASTER	<i>Aster divaricatus</i>				X
WHORLED MILKWEED	<i>Asclepias verticillata</i>				X
YELLOW WOOD SORREL	<i>Oxalis stricta</i>				X
ZIG ZAG GOLDENROD	<i>Solidago flexicaulis</i>				X

### SUCCESSIONAL NORTHERN HARDWOODS

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
BASSWOOD	<i>Tilia americana</i>		X		
BEECH	<i>Fagus grandifolia</i>		X		
BIG TOOTH ASPEN	<i>Populus grandidentata</i>		X		
BITTERNUT HICKORY	<i>Carya cordiformis</i>		X		
BLACK BIRCH	<i>Betula lenta</i>		X		
BLACK CHERRY	<i>Prunus serotina</i>		X		
BLACK LOCUST	<i>Robinia pseudo-acacia</i>		X		
BLACK WALNUT	<i>Juglans nigra</i>		X		
BUTTERNUT	<i>Juglans cinerea</i>		X		
CHESTNUT	<i>Castanea dentata</i>		X		
CHESTNUT OAK	<i>Quercus montana</i>		X		
COTTONWOOD	<i>Populus deltoides</i>		X		
HOPHORNBEAM	<i>Ostrya virginiana</i>		X		
MUSCLEWOOD	<i>Carpinus caroliniana</i>		X		
NORWAY SPRUCE	<i>Picea abies</i>		X		
PIGNUT HICKORY	<i>Carya glabra</i>		X		
QUAKING ASPEN	<i>Populus tremuloides</i>		X		
RED MAPLE	<i>Acer rubrum</i>		X		
RED OAK	<i>Quercus rubra</i>		X		
RED PINE	<i>Pinus resinosa</i>		X		
SHAGBARK HICKORY	<i>Carya ovata</i>		X		
SUGAR MAPLE	<i>Acer saccharum</i>		X		
SYCAMORE	<i>Platanus occidentalis</i>		X		
TULIP	<i>Liriodendron tulipifera</i>		X		
WHITE ASH	<i>Fraxinus americana</i>		X		
WHITE OAK	<i>Quercus alba</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
AUTUMN OLIVE	<i>Elaeagnus umbellata</i>			X	
CURRENT or GOOSEBERRY	<i>Ribes sp.</i>			X	
FALSE SPIREA	<i>Sorbaria sorbifolia</i>			X	
FLOWERING DOGWOOD	<i>Cornus florida</i>			X	
GRAY DOGWOOD	<i>Cornus foemina</i>			X	
HAWTHORNE	<i>Crataegus sp.</i>			X	
HONEYSUCKLE	<i>Lonicera sp.</i>			X	
LOWBUSH BLUEBERRY	<i>Vaccinium angustifolium</i>			X	
MAPLE-LEAVED VIBURNUM	<i>Viburnum acerifolium</i>			X	
MULTIFLORA ROSE	<i>Rosa multiflora</i>			X	
POISON IVY	<i>Toxicodendron radicans</i>			X	
RED RASPBERRIES	<i>Rubus idaeus</i>			X	
RIVERBANK GRAPE	<i>Vitis riparia</i>			X	
SHAD	<i>Amerlanchier sp.</i>			X	
STRIPED MAPLE	<i>Acer pensylvanicum</i>			X	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>			X	
WITCH HAZEL	<i>Hamamelis virginiana</i>			X	
ARROW LEAVED ASTER	<i>Aster sagittifolius</i>				X
BLOODROOT	<i>Sanguinaria canadensis</i>				X
BLUE COHOSH	<i>Caulophyllum thalictroides</i>				X
BLUE-STEMMED GOLDENROD	<i>Solidago caesia</i>				X
BLUETS	<i>Houstonia caerulea</i>				X
BRACKEN	<i>Pteridium aquilinum</i>				X
BUGLE	<i>Ajuga reptans</i>				X
CALICO ASTER	<i>Aster lateriflorus</i>				X
CANADA MAYFLOWER	<i>Maianthemum canadense</i>				X

## SUCCESSIONAL NORTHERN HARDWOODS

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
CHRISTMAS FERN	<i>Polystichum acrostichoides</i>				X
CLEAVERS	<i>Galium aparine</i>				X
COLTS FOOT	<i>Tussilago farfara</i>				X
COMMON CINQUEFOIL	<i>Potentilla simplex</i>				X
CUT-LEAVED TOOTHWORT	<i>Cardamine concatenata</i>				X
DAMES ROCKET	<i>Hesperis matronalis</i>				X
DAY LILY	<i>Hemerocallis fulva</i>				X
EARLY MEADOW RUE	<i>Thalictrum dioicum</i>				X
ENCHANTER'S NIGHTSHADE	<i>Circaea lutetiana</i>				X
FORGET ME NOT	<i>Myosotis scorpioides</i>				X
GARLIC MUSTARD	<i>Alliaria petiolata</i>				X
GOLDEN RAGWORT	<i>Senecio aureus</i>				X
HAIRY WOODRUSH	<i>Luzula acuminata</i>				X
HERB ROBERT	<i>Geranium robertianum</i>				X
INTERRUPTED FERN	<i>Osmunda claytoniana</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
JEWELWEED	<i>Impatiens capensis</i>				X
JUMPSEED	<i>Polygonum virginicum</i>				X
KIDNEY-LEAF BUTTERCUP	<i>Ranunculus abortivus</i>				X
LADY FERN	<i>Athyrium filix-femina</i>				X
LILY OF THE VALLEY	<i>Convallaria majalis</i>				X
LION'S FOOT	<i>Prenanthes sp.</i>				X
MAYAPPLE	<i>Podophyllum peltatum</i>				X
OSTRICH FERN	<i>Matteuccia struthiopteris</i>				X
POINTED LEAF TICK TREFOIL	<i>Desmodium nudiflorum</i>				X
PUSSYTOES	<i>Antennaria sp.</i>				X
RED TRILLIUM	<i>Trillium erectum</i>				X
RUE ANEMONE	<i>Thalictrum thalictroides</i>				X
SARSAPARILLA	<i>Aralia nudicaulis</i>				X
SEDGE	<i>Carex pennsylvanica</i>				X
SEDGE	<i>Carex plantaginea</i>				X
SEDGE	<i>Carex rosea</i>				X
SEDGE	<i>Carex scoparia</i>				X
SENSITIVE FERN	<i>Onoclea sensibilis</i>				X
SILVERROD	<i>Solidago bicolor</i>				X
SOLOMON'S SEAL	<i>Polygonatum pubescens</i>				X
TOOTHWORT	<i>Cardamine diphylla</i>				X
TROUT LILY	<i>Erythronium americanum</i>				X
WHITE AVENS	<i>Geum canadense</i>				X
WHITE SNAKE ROOT	<i>Eupatorium rugosum</i>				X
WHITE TOPPED ASTER	<i>Aster paternus</i>				X
WHITE TRILLIUM	<i>Trillium grandiflorum</i>				X
WHITE WOOD ASTER	<i>Aster divaricatus</i>				X
WILD LEEK	<i>Allium tricoccum</i>				X
WILD OATS	<i>Uvularia sessilifolia</i>				X
WINTERGREEN	<i>Gaultheria procumbens</i>				X
WOODLAND AGRIMONY	<i>Agrimonia gryposepala</i>				X
ZIG ZAG GOLDENROD	<i>Solidago flexicaulis</i>				X

## CONIFER PLANTATION

Most of the conifer plantations found on the watershed are relatively old, with origins dating from the 1930's to the 1950's. Consequently, light levels in the understory are low and herbaceous flora sparse. Shrubs and vines such as poison ivy, virginia creeper and various raspberries are often present. White and red-breasted nuthatches and chickadees are the most common birds.

## THE MOSAIC COMMUNITIES

SHALLOW EMERGENT MARSH/SHRUB SWAMP/SEDGE MEADOW  
SUCCESSIONAL OLD FIELD/SUCCESSIONAL SHRUBLAND  
SUCCESSIONAL SHRUBLAND/SUCCESSIONAL NORTHERN HARDWOODS  
SUCCESSIONAL NORTHERN HARDWOODS/CONIFER PLANTATION

Sometimes it is impossible to assign a community name to a place. Often, this is because a community is in transition from one community to another. For example, many of the conifer plantations on the watershed are "failing" because the trees within them were planted on incompatible sites or because they did not receive proper care, such as timely thinning. As the original planted conifers die or fall, their place is taken in the forest canopy by various hardwoods. If this community happens to be observed, say, when its canopy is roughly 50% conifer and 50% hardwoods, one is left little choice but to call it a mosaic of plantation and successional northern hardwoods. Similar problems exist with old fields succeeding to shrubland and shrubland succeeding to northern hardwoods. On the other hand, sometimes a location is actually a mixture of several different community types. This mixture occurs on a small enough scale, at least relative to the size of the community map being produced or of the magnification of the aerial photos that are being interpreted, as to make dissection into the component community types either pointless or impossible. Such is the case with the shallow emergent marsh/sedge meadow/shrub swamp mosaic that is mapped in Springwater Flats.

Separate plant lists were not created for these mosaic communities.

## RARE PLANT COMMUNITIES, GENERAL IMPRESSIONS

Plant communities are considered to be rare or not according to guidelines established by the New York Natural Heritage Program. The Heritage Program assigns every natural community in the state a global (G) and a state (S) rarity status. The code is numerical: 'one' signifies a very rare element, generally 1-5 sites known globally (G1) or statewide (S1) whereas 'five' signifies a common element. The rare plant communities found on the watershed are listed in Table IV, together with their sizes and rarities and an explanation of the rarity ranks.

Five rare plant communities occur on the watershed. They are inland poor fen, highbush blueberry bog thicket, silver maple-ash swamp, rich hemlock-hardwood peat swamp and maple-basswood rich mesic forest.

It is not at all surprising that four out of these five rare plant communities are palustrine communities. Wetlands are relatively inaccessible because they are wet and so are least likely to have been logged or otherwise disturbed in the recent past. The rare wetland communities that are found in the basins occupied by the lakes and immediately adjacent to them are silver maple-ash swamp and rich hemlock-hardwood peat swamp. It is perhaps more surprising to find wetlands perched on the tops of hills; inland poor fen and highbush blueberry bog thicket fit this description. Having a wetland of any type on top of a hill might sound counter-intuitive but turns out to be a fairly common phenomenon in western New York. The soils on top of these hills are derived from sandstones, shales, siltstones and glacial till and are highly impermeable. The tops of the hills themselves tend to have been scraped flat during glaciation; this combination of topography and impermeable soils combines to create proper conditions for the development of wetlands.

**TABLE IV  
HEMLOCK CANADICE WATERSHED RARE PLANT COMMUNITIES**

COMMUNITY NAME	LOCATION	SIZE (ACRES)	RARITY
Inland poor fen	Canadice Hill Road	1	G4 S3
Highbush blueberry bog thicket	Bald Hill	<1	G4 S3
Silver maple-ash swamp	Canadice Inlet	50	G3G4 S2S3
Silver maple-ash swamp	Canadice Outlet	90	G3G4 S2S3
Rich hemlock-hardwood peat swamp	Town of Wayland	15-20	G3G4 S2S3
Maple-basswood rich mesic forest	Town of Springwater	20	G4 S2S3
Maple-basswood rich mesic forest	Mission Road Gullies	40	G4 S2S3

**EXPLANATION OF RANKS AND CODES**

**GLOBAL RANK:**

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences, or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 = Imperiled globally because of its rarity (6-20 occurrences or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 = Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

**STATE RANK:**

S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 = Typically 6 to 20 occurrences, few remaining individuals, acres or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 = Typically 21 to 100 occurrences, limited acreage or miles of stream in New York State.

S4 = Apparently secure in New York State.

S5 = Demonstrably secure in New York State

#### SILVER MAPLE-ASH SWAMP

The largest rare plant community on the watershed is silver maple-ash swamp. It is a palustrine community found at both ends of Canadice Lake and, in a presumptively early successional stage, at the south end of Hemlock Lake. It is not mapped as such at this last location. Both mapped locations are on City of Rochester property. The community at the south end of Hemlock Lake, in Springwater Flats, is a forested wetland whose canopy is made up almost entirely of young (4-15 inch diameter) green ash. It may have been a silver maple-ash swamp before being cleared for agriculture.

#### SILVER MAPLE ASH SWAMP AT CANADICE INLET

The most accessible example of silver maple-ash swamp is found at Canadice Inlet. There, the City of Rochester, in cooperation with the Department of Environmental Conservation, has created a mosaic of berms and artificial ponds for the purpose of creating wetland habitat and to retain or recreate an earlier stage of wetland succession. Coincidentally the berms provide dry-foot access to the interior of the swamp and are excellent for bird watching. These berms can be found by walking east about 1/4 mile from Canadice Lake Road along the city-owned service road. The dikes are located south of the service road and also provide access to two other plant communities in the immediate vicinity, shrub swamp and shallow emergent marsh. Animals in the area include green frogs, wood ducks, mallards, common yellowthroats, orioles and song sparrows.

Botanical highlights at this site include some silver maples with diameters as large as three and four feet. Green ash is present with diameters of four to twelve inches. Winterberry, arrowwood and swamp rose are found in the shrub layer. Herbaceous species to search for are skunk cabbage, sensitive fern, swamp milkweed, crested fern, ostrich fern and swamp buttercup.

This community, although mature, is relatively small, bisected by a road, fragmented by the berms and home to a large population of moneywort, which is an invasive alien species.

Kentucky coffee tree, (*Gymnocladus dioica*), the one rare plant found on the entire watershed, is located within this community. It is a species more common in the south, although it is often planted in this part of the country. The ten small trees that are present, with a maximum diameter of four inches, could have been seeded in from a planting somewhere on the watershed, although such yard trees were not observed.

#### SILVER MAPLE-ASH SWAMP AT CANADICE OUTLET

This community, although larger than the one at the Inlet, is younger and hosts a higher concentration of invasive species. Access, so to speak, is from the intersection of Canadice Outlet Creek and either Purcell Hill Road or Canadice Hollow Road but one must be prepared to bushwack through an almost impenetrable thicket of invasive alien shrubs to get to the interior of the swamp forest. The invasive aliens include honeysuckle, multiflora rose and autumn olive. The herbaceous layer is also dominated by aliens; moneywort and forget-me-nots are everywhere. The canopy is young and is dominated by silver maple, black ash and green ash. These species are joined by occasional swamp white oak and bur oak; the latter has pleasant, violin-shaped leaves. In the spring, look for marsh marigold, golden ragwort and skunk cabbage. Search for swamp milkweed, fringed loosestrife and common monkey flower in the summer. In places, the swamp forest gives way to small herbaceous communities (sedge meadows) dominated by rice cut grass or a sedge called *Carex lacustris*. This community is young, invaded by alien species, and fragmented by roads.

Birds noted at this site include Common Yellowthroats, Black-capped Chickadees, White-breasted Nuthatches, Cedar Waxwings, Bluejays, Kingfishers and Catbirds.

SILVER MAPLE-ASH SWAMP AT CANADICE INLET

Common name	Species name	Dominant	Tree	Shrub/Vine	Herb
GREEN ASH	<i>Fraxinus pennsylvanica</i>	X	X		
SILVER MAPLE	<i>Acer saccharinum</i>	X	X		
BLACK ASH	<i>Fraxinus nigra</i>		X		
BUR OAK	<i>Quercus macrocarpa</i>		X		
KENTUCKY COFFEE TREE	<i>Gymnocladus dioica</i>		X		
SLIPPERY ELM	<i>Ulmus rubra</i>		X		
ARROWWOOD	<i>Viburnum dentatum var. lucidum</i>			X	
BLACK RASPBERRY	<i>Rubus occidentalis</i>			X	
SWAMP ROSE	<i>Rosa palustris</i>			X	
WINTERBERRY	<i>Ilex verticillata</i>			X	
JEWELWEED	<i>Impatiens sp.</i>	X			X
REED CANARY GRASS	<i>Phalaris arundinacea</i>	X			X
SEDGE	<i>Carex bromoides</i>	X			X
SENSITIVE FERN	<i>Onoclea sensibilis</i>	X			X
SKUNK CABBAGE	<i>Symplocarpus foetidus</i>	X			X
BUTTERCUP	<i>Ranunculus hispidus var. caricetorum</i>				X
CRESTED FERN	<i>Dryopteris cristata</i>				X
EARLY MEADOW RUE	<i>Thalictrum polygonum</i>				X
ENCHANTER'S NIGHTSHADE	<i>Circaea lutetiana</i>				X
FORGET-ME-NOT	<i>Myosotis scorpioides</i>				X
IRIS	<i>Iris sp.</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
JUMPSEED	<i>Polygonum virginianum</i>				X
LADY FERN	<i>Athyrium filix-femina</i>				X
MARSH MARIGOLD	<i>Caltha palustris</i>				X
MONEYWORT	<i>Lysimachia nummularia</i>				X
OSTRICH FERN	<i>Matteuccia struthiopteris</i>				X
SEDGE	<i>Carex crinita</i>				X
SEDGE	<i>Carex cristatella</i>				X
SEDGE	<i>Carex granularis</i>				X
SEDGE	<i>Carex lupulina</i>				X
SEDGE	<i>Carex cf. normalis</i>				X
SEDGE	<i>Carex stipata</i>				X
SEDGE	<i>Carex tuckermanii</i>				X
SWAMP MILKWEED	<i>Asclepias incarnata</i>				X
WATER-HEMLOCK	<i>Cicuta maculata</i>				X
WATER-PARSNIP	<i>Sium suave</i>				X
WILD LEEK	<i>Allium tricoccum</i>				X

SILVER MAPLE-ASH SWAMP AT CANADICE OUTLET

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
BLACK ASH	<i>Fraxinus nigra</i>	X	X		
GREEN ASH	<i>Fraxinus pennsylvanica</i>	X	X		
SILVER MAPLE	<i>Acer saccharinum</i>	X	X		
BASSWOOD	<i>Tilia americana</i>		X		
BEECH	<i>Fagus grandifolia</i>		X		
BUR OAK	<i>Quercus macrocarpa</i>		X		
ELM	<i>Ulmus sp.</i>		X		
MUSCLEWOOD	<i>Carpinus caroliniana</i>		X		
SHAGBARK HICKORY	<i>Carya ovata</i>		X		
SWAMP WHITE OAK	<i>Quercus bicolor</i>		X		
WHITE WILLOW	<i>Salix alba</i>		X		
ARROWWOOD	<i>Viburnum dentatum var. lucidum</i>			X	
AUTUMN OLIVE	<i>Elaeagnus umbellata</i>			X	
HAWTHORNE	<i>Crataegus sp.</i>			X	
HONEYSUCKLE	<i>Lonicera sp.</i>			X	
MULTIFLORA ROSE	<i>Rosa multiflora</i>			X	
POISON IVY	<i>Toxicodendron radicans</i>			X	
RIVERBANK GRAPE	<i>Vitis riparia</i>			X	
SILKY DOGWOOD	<i>Cornus amomum</i>			X	
SPECKLED ALDER	<i>Alnus incana ssp. rugosa</i>			X	
SWAMP ROSE	<i>Rosa palustris</i>			X	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>			X	
AGRIMONY	<i>Agrimonia gryposepala</i>				X
BULRUSH	<i>Scirpus atrovirens</i>				X
CALICO ASTER	<i>Aster lateriflorus</i>				X
CANADA GOLDENROD	<i>Solidago canadensis</i>				X
COMMON MONKEY FLOWER	<i>Mimulus ringens</i>				X
FIELD HORSETAIL	<i>Equisetum arvense</i>				X
FORGET-ME-NOT	<i>Myosotis scorpioides</i>				X
FRINGED LOOSESTRIFE	<i>Lysimachia ciliata</i>				X
GOLDEN RAGWORT	<i>Senecio aureus</i>				X
HEAL-ALL	<i>Prunella vulgaris</i>				X
JEWELWEED	<i>Impatiens cf. capensis</i>				X
JOE PYE WEED	<i>Eupatorium maculatum</i>				X
LADY FERN	<i>Athyrium filix-femina</i>				X
MARSH MARIGOLD	<i>Caltha palustris</i>				X
MONEYWORT	<i>Lysimachia nummularia</i>				X
OSTRICH FERN	<i>Matteuccia struthiopteris</i>				X
REED CANARY GRASS	<i>Phalaris arundinacea</i>				X
RICE CUTGRASS	<i>Leersia oryzoides</i>				X
ROUGH-STEMMED GOLDENROD	<i>Solidago rugosa</i>				X
SEDGE	<i>Carex aquatilis</i>				X
SEDGE	<i>Carex crinita</i>				X
SEDGE	<i>Carex debilis</i>				X
SEDGE	<i>Carex intumescens</i>				X

SILVER MAPLE-ASH SWAMP AT CANADICE OUTLET

SEDGE	<i>Carex lacustris</i>				X
SEDGE	<i>Carex cf. lupulina</i>				X
SEDGE	<i>Carex lurida</i>				X
SEDGE	<i>Carex bromoides</i>				X
SENSITIVE FERN	<i>Onoclea sensibilis</i>				X
SKUNK CABBAGE	<i>Symplocarpus foetidus</i>				X
SOFTSTEM BULRUSH	<i>Scirpus tabernaemontanii</i>				X
SPRING CRESS	<i>Cardamine bulbosa</i>				X
ST. JOHN'S WORT	<i>Hypericum punctatum</i>				X
SWAMP BUTTERCUP	<i>Ranunculus hispidus var. caricetorum</i>				X
SWAMP MILKWEED	<i>Asclepias incarnata</i>				X
TALL MEADOW RUE	<i>Thalictrum pubescens</i>				X
WATER PARSNIP	<i>Sium suave</i>				X
WHITE AVENS	<i>Geum canadense</i>				X
WHITE VERVAIN	<i>Verbena urticifolia</i>				X
WOODLAND HORSETAIL	<i>Equisetum sylvaticum</i>				X

### **RICH HEMLOCK-HARDWOOD PEAT SWAMP IN WAYLAND TOWNSHIP**

Rich hemlock-hardwood peat swamp occurs on private property near the village of Wayland in the Town of Wayland, Steuben county. It lies at the south end of a complex of wetland communities and agricultural land that surrounds the headwaters of Springwater Creek.

The canopy of the peat swamp is primarily hemlock with lesser amounts of balsam fir, red maple, black ash, white pine and yellow birch, none with diameters over 8-10 inches. The shrub layer is very dense, nearly 100% cover, with about equal parts speckled alder, winterberry and mountain holly. Royal fern dominates the herbaceous layer. Hummock and hollow microtopography supports characteristic species such as wild sarsaparilla, woodlily, goldthread, fowl mannagrass, Indian cucumber root, cinnamon fern and at least two species of peat moss.

Balsam fir is not common in the western Finger Lakes region, so this community has some local significance. It is, however, small and not buffered by other natural communities, especially other wetland communities.

### **INLAND POOR FEN AT CANADICE HILL ROAD**

Inland poor fen is one of two wetland communities that occurs on the watershed on the top of Canadice Hill. It is on private property and forms the headwaters of Reynolds Gully. The dominant species of this community are peat mosses. Round leaf sundew is imbedded among these. Other herbaceous plants include cinnamon fern and marsh St. John's wort. Shrubs present include highbush blueberry, low sweet blueberry, winterberry and speckled alder. The fen is surrounded by a treacherous moat dominated by three-way sedge and water horsetail. It is a very nice local example of a peatland, even though it is small and not imbedded in a large natural community complex.

### **HIGHBUSH BLUEBERRY BOG THICKET AT BALD HILL**

Highbush blueberry bog thicket occurs as three tiny examples on the top of Bald Hill on private property. The shrubs in this bog thicket are dense and consist primarily of highbush blueberry, arrowwood and winterberry. Ferns are abundant and include royal fern, interrupted fern, crested fern and sensitive fern. The ground is wet underneath these shrubs and herbs and contains some peat moss. The community occurrences are pretty and in excellent shape. There is considerable potential habitat where more examples of this community might be found, especially on the tops of Bald and Canadice Hills.

### **MAPLE-BASSWOOD RICH MESIC FOREST AT SPRINGWATER WOODS**

Maple-basswood rich mesic forest lies within the rectangle formed by Canadice Road, Grouse Road, Price Road and Straight Road in the Town of Springwater. It is on private property. The community has formed along the limy seeps that flow west northwest through the site. The canopy consists of sugar maple and basswood that is mostly 12 to 15 inches in diameter. These are joined by an occasional bitternut hickory, white ash and tulip tree. Spring flowering herbaceous plants seen or reported by the owner include both red and white baneberry, wild leek, jack-in-the-pulpit, blue cohosh, spring beauty, virginia waterleaf, red trillium and white trillium.

The visit to this site was too late in the season for easy observation of nesting birds, but one would expect Hooded Warbler, American Redstart, Black-throated Green Warbler, Wood Thrush, Ovenbird, Great-crested Flycatcher, Peewee and Red-eyed Vireo to use this community.

#### MAPLE-BASSWOOD RICH MESIC FOREST AT MISSION ROAD GULLIES

Maple-basswood rich mesic forest is also present on a delta on the west shore of Hemlock Lake that has formed at the base of two large and several relatively small gullies. It is on property owned by the City of Rochester. Dominant tree species in the canopy are sugar maple, basswood and white ash. They are joined by lesser amounts of black walnut, tulip, bitternut hickory, white pine, black cherry and red oak. Maximum diameters are 12 to 15 inches. The shrub layer is fairly dense and includes a considerable amount of multiflora rose, which is an invasive alien. The herbaceous layer is also beset with aliens, the principle ones being garlic mustard and moneywort. Native species include small amounts of blue cohosh, Jack-in-the-pulpit, may apple, bloodroot, early meadow rue, foam flower and white trillium. Old roads and an old foundation are present as well as major deer beds and paths.

RICH HEMLOCK-HARDWOOD PEAT SWAMP IN WAYLAND TOWNSHIP

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
HEMLOCK	<i>Tsuga canadensis</i>	X	X		
BALSAM FIR	<i>Pseudotsuga menziesii</i>		X		
BLACK ASH	<i>Fraxinus nigra</i>		X		
RED MAPLE	<i>Acer rubrum</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
YELLOW BIRCH	<i>Betula alleghaniensis</i>		X		
MOUNTAIN HOLLY	<i>Nemopanthus mucronatus</i>	X		X	
SPECKLED ALDER	<i>Alnus incana ssp. rugosa</i>	X		X	
WINTER BERRY	<i>Ilex verticillata</i>	X		X	
DWARF RASPBERRY	<i>Rubus pubescens</i>			X	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>			X	
ROYAL FERN	<i>Osmunda regalis</i>	X			X
CANADA MAYFLOWER	<i>Maianthemum canadense</i>				X
CINNAMON FERN	<i>Osmunda cinnamomea</i>				X
FOWL MANNAGRASS	<i>Glyceria striata</i>				X
GOLDTHREAD	<i>Coptis trifolia</i>				X
INDIAN CUCUMBER ROOT	<i>Medeola virginiana</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
JOE PYE WEED	<i>Eupatorium maculatum</i>				X
MARSH MARIGOLD	<i>Caltha palustris</i>				X
PINK LADYSLIPPER	<i>Cypripedium acaule</i>				X
SEDGE	<i>Carex crinita</i>				X
SEDGE	<i>Carex leptalea</i>				X
SEDGE	<i>Carex scabrata</i>				X
SENSITIVE FERN	<i>Onoclea sensibilis</i>				X
TALL MEADOW RUE	<i>Thalictrum pubescens</i>				X
WHITE SNAKEROOT	<i>Eupatorium rugosum</i>				X
WILD SARSAPARILLA	<i>Aralia nudicaulis</i>				X
WOODLILY, BLUEBEADS	<i>Clintonia borealis</i>				X
MOSS	<i>Campyllum sp.</i>				X
MOSS	<i>Thuidium delicatulum</i>				X
PEAT MOSS	<i>Sphagnum cf. centrale</i>				X
PEAT MOSS	<i>Sphagnum fimbriatum</i>				X

INLAND POOR FEN ON CANADICE HILL ROAD

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
RED MAPLE	<i>Acer rubrum</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
BLACK CHOKEBERRY	<i>Aronia melanocarpa</i>			X	
HIGHBUSH BLUEBERRY	<i>Vaccinium corymbosum</i>			X	
LOWBUSH BLUEBERRY	<i>Vaccinium angustifolium</i>			X	
SPECKLED ALDER	<i>Alnus incana ssp. rugosa</i>			X	
WINTERBERRY	<i>Ilex verticillata</i>			X	
BEDSTRAW	<i>Galium cf. tinctorium</i>				X
CINNAMON FERN	<i>Osmunda cinnamomea</i>				X
MARSH ST. JOHN'S WORT	<i>Triadenum virginicum</i>				X
ROUND LEAF SUNDEW	<i>Drosera rotundifolia</i>				X
SEDGE	<i>Carex cf. interior</i>				X
THREE-WAY SEDGE	<i>Dulichium arundinaceum</i>				X
WATER WILLOW	<i>Decodon verticillatus</i>				X
PEAT MOSS	<i>Sphagnum centrale</i>				X
PEAT MOSS	<i>Sphagnum fuscum</i>				X
PEAT MOSS	<i>Sphagnum magellanicum</i>				X
PEAT MOSS	<i>Sphagnum palustre</i>				X

HIGHBUSH BLUEBERRY BOG THICKET ON BALD HILL

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
AMERICAN CHESTNUT	<i>Castanea dentata</i>		X		
RED MAPLE	<i>Acer rubrum</i>		X		
ARROWWOOD	<i>Viburnum dentatum var. lucidum</i>	X		X	
HIGHBUSH BLUEBERRY	<i>Vaccinium corymbosum</i>	X		X	
WINTERBERRY	<i>Ilex verticillata</i>	X		X	
LOWBUSH BLUEBERRY	<i>Vaccinium angustifolium</i>			X	
SPICEBUSH	<i>Lindera benzoin</i>			X	
WITCH HAZEL	<i>Hamamelis virginiana</i>			X	
CRESTED FERN	<i>Dryopteris cristata</i>				X
INTERRUPTED FERN	<i>Osmunda claytoniana</i>				X
ROYAL FERN	<i>Osmunda regalis</i>				X
SEDGE	<i>Carex lupulina</i>				X
SEDGE	<i>Carex scoparia</i>				X
SEDGE	<i>Carex livida</i>				X
SENSITIVE FERN	<i>Onoclea sensibilis</i>				X
PEAT MOSS	<i>Sphagnum lescurei</i>				X
PEAT MOSS	<i>Sphagnum palustre or henryense</i>				X
PEAT MOSS	<i>Sphagnum russowii</i>				X

MAPLE-BASSWOOD RICH MESIC FOREST IN SPRINGWATER TOWNSHIP

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
BASSWOOD	<i>Tilia americana</i>	X	X		
SUGAR MAPLE	<i>Acer saccharum</i>	X	X		
BITTERNUT HICKORY	<i>Carya cordiformis</i>		X		
TULIP	<i>Liriodendron tulipifera</i>		X		
WHITE ASH	<i>Fraxinus americana</i>		X		
CURRENT or GOOSEBERRY	<i>Ribes sp.</i>			X	
HOPHORNBEAM	<i>Ostrya virginiana</i>			X	
MAPLE-LEAVED VIBURNUM	<i>Viburnum acerifolium</i>			X	
BLUE COHOSH	<i>Caulophyllum thalictroides</i>				X
CUT-LEAVED TOOTHWORT	<i>Cardamine concatenata</i>				X
HEPATIC	<i>Hepatica nobilis</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
MAY APPLE	<i>Podophyllum peltatum</i>				X
NEW YORK FERN	<i>Thelypteris noveboracensis</i>				X
RED BANE BERRY	<i>Actaea spicata ssp. rubra</i>				X
RED TRILLIUM	<i>Trillium erectum</i>				X
SEDGE	<i>Carex plantaginea</i>				X
SPRING BEAUTY	<i>Claytonia sp.</i>				X
TROUT LILY	<i>Erythronium americanum</i>				X
VIRGINIA WATERLEAF	<i>Hydrophyllum virginianum</i>				X
WHITE BANE BERRY	<i>Actaea pachypoda</i>				X
WHITE TRILLIUM	<i>Trillium grandiflorum</i>				X
WHITE WOOD ASTER	<i>Aster divaricatus</i>				X
WILD LEEK	<i>Allium tricoccum</i>				X
ZIG ZAG GOLDENROD	<i>Solidago flexicaulis</i>				X

MAPLE-BASSWOOD RICH MESIC FOREST AT MISSION ROAD GULLIES

Common Name	Species Name	Dominant	Tree	Shrub/Vine	Herb
BASSWOOD	<i>Tilia americana</i>	X	X		
SUGAR MAPLE	<i>Acer saccharum</i>	X	X		
WHITE ASH	<i>Fraxinus americana</i>	X	X		
BITTERNUT HICKORY	<i>Carya cordiformis</i>		X		
BLACK CHERRY	<i>Prunus serotina</i>		X		
BLACK WALNUT	<i>Juglans nigra</i>		X		
MUSCLEWOOD	<i>Carpinus caroliniana</i>		X		
RED OAK	<i>Quercus rubra</i>		X		
SHAGBARK HICKORY	<i>Carya ovata</i>		X		
TULIP	<i>Liriodendron tulipifera</i>		X		
WHITE PINE	<i>Pinus strobus</i>		X		
BLACK RASPBERRY	<i>Rubus occidentalis</i>			X	
CURRENT or GOOSEBERRY	<i>Ribes sp.</i>			X	
MULTIFLORA ROSE	<i>Rosa multiflora</i>			X	
POISON IVY	<i>Toxicodendron radicans</i>			X	
RIVERBANK GRAPE	<i>Vitis riparia</i>			X	
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>			X	
GARLIC MUSTARD	<i>Alliaria petiolata</i>	X			X
MONEYWORT	<i>Lysimachia nummularia</i>	X			X
WHITE SNAKEROOT	<i>Eupatorium rugosum</i>	X			X
BEDSTRAW	<i>Galium mollugo</i>				X
BLOODROOT	<i>Sanguinaria canadensis</i>				X
BLUE COHOSH	<i>Caulophyllum thalictroides</i>				X
BOTTLEBRUSH GRASS	<i>Elymus hystrix</i>				X
COMMON BLUE VIOLET	<i>Viola sororia</i>				X
CUT-LEAVED TOOTHWORT	<i>Cardamine concatenata</i>				X
DOWNY YELLOW VIOLET	<i>Viola pubescens</i>				X
EARLY MEADOW RUE	<i>Thalictrum dioicum</i>				X
FOAM FLOWER	<i>Tiarella cordifolia</i>				X
JACK IN THE PULPIT	<i>Arisaema triphyllum</i>				X
JUMPSEED	<i>Polygonum virginianum</i>				X
MAY APPLE	<i>Podophyllum peltatum</i>				X
TROUT LILY	<i>Erythronium americanum</i>				X
TWO-LEAVED TOOTHWORT	<i>Cardamine diphylla</i>				X
WHITE AVENS	<i>Geum canadense</i>				X
WHITE TRILLIUM	<i>Trillium grandiflorum</i>				X
WHITE VERVAIN	<i>Verbena urticifolia</i>				X
WILD GERANIUM	<i>Geranium maculatum</i>				X

## CONCLUSION

With their wild and undeveloped shorelines and wooded hillsides, the dramatic and unspoiled setting of Hemlock and Canadice Lakes sets them apart from all the other Finger Lakes. Their watersheds, too, are still largely rural, with 55% forested, 11% agricultural, 20% post-agricultural and only 4% developed plant communities. It is hoped that the Finger Lakes Land Trust, The Nature Conservancy and the Ontario County Planning Department will be able to use the information provided in this report in their cooperative conservation effort.

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