

A Vascular Plant Inventory and Vegetation Analysis

of the

Johnson County Heritage Trust's

Hora Woods

in Johnson County, Iowa

Prepared for the Johnson County Heritage Trust

By

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EXECUTIVE SUMMARY

- Though modest in size, Hora Woods supports a diverse and exceptionally attractive woodland community.
- 154 species of vascular plants have been documented on the property and 90% percent are native.
- Hitchcock's sedge (*Carex hitchcockiana*), an uncommon species recorded nowhere else in Johnson County, occurs on the property.
- Garlic mustard (*Alliaria petiolata*), an invasive alien species, occurs on adjacent private land and should be controlled to prevent its establishment on Hora Woods.

INTRODUCTION

Hora Woods is a 20-acre site located in section 34, township 79N, range 5W (Fig. 1). An isolated natural woodland remnant in an overwhelmingly agricultural landscape of eastern Johnson County, the site is surprisingly rich, with an unusually attractive and luxuriant spring flora.

Figure 1. Topographic Map

Figure 2. 2002 Aerial Photograph

METHODS

Study Site

Iowa. Johnson County: Johnson County Heritage Trust's Hora Woods, Vincent Avenue, 4 miles NW of West Branch.

Legal Description

Township 79N, Range 5W
NE 1/2, SE 1/4, Sec. 34

Latitude/Longitude

41° 41' 31"N, 91° 24' 35"W to 41° 41' 31"N, 91° 24' 18"W

Field Research

The inventory was conducted during the 2005 growing season (Table 1), initiated in May, 2005 and continued through early October.

Table 1. Dates of field surveys.

May 15, 2005
May 24, 2005

June 3, 2005
June 16, 2005
July 22, 2005
July 30, 2005
August 9, 2005
August 21, 2005
September 17, 2005
October 1, 2005

Field visits to the study sites were made throughout the growing season, in order to observe and collect plants at an optimal stage (e.g., flowering or fruiting) for identification. Portions of plants were collected routinely for identification purposes. While species were not recorded according to zone, notes on abundance and relative location have been recorded for many species.

Identifications

Plants collected during the course of the inventory were identified using dichotomous keys, mainly those in the *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (Gleason & Cronquist, 1991).

Nomenclature of vascular plants follows *The Vascular Plants of Iowa* (Eilers & Roosa, 1994).

Land Survey Records

The photo dating from 2002, and the U.S. Geological Survey topographic map, were obtained from the Iowa Geographic Map Server (<http://ortho.gis.iastate.edu/>).

RESULTS AND DISCUSSION

Species Diversity

A total of 154 species of vascular plants, representing 117 genera and 61 families, were recorded from Hora Woods (Table 2, Appendix 1). Ninety percent (139) of these species are native.

Table 2. Vascular plant species diversity of Hora Woods.

Study site	# of species	# of native species	% native	# of genera	# of families

Hora Woods	154	139	90	117	61
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Table 3. Uncommon plant species at Hora Woods.

Uncommon species:
Hitchcock's sedge (<i>Carex hitchcockiana</i>)

Vegetation Analysis:

While Hora Woods lies within an area of relatively low topographical relief, there are two shallow, nearly parallel ravines located on the western half of the property that provide microhabitats for certain plant species. These ravines will herein be referred to as the North Ravine and South Ravine.

Hora Woods is characterized by such tree species as box elder (*Acer negundo*), bitternut hickory (*Carya cordiformis*), shagbark hickory (*C. ovata*), hackberry (*Celtis occidentalis*), ironwood (*Ostrya virginiana*), cottonwood (*Populus deltoides*), black cherry (*Prunus serotina*), white oak (*Quercus alba*), bur oak (*Q. macrocarpa*), and basswood (*Tilia americana*). Particularly noteworthy is the abundance of attractive American elms (*Ulmus americana*), many of which unusually large. Black oak (*Q. velutina*), of which there are several beautiful specimens, is unusually abundant. A localized stand of big-tooth aspen (*Populus grandidentata*) occurs along the northern margin of the property. A few alien tree species, including white mulberry (*Morus alba*), and black locust (*Robinia pseudoacacia*), are also present in small numbers.

Woody vegetation is relatively scarce in the understory. While a number of shrubs are present, most occur in small numbers. Such species include pagoda dogwood (*Cornus alternifolia*), grey dogwood (*C. foemina* ssp. *racemosa*), hazel (*Corylus americana*), choke cherry (*Prunus virginiana*), smooth sumac (*Rhus glabra*), gooseberry (*Ribes missouriense*), blackberry (*Rubus allegheniensis*), black raspberry (*R. occidentalis*), elderberry (*Sambucus canadensis*), nannyberry (*Viburnum lentago*), and prickly ash (*Zanthoxylum americanum*). Two alien species, barberry (*Berberis thunbergii*) and multiflora rose (*Rosa multiflora*), are also present in small numbers.

The open understory supports a particularly luxuriant spring flora, including such showy species as trout lily (*Erythronium albidum*), mayapple (*Podophyllum peltatum*), Solomon's seal (*Polygonatum biflorum*), false Solomon's seal (*Smilacina racemosa*), rue anemone (*Thalictrum thalictroides*), bellwort (*Uvularia grandiflora*), common blue violet (*Viola pratincola*), and downy yellow violet (*V. pubescens*). Several species are present in great abundance, including jack-in-the-pulpit (*Arisaema triphyllum*), blue cohosh (*Caulophyllum thalictroides*), and wild geranium (*Geranium maculatum*). Michigan lily (*Lilium michiganense*) is abundant in scattered populations. While most

are non-flowering, as is typical in woodland populations of this species, a few flowering individuals were observed along the base of the South Ravine. Other abundant herbaceous species include cleavers (*Galium aparine*), wood nettle (*Laportea canadensis*), anise root (*Osmorhiza longistylis*), common snakeroot (*Sanicula gregaria*), and honewort (*Cryptotaenia canadensis*).

Several grasses are present, including bearded shorthusk (*Brachyelytrum erectum*), Canada brome (*Bromus pubescens*), wood reed (*Cinna arundinacea*), slender wild rye (*Elymus villosus*), nodding fescue (*Festuca obtusa*), bottlebrush grass (*Hystrix patula*), and whitegrass (*Leersia virginica*). Also present are a number of sedges, including eastern woodland sedge (*Carex blanda*), thinleaf sedge (*C. cephaloidea*), pubescent sedge (*C. hirtifolia*), greater straw sedge (*C. normalis*), rosy sedge (*C. rosea*), and burr reed sedge (*C. sparganioides*). Hitchcock's sedge (*C. hitchcockiana*), an uncommon species previously unrecorded from Johnson County (Thorne, 1955), occurs in abundance along the south side of the North Ravine. Richwoods sedge (*C. oligocarpa*), a morphologically similar species, also occurs here in lesser abundance.

Hora Woods supports several species of ferns, the most abundant of which is lady fern (*Athyrium filix-femina* var. *angustum*). Maidenhair fern (*Adiantum pedatum*), spinulose wood fern (*Dryopteris carthusiana*), and sensitive fern (*Onoclea sensibilis*) occur along the South Ravine, particularly near the eastern end. Along the northern boundary of the property, creeping fragile fern (*Cystopteris protrusa*) and bracken fern (*Pteridium aquilinum* var. *latiusculum*) are locally abundant. Several additional herbaceous species are localized along the northern margin of the property, including Ontario aster (*Aster ontarionis*), showy orchid (*Galearis spectabilis*), shining bedstraw (*Galium concinnum*), starry campion (*Silene stellata*), and purple meadow-rue (*Thalictrum dasycarpum*). A few isolated populations of day lily (*Hemerocallis fulva*), an alien species, also occur here. Another alien species, periwinkle (*Vinca minor*), occurs along a drainage directly adjacent to a culvert.

A robust population of purple giant-hyssop (*Agastache scrophulariifolia*) is present along the southern margin of the property. A few other species, including wild yam (*Dioscorea villosa*) and oblique grape fern (*Botrychium dissectum* f. *obliquum*), are also found here. Garlic mustard (*Alliaria petiolata*), an aggressive alien species, occurs on the private land bordering Hora Woods, near the southwestern corner of the property.

The low-lying northeastern corner of the property is sparsely wooded and relatively disturbed. This area is characterized by such species as meadow parsnip (*Thapsium barbinode*), groundnut (*Apis americana*), beggar-ticks (*Bidens frondosa*), tall beggar-ticks (*B. vulgata*), reed canary grass (*Phalaris arundinacea*), wood reed (*Cinna arundinacea*), white snakeroot (*Eupatorium rugosum*), white vervain (*Verbena urticifolia*), tall bellflower (*Campanula americana*), scaldweed (*Cuscuta gronovii*), and pale-leaved sunflower (*Helianthus strumosus*).

MANAGEMENT CONCERNS

Several alien species are present, though few present a serious management concern. Reed canary grass (*Phalaris arundinacea*) is locally abundant on the disturbed northeastern corner of the property, but should gradually disappear as shade increases due to natural woodland succession. A few small populations of day lily (*Hemerocallis fulva*) and periwinkle (*Vinca minor*) are present in localized areas along the northern margin of the property, but their capacity for dispersal is minimal. A careful, localized application of herbicide should eliminate these species. A few small black locust (*Robinia pseudoacacia*) trees are present along the southern boundary on the far southeastern corner of the property. This species is occasionally aggressive in Iowa woodlands, although typically only on disturbed sites.

Of greatest concern is a localized population of garlic mustard (*Alliaria petiolata*) on a privately owned woodland bordering the south side of Hora Woods. With the landowner's permission, a localized herbicide application, or even hand-pulling, could eliminate this species. However, a thorough search for this species throughout the privately-owned woodland would be helpful to assess the full extent of the population, and ultimately its potential as a threat to Hora Woods.

During the growing season of 2005, herbaceous roadside vegetation along the northern margin of Hora Woods was stripped bare by roadside maintenance crews, leaving the area vulnerable to invasion by alien species. In addition, branch trimming resulted in unsightly damage on several trees along the northern margin of the property. A cooperative roadside management effort between the Trust and Johnson County is advisable, in order that management requirements may be fulfilled in a less intrusive manner.

CONCLUSIONS

While modest in size, the 20-acre Hora Woods supports a diverse and exceptionally attractive woodland community. With 154 species, plant diversity is high, and an unusually high percentage (90%) is native. Hitchcock's sedge (*Carex hitchcockiana*), an uncommon species found nowhere else in Johnson county, occurs in abundance on the property. Garlic mustard (*Alliaria petiolata*) has been found on adjacent private land, and should be controlled to prevent its establishment on Hora Woods.

REFERENCES

- Eilers, L.J. and D.M. Roosa. 1994. The Vascular Plants of Iowa. University of Iowa Press, Iowa City, Iowa.
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Appendix - Hora Woods Plant List

This list includes all vascular plant species recorded in the inventory of the property. Associated information is provided for each species, including species name, family name, common name, origin (whether the species is native or alien), location, and additional comments.

**Appendix - Plant List for the Johnson County Heritage Trust's Hora Woods,
Johnson County, Iowa**

Species Name	Family	Common Name	Origin	Comments
<i>Abutilon theophrasti</i> Medicus	Malvaceae	Velvetleaf	Alien	One plant on N margin
<i>Acalypha virginica</i> L.	Euphorbiaceae	Virginia three-seeded mercury	Native	Moist streambed
<i>Acer negundo</i> L.	Aceraceae	Box elder	Native	
<i>Actaea pachypoda</i> Ell.	Ranunculaceae	White baneberry	Native	Scattered throughout woods
<i>Actaea rubra</i> (Aiton) Willd.	Ranunculaceae	Red baneberry	Native	Scattered throughout woods
<i>Adiantum pedatum</i> L.	Adiantaceae	Maidenhair fern	Native	Several localized populations.
<i>Agastache nepetoides</i> (L.) Kuntze	Lamiaceae	Yellow giant-hyssop	Native	One plant on E margin
<i>Agastache scrophulariifolia</i> (Willd.) Kuntze	Lamiaceae	Purple giant-hyssop	Native	Abundant at south end of woods
<i>Agrimonia gryposepala</i> Wallr.	Rosaceae	Tall agrimony	Native	
<i>Alliaria petiolata</i> (Bieb.) Cavara & Grande	Brassicaceae	Garlic mustard	Alien	Private border
<i>Allium tricoccum</i> Aiton var. <i>burdickii</i> Hanes	Liliaceae	Wild leek	Native	Scattered populations throughout woods
<i>Ambrosia trifida</i> L.	Asteraceae	Giant ragweed	Native	W margin
<i>Amphicarpaea bracteata</i> (L.) Fern.	Fabaceae	Hog peanut	Native	
<i>Apios americana</i> Medicus	Fabaceae	Groundnut	Native	Abundant in disturbed lowland.
<i>Arisaema triphyllum</i> (L.) Schott	Araceae	Jack-in-the-pulpit	Native	Very abundant.

<i>Aster drummondii</i> Lindley	Asteraceae	Drummond's aster	Native	
<i>Aster ontarionis</i> Wieg.	Asteraceae	Ontario aster	Native	Along drive
<i>Athyrium filix-femina</i> (L.) Roth var. <i>angustum</i> (Willd.) Moore	Aspleniaceae	Lady fern	Native	Abundant.
<i>Avena sativa</i> L.	Poaceae	Oats	Alien	Planted in disturbed roadside ditch
<i>Berberis thunbergii</i> DC.	Berberidaceae	Barberry	Alien	A few scattered individuals
<i>Bidens frondosa</i> L.	Asteraceae	Beggar-ticks	Native	Abundant in disturbed lowland.
<i>Bidens vulgata</i> Greene	Asteraceae	Tall beggar-ticks	Native	Abundant in disturbed lowland.
<i>Botrychium dissectum</i> Sprengel f. <i>obliquum</i> (Muhl.) Fern.	Ophioglossaceae	Oblique grape fern	Native	One plant on S margin
<i>Botrychium virginianum</i> (L.) Sw.	Ophioglossaceae	Rattlesnake fern	Native	Present throughout woods.
<i>Brachyelytrum erectum</i> (Schreber) Beauv.	Poaceae	Bearded shorthusk	Native	Abundandant on ridge
<i>Bromus pubescens</i> Muhl. ex Willd.	Poaceae	Canada brome	Native	Abundandant on ridge
<i>Calystegia sepium</i> (L.) R. Br.	Convolvulaceae	Bindweed	Native	A few plants along N margin of woods near NE corner of property
<i>Campanula americana</i> L.	Campanulaceae	Tall bellflower	Native	NE 1/4
<i>Carex blanda</i> Dewey	Cyperaceae	Eastern woodland sedge	Native	
<i>Carex cephaloidea</i> (Dewey) Dewey	Cyperaceae	Thinleaf sedge	Native	
<i>Carex hirtifolia</i> Mack.	Cyperaceae	Pubescent sedge	Native	
<i>Carex hitchcockiana</i> Dewey	Cyperaceae	Hitchcock's sedge	Native	Locally abundant, especially along N ravine branch
<i>Carex normalis</i> Mack.	Cyperaceae	Greater straw sedge	Native	NW corner, west of entrance
<i>Carex oligocarpa</i> Willd.	Cyperaceae	Richwoods sedge	Native	Growing with <i>C. hitchcockiana</i> , but less abundant
<i>Carex pensylvanica</i> Lam.	Cyperaceae	Pennsylvania sedge	Native	Locally abundant.
<i>Carex rosea</i> Schkuhr ex Willd.	Cyperaceae	Rosy sedge	Native	
<i>Carex sparganioides</i> Muhl. ex Willd.	Cyperaceae	Burr reed sedge	Native	
<i>Carya cordiformis</i> (Wang.) K. Koch	Juglandaceae	Bitternut hickory	Native	
<i>Carya ovata</i> (P. Miller) K. Koch	Juglandaceae	Shagbark hickory	Native	
<i>Caulophyllum thalictroides</i> (L.) Michx.	Berberidaceae	Blue cohosh	Native	Abundant throughout.
<i>Celastrus scandens</i> L.	Celastraceae	Bittersweet	Native	
<i>Celtis occidentalis</i> L.	Ulmaceae	Hackberry	Native	

<i>Chenopodium standleyanum</i> Aellen	Chenopodiaceae	Woodland goosefoot	Native	
<i>Cinna arundinacea</i> L.	Poaceae	Wood reed	Native	Moist lowland area in NE 1/4
<i>Circaea lutetiana</i> L. ssp. <i>canadensis</i> (L.) Ascherson & Magnus	Onagraceae	Enchanter's nightshade	Native	Present throughout woods.
<i>Commelinia communis</i> L.	Commelinaceae	Day-flower	Alien	Open area near W margin
<i>Cornus alternifolia</i> L. f.	Cornaceae	Pagoda dogwood	Native	
<i>Cornus foemina</i> P. Miller ssp. <i>racemosa</i> (Lam.) J. S. Wilson	Cornaceae	Gray dogwood	Native	
<i>Corylus americana</i> Walter	Betulaceae	Hazel	Native	Scattered throughout woods
<i>Cryptotaenia canadensis</i> (L.) DC.	Apiaceae	Honewort	Native	Abundant throughout.
<i>Cuscuta gronovii</i> Willd.	Convolvulaceae	Scaldweed	Native	NE corner
<i>Cystopteris protrusa</i> (Weath.) Blasdell	Aspleniaceae	Creeping fragile fern	Native	Near NW corner
<i>Desmodium glutinosum</i> (Muhl. ex Willd.) Wood	Fabaceae	Pointed tick-trefoil	Native	
<i>Desmodium</i> sp.	Fabaceae	Tick-trefoil	Native	Roadside ditch
<i>Dicentra cucullaria</i> (L.) Bernh.	Papaveraceae	Dutchman's breeches	Native	
<i>Dioscorea villosa</i> L.	Dioscoreaceae	Wild yam	Native	Scattered plants
<i>Dryopteris carthusiana</i> (Vill.) H. P. Fuchs	Aspleniaceae	Spinulose wood fern	Native	Only a few plants observed.
<i>Ellisia nyctelea</i> L.	Hydrophyllaceae	Waterpod	Native	
<i>Elymus villosus</i> Muhl. ex Willd.	Poaceae	Slender wild rye	Native	
<i>Equisetum arvense</i> L.	Equisetaceae	Common horsetail	Native	
<i>Erechtites hieraciifolia</i> (L.) Raf. ex DC.	Asteraceae	Fireweed	Native	One plant at N end
<i>Erigeron strigosus</i> Muhl. ex Willd.	Asteraceae	Daisy fleabane	Native	Along drive
<i>Erythronium albidum</i> Nutt.	Liliaceae	Trout lily	Native	
<i>Euonymus alatus</i> (Thunb.) Sieb.	Celastraceae	Winged wahoo	Alien	S end
<i>Eupatorium purpureum</i> L.	Asteraceae	Purple Joe-pye-weed	Native	
<i>Eupatorium rugosum</i> Houtt.	Asteraceae	White snakeroot	Native	Moist lowland area in NE 1/4
<i>Festuca obtusa</i> Biehler	Poaceae	Nodding fescue	Native	Abundant throughout woods
<i>Galearis spectabilis</i> (L.) Raf.	Orchidaceae	Showy orchid	Native	A few plants near road.
<i>Galium aparine</i> L.	Rubiaceae	Cleavers	Native	Abundant throughout woods.
<i>Galium circaezans</i> Michx.	Rubiaceae	Licorice bedstraw	Native	

<i>Galium concinnum</i> T. & G.	Rubiaceae	Shining bedstraw	Native	Abundant near road
<i>Galium triflorum</i> Michx.	Rubiaceae	Sweet-scented bedstraw	Native	
<i>Geranium maculatum</i> L.	Geraniaceae	Wild geranium	Native	Abundant throughout woods.
<i>Geum canadense</i> Jacq.	Rosaceae	White avens	Native	
<i>Hackelia virginiana</i> (L.) I. M. Johnston	Boraginaceae	Stickseed	Native	
<i>Helianthus strumosus</i> L.	Asteraceae	Pale-leaved sunflower	Native	NE corner
<i>Hemerocallis fulva</i> (L.) L.	Liliaceae	Day lily	Alien	Patch next to entrance, and on woods along road.
<i>Hepatica nobilis</i> P. Miller var. <i>acuta</i> (Pursh) Steyermark	Ranunculaceae	Hepatica	Native	Seen by Nagle
<i>Hystrix patula</i> Moench	Poaceae	Bottlebrush grass	Native	SE corner
<i>Juniperus virginiana</i> L.	Cupressaceae	Eastern red cedar	Native	A few individuals in SW corner
<i>Lactuca biennis</i> (Moench) Fern.	Asteraceae	Tall blue lettuce	Native	W margin
<i>Lactuca floridana</i> (L.) Gaertner	Asteraceae	Blue lettuce	Native	SW corner
<i>Laportea canadensis</i> (L.) Wedd.	Urticaceae	Wood nettle	Native	Abundant, especially on northwestern quarter of property.
<i>Leersia virginica</i> Willd.	Poaceae	Whitegrass	Native	Along stream
<i>Leonurus cardiaca</i> L.	Lamiaceae	Motherwort	Alien	A few plants in NE corner
<i>Lilium michiganense</i> Farw.	Liliaceae	Michigan lily	Native	Abundant in scattered populations throughout woods.
<i>Lolium perenne</i> L.	Poaceae	Annual rye grass	Alien	Disturbed area on N margin
<i>Lonicera prolifera</i> (Kirchner) Rehder	Caprifoliaceae	Wild honeysuckle	Native	
<i>Menispermum canadense</i> L.	Menispermaceae	Canada moonseed	Native	
<i>Morus alba</i> L.	Moraceae	White mulberry	Alien	
<i>Onoclea sensibilis</i> L.	Aspleniaceae	Sensitive fern	Native	Along S ravine branch.
<i>Osmorrhiza longistylis</i> (Torrey) DC.	Apiaceae	Anise root	Native	Abundant throughout woods.
<i>Oxalis stricta</i> L.	Oxalidaceae	Yellow wood sorrel	Native	
<i>Panax quinquefolius</i> L.	Araliaceae	Ginseng	Native	Small, localized population near SE corner, and scattered individual plants elsewhere
<i>Parietaria pensylvanica</i> Muhl. ex Willd.	Urticaceae	Pellitory	Native	
<i>Parthenocissus quinquefolia</i> (L.) Planchon	Vitaceae	Virginia creeper	Native	
<i>Phalaris arundinacea</i> L.	Poaceae	Reed canary grass	Native	Abundant in disturbed lowland.
<i>Phryma leptostachya</i> L.	Phrymaceae	Lopseed	Native	

<i>Pilea pumila</i> (L.) Gray	Urticaceae	Clearweed	Native	
<i>Pinus strobus</i> L.	Pinaceae	White Pine	Alien	
<i>Plantago rugelii</i> Dcne.	Plantaginaceae	Common plantain	Native	
<i>Podophyllum peltatum</i> L.	Berberidaceae	Mayapple	Native	
<i>Polygonatum biflorum</i> (Walter) Ell.	Liliaceae	Solomon's seal	Native	
<i>Polygonum punctatum</i> Ell.	Polygonaceae	Water smartweed	Native	Along streams
<i>Polygonum scandens</i> L.	Polygonaceae	Climbing false buckwheat	Native	Lowland
<i>Polygonum virginianum</i> L.	Polygonaceae	Jumpseed	Native	
<i>Populus deltoides</i> Bartram ex Marsh.	Salicaceae	Cottonwood	Native	
<i>Populus grandidentata</i> Michx.	Salicaceae	Big-tooth aspen	Native	Small stand along northern margin
<i>Prenanthes</i> sp.	Asteraceae	White lettuce	Native	One plant near N end
<i>Prunus serotina</i> Ehrh.	Rosaceae	Black cherry	Native	
<i>Prunus virginiana</i> L.	Rosaceae	Choke cherry	Native	
<i>Pteridium aquilinum</i> (L.) Kuhn var. <i>latiusculum</i> (Desv.) Underw. ex Heller	Dennstaedtiaceae	Bracken fern	Native	Abundant along road.
<i>Quercus alba</i> L.	Fagaceae	White oak	Native	
<i>Quercus borealis</i> Michx. var. <i>maxima</i> (Marsh.) Ashe	Fagaceae	Red oak	Native	
<i>Quercus macrocarpa</i> Michx.	Fagaceae	Bur oak	Native	
<i>Quercus velutina</i> Lam.	Fagaceae	Black oak	Native	A number of mature trees present
<i>Ranunculus abortivus</i> L.	Ranunculaceae	Small-flowered crowfoot	Native	
<i>Ranunculus recurvatus</i> Poiret	Ranunculaceae	Hooked buttercup	Native	One plant observed along N ravine branch
<i>Ranunculus septentrionalis</i> Poiret	Ranunculaceae	Swamp buttercup	Native	
<i>Rhus glabra</i> L.	Anacardiaceae	Smooth sumac	Native	N margin
<i>Ribes missouriense</i> Nutt. ex T. & G.	Saxifragaceae	Gooseberry	Native	
<i>Robinia pseudoacacia</i> L.	Fabaceae	Black locust	Alien	S margin of woods, near SW corner
<i>Rorippa palustris</i> (L.) Besser	Brassicaceae	Yellow cress	Native	
<i>Rosa multiflora</i> Thunb. ex Murray	Rosaceae	Multiflora rose	Alien	
<i>Rubus allegheniensis</i> Porter ex Bailey	Rosaceae	Blackberry	Native	
<i>Rubus occidentalis</i> L.	Rosaceae	Black raspberry	Native	

<i>Sambucus canadensis</i> L.	Caprifoliaceae	Elderberry	Native	
<i>Sanicula gregaria</i> Bickn.	Apiaceae	Common snakeroot	Native	Abundant throughout woods.
<i>Scrophularia marilandica</i> L.	Scrophulariaceae	Figwort	Native	
<i>Setaria faberii</i> Herrm.	Poaceae	Giant foxtail	Alien	Disturbed areas on W and N margins
<i>Silene pratensis</i> (Rafn) Gren. & Godron	Caryophyllaceae	White campion	Alien	N margin
<i>Silene stellata</i> (L.) Aiton f.	Caryophyllaceae	Starry campion	Native	Near road.
<i>Smilacina racemosa</i> (L.) Desf.	Liliaceae	False Solomon's seal	Native	Present throughout woods.
<i>Smilax ecirrhata</i> (Engelm. ex Kunth) S. Watson	Liliaceae	Carrion flower	Native	One plant observed near entrance
<i>Smilax herbacea</i> L.	Liliaceae	Carrion flower	Native	Scattered plants throughout woods.
<i>Smilax hispida</i> Muhl.	Liliaceae	Greenbriar	Native	
<i>Solanum americanum</i> P. Miller	Solanaceae	Black nightshade	Native	W margin
<i>Solidago canadensis</i> L.	Asteraceae	Tall goldenrod	Native	
<i>Solidago ulmifolia</i> Muhl. ex Willd.	Asteraceae	Elm-leaved goldenrod	Native	SE 1/4
<i>Thalictrum dasycarpum</i> Fischer & Ave-Lall.	Ranunculaceae	Purple meadow-rue	Native	Abundant along road.
<i>Thalictrum thalictroides</i> (L.) Eames & Boivin	Ranunculaceae	Rue anemone	Native	
<i>Thaspium barbinode</i> (Michx.) Nutt.	Apiaceae	Meadow parsnip	Native	Abundant in NE corner.
<i>Tilia americana</i> L.	Tiliaceae	Basswood	Native	
<i>Toxicodendron radicans</i> (L.) Kuntze ssp. <i>negundo</i> (Greene) Gillis	Anacardiaceae	Poison ivy	Native	
<i>Ulmus americana</i> L.	Ulmaceae	American elm	Native	
<i>Urtica dioica</i> L.	Urticaceae	Stinging nettle	Native	Disturbed lowland.
<i>Uvularia grandiflora</i> Small	Liliaceae	Bellwort	Native	Abundant, especially in southeastern quarter of property
<i>Verbena urticifolia</i> L.	Verbenaceae	White vervain	Native	Moist lowland area in NE 1/4
<i>Veronicastrum virginicum</i> (L.) Farw.	Scrophulariaceae	Culver's root	Native	
<i>Viburnum lentago</i> L.	Caprifoliaceae	Nannyberry	Native	
<i>Vinca minor</i> L.	Apocynaceae	Periwinkle	Alien	Localized near drain pipe
<i>Viola pratincola</i> Greene	Violaceae	Common blue violet	Native	
<i>Viola pubescens</i> Aiton	Violaceae	Downy yellow violet	Native	Present throughout woods.
<i>Vitis riparia</i> Michx.	Vitaceae	Wild grape	Native	

<i>Zanthoxylum americanum</i> P. Miller	Rutaceae	Prickly ash	Native	
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