A Vegetation Inventory of

POTAWATOMI WOODS

Will County, Illinois

Prepared for:

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TABLE OF CONTENTS

INTRODUCTION	
Project Site Location and Purpose	**************

METHODOLOGY	
BACKGROUND SITE INFORMATION	
VEGETATION INVENTORY AND ASSESSMENT	
A FORTALION INVENTOR LAND W22522WENT	*************************
DI ANT COMMUNITY MARRING	
PLANT COMMUNITY MAPPING	
DECLIFE AND DISCUSSION	
Results and Discussion	
BACKGROUND SITE INFORMATION	
VEGETATION INVENTORY AND ASSESSMENT	1
PLANT COMMUNITY MAPPING	
Summary	1.0
	······································
General References	3 3

APPENDICES

APPENDIX I VEGETATION INVENTORY AND SPECIES RELATIVE ABUNDANCE

APPENDIX II FLORISTIC QUALITY ASSESSMENT

EXHIBITS

EXHIBIT A PROJECT SITE LOCATION

EXHIBIT B USGS TOPOGRAPHY MAP

EXHIBIT C PLANT COMMUNITY MAPPING (AERIAL PHOTOGRAPH WITH MYLAR OVERLAY)

PHOTOGRAPHS

INTRODUCTION

PROJECT SITE LOCATION AND PURPOSE

Potawatomi Woods is a ± 117 -acre site located west of New Lenox, Illinois. As depicted on EXHIBIT A – PROJECT SITE LOCATION, the property lies north of Illinois Route 30, east of Gougar Road, and south of Francis Road. And, as depicted on EXHIBIT B – USGS TOPOGRAPHY MAP, the site lies north of the CRIPJ Railroad, west of Interstate 80, and includes acreage north and south of Hickory Creek (N1/3 of Section 17, T35N, R11E), New Lenox Township, Will County, Illinois.

Potawatomi Woods is owned and managed by the Forest Preserve District of Will County (District), and to date no programming or active restoration management activities have occurred at the site. The purpose of this report is to present the results of a vegetation inventory conducted during the growing season of 2001. The information presented herein can be utilized by the District staff for assistance in making sound decisions as to ecological restoration practices and proposed programming features at the site. Accompanying this document is a 1": 200' scale aerial photograph of the project site and immediate surroundings (photo taken in March 1997). A Mylar overlay of the project site is attached with the aerial that includes base information such as boundaries, plant communities, and other landscape features.

METHODOLOGY

BACKGROUND SITE INFORMATION

Various background information was reviewed from the onset of the project, some of which was provided by the District staff; these data included:

- < the USGS Topography Map of the project area;
- < an aerial photograph of the project area;
- < Illinois Natural Areas Inventory data of the site:
- < a "Preservation Plan" of the site; and,
- < a portion of a "Wetland Delineation" report of the site.

As the project proceeded during the spring, summer, and fall of 2001, all of these data were reviewed and their pertinent information incorporated into this report.

VEGETATION INVENTORY AND ASSESSMENT

Several site visits were conducted during the 2001 growing season in order to inventory the vegetation and document the various plant communities and habitats

across the property. From this field work and site observations the following inventory assessments were conducted.

Species Relative Abundance

A relative abundance number from 1 to 4 was given to each plant species recorded in the inventory. A description of each number is as follows.

RELATIVE ABUNDANCE NUMBER	DESCRIPTION
	rare
2	uncommon to occasional
3	common
4	very common to abundant

Species assigned a "1" are rare at the site, indicating that only one individual or a few small populations were noted during the field investigations. Species assigned a "2" are uncommon to occasional, in that they were often observed as few to several scattered populations, generally localized in one plant community or habitat. Species assigned a "3" are common across the property and were likely noted as a characteristic member of the flora at the site. Species assigned a "4" are very common to abundant; these plants were found across most of the site, and/or were common associates of several plant communities.

Special Status Species

The plant inventory also indicates "special status species." These plants are either federal- or state-endangered or threatened species; or, they are species that have coefficients of conservatism values of 8, 9, or 10. As described below (see Floristic Quality Assessment), plants that have been assigned these values are almost always found in some kind of intact natural area or relatively undisturbed plant community—and since these habitats are scarce in our modern landscapes, the plants that inhabit them are equally scarce.

Species of Management Concern

The plant inventory also indicates any "species of management concern." These plants include known weeds, usually adventive to the region, that are or could be a serious threat to habitat stability and management at the site.

Floristic Quality Assessment

Although there are many ways to assess landscapes in order to understand their composition in terms of ecological restoration, the approach presented herein emphasizes vegetation development and floristic quality assessment (FQA) methodology. A useful method for determining the floristic quality of an area is through an analysis of the conservatism and diversity of species appearing in a plant

inventory. The concept of "conservatism" refers to the fundamental character of native plant species to display varying degrees of tolerance to disturbance, as well as varying degrees of fidelity to specific habitat integrity. As a result, each native species can be assigned a coefficient of conservatism (C value) ranging from 0 to 10, "weedy to conservative," reflecting this disposition within a defined geographic region.

In order to determine the extent to which a site contains high quality remnant habitats (i.e., those natural areas with intact presettlement structure, composition, and processes), an inventory of the area is required. From the inventory, the FQA generates 2 fundamental products. The **Mean C** is the average coefficient of conservatism for a site; and, the **floristic quality index (FQI)** is a statistic derived by multiplying Mean C by the square root of the number of species inventoried.

In general, site inventories with Mean C and FQI values less than 2.8 and 20, respectively, as surveyed during the growing season are degraded or derelict plant communities, or are very small habitat remnants. Site inventories with Mean C values approaching 3.2 and FQI values in the middle twenties through middle thirties suffer from various kinds of disturbance, but have potential for habitat restoration and recovery—and, these areas generally have a more diverse component of conservative species than could ever be recreated. When site inventories yield Mean C values 33.5 and have FQI values in the upper thirties or higher, one can be confident there is sufficient native character present for the area to be at least regionally noteworthy—such landscapes are irreplaceable in terms of their unique composition of remnant biodiversity. Site inventories with Mean C and FQI values greater than 4.0 and 50, respectively, are unquestionably rare, highly significant natural areas of statewide importance.

As land management and time cause changes to take place, Mean C and FQI values will reflect the extent to which conservative species are being recruited and the floristic quality is improving (or vice versa). In this way, FQA methodology can be used to monitor and guide restoration management decisions.

PLANT COMMUNITY MAPPING

With the aid of the USGS topography map and an aerial photograph of Potawatomi Woods, the various plant communities and habitats were documented as to their locations across the property and their vegetation composition.

RESULTS AND DISCUSSION

BACKGROUND SITE INFORMATION

As can be seen on the USGS Topography Map (see Exhibit B), the highest elevation on the property is a ridgeline located in the east-central portion of Potawatomi Woods. This area has an elevation of $\forall 650$ feet, and from here, most of the property slopes to the south and west towards Hickory Creek, which is the lowest elevation of

the site at \forall 600 feet. The northeastern portion of the site, north of the ridgeline, is generally flat and drains into a ravine system to the north.

From the aerial photograph submitted along with this report, it is apparent that most of Potawatomi Woods is a forested landscape. One pipeline right-of-way bisects the central portion of the property, and another is located along the eastern boundary adjacent to Interstate 80. Hickory Creek flows east-to-west across the southern end of the site, north of the CRIPJ Railroad. A tributary to Hickory Creek enters the western portion of the site, meandering in a southwest direction near a non-forested wetland habitat before entering the creek. More discussion on the plant communities is presented later in this report.

The adjacent land uses can be seen from the aerial photograph as well. Most striking, perhaps, is the extent of the woodland landscape that lies to the north of the property boundary on both private and public land holdings. A large commercial trucking business is located along Gougar Road, immediately southwest of Potawatomi Woods. Lastly, a combination of institutional, commercial, and residential landscapes lie to the south and east.

The District provided the following background site information for use in this study:

- Illinois Natural Areas Inventory (INAI) data sheets of "Hickory Creek Sedge Meadow;"
- a "Preservation Plan for Hickory Creek;" and,
- a portion of a "Wetland Delineation Report for the Hickory Road Extension."

This information is included within a pocket folder located at the back of the report. To summarize the relevant plant information on the INAI data sheets, the property contains a $\forall 3.1$ -acre grade B sedge meadow, $\forall 34$ acres of grade C wet-mesic floodplain forest, and a grade C high-gradient creek. Tussock sedge was listed as the characteristic plant species in the sedge meadow; and, bur oak, silver maple, and hawthorns were listed as characteristic floodplain forest species. To my knowledge, this information was recorded by the State during the middle 1970s.

To summarize the relevant plant information in the preservation plan (dated 1996), the site contains a "native" forest along the main channel of Hickory Creek. Natural communities include mesic floodplain forest, wet-mesic floodplain forest, wet floodplain forest, mesic upland forest, wet-mesic upland forest, sedge meadow, calcareous fen, forested seep, perennial stream-deep pool, and perennial stream-gravel/cobble bar. The site contains "regionally rare" plant species such as common waterweed, Ohio buckeye, and bladdernut. As will be discussed below under Plant Community Mapping, some of the plant communities listed in the preservation plan are not included in my interpretation of the site. In addition, I did not record Ohio buckeye on the property.

Lastly, the information provided from the wetland delineation report includes FQA summaries of 6 regulatory wetland habitats and adjacent upland woods identified on the property (all of which are located in the southern end of the site near Hickory

Creek). These inventories are dated June and July of 1998. Several plants that are listed in the FQA data were not recorded during my assessment of the property. These include Ohio buckeye, beech, early wild rose, tall swamp marigold, marsh spike rush, purple loosestrife, dotted hawthorn, common mallow, smooth buckthorn, cat brier, cream violet, Norway cinquefoil, hairy mountain mint, bristly aster, fen willow herb, winged loosestrife, cowbane, arrow-leaved tear-thumb, prickly wild gooseberry, summer grape, and marsh skullcap.

VEGETATION INVENTORY AND ASSESSMENT

The vegetation across the entire 117-acre site was inventoried during several site visits to Potawatomi Woods. The dates of the field work were April 13th, May 19th, June 16th and 23rd, August 6th, September 13th, and November 23rd, 2001. During each visit, the plants encountered via systematic meandering across the site were recorded. A total of 374 taxa were recorded; a summary of these inventoried species is presented below.

<u>Species Relative Abundance</u>

As described above, a relative abundance number from 1 to 4 was assigned to each of the 374 species recorded from the site. A list of these species and their relative abundance values is presented in Appendix I. The assignment of these values is somewhat subjective, since a species "presence" changes during the growing season, and one practitioner's impression of relative abundance is not necessarily the same as another's. Nevertheless, this is still a useful datum that provides a level of detail not found in a simple plant list. The following is presented as an example of my interpretation of relative abundance as used in this inventory.

- Violet cress (lodanthus pinnatifidus) was assigned a "1" because only 3 plants were recorded (from near Hickory Creek) on the entire property.
- < Burdick's leek (Allium tricoccum var. burdickii) was assigned a "2" because it was seen occasionally in the mesic woodland in the spring and summer months; and, great Angelica (Angelica atropurpurea) was assigned a "2" because it is common, though restricted, to one local habitat on the site.
- < Nannyberry (Viburnum lentago) was assigned a "3" because it was generally common across many portions of the site; and, wingstem (Actinomeris alternifolia) was assigned a "3" because it is very common, in particular along the creek in late summer and fall.</p>
- < Poison Ivy (Rhus radicans) was assigned a "4" because it was common to abundant across many areas of the property throughout the growing season.

In my opinion, if other field botanists were to assess the site and it's plant species for their relative abundance, there would be a general concurrence with the assigned values presented herein. Species given a value of either "2" or "3" (which comprise the majority of plants from the site) are most likely to be inconsistent in terms of their assigned value—in that, what is one practitioner's "2" is another's "3," and vice versa.

Special Status Species

None of the plants recorded in this inventory are federal- or state-listed species. Of the 293 native species inventoried, 23 have been assigned C values of 8, 9, or 10 (using the Chicago Region FQA Database). An alphabetical list of these rare plants is presented below, and includes the family to which it belongs and a brief comment as to its sighting at Potawatomi Woods.

Asimina triloba – Papaw (Annonaceae)

A few young trees were seen in floodplain woods near Hickory Creek.

Aster shortii – Short's Aster (Compositae)

A few plants were noted in mesic woods in the northern portion of the site.

Blephilia hirsuta – Wood Mint (Labiatae)

Several plants were seen scattered in woodlands throughout the property.

Carex frankii – Bristly Cattail Sedge (Cyperaceae)

Two plants were noted in wet woods near the creek.

Carex interior; C. suberecta – Prairie Star Sedge; Wedge-fruited Oval Sedge (Cyperaceae)

These rare sedges were growing with other native plants in the remnant sedge meadow.

Cercis canadensis - Red Bud (Leguminosae)

A few trees were seen in the woods along Hickory Creek.

Chelone glabra – Turtlehead (Scrophulariaceae)

Seen scattered in the sedge meadow.

Cirsium muticum – Swamp Thistle (Compositae)

Several plants were growing in the sedge meadow with other rare, native species.

Floerkea proserpinacoides – False Mermaid (Limnanthaceae)

Seen scattered in the woods in spring.

Fraxinus nigra – Black Ash (Oleaceae)

A few individuals were seen in wet woods near Hickory Creek.

Galium asprellum – Rough Bedstraw (Rubiaceae)

Recorded from the remnant sedge meadow.

Gymnocladus dioica – Kentucky Coffee Tree (Leguminosae)

Two individuals noted from wet woods near Hickory Creek.

Hydrophyllum appendiculatum – Great Waterleaf (Hydrophyllaceae)

A few plants noted in mesic woods in the northeastern portion of the site.

Iodanthus pinnatifidus – Violet Cress (Cruciferae)

Three plants noted from the bank of Hickory Creek.

Isopyrum biternatum – False Rue Anemone (Ranunculaceae)

Occasionally seen across the woodland areas of the property.

Napaea dioica – Glade Mallow (Malvaceae)

Five individual plants were seen along the south side of Hickory Creek near the railroad.

Onoclea sensibilis – Sensitive Fern (Polypodiaceae)

Restricted to the remnant sedge meadow where a few small populations were growing.

Pedicularis lanceolata – Fen Betony (Scrophulariaceae)

A small population noted from the sedge meadow.

Platanus occidentalis – Sycamore (Platanaceae)

One tree noted from wet woods in the western portion of the site.

Poa palustris - Marsh Blue Grass (Gramineae)

Occasional in the sedge meadow, and seed in the pipeline right-of-way south of the creek.

Rumex orbiculatus – Great Water Dock (Polygonaceae)

Scattered throughout the sedge meadow.

Symplocarpus foetidus – Skunk Cabbage (Araceae)

Common in the sedge meadow and wet woods in the western portion of the site.

Species of Management Concern

Based upon my site observations, the following 14 plant species are listed as current or potential threats to habitat management at Potawatomi Woods.

Alliaria petiolata (garlic mustard), Berberis thunbergii (Japanese barberry), Dipsacus laciniatus, D. sylvestris (teasel), Hesperis matronalis (dame's rocket), Ligustrum vulgare (common privet), Lonicera maackii, L. tatarica, L. x Bella (Eurasian fly honeysuckle shrubs), Phalaris arundinacea (reed canary grass), Phragmites australis (common reed), Rhamnus cathartica (common buckthorn), Rosa multiflora (multiflora rose), and Viburnum opulus (European highbush cranberry).

The most serious threats to habitat stability are the pervasive exotic shrubs that have formed dense thickets throughout many portions of the woods. In addition, reed canary grass is a serious threat in the sedge meadow. Garlic mustard is found across most portions of the property; yet, to date it has not formed dense, ubiquitous stands as in other woodlands of similar structure. The teasel is restricted to the pipeline rights-of-way and waste ground, and common reed was noted in only a couple of small, disturbed areas. Other weeds not listed above (e.g., burdock, crown vetch) are restricted to a few weedy, disturbed spots on the site and do not present any special, imminent management issues.

Floristic Quality Assessment

The results of the plant inventory and associated FQA data are presented in Appendix III. The table below summarizes the number of native species (NS), along with the percent that these native plants comprise of all species recorded (%TS); the native Mean C; and, the native FQI.

POTAWATOMI WOODS		
FQA DATA SUMMARY		
NS (%TS)	Mean C	FQI

PAGE 8

293 (78%)	4.2	72
l		

Since these data are based upon several site visits during the 2001 growing season, it is likely that at least ¾ of the vegetation across the property is included in this assessment and that additional plant inventories would not yield significant changes in FQA results. Overall, these results are high values and reflect upon the presence of remnant, high quality habitat found on the property. Relatively few areas across the Chicago region have Mean C and FQI values this high, and Potawatomi Woods is undoubtedly one of the most significant landscapes within all of Will County.

PLANT COMMUNITY MAPPING

As determined from the field work during the 2001 growing season, 6 plant community types occur across Potawatomi Woods. Their locations on the property, as well as other site features, are depicted on Exhibit C, which is a Mylar overlay that accompanies the aerial photograph.

The plant community types are discussed below, and are presented in an order that generally follows the classification of forest preserve lands within Will County. Each area is described as to characteristic plant species, location on the property, and other relevant information as to existing conditions and/or land management. Photographs taken during the site visits are included at the back of the report.

Mesic Upland Forest

This community is located on slightly rolling topography across the northern portions of the site. Characteristic trees include sugar maple, bitternut hickory, downy hawthorn, American and green ash, hop hornbeam, wild black cherry, white and red oak, American linden, and American elm. Some areas in the eastern portion of these woods are relatively clear of underbrush. However, in many areas these woods are degraded from thickets of shrubs that have developed, comprised primarily of Eurasian honeysuckle shrubs, common buckthorn, and wild gooseberry. In the most degraded portions of these sterile areas surface erosion rills have formed.

Extensive clearing of the underbrush and portions of the understory/canopy layer is necessary throughout these woodlands in order to allow for more light to reach the forest floor. Lastly, although some spring flora has persisted and is found scattered in these woods (e.g., toothwort, sharp-lobed hepatica), the cover and diversity of native herbaceous species is not as impressive as other woodland habitats located nearby; this condition would no doubt improve with restoration management.

<u>Wet-Mesic Upland Forest</u>

This community is located along the lower elevations of the Mesic Upland Forest described above, and is a transition between it and the Mesic Floodplain Forest located along Hickory Creek. Overall, these woods are disturbed and weedy, with many dead or dying American elm trees noted during my site visits. In addition,

other common woody plants to this habitat include box elder, red and green ash, black walnut, Virginia creeper, bur oak, poison ivy, and wild gooseberry. Some of the more common herbaceous species include wild onion, wild ginger, honewort, white snakeroot, annual bedstraw, moneywort, clearweed, clustered black snakeroot, and common blue violet. Similar to the Mesic Upland Woods, this habitat is in need of clearing and burn management.

Mesic Floodplain Forest

This community comprises all of the woodland habitat along Hickory Creek. Characteristic plants include box elder, silver maple, wingstem, garlic mustard, wild ginger, side-flowering aster, hackberry, downy hawthorn, honewort, white snakeroot, wood avens, creeping Charlie, orange jewelweed, wood nettle, moneywort, Virginia creeper, clearweed, bur oak, common buckthorn, poison ivy, wild gooseberry, clustered black snakeroot, American elm, common blue violet, and riverbank grape. Near the banks of Hickory Creek other plants include Pennsylvania bitter cress, poison hemlock, Virginia wild rye, sawtooth sunflower, reed canary grass, wild golden glow, peach-leaved willow, and stinging nettle.

Some wet depressions occur along the creek in these woods. One such area is located at the west end of the site near Gougar Road, and contains hop sedge, wood reed, fowl manna grass, blue flag, white grass, skunk cabbage, and other native vegetation. Other such depressions may represent old oxbow meanders of the creek, or perhaps abandoned sluices. Lastly, several trees along the creek have been damaged from beaver activity.

Sedge Meadow

A remnant, high quality sedge meadow is located in the western portion of Potawatomi Woods, and is the same area identified in the INAI survey. The northern end extends north of the property line. More than any other area on the site, this wetland has many conservative species such as sweet flag, great Angelica, and marsh marigold—just to name a few—in addition to several of the "special status species" listed above. The characteristic vegetation includes blue joint grass, common fox sedge, tussock sedge, blue-fruited dogwood, spotted Joe pye weed, fowl manna grass, Dudley's rush, reed canary grass, pinkweed, heart-leaved willow, skunk cabbage, and germander.

This wetland is being encroached upon on all sides by woody vegetation and is in need of burn management. Reed canary grass has become established within this area as well and threatens to spread across the wetland unless actively managed.

Low-Gradient Creek

PAGE

10

As depicted on the exhibits, Hickory Creek flows east-to-west across the southern end of the property. In general, the creek has a rocky bottom and can be forded in late summer when at some locations the water depth is less than 2 feet. There are extensive drifts of slender waterweed in the creek. Other aquatic plants recorded from the channel include water willow, yellow pond weed, and long-leaved and sago pondweeds.

A tributary to Hickory Creek enters Potawatomi Woods from the north, just west of the sedge meadow. This meandering stream drains much of the woodland landscape immediately to the north and east of the site (see aerial photograph). On the site, the banks of this stream have become eroded and are deeply incised, likely do to upstream stormwater fluxes. Even in the summer month, a small amount of water was flowing through this channel to Hickory Creek.

<u>Cultural Landscapes</u>

Old-field habitat is restricted to the north/south pipeline right-of-way that bisects the property in the central portion of Potawatomi Woods. This area is mowed periodically for maintenance and is dominated by common Old World meadow grasses and forbs, as well as brambles and various native plants that thrive in the sunlight afforded by the clearing.

Another cultural landscape is disturbed waste ground located in the southeast corner of the property, north of the railroad right-of-way and near the I-80 bridge overpass. The area has been used for dumping miscellaneous debris, and as expected, is primarily composed of weeds such as crown vetch, Queen Anne's lace, cut-leaved teasel, and giant foxtail.

SUMMARY

The following is a summary my findings in this vegetation inventory of Potawatomi Woods.

- 1) A total of 374 plants were recorded over several site visits during the 2001 growing season—which amounted to a total of approximately 50 hours of botanizing.
- 2) Although no federal- or state-endangered and threatened species were seen, several remnant-dependent native plants were recorded and listed as "special status species."
- 3) A total of 14 species were identified as "species of management concern," due to their threat to habitat stability and management at the site.
- 4) The FQA results are very impressive and indicate that Potawatomi Woods is a unique area that deserves protection and management.
- 5) Although the site is primarily composed of forested plant communities, the sedge meadow wetland is perhaps the most significant remnant habitat on the property.

PAGE

11

In conclusion, Potawatomi Woods is a unique land holding that has great potential for restoration management. Perhaps its greatest limitation is noise from Interstate 80, and site access. Lastly, the woods north and adjacent to the property should be included as part of land management, in particular those areas that directly affect the tributary stream and sedge meadow.

GENERAL REFERENCES

The following sources were referenced in completing the final draft of this document. Authors and/or titles for some of the background material provided by the District are incomplete.

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APPENDIX I

VEGETATION INVENTORY AND SPECIES RELATIVE ABUNDANCE

The plants listed on the following 8 pages represent the 374 species recorded from Potawatomi Woods between April and November of 2001. The list is arranged alphabetically by species, and includes the common name and relative abundance number assigned to each taxon. Species names in ALL CAPS are non-native.

The 23 species that are followed by a number—e.g., Asimina triloba (9)—are "special status species;" the number indicates their C value. The 14 species followed by an asterisk (*) are "species of management concern." See the narrative section of the report for more information. Nomenclature follows *Plants of the Chicago Region*, 1994.

RES. ABUND NO	SPECIES NAME	SEDIMING A AND THE
3	Acer negundo	BOX ELDER
3	Acer saccharinum	SILVER MAPLE
2	Acer saccharum	SUGAR MAPLE
1	Acorus calamus	SWEET FLAG
2	Actaea pachypoda	WHITE BANEBERRY
3	Actinomeris alternifolia	WINGSTEM
2	Agastache nepetoides	YELLOW GIANT HYSSOP
3	Agrimonia gryposepala	TALL AGRIMONY
2	Agrimonia pubescens	SOFT AGRIMONY
2	AGROPYRON REPENS	QUACK GRASS
2	AGROSTIS ALBA	REDTOP
3	ALLIARIA PETIOLATA *	GARLIC MUSTARD
3	Allium canadense	WILD ONION
2	Allium tricoccum burdickii	BURDICK'S LEEK
1	Ambrosia artemisiifolia elatior	COMMON RAGWEED
2	Ambrosia trifida	GIANT RAGWEED
1	Anemonella thalictroides	RUE ANEMONE
2	Angelica atropurpurea	GREAT ANGELICA
2	Apocynum cannabinum	INDIAN HEMP
1	Apocynum sibiricum	PRAIRIE INDIAN HEMP
2	Arabis laevigata	SMOOTH BANK CRESS
2	ARCTIUM MINUS	COMMON BURDOCK
2	Arisaema dracontium	GREEN DRAGON
2	Arisaema triphyllum	JACK-IN-THE-PULPIT
1	ARTEMISIA VULGARIS	MUGWORT
4	Asarum canadense	WILD GINGER
2	Asclepias incarnata	SWAMP MILKWEED
2	Asclepias syriaca	COMMON MILKWEED
1	Asimina triloba (9)	PAPAW
1	ASPARAGUS OFFICINALIS	ASPARAGUS
3	Aster lateriflorus	SIDE-FLOWERING ASTER
2	Aster novae-angliae	NEW ENGLAND ASTER
2	Aster ontarionis	ONTARIO ASTER
1	Aster pilosus	HAIRY ASTER
1	Aster puniceus firmus	SHINING ASTER
3	Aster sagittifolius drummondii	DRUMMOND'S ASTER
1	Aster shortii (8)	SHORT'S ASTER
1	ATRIPLEX PATULA	COMMON ORACH
2	BARBAREA VULGARIS	YELLOW ROCKET
2	BERBERIS THUNBERGII *	JAPANESE BARBERRY
2	Bidens connata	PURPLE-STEMMED TICKSEED
2	Bidens frondosa	COMMON BEGGAR'S TICKS
2	Bidens polylepis	BUR MARIGOLD
2	Blephilia hirsuta (8)	WOOD MINT
2	Boehmeria cylindrica	FALSE NETTLE
1	Brassica kaber	CHARLOCK
1	BRASSICA NIGRA	BLACK MUSTARD
2	BROMUS INERMIS	HUNGARIAN BROME
11	BROMUS JAPONICUS_	JAPANESE CHESS

RI. ABJAIS NO.	SPHOLS VANE	Childe de de de de la
2	Calamagrostis canadensis	BLUE JOINT GRASS
1	Caltha palustris	MARSH MARIGOLD
3	Campanula americana	TALL BELLFLOWER
2	Cardamine bulbosa	BULBOUS CRESS
2	Cardamine douglassii	PURPLE SPRING CRESS
2	Cardamine pensylvanica	PENNSYLVANIA BITTER CRESS
2	Carex blanda	COMMON WOOD SEDGE
	Carex cephalophora	SHORT-HEADED BRACTED SEDGE
2	Carex cristatella	CRESTED OVAL SEDGE
t	Carex davisii	AWNED GRACEFUL SEDGE
1	Carex emoryi	RIVERBANK SEDGE
1	Carex frankii (8)	BRISTLY CATTAIL SEDGE
2	Carex granularis	PALE SEDGE
2	Carex grayi	COMMON BUR SEDGE
3	Carex grisea	WOOD GRAY SEDGE
2	Carex hirtifolia	HAIRY WOOD SEDGE
1	Carex hystericina	PORCUPINE SEDGE
1	Carex interior (10)	PRAIRIE STAR SEDGE
2	Carex jamesii	GRASS SEDGE
2	Carex lupulina	COMMON HOP SEDGE
2	Carex molesta	FIELD OVAL SEDGE
2	Carex pellita	BROAD-LEAVED WOOLLY SEDGE
2	Carex pensylvanica	COMMON OAK SEDGE
2	Carex radiata	STRAIGHT-STYLED WOOD SEDGE
1	Carex rosea	CURLY-STYLED WOOD SEDGE
1	Carex sparganioides	LOOSE-HEADED BRACTED SEDGE
2	Carex stipata	COMMON FOX SEDGE
2	Carex stricta	COMMON TUSSOCK SEDGE
1	Carex suberecta (8)	WEDGE-FRUITED OVAL SEDGE
2	Carex tribuloides	AWL-FRUITED OVAL SEDGE
2	Carex trichocarpa	HAIRY-FRUITED LAKE SEDGE
2	Carex vulpinoidea	BROWN FOX SEDGE
3	Carya cordiformis	BITTERNUT HICKORY
2	Carya ovata	SHAGBARK HICKORY
3	CELASTRUS ORBICULATUS	ORIENTAL BITTERSWEET
3	Celtis occidentalis	HACKBERRY
2	CERASTIUM VULGATUM	MOUSE-EAR CHICKWEED
2	Ceratophyllum demersum	HORNWORT
11	Cercis canadensis (10)	REDBUD
1	Chelone glabra (8)	TURTLEHEAD
11	CHENOPODIUM ALBUM	LAMB'S QUARTERS
11	CHRYSANTHEMUM LEUCAN. PINN.	OX-EYE DAISY
11	CICHORIUM INTYBUS	CHICORY
1	Cicuta maculata	WATER HEMLOCK
2	Cinna arundinacea	COMMON WOOD REED
2	CIRSIUM ARVENSE	FIELD THISTLE
2	Cirsium discolor	PASTURE THISTLE
11	Cirsium muticum (8)	SWAMP THISTLE
2	CIRSIUM VULGARE	BULL THISTLE

REL ABJND 80	STORS NAME	COWINGS SAND
2	Claytonia virginica	SPRING BEAUTY
1	CONIUM MACULATUM	POISON HEMLOCK
2	CONVOLVULUS ARVENSIS	FIELD BINDWEED
2	Convolvulus sepium	HEDGE BINDWEED
2	Cornus obliqua	BLUE-FRUITED DOGWOOD
1	CORONILLA VARIA	CROWN VETCH
2	Crataegus crus-galli	COCKSPUR HAWTHORN
4	Crataegus mollis	DOWNY HAWTHORN
2	Crataegus succulenta	FLESHY HAWTHORN
4	Cryptotaenia canadensis	HONEWORT
2	Cuscuta gronovii	COMMON DODDER
2	Cyperus esculentus	FIELD NUT SEDGE
2	Cyperus ferruginescens	RUSTY NUT SEDGE
2	DACTYLIS GLOMERATA	ORCHARD GRASS
2	DAUCUS CAROTA	QUEEN ANNE'S LACE
2	Dentaria laciniata	TOOTHWORT
2	DIANTHUS ARMERIA	DEPTFORD PINK
1	DIGITARIA SANGUINALIS	HAIRY CRAB GRASS
3	Dioscorea villosa	WILD YAM
1	DIPSACUS LACINIATUS *	CUT-LEAVED TEASEL
1	DIPSACUS SYLVESTRIS *	COMMON TEASEL
2	Dryopteris thelypteris pubescens	MARSH SHIELD FERN
2	DUCHESNEA INDICA	INDIAN STRAWBERRY
1	DYSSODIA PAPPOSA	FETID MARIGOLD
2	Echinochloa crusgalli	BARNYARD GRASS
1	Echinocystis lobata	WILD CUCUMBER
3	Eleocharis erythropoda	RED-ROOTED SPIKE RUSH
1	Ellisia nyctelea	AUNT LUCY
22	Elodea nuttallii	SLENDER WATERWEED
2	Elymus canadensis	CANADA WILD RYE
2	Elymus villosus	SILKY WILD RYE
3	Elymus virginicus	VIRGINIA WILD RYE
2	Epilobium coloratum	CINNAMON WILLOW HERB
2	Equisetum arvense	HORSETAIL
1	Equisetum fluviatile	PIPES
[<u>1</u>	Eragrostis pectinacea	SMALL LOVE GRASS
2	Erigeron annuus	ANNUAL FLEABANE
3	Erigeron canadensis	HORSEWEED
2	Erigeron philadelphicus	MARSH FLEABANE
2	Erigeron strigosus	DAISY FLEABANE
2	Erythronium albidum	WHITE TROUT LILY
2	Eupatorium altissimum	TALL BONESET
2	Eupatorium maculatum	SPOTTED JOE PYE WEED
2	Eupatorium perfoliatum	COMMON BONESET
2	Eupatorium purpureum	PURPLE JOE PYE WEED
4	Eupatorium rugosum	WHITE SNAKEROOT
2	Eupatorium serotinum	LATE BONESET
1	Euphorbia maculata	EYEBANE
11	Euphorbia supina	SPOTTED CREEPING SPURGE

REL ABUNDO	BER CIN S NAME	Studio ON MANUES
2	FESTUCA ELATIOR	TALL FESCUE
3	Festuca obtusa	NODDING FESCUE
2	Floerkea proserpinacoides (8)	FALSE MERMAID
3	Fragaria virginiana	WILD STRAWBERRY
2	Fraxinus americana	WHITE ASH
1	Fraxinus nigra (10)	BLACK ASH
2	Fraxinus pennsylvanica	RED ASH
4	Fraxinus pennsylvanica subintegerrima	GREEN ASH
4	Galium aparine	ANNUAL BEDSTRAW
1	Galium asprellum (10)	ROUGH BEDSTRAW
2	Galium concinnum	SHINING BEDSTRAW
2	Galium triflorum	SWEET-SCENTED BEDSTRAW
2	Gaura biennis pitcheri	COMMON GAURA
2	Geranium maculatum	WILD GERANIUM
4	Geum canadense	WOOD AVENS
1	Geum laciniatum trichocarpum	ROUGH AVENS
3	GLECHOMA HEDERACEA	CREEPING CHARLIE
3	Glyceria striata	FOWL MANNA GRASS
1	Gymnocladus dioica (8)	KENTUCKY COFFEE TREE
4	Hackelia virginiana	STICKSEED
2	Helenium autumnale	SNEEZEWEED
4	Helianthus grosseserratus	SAWTOOTH SUNFLOWER
2	Helianthus strumosus	PALE-LEAVED SUNFLOWER
11	Heliopsis helianthoides	FALSE SUNFLOWER
2	Hepatica acutiloba	SHARP-LOBED HEPATICA
2	Heracleum maximum	COW PARSNIP
2	HESPERIS MATRONALIS *	DAME'S ROCKET
11	HORDEUM JUBATUM	SQUIRREL-TAIL GRASS
11	Hydrophyllum appendiculatum (8)	GREAT WATERLEAF
4	Hydrophyllum virginianum	VIRGINIA WATERLEAF
2	HYPERICUM PERFORATUM	COMMON ST. JOHN'S WORT
2	Hypericum punctatum	SPOTTED ST. JOHN'S WORT
3	Impatiens capensis	ORANGE JEWELWEED
1	Impatiens pallida	YELLOW JEWELWEED
1	Iodanthus pinnatifidus (8)	VIOLET CRESS
11	IPOMOEA HEDERACEA	IVY-LEAVED MORNING GLORY
2	Iris virginica shrevei	BLUE FLAG
2	Isopyrum biternatum (8)	FALSE RUE ANEMONE
2	Juglans nigra	BLACK WALNUT
2	Juncus dudleyi	DUDLEY'S RUSH
2	Juncus tenuis	PATH RUSH
2	Justicia americana	WATER WILLOW
1	KOCHIA SCOPARIA	BURNING BUSH
1	Lactuca canadensis	WILD LETTUCE
1 4	LACTUCA SALIGNA	WILLOW LETTUCE
1	Laportea canadensis	WOOD NETTLE
$\frac{1}{2}$	Lathyrus palustris myrtifolius Leersia oryzoides	MARSH VETCHLING RICE CUT GRASS
$\frac{2}{3}$	Leersia oryzoides Leersia virginica	WHITE GRASS
<u></u>	Leersia viryiilica	WILLE GRASS

Ki: (4:50.1413, 403	SPECIES VAME	COMMON MANUL
2	Lemna minor	SMALL DUCKWEED
2	LEONURUS CARDIACA	MOTHERWORT
2	LEPIDIUM CAMPESTRE	FIELD CRESS
2	LIGUSTRUM VULGARE *	COMMON PRIVET
2	Lippia lanceolata	FOG FRUIT
3	Lobelia siphilitica	GREAT BLUE LOBELIA
3	LONICERA X BELLA *	SHOWY FLY HONEYSUCKLE
3	LONICERA MAACKII *	AMUR HONEYSUCKLE
2	Lonicera prolifera	YELLOW HONEYSUCKLE
3	LONICERA TATARICA *	TARTARIAN HONEYSUCKLE
2	LYCHNIS ALBA	WHITE CAMPION
2	Lycopus americanus	COMMON WATER HOREHOUND
2	Lysimachia ciliata	FRINGED LOOSESTRIFE
4	LYSIMACHIA NUMMULARIA	MONEYWORT
2	MEDICAGO LUPULINA	BLACK MEDICK
1	MEDICAGO SATIVA	ALFALFA
2	MELILOTUS ALBA	WHITE SWEET CLOVER
2	MELILOTUS OFFICINALIS	YELLOW SWEET CLOVER
2	Menispermum canadense	MOONSEED
2	Mentha arvensis villosa	WILD MINT
2	Mertensia virginica	VIRGINIA BLUEBELLS
2	Mimulus ringens	MONKEY FLOWER
2	Monarda fistulosa	WILD BERGAMOT
3	MORUS ALBA	WHITE MULBERRY
2	Muhlenbergia frondosa	COMMON SATIN GRASS
2	Muhlenbergia schreberi	NIMBLEWILL
3	MYOSOTON AQUATICUM	WATER CHICKWEED
-	Napaea dioica (10)	GLADE MALLOW
2	NEPETA CATARIA	CATNIP
1	Nuphar advena	YELLOW POND LILY
2	Oenothera biennis	COMMON EVENING PRIMROSE
1	Onoclea sensibilis (8)	SENSITIVE FERN
3	Osmorhiza longistylis	SMOOTH SWEET CICELY
3	Ostrya virginiana	HOP HORNBEAM
3	Oxalis europaea	TALL WOOD SORREL
1	Panicum capillare	OLD WITCH GRASS
1	Panicum dichotomiflorum	KNEE GRASS
2	Panicum implicatum	OLD-FIELD PANIC GRASS
2	Parthenocissus inserta	THICKET CREEPER
4	Parthenocissus quinquefolia	VIRGINIA CREEPER
2	PASTINACA SATIVA	WILD PARSNIP
-	Pedicularis lanceolata (9)	FEN BETONY
2	Penstemon calycosus	SMOOTH BEARD TONGUE
3	Penthorum sedoides	DITCH STONECROP
2	PHALARIS ARUNDINACEA *	REED CANARY GRASS
2	PHLEUM PRATENSE	TIMOTHY
2	Phlox divaricata	WOODLAND PHLOX
1	Phragmites australis *	COMMON REED
2	Physalis heterophylla	CLAMMY GROUND CHERRY

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1	Physalis subglabrata	TALL GROUND CHERRY
1	Physostegia virginiana	OBEDIENT PLANT
3	Phytolacca americana	POKEWEED
4	Pilea pumila	CLEARWEED
2	PLANTAGO LANCEOLATA	ENGLISH PLANTAIN
2	Plantago rugelii	RED-STALKED PLANTAIN
. 1	Platanus occidentalis (9)	SYCAMORE
1	POA COMPRESSA	CANADA BLUE GRASS
1	Poa palustris (9)	MARSH BLUE GRASS
2	POA PRATENSIS	KENTUCKY BLUE GRASS
3	Podophyllum peltatum	MAY APPLE
2	Polemonium reptans	JACOB'S LADDER
2	Polygonatum canaliculatum	SMOOTH SOLOMON'S SEAL
1	Polygonum amphibium stipulaceum	WATER KNOTWEED
2	POLYGONUM CESPITOSUM LONG.	CREEPING SMARTWEED
2	POLYGONUM CONVOLVULUS	BLACK BINDWEED
3	Polygonum pensylvanicum	PINKWEED
2	POLYGONUM PERSICARIA	LADY'S THUMB
3	Polygonum punctatum	SMARTWEED
2	Polygonum scandens	CLIMBING FALSE BUCKWHEAT
4	Polygonum virginianum	WOODLAND KNOTWEED
3	Populus deltoides	EASTERN COTTONWOOD
2	Potamogeton nodosus	LONG-LEAVED PONDWEED
	Potamogeton pectinatus	SAGO PONDWEED
1	POTENTILLA RECTA	UPRIGHT CINQUEFOIL
3	Potentilla simplex	COMMON CINQUEFOIL
3	Prenanthes alba	LION'S FOOT
3	Prunella vulgaris lanceolata	SELF HEAL
1	Prunus americana	WILD PLUM
4	Prunus serotina	WILD BLACK CHERRY
3	Prunus virginiana	CHOKE CHERRY
2	Ptelea trifoliata	WAFER ASH
2	Pycnanthemum virginianum	COMMON MOUNTAIN MINT
2	Quercus alba	WHITE OAK
1	Quercus imbricaria	SHINGLE OAK
3	Quercus macrocarpa	BUR OAK
3	Quercus rubra	RED OAK
3	Ranunculus abortivus	SMALL-FLOWERED BUTTERCUP
1	Ranunculus recurvatus	HOOKED BUTTERCUP
2	Ranunculus sceleratus	CURSED BUTTERCUP
4	Ranunculus septentrionalis	SWAMP BUTTERCUP
1	Ratibida pinnata	YELLOW CONEFLOWER
3	RHAMNUS CATHARTICA *	COMMON BUCKTHORN
2	Rhus glabra	SMOOTH SUMAC
4	Rhus radicans	POISON IVY
2	Ribes americanum	WILD BLACK CURRANT
4	Ribes missouriense	WILD GOOSEBERRY
2	Rorippa palustris fernaldiana	MARSH CRESS
3	ROSA MULTIFLORA *	MULTIFLORA ROSE

BEL ABURE WG	82 O. S. & & M.	Transfer of Durbul S.S.
2	Rosa setigera	ILLINOIS ROSE
4	Rubus allegheniensis	COMMON BLACKBERRY
4	Rubus occidentalis	BLACK RASPBERRY
1	Rubus pensilvanicus	YANKEE BLACKBERRY
4	Rudbeckia laciniata	WILD GOLDEN GLOW
2	Rudbeckia triloba	BROWN-EYED SUSAN
2	Rumex altissimus	PALE DOCK
3	RUMEX CRISPUS	CURLY DOCK
1	RUMEX OBTUSIFOLIUS	BITTER DOCK
1	Rumex orbiculatus (8)	GREAT WATER DOCK
2	Sagittaria latifolia	COMMON ARROWHEAD
3	Salix amygdaloides	PEACH-LEAVED WILLOW
2	Salix discolor	PUSSY WILLOW
2	Salix eriocephala	HEART-LEAVED WILLOW
2	Salix interior	SANDBAR WILLOW
2	Salix nigra	BLACK WILLOW
3	Sambucus canadensis	ELDERBERRY
2	Sanguinaria canadensis	BLOODROOT
2	Sanicula canadensis	CANADIAN BLACK SNAKEROOT
4	Sanicula gregaria	CLUSTERED BLACK SNAKEROOT
2	SAPONARIA OFFICINALIS	BOUNCING BET
2	Scirpus atrovirens	DARK GREEN RUSH
1	Scirpus cyperinus	WOOL GRASS
2	Scirpus fluviatilis	RIVER BULRUSH
2	Scirpus pendulus	RED BULRUSH
3	Scrophularia marilandica	LATE FIGWORT
2	Scutellaria lateriflora	MAD-DOG SKULLCAP
2	SETARIA FABERI	GIANT FOXTAIL
2	SETARIA GLAUCA	YELLOW FOXTAIL
2	Sicyos angulatus	BUR CUCUMBER
2	Silene antirrhina	SLEEPY CATCHFLY
2	Silphium perfoliatum	CUP PLANT
2	Sium suave	TALL WATER PARSNIP
4 .	Smilacina racemosa	FEATHERY FALSE SOLOMON'S SEAL
2	Smilacina stellata	STARRY FALSE SOLOMON'S SEAL
2	Smilax lasioneura	COMMON CARRION FLOWER
3	Smilax tamnoides hispida	BRISTLY CAT BRIER
2	SOLANUM CAROLINENSE	HORSE NETTLE
3	SOLANUM DULCAMARA	BITTERSWEET NIGHTSHADE
2	Solidago altissima	TALL GOLDENROD
2	Solidago canadensis	CANADA GOLDENROD
2	Solidago graminifolia nuttallii	HAIRY GRASS-LEAVED GOLDENROD
3	Solidago ulmifolia	ELM-LEAVED GOLDENROD
1	SONCHUS ULIGINOSUS	COMMON SOW THISTLE
1	Stachys palustris homotricha	WOUNDWORT
2	Staphylea trifolia	BLADDERNUT
1	STELLARIA GRAMINEA	STARWORT
2	Symplocarpus foetidus (8)	SKUNK CABBAGE
2	TARAXACUM OFFICINALE	COMMON DANDELION

78 . X8J813, 863	SPOCE & SAMPLE	Conductive Actuality
2	Teucrium canadense	GERMANDER
2	Teucrium occidentale	GERMANDER
2	Thalictrum dasycarpum	PURPLE MEADOW RUE
1	Thalictrum dioicum	EARLY MEADOW RUE
1	Thalictrum revolutum	WAXY MEADOW RUE
3	Tilia americana	AMERICAN LINDEN
1	Tradescantia ohiensis	COMMON SPIDERWORT
1	TRIFOLIUM REPENS	WHITE CLOVER
3	Trillium recurvatum	RED TRILLIUM
1	TRIODIA FLAVA	FALSE REDTOP
3	Triosteum aurantiacum	EARLY HORSE GENTIAN
1	Triosteum perfoliatum	LATE HORSE GENTIAN
2	Typha latifolia	BROAD-LEAVED CATTAIL
4	Ulmus americana	AMERICAN ELM
2	ULMUS PUMILA	SIBERIAN ELM
11	Ulmus rubra	SLIPPERY ELM
4	Urtica procera	TALL NETTLE
2	VERBASCUM THAPSUS	COMMON MULLEIN
2	Verbena hastata	BLUE VERVAIN
1	Verbena stricta	HOARY VERVAIN
4	Verbena urticifolia	HAIRY WHITE VERVAIN
1	Vernonia fasciculata	COMMON IRONWEED
4	Viburnum lentago	NANNYBERRY
2	VIBURNUM OPULUS *	EUROPEAN HIGHBUSH CRANBERRY
3	Viburnum prunifolium	BLACK HAW
2	Viburnum rafinesquianum	DOWNY ARROW-WOOD
4	Viola sororia	COMMON BLUE VIOLET
4	Vitis riparia	RIVERBANK GRAPE
1	XANTHIUM STRUMARIUM	COCKLEBUR
2	Xanthoxylum americanum	PRICKLY ASH
,1	Zizia aurea	GOLDEN ALEXANDERS

APPENDIX II

FLORISTIC QUALITY ASSESSMENT

The following is a summary of the plant inventory data using Wilhelm and Masters's Floristic Quality Assessment and Computer Applications, 1999. Plant nomenclature follows Swink and Wilhelm's Plants of the Chicago Region, 1994. The inventory is separated into 2 sections as follows—

Section 1 includes three tables that summarize the inventory assessment data. The table to the left is an analysis of the floristic quality of the project area. In addition to listing the number of native species and total number of species, the mean coefficient of conservatism (MEAN C), floristic quality index (FQI), and mean wetness (MEAN W) values are presented. These are calculated once for native species only, and a second time including adventive species (W/Adventives). The two other tables summarize the number and percent of species in each physiognomic group (A=annual, B=biennial, P=perennial, W=woody, H=herbaceous).

Section 2 includes the species inventory arranged alphabetically, with each species preceded by its database acronym and coefficient of conservatism (C=0-10, weedy to conservative), and followed by its wetness coefficient (W= -5 - +5, wet to dry), corresponding national wetland indicator status (OBL=obligate wetland species, FAC=facultative species, UPL=upland species), physiognomic group, and common name. Adventive species are written in ALL CAPS and have an asterisk (*) for their C value.

The Mean C is the average coefficient of conservatism for the site. The FQI is derived by multiplying Mean C by the square root of the number of species present. In general, site inventories with Mean C and FQI values less than 2.8 and 20, respectively, as surveyed during the growing season are degraded or derelict plant communities, or are very small habitat remnants. Site inventories with Mean C values approaching 3.2 and FQI values in the middle twenties through middle thirties suffer from various kinds of disturbance, but have good potential for habitat restoration and recovery; and, these areas generally have a more diverse component of conservative species than could ever be recreated. When site inventories yield Mean C values 3.5 and have FQI values in the upper thirties or higher, one can be confident there is sufficient native character present for the area to be at least regionally noteworthy—such landscapes are irreplaceable in terms of their unique composition of remnant biodiversity. Site inventories with Mean C and FQI values greater than 4.0 and 50, respectively, are unquestionably rare, highly significant natural areas of statewide importance.

Site: POTAWATOMI WOODS Locale: Forest Preserve

Locale: Forest Preserve District of Will County, Illinois

Date: April - November 2001

By: Kenneth Johnson

SECTION 1. SUMMARY TABLES

FLORISTIC QUALITY DATA	Native	293	78.3%	Adventive	81	21.7%
293 NATIVE SPECIES	Tree	31	8.3%	Tree	2	0.5%
374 Total Species	Shrub	19	5.1%	Shrub	8	2.1%
4.2 NATIVE MEAN C	W-Vine	7	1.9%	W-Vine	2	0.5%
3.3 W/Adventives	H-Vine	5	1.3%	H-Vine	0	0.0%
71.6 NATIVE FQI	P-Forb	138	36.9%	P-Forb	27	7.2%
63.4 W/Adventives	B-Forb	11	2.9%	B-Forb	14	3.7%
-0.4 NATIVE MEAN W	A-Forb	27	7.2%	A-Forb	13	3.5%
0.3 W/Adventives	P-Grass	14	3.7%	P-Grass	11	2.9%
AVG: Faculative	A-Grass	4	1.1%	A-Grass	4	1.1%
	P-Sedge	32	8.6%	P-Sedge	0	0.0%
•	A-Sedge	1	0.3%	A-Sedge	0	0.0%
	Cryptogam	4	1.1%	_		

SECTION 2. SPECIES INVENTORY

ACRONYM	C SCIENTIFIC NAME	W WETNESS PHYSIOGNOMY COMMON NAME
ACENEG	0 Acer negundo	-2 FACW+ Nt Tree BOX ELDER
ACESAI	0 Acer saccharinum	-3 FACW Nt Tree SILVER MAPLE
ACESAU	3 Acer saccharum	3 FACU Nt Tree SUGAR MAPLE
ACOCAL	7 Acorus calamus	-5 OBL Nt P-Forb SWEET FLAG
ACTPAC	7 Actaea pachypoda	5 UPL Nt P-Forb WHITE BANEBERRY
ACTALT	5 Actinomeris alternifolia	-3 FACW Nt P-Forb WINGSTEM
AGANEP .	5 Agastache nepetoides	3 FACU Nt P-Forb YELLOW GIANT HYSSOP
AGRGRY	2 Agrimonia gryposepala	2 FACU+ Nt P-Forb TALL AGRIMONY
AGRPUB	5 Agrimonia pubescens	5 UPL Nt P-Forb SOFT AGRIMONY
AGRREP	0 AGROPYRON REPENS	3 FACU Ad P-Grass QUACK GRASS
AGRALA	0 AGROSTIS ALBA	-3 FACW Ad P-Grass REDTOP
ALLPET	O ALLIARIA PETIOLATA	0 FAC Ad B-Forb GARLIC MUSTARD
ALLCAN	2 Allium canadense	3 FACU Nt P-Forb WILD ONION
ALLTRB	6 Allium tricoccum burdickii	3 [FACU] Nt P-Forb BURDICK'S LEEK
AMBARE	O Ambrosia artemisiifolia elatior	3 FACU Nt A-Forb COMMON RAGWEED
AMBTRI	0 Ambrosia trifida	-1 FAC+ Nt A-Forb GIANT RAGWEED
ANETHA	7 Anemonella thalictroides	5 UPL Nt P-Forb RUE ANEMONE
ANGATR	7 Angelica atropurpurea	-5 OBL Nt P-Forb GREAT ANGELICA
APOCAN	4 Apocynum cannabinum	0 FAC Nt P-Forb INDIAN HEMP
APOSIB	2 Apocynum sibiricum	-1 FAC+ Nt P-Forb PRAIRIE INDIAN HEMP
ARALAE	5 Arabis laevigata	5 UPL Nt B-Forb SMOOTH BANK CRESS
ARCMIN	0 ARCTIUM MINUS	5 UPL Ad B-Forb COMMON BURDOCK
ARIDRA	7 Arisaema dracontium	-3 FACW Nt P-Forb GREEN DRAGON
ARITRI	4 Arisaema triphyllum	-2 FACW- Nt P-Forb JACK-IN-THE-PULPIT
ARTVUL	O ARTEMISIA VULGARIS	5 UPL Ad P-Forb MUGWORT
ASACAN	7 Asarum canadense	5 UPL Nt P-Forb WILD GINGER
ASCINC	4 Asclepias incarnata	-5 OBL Nt P-Forb SWAMP MILKWEED
ASCSYR	O Asclepias syriaca	5 UPL Nt P-Forb COMMON MILKWEED
ASITRI	9 Asimina triloba	O FAC Nt Tree PAPAW
ASPOFF	O ASPARAGUS OFFICINALIS	3 FACU Ad P-Forb ASPARAGUS
ASTLAT	4 Aster lateriflorus	-2 FACW- Nt P-Forb SIDE-FLOWERING ASTER
ASTNOV	4 Aster novae-angliae	-3 FACW Nt P-Forb NEW ENGLAND ASTER
ASTONT	4 Aster ontarionis	0 FAC Nt P-Forb ONTARIO ASTER
ASTPIL	0 Aster pilosus	2 FACU+ Nt P-Forb HAIRY ASTER
ASTPUF	7 Aster puniceus firmus	-5 OBL Nt P-Forb SHINING ASTER
ASTSAD	2 Aster sagittifolius drummondii	3 [FACU] Nt P-Forb DRUMMOND'S ASTER
ASTSHO	8 Aster shortii	5 UPL Nt P-Forb SHORT'S ASTER
ATRPAT	0 ATRIPLEX PATULA	-2 FACW- Ad A-Forb COMMON ORACH
BARVUL	O BARBAREA VULGARIS	0 FAC Ad B-Forb YELLOW ROCKET
BERTHU	0 BERBERIS THUNBERGII	4 FACU- Ad Shrub JAPANESE BARBERRY
BIDCON	5 Bidens connata	~5 OBL Nt A-Forb PURPLE-STEMMED TICKSEED
BIDFRO	1 Bidens frondosa	-3 FACW Nt A-Forb COMMON BEGGAR'S TICKS
BIDPOL	3 Bidens polylepis	-3 FACW Nt A-Forb BUR MARIGOLD

BLEHIR	8 Blephilia hirsuta	4 FACU-	Nt P-Forb	WOOD MINT
BOECYC	2 Boehmeria cylindrica	-5 OBL	Nt P-Forb	FALSE NETTLE
BRAKAB	0 Brassica kaber	5 UPL	Nt A-Forb	CHARLOCK
BRANIG	0 BRASSICA NIGRA	5 UPL	Ad A-Forb	BLACK MUSTARD
BROINE	0 BROMUS INERMIS	5 UPL	Ad P-Grass	HUNGARIAN BROME
BROJAP	0 BROMUS JAPONICUS	3 FACU	Ad A-Grass	JAPANESE CHESS
CALCAN	3 Calamagrostis canadensis	~5 OBL	Nt P-Grass	BLUE JOINT GRASS
CALTPA	5 Caltha palustris	-5 OBL	Nt P-Forb	MARSH MARIGOLD
CAMAME	3 Campanula americana	0 FAC	Nt A-Forb	TALL BELLFLOWER
CARBUL	6 Cardamine bulbosa	-5 OBL	Nt P-Forb	BULBOUS CRESS
CARDOU CARPEN	7 Cardamine douglassii 4 Cardamine pensylvanica	-3 FACW	Nt P-Forb	PURPLE SPRING CRESS
CXBLAN	1 Carex blanda	-4 FACW+	Nt B-Forb	PENNSYLVANIA BITTER CRESS
CXCEPP	3 Carex cephalophora	0 FAC 3 FACU	_	COMMON WOOD SEDGE SHORT-HEADED BRACTED SEDGE
CXCRIS	4 Carex cristatella	-4 FACW+	_	CRESTED OVAL SEDGE
CXDAVI	7 Carex davisii	-1 FAC+	_	AWNED GRACEFUL SEDGE
CXEMOR	6 Carex emoryi	-5 OBL		RIVERBANK SEDGE
CXFRAN	8 Carex frankii	-5 OBL		BRISTLY CATTAIL SEDGE
CXGRAN	4 Carex granularis	-4 FACW+		PALE SEDGE
CXGRAY	7 Carex grayi	-4 FACW+	Nt P~Sedge	COMMON BUR SEDGE
CXGRIS	2 Carex grisea	1 [FAC-]	Nt P-Sedge	WOOD GRAY SEDGE
CXHIRT	5 Carex hirtifolia	5 UPL	Nt P-Sedge	HAIRY WOOD SEDGE
CXHYST	5 Carex hystericina	~5 OBL		PORCUPINE SEDGE
CXINTE	10 Carex interior	-5 OBL	-	PRAIRIE STAR SEDGE
CXJAME	5 Carex jamesii	5 UPL		GRASS SEDGE
CXLUPN	7 Carex lupulina	-5 OBL		COMMON HOP SEDGE
CXMOLE CXPELL	2 Carex molesta	-1 FAC+		FIELD OVAL SEDGE
CXPENS	4 Carex pellita 5 Carex pensylvanica	-5 OBL 5 UPL		BROAD-LEAVED WOOLLY SEDGE
CXRADI	6 Carex radiata	1 [FAC-]		COMMON OAK SEDGE STRAIGHT-STYLED WOOD SEDGE
CXROSE	4 Carex rosea	5 UPL	Nt P-Sedge	CURLY-STYLED WOOD SEDGE
CXSPAR	3 Carex sparganioides	0 FAC		LOOSE-HEADED BRACTED SEDGE
CXSTIP	3 Carex stipata	-5 OBL		COMMON FOX SEDGE
CXSTRI	5 Carex stricta	-5 OBL		COMMON TUSSOCK SEDGE
CXSUBE	8 Carex suberecta	-5 OBL		WEDGE-FRUITED OVAL SEDGE
CXTRIB	3 Carex tribuloides	-4 FACW+		AWL-FRUITED OVAL SEDGE
CXTRIC	7 Carex trichocarpa	-5 OBL	Nt P-Sedge	HAIRY-FRUITED LAKE SEDGE
CXVULP	2 Carex vulpinoidea	-5 OBL	Nt P-Sedge	BROWN FOX SEDGE
CARCOR	7 Carya cordiformis	3 [FACU]	Nt Tree	BITTERNUT HICKORY
CAROVT	5 Carya ovata	3 FACU	Nt Tree	SHAGBARK HICKORY
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CELORB	O CELASTRUS ORBICULATUS	5 UPL	Ad W-Vine	ORIENTAL BITTERSWEET
CELOCC	3 Celtis occidentalis	5 UPL 1 FAC-	Nt Tree	HACKBERRY
CELOCC CERVUL	3 Celtis occidentalis 0 CERASTIUM VULGATUM	5 UPL 1 FAC- 3 FACU	Nt Tree Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED
CELOCC CERVUL CERDEM	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum	5 UPL 1 FAC- 3 FACU -5 OBL	Nt Tree Ad P-Forb Nt P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT
CELOCC CERVUL CERDEM CERCAN	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU	Nt Tree Ad P-Forb Nt P-Forb Nt Tree	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD
CELOCC CERVUL CERDEM CERCAN CHEGLB	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC-	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb Nt P-Forb Nt P-Grass	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CICINT CICMAC CINARU CIRARV CIRARV CIRDIS CIRMUT	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Forb Nt P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRARV CIRDIS CIRMUT CIRVUL	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL 5 UPL 5 UPL 4 FACU-	Nt Tree Ad P-Forb Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE BULL THISTLE
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRARV CIRDIS CIRMUT CIRVUL CLAVIR	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL 5 UPL 5 UPL 5 UPL 5 UPL 5 ACW 5 UPL 5 UPL 5 ACW 6 ACCU 6 ACCU 7 ACCU	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL 5 UPL -3 FACW 5 UPL -5 OBL -4 FACU- 3 FACU -3 FACW	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Ad B-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHILEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACU -3 FACU -3 FACW 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad B-Forb Ad B-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE SULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONTUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 6 OBL 4 FACU 3 FACU 3 FACU 5 UPL 0 FAC	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad B-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL 5 UPL 5 UPL 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU 3 FACU -3 FACU -3 FACW 5 UPL -5 OBL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad B-Forb Ad B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Nt P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHILEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL CORVAR	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACU -4 FACU- 5 UPL 5 UPL -5 OBL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad B-Forb Ad P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL CORVAR CRACRU	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACU -4 FACW- 5 UPL 5 UPL -5 OBL -7 FACW -7	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad P-Forb Ad P-Forb Nt Shrub Ad P-Forb Nt Tree	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONMAC CONMAC CONSEP COROBL CORVAR CRACRU CRAMOL	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus mollis	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACW 5 UPL -5 OBL 4 FACU- 4 FACU- 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC 4 FACU-	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad P-Forb Ad B-Forb Ad P-Forb Ad P-Forb At P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt Tree Nt Tree	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL CORVAR CRACRU	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACU -4 FACW- 5 UPL 5 UPL -5 OBL -7 FACW -7	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad P-Forb Ad P-Forb Nt Shrub Ad P-Forb Nt Tree	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL CORVAR CRACRU CRASUC	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus mollis 5 Crataegus succulenta	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL -5 OBL -3 FACW 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACW -4 FACU- 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC -5 UPL 0 FAC -6 FACW+ 5 UPL 0 FAC -7 FACW+ 5 UPL 0 FAC -7 FACW+ 5 UPL 0 FAC -7 FACW+ 5 UPL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Nt P-Forb Ad B-Forb Ad P-Forb Ad P-Forb Nt P-Forb Ad P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt Tree Nt Tree	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN FLESHY HAWTHORN
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHRLEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONARV CONSEP COROBL CORVAR CRACRU CRASUC CRASUC CRYCAN	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus succulenta 2 Cryptotaenia canadensis 4 Cuscuta gronovii 0 Cyperus esculentus	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -4 FACU- 3 FACU -3 FACU -4 FACU- 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Nt P-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad P-Forb Nt P-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE SULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN FLESHY HAWTHORN HONEWORT
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONSEP COROBL CORVAR CRACRU CRAMOL CRASUC CRYCAN CUSGRO CYPESC CYPFER	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus succulenta 2 Cryptotaenia canadensis 4 Cuscuta gronovii 0 Cyperus esculentus 2 Cyperus ferruginescens	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU 3 FACU -3 FACW 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC -4 FACU- 5 UPL 0 FAC -5 UPL 0 FAC -5 UPL 0 FAC -5 (OBL)	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad B-Forb Ad P-Forb Ad P-Forb Ad P-Forb Nt Tree Nt Tree Nt Tree Nt A-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE SWAMP THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN FLESHY HAWTHORN HONEWORT COMMON DODDER
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHILEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONSEP COROBL CORVAR CRACRU CRASUC CRASUC CRYCAN CUSGRO CYPESC CYPER DACGLO	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus mollis 5 Crataegus succulenta 2 Cryptotaenia canadensis 4 Cuscuta gronovii 0 Cyperus esculentus 2 Cyperus ferruginescens 0 DACTYLIS GLOMERATA	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACW 5 UPL -5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC 4 FACU- 5 UPL 0 FAC -5 UPL 0 FAC -5 UPL 1 FACC -5 UPL 0 FAC -5 UPL 1 FACC -5 OBL -1 [FAC+] -5 OBL 3 FACU	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Nt P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Ad B-Forb Ad P-Forb Ad P-Forb Ad P-Forb Ad P-Forb Ad P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt Tree Nt Tree Nt Tree Nt Tree Nt Tree Nt P-Forb Nt P-Forb Nt A-Forb Nt P-Sedge Nt A-Sedge Ad P-Grass	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN DOWNY HAWTHORN HONEWORT COMMON DODDER FIELD NUT SEDGE RUSTY NUT SEDGE ORCHARD GRASS
CELOCC CERVUL CERDEM CERCAN CHEGLB CHEALB CHEALB CHILEP CICINT CICMAC CINARU CIRARV CIRDIS CIRMUT CIRVUL CLAVIR CONMAC CONSEP COROBL CORVAR CRACRU CRAMOL CRASUC CRYCAN CUSGRO CYPESC CYPFER	3 Celtis occidentalis 0 CERASTIUM VULGATUM 5 Ceratophyllum demersum 10 Cercis canadensis 8 Chelone glabra 0 CHENOPODIUM ALBUM 0 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM 0 CICHORIUM INTYBUS 6 Cicuta maculata 5 Cinna arundinacea 0 CIRSIUM ARVENSE 2 Cirsium discolor 10 Cirsium muticum 0 CIRSIUM VULGARE 2 Claytonia virginica 0 CONIUM MACULATUM 0 CONVOLVULUS ARVENSIS 1 Convolvulus sepium 6 Cornus obliqua 0 CORONILLA VARIA 2 Crataegus crus-galli 2 Crataegus succulenta 2 Cryptotaenia canadensis 4 Cuscuta gronovii 0 Cyperus esculentus 2 Cyperus ferruginescens	5 UPL 1 FAC- 3 FACU -5 OBL 3 FACU -5 OBL 1 FAC- 5 UPL 5 UPL -5 OBL -3 FACW 5 UPL 5 UPL -5 OBL 4 FACU- 3 FACU -3 FACU -3 FACU -4 FACU- 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC -4 FACW+ 5 UPL 0 FAC -5 (OBL) -1 [FAC+] -5 OBL	Nt Tree Ad P-Forb Nt P-Forb Nt Tree Nt P-Forb Ad A-Forb Ad P-Forb Ad P-Forb Nt P-Grass Ad P-Forb Nt B-Forb Nt B-Forb Nt B-Forb Nt P-Forb Ad B-Forb Nt P-Forb Ad P-Forb Ad P-Forb Nt P-Forb Ad P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt P-Forb Nt Tree Nt Tree Nt Tree Nt Tree Nt Tree Nt Tree Nt A-Forb Nt A-Forb Nt A-Forb	HACKBERRY MOUSE-EAR CHICKWEED HORNWORT REDBUD TURTLEHEAD LAMB'S QUARTERS OX-EYE DAISY CHICORY WATER HEMLOCK COMMON WOOD REED FIELD THISTLE PASTURE THISTLE SWAMP THISTLE BULL THISTLE SPRING BEAUTY POISON HEMLOCK FIELD BINDWEED HEDGE BINDWEED BLUE-FRUITED DOGWOOD CROWN VETCH COCKSPUR HAWTHORN DOWNY HAWTHORN FLESHY HAWTHORN HONEWORT COMMON DODDER FIELD NUT SEDGE RUSTY NUT SEDGE

DIAARM	0	DIANTHUS ARMERIA	5	UPL	Ad A-Forb	DEPTFORD PINK
DIGSAS .	0	DIGITARIA SANGUINALIS	3	FACU	Ad A-Grass	HAIRY CRAB GRASS
DIOAIT	7	Dioscorea villosa	1	FAC~	Nt H-Vine	WILD YAM
DIPLAC	0	DIPSACUS LACINIATUS	5	UPL	Ad B-Forb	CUT-LEAVED TEASEL
DIPSYL	0	DIPSACUS SYLVESTRIS	5	UPL	Ad B-Forb	COMMON TEASEL
DRYTHP		Dryopteris thelypteris pubescens	 5	[OBL]	Cryptogam	MARSH SHIELD FERN
DUCIND	0	DUCHESNEA INDICA	4	FACU-	Ad P-Forb	INDIAN STRAWBERRY
DYSPAP	0	DYSSODIA PAPPOSA	5	UPL	Ad A-Forb	FETID MARIGOLD
ECHCRU	0	Echinochloa crusgalli	-3	FACW	Nt A-Grass	BARNYARD GRASS
ECHLOB	5	Echinocystis lobata	-2	FACW-	Nt H-Vine	WILD CUCUMBER
ELEERY	2	Eleocharis erythropoda	-5	OBL	Nt P-Sedge	RED-ROOTED SPIKE RUSH
ELLNYC	2	Ellisia nyctelea	-1	FAC+	Nt A-Forb	AUNT LUCY
ELONUT	7	Elodea nuttallii	-5	OBL	Nt P-Forb	SLENDER WATERWEED
ELYCAN	4	Elymus canadensis	1	FAC-	Nt P-Grass	CANADA WILD RYE
ELYVIL	5	Elymus villosus	3	FACU	Nt P-Grass	SILKY WILD RYE
ELYVIR	4	Elymus virginicus	-2	FACW-	Nt P-Grass	VIRGINIA WILD RYE
EPICOL	3	Epilobium coloratum	-5	OBL	Nt P-Forb	CINNAMON WILLOW HERB
EQUARV	0	Equisetum arvense	0	FAC	Cryptogam	HORSETAIL
EQUFLU	7	Equisetum fluviatile	-5	OBL	Cryptogam	PIPES
ERAPEC	0	Eragrostis pectinacea	0	FAC	Nt A-Grass	SMALL LOVE GRASS
ERIANS	0	Erigeron annuus	1	FAC~	Nt B-Forb	ANNUAL FLEABANE
ERICAN	0	Erigeron canadensis	1	FAC-	Nt A-Forb	HORSEWEED
ERIPHI		Erigeron philadelphicus	-3	FACW	Nt P-Forb	MARSH FLEABANE
ERISTR	5	Erigeron strigosus	5	[UPL]	Nt B-Forb	DAISY FLEABANE
ERYALB		Erythronium albidum	5	UPL	Nt P-Forb	WHITE TROUT LILY
EUPALT	0	Eupatorium altissimum	3	[FACU]	Nt P-Forb	TALL BONESET
EUPMAM	4	Eupatorium maculatum	-5	OBL	Nt P-Forb	SPOTTED JOE PYE WEED
EUPPER	4	Eupatorium perfoliatum	-4	FACW+	Nt P-Forb	COMMON BONESET
EUPPUR	7	Eupatorium purpureum	5	UPL	Nt P-Forb	PURPLE JOE PYE WEED
EUPRUG	4	Eupatorium rugosum	5	UPL	Nt P-Forb	WHITE SNAKEROOT
EUPSEM	0	Eupatorium serotinum	-1	FAC+	Nt P-Forb	LATE BONESET
EUPMAA	0	Euphorbia maculata	3	FACU	Nt A-Forb	EYEBANE
EUPSUP	0	Euphorbia supina		FACU-	Nt A-Forb	SPOTTED CREEPING SPURGE
FESELA		FESTUCA ELATIOR		FACU+	Ad P-Grass	TALL FESCUE
FESOBT	5	Festuca obtusa		FACU+	Nt P-Grass	NODDING FESCUE
FLOPRO	8	Floerkea proserpinacoides	-1	FAC+	Nt A-Forb	FALSE MERMAID
FRAVIR		Fragaria virginiana		FAC-	Nt P-Forb	WILD STRAWBERRY
FRAAMA	5	Fraxinus americana	3	FACU	Nt Tree	WHITE ASH
FRANIG	10	Fraxinus nigra	-4	FACW+	Nt Tree	BLACK ASH
FRAPEP	5	Fraxinus pennsylvanica	-3	FACW	Nt Tree	RED ASH
FRAPES	1	Fraxinus pennsylvanica subintegerrima		FAC	Nt Tree	GREEN ASH
GALAPA		Galium aparine	3	FACU	Nt A-Forb	ANNUAL BEDSTRAW
GALASP	10	Galium asprellum	-5	OBL	Nt P-Forb	ROUGH BEDSTRAW
GALCON	5	Galium concinnum	5	[UPL]	Nt P-Forb	SHINING BEDSTRAW
GALTRF	5	Galium triflorum	2	FACU+	Nt P-Forb	SWEET-SCENTED BEDSTRAW
GAUBIP	2	Gaura biennis pitcheri	4	FACU-	Nt B-Forb	COMMON GAURA
GERMAC	4	Geranium maculatum	5	[UPL]	Nt P-Forb	WILD GERANIUM
GEUCAN		Geum canadense	0	FAC	Nt P-Forb	WOOD AVENS
GEULAT	2	Geum laciniatum trichocarpum	-3	FACW	Nt P-Forb	ROUGH AVENS
GLEHED		GLECHOMA HEDERACEA		FACU	Ad P-Forb	CREEPING CHARLIE
GLYSTR	4	Glyceria striata	-3	[FACW]	Nt P-Grass	FOWL MANNA GRASS
GYMDIO	8	Gymnocladus dioica	5	UPL	Nt Tree	KENTUCKY COFFEE TREE
HACVIR	0	Hackelia virginiana	1	FAC-	Nt B-Forb	STICKSEED
HELAUT	5	Helenium autumnale	-4	FACW+	Nt P-Forb	SNEEZEWEED
HELGRO	2	Helianthus grosseserratus		FACW-	Nt P-Forb	SAWTOOTH SUNFLOWER
HELSTR		Helianthus strumosus		UPL	Nt P-Forb	PALE-LEAVED SUNFLOWER
HELHEL	5	Heliopsis helianthoides		UPL	Nt P~Forb	FALSE SUNFLOWER
HEPACU	6	Hepatica acutiloba	5	UPL	Nt P-Forb	SHARP-LOBED HEPATICA
HERMAX	5	Heracleum maximum	5	UPL	Nt P-Forb	COW PARSNIP
HESMAT		HESPERIS MATRONALIS		UPL	Ad P-Forb	DAME'S ROCKET
HORJUB		HORDEUM JUBATUM		FAC+	Ad P-Grass	SQUIRREL-TAIL GRASS
HYDAPP		Hydrophyllum appendiculatum		UPL	Nt P-Forb	GREAT WATERLEAF
HYDVIR		Hydrophyllum virginianum		[FAC]	Nt P-Forb	VIRGINIA WATERLEAF
HYPPER		HYPERICUM PERFORATUM		UPL	Ad P-Forb	COMMON ST. JOHN'S WORT
HYPPUN		Hypericum punctatum		[FACU]	Nt P-Forb	SPOTTED ST. JOHN'S WORT
IMPCAP		Impatiens capensis		FACW	Nt A-Forb	ORANGE JEWELWEED
IMPPAL		Impatiens pallida		[FAC+]	Nt A-Forb	YELLOW JEWELWEED
IODPIN		Iodanthus pinnatifidus		FACW	Nt P-Forb	VIOLET CRESS
IPOHED		IPOMOEA HEDERACEA		FAC	Ad A-Forb	IVY-LEAVED MORNING GLORY
IRIVIS		Iris virginica shrevei		OBL	Nt P-Forb	BLUE FLAG
ISOBIT		Isopyrum biternatum		UPL	Nt P-Forb	FALSE RUE ANEMONE

JUGNIG	5 Juglans nigra	3 FACU	Nt Tree	BLACK WALNUT
JUNDUD	4 Juncus dudleyi	0 [FAC]	Nt P-Forb	DUDLEY'S RUSH
JUNTEN	0 Juncus tenuis	2 [FACU+]	Nt P-Forb	PATH RUSH
JUSAME	6 Justicia americana	-5 OBL	Nt P-Forb	WATER WILLOW
KOCSCO	0 KOCHIA SCOPARIA	4 FACU-	Ad A-Forb	BURNING BUSH
LACCAN	2 Lactuca canadensis	2 FACU+	Nt B-Forb	WILD LETTUCE
LACSAL	O LACTUCA SALIGNA	3 FACU	Ad B-Forb	WILLOW LETTUCE
LAPCAN	3 Laportea canadensis	-3 FACW	Nt P-Forb	WOOD NETTLE
LATPAM	6 Lathyrus palustris myrtifolius	-3 FACW	Nt P-Forb	MARSH VETCHLING
LEEORY	4 Leersia oryzoides	-5 OBL	Nt P-Grass	RICE CUT GRASS
LEEVIR	7 Leersia virginica	-3 FACW	Nt P-Grass	WHITE GRASS
LEMMIO	5 Lemna minor	-5 OBL	Nt A-Forb	SMALL DUCKWEED
LEOCAR	O LEONURUS CARDIACA	5 UPL	Ad P-Forb	MOTHERWORT
LEPCAM	O LEPIDIUM CAMPESTRE	5 UPL	Ad B-Forb	FIELD CRESS
LIGVUL	0 LIGUSTRUM VULGARE	1 FAC-	Ad Shrub	COMMON PRIVET
LIPLAN	6 Lippia lanceolata	-5 OBL	Nt P-Forb	FOG FRUIT
LOBSIP	6 Lobelia siphilitica	-4 FACW+	Nt P-Forb	GREAT BLUE LOBELIA
LONMAA	O LONICERA MAACKII	5 UPL	Ad Shrub	AMUR HONEYSUCKLE
LONPRO	7 Lonicera prolifera	5 UPL	Nt W-Vine	YELLOW HONEYSUCKLE
LONTAT	0 LONICERA TATARICA	5 [UPL]	Ad Shrub	TARTARIAN HONEYSUCKLE
LONBEL	O LONICERA X BELLA	4 FACU~	Ad Shrub	SHOWY FLY HONEYSUCKLE
LYCALB	O LYCHNIS ALBA	5 UPL	Ad A-Forb	WHITE CAMPION
LYCAME	5 Lycopus americanus	-5 OBL	Nt P-Forb	COMMON WATER HOREHOUND
LYSCIL	4 Lysimachia ciliata	-3 FACW	Nt P-Forb	FRINGED LOOSESTRIFE
	-			
LYSNUM	0 LYSIMACHIA NUMMULARIA	-4 FACW+	Ad P-Forb	MONEYWORT
MEDLUP	0 MEDICAGO LUPULINA	1 FAC-	Ad A-Forb	BLACK MEDICK
MEDSAT	0 MEDICAGO SATIVA	5 UPL	Ad P-Forb	ALFALFA
MELALB	0 MELILOTUS ALBA	3 FACU	Ad B-Forb	WHITE SWEET CLOVER
MELLOF	O MELILOTUS OFFICINALIS	3 FACU	Ad B-Forb	YELLOW SWEET CLOVER
MENCAN	6 Menispermum canadense	-1 FAC+	Nt W-Vine	MOONSEED
MENARV	5 Mentha arvensis villosa	-5 [OBL]	Nt P-Forb	WILD MINT
MERVIR	5 Mertensia virginica	-3 FACW	Nt P-Forb	VIRGINIA BLUEBELLS
MIMRIN	6 Mimulus ringens	-5 OBL	Nt P-Forb	MONKEY FLOWER
MONFIS	4 Monarda fistulosa	3 FACU	Nt P-Forb	WILD BERGAMOT
MORALB	0 MORUS ALBA	0 FAC	Ad Tree	WHITE MULBERRY
MUHFRO	3 Muhlenbergia frondosa 🕟 .	-3 FACW	Nt P-Grass	COMMON SATIN GRASS
MUHSCH	0 Muhlenbergia schreberi	3 [FACU]	Nt P-Grass	NIMBLEWILL
MYOAQU	0 MYOSOTON AQUATICUM	-1 FAC+	Ad P-Forb	WATER CHICKWEED
NAPDIO	10 Napaea dioica	-2 FACW-	Nt P-Forb	GLADE MALLOW
NEPCAT	O NEPETA CATARIA	1 FAC-	Ad P-Forb	CATNIP
NUPADV	7 Nuphar advena	-5 OBL	Nt P-Forb	YELLOW POND LILY
OENBIE	O Oenothera biennis	3 FACU	Nt B-Forb	COMMON EVENING PRIMROSE
ONOSEN	8 Onoclea sensibilis	-3 FACW	Cryptogam	SENSITIVE FERN
OSMLON	3 Osmorhiza longistylis	4 FACU-	Nt P-Forb	SMOOTH SWEET CICELY
OSTVIR	5 Ostrva virginiana	4 FACU-	Nt Tree	HOP HORNBEAM
OXAEUR	0 Oxalis europaea	3 FACU	Nt P-Forb	TALL WOOD SORREL
PANCAP	1 Panicum capillare	0 FAC	Nt A-Grass	OLD WITCH GRASS
PANDII	O Panicum dichotomiflorum	-2 FACW-	Nt A-Grass	KNEE GRASS
PANIMP	2 Panicum implicatum	1 FAC-	Nt P-Grass	OLD-FIELD PANIC GRASS
PARINS	1 Parthenocissus inserta	3 FACU	Nt W-Vine	THICKET CREEPER
PARQUI	2 Parthenocissus quinquefolía	1 FAC-	Nt W-Vine	VIRGINIA CREEPER
PASSAT	O PASTINACA SATIVA	5 UPL	Ad B-Forb	WILD PARSNIP
PEDLAN	9 Pedicularis lanceolata	-5 [OBL]	Nt P-Forb	FEN BETONY
PENCAL	7 Penstemon calycosus	3 FACU	Nt P-Forb	SMOOTH BEARD TONGUE
PENSED	5 Penthorum sedoides	-5 OBL	Nt P-Forb	DITCH STONECROP
PHAARU	O PHALARIS ARUNDINACEA	-4 FACW+	Ad P-Grass	REED CANARY GRASS
PHLPRA	O PHLEUM PRATENSE	3 FACU	Ad P-Grass	TIMOTHY
		3 FACU	Nt P-Forb	WOODLAND PHLOX
PHLDIV	5 Phlox divaricata 1 Phragmites australis	-4 FACW+	Nt P-Grass	COMMON REED
PHRAUS	3 Physalis heterophylla	5 UPL	Nt P-Forb	CLAMMY GROUND CHERRY
PHYHET	0 Physalis subglabrata	5 UPL	Nt P-Forb	TALL GROUND CHERRY
PHYSUB	0 Physalis subglabrata 6 Physostegia virginiana	-5 [OBL]	Nt P-Forb	OBEDIENT PLANT
PHYVIV		1 FAC-	Nt P-Forb	POKEWEED
PHYAME	1 Phytolacca americana		Nt A-Forb	CLEARWEED
PILPUM	5 Pilea pumila	-3 FACW		ENGLISH PLANTAIN
PLALAN	0 PLANTAGO LANCEOLATA	0 FAC	Ad P-Forb	
PLARUG	O Plantago rugelii	0 FAC	Nt A-Forb	RED-STALKED PLANTAIN
PLAOCC	9 Platanus occidentalis	-3 FACW	Nt Tree	SYCAMORE CANADA BLUE GRASS
POACOM	0 POA COMPRESSA	2 FACU+	Ad P-Grass Nt P-Grass	MARSH BLUE GRASS
POAPAS	9 Poa palustris	-4 FACW+	Ad P-Grass	KENTUCKY BLUE GRASS
POAPRA	O POA PRATENSIS	1 FAC- 3 FACU	Nt P-Forb	MAY APPLE
PODPEL	4 Podophyllum peltatum	5 FACO	WC L LOTD	THIE EFF THE

POLREP	5 Polemonium reptans	0 FAC Nt P-Forb	JACOB'S LADDER
POLCAL	3 Polygonatum canaliculatum	3 FACU Nt P-Forb	SMOOTH SOLOMON'S SEAL
POLAMS	4 Polygonum amphibium stipulaceum	-5 OBL Nt P-Forb	WATER KNOTWEED
POLCEL	O POLYGONUM CESPITOSUM LONGISETUM	5 UPL Ad A-Forb	CREEPING SMARTWEED
POLCON	0 POLYGONUM CONVOLVULUS	1 FAC- Ad A-Forb	BLACK BINDWEED
POLPEN	O Polygonum pensylvanicum	-4 FACW+ Nt A-Forb	PINKWEED
POLPER	0 POLYGONUM PERSICARIA	1 [FAC-] Ad A-Forb	
POLPUN	6 Polygonum punctatum		LADY'S THUMB
POLSCN	1 Polygonum scandens		SMARTWEED
		0 FAC Nt H-Vine	CLIMBING FALSE BUCKWHEAT
POLGVI	2 Polygonum virginianum	0 FAC Nt P-Forb	WOODLAND KNOTWEED
POPDEL	2 Populus deltoides	-1 FAC+ Nt Tree	EASTERN COTTONWOOD
POTNOD	7 Potamogeton nodosus	-5 OBL Nt P-Forb	LONG-LEAVED PONDWEED
POTPEC	5 Potamogeton pectinatus	~5 OBL Nt P-Forb	SAGO PONDWEED
POTREC	O POTENTILLA RECTA	5 UPL Ad P-Forb	UPRIGHT CINQUEFOIL
POTSIS	4 Potentilla simplex	4 FACU- Nt P-Forb	COMMON CINQUEFOIL
PREALB	5 Prenanthes alba	3 FACU Nt P-Forb	LION'S FOOT
PRUVLA	O Prunella vulgaris lanceolata	3 [FACU] Nt P-Forb	SELF HEAL
PRUAME	5 Prunus americana	5 UPL Nt Tree	WILD PLUM
PRUSER	1 Prunus serotina	3 FACU Nt Tree	WILD BLACK CHERRY
PRUVIR	3 Prunus virginiana	3 [FACU] Nt Shrub	CHOKE CHERRY
PTETRT	7 Ptelea trifoliata	2 FACU+ Nt Shrub	WAFER ASH
PYCVIR	5 Pycnanthemum virginianum	-4 FACW+ Nt P-Forb	COMMON MOUNTAIN MINT
QUEALB	5 Quercus alba	0 FAC Nt Tree	
	_		WHITE OAK
QUEIMB	7 Quercus imbricaria	1 FAC- Nt Tree	SHINGLE OAK
QUEMAC	5 Quercus macrocarpa	1 FAC- Nt Tree	BUR OAK
QUERUB	7 Quercus rubra	3 FACU Nt Tree	RED OAK
RANABO	O Ranunculus abortivus	-2 FACW- Nt A-Forb	SMALL-FLOWERED BUTTERCUP
RANREC	5 Ranunculus recurvatus	-3 FACW Nt A-Forb	HOOKED BUTTERCUP
RANSCE	6 Ranunculus sceleratus	-5 OBL Nt A-Forb	CURSED BUTTERCUP
RANSEP	5 Ranunculus septentrionalis	-4 FACW+ Nt P-Forb	SWAMP BUTTERCUP
RATPIN	4 Ratibida pinnata	5 UPL Nt P-Forb	YELLOW CONEFLOWER
RHACAT	0 RHAMNUS CATHARTICA	3 FACU Ad Shrub	COMMON BUCKTHORN
RHUGLA	1 Rhus glabra	5 UPL Nt Shrub	SMOOTH SUMAC
RHURAD	2 Rhus radicans	-1 FAC+ Nt W-Vine	POISON IVY
RIBAME	7 Ribes americanum	-3 FACW Nt Shrub	WILD BLACK CURRANT
RIBMIS	5 Ribes missouriense	5 UPL Nt Shrub	WILD GOOSEBERRY
RORPAF	4 Rorippa palustris fernaldiana	-5 OBL Nt A-Forb	
ROSMUL	0 ROSA MULTIFLORA		MARSH CRESS
		3 FACU Ad Shrub	MULTIFLORA ROSE
ROSSET	7 Rosa setigera	2 FACU+ Nt Shrub	ILLINOIS ROSE
RUBALL	3 Rubus allegheniensis	2 FACU+ Nt Shrub	COMMON BLACKBERRY
RUBOCC	2 Rubus occidentalis	5 UPL Nt Shrub	BLACK RASPBERRY
RUBPEN	3 Rubus pensilvanicus	3 FACU Nt Shrub	YANKEE BLACKBERRY
RUDLAC	5 Rudbeckia laciniata	-4 FACW+ Nt P-Forb	WILD GOLDEN GLOW
RUDTRI	3 Rudbeckia triloba	1 FAC- Nt A-Forb	BROWN-EYED SUSAN
RUMALT	2 Rumex altissimus	-2 FACW- Nt P-Forb	PALE DOCK
RUMCRI	0 RUMEX CRISPUS	-1 FAC+ Ad P-Forb	CURLY DOCK
RUMOBT	0 RUMEX OBTUSIFOLIUS	-3 FACW Ad P-Forb	BITTER DOCK
RUMORB	8 Rumex orbiculatus	-5 OBL Nt P-Forb	GREAT WATER DOCK
SAGLAT	4 Sagittaria latifolia	-5 OBL Nt P-Forb	COMMON ARROWHEAD
SALAMY	5 Salix amygdaloides	-3 FACW Nt Tree	PEACH-LEAVED WILLOW
SALDIS	2 Salix discolor	-3 FACW Nt Shrub	PUSSY WILLOW
SALERI	5 Salix eriocephala	-3 FACW Nt Shrub	HEART-LEAVED WILLOW
SALINT	1 Salix interior	-5 OBL Nt Shrub	
SALNIG	4 Salix nigra		SANDBAR WILLOW
SAMCAN		-5 OBL Nt Tree	BLACK WILLOW
	1 Sambucus canadensis	-2 FACW- Nt Shrub	ELDERBERRY
SANCAD	6 Sanguinaria canadensis	4 FACU- Nt P-Forb	BLOODROOT
SANCAA	7 Sanicula canadensis	2 FACU+ Nt B-Forb	CANADIAN BLACK SNAKEROOT
SANGRE	2 Sanicula gregaria	-1 FAC+ Nt P-Forb	CLUSTERED BLACK SNAKEROOT
SAPOFF	O SAPONARIA OFFICINALIS	3 FACU Ad P-Forb	BOUNCING BET
SCIATR	4 Scirpus atrovirens	-5 OBL Nt P-Sedge	DARK GREEN RUSH
SCICYP	6 Scirpus cyperinus	-5 OBL Nt P-Sedge	WOOL GRASS
SCIFLU	4 Scirpus fluviatilis	-5 OBL Nt P-Sedge	RIVER BULRUSH
SCIPEN	4 Scirpus pendulus	-5 OBL Nt P-Sedge	
SCRMAR	4 Scrophularia marilandica	4 FACU- Nt P-Forb	LATE FIGWORT
SCULAT	5 Scutellaria lateriflora	-5 OBL Nt P-Forb	MAD-DOG SKULLCAP
SETFAB	O SETARIA FABERI	2 FACU+ Ad A-Grass	
SETGLA	O SETARIA GLAUCA	0 FAC Ad A-Grass	YELLOW FOXTAIL
SICANG	5 Sicyos angulatus	-2 FACW- Nt H-Vine	BUR CUCUMBER
SILANT	1 Silene antirrhina	5 UPL Nt A-Forb	SLEEPY CATCHFLY
SILPER	5 Silphium perfoliatum	-2 FACW- Nt P-Forb	CUP PLANT
SIUSUA	7 Sium suave		
51050A	r oldin oddyc	-5 OBL Nt P-Forb	TALL WATER PARSNIP

SMIRAC	3 Smilacina racemosa	3 FACU	Nt P-Forb	FEATHERY FALSE SOLOMON'S SL
SMISTE	5 Smilacina stellata	1 FAC-	Nt P-Forb	STARRY FALSE SOLOMON'S SEAL
SMILAS	5 Smilax lasioneura	5 [UPL]	Nt H-Vine	COMMON CARRION FLOWER
SMITAH	5 Smilax tamnoides hispida	5 UPL	Nt W-Vine	BRISTLY CAT BRIER
SOLCAR	0 SOLANUM CAROLINENSE	4 FACU-	Ad P-Forb	HORSE NETTLE
SOLDUL	0 SOLANUM DULCAMARA	0 FAC	Ad W-Vine	BITTERSWEET NIGHTSHADE
SOLALT	1 Solidago altissima	3 FACU	Nt P-Forb	TALL GOLDENROD
SOLCAN	1 Solidago canadensis	3 FACU	Nt P-Forb	CANADA GOLDENROD
SOLGRN	3 Solidago graminifolia nuttallii	0 [FAC]	Nt P-Forb	HAIRY GRASS-LEAVED GOLDENROD
SOLULM	5 Solidago ulmifolia	5 UPL	Nt P-Forb	ELM-LEAVED GOLDENROD
SONULI	O SONCHUS ULIGINOSUS	1 FAC-	Ad P-Forb	COMMON SOW THISTLE
STAPAH	5 Stachys palustris homotricha	-5 OBL	Nt P-Forb	WOUNDWORT
STATRI	7 Staphylea trifolia	0 FAC	Nt Shrub	BLADDERNUT
STEGRN	0 STELLARIA GRAMINEA	5 UPL	Ad P-Forb	STARWORT
SYMFOE	8 Symplocarpus foetidus	-5 OBL	Nt P-Forb	SKUNK CABBAGE
TAROFF	0 TARAXACUM OFFICINALE	3 FACU	Ad P-Forb	COMMON DANDELION
TEUCAN	3 Teucrium canadense	-3 FACW	Nt P-Forb	GERMANDER
TEUOCC	3 Teucrium occidentale	-3 FACW	Nt P-Forb	GERMANDER
THADAD	5 Thalictrum dasycarpum	-2 FACW-	Nt P-Forb	PURPLE MEADOW RUE
THADIO	7 Thalictrum dioicum	2 FACU+	Nt P-Forb	EARLY MEADOW RUE
THAREV	6 Thalictrum revolutum	0 FAC	Nt P-Forb	WAXY MEADOW RUE
TILAME	5 Tilia americana	3 FACU	Nt Tree	AMERICAN LINDEN
TRAOHI	2 Tradescantia ohiensis	2 FACU+	Nt P-Forb	COMMON SPIDERWORT
TRIREP	O TRIFOLIUM REPENS	2 FACU+	Ad P-Forb	WHITE CLOVER
TRIREC	5 Trillium recurvatum	4 FACU-	Nt P-Forb	RED TRILLIUM
TRIFLA	O TRIODIA FLAVA	5 UPL	Ad P~Grass	
TRIAUA	5 Triosteum aurantiacum	5 UPL	Nt P-Forb	EARLY HORSE GENTIAN
TRIPER	5 Triosteum perfoliatum	5 UPL	Nt P-Forb	LATE HORSE GENTIAN
TYPLAT	1 Typha latifolia	-5 OBL	Nt P-Forb	BROAD-LEAVED CATTAIL
ULMAME	3 Ulmus americana	-2 FACW-	Nt Tree	AMERICAN ELM
ULMPUM	O ULMUS PUMILA	5 UPL	Ad Tree	SIBERIAN ELM
ULMRUB	4 Ulmus rubra	0 FAC	Nt Tree	SLIPPERY ELM
URTPRO	2 Urtica procera	-1 FAC+	Nt P-Forb	TALL NETTLE
VERTHA	0 VERBASCUM THAPSUS	5 UPL	Ad B-Forb	COMMON MULLEIN
VERHAS	4 Verbena hastata	-4 FACW+	Nt P-Forb	BLUE VERVAIN
VERSTR	4 Verbena stricta	5 UPL	Nt P~Forb	HOARY VERVAIN
VERURU	5 Verbena urticifolia	5 UPL	Nt P-Forb	HAIRY WHITE VERVAIN
VERFAS	5 Vernonia fasciculata	-3 FACW	Nt P-Forb	COMMON IRONWEED
VIBLEN	5 Viburnum lentago	-1 FAC+	Nt Shrub	NANNYBERRY
VIBOPU	O VIBURNUM OPULUS	3 [FACU]	Ad Shrub	EUROPEAN HIGHBUSH CRANBERRY
VIBPRU	5 Viburnum prunifolium	3 FACU	Nt Shrub	BLACK HAW
VIBRAF	5 Viburnum rafinesquianum	5 UPL	Nt Shrub	DOWNY ARROW-WOOD
VIOSOR	3 Viola sororia	1 FAC-	Nt P-Forb	COMMON BLUE VIOLET
VITRIP	2 Vitis riparia	-2 FACW-	Nt W-Vine	RIVERBANK GRAPE
XANSTR	0 XANTHIUM STRUMARIUM	0 FAC	Ad A-Forb	COCKLEBUR
XANAME	3 Xanthoxylum americanum	5 UPL	Nt Shrub	PRICKLY ASH
ZIZAUR	7 Zizia aurea	-1 FAC+	Nt P-Forb	GOLDEN ALEXANDERS
TT DOW	, artra durea	-I PACE	HC L LOID	OODDER ADEXAMORES

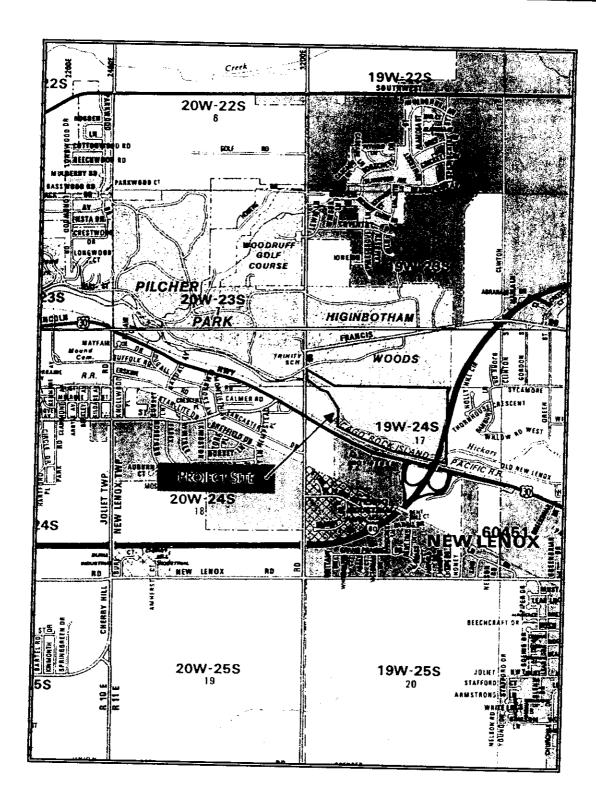


EXHIBIT A PROJECT SITE LOCATION

A Vegetation Inventory of Potawatomi Woods Forest Preserve District of Will County, Illinois N ↑ (not to scale)

Kenneth Johnson January 2002

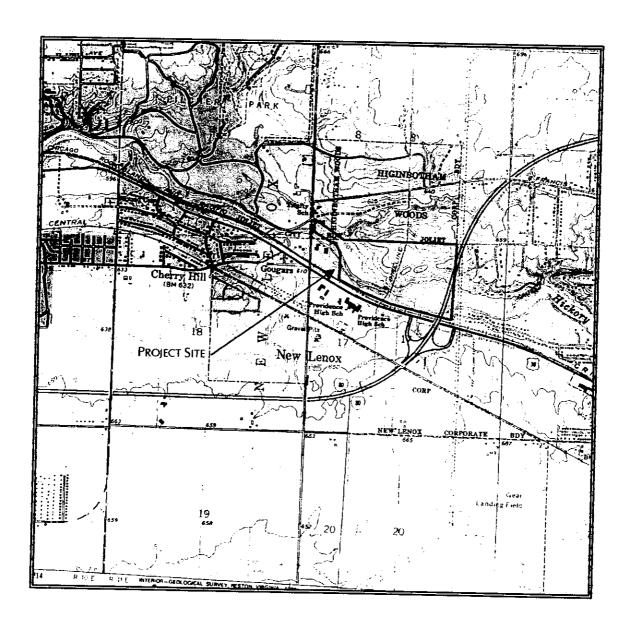
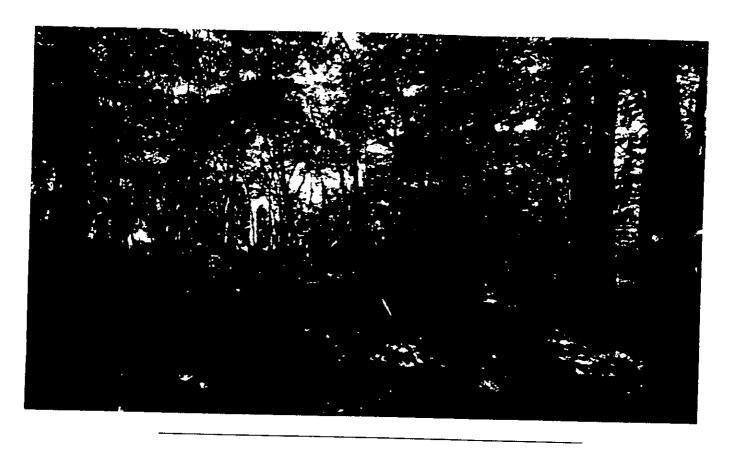
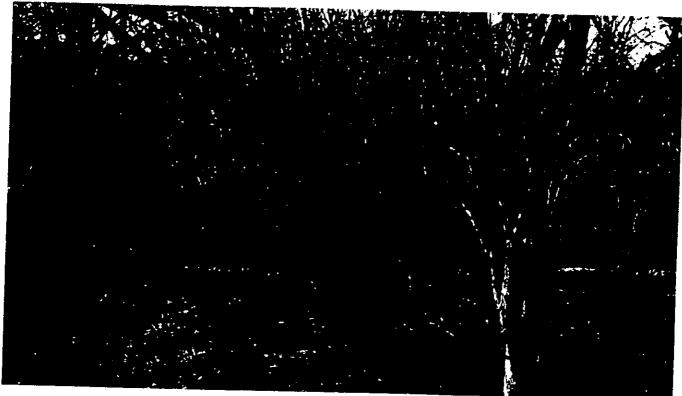


EXHIBIT B USGS TOPOGRAPHY MAP

A Vegetation Inventory of Potawatomi Woods Forest Preserve District of Will County, Illinois N↑ (not to scale)

Kenneth Johnson January 2002





Above: Mesic Upland Forest (May 2001).

Below: Wet-mesic Upland Forest (April 2001).





Above: Mesic Floodplain Forest (November 2001).

Below: Oxbow in Mesic Floodplain Forest (November 2001).

Sedge Meadow (May 2001).

Below:

Sedge Meadow (April 2001).

:9vodA





Pipeline Right-of-way (April 2001).

Tributary Stream (April 2001). :9vodA

Below:









Above: Hickory Creek (September 2001).

Below: Hickory Creek, with rocky bottom and slender waterweed (September 2001).