Thomas Miner Preserve Wildlife & Plant Report

10/24/2014

Contributors: Paul Armond, Bob Dewire, Niall Doherty, Bruce Fellman, Joyce Fingerut, Larry Reiter, Stanton Simm, Glenn Williams



Introduction: In early 2013 it was decided to conduct a wildlife and plant survey on the Miner Preserve in order to:

- establish a baseline so that future population changes could be detected
- determine the presence or absence of species of special interest
- guide management of the property in a manner appropriate for wildlife and plants of interest.

A survey plan was developed with expert guidance from Robert Askins (Ornithologist, Professor of Biology, Connecticut College), Robert Dewire (Naturalist, Ornithologist), and Paul Armond (Botanist) and input from Stanton Simm (Executive Director Stonington Land Trust, Chairman of Stonington Conservation Commission) and carried out between 04/18/2013 and 10/22/2014. This report describes the results of the surveys of plants, birds, mammals, amphibians/reptiles and some insects.

Physical Characteristics of the Preserve

Stanton Simm

ACREAGE:

• 82.61-acres with 735' of frontage on Taugwonk Road

HAY FIELDS:

- Approximately 22 acres, about 27% of the entire Preserve
- Soil Types: Rainbow silt loam with 0 to 3% slopes; Woodbridge fine sandy loam with 0 to 3% slopes; Paxton and Montauk fine sandy loams with 3 to 15% slopes

WOODLAND (Forest Cover):

- Approximately 60 acres, about 73% of the entire Preserve.
- Soil Type: Primarily Rainbow silt loam with 2 to 8% slopes, very stony.

ELEVATION ABOVE SEA LEVEL:

• Elevation ranges from approximately 220'on the northern border to approximately 170' on the eastern border and the southwest corner. However, most of property is within a range of 210' to 195'.

WATER TABLE

• Entire 82.61 acres has a 'perched' water table due to the fact that there's an underlying impermeable clay layer, anywhere from 2 to 20' below the surface of the ground on the entire Preserve and surrounding area.

Bird Survey

Bob Dewire, Niall Doherty, Bruce Fellman, Larry Reiter and Glenn Williams

Caveats: The plan for the bird survey (see appendix) required some adjustment since sections of the proposed route became inaccessible at times:

- The section that involved walking on the neighbor's property to the East of the Preserve became inaccessible for safety reasons when a large bull was present. During this period it was possible to survey the Eastern edge by walking just inside the Preserve, parallel to the stone wall that marks the border of the property, although this route does not afford as clear a view of the bird-rich Eastern edge.
- Sections of the bird survey route within the Preserve were mowed and could be walked without undue exposure to ticks and the diseases transmitted by ticks. However, the owners of neighboring properties are under no obligation to mow according to a schedule that suited our survey and at times the vegetation on those sections was high and dense resulting in elevated risk of tick/Lyme disease exposure. Some of these sections were therefore not surveyed on all visits to the Preserve by all observers.

Notwithstanding these deviations from the plan, the sections that were surveyed were a fair representation of the environmental diversity of the Preserve as a whole and should not have distorted the overall number of species found but will have impacted the number of individuals in each species.

As outlined in the plan, the surveys took place in the mornings when most birds are active. With hindsight, a series of evening and nighttime surveys should have been planned in order to determine whether crepuscular/nocturnal species (owls, woodcock, nighthawks, etc.) were present. This omission could be remedied in the future. One observer, Glenn Williams, did have the foresight to make a couple of evening/nighttime visits.

As noted in the survey plan, the primary objective was to identify which species of birds were present without attempting to count the number of individual species. A valid, quantitative survey is a very difficult and time-consuming project and beyond the resources available. However, numbers of birds were recorded and some numerical data will be presented when they are considered meaningful and add value.

Results: All the bird data collected was recorded in eBird (http://ebird.org/content/ebird/), an online system developed by the National Audubon Society, Inc. and the Cornell Lab of Ornithology. In addition to providing a convenient means of storing and analyzing the bird data from the Miner Preserve survey, those data can be pooled and compared with data from other areas, thus contributing to the analysis and understanding of trends in bird populations nationally and globally. The complete dataset can be viewed and analyzed by creating an account in eBird

(https://secure.birds.cornell.edu/cassso/login?service=https%3A%2F%2Febird.org
%2Febird%2Fj spring cas security check%3Fportal%3Debird), clicking on Explore Data, then Explore Hotspots, type Stonington into the search field that appears in the top, left corner of the map and select Stonington, Miner Preserve (Private). Then, clicking on Bar Charts is a good place to start exploring data.

Between April 2, 2013 and October 22, 2014 (79 weeks), 218 individual surveys were carried out (average 2.75/week), accounting for a total of approximately 436 hours of observation. During this period, 127 species were found. In the main table (starting on page 12), the bird species found on the Preserve are labeled with their Connecticut migration/residency categories as shown in "The Sibley Guide to Birds," second edition, David Allen Sibley, Alfred A. Knopf, New York, 2014. These categories, described below, are no more than general guidelines of what to expect on the Miner Preserve because they are on a State-wide scale and will not reflect local variability or changes in the habitat used by some species at

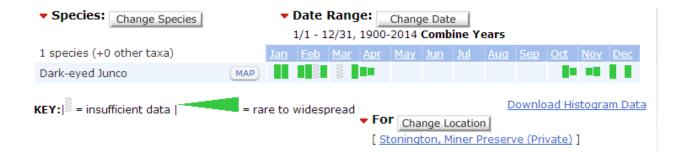
different times of the year. In addition, for some species the Preserve is close to the borderline between two categories and either behavior could be expected.

Year round: These species are present year-round and potentially breed on the Preserve. The American robin is typical of this group as indicated by our data from the Preserve presented in the form of a bar graph from eBird. As shown below, American robins were found on nearly every visit to the Preserve with little seasonal variation.



Migrants: Migrants can be divided into various subcategories

• Winter: Those that breed to the North and come South to spend the winter in Connecticut; for example, the dark-eyed junco.



• *Summer:* Those that winter to the South and come to Connecticut to breed; for example, the yellow warbler.



• Migrant: Those that winter to the South and pass through Connecticut to breed further North. These species may be seen in Spring as they head North and Fall as they head South. Suitable locations for rest and feeding en route are essential for their successful migration. For some species, their route North may be different from their route South so they may not be seen on the Preserve in both Spring and Fall. Also, the Spring migration occurs over a shorter period of time than the fall migration and less common species are more easily missed in Spring. Data for the blackpoll warbler are shown below as an example.



• Incidental: These are species that pass through the Preserve, some without landing (flyovers) and whose lifestyle/survival is independent of the Preserve. Species seen only once are included here even if the Preserve could potentially support them. Although these species are in the output from eBird shown later, they are also listed in the table below.

Incidental	Bird Species
Species	Comments
Double-crested cormorant	Multiple sightings

Northern goshawk	One seen on one occasion
Sandhill crane	2 seen on one occasion
Herring gull	Multiple sightings
Canada goose	Multiple sightings
Turkey vulture	Multiple sightings
Black Vulture	2 seen on one occasion
Great black-backed gull	3 seen on one occasion
Broad-winged hawk	One seen on one occasion
Great blue heron	Multiple sightings
Green heron	4 seen on one occasion
Osprey	Multiple sightings
Great egret	Multiple sightings
Common Raven	One seen on one occasion
Whip-poor-will	One seen on one occasion
Clay-colored sparrow	One seen on one occasion
	1

Notable findings include:

• Bobolinks: In both summers of the survey there were significant populations of bobolinks that bred in the barn field. The largest number seen in 2014, 42 on 07/09/2014, was larger that the largest number seen in 2013, 32 on 08/06/2013, suggesting that the population is growing. This is a remarkable concentration of a State species of special concern and highlights the need to maintain the grassland nature of the field by mowing as needed, after the young have fledged (September or later), to prevent the build-up of brush that would make the area unsuitable for bobolinks.

- The Eastern edge, where the Preserve's forest abuts the neighbor's scrubby field, supports a large number and diversity of migrants, particularly in the Fall. This is likely because the morning sun is unobstructed on this Eastern edge and is able to warm the tops of the trees and activate the insects that many species forage on after their non-stop overnight migration. Any changes to the Preserve should retain this feature.
- Kestrel are reported to be present Year Round in Connecticut, although State-listed as Threatened, but have only been seen on the Preserve in Spring and Fall, despite the presence of suitable habitat. This could be due to the absence of suitable nesting sites (holes in trees/nest boxes in or near grassland). A kestrel nesting box was erected in the barn field early in 2014 but the kestrel did not take advantage of it. Relocation of the nesting box to a more remote location in the barn field, farther away from the main East/West trail which has some vehicular traffic, may make it more attractive to kestrel.
- Bluebirds are also listed as Year Round in Connecticut and the grassland on the Preserve would appear to be perfect bluebird habitat. However, although seen at other times of the year, and fledglings were seen in late summer/fall, bluebirds were not seen in the breeding season. This is likely because of the absence of suitable nest sites, a deficiency which could be remedied by erecting bluebird nesting boxes in the fields. Since the same habitat and nest boxes are suitable for tree swallows, it is likely that they would also start to breed on the Preserve if nest boxes were provided.
- The purple martin (a species listed as threatened in Connecticut) colony in the adjacent Smith property seems to be thriving and further expansion could be limited by the number of martin nest boxes available on that site.
 Provision of a cluster of martin nest boxes on the Preserve would allow that colony to expand.
- In July there were two independent reports of sightings of possible bobwhite quail adult with poults. These reports were not from members of the bird survey team and the all the details necessary for entry into eBird are not available. Although once common in Connecticut this species

has largely disappeared due to loss of habitat, predation and hunting. Twenty years ago they were frequently seen in Stonington, and more often heard, but have not been reported here for many years. Bobwhite quail are bred in captivity and released for hunting but an informal query to local gun clubs did not reveal any local release of birds bred in captivity. Since there have been no reports of bobwhites calling on the preserve it is probable that, if the birds seen were in fact bobwhites, they reside/breed elswhere and spend relatively little time on the Preserve. The Connecticut DEEP

(http://www.ct.gov/deep/cwp/view.asp?a=2723&q=325982&depNav GID =1655) provides a description of the habitat required to support a bobwhite population: "Without good habitat, bobwhite populations are severely affected. The bobwhite requires several habitat types: grass in the spring and summer for nesting and brood rearing, cropland for fall and winter feeding, and brushy woodlands for escape and roosting cover.

Additionally, all of the habitat types need to be within a quarter of a mile of each other. The grass habitat is usually the limiting factor for bobwhite because it is often mowed or converted to cropland. Hedgerows are also very important, providing sources of food and cover." The Preserve contains all these features so there is hope that bobwhite quail could breed there at some time in the future.

Species that probably breed on the Preserve were identified by indications of breeding behavior, including: carrying nesting material, territorial males, carrying food, distraction display, and others. In 2014, singing males of many species were noted on territories in virtually the same location as 2013. The full dataset on bird observations, taken from eBird, is shown in the following table which shows which species probably breed on the Preserve. Other birds that have been recorded on the Preserve that could potentially nest here, but for which no indications that they do have been observed, include: red-tailed hawk, Cooper's hawk, American woodcock, black-billed cuckoo, yellow-billed cuckoo, common

flicker, eastern kingbird, savannah sparrow, eastern bluebird, white-eyed vireo, fish crow, brown thrasher, scarlet tanager, Baltimore oriole and orchard oriole.

List of bird species observed on the Thomas Miner Preserve

Note: **CT Status** is that given by The Sibley Guide to the Bird and may differ from the observations reported below. **Breeding:** ✓ indicates that evidence of breeding has been observed on the Preserve. See text above for further explanation.

127 species (+3 other taxa)	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	Apr May	<u> Jun </u>	ul Aug	Sep O	ct Nov	<u>Dec</u>	CT Status	Breeding
Canada Goose	MAP									Year round	
Wild Turkey	MAP									Year round	✓
Double-crested Cormorant	MAP					•				Year round	
Great Blue Heron	MAP		3							Year round	
Great Egret	MAP						-	•		Summer	
Green Heron	MAP		3							Summer	
Black Vulture	MAP									Year round	
Turkey Vulture	MAP	1	3			100				Year round	
Osprey	MAP									Summer	
Northern Harrier	MAP	3	3							Year round	
Sharp-shinned Hawk	MAP						100			Year round	
Cooper's Hawk	MAP	- 1								Year round	
Northern Goshawk	MAP									Year round	
Accipiter sp.	MAP	3	3	-						Year round	
Red-shouldered Hawk	MAP									Year round	✓

	Jan	Feb Mar	Apr May Jun Jul Aug Sep	Oct Nov Dec	CT Status	Breeding
Broad-winged Hawk	MAP				Summer	
Red-tailed Hawk	MAP				Year round	
Sandhill Crane	MAP	3 3			Rare	
Killdeer	MAP				Summer	
American Woodcock	MAP	3 3			Summer	
Herring Gull	MAP				Year round	
Great Black-backed Gull	MAP				Year round	
Rock Pigeon	MAP				Year round	
Mourning Dove	MAP	3 3 1			Year round	✓
Yellow-billed Cuckoo	MAP				Summer	
Black-billed Cuckoo	MAP	3 3			Summer	
Great Horned Owl	MAP				Year round	✓
Common Nighthawk	MAP	1 1			Summer	
Eastern Whip-poor-will	MAP				Summer	
Chimney Swift	MAP		ER [1]		Summer	

	Jan	Feb Ma	Apr May	/ Jun J	ul Aug S	ep Oct	Nov	Dec	CT Status	Breeding
Ruby-throated Hummingbird	MAP		-		-				Summer	✓
Red-bellied Woodpecker	MAP								Year round	✓
Yellow-bellied Sapsucker	MAP								Migrant	
Downy Woodpecker	MAP		II - -I				• 1		Year round	✓
Hairy Woodpecker	MAP					-			Year round	✓
Northern Flicker	MAP								Year round	
American Kestrel	MAP								Year round	
<u>Merlin</u>	MAP	3 3							Migrant	
Peregrine Falcon	MAP					•			Year round	
Eastern Wood-Pewee	MAP	3 3							Summer	✓
Willow Flycatcher	MAP			1 /					Summer	
Empidonax sp.	MAP	3 3							Summer	
Eastern Phoebe	MAP								Summer	✓
Great Crested Flycatcher	MAP	1 1		•		-			Summer	✓
Eastern Kingbird	MAP			•					Summer	

	Jan	Feb Mar	Apr May Jun Jul Aug Sep Oct Nov	Dec	CT Status	Breeding
White-eyed Vireo	MAP		-		Summer	
Yellow-throated Vireo	MAP				Summer	
Blue-headed Vireo	MAP	3 3			Migrant	
Warbling Vireo	MAP				Summer	
Red-eyed Vireo	MAP	3 3			Summer	✓
Blue Jay	MAP				Year round	✓
American Crow	MAP		[11]-1][1]-] - 1 -111111][1-1][Year round	✓
Fish Crow	MAP				Year round	
crow sp.	MAP				Year round	
Common Raven	MAP				Year round	
Purple Martin	MAP				Summer	
Tree Swallow	MAP				Summer	
Barn Swallow	MAP	3 3			Summer	
Black-capped Chickadee	MAP				Year round	✓
Tufted Titmouse	MAP				Year round	✓

	Jan	Feb I	Mar A	pr May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CT Status	Breeding
Red-breasted Nuthatch	MAP											Winter	
White-breasted Nuthatch	MAP								- 1		I	Year round	✓
House Wren	MAP			- 10								Summer	✓
Winter Wren	MAP	3	8								I	Winter	
Carolina Wren	MAP					10.0						Year round	
Blue-gray Gnatcatcher	MAP	- 3		8-8 8								Summer	✓
Golden-crowned Kinglet	MAP											Winter	
Ruby-crowned Kinglet	MAP	3							ш			Migrant	
Eastern Bluebird	MAP											Year round	
Veery	MAP	3		-111								Summer	✓
Hermit Thrush	MAP											See note	
Wood Thrush	MAP			-81		ш						Summer	✓
American Robin	MAP						Ш		ПП			Year round	✓
Gray Catbird	MAP	-		- 11	Ħ	Ш						Summer	✓
Brown Thrasher	MAP									•		Summer	

Note: Connecticut lies on the border of the summer and winter regions for the hermit thrush

	Jan	Feb Mar /	Apr May Jun Ju	ıl Aug Sep Oct	Nov Dec	CT Status	Breeding
Northern Mockingbird	MAP					Year round	✓
European Starling	MAP					Year round	✓
American Pipit	MAP	3 3				Migrant	
Cedar Waxwing	MAP					Year round	✓
Ovenbird	MAP	11 11	-			Summer	✓
Worm-eating Warbler	MAP					Summer	
Northern Waterthrush	MAP	1 1				Summer	
Blue-winged Warbler	MAP					Summer	✓
Black-and-white Warbler	MAP		- -			Summer	✓
Tennessee Warbler	MAP					Migrant	
Nashville Warbler	MAP	3 3		0.00		Summer	
Common Yellowthroat	MAP		-			Summer	✓
American Redstart	MAP	1 1	-11111111			Summer	✓
Northern Parula	MAP					Migrant	
Magnolia Warbler	MAP			- 1-1		Migrant	

								Dec	CT Status	Breeding
Yellow Warbler	MAP				Ш				Summer	✓
Chestnut-sided Warbler	MAP	3							Summer	
Blackpoll Warbler	MAP								Migrant	
Black-throated Blue Warbler	MAP	3	8						Summer	
Palm Warbler	MAP								Migrant	
Pine Warbler	MAP	3							Summer	
Yellow-rumped Warbler	MAP								Winter	
Prairie Warbler	MAP	*	8						Summer	
Black-throated Green Warbler	MAP								Summer	
Canada Warbler	MAP	*	8						Summer	
Wilson's Warbler	MAP								Migrant	
Yellow-breasted Chat	MAP	3	3						Summer	
Eastern Towhee	MAP								Summer	✓
American Tree Sparrow	MAP								Winter	
Chipping Sparrow	MAP				Ш				Summer	✓

	Jan	Feb Mar	Apr May Jun Jul Aug S	Sep Oct Nov Dec	CT Status	Breeding
Clay-colored Sparrow	MAP				Rare	
Field Sparrow	MAP				Summer	
Savannah Sparrow	MAP	3 3			Year round	
Fox Sparrow	MAP				Winter	
Song Sparrow	MAP			-	Year round	✓
Lincoln's Sparrow	MAP			H- H H	Summer	
Swamp Sparrow	MAP				Year round	
White-throated Sparrow	MAP				Winter	
White-crowned Sparrow	MAP	8 8			Winter	
Dark-eyed Junco	MAP				Winter	
Scarlet Tanager	MAP	3 3			Summer	
Northern Cardinal	MAP				Year round	✓
Rose-breasted Grosbeak	MAP	3 3			Summer	✓
Indigo Bunting	MAP				Summer	
Bobolink	MAP			••	Summer	✓

	Jan	Feb	Mar	Apr May	Jun Ju	ıl Aug	Sep	Oct	Nov Dec	CT Status	Breeding
Red-winged Blackbird	MAP									Year round	✓
Eastern Meadowlark	MAP		3							Year round	
Common Grackle	MAP		3 1					-		Year round	✓
Brown-headed Cowbird	MAP	3	3							Year round	✓
Orchard Oriole	MAP									Summer	
Baltimore Oriole	MAP		3							Summer	
House Finch	MAP							- 20		Year round	✓
Purple Finch	MAP		3							Year round	
American Goldfinch	MAP			-8-8				•		Year round	✓
House Sparrow	MAP									Year round	

Mammal Survey

Niall Doherty, Bob Dewire & Bruce Fellman

As described in the survey plan (see appendix) no formal mammal survey was conducted but all involved in the other surveys noted any mammal-related observations and these incidental reports are summarized here.

Rabbit: Rabbits are seen frequently on the Preserve and rabbit pellets are abundant. Two species of rabbit occur in our area. The Eastern cottontail is an introduced species that is now abundant while the New England cottontail is a native species that is a candidate for State listing as endangered. Even biologists can find it hard to tell a New England from an Eastern cottontail. To confirm an identification, a scientist may examine a specimen's skull (skull shape and other features differ between the species) or analyze DNA extracted from body tissues or droppings. DNA analysis of fecal pellets can be used to determine the presence, in a given area, of New England cottontails. New England cottontails have been identified by the Connecticut DEEP on adjacent properties but a trapping program on the Preserve identified only Eastern cottontails. It seems likely that creating on the Preserve the type of habitat New England cottontails require, extensive areas of dense brush, would attract a breeding population.

Coyote: Coyotes and coyote scat were seen on several occasions on the Preserve and there were many coyote tracks in the snow.

Deer: White-tailed deer were seen on several occasions and deer scat is abundant.

Bobcat: A bobcat was seen once on the Preserve and the DEEP staff that have been engaged in the New England cottontail study report that they have seen them many times on the property to the East of the Preserve, particularly at night.

Weasel: A short-tailed weasel (ermine) was observed on one occasion and some tracks seen in the snow are consistent with being those of weasels. Weasels are considered common in Connecticut (http://www.wildlifeofct.com/short-tailed%20weasel%20and%20long-tailed%20weasel.html)but are elusive and not often seen.

Usual suspects: Grey squirrels, red squirrels and chipmunks have been seen and a groundhog was seen on one occasion.

Note: The DEEP staff that have been engaged in the New England cottontail study report that they caught two mink in their rabbit traps on the property to the East of the Preserve. Although mink have not been seen on the preserve, they likely spend some time there.

Botanical Survey of the Thomas Miner Preserve

Paul A. Armond, Ph.D. and Joyce Fingerut

The plant survey of the Thomas Miner Preserve was performed during the 2013 growing season. Field walks were conducted on April 26, June 5 and August 7, 2013.

The property is 82.61 acres, approximately three-quarters forested and one quarter open field The forested portion of the property is a dense, red maple forest with a perched water table (standing water for most of the year at least in some portions) providing a very uniform environment throughout the forest. There were many fallen trees as a result of the storms which occurred in the past few years. The understory of the forest can be very dense, commonly consisted of mountain laurel and spice bush. The ferns and bog plants were those common to our area. The two species of trout lilies were a notable exception to this. Absent (at least from our observations) were Hamamelis, Trillium and Veratrum, species that one might expect to see in this environment. Also absent were Mitchella repens, Pyrola americana and Chimaphila maculata; for the latter, the forest may be too wet and too dark for their growth.

The field herbaceous plants, probably benefitting from the high ground water, were varied and lush, with far more diversity than one might expect to see. Peak bloom in 2013 was early August.

Plant nomenclature was based on The Plant List (http://www.the plantlist.org) Invasive plant species (designated by * in the plant list) were found throughout the property. The density level of the invasive plants was low; control of these plants will not require extraordinary measures.

PLANTS FOUND ON THOMAS MINER PRESERVE

Botanical name and authority

Common name

Woody Plants:

Acer platanoides L. *
Acer rubrum L.
Acer saccharinum L.

Ailanthus altissima (Mill.) Swingle*

Aralia spinosa L. Betula nigra L.

Betula populifolia Marshall Celastrus orbiculatus Thunb.*

Clethra alnifolia L. Cornus florida L.

Elaeagnus angustifolia L.*

Euonymus alatus (Thunb.) Siebold*

Fraxinus anadensi L. Kalmia latifolia L. Lindera benzoin L.

Lonicera japonica Thunb.*
Lonicera maackii (Rupr.) Maxim*

Lunicera maackii (Nupr.) wa

Nyssa sylvatica Marshall

Parthenocissus quinquefolia (L.) Planch

Prunus serotina Ehrh.
Prunus virginiana L.
Rosa multiflora Thunb.*

Rhus glabra L. Rubus spp.

Salix bebbiana Sarg. Sambucus anadensis L. Sassafras albidum (Nutt.) Nees

Smilax rotundifolia L. Spiraea alba Du Roi

Spiraea latifolia (Aiton) Borkh.

Spiraea tomentosa Raf.

Toxicodendron radicans (L.) Kuntze

Vaccinium corymbosum L. Viburnum dentatum L.

Vitis labrusca L.

Norway maple red maple sugar maple tree of heaven devil's walkingstick

black birch grey birch

Asian bittersweet sweet pepperbush

dogwood Russian olive burning bush American ash mountain laurel spicebush

Japanese honeysuckle Amur or bush honeysuckle

tupelo

Virginia creeper black cherry chokecherry multiflora rose smooth sumac

Raspberries, blackberries, etc.

beaked willow elderberry sassafras

common greenbrier white meadowsweet broadleaf meadowsweet

steeplebush

eastern poison ivy highbush blueberry

arrowwood fox grape

Herbaceous Plants:

Achillea millefolium L.

yarrow

Anemone quinquefolia L. Arisaema triphyllum (L.) Schott

Artemisia vulgaris L. Asclepias incarnata L. Asclepias purpurascens L. Asclepias syriaca L.

Cirsium vulgare (Savi) Ten.

Daucus carota L.

Duchesnea (Potentilla) indica (Andrews) Focke

Equisetum arvense L.

Erythronium americanum Ker Gawl.

Erythronium albidum Nutt. Eupatorium perfoliatum L.

Eutrochium (Eupatorium) purpureum (L.) E.E.Lamont Joe Pye weed

Fragaria vesca L.
Galium aparine L.
Galium boreale L.
Geranium maculatum L.
Helenium autumnale L.
Hieracium L. species

Impatiens capensis Meerb.

Iris versicolor L. Lobelia cardinalis L.

Maianthemum canadense Desf.

Mimulus ringens L.
Pastinaca sativa L.
Polygonum L. species

Phragmites australis (Cav.) Trin. ex Steud.*

Prunella vulgaris subsp. Lanceolata (W.P.C. Barton) Piper & Beattie

Ranunculus acris L. Rhexia mariana L. Rudbeckia hirta L. Rumex L. species

Sisyrinchium angustifolium Mill.

Solanum carolinense L. Solidago L. species

Spiranthes cernua (L.) Rich. Stellaria media (L.) Vill.

Symplocarpus foetidus (L.) Salisb. ex W. Barton

Trifolium pratense L. Verbena hastata L.

Vernonia noveboracensis (L.) Michx.

Vicia cracca L. Viola L. species wood anemone jack-in-the-pulpit

mugwort

rose milkweed purple milkweed common milkweed

bull thistle

Queen Anne's lace mock strawberry

horsetail trout lily white fawnlily boneset

Joe Pye weed wild strawberry

cleaver

northern bedstraw wood geranium sneezeweed hawkweeds

orange jewelweed

blue flag cardinal flower mayflower

Allegheny monkeyflower

parsnip knotweeds common reed selfheal

meadow buttercup

Maryland meadowbeauty

black-eyed Susan

docks

blue-eyed grass Carolina horsenettle

goldenrods

nodding lady's tresses common chickweed skunk cabbage red clover

red clover blue vervain

New York ironweed

cow vetch violets

Ferns and fern allies:

Dennstaedtia punctilobula (Michx.) T. Moore
Lycopodium dendroideum Michx.
Lycopodium obscurum L.
Onoclea sensibilis L.
Osmunda regalis L.
Osmundastrum (Osmunda) cinnamomeum (L.)

hayscented fern
ground pine
clubmoss
sensitive fern
royal fern
cinnamon fern

C. Presl

Sphagnum flexuosum Dozy & Molk

sphagnum moss

^{*}Plants considered to be invasive according to the *Connecticut Invasive Plant List*, October 2011