

**A Vascular Plant Inventory and Vegetation Analysis**  
**of the**  
**Johnson County Heritage Trust's**  
**Belgum Grove**  
**in Johnson County, Iowa**

Prepared for the Johnson County Heritage Trust

By

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## EXECUTIVE SUMMARY

- 250 species of vascular plants have been documented from Belgum Grove, and an extraordinarily low percentage (71%) is native.
- Vegetation on the site is dominated by a small number of alien species, and most native species are very limited in abundance.
- The property supports three man-made plant communities, Pasture, Reconstructed Prairie, and Riparian. One natural community, Woodland, is also supported.
- Historically covered by prairie, most of the site has been farmed since 1937.
- Several aggressive alien species, including wild parsnip (*Pastinaca sativa*), Canada thistle (*Cirsium arvense*) and ox-eye daisy (*Leucanthemum vulgare*) present a challenge to sustainable management on the property.

## INTRODUCTION

Belgum Grove is a 40-acre site located in section 13, township 78N, range 7W (Fig. 1). It was acquired by the Johnson County Heritage Trust in 1998. Prior to its acquisition, the property was utilized for agricultural purposes. The site was largely pastured, but also supported a small orchard.

**Figure 1.** Topographic Map

**Figure 2.** 2002 Aerial Photograph

### **General Land Office Survey**

In May of 1841, General Land Office Surveyors Foley and McDonald passed within 1/4 mile of Belgum Grove along two section lines, first between sections 13 and 14, and second between sections 13 and 24 of township 78N, range 7W. One-half mile from the property, the Surveyors passed along the section line between sections 13 and 12.

They describe the land along the section lines between sections 13 and 14, and 13 and 12, as "rolling prairie" and "first rate" (Fig. 3). The land along the section line between sections 13 and 24 is described as "rolling prairie" and "second rate". The surveyors encountered unbroken prairie, with virtually no trees present.

Town No 78 North Range No 7 W 5th MeTown No 78 North Range No 7 W 5th Mer

C L  
 East Random between Secti  
 -ons 13 & 24  
 79.50 Intersected East Boun  
 -dary of Range 7 West  
 78 North, 20 links  
 North of Post  
 Prairie Rolling secd Rate

West Corrected Between secti  
 -ons 13 & 24  
 39.75 Set Quarter section  
 post at average distance  
 and made a mound  
 Pit 3 links East  
 79.50 Section corner

C L  
 North between Sections 13 & 14  
 39.75 Branch 10 links East  
 40 00 Set Quarter section post  
 on the North Bank in mound  
 Pit 3 links East  
 90 00 Set post corner to sections  
 11.12.13.& 14

Bearing (R. oak 10 Inc. 3 l E 432  
 (No other tree conv<sup>t</sup>  
 Rolling first Rate Prairie

**Figure 3.** General Land Office survey notes, line between sections 13 & 24, and 13 & 14

Town No 78 North, Range No 7 West 5th M

C L  
 East Random Between Sections  
 12 & 13  
 79.60 Intersected East boundary  
 of Range 7 W Town 78 N  
 31 links North of Post  
 Quality as the Same

West corrected between sections  
 12 & 13  
 39.80 Set Quarter Section post  
 at average distance  
 10 links South of pit  
 79.60 Section Corner-

May 10th 1841

**Figure 4.** General Land Office survey notes, line between sections 12 and 13

### **Aerial Photographs**

By 1937, most of the Belgum property was actively farmed (Fig. 5), though small areas, including a very modest woodland remnant, had been spared from cultivation along Dirty Face Creek and a north-south-oriented tributary.

The extent of active agricultural usage increased slightly between 1951 and 1970 (Fig. 6-8). A triangular segment of uncultivated land, supporting scattered trees, is visible in the 1937 and 1951 photographs (Fig. 5-7), but had been cleared by 1963. A linear fringe of uncultivated land along the tributary of Dirty Face Creek, also supporting scattered trees, was present as recently as 1963, but had been cleared by 1970.

By 1983, a barn had been constructed on the northwestern corner of the property (Fig. 9). By 1991, a small orchard and pine plantation, occupying approximately 2.5 acres along the southern margin of the woodland remnant, had been well established (Fig. 10).

**Figure 5.** 1937 Aerial Photograph

**Figure 6.** 1951 Aerial Photograph

**Figure 7.** 1963 Aerial Photograph

**Figure 8.** 1970 Aerial Photograph

**Figure 9.** 1983 Aerial Photograph

**Figure 10.** 1991 Aerial Photograph

**Figure 11.** 2002 Aerial Photograph

### **Soil Survey**

Land bordering Dirty Face Creek is covered Nodaway silt loam, with 0 to 2 percent slopes (220)(Fig. 12). Low-lying land occupying drainages to the south is covered by Colo-Ely complex, with 2 to 5 percent slopes (11B). Clinton silty clay loam, with 9 to 14 percent slopes (80D3) and Clinton silt loam, 5 to 9 percent slopes (80C2), occur on uplands south of the creek. These soils are characterized as "severely eroded", and "moderately eroded", respectively. Lagoda silt loam, with 2 to 5 percent slopes (76B), and Nodaway Arenzville silt loams, with 1 to 4 percent slopes (729B), occur along the northern margin of the property.

**Figure 12.** Soil Survey Map

### **METHODS**

#### **Study Site**

Iowa. Johnson County: Johnson County Heritage Trust's Belgum Grove, 500th Street, 1/4 E of Lackender Avenue intersection.

#### **Legal Description**



<b>Township 78N, Range 7W</b>
NE ¼, SW ¼, Sec. 13

### **Latitude/Longitude**

41° 33' 41"N, 91° 36' 37"W to 41° 33' 28"N, 91° 36' 37"W

### **Field Research**

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

**Table 1.** Dates of field surveys.

May 16, 2005
May 24, 2005
June 3, 2005
June 16, 2005
July 22, 2005
July 31, 2005
August 10, 2005
August 20, 2005
September 18, 2005
September 29, 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. Most species were recorded from the first zone in which they were found and not from additional zones, unless they happened to be particularly characteristic of more than one area.

### **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

Land survey records for the study sites include General Land Office Survey notes, aerial photographs, U.S. Geological Survey topographic maps, and U.S. Department of Agriculture soil survey. Images used as figures in this report were obtained from several sources. General Land Office Survey records were obtained from the Library of the State Historical Society of Iowa at their Iowa City location. Aerial photographs dating from 1937, 1951, 1963, 1970 and 1983 were obtained from the University of Iowa Main Library Map Collection. Photos dating from 1991 and 2002, and the topographic map, were obtained from the Iowa Geographic Map Server (<http://ortho.gis.iastate.edu/>). The soil survey maps and index were obtained from the University of Iowa Geoscience Library.

## RESULTS AND DISCUSSION

### Species Diversity

A total of 250 species of vascular plants representing 173 genera and 58 families, were recorded from Belgium Grove (Table 2, Appendix 1). Seventy-one percent (177) of these species are native.

**Table 2.** Vascular plant species diversity of Belgium Grove.

Study site	# of species	# of native species	% native	# of genera	# of families
Belgium Grove	250	177	71	173	58

## VEGETATION ANALYSIS

The property was subdivided into four zones as a result of the current inventory (Fig. 13, 14). These zones reflect vegetation and historical land use, and are identified by the plant communities within. Three man-made communities are present, Pasture (Zone 1), Riparian (Zone 2), and Reconstructed Prairie (Zone 3). One natural community, Woodland (Zone 4), is also present.

**Figure 13.** Vegetation zone topographic map

**Figure 14.** Vegetation zone aerial photograph

## **METHODS**

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### **Zone 1, Pasture**

Formerly pastured areas are dominated by a small number of alien grasses, including smooth brome (*Bromus inermis*), orchard grass (*Dactylis glomerata*), meadow fescue (*Festuca pratensis*), reed canary grass (*Phalaris arundinacea*), timothy (*Phleum pratense*), Kentucky bluegrass (*Poa pratensis*), and yellow foxtail (*Setaria glauca*). Other characteristic herbaceous species include yarrow (*Achillea millefolium* ssp. *lanulosa*), dogbane (*Apocynum sibiricum*), common milkweed (*Asclepias syriaca*), heath aster (*Aster ericoides*), heavy sedge (*Carex gravida*), wild bergamot (*Monarda fistulosa*), common plantain (*Plantago rugelii*), and American germander (*Teucrium canadense* var. *virginicum*).

Woody species constitute a relatively small percentage of the vegetation. Several species occur as scattered individuals, including cockspur hawthorn (*Crataegus crus-galli*), hedge apple (*Maclura pomifera*), multiflora rose (*Rosa multiflora*), and American elm (*Ulmus americana*). A few species, such as wild plum (*Prunus americana*) and smooth sumac (*Rhus glabra*), occur as localized thickets.

Wild parsnip (*Pastinaca sativa*), an aggressive alien species, is present in extraordinary abundance, particularly on the northern pasture. Interestingly, tiger swallowtail larvae were frequently observed consuming this species during the late summer.

Unfortunately, the larvae are not present in great enough numbers to serve as an effective control. Another aggressive alien species, Canada thistle (*Cirsium arvense*), occurs as several large populations, particularly bordering the banks of the creek.

The pasture is divided into northern and southern units by Dirty Face Creek. These units will be herein referred to as "South Pasture" and "North Pasture".

## i. South Pasture

A number of herbaceous species are limited to the South Pasture, including paniced aster (*Aster lanceolatus*), willow aster (*Aster praealtus*), field thistle (*Cirsium discolor*), fireweed (*Erechtites hieraciifolia*), ironweed (*Vernonia fasciculata*), and tall goldenrod (*Solidago canadensis*). Alien species include Deptford pink (*Dianthus armeria*), willowleaf lettuce (*Lactuca saligna*), and red clover (*Trifolium pratense*).

A small association of native prairie species is present near the northern end of the South Pasture. Included are such species as pussytoes (*Antennaria neglecta*), tapered rosette grass (*Dichanthelium acuminatum*), everlasting (*Gnaphalium obtusifolium*), prairie crab (*Malus ioensis*), field milkwort (*Polygala sanguinea*), prairie ragwort (*Senecio plattensis*), and nodding ladies'-tresses (*Spiranthes cernua*). The locality coincides with a soil map unit characterized by severely eroded and phosphorous-poor soil. The rather xeric conditions and unusually poor, exposed soil at this site have perhaps prevented alien pasture grasses from becoming established.

A few wetland species occur sporadically along drainages and moist depressions. These include sweet flag (*Acorus calamus*), fox sedge (*Carex vulpinoidea*), rice cut-grass (*Leersia oryzoides*), ditch stonecrop (*Penthorum sedoides*), and tearthumb (*Polygonum sagittatum*).

Trees, occurring on the margins of the South Pasture, include eastern red cedar (*Juniperus virginiana*), and a single large bur oak (*Quercus macrocarpa*), located along the western boundary of the property among a hedgerow of hedge apples (*Maclura pomifera*). Several cultivated trees and shrubs have been planted along fencerows and in association with the pine plantation and orchard on the northeastern portion of the South Pasture. These include apple (*Malus sylvestris*), ninebark (*Physocarpus opulifolius*), blue spruce (*Picea pungens*), white pine (*Pinus strobus*), scots pine (*Pinus sylvestris*), pear (*Pyrus communis*), and eastern white cedar (*Thuja occidentalis*).

## ii. North Pasture

The North Pasture is smaller and supports fewer species than the South Pasture. A large population of horse nettle (*Solanum carolinense*) occurs near the entrance to the property, and large populations of elderberry (*Sambucus canadensis*) and blister sedge (*Carex vesicaria*) occur at the eastern extent of the North Pasture. A large population of burdock (*Arctium minus*), an alien species, also occurs here.

Several cultivated species have been planted adjacent to the barn, including European smoke tree (*Cotinus coggygria*), German Iris (*Iris x germanica*), apple (*Malus sylvestris*), and cherry (*Prunus sp.*). Two additional species, day lily (*Hemerocallis fulva*) and plume grass (*Miscanthus sacchariflorus*), have been planted along the driveway. While both species have the potential to expand vegetatively, the latter is particularly aggressive, and has also colonized a small area along Dirty Face Creek (see discussion of Zone 2).

## Zone 2, Riparian

A frequent condition in areas of intensive agricultural use, the creek channel is deeply incised relatively to the surrounding former pastures, and is flanked by steep, highly-eroded banks.

The greatest plant species diversity on the property is located along the creek. Native species present here include Virginia three-seeded mercury (*Acalypha virginica*), bindweed (*Calystegia sepium*), tall bellflower (*Campanula americana*), soft fox sedge (*Carex conjuncta*), pale touch-me-not (*Impatiens pallida*), great lobelia (*Lobelia siphilitica*), clearweed (*Pilea pumila*), pale dock (*Rumex altissimus*), bur cucumber (*Sicyos angulatus*), stinging nettle (*Urtica dioica*), white vervain (*Verbena urticifolia*), neckweed (*Veronica peregrina*), and wild grape (*Vitis riparia*).

Numerous members of the Aster family are present here, including common ragweed (*Ambrosia artemisiifolia*), giant ragweed (*A. trifida*), nodding bur marigold (*Bidens cernua*), threelobe beggarticks (*B. tripartita*), sneezeweed (*Helenium autumnale*), pale-leaved sunflower (*Helianthus tuberosus*), wild lettuce (*Lactuca canadensis*), and blue lettuce (*L. floridana*). Also present are a number of grasses, including barnyard grass (*Echinochloa crusgalli*), Canada wild rye (*Elymus canadensis*), pony grass (*Eragrostis hypnoides*), fowl manna grass (*Glyceria striata*), whitegrass (*Leersia virginica*), nodding Muhly (*Muhlenbergia bushii*), and nimblewill (*M. schreberi*). A variety of knotweeds occur here, including knotweed (*Polygonum aviculare*), curlytop knotweed (*P. lapathifolium*), pennsylvania smartweed (*P. pennsylvanicum* var. *leavigatum*), and water smartweed (*P. punctatum*). Several members of the mint family are found here as well, including water horehound (*Lycopus americanus*), northern bugleweed (*L. uniflorus*), wild mint (*Mentha arvensis*), mad-dog scullcap (*Scutellaria lateriflora*), and hedge nettle (*Stachys tenuifolia* var. *hispida*).

Wetland species, growing in the water, or along the water's edge, include duckweed (*Lemna minor*), monkey flower (*Mimulus ringens*), leafy pondweed (*Potamogeton foliosus*), cursed crowfoot (*Ranunculus sceleratus*), dark green bulrush (*Scirpus atrovirens*), and soft-stemmed bulrush (*S. validus* var. *creber*).

Several native trees occur sporadically along the creek, including silver maple (*Acer saccharinum*), honey locust (*Gleditsia triacanthos*), black willow (*Salix nigra*), black walnut (*Juglans nigra*), and cottonwood (*Populus deltoides*). Most are relatively small, although a few large cottonwoods are present.

While species diversity is high, the riparian community also supports an unusually large number of alien species, including two aggressive alien species, poison hemlock (*Conium maculatum*) and plume grass (*Miscanthus sacchariflorus*). The former is abundant at several locations along the creek, while the latter is currently limited to a single localized population. Hops (*Humulus japonicus*), a vining species, is unusually abundant. Other alien species that occur here include velvet leaf (*Abutilon theophrasti*),

soft brome (*Bromus mollis*), European chickweed (*Cerastium pumilum*), ground ivy (*Glechoma hederacea*), pineapple weed (*Matricaria matricarioides*), spearmint (*Mentha spicata*), Canadian bluegrass (*Poa compressa*), climbing false buckwheat (*Polygonum scandens*), lady's thumb (*P. persicaria*), common chickweed (*Stellaria media*), mullein (*Verbascum thapsus*), and cocklebur (*Xanthium strumarium*). A number of alien species in the mustard family are present, including yellow rocket (*Barbarea vulgaris*), field cress (*Lepidium campestre*), tansy mustard (*Descurainia sophia*), wormseed mustard (*Erysimum cheiranthoides*), tumble mustard (*Sisymbrium sp.*), and penny cress (*Thlaspi arvense*). Three alien tree species also occur here, including weeping willow (*Salix babylonica*), white mulberry (*Morus alba*) and Siberian elm (*Ulmus pumila*).

### **Zone 3, Reconstructed prairie**

The reconstructed prairie is characterized by several native grasses, including side-oats gramma (*Bouteloua curtipendula*), switchgrass (*Panicum virgatum*), Indian grass (*Sorghastrum nutans*), and prairie cord grass (*Spartina pectinata*). Prairie forbs include New England aster (*Aster novae-angliae*), purple coneflower (*Echinacea purpurea*), daisy fleabane (*Erigeron strigosus*), rattlesnake master (*Eryngium yuccifolium*), ox-eye (*Heliopsis helianthoides*), Dudley's rush (*Juncus dudleyi*), round-headed bush clover (*Lespedeza capitata*), foxglove penstemon (*Penstemon digitalis*), clammy ground cherry (*Physalis heterophylla*), Virginia ground cherry (*P. virginiana*), tall cinquefoil (*Potentilla arguta*), gray-headed coneflower (*Ratibida pinnata*), black-eyed susan (*Rudbeckia hirta*), and hoary vervain (*Verbena stricta*).

A few alien species are present, including quackgrass (*Agropyron repens*) and giant foxtail (*Setaria faberi*). Ox-eye daisy (*Leucanthemum vulgare*), a particularly aggressive species, is present in alarming abundance over much of the area, especially on the northern half. A population of another aggressive species, crown vetch (*Coronilla varia*), is localized near the northern end of the Prairie Reconstruction.

### **Zone 4, Woodland**

The Woodland is characterized by such tree species as shagbark hickory (*Carya ovata*), hackberry (*Celtis occidentalis*), black cherry (*Prunus serotina*), choke cherry (*P. virginiana*), slippery elm (*Ulmus rubra*). Many of these species are represented only by small trees, although several large, mature shagbark hickories are present.

Herbaceous species include wild onion (*Allium canadense*), side-flowered aster (*Aster lateriflorus*), Ontario aster (*A. ontarionis*), oval-leaf sedge (*Carex cephalophora*), greater straw sedge (*C. normalis*), rosy sedge (*C. rosea*), enchanter's nightshade (*Circaea lutetiana* ssp. *canadensis*), honewort (*Cryptotaenia canadensis*), waterpod (*Ellisia nyctelea*), slender wild rye (*Elymus villosus*), Virginia wild rye (*E. virginicus*), common horsetail (*Equisetum arvense*), cleavers (*Galium aparine*), licorice bedstraw (*G. circaezans*), sweet-scented bedstraw (*G. triflorum*), white avens (*Geum canadense*), stickseed (*Hackelia virginiana*), anise root (*Osmorhiza longistylis*), lopseed (*Phryma leptostachya*), Solomon's seal (*Polygonatum biflorum*), small-flowered crowfoot

(*Ranunculus abortivus*), black snakeroot (*Sanicula canadensis*), common snakeroot (*S. gregaria*), starry campion (*Silene stellata*), and cup plant (*Silphium perfoliatum*). A few showy spring wildflowers are present, including spring beauty (*Claytonia virginica*), Virginia bluebell (*Mertensia virginica*), common blue violet (*Viola pratensis*), and downy yellow violet (*V. pubescens*).

Also present are a few species of ferns, including lady fern (*Athyrium filix-femina* var. *angustum*), rattlesnake fern (*Botrychium virginianum*), creeping fragile fern (*Cystopteris protrusa*), and sensitive fern (*Onoclea sensibilis*).

## MANAGEMENT CONCERNS

Numerous alien species are established on the property, several in great abundance. While management of these species is important corollary to sustainable prairie reconstruction, it is also desirable as a safeguard to neighboring properties. In particular, a few very aggressive alien species warrant immediate management. One such species is Canada thistle (*Cirsium arvense*), of which there are several large populations, particularly flanking the stream. Another such species is wild parsnip (*Pastinaca sativa*), a particularly dominant component of the pastures. The latter species, aside from being invasive, carries a significant risk to human health in the form of photodermatitis. Poison hemlock (*Conium maculatum*), occurs in abundance along the creek, and should be controlled. Plume grass (*Miscanthus sacchariflorus*), located along the creek and adjacent to the property entrance, is currently small in extent but has significant potential for expansion.

The dominance of ox-eye daisy (*Leucanthemum vulgare*) on a large portion of the Reconstructed Prairie is particularly problematic. The abundance of this aggressive alien species has made it a significant competitor with native prairie species. When in flower, the masses of white blossoms give the area a highly unnatural appearance, imparting an inaccurate conception of native prairie communities to the uneducated visitor. Unfortunately, the growth of this species is so extensive that its removal will be difficult without wholesale elimination of the surrounding native vegetation. For future prairie reconstruction, great care must be taken to obtain seed free of alien species.

## CONCLUSIONS

As a site shaped by recent, large-scale disturbance, the 40-acre Belgum Grove property supports very little natural vegetation. A very small woodland remnant has survived, along with a minor assortment of native prairie and wetland species. Much of the property is dominated by a few alien species. With 250 species, the plant diversity on the property is high, though an extraordinarily low percentage (71%) is native.

Very little of the study area remains consistent with historical records. The prairie described in the General Land Office (GLO) Survey notes had been entirely converted

to farm fields by 1937. The only remaining natural feature is a small woodland remnant, having survived since 1937, as documented in the photographic record.

Except for the Woodland, native species are present only in small numbers, in most cases occurring as isolated individuals, and not integrated as part of a functional community. On much of the property, particularly the Pasture and Riparian communities, a few alien species are dominant.

Prairie reconstruction on the property has been a mixed success. While a diversity of native plant species has been established, an unsightly and aggressive alien species dominates a significant portion of the community. For future prairie reconstruction, great care must be taken to obtain seed free of alien species.



## **ACKNOWLEDGEMENTS**

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The State Historical Society of Iowa provided access to the General Land Office Survey data. The University of Iowa Main Library Map Collection provided access to aerial photos and kindly provided scans of the same. The Iowa Geographic Map Server, a division of the Iowa State University Geographic Information Systems Support & Research Facility, provided internet access to aerial photos and topographic map. The University of Iowa Geoscience Library provided access to soil survey data.

## REFERENCES

Eilers, L.J. and D.M. Roosa. 1994. *The Vascular Plants of Iowa*. University of Iowa Press, Iowa City, Iowa.

Gleason, H.A., and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. New York Botanical Garden., Bronx, New York.

## **Appendix - Belgum Grove Plant List**

This list includes all vascular plant species recorded in the inventory of Belgum Grove. Associated information is provided for each species, including species name, family name, common name, origin (whether the species is native or alien), location (according to the area numbers in Fig. 1), and additional comments.

**Appendix - Plant List for the Johnson County Heritage Trust's Belgum Grove,  
Johnson County, Iowa**

Species Name	Family	Common Name	Origin	Zone	Comments
<i>Abutilon theophrasti</i> Medicus	Malvaceae	Velvet leaf	Alien	Zone 2	Moist creek bed
<i>Acalypha virginica</i> L.	Euphorbiaceae	Virginia three-seeded mercury	Native	Zone 2	Creek bank
<i>Acer negundo</i> L.	Aceraceae	Box elder	Native	Zone 2	Creek bank
<i>Acer saccharinum</i> L.	Aceraceae	Silver maple	Native	Zone 2	Along creek
<i>Achillea millefolium</i> L. ssp. <i>lanulosa</i> (Nutt.) Piper	Asteraceae	Yarrow	Native	Zone 1	Pastures
<i>Acorus calamus</i> L.	Araceae	Sweet flag	Native	Zone 1	Localized population in small rill in S pasture
<i>Agrimonia</i> sp.	Rosaceae	Agrimony	Native		
<i>Agropyron repens</i> (L.) Beauv.	Poaceae	Quackgrass	Alien	Zone 3	Localized population on Reconstructed Prairie
<i>Agrostis gigantea</i> Roth	Poaceae	Redtop	Alien	Zone 2, Zone 1	Along creek bank and on S pasture
<i>Allium canadense</i> L.	Liliaceae	Wild onion	Native	Zone 4	Woods
<i>Amaranthus tuberculatus</i> (Moq.) Sauer	Amaranthaceae	Roughfruit amaranth	Native	Zone 2	Along creek bank
<i>Ambrosia artemisiifolia</i> L.	Asteraceae	Common ragweed	Native	Zone 2	Creek bank

<i>Ambrosia trifida</i> L.	Asteraceae	Giant ragweed	Native	Zone 2	Along creek
<i>Antennaria neglecta</i> Greene	Asteraceae	Pussytoes	Native	Zone 1	S pasture
<i>Apocynum sibiricum</i> Jacq.	Apocynaceae	Dogbane	Native	Zone 1	Pastures
<i>Arctium minus</i> Bernh.	Asteraceae	Burdock	Alien	Zone 1, Zone 2	N & S pasture, creek bank
<i>Asclepias syriaca</i> L.	Asclepiadaceae	Common milkweed	Native	Zone 1	Pastures
<i>Aster ericoides</i> L.	Asteraceae	Heath aster	Native	Zone 1	Pastures
<i>Aster lanceolatus</i> Willd.	Asteraceae	Panicled aster	Native	Zone 1	S pasture
<i>Aster lateriflorus</i> (L.) Britton	Asteraceae	Side-flowered aster	Native	Zone 4	Woods
<i>Aster novae-angliae</i> L.	Asteraceae	New England aster	Native	Zone 3	Reconstructed Prairie
<i>Aster ontarionis</i> Wieg.	Asteraceae	Ontario aster	Native	Zone 4	Woods
<i>Aster praealtus</i> Poiret	Asteraceae	Willow aster	Native	Zone 1	S pasture
<i>Athyrium filix-femina</i> (L.) Roth var. <i>angustum</i> (Willd.) Moore	Aspleniaceae	Lady fern	Native	Zone 4	Woods
<i>Barbarea vulgaris</i> R. Br.	Brassicaceae	Yellow rocket	Alien	Zone 2	Creek bank
<i>Bidens cernua</i> L.	Asteraceae	Nodding bur marigold	Native	Zone 2	Along creek
<i>Bidens tripartita</i> L.	Asteraceae	Threelobe beggarticks	Native	Zone 2	Along creek
<i>Botrychium virginianum</i> (L.) Sw.	Ophioglossaceae	Rattlesnake fern	Native	Zone 4	Woods
<i>Bouteloua curtipendula</i> (Michx.) Torrey	Poaceae	Side-oats gramma	Native	Zone 3	A few plants on Reconstructed Prairie
<i>Bromus inermis</i> Leysser	Poaceae	Smooth brome	Alien	Zone 1	Pastures
<i>Bromus mollis</i> L.	Poaceae	Soft brome	Alien	Zone 2	Localized population on dry creek bank
<i>Bromus tectorum</i> L.	Poaceae	Downy chess	Alien		
<i>Calystegia sepium</i> (L.) R. Br.	Convolvulaceae	Bindweed	Native	Zone 2	Along creek
<i>Campanula americana</i> L.	Campanulaceae	Tall bellflower	Native	Zone 2	Along creek bank
<i>Cannabis sativa</i> L.	Moraceae	Hemp	Alien	Zone 2	Along creek
<i>Capsella bursa-pastoris</i> (L.) Medicus	Brassicaceae	Shepherd's purse	Alien	Zone 1	Scattered in open areas
<i>Carex amphibola</i> Steudel var. <i>turgida</i> Fern.	Cyperaceae	Eastern narrowleaf sedge	Native		
<i>Carex annectans</i>	Cyperaceae	Yellowfruit sedge	Native	Zone 1	Fairly abundant in S pasture
<i>Carex blanda</i> Dewey	Cyperaceae	Eastern woodland sedge	Native		

<i>Carex brevior</i> (Dewey) Mack. ex Lunell	Cyperaceae	Shortbeak sedge	Native	Zone 1	Thicket south of old orchard
<i>Carex cephalophora</i> Willd.	Cyperaceae	Oval-leaf sedge	Native	Zone 4	Open woods
<i>Carex conjuncta</i> Boott	Cyperaceae	Soft fox sedge	Native	Zone 2, Zone 1	Scattered plants on and above creek bank
<i>Carex davisii</i> Schwein. & Torrey	Cyperaceae	Davis' sedge	Native	Zone 4, Zone 1	Scattered plants in E woodland remnant and in open areas
<i>Carex gravida</i> Bailey	Cyperaceae	Heavy sedge	Native	Zone 1	Pastures
<i>Carex jamesii</i> Schwein	Cyperaceae	James' sedge	Native	Zone 4	Locally abundant in small woodland remnant along W margin of property
<i>Carex leavenworthii</i> Dewey	Cyperaceae	Leavenworth's sedge	Native	Zone 1	Locally abundant on margin of pine plantation
<i>Carex normalis</i> Mack.	Cyperaceae	Greater straw sedge	Native	Zone 4	Woods
<i>Carex rosea</i> Schkuhr ex Willd.	Cyperaceae	Rosy sedge	Native	Zone 4	Woods
<i>Carex vesicaria</i> L.	Cyperaceae	Blister sedge	Native	Zone 1, Zone 2	Large localized population along N margin of property, and on creek bank
<i>Carex vulpinoidea</i> Michx.	Cyperaceae	Fox sedge	Native	Zone 1	S pasture, north of Reconstructed Prairie
<i>Carya ovata</i> (P. Miller) K. Koch	Juglandaceae	Shagbark hickory	Native	Zone 4	Woods
<i>Celtis occidentalis</i> L.	Ulmaceae	Hackberry	Native	Zone 4	A few saplings in woods
<i>Cerastium pumilum</i> Curtis	Caryophyllaceae	European chickweed	Alien	Zone 2	Creek bank
<i>Chenopodium album</i> L.	Chenopodiaceae	Lamb's quarters	Alien	Zone 2	Along creek
<i>Circaea lutetiana</i> L. ssp. <i>canadensis</i> (L.) Ascherson & Magnus	Onagraceae	Enchanter's nightshade	Native	Zone 4	Woods
<i>Cirsium arvense</i> (L.) Scop.	Asteraceae	Canada thistle	Alien	Zone 1	Scattered infestations throughout open areas
<i>Cirsium discolor</i> (Muhl. ex Willd) Sprengel	Asteraceae	Field thistle	Native	Zone 1	S pasture
<i>Claytonia virginica</i> L.	Portulacaceae	Spring beauty	Native	Zone 4	Woods
<i>Conium maculatum</i> L.	Apiaceae	Poison hemlock	Alien	Zone 2	Abundant along creek
<i>Conyza canadensis</i> (L.) Cronq.	Asteraceae	Horseweed	Native	Zone 2, Zone 1	Scattered plants along creek bank, N & S pasture

<i>Cornus foemina</i> P. Miller ssp. <i>racemosa</i> (Lam.) J. S. Wilson	Cornaceae	Gray dogwood	Native		
<i>Coronilla varia</i> L.	Fabaceae	Crown vetch	Alien	Zone 3	Isolated population near hilltop on Reconstructed Prairie
<i>Cotinus coggygria</i> Scop.	Anacardiaceae	European smoke tree	Alien	Zone 1	One plant in hedgerow near barn
<i>Crataegus crus-galli</i> L.	Rosaceae	Cockspur hawthorn	Native	Zone 1	Several trees along W margin of property, one large tree on N pasture
<i>Cryptotaenia canadensis</i> (L.) DC.	Apiaceae	Honewort	Native	Zone 4	Woods
<i>Cystopteris protrusa</i> (Weath.) Blasdel	Aspleniaceae	Creeping fragile fern	Native	Zone 4, Zone 1	Locally abundant in woodland remnant.
<i>Dactylis glomerata</i> L.	Poaceae	Orchard grass	Alien	Zone 1	Pastures
<i>Descurainia sophia</i> (L.) Webb ex Prantl	Brassicaceae	Tansy mustard	Alien	Zone 2	Along creek
<i>Dianthus armeria</i> L.	Caryophyllaceae	Deptford pink	Alien	Zone 1	S pasture
<i>Dichanthelium acuminatum</i> (Sw.) Gould & Clark	Poaceae	Tapered rosette grass	Native	Zone 1	S pasture
<i>Echinacea purpurea</i> (L.) Moench.	Asteraceae	Purple coneflower	Alien	Zone 3	Scattered plants on Reconstructed Prairie
<i>Echinochloa crusgalli</i> (L.) Beauv.	Poaceae	Barnyard grass	Alien	Zone 2	Along creek
<i>Ellisia nyctelea</i> L.	Hydrophyllaceae	Waterpod	Native	Zone 4	Woods
<i>Elymus canadensis</i> L.	Poaceae	Canada wild rye	Native	Zone 2	Along creek
<i>Elymus villosus</i> Muhl. ex Willd.	Poaceae	Slender wild rye	Native	Zone 4	Woods & W margin of property
<i>Elymus virginicus</i> L.	Poaceae	Virginia wild rye	Native	Zone 4	Woods
<i>Epilobium coloratum</i> Biehler	Onagraceae	Cinnamon willowherb	Native	Zone 2	Along creek
<i>Equisetum arvense</i> L.	Equisetaceae	Common horsetail	Native	Zone 4	Steep, north-facing wooded slope
<i>Equisetum laevigatum</i> A. Br.	Equisetaceae	Smooth scouring- rush	Native	Zone 3, Zone 1	Localized population on N- facing prairie slope and on S pasture
<i>Eragrostis hypnoides</i> (Lam.) BSP	Poaceae	Pony grass	Native	Zone 2	Along creek
<i>Erechtites hieraciifolia</i> (L.) Raf. ex. DC.	Asteraceae	Fireweed	Native	Zone 1	S pasture
<i>Erigeron annuus</i> (L.) Pers.	Asteraceae	Annual fleabane	Native		
<i>Erigeron strigosus</i> Muhl. ex Willd.	Asteraceae	Daisy fleabane	Native	Zone 3	Dry, relatively open ground near hilltop on Reconstructed Prairie and S pasture

<i>Eryngium yuccifolium</i> Michx.	Apiaceae	Rattlesnake master	Native	Zone 3	One plant on Reconstructed Prairie
<i>Erysimum cheiranthoides</i> L.	Brassicaceae	Wormseed mustard	Alien	Zone 2	Along creek
<i>Euphorbia maculata</i> L.	Euphorbiaceae	Carpet spurge	Native	Zone 2	Creek bank
<i>Euphorbia nutans</i> Lag.	Euphorbiaceae	Nodding spurge	Native	Zone 1	A few plants on N pasture
<i>Festuca pratensis</i> Hudson	Poaceae	Meadow fescue	Alien	Zone 1	N & S pasture
<i>Galium aparine</i> L.	Rubiaceae	Cleavers	Native	Zone 4	Woods
<i>Galium circaezans</i> Michx.	Rubiaceae	Licorice bedstraw	Native	Zone 4	Woods
<i>Galium triflorum</i> Michx.	Rubiaceae	Sweet-scented bedstraw	Native	Zone 4	Woods
<i>Geum canadense</i> Jacq.	Rosaceae	White avens	Native	Zone 4	Woods
<i>Glechoma hederacea</i> L.	Lamiaceae	Ground ivy	Alien	Zone 2	Moist creek bank adjacent to woodland remnant
<i>Gleditsia triacanthos</i> L.	Fabaceae	Honey locust	Native	Zone 2	Along creek
<i>Glyceria striata</i> (Lam.) A. S. Hitchc.	Poaceae	Fowl manna grass	Native	Zone 2	Along creek
<i>Gnaphalium obtusifolium</i> L.	Asteraceae	Everlasting	Native	Zone 1	S pasture
<i>Hackelia virginiana</i> (L.) I. M. Johnston	Boraginaceae	Stickseed	Native	Zone 4	Woods
<i>Helenium autumnale</i> L.	Asteraceae	Sneezeweed	Native	Zone 2	A few scattered plants along creek bank
<i>Helianthus tuberosus</i> L.	Asteraceae	Pale-leaved sunflower	Native	Zone 2	Creek bank
<i>Heliopsis helianthoides</i> (L.) Sweet	Asteraceae	Ox-eye	Native	Zone 3	Reconstructed Prairie
<i>Hemerocallis fulva</i> (L.) L.	Liliaceae	Day lily	Alien	Zone 1	Along driveway
<i>Hibiscus trionum</i> L.	Malvaceae	Flower-of-an-hour	Alien	Zone 2	One plant on creek bank
<i>Humulus japonicus</i> Sieb. & Zucc.	Moraceae	Hops	Alien	Zone 2	Along creek
<i>Impatiens pallida</i> Nutt.	Balsaminaceae	Pale touch-me-not	Native	Zone 2	Along creek
<i>Iris x germanica</i> L.	Iridaceae	German Iris	Alien	Zone 1	Planted along barn
<i>Juglans nigra</i> L.	Juglandaceae	Black walnut	Native	Zone 2	Creek bank
<i>Juncus dudleyi</i> Wieg.	Juncaceae	Dudley's rush	Native	Zone 3	Reconstructed Prairie
<i>Juncus interior</i> Wieg.	Juncaceae	Inland rush	Native		
<i>Juniperus virginiana</i> L.	Cupressaceae	Eastern red cedar	Native	Zone 1	Several saplings in S pasture
<i>Lactuca canadensis</i> L.	Asteraceae	Wild lettuce	Native	Zone 2	Along creek bank
<i>Lactuca floridana</i> (L.) Gaertner	Asteraceae	Blue lettuce	Native	Zone 2	Along creek bank



<i>Lactuca saligna</i> L.	Asteraceae	Willowleaf lettuce	Native	Zone 1	S pasture
<i>Lactuca serriola</i> L.	Asteraceae	Prickly lettuce	Alien	Zone 1	W end of N pasture
<i>Laportea canadensis</i> (L.) Wedd.	Urticaceae	Wood nettle	Native	Zone 2	Along creek bank
<i>Leersia oryzoides</i> (L.) Sw.	Poaceae	Rice cut-grass	Native	Zone 1	Along creek branch through S pasture
<i>Leersia virginica</i> Willd.	Poaceae	Whitegrass	Native	Zone 2	Along creek bank
<i>Lemna minor</i> L.	Lemnaceae	Duckweed	Native	Zone 2	Slow moving water in creek
<i>Leonurus cardiaca</i> L.	Lamiaceae	Motherwort	Alien	Zone 1	W margin of property
<i>Lepidium campestre</i> (L.) R. Br.	Brassicaceae	Field cress	Alien	Zone 2	Creek bank
<i>Lepidium virginicum</i> L.	Brassicaceae	Poor-man's pepper	Native	Zone 2	A few scattered plants on dry, eroding creek bank
<i>Lespedeza capitata</i> Michx.	Fabaceae	Round-headed bush clover	Native	Zone 3	A few plants on prairie planting
<i>Leucanthemum vulgare</i> Lam.	Asteraceae	Ox-eye daisy	Alien	Zone 3	Heavy infestation in SE 1/4 of property
<i>Lobelia inflata</i> L.	Campanulaceae	Indian tobacco	Native	Zone 1	N of Reconstructed Prairie
<i>Lobelia siphilitica</i> L.	Campanulaceae	Great lobelia	Native	Zone 2	One plant along creek
<i>Lonicera tartarica</i> L.	Caprifoliaceae	Tartarian honeysuckle	Alien		
<i>Lycopus americanus</i> Muhl. ex Barton	Lamiaceae	Water horehound	Native	Zone 2	Along creek
<i>Lycopus uniflorus</i> Michx.	Lamiaceae	Northern bugleweed	Native	Zone 2	Along creek
<i>Maclura pomifera</i> (Raf. ex Sarg.) Schneider	Moraceae	Hedge apple	Alien	Zone 1	W margin of property, scattered trees on S & N pasture
<i>Malus ioensis</i> (Wood) Britton	Rosaceae	Prairie crab	Native	Zone 1	Scattered individuals on S 1/2 of property
<i>Malus sylvestris</i> (L.) P. Miller	Rosaceae	Apple	Alien	Zone 1	Planted near barn and in old orchard along E margin of property
<i>Matricaria matricarioides</i> (Less.) Porter	Asteraceae	Pineapple weed	Alien	Zone 2	Along creek
<i>Medicago lupulina</i> L.	Fabaceae	Black medic	Alien	Zone 2	Creek bank
<i>Melilotus officinalis</i> (L.) Pallas	Fabaceae	White sweet clover	Alien	Zone 2	Along creek
<i>Mentha arvensis</i> L.	Lamiaceae	Wild mint	Native	Zone 2	Along creek
<i>Mentha spicata</i> L.	Lamiaceae	Spearmint	Alien	Zone 2	Along creek
<i>Mertensia virginica</i> (L.) Pers. ex Link	Boraginaceae	Virginia bluebell	Native	Zone 4	Woods
<i>Mimulus ringens</i> L.	Scrophulariaceae	Monkey flower	Native	Zone 2	Along creek

<i>Miscanthus sacchariflorus</i> (Maxim.) Hackel	Poaceae	Plume grass	Alien	Zone 2, Zone 1	On creek bank and along driveway
<i>Monarda fistulosa</i> L.	Lamiaceae	Wild bergamot	Native	Zone 1	Pastures
<i>Morus alba</i> L.	Moraceae	White mulberry	Alien	Zone 2	Creek bank
<i>Muhlenbergia bushii</i> Pohl	Poaceae	Nodding Muhly	Native	Zone 2	Along creek bank
<i>Muhlenbergia schreberi</i> J. F. Gmelin	Poaceae	Nimblewill	Native	Zone 2	Creek bank
<i>Nepeta cataria</i> L.	Lamiaceae	Catnip	Alien	Zone 2, Zone 1	Along creek bank & upland
<i>Oenothera villosa</i> Thunb.	Onagraceae	Gray evening primrose	Native	Zone 2	Along creek
<i>Onoclea sensibilis</i> L.	Aspleniaceae	Sensitive fern	Native	Zone 4	Localized population on steep, north-facing wooded slope
<i>Osmorhiza longistylis</i> (Torrey) DC.	Apiaceae	Anise root	Native	Zone 4	Woods
<i>Oxalis stricta</i> L.	Oxalidaceae	Yellow wood sorrel	Native	Zone 2	Along creek
<i>Panicum virgatum</i> L.	Poaceae	Switchgrass	Native	Zone 3	Reconstructed Prairie
<i>Parthenocissus vitacea</i> (Knerr.) A. S. Hitchcock	Vitaceae	Woodbine	Native	Zone 1	Old orchard
<i>Pastinaca sativa</i> L.	Apiaceae	Wild parsnip	Alien	Zone 1	Heavy infestation throughout open areas
<i>Penstemon digitalis</i> Nutt.	Scrophulariaceae	Foxglove penstemon	Native	Zone 3	A few individuals on Reconstructed Prairie
<i>Penthorum sedoides</i> L.	Saxifragaceae	Ditch stonecrop	Native	Zone 1	Along creek branch through S pasture
<i>Phalaris arundinacea</i> L.	Poaceae	Reed canary grass	Native	Zone 1	Heavy infestation throughout open areas
<i>Phleum pratense</i> L.	Poaceae	Timothy	Alien	Zone 1	S pasture
<i>Phryma leptostachya</i> L.	Phrymaceae	Lopseed	Native	Zone 4	Woods
<i>Physalis heterophylla</i> Nees	Solanaceae	Ground cherry	Native	Zone 3	Reconstructed Prairie
<i>Physalis virginiana</i> P. Miller	Solanaceae	Ground cherry	Native	Zone 3	Reconstructed Prairie
<i>Physocarpus opulifolius</i> (L.) Maxim.	Rosaceae	Ninebark	Native	Zone 1	Several individuals along E margin of property, probably planted
<i>Picea pungens</i> Engelm.	Pinaceae	Blue spruce	Alien	Zone 1	Planted along fencerows
<i>Pilea pumila</i> (L.) Gray	Urticaceae	Clearweed	Native	Zone 2	Along creek
<i>Pinus strobus</i> L.	Pinaceae	White pine	Alien	Zone 1	South end of pine plantation

<i>Pinus sylvestris</i> L.	Pinaceae	Scots pine	Alien	Zone 1	Pine plantation
<i>Plantago rugelii</i> Dcne.	Plantaginaceae	Common plantain	Native	Zone 1	Pastures
<i>Plantago virginica</i> L.	Plantaginaceae	Virginia plantain	Native	Zone 1	Abundant around barn
<i>Poa compressa</i> L.	Poaceae	Canadian bluegrass	Alien	Zone 2	Localized population on dry, steep creek bank
<i>Poa pratensis</i> L.	Poaceae	Kentucky bluegrass	Alien	Zone 1	Pastures
<i>Polygala sanguinea</i> L.	Polygalaceae	Field milkwort	Native	Zone 1	A few plants on an open, localized area in S pasture
<i>Polygonatum biflorum</i> (Walter) Ell.	Liliaceae	Solomon's seal	Native	Zone 4	Woods
<i>Polygonum amphibium</i> L. var. <i>emursum</i> Michx.	Polygonaceae	Water smartweed	Native	Zone 3, Zone 2	Localized population on N-facing prairie slope and along creek
<i>Polygonum aviculare</i> L.	Polygonaceae	Knotweed	Alien	Zone 2	One plant on creek bank
<i>Polygonum hydropiper</i> L.	Polygonaceae	Marshpepper knotweed	Native	Zone 1	N pasture
<i>Polygonum lapathifolium</i> L.	Polygonaceae	Curlytop knotweed	Native	Zone 2	Along creek
<i>Polygonum pennsylvanicum</i> L. var. <i>leavigatum</i> Fern.	Polygonaceae	Pennsylvania smartweed	Native	Zone 2	Along creek
<i>Polygonum persicaria</i> L.	Polygonaceae	Lady's thumb	Alien	Zone 2	Along creek
<i>Polygonum punctatum</i> Ell.	Polygonaceae	Water smartweed	Native	Zone 2	Along creek
<i>Polygonum sagittatum</i> L.	Polygonaceae	Tearthumb	Native	Zone 1	Along creek branch through S pasture
<i>Polygonum scandens</i> L.	Polygonaceae	Climbing false buckwheat	Alien	Zone 2	Along creek bank
<i>Populus deltoides</i> Bartram ex. Marsh.	Salicaceae	Cottonwood	Native	Zone 2	Creek bank
<i>Potamogeton foliosus</i> Raf.	Potamogetonaceae	Leafy pondweed	Native	Zone 2	Relatively deep water in creek
<i>Potentilla arguta</i> Pursh	Rosaceae	Tall cinquefoil	Native	Zone 3	One plant on Reconstructed Prairie
<i>Potentilla norvegica</i> L.	Rosaceae	Norwegian cinquefoil	Native	Zone 2	One plant along creek
<i>Potentilla recta</i> L.	Rosaceae	Sulphur cinquefoil	Alien	Zone 1, Zone 3	Scattered plants on S pasture, Reconstructed Prairie
<i>Potentilla simplex</i> Michx.	Rosaceae	Common cinquefoil	Native	Zone 4, Zone 1	Woods, margin of pine plantation
<i>Prunella vulgaris</i> L.	Lamiaceae	Self heal	Alien		
<i>Prunus americana</i> Marsh.	Rosaceae	Wild plum	Native	Zone 1	Pastures
<i>Prunus serotina</i> Ehrh.	Rosaceae	Black cherry	Native	Zone 4	Woods

<i>Prunus sp. (cultivar)</i>	Rosaceae	Cherry	Alien	Zone 1	Planted near barn
<i>Prunus virginiana</i> L.	Rosaceae	Choke cherry	Native	Zone 4	Woods
<i>Pycnanthemum tenuifolium</i> Schrader	Lamiaceae	Slender mountain mint	Native	Zone 1	Locally abundant in S pasture
<i>Pyrus communis</i> L.	Rosaceae	Pear	Alien	Zone 1	A few individuals planted in old apple orchard along E margin of property
<i>Quercus macrocarpa</i> Michx.	Fagaceae	Bur oak	Native	Zone 1	One tree along west margin
<i>Ranunculus abortivus</i> L.	Ranunculaceae	Small-flowered crowfoot	Native	Zone 4	Woods
<i>Ranunculus sceleratus</i> L.	Ranunculaceae	Cursed crowfoot	Native	Zone 2	A few scattered plants along creek
<i>Ratibida pinnata</i> (Vent.) Barnh.	Asteraceae	Gray-headed coneflower	Native	Zone 3	Reconstructed Prairie
<i>Rhus glabra</i> L.	Anacardiaceae	Smooth sumac	Native	Zone 1	Pastures
<i>Ribes missouriense</i> Nutt. ex T. & G.	Saxifragaceae	Gooseberry	Native	Zone 4	Woods
<i>Rorripa palustris</i> (L.) Besser	Brassicaceae	Marsh cress	Native	Zone 2	Along creek
<i>Rorripa sessiliflora</i> (Nutt.) A. S. Hitchc.	Brassicaceae	Yellow cress	Native	Zone 2	Along creek
<i>Rosa multiflora</i> Thunb. ex Murray	Rosaceae	Multiflora rose	Alien	Zone 1	Pastures
<i>Rudbeckia hirta</i> L.	Asteraceae	Black-eyed susan	Native	Zone 3	Reconstructed Prairie
<i>Rumex altissimus</i> Wood	Polygonaceae	Pale dock	Native	Zone 2	Along creek bank
<i>Rumex crispus</i> L.	Polygonaceae	Curly dock	Alien		
<i>Salix babylonica</i> L.	Salicaceae	Weeping willow	Alien	Zone 2	One large tree near creek crossing
<i>Salix nigra</i> Marsh.	Salicaceae	Black willow	Native	Zone 2	Along creek
<i>Sambucus canadensis</i> L.	Caprifoliaceae	Elderberry	Native	Zone 1	Very abundant in NE corner, scattered elsewhere
<i>Sanicula canadensis</i> L.	Apiaceae	Black snakeroot	Native	Zone 4	Open woods and around pine plantation
<i>Sanicula gregaria</i> Bickn.	Apiaceae	Common snakeroot	Native	Zone 4	Woods
<i>Scirpus atrovirens</i> Willd.	Cyperaceae	Dark green bulrush	Native	Zone 2	Along creek
<i>Scirpus validus</i> Vahl. var. <i>creber</i> Fern.	Cyperaceae	Soft-stemmed bulrush	Native	Zone 2	Wet ground along edge of creek
<i>Scutellaria lateriflora</i> L.	Lamiaceae	Mad-dog scullcap	Native	Zone 2	Localized population growing on log in creek
<i>Senecio plattensis</i> Nutt.	Asteraceae	Prairie ragwort	Native	Zone 1	Abundant in S 1/2 of property
<i>Setaria faberi</i> Herrm.	Poaceae	Giant foxtail	Alien	Zone 3	SE corner of Reconstructed Prairie
<i>Setaria glauca</i> (L.) Beauv.	Poaceae	Yellow foxtail	Alien	Zone 1	S pasture

<i>Sicyos angulatus</i> L.	Cucurbitaceae	Bur cucumber	Native	Zone 2	One plant along creek bank
<i>Silene pratensis</i> (Rafn.) Gren. & Godron	Caryophyllaceae	White campion	Alien	Zone 2	A few scattered plants along dry creek bank
<i>Silene stellata</i> (L.) Aiton f.	Caryophyllaceae	Starry campion	Native	Zone 4	E Woodland remnant
<i>Silphium integrifolium</i> Michx.	Asteraceae	Rosinweed	Native	Zone 1	Four plants near Crataegus grove along W margin of property
<i>Silphium perfoliatum</i> L.	Asteraceae	Cup plant	Native	Zone 4	Scattered plants in open woods
<i>Sisymbrium</i> sp.	Brassicaceae	Tumble mustard	Alien	Zone 2	Along creek
<i>Smilax</i> sp.	Liliaceae	Carrion flower	Native	Zone 4	Woods
<i>Solanum americanum</i> P. Miller	Solanaceae	Black nightshade	Native	Zone 2	One plant along creek bank
<i>Solanum carolinense</i> L.	Solanaceae	Horse nettle	Native	Zone 1	Locally abundant on N pasture near entrance
<i>Solidago canadensis</i> L.	Asteraceae	Tall goldenrod	Native	Zone 1	Above creek bank in S pasture
<i>Sorghastrum nutans</i> (L.) Nash	Poaceae	Indian grass	Native	Zone 3	Reconstructed Prairie
<i>Spartina pectinata</i> Link	Poaceae	Prairie cord grass	Native	Zone 3	Localized population on prairie planting
<i>Spiranthes cernua</i> (L.) L. C. Rich	Orchidaceae	Nodding ladies'-tresses	Native	Zone 1	Seven plants in S pasture
<i>Stachys tenuifolia</i> Willd. var. <i>hispida</i> (Pursh) Fern.	Lamiaceae	Hedge nettle	Native	Zone 2	Along creek
<i>Stellaria media</i> (L.) Vill.	Caryophyllaceae	Common chickweed	Alien	Zone 2	Along creek
<i>Taraxacum officinale</i> Weber	Asteraceae	Dandelion	Alien		
<i>Teucrium canadense</i> L. var. <i>virginicum</i> (L.) Eaton	Lamiaceae	American germander	Native	Zone 1	Pastures
<i>Thlaspi arvense</i> L.	Brassicaceae	Penny cress	Alien	Zone 2	along creek
<i>Thuja occidentalis</i> L.	Cupressaceae	Eastern white cedar	Alien	Zone 1	Planted along fencerow
<i>Toxicodendron radicans</i> P. Miller	Anacardiaceae	Poison ivy	Native		
<i>Trifolium hybridum</i> L.	Fabaceae	Alsike clover	Alien	Zone 2	Along creek
<i>Trifolium pratense</i> L.	Fabaceae	Red clover	Alien	Zone 1	Scattered plants on S pasture
<i>Trifolium repens</i> L.	Fabaceae	White clover	Alien	Zone 2	Along creek
<i>Ulmus americana</i> L.	Ulmaceae	American elm	Native	Zone 1	Scattered young trees throughout
<i>Ulmus pumila</i> L.	Ulmaceae	Siberian elm	Alien	Zone 2	Creek bank
<i>Ulmus rubra</i> Muhl.	Ulmaceae	Slippery elm	Native	Zone 4	Woods
<i>Urtica dioica</i> L.	Urticaceae	Stinging nettle	Native	Zone 2	Along creek

<i>Verbascum thapsus</i> L.	Scrophulariaceae	Mullein	Alien	Zone 2	Along creek bank
<i>Verbena hastata</i> L.	Verbenaceae	Blue vervain	Native	Zone 1, Zone 2	Wet area at N end of in S pasture, and along creek bank
<i>Verbena stricta</i> Vent.	Verbenaceae	Hoary vervain	Native	Zone 3	Reconstructed prairie
<i>Verbena urticifolia</i> L.	Verbenaceae	White vervain	Native	Zone 2	Along creek bank
<i>Vernonia fasciculata</i> Michx.	Asteraceae	Ironweed	Native	Zone 1	Scattered in S pasture
<i>Veronica peregrina</i> L.	Scrophulariaceae	Neckweed	Native	Zone 2	Along creek
<i>Viola pratensis</i> Greene	Violaceae	Common blue violet	Native	Zone 4	Woods
<i>Viola pubescens</i> Aiton	Violaceae	Downy yellow violet	Native	Zone 4	Woods
<i>Vitis riparia</i> Michx.	Vitaceae	Wild grape	Native		
<i>Xanthium strumarium</i> L.	Asteraceae	Cocklebur	Alien	Zone 2	Creek bank