

Observations on the Flora and Fauna of Steepletop

Compiled by the Hawthorne Valley Farmscape Ecology Program (fep@hawthornevalleyfarm.org)

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The Hawthorne Valley Farmscape Ecology Program (FEP) has conducted biological inventories in select habitats at Steepletop in 2011 and 2012, with follow-up visits in 2013 and 2016. The Program has also—over the years—offered a number of ecology walks, introducing the public to the wild plants and animals that live in the fields and forests of Steepletop.

Most of our observations were made in the habitat units numbered on the aerial photo.



The numbers correspond to the following management units and habitats:

- 2. *Hawk Meadow*: Old Field
- 61. *West Field*: Wet Meadow
- 62. *West Field*, north of tennis court: Old Field
- 63. *West Field*, south of tennis court: Old Field
- 64. *East Field*, east of buildings: Old Field
- 65. Young Forest
- 66. *Hidden Meadow*: Old Field
- 80. Young Forest
- 81. “Ancient” Northern Hardwood Forest
- 82. Rocky Stream
- 83. Shrub Swamp

Below, we offer a brief summary of our salient observations on the flora, general habitats, and select insect groups at Steepletop.

Flora of Steepletop:

We documented a total of 268 plant species at Steepletop, of which 192 (71%) were native species and 10 invasive. All the plants we found are listed in the Appendix (provided as a PDF file, sorted by common name and as an Excel file), which gives the plant family, scientific and common name for each species we found. It also indicates whether the species is considered native, non-native, or invasive; whether it is rare in Columbia County or in the larger Hudson Valley region; and in which of the management units at Steepletop we have seen it. Please note that this plant list is far from comprehensive and that we expect additional species to be present at Steepletop. Also, if a species is not marked as occurring in a management unit, this only means, we did not see it there during our brief inventories. It does not mean that it definitely does not occur there. In the following narrative, we refer to the plant species by their common names. Please use Appendix 1 to find the corresponding scientific names.

Habitats with Description of their Vegetation:

Steepletop is embedded in Harvey Mountain State Forest and we documented some forest habitats that seem to be representative of the surrounding larger landscape.

These included “ancient” Oak-Maple Forest (map unit 81), which might never have been cleared for agriculture (although it has certainly been selectively logged). The most common and largest trees in that forest were Red Oak, Red Maple, White Ash, and White Birch, with smaller Beech, Sugar Maple, and Yellow Birch. The shrub layer/understory was characterized by saplings of the canopy trees and a variety of native shrubs and small trees, such as Witch-hazel, Beaked Hazel, Muscledwood, Hop-hornbeam, and Striped Maple. The ground layer was not very dense and characterized by common native forest herbs, ferns, and tree and shrub seedlings. We also documented a variety of native forest sedges. We noted no non-native and no particularly rare native species in this forest.

We also inventoried several examples of a post-agricultural forests (map units 65, 80). These Young Forests had a canopy of White Pine and Red Maple, with occasional Red Oak, Black Cherry, Shadbush, and White Birch. The understory had a mix of saplings of the canopy trees, as well as Beech, Shadbush, and Striped Maple. The ground layer was not very dense and characterized by Canada Mayflower, Starflower, Lowbush Blueberry, ferns and club-mosses. The invasive species we noted in these forests were Japanese Barberry, Common Buckthorn, and Norway Maple. We did not find any particularly rare native species in this habitat.

The unique habitats at Steepletop were its Old Fields. In the higher elevations of the eastern part of Columbia County, there are few fields that have been kept open, yet not actively cropped (or grazed) for such a long time. In addition, these fields have long been islands of open habitat located in a matrix of forest, isolated from areas of more intensive agriculture or development. Some of these fields have seeps, where groundwater emerges to the surface and creates the conditions for Wet Meadows. All these factors contribute to vegetation that is diverse, composed of a mix of native and European meadow plants, and home to some native plant species we rarely find anywhere else in Columbia County.

All the Old Fields are characterized by an abundance of native woody plants, such as Lowbush Blueberry, Allegheny Blackberry, White Meadowsweet, Steeplebush, Gray Dogwood, Arrowwood, Black Chokeberry, and seedlings of Black Cherry. These small shrubs are accompanied by the native “old field goldenrods” (Wrinkle-

leaved, Grass-leaved, Smooth, Early, and—to a lesser extent—Tall/Canada Goldenrod) and a number of asters (Blue Wood, Heath, Calico, Purple-stemmed, and Wavy-leaved Aster). Furthermore, many European grasses and clovers thrive in these fields, together with a variety of native and non-native wildflowers. Some of the more unusual native wildflowers in this habitat include Golden Alexander, Spreading Dogbane, Common Milkweed, Gild Geranium, Blue-eyed Grass, and Narrow-leaved Mountain Mint. A few invasive plants occur in the Old Fields in relatively small amounts. We have seen Multiflora Rose, Eurasian Shrub Honeysuckle, Japanese Barberry, Canada Thistle, and Spotted Knapweed.

The rarest native plants in this habitat were Wood Lily (documented south of the Tennis Court [map unit 63] and in the *Hidden Meadow* [map unit 66]), Spiked Lobelia (only seen in the *Hidden Meadow*, but in great numbers there), American Harebell (documented north of the Tennis Court [map unit 62] and in the *Hidden Meadow*).

The Wet Meadow on the lower end of the *West Field* (map unit 61) is a very special type of Old Field where we found several otherwise rare plants in great numbers. We suspect that the seeps of groundwater in that area help create a unique plant community. This includes a large population (we counted at the order of 500! individual plants) of the Pale Green Orchid and a few individuals of Ragged-fringed Orchid. Both of these species were also seen in smaller numbers in the *East Field* (map unit 64). The Wet Meadow in the *West Field* also had a large number of Water Avens, several wetland sedges not seen anywhere else at Steepletop, and it was here that we found a few plants of Closed Gentian.

Invasive Plants:

The only species of invasive plant observed in 2011/12 that seemed worthy of a concerted effort for control was Lesser Celandine, which had developed a dense patch in the ditch in front of the office building and was threatening to spread downhill from there.

Dragonflies and Damselflies:

Steepletop open-field and pond-edge dragonflies and damselflies were tallied during July of 2012, June of 2013 and August of 2016. While none are considered rare at a state level, three species (the Clamp-tipped and Racket-tailed Emeralds, and the Twin-spotted Spiketail) are, in our experience, rare at the County level. For example, three out of four of our Clamp-tailed Emerald sightings in Columbia County occurred at Steepletop.

Table 1: Dragonflies and Damselflies of Steepletop

Common Name	Family	Scientific Name	County Abundance
Sedge Sprite	Coenagrionidae	<i>Nehalennia irene</i>	unusual
Black Saddlebags	Libellulidae	<i>Tramea lacerata</i>	abundant
Black-tipped Darner	Aeshnidae	<i>Aeshna tuberculifera</i>	unusual
Calico Pennant	Libellulidae	<i>Celithemis elisa</i>	occasional
Clamp-tipped Emerald	Corduliidae	<i>Somatochlora tenebrosa</i>	rare
Common Baskettail	Corduliidae	<i>Epitheca cynosura</i>	occasional
Common Green Darner	Aeshnidae	<i>Anax junius</i>	abundant
Common Whitetail	Libellulidae	<i>Plathemis lydia</i>	abundant
Eastern Pondhawk	Libellulidae	<i>Erythemis simplicicollis</i>	abundant
Green-striped Darner	Aeshnidae	<i>Aeshna verticalis</i>	unusual
Painted Skimmer	Libellulidae	<i>Libellula semifasciata</i>	unusual
Racket-tailed Emerald	Corduliidae	<i>Dorocordulia libera</i>	rare
Red Meadowhawk	Libellulidae	<i>Sympetrum sp.</i>	frequent
Twelve-spotted Skimmer	Libellulidae	<i>Libellula pulchella</i>	abundant
Twin-spotted Spiketail	Cordulegastridae	<i>Cordulegaster maculata</i>	rare
Widow Skimmer	Libellulidae	<i>Libellula luctuosa</i>	abundant
Habitat Key			
rocky headwater streams		These are crude habitat approximations; some	
marshy wetlands		species are more specific and some are more	
open ponds & lakes		general.	

Butterflies:

At least partially reflecting its unusual botany, Steepletop is home to a diverse butterfly fauna including some regionally rare species. It is the only place in the County where we have found Coral Hairstreak, and one of the few sites where we have found Grey Comma and Aphrodite Fritillary. While finding a single example of any one of these species is interesting, finding a site that harbors all three is exciting, and indicative of Steepletop’s ecological value.

Table 2: Butterflies of Steepletop

Common Name	Family	Species	County Abundance	Flight Time	Caterpillar Food	Habitat
Cabbage White	Pieridae	<i>Pieris rapae</i>	common	May-Oct	crucifers	pastures or cultivated fields
Comma, Grey	Nymphalidae	<i>Polygonia progne</i>	rare	3 flights, April - Sept	Ribes, elm	woodland clearings
Common Ringlet	Nymphalidae	<i>Coenonympha tullia</i>	common	late May-early July, late July-Aug	grasses	old fields
Common Wood Nymph	Nymphalidae	<i>Cerylonis pegala</i>	common	July-early Sept	grasses	fields with shrubs or
Copper, American	Lycaenidae	<i>Lycaena phlaeas</i>	common	May-Sept	dock species	drier fields
Dash, Long	Hesperiidae	<i>Polites mystic</i>	occasional	early June-early July, Aug	grasses	open grassy oft moist
Eastern Tailed Blue	Lycaenidae	<i>Evers comyntus</i>	common	May-Sept	legumes	open, disturbed low
Fritillary, Aphrodite	Nymphalidae	<i>Speyeria aphrodite</i>	rare	late June-early Sept	violets	upland acid soils, moist
Fritillary, Great Spangled	Nymphalidae	<i>Speyeria cybele</i>	common	late June-early Sept	violets	forest edges
Fritillary, Meadow	Nymphalidae	<i>Boloria bellona</i>	common	May-Sept	violets	moister fields
Hairstreak, Banded	Lycaenidae	<i>Satyrium colanuss</i>	occasional	May-Aug	oaks and hickories	edges, opens
Hairstreak, Coral	Lycaenidae	<i>Satyrjum titus</i>	rare	June	cherries, plums	old field, second growth
Little Glassywing	Hesperiidae	<i>Pompeius verna</i>	occasional	late June-July	Purple Top & ?? other grasses	old fields/pastures
Little Wood Satyr	Nymphalidae	<i>Megisto gymela</i>	common	late May-early Aug	grasses	edges, clearings of
Monarch	Nymphalidae	<i>Danaus plexippus</i>	common	mid June-Sept	milkweed	old fields, edges
Northern Broken-dash	Hesperiidae	<i>Walingengenia egeremet</i>	occasional	early June-mid Aug	panic grasses	old fields
Pearl Crescent	Nymphalidae	<i>Physcides tharos</i>	common	mid May-early Sept	asters	a variety of fields
Skipper, Dun	Hesperiidae	<i>Euphyes vestris</i>	occasional	July-Aug	sedges, maybe grasses	old fields
Skipper, European	Hesperiidae	<i>Thymelicus lineola</i>	common	June - July	timothy & other introd	fields
Skipper, Least	Hesperiidae	<i>Ancyloxypha numitor</i>	common	June - Oct	grasses	wet, tall grass
Skipper, Peck's	Hesperiidae	<i>Polites peckius</i>	common	late May - Sept	grasses	fields
Skipper, Tawny-edged	Hesperiidae	<i>Polites themistocles</i>	common	late May -mid July, early Aug - Sept	grasses	grassy oft moist
Sulphur, Clouded	Pieridae	<i>Colias philodice</i>	common	May-mid Oct	legumes	open, prefers more
Swallowtail, Black	Papilionidae	<i>Papilio polyxenes</i>	common	May-Sept	parsely, carrot and other	mainly open fields
Swallowtail, Eastern Tiger	Papilionidae	<i>Papilio glaucus</i>	common	late May-Oct	black cherry, tuliptree,	near deciduous trees
Swallowtail, Spicebush	Papilionidae	<i>Papilio troilus</i>	occasional	May-Aug	Spicebush	varied open space, usually near forest

Moths:

The Farmscape Ecology Program conducted a moth survey at Steepletop on the 8th and 9th of August, 2016. We used four BugDorm Night Collecting Tents each paired with a 40 watt actinic bulb. The survey lasted about 7 hours during the night. All moths that were attracted to the tents were photo documented and identified to species if possible. Eighty one species of moths were found. Many were common species that have been documented at numerous locations in Columbia County, but there were several uncommon and/or regionally declining species documented. One uncommon species found was the Decorated Owlet (*Pangrapta decoralis*), a blueberry specialist (its caterpillar feeds only on blueberry (*Vaccinium* sp.). It is not considered a pest of the plant. Additionally, we documented Red-Humped Caterpillar Moth (*Schizura concinna*), a species that appears to be declining in this region. Its caterpillars feed on a variety of woody plants. Small Eyed Sphinx (*Paonias myops*) was also found, another species whose population has declined in parts of the northeastern US. The reason for the decline of the latter two moths may be linked to *Compsilura concinnata*, a non-native fly parasitoid that was intentionally introduced to our region for Gypsy Moth (*Lymantria dispar*) control.

Table 3: Moth Species of Steepletop

Scientific Name	Common Name	Hodges #
<i>Acronicta hasta</i>	Speared Dagger Moth	9229
<i>Amphipoea americana</i>	American Ear Moth	9457
<i>Amphipyra pyramidoides</i>	Copper Underwing	9638
<i>Anavitrinella pampinaria</i>	Common Gray	6590
<i>Antaeotricha schlaegeri</i>	Schlaeger's Fruitworm Moth	1011
<i>Besma endropiaria</i>	Straw Besma	6884
<i>Besma quercivoraria</i>	Oak Besma	6885
<i>Cabera erythemaria</i>	Yellow-Dusted Cream	6677
<i>Cabera variolaria</i>	The Vestal	6678
<i>Caripeta angustiorata</i>	Brown Pine Looper	6887
<i>Catocala lineela</i>	Little Lined Underwing	8878.1
<i>Catocala subnata</i>	Youthful Underwing	8797
<i>Cenopis pettitana</i>	Maple-Basswood Leafroller	3725
<i>Choristoneura rosaceana</i>	Oblique-Banded Leafroller	3635
<i>Clostera albosigma</i>	Sigmoid Prominent	7895
<i>Crambus praefectellus</i>	Common Grass-Veneer	5355
<i>Cyclophora pendulinaria</i>	Sweetfern Geometer	7139
<i>Cycnia tenera</i>	Delicate Cycnia	8230
<i>Dasychira basiflava</i>	Yellow-Based Tussock Moth	8296
<i>Dasychira obliquata</i>	Streaked Tussock Moth	8302
<i>Dasychira vagans</i>	Variable Tussock Moth	8294
<i>Deprana arcuata</i>	Arched Hooktip	6251
<i>Ennomos subsignaria</i>	Elm Spanworm	6798
<i>Epirrhoe alternata</i>	White-Banded Toothed Carpet	7394
<i>Eulithis explanata</i>	White Eulithis	7206
<i>Eusarca confusaria</i>	Confused Eusarca	6941

<i>Feltia jaculifera</i>	Dingy Cutworm	10670
<i>Furcula borealis</i>	White Furcula	7936
<i>Gluphisia septentrionis</i>	Common Gluphisia	7931
<i>Grammia virgo</i>	Virgin Tiger Moth	8197
<i>Halysidota tessellaris</i>	Banded Tussock Moth	8203
<i>Heterocampa biundata</i>	Wavy-Lined Heterocampa	7995
<i>Homochlodes frittillaria</i>	Pale Homochlodes	6812
<i>Hydrelia albifera</i>	Fragile White Carpet	7423
<i>Hypagyrtis piniata</i>	Pine Measuringworm	6656
<i>Hypena baltimoralis</i>	Baltimore Snout	8442
<i>Hypena edictalis</i>	Large Snout	8452
<i>Hypena madefactalis</i>	Gray-Edged Snout	8447
<i>Hypoprepia fucosa</i>	Painted Lichen Moth	8090
<i>Idia aemula</i>	Common Idia	8323
<i>Idia americalis</i>	American Idia	8322
<i>Idia rotundalis</i>	Rotund Idia	8326
<i>Iridopsis ephyraria</i>	Pale-Winged Gray	6582
<i>Iridopsis larvaria</i>	Bent-Line Gray	6588
<i>Lacinipolia olivacea</i>	Olive Arches	10406
<i>Lacinipolia renigera</i>	Bristly Cutworm	10397
<i>Lambdina fiscellaria</i>	Hemlock Looper	6888
<i>Leucania commoides</i>	Comma Wainscot	10446
<i>Lymantria dispar</i>	Gypsy Moth	8318
<i>Macaria aemulataria</i>	Common Angle	6326
<i>Macaria minorata</i>	Minor Angle	6340
<i>Macaria pinistrobata</i>	White Pine Angle	6347
<i>Macaria transitaria</i>	Blurry Chocolate Angle	6339
<i>Malacosoma disstria</i>	Forest Tent Caterpillar	7698
<i>Melanolophila canadaria</i>	Canadian Melanolophia	6620
<i>Metanema inatomaria</i>	Pale Metanema	6819
<i>Oligocentria semirufescens</i>	Red-Washed Prominent	8012
<i>Orgyia leucostigma</i>	White-Marked Tussock Moth	8316
<i>Ostrinia nubilalis</i>	European Corn Borer	4949
<i>Pangrapta decoralis</i>	Decorated Owlet	8490
<i>Panthea furcilla</i>	Eastern Panthea	9182
<i>Paonias myops</i>	Small-Eyed Sphinx	7825
<i>Peridea angulosa</i>	Angulose Prominent	7920
<i>Pero honestaria</i>	Honest Pero	6753
<i>Prococera asperatella</i>	Maple Webworm	5606
<i>Proxenus miranda</i>	Miranda Moth	9647
<i>Pseudothyatira cymatophoroides</i>	Tufted Thyatrid	6237
<i>Renia discoloralis</i>	Discolored Renia	8381

<i>Renia flavipunctalis</i>	Yellow-Spotted Renia	8384.1
<i>Rheumaptera prunivorata</i>	Cherry Scallop Shell	7292
<i>Schizura concinna</i>	Red-Humped Caterpillar Moth	8010
<i>Schizura ipomoeae</i>	Morning-Glory Prominent	8005
<i>Schizura unicornis</i>	Unicorn Prominent	8007
<i>Scopula inductata</i>	Soft-Lined Wave	7094
<i>Scopula limboundata</i>	Large Lace Border	7159
<i>Speranza pustularia</i>	Lesser Maple Spanworm	6273
<i>Tolype vellea</i>	Large Tolype	7670
<i>Trichodezia albovittata</i>	White Striped Black	7430
<i>Xestia badicollis</i>	Northern Variable Dart	10968
<i>Zanclognatha jacchusalis</i>	Wavy-Lined Fan-Foot	8353
<i>Zanclognatha laevigata</i>	Variable Fan-Foot	8345

Ground Beetles:

A brief survey of ground beetles at Steepletop revealed a trio of species which are rare at least in our own records: *Agonum picicornoides*, *Bradycellus lugubris*, and *Notiophilus palustris*. We have recorded the first two at only one other site in Columbia County, and the last only from Steepletop.

Ants:

As befits dry, well-established old-field habitats embedded in forest, Steepletop is home to a fairly diverse ant fauna including *Formica prociliata*, an interesting Midwestern species, which, on the East Coast, has so far only been reported from Columbia County.

Table 4: Ants of Steepletop

Genus	Species	Overall Abundance
<i>Aphaenogaster</i>	<i>picea</i>	Common
<i>Aphaenogaster</i>	<i>rudis</i>	Common
<i>Brachymyrmex</i>	<i>depilis</i>	Common
<i>Formica</i>	<i>exsectoides</i>	Common
<i>Formica</i>	<i>incerta</i>	Common
<i>Formica</i>	<i>lasioides</i>	Common
<i>Formica</i>	<i>neogagates</i>	Common
<i>Formica</i>	<i>obscuriventris</i>	Common
<i>Formica</i>	<i>prociliata</i>	Rare
<i>Formica</i>	<i>subaenescens</i>	Common
<i>Formica</i>	<i>subintegra</i>	Common
<i>Formica</i>	<i>subsericea</i>	Common
<i>Lasius</i>	<i>alienus</i>	Common
<i>Lasius</i>	<i>flavus</i>	Common
<i>Lasius</i>	<i>nearcticus</i>	Common
<i>Lasius</i>	<i>neoniger</i>	Common
<i>Lasius</i>	<i>umbratus</i>	Common
<i>Myrmica</i>	<i>fracticornis</i>	Common
<i>Myrmica</i>	<i>incompleta</i>	Common
<i>Myrmica</i>	<i>latifrons</i>	Common
<i>Myrmica</i>	<i>sculptilis</i>	Rare
<i>Myrmica</i>	<i>smithana</i>	Rare
<i>Stenamma</i>	<i>brevicorne</i>	Common
<i>Tapinoma</i>	<i>sessile</i>	Common

Appendix: Preliminary Plant List of Steepletop

compiled by the Hawthorne Valley Farmscape Ecology Program (fep@hawthornevalleyfarm.org) in 2020 based on observations made in 2011/12)

Common Name	Scientific Name	Plant Family	Native (Y=yes; N=no; N-I=Invasive)	Map Unit	2	61	62	63	64	65	66	80	81	82	83				
					rare in Columbia County (CC) or Hudson Valley (HV)	Old Field "Hawk Meadow"	Wet Meadow in "West Field"	Old Field "West Field North of Tennis Court"	Old Field "West Field South of Tennis Court"	Old Field "East Field; east of buildings"	Young Forest	Old Field "Hidden Meadow"	Young Forest	Oak-Maple Forest	Rocky Stream	Shrub Swamp	Young Forest above Tennis Court	Poetry Trail	other habitats
alder	Alnus sp.	Betulaceae	Y						x										
Allegheny blackberry	Rubus allegheniensis	Rosaceae	Y			x	x	x	x	x	x	x				x			
Allegheny hawkweed	Hieracium paniculatum	Asteraceae	Y														x		
Allegheny serviceberry	Amelanchier laevis	Rosaceae	Y							x		x	x	x		x			
alpine violet	Viola labradorica	Violaceae	Y			x													
alsike clover	Trifolium hybridum	Fabaceae	N					x											
alternate-leaf dogwood	Cornus alternifolia	Cornaceae	Y							x		x	x	x			x		
American chestnut	Castanea dentata	Fagaceae	Y											x				x	
American harebell	Campanula rotundifolia	Campanulaceae	Y	CC			x				x								
American mountain-ash	Sorbus americana	Rosaceae	Y	CC										x					
American red raspberry	Rubus idaeus ssp. strigosus	Rosaceae	Y											x		x			
American water-pennywort	Hydrocotyle americana	Apiaceae	Y			x													
American wintergreen	Pyrola americana	Ericaceae	Y							x									
American woollyfruit sedge	Carex lasiocarpa ssp. americana	Cyperaceae	Y	CC		x													
Appalachian sedge	Carex appalachica	Cyperaceae	Y														x		
apple	Malus sp.	Rosaceae	N				x												
arrow-leaf tearthumb	Persicaria sagittata	Polygonaceae	Y			x													
arrowwood	Viburnum dentatum var. lucidum	Caprifoliaceae	Y			x	x	x	x	x	x	x	x		x				
azure bluet	Houstonia caerulea	Rubiaceae	Y			x	x		x									x	
beaked hazelnut	Corylus cornuta ssp. cornuta	Betulaceae	Y							x		x	x						
Bebb's willow	Salix bebbiana	Salicaceae	Y			x			x		x								
beech	Fagus grandifolia	Fagaceae	Y							x		x	x	x			x		
bentgrass	Agrostis sp.	Poaceae				x													
bird vetch	Vicia cracca	Fabaceae	N			x			x										
bird's-eye speedwell	Veronica persica	Scrophulariaceae	N			x													
bittersweet nightshade	Solanum dulcamara var. dulcamara	Solanaceae	N												x				
black cherry	Prunus serotina	Rosaceae	Y			x	x	x	x	x	x	x	x			x			
black chokeberry	Aronia melanocarpa	Rosaceae	Y			x	x	x	x	x	x								
black huckleberry	Gaylussacia baccata	Ericaceae	Y								x								
black oak	Quercus velutina	Fagaceae	Y														x		
black-eyed Susan	Rudbeckia hirta	Asteraceae	N			x	x				x								
bladder campion	Silene vulgaris	Caryophyllaceae	N					x											
blue wood aster	Symphyotrichum cordifolium	Asteraceae	Y								x								
blueflag	Iris versicolor	Iridaceae	Y			x			x										
bracken fern	Pteridium aquilinum var. latiusculum	Dennstaedtiaceae	Y								x							x	
bristly dewberry	Rubus hispidus	Rosaceae	Y			x	x	x									x		
brittlestem hemp-nettle	Galeopsis tetrahit var. tetrahit	Lamiaceae	N					x											
broadleaf helleborine	Epipactis helleborine	Orchidaceae	N															x	
broom sedge	Carex scoparia var. scoparia	Cyperaceae	Y			x	x	x	x	x									
bulrush	Scirpus atrovirens/hattorianus	Cyperaceae	Y			x	x		x										
burdock	Arctium sp.	Asteraceae	N					x											
butter-and-eggs	Linaria vulgaris	Scrophulariaceae	N					x			x								
calico aster	Symphyotrichum lateriflorum	Asteraceae	Y			x	x		x		x			x					
Canada lettuce	Lactuca canadensis	Asteraceae	Y					x			x								
Canada mayflower	Maianthemum canadense	Liliaceae	Y			x				x		x	x				x		
Canada thistle	Cirsium arvense	Asteraceae	N-I					x											
cherry	Prunus sp.	Rosaceae						x	x	x	x								
choke cherry	Prunus virginiana	Rosaceae	Y																
cinnamon fern	Osmunda cinnamomea	Osmundaceae	Y										x	x					
closed gentian	Gentiana clausa	Gentianaceae	Y	CC		x													
coltsfoot	Tussilago farfara	Asteraceae	N																
common blue violet	Viola sororia	Violaceae	Y														x		
common buckthorn	Rhamnus cathartica	Rhamnaceae	N-I										x						
common cinquefoil	Potentilla simplex	Rosaceae	Y			x	x	x	x	x	x								
common dandelion	Taraxacum officinale	Asteraceae	N				x	x											
common elder	Sambucus nigra ssp. canadensis	Caprifoliaceae	Y												x	x			
common golden Alexanders	Zizia aurea	Apiaceae	Y			x	x	x		x				x					
common horsetail	Equisetum arvense	Equisetaceae	Y						x										
common milkweed	Asclepias syriaca	Asclepiadaceae	Y					x	x		x								

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					rare in Columbia County (CC) or Hudson Valley (HV)	Old Field "Hawk Meadow"	Wet Meadow in "West Field"	Old Field "West Field North of Tennis Court"	Old Field "West Field South of Tennis Court"	Old Field "East Field; east of buildings"	Young Forest	Old Field "Hidden Meadow"	Young Forest	Oak-Maple Forest	Rocky Stream	Shrub Swamp	Young Forest above Tennis Court	Poetry Trail	other habitats
common mullein	Verbascum thapsus	Scrophulariaceae	N						x										
common plantain	Plantago major	Plantaginaceae	N						x										
common serviceberry	Amelanchier arborea var. arborea	Rosaceae	Y							x	x	x	x	x					
common sheep sorrel	Rumex acetosella ssp. pyrenaicus	Polygonaceae	N				x		x		x								
common speedwell	Veronica officinalis	Scrophulariaceae	N			x									x				
common St. Johnswort	Hypericum perforatum	Clusiaceae	N			x	x		x		x								
common stitchwort	Stellaria graminea	Caryophyllaceae	N			x	x												
common tansy	Tanacetum vulgare	Asteraceae	N							x								x	
common winterberry	Ilex verticillata	Aquifoliaceae	Y													x			
common woodrush	Luzula multiflora ssp. multiflora	Juncaceae	Y			x	x	x	x	x		x							
common woolgrass	Scirpus cyperinus	Cyperaceae	Y				x												
common yarrow	Achillea millefolium var. millefolium	Asteraceae	N				x	x	x	x		x							
curly dock	Rumex crispus	Polygonaceae	N							x						x			
currant	Ribes sp.	Grossulariaceae														x			
cushion moss	Leucobryum sp.	Leucobryaceae	Y													x			
daisy fleabane	Erigeron annuus	Asteraceae	Y						x										
deerberry	Vaccinium stamineum	Ericaceae	Y							x									
Deptford pink	Dianthus armeria ssp. armeria	Caryophyllaceae	N					x											
dogbane	Apocynum sp.	Apocynaceae	Y				x												
drooping sedge	Carex prasina	Cyperaceae	Y													x			
drooping woodland sedge	Carex arctata	Cyperaceae	Y				x	x	x						x			x	
early goldenrod	Solidago juncea	Asteraceae	Y				x	x	x	x		x						x	
early meadow-rue	Thalictrum dioicum	Ranunculaceae	Y													x			
eastern cottonwood	Populus deltoides	Salicaceae	Y				x												
eastern star sedge	Carex radiata	Cyperaceae	Y													x			
eastern tree clubmoss	Dendrolycopodium obscurum	Lycopodiaceae	Y								x		x	x				x	
elliptic spikerush	Eleocharis elliptica	Cyperaceae	Y					x											
Eurasian shrub honeysuckle	Lonicera morrowii/bella	Caprifoliaceae	N-I									x							
everygreen woodfern	Dryopteris intermedia ssp. intermedia	Dryopteridaceae	Y								x		x			x			
false Solomon's-seal	Maianthemum racemosum ssp. racemosum	Liliaceae	Y															x	
false spiraea	Sorbaria sorbifolia	Rosaceae	N							x								x	
fan clubmoss	Diphasiastrum digitatum	Lycopodiaceae	Y								x		x	x				x	
fescue	Festuca sp.	Poaceae	N						x	x	x		x						
fescue	Schedonorus sp.	Poaceae	N														x		
fibrousroot sedge	Carex communis var. communis	Cyperaceae	Y													x			
flat-topped white aster	Doellingeria umbellata var. umbellata	Asteraceae	Y					CC											
forest goldenrod	Solidago arguta var. arguta	Asteraceae	Y															x	
fowl mannagrass	Glyceria striata	Poaceae	Y														x		
fox or yellowfruit sedge	Carex vulpinoidea/annectens	Cyperaceae	Y																
fringed loosestrife	Lysimachia ciliata	Primulaceae	Y																
fringed sedge	Carex crinita var. crinita	Cyperaceae	Y																
fuzzy wuzzy sedge	Carex hirsutella	Cyperaceae	Y																
gall-of-the-earth	Prenanthes trifoliolata	Asteraceae	Y															x	
garden stonecrop	Hylotelephium telephium	Crassulaceae	N														x		
garlic-mustard	Alliaria petiolata	Brassicaceae	N-I																
giant Solomon's seal	Polygonatum biflorum	Liliaceae	Y															x	
goat's-beard	Tragopogon pratensis	Asteraceae	N																
golden ragwort	Packera aurea	Asteraceae	Y																
graceful sedge	Carex gracillima	Cyperaceae	Y																
grape	Vitis sp.	Vitaceae																	
grass	sp.	Poaceae																	
grass-leaved goldenrod	Euthamia graminifolia	Asteraceae	Y																
gray birch	Betula populifolia	Betulaceae	Y																
gray dogwood	Cornus racemosa	Cornaceae	Y																
gray goldenrod	Solidago nemoralis ssp. nemoralis	Asteraceae	Y																
green ash	Fraxinus pensylvanica	Oleaceae	Y																
grove bluegrass	Poa alsodes	Poaceae	Y																

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hairy Solomon's seal	Polygonatum pubescens	Liliaceae	Y							x			x						
hairyfruit sedge	Carex trichocarpa	Cyperaceae	Y	HV		x													
hawkweed	Pilosella sp.	Asteraceae	N								x			x					
hawthorn	Crataegus sp.	Rosaceae			x		x	x	x	x	x	x	x						
hay sedge	Carex argyrantha	Cyperaceae	Y				x		x										
hayscented fern	Dennstaedtia punctilobula	Dennstaedtiaceae	Y		x			x		x	x		x			x			
heal-all	Prunella vulgaris	Lamiaceae	Y/N			x	x		x			x		x					
heath aster	Symphyotrichum ericoides var. ericoides	Asteraceae	Y								x								
hedge false-bindweed	Calystegia sepium ssp. sepium	Convolvulaceae	N				x	x			x								
herb-Robert	Geranium robertianum	Geraniaceae	Y												x				
hop-clover	Trifolium aureum	Fabaceae	N			x	x	x	x		x								
hop-hornbeam	Ostrya virginiana	Betulaceae	Y												x				
Indian-cucumber	Medeola virginiana	Liliaceae	Y							x									
Indian-pipe	Monotropa uniflora	Ericaceae	Y							x		x	x						
Indian-tobacco	Lobelia inflata	Campanulaceae	Y					x											
inland sedge	Carex interior	Cyperaceae	Y	CC	x				x										
interrupted fern	Osmunda claytoniana	Osmundaceae	Y			x	x		x	x			x		x				
iris	Iris sp.	Iridaceae													x				
Jack-in-the-pulpit	Arisaema triphyllum	Araceae	Y												x			x	
Japanese barberry	Berberis thunbergii	Berberidaceae	N-I						x		x			x		x			
kidney-leaved buttercup	Ranunculus abortivus	Ranunculaceae	Y															x	
lady fern	Athyrium filix-femina ssp. angustum	Woodsiaceae	Y						x				x	x					
lesser celandine	Ficaria verna	Ranunculaceae	N-I															x	
lettuce	Lactuca sp.	Asteraceae	Y				x												
little bluestem	Schizachyrium scoparium var. scoparium	Poaceae	Y						x										
lowbush blueberry	Vaccinium sp.	Ericaceae	Y		x	x	x	x	x	x	x	x	x						
lupine	Lupinus sp.	Fabaceae						x											
maiden pink	Dianthus deltooides	Caryophyllaceae	N				x												
maleberry	Lyonia ligustrina	Ericaceae	Y		x	x	x	x	x		x								
mapleleaf viburnum	Viburnum acerifolium	Caprifoliaceae	Y									x	x				x		
marsh fern	Thelypteris palustris var. pubescens	Thelypteridaceae	Y			x			x										
meadow hawkweed	Pilosella caespitosa	Asteraceae	N				x	x											
Missouri willow	Salix eriocephala	Salicaceae	Y			x			x										
moist sowthistle	Sonchus arvensis ssp. uliginosus	Asteraceae	N								x								
moneywort	Lysimachia nummularia	Primulaceae	N-I																
mountain laurel	Kalmia latifolia	Ericaceae	Y												x				
multiflora rose	Rosa multiflora	Rosaceae	N-I						x						x				
musclewood	Carpinus caroliniana ssp. virginiana	Betulaceae	Y									x	x						
nannyberry	Viburnum lentago	Caprifoliaceae	Y													x			
narrowleaf blue-eyed grass	Sisyrinchium angustifolium	Iridaceae	Y			x	x		x										
narrowleaf plantain	Plantago lanceolata	Plantaginaceae	N			x													
narrow-leaved mountain mint	Pycnanthemum tenuifolium	Lamiaceae	Y				x				x								
New York fern	Thelypteris noveboracensis	Thelypteridaceae	Y										x	x	x				
northern bush-honeysuckle	Diervilla lonicera	Caprifoliaceae	Y															x	
northern long-awned wood grass	Brachyelytrum aristosum	Poaceae	Y															x	
northern spicebush	Lindera benzoin	Lauraceae	Y												x				
Norway maple	Acer platanoides	Aceraceae	N-I																
openfield sedge	Carex conoidea	Cyperaceae	Y			x												x	
orange hawkweed	Pilosella aurantiaca	Asteraceae	N			x	x	x											
orchard grass	Dactylis glomerata	Poaceae	N				x												
oxeye daisy	Leucanthemum vulgare	Asteraceae	N			x	x		x		x								
pale green orchid	Platanthera flava var. herbiola	Orchidaceae	Y	HV		x			x										
pale sedge	Carex pallescens	Cyperaceae	Y			x					x								
panicgrass	Dichanthelium acuminatum ssp. fasciculatum	Poaceae	Y						x	x	x								
partridgeberry	Mitchella repens	Rubiaceae	Y										x	x				x	
path rush	Juncus tenuis	Juncaceae	Y				x	x											
Pennsylvania sedge	Carex pensylvanica	Cyperaceae	Y										x	x					

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polytrichum moss	Polytrichum sp.	Polytrichaceae	Y			x													
poverty oatgrass	Danthonia spicata	Poaceae	Y				x	x	x	x	x								
prickly dewberry	Rubus flagellaris	Rosaceae	Y					x	x										
purple-flowering raspberry	Rubus odoratus	Rosaceae	Y												x				
purple-stemmed aster	Symphotrichum puniceum var. puniceum	Asteraceae	Y			x				x					x				
pussy willow	Salix discolor	Salicaceae	Y			x				x							x		
pussytoes	Antennaria sp.	Asteraceae	Y																x
quackgrass	Elymus repens	Poaceae	N					x											
quaking aspen	Populus tremuloides	Salicaceae	Y			x		x	x		x	x			x				
quill sedge	Carex tenera	Cyperaceae	Y			x													
ragged-fringed orchid	Platanthera lacera	Orchidaceae	Y	HV		x				x									
rattlesnake-root	Prenanthes sp.	Asteraceae	Y												x				
red clover	Trifolium pratense	Fabaceae	N			x	x	x	x		x								
red fescue	Festuca rubra ssp. rubra	Poaceae	N				x												
red maple	Acer rubrum var. rubrum	Aceraceae	Y			x	x	x	x	x	x	x	x					x	
red oak	Quercus rubra	Fagaceae	Y			x	x	x	x	x	x	x	x					x	
redtop	Agrostis gigantea	Poaceae	N						x	x		x							
rosebud azalea	Rhododendron prinophyllum	Ericaceae	Y			x							x	x					x
rough avens	Geum laciniatum	Rosaceae	Y												x				
rough sedge	Carex scabrata	Cyperaceae	Y																x
rough-leaved goldenrod	Solidago patula ssp. patula	Asteraceae	Y			x				x					x	x			
roundleaf ragwort	Packera obovata	Asteraceae	Y																x
sedge	Carex sp.	Cyperaceae																	
sensitive fern	Onoclea sensibilis	Onocleaceae	Y			x	x			x	x				x	x			
sessile-leaved bellwort	Uvularia sessilifolia	Liliaceae	Y																x
shallow sedge	Carex lurida	Cyperaceae	Y							x									
shining clubmoss	Huperzia lucidula	Lycopodiaceae	Y										x	x					
silky willow	Salix sericea	Salicaceae	Y	HV		x													x
slender vetch	Vicia tetrasperma	Fabaceae	N						x										
smooth brome	Bromus inermis	Poaceae	N			x	x												
smooth goldenrod	Solidago gigantea	Asteraceae	Y			x	x	x	x	x					x				
soft rush	Juncus effusus	Juncaceae	Y			x				x									
spiked lobelia	Lobelia spicata	Campanulaceae	Y	CC									x						
spinulose woodfern	Dryopteris carthusiana	Dryopteridaceae	Y							x									x
spotted jewelweed	Impatiens capensis	Balsaminaceae	Y			x									x	x			x
spotted Joe-Pye weed	Eutrochium maculatum var. maculatum	Asteraceae	Y							x									
spotted knapweed	Centaurea stoebe ssp. micranthos	Asteraceae	N-I					x											
spreading dogbane	Apocynum androsaemifolium	Apocynaceae	Y					x	x										
square-stemmed monkey-flower	Mimulus ringens	Scrophulariaceae	Y												x				
star sedge	Carex echinata ssp. echinata	Cyperaceae	Y	CC		x													
starflower	Trientalis borealis	Primulaceae	Y							x			x	x					x
steeplebush	Spiraea tomentosa var. tomentosa	Rosaceae	Y			x	x	x	x		x								
strict blue-eyed grass	Sisyrinchium montanum var. montanum	Iridaceae	Y							x									
striped maple	Acer pensylvanicum	Aceraceae	Y								x		x	x					x
sugar maple	Acer saccharum var. saccharum	Aceraceae	Y								x		x	x	x				
summer sedge	Carex aestivalis	Cyperaceae	Y												x				
swamp saxifrage	Saxifraga pensylvanica	Saxifragaceae	Y	CC															x
swamp-candles	Lysimachia terrestris	Primulaceae	Y					x											
Swan's sedge	Carex swanii	Cyperaceae	Y						x		x								x
sweet vernalgrass	Anthoxanthum odoratum	Poaceae	N			x	x	x	x	x		x							x
tall buttercup	Ranunculus acris	Ranunculaceae	N				x	x	x	x		x							x
tall meadow-rue	Thalictrum pubescens	Ranunculaceae	Y							x									x
Tall/Canada goldenrod	Solidago altissima/canadensis	Asteraceae	Y			x	x	x											
thyme	Thymus pulegioides	Lamiaceae	N					x											
timothy	Phleum pratense ssp. pratense	Poaceae	N			x				x		x							
trumpet honeysuckle	Lonicera sempervirens	Caprifoliaceae	Y	HV															x
violet	Viola sp.	Violaceae													x				

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Virginia creeper	Parthenocissus quinquefolia	Vitaceae	Y						x					x					
virgin's-bower	Clematis virginiana	Ranunculaceae	Y			x			x					x					
water avens	Geum rivale	Rosaceae	Y	CC		x										x			
water-horehound	Lycopus sp.	Lamiaceae	Y						x										
wavy hairgrass	Avenella flexuosa	Poaceae	Y		x		x	x	x	x	x								
wavy-leaved aster	Symphotrichum undulatum	Asteraceae	Y	CC			x												
white ash	Fraxinus americana	Oleaceae	Y				x			x				x	x				
white birch	Betula papyrifera	Betulaceae	Y							x			x	x				x	
white clover	Trifolium repens	Fabaceae	N					x			x								
white edge sedge	Carex debilis var. rudgei	Cyperaceae	Y			x													
white edge sedge	Carex debilis var. rudgei	Cyperaceae	Y							x				x				x	
white meadowsweet	Spiraea alba var. latifolia	Rosaceae	Y		x	x	x	x	x	x	x				x	x			
white oak	Quercus alba	Fagaceae	Y					x										x	
white pine	Pinus strobus	Pinaceae	Y			x			x	x			x	x				x	
white turtlehead	Chelone glabra	Scrophulariaceae	Y												x				
white willow	Salix alba	Salicaceae	N												x				
white wood aster	Eurybia divaricata	Asteraceae	Y											x	x			x	
whorled loosestrife	Lysimachia quadrifolia	Primulaceae	Y			x		x		x	x	x				x			
wild basil	Cinopodium vulgare	Lamiaceae	N					x			x								
wild bergamot	Monarda fistulosa	Lamiaceae	Y															x	
wild geranium	Geranium maculatum	Geraniaceae	Y			x	x	x		x	x								
wild madder	Galium mollugo	Rubiaceae	N			x	x	x			x				x				
wild mint	Mentha arvensis	Lamiaceae	N				x												
wild sarsaparilla	Aralia nudicaulis	Araliaceae	Y										x	x				x	
wild strawberry	Fragaria virginiana	Rosaceae	Y			x	x	x			x								
willow	Salix sp.	Salicaceae					x		x										
winter bentgrass	Agrostis hyemalis	Poaceae	Y					x	x		x								
wintercress	Barbarea vulgaris	Brassicaceae	N												x				
wintergreen	Gaultheria procumbens	Ericaceae	Y			x							x						
witch-hazel	Hamamelis virginiana	Hamamelidaceae	Y											x				x	
wood bluegrass	Poa nemoralis	Poaceae	N												x				
wood lily	Lilium philadelphicum	Liliaceae	Y	CC				x			x								
wood-betony	Pedicularis canadensis ssp. canadensis	Scrophulariaceae	Y	CC			x	x										x	
wrinkle-leaved goldenrod	Solidago rugosa var. rugosa	Asteraceae	Y			x	x	x	x	x	x			x	x				
yellow birch	Betula alleghaniensis	Betulaceae	Y												x				
yellow sedge	Carex flava	Cyperaceae	Y				x	x		x									
yellow wood violet	Viola pubescens	Violaceae	Y				x												
yellow wood-sorrel	Oxalis stricta	Oxalidaceae	Y				x				x								
yellow-rattle	Rhinanthus minor	Scrophulariaceae	N						x		x								