

**APPENDIX 1**

**LANDOWNER CONTACT PACKAGE**

Date:

Landowner Name

Landowner Address

Dear Landowner

**Re: Request for Access to Property** for Life Science Inventory, Middlesex County Natural Heritage Study

Five Conservation Authorities and the County of Middlesex are involved in a collaborative effort to conduct a life science (biological) inventory of the natural areas found throughout Middlesex County. The purpose of the study is to identify, locate and determine the health of woodlands, wetlands and aquatic systems within Middlesex County; and to use this information in the development of the County's Official Plan.

We are writing you to request consent for access to your property at Property Address because it contains a natural forest or wetland feature. Site visits will be made by Conservation Authority staff throughout the summer (2001). The information that we collect about your woodlot and /or associated wetland features can be used to assist you in developing land use planning options, determining the significance of the natural features in your woodlot and in managing the natural heritage features on your property. As part of the thank-you package, all landowners who permit the Conservation Authority access to their property will receive a copy of the report summary in the winter of 2002.

While we understand that this is a very busy time for you, we would greatly appreciate your reply on the enclosed consent form (this applies whether you agree to consent or not) by date (or as soon as possible). If you have any information about the plants, animals or nesting birds on your property that could assist in this study, please check the appropriate space on the consent form and a representative from the Conservation Authority will contact you at your convenience. As well, I would be pleased to answer any questions you may have and can be reached at (519) 451-2800 ext. 261 between 8:15 a.m. and 4:30 p.m. If I am out of the office, please leave a message and I will return your call as soon as possible.

Thank you very much for your time.

Yours truly,

UPPER THAMES RIVER CONSERVATION AUTHORITY

Tara Tchir  
Planning Ecologist

**LANDOWNER CONSENT FORM FOR ACCESS TO PROPERTY**

For the 2001 Life Science Inventory of the Middlesex County Natural Heritage Study

Please complete this form and return it in the enclosed stamped, self-addressed envelope by date (or as soon as possible). Thank-you very much for your assistance with this inventory study.

Permission is granted for qualified personnel, employed by the Upper Thames River Conservation Authority, to be on lands described as Property Address owned by Landowner Name between June 11<sup>th</sup>, 2001 and August 31<sup>st</sup>, 2001 for the purpose of conducting life science (biological) inventories. It is understood that Conservation Authority staff carry the necessary liability insurance for this project.

**G** YES

**G** NO (please explain):

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**G** I / We have records or information about the plants, animals or nesting birds on my/our property.

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Contact Person(s): 

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Telephone: 

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Signed by: 

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Date: 

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## Middlesex County Natural Heritage Study Project Update - Spring 2001

In 1999, the County of Middlesex asked the five Conservation Authorities with jurisdiction within its boundaries, as well as the Ministries of Natural Resources and Municipal Affairs and Housing, to participate in a coordinated natural heritage study in Middlesex County.

The County recognized the need to develop a solid information and policy basis for its woodland and wetland features, in order to fulfil the County's obligations under the Provincial Policy Statement for the protection and rehabilitation of natural heritage features and functions (Section 2.3).

The Middlesex County Natural Heritage Study has several goals:

1. To increase our understanding of the County's natural heritage features and systems (e.g. woodlands, wetlands and aquatic systems).
2. To develop land use planning information and policy that identifies, protects and enhances the County's natural heritage features and systems.
3. To encourage and facilitate private stewardship and public education.
4. To protect the relationships between plant and animal communities.

The study is a pilot project for the Carolinian Canada Big Picture Project and the Ministry of Natural Resources Ecological Land Classification System, as well as landowner outreach and stewardship approaches. The study's specific products include:

- Background for official plan policy (county and local plans)

- Baseline data for natural heritage features
- Natural heritage systems mapping
- Determining the criteria for and local definition of woodland significance
- Landowner conservation / stewardship / education tools
- Identifying possible sites for future restoration and rehabilitation projects

### Project Phases

The Middlesex County Natural Heritage Study will be completed early in 2002. The information will be available for local official plan updates and for the next update of the County's official plan.

### *Tasks completed in 2000/2001:*

- Formed multi-partner steering committee to direct the project.
- Obtained satellite imagery and completed map production.
- Prepared Development Assessment Report (DAR) guidelines and interim guidelines for woodland significance for the Township of Middlesex Centre.
- Developed landowner outreach program to provide information about conservation incentives, stewardship programs and land use planning tools.
- Developed communications program for municipal decision makers and local interest groups.

### *Winter 2001 tasks:*

- Review, update and standardize information on natural features in Middlesex County.
- Determine the number and location of field visits needed.

*Spring / Summer 2001 tasks:*

- Implement the landowner outreach program.
- Collect biological information for 80 to 100 sites.
- Cross reference study results that affect bordering municipalities.
- Develop an interim natural heritage policy framework for local municipalities.

*Fall 2001 / Winter 2002 tasks:*

- Incorporate results into County and lower tier official plans, as well as CA land use planning advisory services.
- Make the information base available to other partners to assist in their own conservation programs.

**Budget and Partners**

The estimated budget for the Middlesex County Natural Heritage Study is \$105,000 over three years. This figure includes in-kind contributions but not volunteer time donated by the steering committee participants.

As of March 2001, the project partners include:

- County of Middlesex
- Middlesex Stewardship Committee
- Middlesex County Conservation Authorities (Ausable Bayfield, St. Clair Region, Lower Thames Valley, Kettle Creek and Upper Thames River)
- City of London
- Carolinian Canada
- Nature Conservancy of Canada
- Ministry of Natural Resources
- Ministry of Municipal Affairs and Housing
- Thames - Talbot Land Trust
- Natural Heritage Coalition of Thames Centre

The Upper Thames River Conservation Authority is leading the study, under the direction of a steering committee comprised of representatives from the partner groups. The steering committee is determining the best approach for assessing the natural features of Middlesex County, with input from local municipalities, landowners, the agricultural community, and other stakeholders. All of the project partners are kept informed throughout the project phases.

**For more information or to get involved:**

Check your local Conservation Authority's web site:

- ▶ Ausable Bayfield CA- [www.execulink.com/~abca/](http://www.execulink.com/~abca/)
- ▶ Kettle Creek CA- [www.kettlecreekconservation.on.ca](http://www.kettlecreekconservation.on.ca)
- ▶ Lower Thames Valley CA- [www.lowerthames-conservation.on.ca](http://www.lowerthames-conservation.on.ca)
- ▶ St. Clair Region CA- [www.scrca.on.ca](http://www.scrca.on.ca)
- ▶ Upper Thames River CA- [www.thamesriver.on.ca](http://www.thamesriver.on.ca)

Visit the Middlesex County Natural Heritage Study website:

<http://www.thamesriver.on.ca/MNHS/MNHS.htm>

Phone or email:

Tara Tchir  
 Planning Ecologist  
 Upper Thames River Conservation Authority  
 (519) 451-2800 ext. 261  
[tchirt@thamesriver.on.ca](mailto:tchirt@thamesriver.on.ca)

Steve Evans  
 Director of Planning and Economic Development  
 County of Middlesex  
 (519) 434-7321 ext. 253  
[sevans@county.middlesex.on.ca](mailto:sevans@county.middlesex.on.ca)

**APPENDIX 2**

**STANDARD FIELD DATA FORMS**

Page ..... of .....

Patch ID:

Community Number(s):

**PRE - FIELD PATCH ANALYSIS : Complete only once for each patch**

**PATCH IDENTIFICATION**

Landowner		Patch ID #
UTMZ	UTME	UTMN
Township	Lot	Concession
Aerial Photo #	Date of Photo	Patch Area (ha)
Soil Texture (soil map)	Slope (DEM)	Aspect (DEM)

Check all that apply

**G** Within a Big Picture core

**G** Patches adjacent to the City of London

**G** Stream classification done by:

**G** Within a Big Picture corridor

**G** Within an area zoned for development

**PATCH EVALUATION CRITERIA: Circle one in each row**

<b>Distance to road (major 2 lane)</b>	0 - 100 m	100 - 200m	200 - 300m	300 - 400m	> 400m
<b>Patch Size (2.2) * (3) **</b>	< 4 ha	4 - 10 ha	>10 - 20 ha	>20 - 40 ha	> 40 ha
<b>Woodland Size (2.2a) *</b>	Patch contains <2 ha of upland forest	Patch contains 2 - 4 ha of upland forest	Patch contains > 4 - 10 ha of upland forest	Patch contains >10 - 20 ha of upland forest	Patch contains > 20 ha of upland forest
<b>Patch Interior (2.2b) * (3) **</b>	100m circle does not fit inside patch	100m circle just fits inside patch	100m circle fits inside patch with < 2% of interior patch area remaining	100m circle fits inside patch with 2 - 4% of interior patch area remaining	100m circle fits inside patch with > 4% of interior patch area remaining
<b>Proximity to &gt; 4 ha patch (1.2c) * (6) **</b>	>400 m to next patch	>250 - 400 m to next patch	>100 - 250m to next patch	>40 - 100 m to next patch	≤ 40 m to next patch
<b>Connectedness / Fragmentation (1.2b) * (6) **</b>	No connecting natural corridors; natural areas separated by active agricultural lands or urban development	Natural area connected by cultural corridors	Natural area connected by natural corridors < 10 m wide	Natural area connected by natural corridors 10 - 30 m wide and > 80 m long	Natural area connected by natural corridors > 30 m wide and < 80 m long
<b>Distinctive Landforms (4.2a) *</b>	Patch not on significant slopes, and/or is on Till Plain or spillways	Patch on significant slopes as well as on till plain or spillways	Patch on slopes associated with glacial deposits, lake shorelines or Till Moraine	Patch on remnant valley slopes associated with Arva, Ingersoll and Westminster Moraines	Patch on glacial meltwater channels, lakes or on Beach Ridge or Sand Plain
<b>Slope (1.1b)*</b>	no slope	0 - 10% slope on any soil	> 10 - 15% on heavy clay, clay or silty clay	> 10 - 15% on silty loam, sandy loam, loam, fine sand to coarse sand	>15% slope on any soil

\* City of London. 2000. Guideline Document for the Evaluation of Ecologically Significant Woodlands.

\*\* Bowles, J and B. Bergsma. November 30, 1999. Components of the Natural Heritage System Guidelines for the Evaluation of Patches.

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Patch ID:

Community Number(s):

**POST - FIELD PATCH ANALYSIS : Complete only once for each patch**

**PATCH EVALUATION CRITERIA: Circle one in each row**

<b>Community Structure and Diversity (excludes cultural communities) (2.3a) * (5) **</b>	Patch homogeneous; all vegetation communities of the same ELC vegetation type and the same ELC Community Series	Patch relatively homogeneous, 2 - 5 ELC vegetation types in 1 ELC Community Series	Patch containing 2 - 5 ELC vegetation types in 2 ELC Community Series; or 6 - 10 ELC vegetation types in one ELC Community Series	Patch containing 6 - 10 ELC vegetation types in 2 Community Series; or >10 ELC vegetation types in one ELC Community Series	Patch containing > 10 ELC vegetation types in 2 Community Series; or ≥ 3 ELC Community Series
<b>Vegetation Type and Topographic Diversity (2.3b) *</b>	Woodland homogeneous with 1 - 2 vegetation types on one topographic feature	Woodland has 3 vegetation types on one topographic feature	Woodland has 1 vegetation type with complexes	Woodland has 4 + vegetation types	Woodland has 2 + vegetation types on 2 + different topographic features
<b>Conifer cover (2.3d) * (6) **</b>	Patch contains no coniferous communities; or plantations of non-native, invasive conifer species	Patch contains plantations of non-native, non-invasive conifer species	Patch contains plantations of native indigenous conifer species	Patch contains naturalized vegetation communities with 25 - 75% native conifer canopy cover	Patch contains a naturalized native conifer community (with > 75% conifer canopy cover)
<b>Woodland Cover (1.2a) *</b>	No woodland cover	< 10% woodland cover	10 - 25% woodland cover	25 - 50% woodland cover	50 - 100% woodland cover
<b>Hydrological Features (includes: watercourses, wetlands, aquifers, seepage) (1.1a) * (4) **</b>	Patch > 100 m from the nearest hydrological feature	Patch > 50 - 100 m from a hydrological feature	> 30 - 50 m from a hydrological feature	≤ 30 m from an intermittent (not permanent) hydrological feature	Includes or is adjacent to a permanent hydrological feature
<b>Groundwater Recharge Areas on course substrate (1.1a) * (4) **</b>	No recharge areas identified in patch	Up to 20% or < 2 ha of patch in a recharge area	20 - 40% or 2 - 4 ha of patch in a recharge area	> 40 - 60% or 4 - 10 ha of patch in a recharge area	> 60 - 100% or > 10 ha of patch in a recharge area
<b>Wetland Hydrology (1.1a) * (4) **</b>	No wetland areas within the patch	Patch containing or connected to a wetland meeting no key hydrology functions ***	Patch containing or connected to a wetland meeting 1 key hydrology function ***	Patch containing or connected to a wetland meeting 2 key hydrology functions ***	Patch containing a provincially significant wetland; or a wetland meeting 3 or more key hydrology functions ***

\* City of London. 2000. Guideline Document for the Evaluation of Ecologically Significant Woodlands.

\*\* Bowles, J and B. Bergsma. November 30, 1999. Components of the Natural Heritage System Guidelines for the Evaluation of Patches.

\*\*\* Key Hydrology Functions (defined by OMNR 3<sup>rd</sup> ed. Wetland evaluation manual for Southern Ontario) :

- Flood Attenuation
- Carbon Sink / Long Term Nutrient Trap
- Water Quality Improvement
- Groundwater Discharge
- Groundwater Recharge



Page ..... of .....

Patch ID:

Community Number(s):

**IN - FIELD PATCH ANALYSIS : Complete only once for each patch**

**ANTHROPOGENIC MANAGEMENT DATA SHEET FOR PATCH:**

Plantation	none	occasional	abundant	dominant
Extent	none	local	widespread	extensive
Sugar Bush	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Non-native Species	none	occasional	abundant	dominant
Extent	none	local	widespread	extensive
Livestock	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Trails	none	faint	well marked	tracks / road
Extent	none	local	widespread	extensive
Artificial Drainage	none	occasional	abundant	dominant
Extent	none	local	widespread	extensive
Dumping	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Earth movement	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Recreation	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Noise	none	slight	moderate	intense
Extent	none	local	widespread	extensive
Other .....	none	light	moderate	heavy
Extent	none	local	widespread	extensive

Page ..... of .....

Patch ID:

Community Number(s):

**IN - FIELD PATCH ANALYSIS : Complete only once for each patch**

**NATURAL PROCESSES DATA SHEET FOR PATCH:**

Wind throw	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Disease / Death	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Canopy Gaps	none	small	intermediate	large
Extent	none	local	widespread	extensive
Fire	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Flooding	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Ice Damage	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Browse	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Beaver	none	light	moderate	heavy
Extent	none	local	widespread	extensive
Other .....	none	light	moderate	heavy
Extent	none	local	widespread	extensive

Comments:



Page ..... of .....

Patch ID:

Community #:

**IN - FIELD COMMUNITY ANALYSIS: Complete for each community**

**COMMUNITY IDENTIFICATION:**

Surveyor(s)	Date	Aspect (dir.)
Slope (°) circle one:                      < 2    2 - 9    10 - 30    > 30		

**COMMUNITY / POLYGON DESCRIPTION: Check one in each group**

SYSTEM	TOPOGRAPHIC FEATURE	DOMINANT PLANT FORM	COMMUNITY
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating	<input type="checkbox"/> River
	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
SUBSTRATE	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Organic	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input type="checkbox"/> Mineral	<input type="checkbox"/> Rolling Land	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
	<input type="checkbox"/> Bluff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
HISTORY		<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Natural	COMM. AGE	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural	<input type="checkbox"/> Pioneer		<input type="checkbox"/> Prairie
	<input type="checkbox"/> Young	SITE	<input type="checkbox"/> Thicket
COVER	<input type="checkbox"/> Mid-Age	<input type="checkbox"/> Open Water	<input type="checkbox"/> Savanna
<input type="checkbox"/> Open	<input type="checkbox"/> Mature	<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Woodland
<input type="checkbox"/> Shrub	<input type="checkbox"/> Old Growth	<input type="checkbox"/> Surficial Dep.	<input type="checkbox"/> Forest
<input type="checkbox"/> Treed *			<input type="checkbox"/> Plantation

\* Note: Record whether it is open, sparse or closed

Page ..... of .....  
Vegetation Type #:

Patch ID:  
Community #

**IN - FIELD VEGETATION TYPE ANALYSIS: Complete for each vegetation type**

**STAND DESCRIPTION:**

HT CODES: 1 = >25m 2 = 10<HT≤25m 3 = 2<HT≤10m 4 = 1<HT≤2m 5 = 0.5<HT≤1m 6 = 0.2<HT≤0.5m 7 = HT<0.2m  
CVR CODES: 0 = NONE 1 = 0%<CVR≤10% 2 = 10<CVR≤25% 3 = 25<CVR≤60% 4 = CVR>60%

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE
1 CANOPY			
2 SUB-CANOPY			
3 UNDER STOREY			
4 GRD. LAYER			

**MOISTURE REGIME** (circle one):

Dry                      Fresh                      Moist                      Wet / Organic

**COMMENTS:**

Soil Texture (as verified in field):

Drainage:

Other:

**POST - FIELD VEGETATION TYPE ANALYSIS: Complete for each vegetation type**

Community Description:

**COMMUNITY CLASSIFICATION:**

Community Class	Code
Community Series	Code
Ecosite	Code
Vegetation Type	Code











## **APPENDIX 3**

### **GLOSSARY**

**Abundance codes:** the quantity (noted as rare, occasional, abundant or dominant) of a plant species in a vegetation community.

**Abundant:** large numbers of individuals or clumps of individuals likely to be encountered anywhere in a given area (*e.g.* vegetation community). When describing herbaceous plants, usually forms 10% of the ground cover.

**Adjacent:** next to or nearest to.

**Adventive:** a non-native species (generally plant) growing without human aid or intervention. See *Alien species*.

**Alien species:** species that are not native to a particular region. In the case of Ontario, alien species are those that did not occur prior to European settlement. Alien species are brought into an area from other parts of the world or province, intentionally or accidentally by humans. Some alien species, such as Common Buckthorn (*Rhamnus cathartica*) and Garlic Mustard (*Alliaria petiolaris*) can be highly invasive and dominate woodland areas to the detriment of the native flora. Intensity was judged from the number of alien species and abundance of individual species.

**Amphibians:** any vertebrate animal whose life history includes an aquatic gill-breathing larval stage followed by a terrestrial lung-breathing adult stage. Includes frogs, toads, newts, and salamanders. Amphibians can be indicators of healthy woodlands with well functioning processes (OMNR 1999, 2000c).

**Aquatic system:** water table above substrate surface including flooded bedrock, mineral or organic substrates. Permanently flooded sites with persistent

water, emergent woody or herbaceous vegetation cover <25%, vegetation cover absent or of submerged or floating leaved plant species.

**Associate species:** a species which is a normal component of a vegetation community, but which does not have sufficient importance to rank dominant, co-dominant or secondary.

**Aspect:** orientation of slope face expressed as a compass direction.

**Barren:** unusually open sites on bedrock or unconsolidated material where major limiting factor is drought. Substrate surface a mosaic of exposed bare substrate and vegetation cover. May have stunted trees and low shrubs with patchy and open vegetation cover, but not tall grass species.

**Basal area:** the area occupied by plants, especially trees, near the ground surface. Usually measured in m<sup>2</sup>/ha. The diameter of a tree is measured at breast height approximately 1.5m above the ground surface; or across a clump of graminoids, usually 2 to 3 cm above the ground surface.

**Biodiversity:** total richness of biological variation, ranging from within species genetic variation, through subspecies and species, to communities and the patterns and dynamics of these on the landscape (City of London 2000).

**Bluff:** a shoreline area of a river or lake with steep to vertical slopes of unconsolidated surficial deposits that are subject to active erosion from slumping, mass wasting or toe erosion.

**Bog:** deep (>40 cm) sphagnum peat lands generally unaffected by nutrient rich groundwater. Acidic and often dominated by heath shrubs and mosses. May include open growing stunted trees.

**Bottomland:** land situated at the bottom of a river valley. It includes the flood plain, but may extend beyond the limit of flooding to the base of the valley slopes.

**Bryophyte:** plants without a vascular system such as mosses and liverworts.

**Canopy:** tallest layer of vegetation that receives direct sunlight.

**Carbon sink:** an area where the rate of carbon uptake by living organisms exceeds the rate of carbon release.

**Centroid:** the geometric or gravitational centre.

**Climax:** the final or end stage; a self-perpetuating community composed primarily of climax species showing uneven stand age distribution.

**Co-dominant:** two or more species that share, more or less equally, the greatest importance in the community.

**Community:** an assemblage of species or populations that live in a defined environment at a defined spatial - temporal scale, and interact with one another to form a distinctive living system with its own composition, structure, environmental relations, development and function (Whittaker 1975). A community may be described and classified using the Ecological Land Classification for Southern Ontario (Lee *et al.* 1998) or any other recognized system.

**Community age:** the estimated successional stage of the community based on Strong *et al.* 1990. These include: Pioneer, Young, Mid Aged, Sub-Climax and Climax.

**Community diversity:** the number of different ecosites and/or community series (excluding cultural communities) in the patch as defined by the ELC Community tables (Lee *et al.* 1998).

**Community series:** units that are visible and recognizable on air-photos or from a combination of maps, air photo interpretation and other remote sensing techniques. This is the lowest level in the ELC that can be identified without a site visit. Distinguished based on the type of vegetation cover and / or the plant form that characterizes the community (Lee *et al.* 1998).

**Community SRANK:** A provincial ranking system based on the rarity of a community type. Ranks are based on the best available information from three factors: estimated number of occurrences, estimated areal extent and estimated range. Based on Bakowsky (1993) and current status from the NHIC web page <http://www.mnr.gov.on.ca/MNR/nhic/veg/lists/comm1ist.html>.

**Community type:** an overall descriptor of the community setting in the landscape, to be used for description purposes only. Community types include: Lakes, Ponds, Rivers, Streams, Marsh, Swamp, Fen, Bog, Barren, Meadow, Prairie, Thicket, Savanna, Woodland, Forest or Plantation.

**Conifer cover:** an area dominated by coniferous (evergreen) trees; important for providing winter food and shelter for a variety of wildlife species (OMNR 1999, 2000c).

**Coniferous forest:** a forest community where the canopy is made up of >75% coniferous trees.

**Conservative bird species:** species with high jurisdictional responsibility, preservation responsibility and / or area sensitivity scores for Middlesex County based on Couturier (1999).

**Cover:** the type of vegetation that dominates an area, either open (*i.e.* tree-less), shrub or treed.

**Cultural barrier:** permanent human structure or feature, including roads, buildings and railroads, unless connected by a culvert or bridge that allows movement of wildlife (City of London 2000).

**Cultural community:** vegetation community originating from or maintained by people (*e.g.* meadows growing on disturbed soils, pine plantations). Non-native species often abundant.

**Cultural corridor:** includes abandoned rail or roads, utility easements or right of ways, recreational green way parks/open spaces, abandoned agricultural land (City of London 2000).

**Deciduous forest:** a forest community where the canopy is made up of >75% deciduous (broad-leaved) trees.

**Density:** the number of plant individuals per unit area. May be expressed in absolute terms or as a relative density, which is number of individuals of a certain

species as a percentage of the total number of individuals of all species in the same area (Curtis 1959)

**Disease/ death of trees** - This disturbance category was applied to generalized events rather than the senescence and death of individuals in the forest canopy. Generalized tree death can occur, for example, as a result of changes in site drainage, or disease such as Dutch Elm disease.

**Distinctive landforms:** identified by the slope stability mapping project (UTRCA 1996) and City of London Glacial Geomorphology mapping (City of London GIS layer).

**Disturbances:** each disturbance type (except time since the last logging event) was scored from 0 to 3 for intensity and 0 to 3 for extent. Intensity and extent scores were then multiplied together to produce a score for each disturbance type. A total disturbance index for each patch was calculated from the sum of disturbance scores. Estimated time since the last logging event (in years) was also recorded for each patch.

**Dominant plant form:** the most prevalent plant form in a community which include Plankton, Submerged, Floating, Graminoids, Forbs, Lichen, Bryophyte, Deciduous Forest, Coniferous Forest, Mixed Forest.

**Dominant:** a plant species encountered throughout the polygon in a large numbers or clumps and visually more abundant than other species (>10% of the ground cover and > 35% of the vegetation cover in any one layer).

**Dominants(s):** One to three species which dominate and characterize the vegetation community. Species were listed in order of importance based on a visual estimate. Importance combines both the size and abundance of species. Relative abundance was indicated by >>, > or =. Species in separate strata were divided by /.

**Dumping:** any dumping of material including field stone or top-soil was recorded as a disturbance.

**Earth displacement:** excavation of soil for any reason was recorded, including extraction of sand and drainage operations.

**Ecosite:** part of an ecosection that consists of a mappable area or land having a consistent set of environmental factors (hydrology, soils) and patterns of vegetation characteristics (City of London 2000).

**Fen:** wetland with a peat substrate and nutrient rich waters, primarily vegetated by shrubs and graminoids. Substrate of brown moss peat or marl with water source minerotrophic, alkaline to mildly acidic.

**Floating:** aquatic community with wetland plants that have their major photosynthetic area (leaves) floating on the surface of the water.

**Forbs:** community with >75% of the vegetation composed of non-woody broad leaved herbaceous plants that are either monocots or dicots but not graminoids.

**Forest:** terrestrial vegetation community with at least 60% tree cover of coniferous or deciduous trees (City of London 2000).

**Fresh soil moisture:** characterized by no mottles or gleying within top half of the soil profile.

**Gaps in forest canopy:** only gaps caused by disturbance events such as logging, windstorm or disease were recorded. Intensity was judged by the number and size of gaps. The vegetation in established gaps is generally quite distinct because gaps are frequently occupied by shade-intolerant species rather than shade tolerant woodland species. Shade-intolerant species tend to replace slower growing woodland species when light levels are high. Gap dynamics are part of a healthy ecosystem, but in small patches large or frequent gaps may affect the long term health of a woodlot.

**Gleying:** a soil characteristic caused by poor soil aeration in saturated soils, leading to a soil profile that is typically grey in colour interspersed with yellow, orange, or rusty brown mottles or streaks.

**Graminoids:** community with >75% of the vegetation composed of narrow leaved monocots with a grass-like morphology, including grasses, sedges and rushes.

**Ground layer:** vegetation layer that is nearest to the substrate.

**Groundwater discharge:** an area where the groundwater moves upward from the underlying mineral material or emerges from surrounding uplands. Discharge wetlands have a high value both for ecological reasons and because of their utility value in erosion control and water quality improvement. Groundwater discharging in a wetland is usually nutrient and mineral rich allowing the development of locally unique ecosystems.

**Groundwater recharge:** the flow to groundwater storage from precipitation, infiltration from streams, and other sources of water.

**Hardwood:** all broad-leafed trees.

**History:** past influences and management regime of the community. Can be either natural or cultural.

**Hydrological features:** includes groundwater recharge areas, headwater/first order watercourses, river or stream corridors, wetlands (OMNR 1994), shallow aquifers or discharge / seepage areas as identified by the subwatershed studies and / or verified through technical studies (City of London 2000).

**Interior habitat:** amount area left after 100m buffer has been removed from the interior of the woodland patch perimeter (City of London 2000).

**Invasive species:** non-native species that reproduce aggressively and displace native plant species in an area.

**Lacustrine:** aquatic or wetland site associated with fresh water lakes or ponds. Sediments generally consist of stratified fine sand, silt and clay deposits on a lake bed.

**Lake:** standing water body >2 ha in area.

**Landforms:** the various slopes of the land surface resulting from a variety of actions such as deposition or sedimentation, erosion and movements of the earth crust to create topographic features (City of London 2000).

**Landscape variables:** measurements taken from GIS information for each patch. Landscape variables included patch area, patch core area after a 100m buffer was removed from around the patch perimeter, edge (buffer) area to total area ratio and distance to road, railroad, neighbour and recognized feature.

**Lichen:** community with >50% of the vegetation composed of lichens.

**Linkage:** according to OMNR (1999), woodlands are considered to be continuous even if intersected by standard roads 21 m wide.

**Livestock:** historic livestock grazing was inferred from the condition of the ground layer flora and the tree species composition (such as abundance of Hop-hornbeam (*Ostrya virginiana*) or Hawthorn (*Crataegus* spp.), both species tolerant of livestock impacts). Clues to previous grazing influences include the presence of old fences and open-grown trees in the forest canopy. Other indications of livestock grazing in the last 5-15 years are damage and compaction around tree roots and evidence of old browse lines.

**Logging:** intensity was based on evidence of the most recent logging practices in the patch. Fuel wood cutting was assumed when occasional trees, especially dead or diseased individuals, had been removed. Evidence of selective cutting included a more intensive level of tree removal, signs of skidding operations, one or more trees species targeted, and so on. A diameter limit cut was indicated by heavy removal of large trees resulting in an even-aged sapling response. Time since logging was also estimated from clues such as the condition of stumps and the size of released saplings.

**Marsh:** wetland with a mineral or peat substrate inundated by nutrient rich water and characterized by emergent vegetation.

**Meadow:** open terrestrial communities characterized by grasses or forbs (not tall grass species), usually originating or maintained by cultural disturbances.

**Mean Coefficient of Conservatism (MCC):** based on the Floristic Quality Assessment System for Southern Ontario (Oldham *et al.* 1995) and on analysis of distribution in the London Subwatershed area (City of London 2000). It aids in measuring the overall quality of a site since the conservative coefficient describes the probability of finding a species in a particular habitat type or undisturbed habitat. It ranges from 0 (widespread) to 10 (found only in specialized habitats). For each patch a mean conservatism coefficient (MCC) was calculated from the conservatism coefficients for all native species recorded from the patch.

**Mean weediness:** Oldham *et al.* (1995) developed weediness coefficients for non-native species. Non-invasive adventive (non-native) species were given a score of -1. Highly invasive weedy species, which have a potential for invading natural habitats and displacing the native flora, were assigned a weediness coefficient of -3. Mean weediness was also calculated for all patches in this study.

**Mean wetness:** a coefficient of wetness was assigned to plant species by Oldham *et al.* (1995). Wetness scores range from 5 for obligate upland species to -5 for obligate wetland species. The mean coefficient of wetness for a site is an indicator of the overall soil moisture regime.

**Mesic:** soil moisture that is neither humid (hydric) nor very dry (xeric).

**Mid aged:** a seral community which has undergone natural thinning as a result of species interaction. May contain some climax species.

**Mineral substrate:** soil composed of unconsolidated mineral matter where the organic thickness (if present) is < 40 cm.

**Mixed forest:** both deciduous and coniferous species make up >25% of the canopy cover.

**Moist moisture regime:** mottles occur within 15cm or gleying within 45cm of mineral surface.

**Moisture regime:** estimated soil moisture regime based on plant species assemblages and soil characteristics. Can be Dry, Fresh, Moist or Wet.

**Mottle:** spots or blotches of different soil colors or shades of colors interspersed with the dominant soil color, usually the result of alternating aerobic and anaerobic soil conditions and indicative of poor drainage. The depth of mottles in soils of different types is a diagnostic indication of moisture regime.

**Native species:** species known to have existed on a site prior to European settlement.

**Natural community:** resulting from natural dynamics of vegetation development; not maintained as a result of anthropogenic disturbance regimes. Any anthropogenic influences either not of sufficient intensity or were long enough ago that the community has recovered some of its original composition and structure.



**Natural corridor:** includes hedgerows, streams, drainage features, plantations, valley and stream corridors, riparian zones, thickets, woodlands. A corridor may be interrupted by some cultural features such as bridges and culverts which still permit wildlife movement (City of London 2000).

**Noise:** persistent or repeated noise, for example highways, railways or manufacturing operations, was recorded. Occasional noise such as from farm machinery was not recorded.

**Occasional:** plants represented as scattered individuals throughout a community or one or more large clumps of many individuals in the polygon.

**Open cover:** wetland or terrestrial communities with < 10% tree cover and <25% shrub cover.

**Open water:** aquatic site with deep water (usually >2m) in lakes, ponds or rivers; community dominated by plankton; vascular vegetation cover <25%.

**Organic substrate:** soil dominated by deep organic deposits, usually >40 cm thick.

**Patch:** a vegetated unit with a discrete boundary that differs in appearance from its surroundings and is 0.5 ha in size or larger.

**Patch ID:** a unique identifier (number) for each patch, used to link most of the tables and GIS files in the database.

**Patch interior:** the proportion of interior to total area based on a 100 m interior edge zone. Definition is based on an analysis of subwatershed study patches in the City of London (2000).

**Phytosociological:** refers to a recognizable and repeatable community of interacting plant species that occurs across a landscape under the same conditions (City of London 2000).

**Pioneer:** a community which has invaded disturbed or newly created sites, and represents the early stages of either primary or secondary succession.

**Plankton:** plant community composed of free-floating microscopic organisms suspended in water. Some photosynthetic plankton, such as algae, occur in such large numbers that they form visible blooms on the water surface.

**Plantation:** a coniferous or deciduous treed community in which the majority of trees have been planted (City of London 2000).

**Pond:** a small body of water <2ha in area.

**Prairie:** an area of native grassland (tallgrass species present) controlled by a combination of moisture deficiency and fire.

**Rare:** plant species represented by only one to a few individuals (less than 3-5 individuals) or small clumps in the community.

**Recreation use:** signs of recreation use included tracks and recreational vehicle trails, signs of hunting (deer platforms, large numbers of spent cartridges), fire pits, empty bottles and drink cans, forts and so on.

**Remnant pond:** a pond that remains from an ecological community that was once much larger.

**Riffle:** shallow rapids where the water flows swiftly over completely or partially submerged obstructions to produce surface disturbances, but where standing waves are absent.

**River:** a large permanent watercourse (4<sup>th</sup> order or larger) with at least some permanent tributary streams.

**Riverine:** aquatic or wetland site associated with waters of a river or stream.

**Rolling land:** topography that exhibits a complex or repeated pattern of ridges, slopes and hollows, but no abrupt peaks or cliffs.

**Satellite community:** a group of small woodlands surrounding a larger woodland.

**Savanna:** treed community with 10 - 35% cover of coniferous or deciduous trees.

**Seepage:** the slow movement of water near the soil surface, often occurring above an impermeable subsoil layer or at the boundary between bedrock and unconsolidated material that is exposed at ground surface. Usually occurs downslope of the recharge area (City of London 2000).

**Shallow water:** aquatic or wetland sites with more or less permanent shallow water (usually <2 m); vegetation cover typically >25%, except in disturbed sites.

**Shrub cover:** vegetation communities that have <10% cover of trees and >25% cover of shrubs.

**Site:** categories consist of: open water, shallow water and surficial deposits.

**Slope:** protection of runoff processes and ground stability (erosion potential) for slopes > 10% as mapped in the slope stability mapping project (UTRCA 1996) and digital topographic layers (City of London GIS). Consideration is given to soil textures and type as described in the ELC manual (Lee *et al.* 1998).

**Species code:** plant species recorded using the NHIC 7- letter codes for species names.

**Stream:** a permanent or intermittent water course (3<sup>rd</sup> order or smaller).

**Sub-canopy:** vegetation layer under the canopy that does not receive direct sunlight.

**Sub-climax:** a secessional maturing community dominated primarily by climax species, but significant remnants of early seral stages may be present.

**Submerged:** aquatic community with plants that normally lie entirely beneath the water. Some species have flowering parts that break the water surface.

**Sugar bush operations:** light or occasional sugar bush operations include signs of historic evidence, tapping of occasional trees and instances where there was little recent evidence of selective cutting for sugar bush. Heavy impacts included the presence of a permanent network of sap tubes, and forest management towards the sugar bush operation.

**Surficial deposits:** sites on deep (>15cm) deposits of unconsolidated organic or mineral material.

**Surveyor(s):** initials of all members of the field crew responsible for filling in the data.

**Swamp:** a mineral rich wetland characterized by a cover (>25%) of deciduous or coniferous trees.

**System:** predominant form of ecosystem which can be either terrestrial, wetland or aquatic.

**Tableland:** an upland area that is essentially flat, on a more or less level plain that is not associated with any marked topographic feature.

**Terrace:** a relatively level bench that is created and occurs within river valleys but is above the reach of modern flood waters. Sometimes sharp or low breaks occur between individual terrace surfaces. These features are formed during a period of fluvial stability followed by a period of down-cutting by a stream. Typically represent historical shorelines or flood plains.

**Terrestrial system:** water table rarely above substrate surface; substrate of parent mineral material, mineral soil or bedrock; depth of accumulated organics < 40cm; standing or vernal pools of water.

**Thicket:** open terrestrial community characterized by < 10% tree cover and > 25% tall shrub (> 2m) cover.

**Threatened and Endangered Species:** identification, evaluation and listing of provincially endangered or threatened species as determined by the OMNR (City of London 2000).

**Topographic feature:** the dominant feature of the patch. Includes lacustrine, riverine, bottomland, terrace, valley slope, tableland, rolling land and bluff features.

**Tracks and trails:** roads, paths and trails made and maintained by human were considered disturbances.

Animal trails resulting from wildlife movement were not included. Faint trails are visible mostly as compacted and vegetation-free strips on ground surface. Well marked trails are usually actively managed, the trail itself is wider and some brush maybe cut at the side of the trail. Often there are signs of erosion on the trail itself and there may be a change in the trail-side vegetation. Tracks or roads are, or have been, used by vehicles. There is commonly a gap in the canopy above the track and distinct flora along the edge.

**Treed cover:** all vegetation patches containing tree cover >10% cover (City of London 2000).

**Understory:** vegetation layer intermediate in height between the canopy and the ground layer (*e.g.* shrub layer in the forest).

**Upland forest:** all forest that is found above regulated fill lines (City of London 2000).

**Valley slope:** sloping walls of a distinct valley associated with a river or stream. Site in a clearly incised river valley.

**Vegetation layers:** includes canopy, sub-canopy, understory and ground layers.

**Vegetation type:** the finest level of resolution in the ELC, identified through site and stand level research and inventory. Vegetation types are generated by grouping similar plant communities based on plant species composition and dominance, according to relative cover. The goal is to distill the natural diversity and variability of plant communities to a small number of relatively uniform vegetation units (City of London 2000).

**Vernal pool:** a pool appearing in the spring and/or fall.

**Watercourse:** has one or more of the following characteristics: a distinct channel in which water naturally flows at some time of the year (*i.e.* either permanent or intermittent flow), natural riparian vegetation or a type I - IV aquatic habitat (City of London 2000).

**Wet moisture regime:** mottles within 5cm of surface.

**Wetland:** defined by the Ontario Wetland Evaluation System Southern Manual 3<sup>rd</sup> edition (OMNR 1994) with a minimum community size of 0.5 ha.

**Wetland system:** water table above substrate surface; flooded bedrock, mineral or organic substrates, standing water >20% of ground coverage. Water levels fluctuate. Emergent herbaceous or woody vegetation cover >25%.

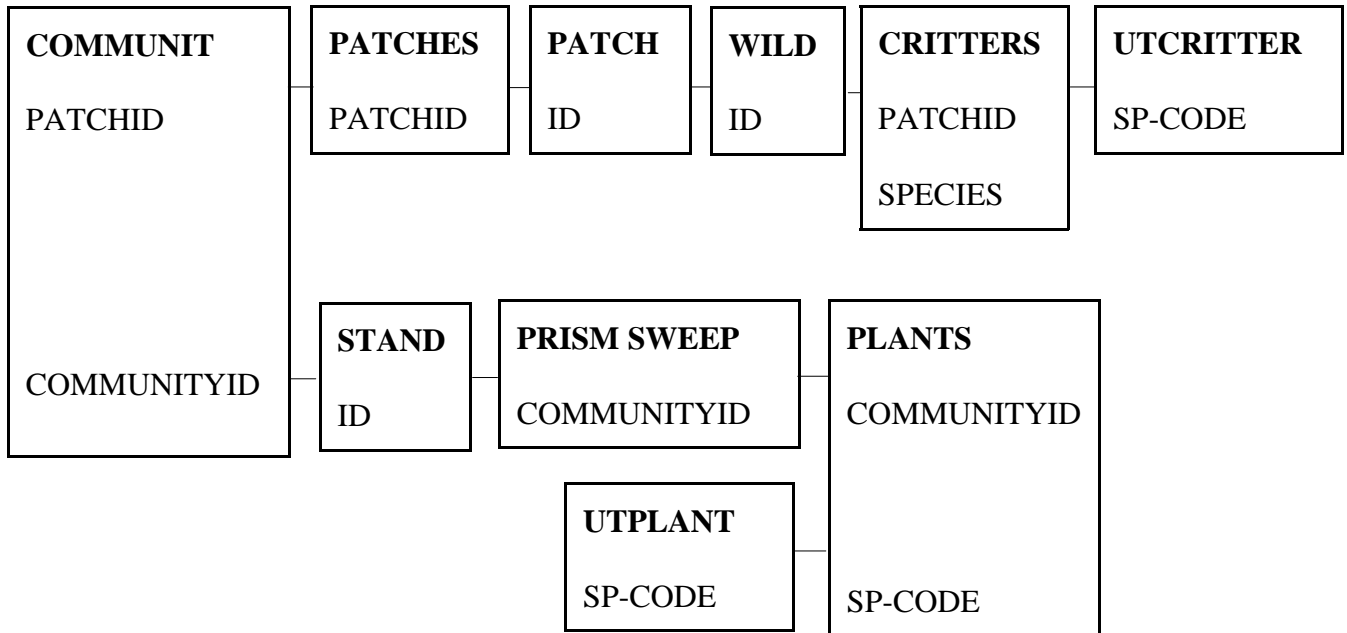
**Windstorm (blowdown):** evidence that trees had been uprooted or broken by wind. Does not include isolated, single tree falls or damage to small branches.

**Woodland:** a treed community with 35 - 60% cover of coniferous or deciduous trees (Lee *et al.* 1998, City of London Significant Woodlands Criteria, Provincial Policy Statement 1997, City of London Official Plan).

**Woodland cover:** percentage cover of woodlands within 2km radius circle from patch centroid (City of London 2000).

**Young:** a community which has not undergone a series of natural thinning. Plants are essentially growing as independent individuals rather than as members of a photo-sociological community.

**APPENDIX 4**  
**DATABASE RELATIONSHIP DIAGRAM**



## **APPENDIX 5**

### **Vascular Plants of Middlesex County**

#### **Species Codes and County Status**

T h e M i d d l e s e x N a t u r a l H e r i t a g e S t u d y

The following list gives the scientific name and species codes for the vascular plants of Middlesex County. Scientific names and status follow Oldham 1993a and are taken from his database. Some plant names were added from Bowles *et al.* 1994. Definition of column headings are as follows:

SP\_CODE: 7 letter code (ALL CAPS) based on first 3 letters of the genus and first 4 letters of the species name  
 SCI\_NAME: latin name (genus and species)  
 MIDD: status in Middlesex County (see below)  
 CC: conservatism coefficient  
 CW: coefficient of wetness  
 SRANK: NHIC ranking  
 WEED: weediness score  
 COM\_NAME: common name  
 PHYSIOG: type of plant (Native or Alien)

The symbols used in column MIDD (status in Middlesex County) are as follows:

R#: rare with # = 1-4 records  
 C: common  
 VU: very uncommon (5-9 records)  
 U: uncommon (10-15 records)  
 I: introduced  
 c: common introduction  
 r: rare introduction  
 u: uncommon introduction  
 X: status unknown

SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
ABIBALS	Abies balsamea	lr	5	-3			Balsam Fir	N Tree
ABUTHEO	Abutilon theophrasti	lc		4		-1	Velvet-leaf	A Forb
ACARHOM	Acalypha rhomboidea	C	0	3			Three-seeded Mercury	N Forb
ACENIGR	Acer saccharum	C	7	3			Black Maple	N Tree
ACEPLAT	Acer platanoides	lu		5		-3	Norway Maple	A Tree
ACERUBR	Acer rubrum	C	4	0			Red Maple	N Tree
ACESACC	Acer saccharum	C	4	3			Sugar Maple	N Tree
ACESACN	Acer saccharinum	C	5	-3			Silver Maple	N Tree
ACESPIC	Acer spicatum	VU	6	3			Mountain Maple	N Tree
ACHMILL	Achillea millefolium	C		3		-1	Yarrow	A Forb
ACIARVE	Acinos arvensis	lr		5		-1	Basil Balm	A Forb
ACOAMER	Acorus americanus	R2	8	-5			Sweet-flag	N Forb
ACOCALA	Acorus calamus	lr		-5		-1	European Sweet-flag	A Forb
ACTPACH	Actaea pachypoda	C	6	5			White Baneberry	N Forb
ACTRUBR	Actaea rubra	C	5	5			Red Baneberry	N Forb
ADIPEDA	Adiantum pedatum	C	7	1			Northern Maidenhair Fern	N Fern
ADLFUNG	Adlumia fungosa	R1	8	5			Climbing Fumitory	N Forb
AEGPODA	Aegopodium podagraria	lu		0		-3	Goutweed	A Forb
AESHIPP	Aesculus hippocastanum	lr		5		-1	Horse-chestnut	A Tree
AGANEPE	Agastache nepetoides	R3	8	3			Yellow Giant Hyssop	N Forb
AGATENU	Agalinis tenuifolia	VU	7	-3			Slender-leaved Agalinis	N Forb
AGRCRIS	Agropyron cristatum	lr		5		-1	Crested Wheat Grass	A Grass
AGRGIGA	Agrostis gigantea	lc		0		-2	Redtop	A Grass
AGRGITH	Agrostemma githago	lr		3		-1	Corn-cockle	A Forb
AGRGRYP	Agrimonia gryposepala	C	2	2			Agrimony	N Forb
AGRPARV	Agrimonia parviflora	R4	4	-1	S3		Small-flowered Agrimony	N Forb
AGRPERE	Agrostis perennans	VU	5	1			Autumn Bent Grass	N Grass



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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
AGRPUBE	Agrimonia pubescens	VU	7	5	S4		Hairy Agrimony	N Forb
AGRSCAB	Agrostis scabra	R1	6	0			Rough Hair Grass	N Grass
AGRSTOL	Agrostis stolonifera	C	0	-3			Creeping Bent Grass	N Grass
AILALTI	Ailanthus altissima	lr		5		-1	Tree-of-Heaven	A Tree
ALCROSE	Alcea rosea	lr		5		-1	Hollyhock	A Forb
ALLBURD	Allium burdickii	R1	9	3			Wild Leek	N Forb
ALLCANA	Allium canadense	U	8	3			Wild Garlic	N Forb
ALLSATI	Allium sativum	lr		5		-1	Garlic	A Forb
ALLSCHO	Allium schoenoprasum	lr	9	3			WILD CHIVES	N Forb
ALLVINE	Allium vineale	lr		3		-1	Field Garlic	A Forb
ALNGLUT	Alnus glutinosa	lu		-2		-3	Black Alder	A Tree
ALOAEQU	Alopecurus aequalis	R2	7	-5			Short-awned Foxtail	N Grass
ALOGENI	Alopecurus geniculatus	lr		-5		-1	Water Foxtail	A Grass
ALOPRAT	Alopecurus pratensis	lu		-3		-1	Meadow Foxtail	A Grass
ALYALYS	Alyssum alyssoides	lu		5		-1	Pale Alyssum	A Forb
AMAALBU	Amaranthus albus	lu		3		-1	Tumbling Pigweed	A Forb
AMABLIT	Amaranthus blitoides	lu		5		-1	Prostrate Pigweed	A Forb
AMAHYBR	Amaranthus hybridus	lu		5		-1	Smooth Pigweed	A Forb
AMAPOWE	Amaranthus powellii	lr		5		-1	Green Pigweed	A Forb
AMARETR	Amaranthus retroflexus	lc		2		-1	Redroot Pigweed	A Forb
AMATUBE	Amaranthus tuberculatus	R4	6	-5			Water-hemp	N Forb
AMBARTE	Ambrosia artemisiifolia	C	0	3			Common Ragweed	N Forb
AMBPSIL	Ambrosia psilostachya	lr		1		-1	Perennial Ragweed	A Forb
AMBTRIF	Ambrosia trifida	C	0	-1			Giant Ragweed	N Forb
AMEARBO	Amelanchier arborea	C	5	3			Juneberry	N Tree
AMELAEV	Amelanchier laevis	U	5	5			Smooth Juneberry	N Tree
AMESANG	Amelanchier sanguinea	R4	7	5	S4		Juneberry	N Shrub
AMESPIC	Amelanchier spicata	R1	7	3			Tall Juneberry	N Shrub
AMOFRUT	Amorpha fruticosa	lr	5	-4	S1		False Indigo	N Shrub
AMPBRAC	Amphicarpaea bracteata	C	4	0			Hog-peanut	N Forb
ANAARVE	Anagallis arvensis	lr		4		-1	Scarlet Pimpernel	A Forb
ANAMARG	Anaphalis margaritacea	R3	3	5			Pearly Everlasting	N Forb
ANDGERA	Andropogon gerardii	C	7	1			Big Blues tem	N Grass
ANDPOLI	Andromeda polifolia	R2	10	-5			Bog-Rosemary	N Shrub
ANDVIRG	Andropogon virginicus	U	5	1	S2S3		Broom-sedge	N Grass
ANECANA	Anemone canadensis	C	3	-3			Canada Anemone	N Forb
ANECYLI	Anemone cylindrica	VU	7	5			Long-fruited Thimbleweed	N Forb
ANEGRAV	Anethum graveolens	lr		5		-1	Dill	A Forb
ANEQUIN	Anemone quinquefolia	C	7	0			Wood Anemone	N Forb
ANETHAL	Anemonella thalictroides	R2	8	5	S4		Rue-anemone	N Forb
ANEVIRG	Anemone virginiana	C	4	5			Thimbleweed	N Forb
ANGATRO	Angelica atropurpurea	C	6	-5			Angelica	N Forb
ANTCOTU	Anthemis cotula	lu		3		-1	Stinking Mayweed	A Forb
ANTHOWE	Antennaria howellii	X	2	5			Pussytoes	N Forb
ANTNEGL	Antennaria neglecta	X	3	5			Pussytoes	N Forb
ANTODOR	Anthoxanthum odoratum	lr		3		-1	Sweet Vernal Grass	A Grass
ANTPARL	Antennaria parlinii	U	2	5			Plantain-leaved Everlasting	N Forb
ANTSYLV	Anthriscus sylvestris	lr		5		-2	Wild Chervil	A Forb
ANTTINC	Anthemis tinctoria	lh		5		-1	Yellow Chamomile	A Forb
APESPIC	Apera spica-venti	lr		5		-1	Wind Grass	A Grass
APIAMER	Apios americana	C	6	-3			Groundnut	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
APLHYEM	Aplectrum hyemale	Rh	10	1	S2		Putty-root	N Forb
APOANDR	Apocynum androsaemifolium	C	3	5			Spreading Dogbane	N Forb
APOCANN	Apocynum cannabinum	C	3	0			Indian Hemp	N Forb
AQUCANA	Aquilegia canadensis	C	5	1			Wild Columbine	N Forb
ARACANA	Arabis canadensis	R2	7	5	S4		Sickle-pod	N Forb
ARAGLAB	Arabis glabra	R2	4	5			Tower Mustard	N Forb
ARALAEV	Arabis laevigata	VU	5	5			Smooth Rock-cress	N Forb
ARALYRA	Arabis lyrata	R3	7	4	S4		Lyre-leaved Rock-cress	N Forb
ARANUDI	Aralia nudicaulis	C	4	3			Wild Sarsaparilla	N Forb
ARARACE	Aralia racemosa	C	7	5			Spikenard	N Forb
ARCLAPP	Arctium lappa	lr		5		-2	Great Burdock	A Forb
ARCMINU	Arctium minus	lc		5		-2	Common Burdock	A Forb
AREBULB	Arethusa bulbosa	R1	10	-5			Arethusa	N Forb
ARESERP	Arenaria serpyllifolia	lc		0		-2	Thyme-leaved Sandwort	A Forb
ARIDRAC	Arisaema dracontium	U	9	-3	S3		Green Dragon	N Forb
ARINECO	Aristida necopina	R1	8	5	S2		Three-awn	N Grass
ARITRIP	Arisaema triphyllum	C	5	-2			Jack-in-the-pulpit	N Forb
ARMLACU	Armoracia lacustris	R1	9	-5			Lake Cress	N Forb
ARMRUST	Armoracia rusticana	lr		0		-1	Horseradish	A Forb
AROMELA	Aronia melanocarpa	VU	7	-3			Chokeberry	N Shrub
ARRELAT	Arrhenatherum elatius	lu		3		-1	Tall Oat Grass	A Grass
ARTABSI	Artemisia absinthium	l		5		-1	Absinth	A Forb
ARTBIEN	Artemisia biennis	lr		-2		-1	Biennial Wormwood	A Forb
ARTCAMP	Artemisia campestris	R1	8	0			Sagewort W ormwood	N Forb
ARTPONT	Artemisia pontica	lr		5		-1	Roman W ormwood	A Shrub
ARTVULG	Artemisia vulgaris	lr		5		-1	Mugwort	A Forb
ASACANA	Asarum canadense	C	6	5			Wild-ginger	N Forb
ASCEXAL	Asclepias exaltata	VU	8	5			Poke Milkweed	N Forb
ASCINCA	Asclepias incarnata	C	6	-5			Swamp Milkweed	N Forb
ASCSULL	Asclepias sullivantii	R1	8	5	S2		Sullivant's Milkweed	N Forb
ASCSYRI	Asclepias syriaca	C	0	5			Com mon Milkweed	N Forb
ASCTUBE	Asclepias tuberosa	U	8	5			Butterfly-weed	N Forb
ASITRIL	Asimina triloba	R2	10	0	S3		Pawpaw	N Tree
ASPOFFI	Asparagus officinalis	lc		3		-1	Garden Asparagus	A Forb
ASPPLAT	Asplenium platyneuron	R4	6	3			Ebony Spleenwort	N Fern
ASTBORE	Aster borealis	R3	10	-5			Rush Aster	N Forb
ASTCORD	Aster cordifolius	C	5	5			Heart-leaved Aster	N Forb
ASTERIC	Aster ericoides	C	4	4			Heath Aster	N Forb
ASTLAEV	Aster laevis	C	7	5			Smooth Aster	N Forb
ASTLANC	Aster lanceolatus	C	3	-3			Panicled Aster	N Forb
ASTLATE	Aster lateriflorus	C	3	-2			Calico Aster	N Forb
ASTMACR	Aster macrophyllus	C	5	5			Large-leaved Aster	N Forb
ASTNEGL	Astragalus neglectus	R2	9	4			Cooper's Milk-vetch	N Forb
ASTNOVA	Aster novae-angliae	C	2	-3			New England Aster	N Forb
ASTOOLE	Aster oolentangiensis	R1	9	5			Azure Aster	N Forb
ASTPILO	Aster pilosus	U	4	2			Hairy Aster	N Forb
ASTPRAE	Aster praealtus	R1	8	-3	S1		Willow Aster	N Forb
ASTPUNI	Aster puniceus	X	6	-5			Purple-stemmed Aster	N Forb
ASTSCHR	Aster schreberi	R2	8	5	S2		Schreber's Aster	N Forb
ASTUMBE	Aster umbellatus	VU	6	-3			Flat-topped W hite Aster	N Forb
ASTUROP	Aster urophyllus	X	6	5			Arrow-leaved Aster	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
ATHFILI	Athyrium filix-femina	X	4	0			Northeastern Lady Fern	N Fern
ATHPYCN	Athyrium pycnocarpon	R1	10	1			Glade Fern	N Fern
ATHTHEL	Athyrium thelypteroides	X	8	0			Silvery Glade Fern	N Fern
ATRPATU	Atriplex patula	X	0	-2			Spearscale	N Forb
AURFLAV	Aureolaria flava	R2	10	5	S4		Yellow False Foxglove	N Forb
AVEFATU	Avena fatua	lr		5		-1	Wild Oats	A Grass
AVESATI	Avena sativa	lr		5		-1	Oats	A Grass
BARVIRG	Bartonia virginica	Rh	9	-4	S2		Virginian Bartonia	N Forb
BARVULG	Barbarea vulgaris	lc		0		-1	Winter Cress	A Forb
BECSYZI	Beckmannia syzigachne	Rh	4	-5			American Slough Grass	N Grass
BELPERE	Bellis perennis	lr		5		-1	English Daisy	A Forb
BERINCA	Berteroa incana	l		5		-3	Hoary Alyssum	A Forb
BERTHUN	Berberis thunbergii	l		4		-3	Japanese Barberry	A Shrub
BERVULG	Berberis vulgaris	l		3		-2	Common Barberry	A Shrub
BETALLE	Betula alleghaniensis	X	6	0			Yellow Birch	N Tree
BETPAPY	Betula papyrifera	X	2	2			Paper Birch	N Tree
BETPEND	Betula pendula	lr		-4		-3	European White Birch	A Tree
BETPUMI	Betula pumila	*	9	-5			Swamp Birch	N Shrub
BIDCERN	Bidens cernua	X	2	-5			Nodding Beggarticks	N Forb
BIDCORO	Bidens coronata	Rh	9	-5	S2		Southern Tickseed	N Forb
BIDDISC	Bidens discoidea	R2	6	-3	S3		Small Beggarticks	N Forb
BIDFRON	Bidens frondosa	X	3	-3			Devil's Beggarticks	N Forb
BIDTRIP	Bidens tripartita	X	4	-3			Beggarticks	N Forb
BIDVULG	Bidens vulgata	X	5	-3			Tall Beggarticks	N Forb
BOECYLI	Boehmeria cylindrica	X	4	-5			False Nettle	N Forb
BOTDIDI	Botrychium dissectum	X	6	0			Dissected Grape Fern	N Fern
BOTMATR	Botrychium matricariifolium	R2	7	3			Daisy-leaved Grape Fern	N Fern
BOTMULT	Botrychium multifidum	R2	6	3			Leather-leaved Grape Fern	N Fern
BOTONEI	Botrychium oneidense	R2	8	5			Blunt-lobed Grape Fern	N Fern
BOTRUGU	Botrychium rugulosum	R1	6	5	S2		Rugulose Grape Fern	N Fern
BOTVIRG	Botrychium virginianum	X	5	3			Rattlesnake Fern	N Fern
BRAEREC	Brachyelytrum erectum	X	7	5			Bearded Shorthusk	N Grass
BRAJUNC	Brassica juncea	l		5		-1	Indian Mustard	A Forb
BRANIGR	Brassica nigra	l		5		-1	Black Mustard	A Forb
BRARAPA	Brassica rapa	?		5		-1	Field Mustard	A Forb
BRASCHR	Brasenia schreberi	R2	7	-5			Water-shield	N Forb
BRIMEDI	Briza media	lr		0		-1	Quaking Grass	A Grass
BROBRIZ	Bromus briziformis	lh		5		-1	Quake Grass	A Grass
BROCILI	Bromus ciliatus	X	6	-3			Fringed Brome	N Grass
BROCOMM	Bromus commutatus	l		5		-1	Hairy Chess	A Grass
BROEREC	Bromus erectus	lr		5		-1	Upright Brome	A Grass
BROINER	Bromus inermis	lc		5		-3	Smooth Brome	A Grass
BROJAPO	Bromus japonicus	l		3		-1	Japanese Brome	A Grass
BROKALM	Bromus kalmii	R3	8	0	S4		Kalm's Brome	N Grass
BROLATI	Bromus latiglumis	U	7	-2			Tall Brome	N Grass
BROPUBE	Bromus pubescens	R2	7	3	S4		Canada Brome	N Grass
BROSECA	Bromus secalinus	l		5		-1	Cheat	A Grass
BROSQUA	Bromus squarrosus	lr		5		-1	Chess	A Grass
BROTECT	Bromus tectorum	l		5		-2	Downy Chess	A Grass
BUGARVE	Buglossoides arvensis	lr		5		-1	Corn Gromwell	A Forb
BULCAPI	Bulbostylis capillaris	lr	5	2	S3		Bulbostylis	N Sedge

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
CACPLAN	Cacalia plantaginea	R1	10	0	S3		Indian-plantain	N Forb
CALCANA	Calamagrostis canadensis	X	4	-5			Canada Blue-joint	N Grass
CALEPIG	Calamagrostis epigejos	lr		0		-1	Feathertop	A Grass
CALLONG	Calamovilfa longifolia	lr	10	5	S3		Long-leaved Reed Grass	N Grass
CALPALU	Caltha palustris	C	5	-5			Marsh-marigold	N Forb
CALSEPI	Calystegia sepium	X	2	0			Hedge Bindweed	N Forb
CALSTRI	Calamagrostis stricta	VU	8	-4	S5		Northern Reed Grass	N Grass
CALTUBE	Calopogon tuberosus	R4	9	-5			Grass-pink	N Forb
CAMAMER	Campanula americana	R2	8	0	S4		Tall Bellflower	N Forb
CAMAPAR	Campanula aparinoides	VU	7	-5			Marsh-bellflower	N Forb
CAMMICR	Camelina microcarpa	l		5		-1	Small-seeded False Flax	A Forb
CAMRADI	Campsis radicans	lr	3	0	S1		Trumpet Creeper	N Vine
CAMRAPU	Campanula rapunculoides	lr		5		-2	Creeping Bellflower	A Forb
CAMROTU	Campanula rotundifolia	VU	7	1			Harebell	N Forb
CANSATI	Cannabis sativa	lr		0		-1	Marijuana	A Forb
CAPBURS	Capsella bursa-pastoris	lc		1		-1	Shepherd's-purse	A Forb
CARALBU	Carex albursina	C	7	5			White-bear Sedge	N Sedge
CARALOP	Carex alopecoidea	U	6	-4			Foxtail Sedge	N Sedge
CARAQUA	Carex aquatilis	VU	7	-5			Water Sedge	N Sedge
CARATHE	Carex atherodes	R3	6	-5			Slough Sedge	N Sedge
CARATLA	Carex atlantica	R1	10	-3	S1		Prickly Bog Sedge	N Sedge
CARAURE	Carex aurea	C	4	-4			Golden-fruit Sedge	N Sedge
CARBEBB	Carex bebbii	C	3	-5			Bebb's Sedge	N Sedge
CARBLAN	Carex blanda	C	3	0			Woodland Sedge	N Sedge
CARBREV	Carex brevior	R3	7	0			Short-headed Sedge	N Sedge
CARBROM	Carex bromoides	C	7	-4			Brome-like Sedge	N Sedge
CARBRUN	Carex brunnescens	R2	7	-3			Brownish Sedge	N Sedge
CARCANE	Carex canescens	VU	7	-5			Hoary Sedge	N Sedge
CARCARE	Carex careyana	VU	10	5	S2		Carey's Sedge	N Sedge
CARCARO	Carpinus caroliniana	C	6	0			Blue-beech	N Tree
CARCEPD	Carex cephaloidea	U	6	2			Thin-leaf Sedge	N Sedge
CARCEPH	Carex cephalophora	C	5	3			Oval-leaf Sedge	N Sedge
CARCHOR	Carex chordorrhiza	R1	10	-5			Creeping Sedge	N Sedge
CARCOMM	Carex communis	C	6	5			Common Sedge	N Sedge
CARCOMO	Carex comosa	C	5	-5			Bearded Sedge	N Sedge
CARCONO	Carex conoidea	R1	9	2	S3		Field Sedge	N Sedge
CARCORD	Carya cordiformis	X	6	0			Bitternut Hickory	N Tree
CARCRAW	Carex crawei	R1	10	-3			Crawe's Sedge	N Sedge
CARCRIN	Carex crinita	C	6	-4			Fringed Sedge	N Sedge
CARCRIS	Carex cristatella	C	3	-4			Crested Sedge	N Sedge
CARCRYP	Carex cryptolepis	R1	7	-5			Northeastern Sedge	N Sedge
CARDEWE	Carex deweyana	C	6	4			Short-scale Sedge	N Sedge
CARDIAN	Carex diandra	R4	7	-5			Lesser Panicked Sedge	N Sedge
CARDIGI	Carex digitalis	U	7	5			Finger Sedge	N Sedge
CARDISP	Carex disperma	VU	8	-5			Soft-leaf Sedge	N Sedge
CAREBUR	Carex eburnea	VU	6	4			Bristle-leaf Sedge	N Sedge
CAREMOR	Carex emoryi	U	8	-5	S3		Emory's Sedge	N Sedge
CARFLAC	Carex flacca	lh		0		-1	Sedge	A Sedge
CARFLAV	Carex flava	C	5	-5			Yellow Sedge	N Sedge
CARFORM	Carex formosa	R4	6	-2	S3		Handsome Sedge	N Sedge
CARGARB	Carex garberi	R1	10	-3			Elk Sedge	N Sedge

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
CARGLAB	Carya glabra	R1	9	3	S2		Sweet Pignut Hickory	N Tree
CARGRAN	Carex granularis	C	3	-4			Meadow Sedge	N Sedge
CARGRAY	Carex grayi	U	8	-4			Asa Gray's Sedge	N Sedge
CARGRIS	Carex grisea	C	8	1			Sedge	N Sedge
CARHIRF	Carex hirtifolia	C	5	5			Hairy Sedge	N Sedge
CARHIRS	Carex hirsutella	R1		3	S2	-1	Sedge	A Forb
CARHITC	Carex hitchcockiana	U	6	5			Hitchcock's Sedge	N Sedge
CARHYST	Carex hystericina	C	5	-5			Hybrid Sedge	N Sedge
CARHYST	Carex hystericina	C	5	-5			Porcupine Sedge	N Sedge
CARINTE	Carex interior	C	6	-5			Inland Sedge	N Sedge
CARINTU	Carex intumescens	C	6	-4			Bladder Sedge	N Sedge
CARJAME	Carex jamesii	U	8	5	S3		James' Sedge	N Sedge
CARLACU	Carex lacustris	C	5	-5			Lake Sedge	N Sedge
CARLAEV	Carex laevivaginata	U	8	-5	S4		Smooth-sheathed Sedge	N Sedge
CARLANU	Carex lanuginosa	C	4	-5			Woolly Sedge	N Sedge
CARLASI	Carex lasiocarpa	R4	8	-5			Hairy-fruited Sedge	N Sedge
CARLAXC	Carex laxiculmis	U	7	5	S4		Loose-stemmed Sedge	N Sedge
CARLAXI	Carex laxiflora	C	5	0			Distant-flowered Sedge	N Sedge
CARLEPN	Carex leptoneuria	U	5	0			Finely-nerved Sedge	N Sedge
CARLEPT	Carex leptalea	U	8	-5			Bristle-stalked Sedge	N Sedge
CARLIMO	Carex limosa	R2	10	-5			Sedge	N Sedge
CARLUPF	Carex lupuliformis	R1	10	-4	S1		Hop-like Sedge	N Sedge
CARLUPU	Carex lupulina	C	6	-5			Hop Sedge	N Sedge
CARLURI	Carex lurida	R1	6	-5			Sallow Sedge	N Sedge
CARMEAD	Carex meadii	R2	9	0	S2		Mead's Sedge	N Sedge
CARMOLE	Carex molesta	U	5	2	S4		Troublesome Sedge	N Sedge
CARMUSK	Carex muskingumensis	R1	9	-5	S2		Muskingum Sedge	N Sedge
CARNORM	Carex normalis	VU	6	-3			Right-angled Sedge	N Sedge
CAROVAT	Carya ovata	X	6	3			Shagbark Hickory	N Tree
CARPALL	Carex pallescens	R4	5	3			Pale Sedge	N Sedge
CARPARR	Carex parryana	Ir		-2		-1	Parry's Sedge	A Sedge
CARPAUC	Carex pauciflora	?	10	-5			Few-flowered Sedge	N Sedge
CARPECK	Carex peckii	R3	6	5			Peck's Sedge	N Sedge
CARPEDU	Carex pedunculata	C	5	5			Peduncled Sedge	N Sedge
CARPENS	Carex pensylvanica	C	5	5			Pennsylvania Sedge	N Sedge
CARPLAN	Carex plantaginea	C	7	5			Plantain-leaved Sedge	N Sedge
CARPRAE	Carex praegracilis	lu		-3		-1	Very Slender Sedge	A Sedge
CARPRAI	Carex prairea	R3	7	-4			Prairie Sedge	N Sedge
CARPRAS	Carex prasina	VU	10	-5	S3		Drooping Sedge	N Sedge
CARPROJ	Carex projecta	U	5	-4			Spreading Sedge	N Sedge
CARPSEU	Carex pseudo-cyperus	U	6	-5			Cyperus-like Sedge	N Sedge
CARRADI	Carex radiata	C	4	5			Sedge	N Sedge
CARRICH	Carex richardsonii	R1	9	5	S4		Richardson's Sedge	N Sedge
CARROSE	Carex rosea	C	5	5			Sedge	N Sedge
CARRUGO	Carex rugosperma	R1	7	5			Wrinkled-seeded Sedge	N Sedge
CARSCAB	Carex scabrata	U	8	-5			Rough Sedge	N Sedge
CARSCHW	Carex schweinitzii	R1	9	-5			Schweinitz's Sedge	N Sedge
CARSPAR	Carex sparganioides	U	5	0			Bur-reed Sedge	N Sedge
CARSPIC	Carex spicata	lc		5		-1	Spiked Sedge	A Sedge
CARSPRE	Carex sprengei	U	6	0			Sprengel's Sedge	N Sedge

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
CARSTER	Carex sterilis	R2	10	-5			Sterile Sedge	N Sedge
CARSTIP	Carex stipata	C	3	-5			Awl-fruited Sedge	N Sedge
CARSTRI	Carex stricta	C	4	-5			Tussock Sedge	N Sedge
CARSUBE	Carex suberecta	R1	10	-5	S1		Sedge	N Sedge
CARSWAN	Carex swanii	R2	7	3	S3		Swan's Sedge	N Sedge
CARSYLV	Carex sylvatica	lr		-1		-1	Wood Sedge	A Sedge
CARTENE	Carex tenera	U	4	-1			Slender Sedge	N Sedge
CARTENU	Carex tenuiflora	Rh	10	-5			Sparse-flowered Sedge	N Sedge
CARTETA	Carex tetanica	R4	8	-3	S2		Rigid Sedge	N Sedge
CARTORT	Carex torta	Rh	10	-5	SX		Sedge	N Sedge
CARTRIB	Carex tribuloides	U	5	-4			Blunt-broom Sedge	N Sedge
CARTRIC	Carex trichocarpa	U	8	-5	S2		Hairy-fruited Sedge	N Sedge
CARTRIS	Carex trisperma	R4	9	-5			Three-fruited Sedge	N Sedge
CARTUCK	Carex tuckermanii	VU	7	-5			Tuckerman's Sedge	N Sedge
CARUMBE	Carex umbellata	R2	7	5			Umbellate Sedge	N Sedge
CARUTRI	Carex utriculata	U	7	-5			Beaked Sedge	N Sedge
CARVESI	Carex vesicaria	R1	7	-5			Inflated Sedge	N Sedge
CARVIRI	Carex viridula	VU	5	-5			Greenish Sedge	N Sedge
CARVULP	Carex vulpinoidea	C	3	-5			Fox Sedge	N Sedge
CARWOOD	Carex woodii	C	6	0	S4		Wood's Sedge	N Sedge
CARXCOP	Carex x copulata	VU	7				(C. digitalis X C. laxiculmis)	N Sedge
CASCOCC	Castilleja coccinea	R1	9	0			Indian Paintbrush	N Forb
CASDENT	Castanea dentata	VU	8	5	S3		American Chestnut	N Tree
CAUTHAL	Caulophyllum thalictroides	X	6	5			Blue Cohosh	N Forb
CEAMER	Ceanothus americanus	R2	7	5			New Jersey Tea	N Shrub
CELOCCI	Celtis occidentalis	X	8	1			Common Hackberry	N Tree
CELSCAN	Celastrus scandens	X	3	3			Climbing Bittersweet	N Vine
CELTENU	Celtis tenuifolia	R1	10	5	S2		Dwarf Hackberry	N Shrub
CENERYT	Centaurium erythraea	lr		-4		-1	Centaury	A Forb
CENJACE	Centaurea jacea	l		5		-1	Brown Knapweed	A Forb
CENLONG	Cenchrus longispinus	R3	3	5	S4		Long-spined Sandbur	N Grass
CENMACU	Centaurea rhenana	l		5		-3	Spotted Knapweed	A Forb
CENPULC	Centaurium pulchellum	lr		4		-1	Beautiful Centaury	A Forb
CEPOCCI	Cephalanthus occidentalis	X	7	-5			Buttonbush	N Shrub
CERARVE	CERASTIUM ARVENSE	lvu		5		-1	FIELD CHICKWEED	A Forb
CERCANA	Cercis canadensis	lr	8	3	SX		Redbud	N Tree
CERDEME	Ceratophyllum demersum	VU	4	-5			Common Coontail	N Forb
CERFONT	Cerastium fontanum	lc		3		-1	Mouse-eared Chickweed	A Forb
CERGLOM	Cerastium glomeratum	lr		5		-1	Chickweed	A Forb
CERNUTA	Cerastium nutans	R1	4	2			Nodding Chickweed	N Forb
CERSEMI	Cerastium semidecandrum	lu		5		-1	Spring Mouse-eared Chickweed	A Forb
CHACALY	Chamaedaphne calyculata	R2	9	-5			Leatherleaf	N Shrub
CHAGLYP	Chamaesyce glyptosperma	l		5		-1	Engraved Spurge	A Forb
CHAMACU	Chamaesyce maculata	l		4		-1	Hairy-fruited Spurge	A Forb
CHAMINU	Chaenorrhinum minus	lc		5		-1	Dwarf Snapdragon	A Forb
CHANUTA	Chamaesyce nutans	VU	0	3			Eyebane	N Forb
CHASERP	Chamaesyce serpyllifolia	lr		5		-1	Thyme-leaved Spurge	A Forb
CHAVERM	Chamaesyce vermiculata	X	0	5			Hairy-stemmed Spurge	N Forb
CHEALBU	Chenopodium album	l		1		-1	Lamb's-quarters	A Forb
CHEBOTR	Chenopodium botrys	lr		4		-1	Jerusalem-oak	A Forb
CHECAPI	Chenopodium capitatum	R2	4	5			Strawberry Blite	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
CHEGLAB	Chelone glabra	X	7	-5			Turtlehead	N Forb
CHEGLAU	Chenopodium glaucum	I		-3		-1	Oak-leaved Goosefoot	A Forb
CHEGLAU	Chenopodium glaucum	I		-3		-1	Oak-leaved Goosefoot	A Forb
CHEMAJU	Chelidonium majus	I		5		-3	Celandine	A Forb
CHESIMP	Chenopodium simplex	VU	0	5			Maple-leaved Goosefoot	N Forb
CHIUMBE	Chimaphila umbellata	R2	8	5			Pipsissewa	N Forb
CHRAMER	Chrysosplenium americanum	X	8	-5			Golden Saxifrage	N Forb
CICBULB	Cicuta bulbifera	X	5	-5			Bulb-bearing Water-hemlock	N Forb
CICINTY	Cichorium intybus	Ic		5		-1	Chicory	A Forb
CICMACU	Cicuta maculata	X	6	-5			Spotted Water-hemlock	N Forb
CINARUN	Cinna arundinacea	X	7	-3	S4		Stout Wood Grass	N Grass
CINLATI	Cinna latifolia	R2	7	-4			Drooping Woodreed	N Grass
CIRALPI	Circaea alpina	X	6	-3			Small Enchanter's-nightshade	N Forb
CIRARVE	Cirsium arvense	Ic		3		-1	Canada Thistle	A Forb
CIRDISC	Cirsium discolor	R1	9	5	S5		Field Thistle	N Forb
CIRLUTE	Circaea lutetiana	X	3	3			Enchanter's-nightshade	N Forb
CIRMUTI	Cirsium muticum	X	8	-5			Swamp Thistle	N Forb
CIRVULG	Cirsium vulgare	I		4		-1	Bull Thistle	A Forb
CLACARO	Claytonia caroliniana	R3	7	3			Spring Beauty	N Forb
CLAMARI	Cladium mariscoides	R1	9	-5			Twig-rush	N Sedge
CLAVIRG	Claytonia virginica	C	5	3			Narrow-leaved Spring Beauty	N Forb
CLEHASS	Cleome hassleriana	Ir		5		-1	Spider-flower	A Forb
CLEVIRG	Clematis virginiana	C	3	0			Virgin's-bower	N Vine
CLIBORE	Clintonia borealis	X	7	-1			Bluebead Lily	N Forb
CLIVULG	Clinopodium vulgare	X	4	5			Wild Basil	N Forb
CLLPALU	Calla palustris	VU	8	-5			Wild Calla	N Forb
CLTPALT	Callitriche palustris	R1	6	-5			Common Water-starwort	N Forb
COEVIRI	Coeloglossum viride	R1	8	0			Long-bracted Green Orchid	N Forb
COLCANA	Collinsonia canadensis	X	8	0			Horsebalm	N Forb
COLVERN	Collinsia verna	Rh	10	3	SX		Blue-eyed Mary	N Forb
COMCOMM	Commelina communis	Ir		0		-1	Day-flower	A Forb
COMPERE	Comptonia peregrina	R1	7	5			Sweet-fern	N Shrub
COMUMBE	Comandra umbellata	U	6	3			Bastard-toadflax	N Forb
CONAMER	Conopholis americana	R4	9	5			Squawroot	N Forb
CONARVE	Convolvulus arvensis	I		5		-1	Field Bindweed	A Forb
CONCANA	Conyza canadensis	C	0	1			Horseweed	N Forb
CONCHIN	Conioselinum chinense	R1	10	-5	S3		Hemlock Parsley	N Forb
CONORIE	Conringia orientalis	Ir		5		-1	Hare's-ear Mustard	A Forb
COPTRIF	Coptis trifolia	X	7	-3			Goldthread	N Forb
CORALTE	Cornus alternifolia	X	6	5			Alternate-leaved Dogwood	N Tree
CORAMER	Corylus americana	C	5	4			American Hazel	N Shrub
CORAMOM	Cornus amomum	X	5	-4			Silky Dogwood	N Shrub
CORCANA	Cornus canadensis	X	7	0			Bunchberry	N Shrub
CORCORN	Corylus cornuta	X	5	5			Beaked Hazel	N Shrub
CORFLOR	Cornus florida	X	7	4	S4S3		Flowering Dogwood	N Tree
CORFOEM	Cornus foemina	X	2	-2			Grey Dogwood	N Shrub
CORGRAN	Coreopsis grandiflora	Ir		5		-1	Large-flowered Coreopsis	A Forb
CORLANC	Coreopsis lanceolata	?	5	3	S2		Lance-leaved Coreopsis	N Forb
CORMACU	Corallorhiza maculata	X	7	4			Spotted Coral-root	N Forb
CORRUGO	Cornus rugosa	X	6	5			Round-leaved Dogwood	N Shrub
CORSTOL	Cornus stolonifera	C	2	-3			Red-osier Dogwood	N Shrub

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CORSTRI	Corallorhiza striata	?	7	4			Striped Coral-root	N Forb
CORTRIF	Corallorhiza trifida	R1	7	-2			Early Coral-root	N Forb
CORTRIP	Coreopsis tripteris	R2	9	0	S2		Tall Coreopsis	N Forb
CORVARI	Coronilla varia	I		5		-2	Crown-vetch	A Forb
CRAPIO	Crataegus apiomorpha	R2	4	5			Hawthorn	N Tree
CRAATER	Crataegus ater	R1	4	5			Hawthorn	N Tree
CRABRAI	Crataegus brainerdii	R3	4	5	S2		Brainerd's Hawthorn	N Tree
CRACALP	Crataegus calpodendron	X	4	5			Hawthorn	N Tree
CRACHRY	Crataegus chrysoarpa	X	4	5			Hawthorn	N Tree
CRACOMP	Crataegus compacta	X	4	5			Compact Hawthorn	N Tree
CRACORU	Crataegus corusca	R1	4	5	S3		Hawthorn	N Tree
CRACRUS	Crataegus crus-galli	VU	4	0			Cocksbur Hawthorn	N Tree
CRADISS	Crataegus dissona	R3	4	5	S2		Hawthorn	N Tree
CRADODG	Crataegus dodgei	U	4	5	S2		Hawthorn	N Tree
CRAFLAB	Crataegus flabellata	R1	4	5			Fan-shaped Hawthorn	N Tree
CRAHOLM	Crataegus holmesiana	X	4	5			Holmes' Hawthorn	N Tree
CRALUMA	Crataegus lumaria	R3	4	5	S2		Hawthorn	N Tree
CRAMACR	Crataegus macracantha	X	4	5			Hawthorn	N Tree
CRAMACS	Crataegus macrosperma	X	4	5			Variable Hawthorn	N Tree
CRAMARG	Crataegus margaretta	R1	4	5	S1		Hawthorn	N Tree
CRAMOLL	Crataegus mollis	X	4	-2			Downy Hawthorn	N Tree
CRAMONO	Crataegus monogyna	I		5		-1	English Hawthorn	A Tree
CRAPEDI	Crataegus pedicellata	R3	4	5			Pedicelled Hawthorn	N Tree
CRAPERJ	Crataegus perjucunda	R3	4	5	S2		Hawthorn	N Tree
CRAPRIN	Crataegus pringlei	X	4	5			Hawthorn	N Tree
CRAPRUI	Crataegus pruinosa	X	4	5			Waxy-fruited Hawthorn	N Tree
CRAPUNC	Crataegus punctata	C	4	5			Dotted Hawthorn	N Tree
CRASCAB	Crataegus scabrida	R1	4	5			Hawthorn	N Tree
CRASCHU	Crataegus schuettei	X	4	5			Hawthorn	N Tree
CRASUBO	Crataegus suborbiculata	VU	4	5	S2		Roundish-leaved Hawthorn	N Tree
CRASUCC	Crataegus succulenta	X	4	5			Hawthorn	N Tree
CRASYLV	Crataegus sylvestris	R2	4	5			Hawthorn	N Tree
CRATAE.	Crataegus sp.	X	4	5			Hawthorn species	N Tree
CRATENA	Crataegus tenax	X	4	5			Hawthorn	N Tree
CRDBULB	Cardamine bulbosa	X	8	-5	S4		Spring Cress	N Forb
CRDDOUG	Cardamine douglassii	X	7	-3	S4		Purple Spring Cress	N Forb
CRDPENS	Cardamine pensylvanica	X	6	-4			Pennsylvania Bitter-cress	N Forb
CRECAPI	Crepis capillaris	I		5		-1	Hawk's-beard	A Forb
CRETECT	Crepis tectorum	I		5		-1	Narrow-leaved Hawk's-beard	A Forb
CRYCANA	Cryptotaenia canadensis	X	5	0	S5		Honewort	N Forb
CRYSCHO	Crypsis schoenoides	Ir		3		-1	Crypsis	A Grass
CUSCAMP	Cuscuta campestris	Ih	2	5	S2		Dodder sp.	N Forb
CUSEPIT	Cuscuta epithimum	Ih		5		-1	Clover Dodder	A Forb
CUSGRON	Cuscuta gronovii	C	4	-3			Common Dodder	N Forb
CYCATRI	Cycloloma atriplicifolium	R3	1	3			Winged Pigweed	N Forb
CYNCRIS	Cynosurus cristatus	Ir		0		-1	Crested Dogtail	A Grass
CYNOFFI	Cynoglossum officinale	I		5		-1	Hound's-tongue	A Forb
CYPACAU	Cypripedium acaule	R3	7	-3			Pink Moccasin Flower	N Forb
CYPARIE	Cypripedium arietinum	Rh	10	-4	S3		Ram's-head Lady's-slipper	N Forb
CYPBIPA	Cyperus bipartitus	U	4	-4			Shining Cyperus	N Sedge
CYPCALP	Cypripedium calceolus	X	5	-1			Large Yellow Lady's-slipper	N Forb



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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
CYPCALR	Cypripedium calceolus	X	7	-1			Small Yellow Lady's-slipper	N Forb
CYPDIAN	Cyperus diandrus	Rh	6	-4			Low Cyperus	N Sedge
CYPERYT	Cyperus erythrorhizos	R2	6	-5	S3		Red-rooted Cyperus	N Sedge
CYPESCU	Cyperus esculentus	C	1	-3			Yellow Nut Sedge	N Sedge
CYPLUPU	Cyperus lupulinus	VU	7	4			Slender-stemmed Cyperus	N Sedge
CYPODOR	Cyperus odoratus	VU	5	-3	S4		Coarse Cyperus	N Sedge
CYPREGI	Cypripedium reginae	VU	7	-4			Showy Lady's-slipper	N Forb
CYPSTRI	Cyperus strigosus	VU	5	-3			Straw-colored Cyperus	N Sedge
CYSBULB	Cystopteris bulbifera	X	5	-2			Bulblet Fern	N Fern
CYSPROT	Cystopteris protusa	R3	9	5	S2		Creeping Fragile Fern	N Fern
CYSTENU	Cystopteris tenuis	X	6	5			Mackay's Fragile Fern	N Fern
DACGLOM	Dactylis glomerata	lc		3		-1	Orchard Grass	A Grass
DANSPIC	Danthonia spicata	X	5	5			Poverty Oat Grass	N Grass
DATSTRA	Datura stramonium	l		5		-1	Jimsonweed	A Forb
DAUCARO	Daucus carota	lc		5		-2	Wild Carrot	A Forb
DECVERT	Decodon verticillatus	R4	7	-5			Swamp Loosestrife	N Shrub
DENPUNC	Dennstaedtia punctilobula	?		6			Hay-scented Fern	N Fern
DESCANA	Desmodium canadense	X	5	1			Showy Tick-trefoil	N Forb
DESCANE	Desmodium canescens	R1	10	5	S2		Tick-trefoil	N Forb
DESCUSP	Desmodium cuspidatum	R1	10	5	S4		Tick-trefoil	N Forb
DEGLUT	Desmodium glutinosum	X	6	5			Pointed-leaved Tick-trefoil	N Forb
DESILLI	Desmodium illinoense	Rh	10	5	SX		Tick-trefoil	N Forb
DESNUDI	Desmodium nudiflorum	VU	7	5			Naked-flowered Tick-trefoil	N Forb
DESPAND	Desmodium paniculatum	X	6	3			Tick-trefoil	N Forb
DESPANI	Desmodium paniculatum	R?	8	3			Tick-trefoil	N Forb
DESROTU	Desmodium rotundifolium	R3	10	5	S2		Prostrate Tick-trefoil	N Forb
DESSOPH	Descurainia sophia	lr		5		-1	Flixweed	A Forb
DIAARME	Dianthus armeria	l		5		-1	Deptford Pink	A Forb
DICCANA	Dicentra canadensis	X	7	5			Squirrel-corn	N Forb
DICCUCU	Dicentra cucullaria	X	6	5			Dutchman's-breeches	N Forb
DIELONI	Diervilla lonicera	X	5	5			Bush-honeysuckle	N Shrub
DIGCOGN	Digitaria cognata	R3	6	5	S1		Fall Witch Grass	N Grass
DIGISCH	Digitaria ischaemum	l		3		-1	Smooth Crab Grass	A Grass
DIGSANG	Digitaria sanguinalis	l		3		-1	Large Crab Grass	A Grass
DIOQUAT	Dioscorea quaternata	X	7	1			Wild Yam	N Vine
DIPFULL	Dipsacus fullonum	lc		5		-1	Teasel	A Forb
DIPLACI	Dipsacus laciniatus	lr		5		-1	Cut-leaved Teasel	A Forb
DIPMURA	Diplotaxis muralis	lr		5		-1	Wall Rocket	A Forb
DIPTENU	Diplotaxis tenuifolia	l		5		-3	Narrow-leaved Wall Rocket	A Forb
DIRPALU	Dirca palustris	X	7	0			Leatherwood	N Shrub
DISLANU	Disporum lanuginosum	R3	8	5	S3		Yellow Mandarin	N Forb
DRAREPT	Draba reptans	Rh	9	5	S2		Carolina Whitlow-grass	N Forb
DROINTE	Drosera intermedia	R1	9	-5			Spatulate-leaved Sundew	N Forb
DROROTU	Drosera rotundifolia	VU	7	-5			Round-leaved Sundew	N Forb
DRYCART	Dryopteris carthusiana	X	5	-2			Spinulose Wood Fern	N Fern
DRYCLIN	Dryopteris clintoniana	X	7	-4			Clinton's Wood Fern	N Fern
DRYCRIS	Dryopteris cristata	X	7	-5			Crested Wood Fern	N Fern
DRYGOLD	Dryopteris goldiana	R2	10	0			Goldie's Wood Fern	N Fern
DRYINTE	Dryopteris intermedia	VU	5	0			Glandular Wood Fern	N Fern
DRYMARG	Dryopteris marginalis	X	5	3			Marginal Wood Fern	N Fern
DULARUN	Dulichium arundinaceum	VU	7	-5			Three-way Sedge	N Sedge

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
ECHCRUS	Echinochloa crusgalli	lc		-3		-1	Barnyard Grass	A Grass
ECHLOBA	Echinocystis lobata	X	3	-2			Wild Cucumber	N Vine
ECHMICR	Echinochloa microstachya	X	6	-2			Barnyard Grass	N Grass
ECHMURI	Echinochloa muricata	R2	4	-5			Barnyard Grass	N Grass
ECHVULG	Echium vulgare	lc		5		-2	Viper's-bugloss	A Forb
ELAUMBE	Elaeagnus umbellata	lr		3		-3	Autumn-olive	A Shrub
ELEACIC	Eleocharis acicularis	VU	5	-5			Needle Spike-rush	N Sedge
ELECOMP	Eleocharis compressa	R2	8	-3			Flat-stemmed Spike-rush	N Sedge
ELEELLI	Eleocharis elliptica	R4	7	-3			Elliptic Spike-rush	N Sedge
ELEERYT	Eleocharis erythropoda	C	4	-5			Red-based Spike-rush	N Sedge
ELEINDI	Eleusine indica	lr		3		-1	Goose Grass	A Grass
ELEINTE	Eleocharis intermedia	VU	7	-3	S4		Intermediate Spike-rush	N Sedge
ELEOBTU	Eleocharis obtusa	C	5	-5			Blunt Spike-rush	N Sedge
ELEOLIV	Eleocharis olivacea	R2	8	-5	S4		Olive-fruited Spike-rush	N Sedge
ELEOVAT	Eleocharis ovata	R1	8	-5			Spike-rush	N Sedge
ELESMAL	Eleocharis smallii	R2	6	-5			Small's Spike-rush	N Sedge
ELOCANA	Elodea canadensis	X	4	-5			Canada Water-weed	N Forb
ELYCANA	Elymus canadensis	X	8	1			Canada Wild-rye	N Grass
ELYREPE	Elymus repens	lc		3		-3	Quack Grass	A Grass
ELYRIPA	Elymus riparius	R4	7	-3			River Bank Wild-rye	N Grass
ELYTRAC	Elymus trachycaulus	R3	7	0			Slender Wheat Grass	N Grass
ELYVILL	Elymus villosus	X	7	3	S4		Hairy Wild-rye	N Grass
ELYVIRG	Elymus virginicus	X	5	-2			Virginia Wild-rye	N Grass
ELYWIEG	Elymus wiegandii	R1	10	0			Wild-rye	N Grass
EPIANGU	Epilobium angustifolium	X	3	0			Fireweed	N Forb
EPICILI	Epilobium ciliatum	X	3	3	S4		Willow-herb	N Forb
EPICOLO	Epilobium coloratum	X	3	-5			Purple-leaved Willow-herb	N Forb
EPIHELL	Epipactis helleborine	l		5		-2	Helleborine	A Forb
EPIHIRS	Epilobium hirsutum	l		-4		-2	Great Hairy Willow-herb	A Forb
EPILEPT	Epilobium leptophyllum	X	7	-5			Narrow-leaved Willow-herb	N Forb
EPIPARV	Epilobium parviflorum	l		3		-1	Small-flowered Willow-herb	A Forb
EPIREPE	Epigaea repens	R1	9	5			Trailing Arbutus	N Shrub
EPISTRI	Epilobium strictum	R2	9	-5			Downy Willow-herb	N Forb
EPIVIRG	Epifagus virginiana	C	6	5			Beech-drops	N Forb
EQUARVE	Equisetum arvense	C	0	0			Field Horsetail	N Fern
EQUFLUV	Equisetum fluviatile	U	7	-5			Water Horsetail	N Fern
EQUHYEM	Equisetum hyemale ssp. affine	C	2	-2			Common Scouring-rush	N Fern
EQU LAEV	Equisetum laevigatum	VU	7	-3			Smooth Scouring-rush	N Fern
EQU PALU	Equisetum palustre	R1	10	-3			Marsh Horsetail	N Fern
EQU PRAT	Equisetum pratense	VU	8	-3			Meadow Horsetail	N Fern
EQU SCIR	Equisetum scirpoides	VU	7	-1			Dwarf Scouring-rush	N Fern
EQU SYLV	Equisetum sylvaticum	R3	7	-3			Woodland Horsetail	N Fern
EQU VARI	Equisetum variegatum	U	5	-3			Variegated Scouring-rush	N Fern
ERACILI	Eragrostis ciliaris	l		3		-1	Stink Grass	A Grass
ERAFRAN	Eragrostis frankii	X	3	-3	SE		Frank's Love Grass	N Grass
ERAHYPN	Eragrostis hypnoides	R2	7	-5	S4		Moss-like Love Grass	N Grass
ERAMINO	Eragrostis minor	l		5		-1	Little Love Grass	A Grass
ERAPECT	Eragrostis pectinacea	X	0	0			Tufted Love Grass	N Grass
ERASPEC	Eragrostis spectabilis	R4	6	5	S2		Purple Love Grass	N Grass
EREHIER	Erechtites hieracifolia	X	2	3			Pilewort	N Forb
ERIANNU	Erigeron annuus	C	0	1			Daisy Fleabane	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
ERIBULB	<i>Erigenia bulbosa</i>	U	9	5	S3		Harbinger-of-spring	N Forb
ERIGRAC	<i>Eriophorum gracile</i>	R1	10	-5			Slender Cotton-grass	N Sedge
ERIPHIL	<i>Erigeron philadelphicus</i>	C	1	-3			Philadelphia Fleabane	N Forb
ERIPULC	<i>Erigeron pulchellus</i>	X	7	3			Robin's-plantain	N Forb
ERISTR1	<i>Erigeron strigosus</i>	C	0	1			Narrow-leaved Fleabane	N Forb
ERIVIRG	<i>Eriophorum virginicum</i>	R1	10	-5			Tawny Cotton-grass	N Sedge
ERIVIRI	<i>Eriophorum viridi-carinatum</i>	Rh	9	-5			Cotton-grass	N Sedge
EROVERN	<i>Erophila verna</i>	I		5		-2	Whitlow-grass	A Forb
ERUGALL	<i>Erucastrum gallicum</i>	I		5		-1	Dog Mustard	A Forb
ERYALBI	<i>Erythronium albidum</i>	X	8	5			White Trout Lily	N Forb
ERYAMER	<i>Erythronium americanum</i>	X	5	5			Yellow Trout Lily	N Forb
ERYCHEI	<i>Erysimum cheiranthoides</i>	I		3		-1	Wormseed Mustard	A Forb
ERYREPA	<i>Erysimum repandum</i>	Ir		5		-1	Spreading Wallflower	A Forb
EUOATRO	<i>Euonymus atropurpurea</i>	R2	8	1	S3		Burning Bush	N Shrub
EUOEURO	<i>Euonymus europaea</i>	Ir		5		-1	Spindle-tree	A Shrub
EUOFORT	<i>Euonymus fortunei</i>	Ir		5		-1	Wintercreeper	A Vine
EUOOBOV	<i>Euonymus obovata</i>	C	6	5			Running Strawberry-bush	N Shrub
EUPALTI	<i>Eupatorium altissimum</i>	Ir	3	3			Tall Thoroughwort	N Forb
EUPCOMM	<i>Euphorbia commutata</i>	Rh	10	5	S1		Wood Spurge	N Forb
EUPCORO	<i>Euphorbia corollata</i>	U	7	5	S4		Flowering Spurge	N Forb
EUPCYPA	<i>Euphorbia cyparissias</i>	I		5		-2	Cypress Spurge	A Forb
EUPDENT	<i>Euphorbia dentata</i>	I		5		-1	Toothed Spurge	A Forb
EUPEsul	<i>Euphorbia esula</i>	I		5		-2	Leafy Spurge	A Forb
EUPHELI	<i>Euphorbia helioscopia</i>	Ir		5		-1	Sun Spurge	A Forb
EUPMACU	<i>Eupatorium maculatum</i>	C	3	-5			Spotted Joe-Pye-weed	N Forb
EUPMARG	<i>Euphorbia marginata</i>	Ir		4		-1	Snow-on-the-mountain	A Forb
EUPPEPL	<i>Euphorbia peplus</i>	Ir		5		-1	Petty Spurge	A Forb
EUPPURP	<i>Eupatorium purpureum</i>	VU	8	0	S2		Sweet Joe-Pye-weed	N Forb
EUPRUGO	<i>Eupatorium rugosum</i>	C	5	3			White Snakeroot	N Forb
EUPSERO	<i>Eupatorium serotinum</i>	Ir		-1		-1	Late-flowering Thoroughwort	A Forb
EUTGRAM	<i>Euthamia graminifolia</i>	C	2	-2			Grass-leaved Goldenrod	N Forb
FAGESCU	<i>Fagopyrum esculentum</i>	Ir		5		-1	Buckwheat	A Forb
FAGGRAN	<i>Fagus grandifolia</i>	C	6	3			American Beech	N Tree
FESARUN	<i>Festuca arundinacea</i>	Ic		2		-1	Tall Fescue	A Grass
FESBREV	<i>Festuca brevipila</i>	I		5		-2	Hard Fescue	A Grass
FESFILI	<i>Festuca filiformis</i>	Ir		5		-1	Hair Fescue	A Grass
FESPRAT	<i>Festuca pratensis</i>	I		4		-1	Meadow Fescue	A Grass
FESRUBR	<i>Festuca rubra</i>	I		1		-1	Red Fescue	A Grass
FESSUBV	<i>Festuca subverticillata</i>	X	6	2			Nodding Fescue	N Grass
FLOPROS	<i>Floerkea proserpinacoides</i>	X	9	-1	S4S3		False Mermaid	N Forb
FRAAMER	<i>Fraxinus americana</i>	C	4	3			White Ash	N Tree
FRANIGR	<i>Fraxinus nigra</i>	X	7	-4			Black Ash	N Tree
FRAQUAD	<i>Fraxinus quadrangulata</i>	VU	9	5	S2		Blue Ash	N Tree
FRAVESC	<i>Fragaria vesca</i>	X	4	4			Woodland Strawberry	N Forb
FRAVIRG	<i>Fragaria virginiana</i>	C	2	1			Wild Strawberry	N Forb
GALAPAR	<i>Galium aparine</i>	X	4	3			Cleavers	N Forb
GALASPR	<i>Galium asprellum</i>	X	6	-5			Rough Bedstraw	N Forb
GALBREV	<i>Galium brevipes</i>	R1	8	-5			Bedstraw	N Forb
GALCIRC	<i>Galium circaezans</i>	X	7	4			Wild Licorice	N Forb
GALCONC	<i>Galium concinnum</i>	R1	9	3			Bedstraw	N Forb
GALLABR	<i>Galium labradoricum</i>	R1	9	-5			Bog Bedstraw	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
GALLANC	Galium lanceolatum	X	8	5			Lance-leaved Wild Licorice	N Forb
GALMOLL	Galium mollugo	I		5		-2	Wild Madder	A Forb
GALOBTU	Galium obtusum	R1	6	-5			Obtuse Bedstraw	N Forb
GALPALU	Galium palustre	X	5	-5			Marsh Bedstraw	N Forb
GALPILO	Galium pilosum	R3	9	5	S3		Hairy Bedstraw	N Forb
GALQUAD	Galinsoga quadriradiata	Ir		5		-1	Hairy Galinsoga	A Forb
GALSPEC	Galearis spectabilis	R4	9	5			Showy Orchis	N Forb
GALTETR	Galeopsis tetrahit	I		5		-1	Hemp-nettle	A Forb
GALTINC	Galium tinctorium	R1	5	-5			Dyer's Bedstraw	N Forb
GALTRID	Galium trifidum	R4	5	-4			Three-cleft Bedstraw	N Forb
GALTRIF	Galium triflorum	X	4	2			Sweet-scented Bedstraw	N Forb
GALVERU	Galium verum	I		5		-1	Yellow Bedstraw	A Forb
GAUHISP	Gaultheria hispidula	R1	8	-3			Snowberry	N Shrub
GAUPROC	Gaultheria procumbens	X	6	3			Wintergreen	N Shrub
GAYBACC	Gaylussacia baccata	VU	8	3			Black Huckleberry	N Shrub
GENANDR	Gentiana andrewsii	X	6	-3			Closed Gentian	N Forb
GENCRIN	Gentianopsis crinita	VU	8	-4			Fringed Gentian	N Forb
GENQUIN	Gentianella quinquefolia	R2	9	0	S2		Stiff Gentian	N Forb
GENVIRG	Gentianopsis virgata	R1	8	-5			Narrow-leaved Fringed Gentian	N Forb
GERMACU	Geranium maculatum	X	6	3			Wild Geranium	N Forb
GERPUSI	Geranium pusillum	Ir		5		-1	Small-flowered Crane's-bill	A Forb
GERROBE	Geranium robertianum	Ic		5		-2	Herb Robert	A Forb
GEUALEP	Geum aleppicum	X	2	-1			Yellow Avens	N Forb
GEUCANA	Geum canadense	X	3	0			White Avens	N Forb
GEULACI	Geum laciniatum	X	4	-3	S4		Cut-leaved Avens	N Forb
GEURIVA	Geum rivale	R2	7	-5			Water Avens	N Forb
GEUTRIF	Geum triflorum	R3	9	4	S4		Prairie Smoke	N Forb
GEURBA	Geum urbanum	Ir		5		-1	Urban Avens	A Forb
GEUVERN	Geum vernum	R2	7	1	S3		Spring Avens	N Forb
GLEHEDE	Glechoma hederacea	I		3		-2	Gill-over-the-ground	A Forb
GLETRIA	Gleditsia triacanthos	I	3	0	S2		Honey Locust	N Tree
GLYBORE	Glyceria borealis	R3	8	-5			Northern Manna Grass	N Grass
GLYCANA	Glyceria canadensis	R1	7	-5			Rattlesnake Manna Grass	N Grass
GLYGRAN	Glyceria grandis	X	5	-5			Tall Manna Grass	N Grass
GLYMAX	Glycine max	Ir		5		-1	Soybean	A Forb
GLYSEPT	Glyceria septentrionalis	X	8	-5			Eastern Manna Grass	N Grass
GLYSTRI	Glyceria striata	X	3	-5			Fowl Manna Grass	N Grass
GNAOBTU	Gnaphalium obtusifolium	X	4	5			Fragrant Cudweed	N Forb
GNAULIG	Gnaphalium uliginosum	Ir		0		-1	Low Cudweed	A Forb
GNAVISC	Gnaphalium viscosum	R1	4	5			Clammy Cudweed	N Forb
GOOPUBE	Goodyera pubescens	R2	8	0	S4		Downy Rattlesnake-plantain	N Forb
GOOREPE	Goodyera repens	R1	8	3			Dwarf Rattlesnake-plantain	N Forb
GRANEGL	Gratiola neglecta	R1	7	-5	S4		Hedge-hyssop	N Forb
GRISQUA	Grindelia squarrosa	Ih		3		-1	Gumweed	A Forb
GYMDIOI	Gymnocladus dioicus	R2	6	5	S2		Kentucky Coffee Tree	N Tree
GYMDRYO	Gymnocarpium dryopteris	VU	7	0			Oak Fern	N Fern
HACVIRG	Hackelia virginiana	VU	5	1			Stickseed	N Forb
HALDEFL	Halenia deflexa	R2	7	0			Spurred Gentian	N Forb
HAMVIRG	Hamamelis virginiana	X	6	3			Witch-hazel	N Shrub
HEDPULE	Hedeoma pulegioides	R3	6	5			American Pennyroyal	N Forb
HELANNU	Helianthus annuus	Ir		1		-1	Common Sunflower	A Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
HELAUTU	<i>Helenium autumnale</i>	R3	7	-4			Sneezeweed	N Forb
HELBICK	<i>Helianthemum bicknellii</i>	R1	9	5	S4		Bicknell's Frostweed	N Forb
HELCANA	<i>Helianthemum canadense</i>	R2	9	5			Frostweed	N Forb
HELDECA	<i>Helianthus decapetalus</i>	X	7	5			Thin-leaved Sunflower	N Forb
HELDIVA	<i>Helianthus divaricatus</i>	X	7	5			Woodland Sunflower	N Forb
HELFLEX	<i>Helenium flexuosum</i>	I		-1		-1	Purple-headed Sneezeweed	A Forb
HELGIGA	<i>Helianthus giganteus</i>	X	6	-3			Tall Sunflower	N Forb
HELHELI	<i>Heliopsis helianthoides</i>	R4	3	5			Ox-eye	N Forb
HELMOLL	<i>Helianthus mollis</i>	Ir		5		-1	Soft Sunflower	A Forb
HELSTRU	<i>Helianthus strumosus</i>	X	7	5			Sunflower	N Forb
HELTUBE	<i>Helianthus tuberosus</i>	I		0		-2	Jerusalem Artichoke	A Forb
HEMFULV	<i>Hemerocallis fulva</i>	I		5		-3	Orange Day Lily	A Forb
HEMLILI	<i>Hemerocallis lilioasphodelus</i>	Ir		5		-1	Yellow Day Lily	A Forb
HEPACUT	<i>Hepatica acutiloba</i>	X	6	5			Sharp-lobed Hepatica	N Forb
HEPAMER	<i>Hepatica americana</i>	X	6	5			Round-lobed Hepatica	N Forb
HERLANA	<i>Heracleum lanatum</i>	X	3	-3			Cow-parsnip	N Forb
HESMATR	<i>Hesperis matronalis</i>	I		5		-3	Dame's Rocket	A Forb
HETDUBI	<i>Heteranthera dubia</i>	R2	7	-5			Water Star-grass	N Forb
HIEAURA	<i>Hieracium aurantiacum</i>	I		5		-2	Devil's Paintbrush	A Forb
HIECAES	<i>Hieracium caespitosum</i>	I		5		-2	Field Hawkweed	A Forb
HIEGRON	<i>Hieracium gronovii</i>	R1	9	5	S4		Hawkweed	N Forb
HIELACH	<i>Hieracium lachenalii</i>	Ir		5		-1	Common Hawkweed	A Forb
HIEODOR	<i>Hierochloa odorata</i>	VU	5	-3			Sweet Grass	N Grass
HIEPILD	<i>Hieracium piloselloides</i>	Ir		5		-2	King Devil Hawkweed	A Forb
HIEPILO	<i>Hieracium pilosella</i>	Ir		5		-1	Mouse-ear Hawkweed	A Forb
HIESCAB	<i>Hieracium scabrum</i>	VU	7	5			Rough Hawkweed	N Forb
HIEXFLO	<i>Hieracium x floribundum</i>	Ir		5		-2	( <i>H. caespitosum</i> X <i>H. lactucella</i> )	A Forb
HOLLANA	<i>Holcus lanatus</i>	Ir		4		-1	Velvet Grass	A Grass
HOLUMBE	<i>Holosteum umbellatum</i>	Ir		5		-1	Jagged Chickweed	A Forb
HORJUBA	<i>Hordeum jubatum</i>	I		-1		-1	Foxtail Barley	A Grass
HUMJAPO	<i>Humulus japonicus</i>	Ir		3		-1	Japanese Hops	A Vine
HUMLUPU	<i>Humulus lupulus</i>	Ir		3		-1	Common Hop	A Vine
HYBCONC	<i>Hybanthus concolor</i>	R2	9	2	S2		Green Violet	N Forb
HYDAMER	<i>Hydrocotyle americana</i>	X	7	-5			Marsh or Water-pennywort	N Forb
HYDAPPE	<i>Hydrophyllum appendiculatum</i>	R2	9	5	S2		Appendaged Waterleaf	N Forb
HYDCANA	<i>Hydrophyllum canadense</i>	X	8	-2	S4		Canada Waterleaf	N Forb
HYDCAND	<i>Hydrastis canadensis</i>	R1	10	5	S2		Golden Seal	N Forb
HYDVIRG	<i>Hydrophyllum virginianum</i>	C	6	-2			Virginia Waterleaf	N Forb
HYPASCY	<i>Hypericum ascyron</i>	VU	6	-1			Great St. John's-wort	N Forb
HYPCANA	<i>Hypericum canadense</i>	R1	8	-3			Canada St. John's-wort	N Forb
HYPHIRS	<i>Hypoxis hirsuta</i>	R1	10	0	S3		Yellow Stargrass	N Forb
HYPMAJU	<i>Hypericum majus</i>	R2	5	-3			Large St. John's-wort	N Forb
HYPMUTI	<i>Hypericum mutilum</i> ssp. <i>mutilum</i>	R3	6	-3			WEAK ST. JOHN'S-WORT	N Forb
HYPPERF	<i>Hypericum perforatum</i>	Ic		5		-3	Common St. John's-wort	A Forb
HYPPROL	<i>Hypericum prolificum</i>	R3	6	3	S1		Shrubby St. John's-wort	N Shrub
HYPPUNC	<i>Hypericum punctatum</i>	X	5	-1			Spotted St. John's-wort	N Forb
HYPSPHA	<i>Hypericum sphaerocarpon</i>	Ir	6	3			St. John's-wort	N Forb
HYSOFFI	<i>Hyssopus officinalis</i>	Ih		5		-1	Hyssop	A Forb
HYSPATU	<i>Hystrix patula</i>	X	5	5			Bottlebrush Grass	N Grass
ILEVERT	<i>Ilex verticillata</i>	X	5	-4			Winterberry	N Shrub
IMPCAPE	<i>Impatiens capensis</i>	C	4	-3			Spotted Touch-me-not	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
IMPGLAN	Impatiens glandulifera	lr		-3		-2	Purple Touch-me-not	A Forb
IMPPALL	Impatiens pallida	X	7	-3			Pale Touch-me-not	N Forb
INUHELE	Inula helenium	l		5		-2	Elecampane	A Forb
IPOPURP	Ipomoea purpurea	lr		4		-1	Common Morning-glory	A Forb
IRIPSEU	Iris pseudacorus	lr		-5		-2	Yellow-flag	A Forb
IRIVERS	Iris versicolor	X	5	-5			Wild Blue-flag	N Forb
IRIVIRG	Iris virginica	R2	5	-5	S4		Southern Blue-flag	N Forb
ISOBITE	Isopyrum biternatum	VU	10	0	S2		False Rue-anemone	N Forb
ISOECHI	Isoetes echinospora	?	7	-5			Spiny-spored Quillwort	N Forb
ISOVERT	Isotria verticillata	R1	10	0	S1		Larger Whorled Pogonia	N Forb
JEFDIPH	Jeffersonia diphylla	X	10	5	S2		Twingleaf	N Forb
JUGCINE	Juglans cinerea	X	6	2			Butternut	N Tree
JUGNIGR	Juglans nigra	X	5	3	S4		Black Walnut	N Tree
JUNACUM	Juncus acuminatus	R1	6	-5	S3		Tapered Rush	N Forb
JUNALPI	Juncus alpinoarticulatus	VU	5	-5			Alpine Rush	N Forb
JUNARTI	Juncus articulatus	VU	5	-5			Jointed Rush	N Forb
JUNBALT	Juncus balticus	U	5	-5			Baltic Rush	N Forb
JUNBRAC	Juncus brachycephalus	VU	7	-5			Short-headed Rush	N Forb
JUNBUFO	Juncus bufonius	U	1	-4			Toad Rush	N Forb
JUNCANA	Juncus canadensis	X	6	-5			Canadian Rush	N Forb
JUNCOMM	Juniperus communis	R1	4	3			Common Juniper	N Shrub
JUNCOMP	Juncus compressus	lr		-4		-1	Flat-stemmed Rush	A Forb
JUNDUDL	Juncus dudleyi	C	1	0	S4		Dudley's Rush	N Forb
JUNEFFU	Juncus effusus	X	4	-5			Soft Rush	N Forb
JUNGERA	Juncus gerardii	lr		-5		-1	Black-grass	A Forb
JUNHORI	Juniperus horizontalis	R1	10	1			Creeping Juniper	N Shrub
JUNMARG	Juncus marginatus	R2	9	-3	S2		Grass-leaved Rush	N Forb
JUNNODO	Juncus nodosus	X	5	-5			Knotted Rush	N Forb
JUNPELO	Juncus pelocarpus	R1	8	-5			Brown-fruited Rush	N Forb
JUNPYLA	Juncus pylaei	X	4	-5			Soft Rush	N Forb
JUNTENU	Juncus tenuis	X	0	0			Path Rush	N Forb
JUNTORR	Juncus torreyi	VU	3	-3			Torrey's Rush	N Forb
JUNVIRG	Juniperus virginiana	X	4	3			Red Cedar	N Tree
KALPOLI	Kalmia polifolia	R1	10	-5			Bog-laurel	N Shrub
KOCSCOP	Kochia scoparia	l		4		-1	Summer-cypress	A Forb
KOEMACR	Koeleria macrantha	R3	10	5	S2S3		Prairie June Grass	N Grass
LACBIEN	Lactuca biennis	X	6	0			Tall Blue Lettuce	N Forb
LACCANA	Lactuca canadensis	X	3	2			Wild Lettuce	N Forb
LACSERR	Lactuca serriola	l		0		-1	Prickly Lettuce	A Forb
LAMAMPL	Lamium amplexicaule	lr		5		-1	Henbit	A Forb
LAMPURP	Lamium purpureum	lr		5		-2	Purple Dead-nettle	A Forb
LAPCANA	Laportea canadensis	X	6	-3			Wood Nettle	N Forb
LAPCOMM	Lapsana communis	lr		5		-2	Nipplewort	A Forb
LAPSQUA	Lappula squarrosa	lr		5		-1	Burseed	A Forb
LARDECI	Larix decidua	l		5		-1	European Larch	A Tree
LARLARI	Larix laricina	X	7	-3			Tamarack	N Tree
LATLATI	Lathyrus latifolius	l		5		-1	Everlasting Pea	A Forb
LATPALU	Lathyrus palustris	R1	6	-3			Marsh Pea	N Forb
LATPRAT	Lathyrus pratensis	lr		3		-1	Yellow Vetchling	A Forb
LECVILL	Lechea villosa	VU	9	5	S3		Hairy Pinweed	N Forb
LEEORYZ	Leersia oryzoides	X	3	-5			Rice Cut Grass	N Grass

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
LEEVIRG	Leersia virginica	X	6	-3			White Grass	N Grass
LEMMINO	Lemna minor	X	2	-5			Common Duckweed	N Forb
LEMTRIS	Lemna trisulca	X	4	-5			Star Duckweed	N Forb
LEOAUTU	Leontodon autumnalis	lr		5		-1	Fall Hawkbit	A Forb
LEOCARD	Leonurus cardiaca	lc		5		-2	Motherwort	A Forb
LEPACUM	Leptochloa acuminata	lr		-5		-1	Sprangletop	A Grass
LEPCAMP	Lepidium campestre	l		5		-1	Field Pepper-grass	A Forb
LEPDENS	Lepidium densiflorum	X		0		-2	Common Pepper-grass	A Forb
LEPVIRG	Lepidium virginicum	R4	0	4			Poor-man's Pepper-grass	N Forb
LESCAPI	Lespedeza capitata	VU	7	3			Round-headed Bush-clover	N Forb
LESHIRT	Lespedeza hirta	VU	9	5			Hairy Bush-clover	N Forb
LESINTE	Lespedeza intermedia	VU	8	5	S4		Wandlike Bush-clover	N Forb
LEUMULT	Leucospora multifida	lr	8	0	S1		Conobea	N Forb
LEUVULG	Leucanthemum vulgare	lc		5		-1	Ox-eye Daisy	A Forb
LEYAREN	Leymus arenarius	lr		3		-1	European Dune Grass	A Grass
LIAASPE	Liatris aspera	?	10	5	S2		Rough Blazing-star	N Forb
LIASPIC	Liatris spicata	R1	9	0	S3		Spiked Blazing Star	N Forb
LIGVULG	Ligustrum vulgare	l		1		-2	Privet	A Shrub
LILMICH	Lilium michiganense	U	7	-1			Michigan Lily	N Forb
LILPHIL	Lilium philadelphicum	R3	8	1			Wood Lily	N Forb
LINBENZ	Lindera benzoin	X	6	-2			Spicebush	N Shrub
LINBORE	Linnaea borealis	R3	7	0			Twinflower	N Forb
LINDUBI	Lindernia dubia var. dubia	VU	7	-5			FALSE PIMPERNEL	N Forb
LINGENI	Linaria genistifolia	lr		5		-1	Dalmatian Toadflax	A Forb
LINPERE	Linum perenne	lh		5		-1	Perennial Flax	A Forb
LINVULG	Linaria vulgaris	lc		5		-1	Butter-and-eggs	A Forb
LIPLILI	Liparis liliifolia	R1	8	4	S2		Lily-leaved Twayblade	N Forb
LIPLOES	Liparis loeselii	X	5	-4			Loesel's Twayblade	N Forb
LIRTULI	Liriodendron tulipifera	U	8	2	S3		Tulip-tree	N Tree
LISCORD	Listera cordata	R1	8	-3			Heart-leaved Twayblade	N Forb
LITCANE	Lithospermum canescens	R1	10	5	S5		Hoary Puccoon	N Forb
LITLATI	Lithospermum latifolium	VU	9	5	S2		American Gromwell	N Forb
LITOFFI	Lithospermum officinale	l		5		-1	European Gromwell	A Forb
LOBCARD	Lobelia cardinalis	X	7	-5			Cardinal Flower	N Forb
LOBINFL	Lobelia inflata	X	3	4			Indian-tobacco	N Forb
LOBKALM	Lobelia kalmii	R3	9	-5	S5		Kalm's Lobelia	N Forb
LOBSIPH	Lobelia siphilitica	X	6	-4			Great Lobelia	N Forb
LOBSPIC	Lobelia spicata	R4	8	0			Pale-spiked Lobelia	N Forb
LOLPERE	Lolium perenne	l		3		-1	Perennial Rye Grass	A Grass
LONCANA	Lonicera canadensis	X	6	3			Fly Honeysuckle	N Shrub
LONDIOI	Lonicera dioica	X	5	3			Wild Honeysuckle	N Vine
LONHIRS	Lonicera hirsuta	R1	7	0			Hairy Honeysuckle	N Shrub
LONJAPO	Lonicera japonica	lr		3		-2	Japanese Honeysuckle	A Vine
LONMAAC	Lonicera maackii	lr		5		-2	Amur Honeysuckle	A Shrub
LONMORR	Lonicera morrowii	lr		5		-1	Morrow's Honeysuckle	A Shrub
LONOBLO	Lonicera oblongifolia	R2	8	-5			Swamp Fly-honeysuckle	N Shrub
LONTATA	Lonicera tatarica	l		3		-3	Tartarian Honeysuckle	A Shrub
LONXYLO	Lonicera xylosteum	lr		5		-2	European Fly-honeysuckle	A Shrub
LOTORN	Lotus corniculatus	l		1		-2	Birdfoot Trefoil	A Forb
LUDPALU	Ludwigia palustris	X	5	-5			Water-purslane	N Forb
LUPPERE	Lupinus perennis	R3	10	5	S3		Wild Lupine	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
LUZACUM	Luzula acuminata	X	6	1			Pointed Wood-rush	N Forb
LUZMULT	Luzula multiflora	X	6	3			Common Wood-rush	N Forb
LYCAMER	Lycopus americanus	C	4	-5			American Water-horehound	N Forb
LYCANNO	Lycopodium annotinum	R1	7	0			Stiff Clubmoss	N Fern
LYCBARB	Lycium barbarum	lh		5		-1	Matrimony Vine	A Vine
LYCCLAV	Lycopodium clavatum	R2	6	0			Running Clubmoss	N Fern
LYCDIGI	Lycopodium digitatum	C	5	5			Crowfoot Clubmoss	N Fern
LYCINUN	Lycopodium inundatum	R3	9	-5			Bog Clubmoss	N Fern
LYCLUCI	Lycopodium lucidulum	X	7	-1			Shining Clubmoss	N Fern
LYCOBSC	Lycopodium obscurum	X	6	3			Ground-pine	N Fern
LYCTRIS	Lycopodium tristachyum	R1	8	5			Ground-cedar	N Fern
LYCUNIF	Lycopus uniflorus	C	5	-5			Bugleweed	N Forb
LYCVIRG	Lycopus virginicus	R3	8	-5	S1		Virginia Water-horehound	N Forb
LYSCILI	Lysimachia ciliata	X	4	-3			Fringed Loosestrife	N Forb
LYSUMM	Lysimachia nummularia	l		-4		-3	Moneywort	A Forb
LYSQUAD	Lysimachia quadriflora	R2	8	5			Prairie Loosestrife	N Forb
LYSTERR	Lysimachia terrestris	R3	6	-5			Swamp Candles	N Forb
LYSTHYR	Lysimachia thyriflora	X	7	-5			Tufted Loosestrife	N Forb
LYSVULG	Lysimachia vulgaris	lr		-2		-1	Garden Loosestrife	A Forb
LYTALAT	Lythrum alatum	VU	5	-5	S3		Winged Loosestrife	N Forb
LYTSALI	Lythrum salicaria	lc		-5		-3	Purple Loosestrife	A Forb
MAICANA	Maianthemum canadense	X	5	0			Wild Lily-of-the-valley	N Forb
MAIRACE	Maianthemum racemosum	X	4	3			False Solomon's-seal	N Forb
MAISTEL	Maianthemum stellatum	X	6	1			Starry False Solomon's-seal	N Forb
MAITRIF	Maianthemum trifolium	R4	10	-5			Three-leaved False Solomon's-seal	N Forb
MALCORO	Malus coronaria	X	5	5			Wild Crab	N Tree
MALMOSC	Malva moschata	l		5		-1	Musk Mallow	A Forb
MALNEGL	Malva neglecta	l		5		-1	Common Mallow	A Forb
MALPUMI	Malus pumila	l		5		-1	Apple	A Tree
MALROTU	Malva rotundifolia	lr		5		-1	Round-leaved Mallow	A Forb
MALUNIF	Malaxis unifolia	R2	6	0			Green Adder's-mouth	N Forb
MARVULG	Marrubium vulgare	lr		0		-1	Common Horehound	A Forb
MATPERF	Matricaria perforata	lr		5		-1	Scentless Chamomile	A Forb
MATSTRU	Matteuccia struthiopteris	X	5	-3			American Ostrich Fern	N Fern
MEDLUPU	Medicago lupulina	lc		1		-1	Black Medick	A Forb
MEDSATI	Medicago sativa	lc		5		-1	Alfalfa	A Forb
MEDVIRG	Medeola virginiana	X	7	5			Indian Cucumber-root	N Forb
MELALBA	Melilotus alba	lc		3		-3	White Sweet-clover	A Forb
MELLINE	Melampyrum lineare	R3	6	1			Cow-wheat	N Forb
MELOFFI	Melilotus officinalis	lc		3		-1	Yellow Sweet-clover	A Forb
MENARVE	Mentha arvensis	X	3	-3			Field Mint	N Forb
MENCANA	Menispermum canadense	X	7	0			Moonseed	N Vine
MENSPIC	Mentha spicata	l		-4		-1	Spearmint	A Forb
MENSUAV	Mentha suaveolens	lr		-3		-1	Round-leaved Mint	A Forb
MENTRIF	Menyanthes trifoliata	VU	9	-5			Bogbean	N Forb
MENXPIP	Mentha x piperita	l		-5		-1	(M. aquatica X M. spicata)	A Forb
MERVIRG	Mertensia virginica	R3	9	-3	S2		Virginia Bluebells	N Forb
MILEFFU	Milium effusum	X	8	4	S5		Wood Millet	N Grass
MIMRING	Mimulus ringens	X	6	-5			Square-stemmed Monkey-flower	N Forb
MIRNYCT	Mirabilis nyctaginea	l		5		-1	Wild Four-o'clock	A Forb
MISSACC	Miscanthus sacchariflorus	l		5		-1	Plume Grass	A Grass



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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
MITDIPH	Mitella diphylla	X	5	2			Bishop's-cap	N Forb
MITNUDA	Mitella nuda	X	6	-3			Naked Mitrewort	N Forb
MITREPE	Mitchella repens	X	6	2			Partridge-berry	N Shrub
MOLVERT	Mollugo verticillata	lr		0		-2	Carpetweed	A Forb
MONDIDY	Monarda didyma	U	8	3	S3		Oswego Tea	N Forb
MONFIST	Monarda fistulosa	C	6	3			Wild Bergamot	N Forb
MONHYPO	Monotropa hypopithys	R1	6	5			Pinesap	N Forb
MONPUNC	Monarda punctata	R1	9	5	S1		Spotted Horsemint	N Forb
MONUNIF	Monotropa uniflora	X	6	3			Indian Pipe	N Forb
MORALBA	Morus alba	l		0		-3	White Mulberry	A Tree
MORRUBR	Morus rubra	R1	10	1	S2		Red Mulberry	N Tree
MUHASPE	Muhlenbergia asperifolia	lr		5	SE	-1	Scratch Grass	A Grass
MUHFRO	Muhlenbergia frondosa	X	5	-3			Wire-stemmed Muhly	N Grass
MUHGLOM	Muhlenbergia glomerata	X	7	-4			Marsh Wild-timothy	N Grass
MUHMEXI	Muhlenbergia mexicana	X	1	-3			Satin Grass	N Grass
MUHSCHR	Muhlenbergia schreberi	X	1	0	S4		Nimble Will	N Grass
MUHTENU	Muhlenbergia tenuiflora	R3	9	5	S2		Slender Satin Grass	N Grass
MUSBOTR	Muscari botryoides	lr		5		-1	Grape Hyacinth	A Forb
MYOQUA	Myosoton aquaticum	lr		-1		-1	Giant Chickweed	A Forb
MYOLAXA	Myosotis laxa	X	6	-5			Smaller Forget-me-not	N Forb
MYOSCOR	Myosotis scorpioides	l		-5		-1	True Forget-me-not	A Forb
MYOSTRI	Myosotis stricta	lr		5		-1	Forget-me-not	A Forb
MYOSYLV	Myosotis sylvatica	lr		5		-1	Forget-me-not	A Forb
MYRSIBI	Myriophyllum sibiricum	R4	6	-5			Northern Water-milfoil	N Forb
NAJFLEX	Najas flexilis	R1	5	-5			Bushy Naiad	N Forb
NARCIS.	Narcissus sp.	l				-1	Daffodil species	A Forb
NASOFFI	Nasturtium officinale	l		-5		-1	Water Cress	A Forb
NEMMUCR	Nemopanthus mucronatus	X	8	-5			Mountain Holly	N Shrub
NEPCATA	Nepeta cataria	lc		1		-2	Catnip	A Forb
NUPADVE	Nuphar advena	R1	7	-5	S2		Yellow Pond-lily	N Forb
NUPVARI	Nuphar variegata	X	4	-5			Bullhead Lily	N Forb
NYMODOR	Nymphaea odorata	X	5	-5			Fragrant Water-lily	N Forb
NYSSYLV	Nyssa sylvatica	R2	9	-4	S3		Black-gum	N Tree
OENBIEN	Oenothera biennis	R1	0	3			Hairy Yellow Evening-primrose	N Forb
OENCLEL	Oenothera clelandii	R1	9	5	S1		Cleland's Evening-primrose	N Forb
OENLACI	Oenothera laciniata	lr		3		-1	Cut-leaved Evening-primrose	A Forb
OENOAKE	Oenothera oakesiana	Rh	8	5			Evening-primrose	N Forb
OENPARV	Oenothera parviflora	X	1	3			Small-flowered Evening-primrose	N Forb
OENPERE	Oenothera perennis	R4	6	0			Sundrops	N Forb
OENPILO	Oenothera pilosella	R2	8	1	S2		Meadow Sundrops	N Forb
ONOACAN	Onopordum acanthium	l				-1	Scotch Thistle	A Forb
ONOMOLL	Onosmodium molle	R3	8	5	S2		False Gromwell	N Forb
ONOSENS	Onoclea sensibilis	X	4	-3			Sensitive Fern	N Fern
OPHPUSI	Ophioglossum pusillum	R1	6	3			Northern Adder's-tongue Fern	N Fern
ORIVULG	Origanum vulgare	lu		5		-2	Wild Marjoram	A Forb
ORNUMBE	Ornithogalum umbellatum	lr		1		-1	Star-of-Bethlehem	A Forb
OROUNIF	Orobancha uniflora	VU	8	5			One-flowered Cancer-root	N Forb
ORTSECU	Orthilia secunda	R2	5	-1			One-sided Pyrola	N Forb
ORYASPE	Oryzopsis asperifolia	X	6	5			Rough-leaved Mountain-rice	N Grass
ORYPUNG	Oryzopsis pungens	R1	8	5	S5		Sharp-leaved Oryzopsis	N Grass
ORYRACE	Oryzopsis racemosa	X	7	5			Mountain-rice	N Grass

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
OSDCINN	Osmunda cinnamomea	X	7	-3			Cinnamon Fern	N Fern
OSDCLAY	Osmunda claytoniana	X	7	-1			Interrupted Fern	N Fern
OSDREGA	Osmunda regalis	X	7	-5			American Royal Fern	N Fern
OSMCLAY	Osmorhiza claytonii	X	5	4			Sweet-cicely	N Forb
OSMLONG	Osmorhiza longistylis	X	6	4			Long-styled Sweet-cicely	N Forb
OSTVIRG	Ostrya virginiana	C	4	4			Hop-hornbeam	N Tree
OXACORN	Oxalis corniculata	lr		3		-1	Creeping Wood-sorrel	A Forb
OXADILL	Oxalis dillenii	X	0	3			Common Yellow Wood-sorrel	N Forb
OXALIS.	Oxalis sp.	lc	0	3			Wood-sorrel species	N Forb
OXASTRI	Oxalis stricta	X	0	3			European Wood-sorrel	N Forb
PANBORE	Panicum boreale	R1	7	2	S4		Northern Panic Grass	N Grass
PANCAPI	Panicum capillare	X	0	0			Witch Grass	N Grass
PANCLAN	Dichanthelium clandestinum	R2	8	-3	S2		Hidden Panic Grass	N Grass
PANCOLU	Panicum columbianum	R1	6	5	S5		Columbia Panic Grass	N Grass
PANDEPA	Panicum depauperatum	R1	6	5	S4		Impoverished Panic Grass	N Grass
PANDICF	PANICUM DICHOTOMIFLORUM	lc		-2		-1	PANIC GRASS	A Grass
PANDICH	Dichanthelium dichotomum	R2	9	1	S2		Forked Panic Grass	N Grass
PANFLEX	Panicum flexile	R4	8	-4	S4		Wiry Witch Grass	N Grass
PANGATT	Panicum gattingeri	U	3	0	S3		Gattinger's Witch Grass	N Grass
PANIMPL	Panicum implicatum	C	2	0			Hairy Panic Grass	N Grass
PANLATI	Panicum latifolium	X	6	3			Broadleaf Panic Grass	N Grass
PANLIND	Panicum lindheimeri	R1	8	-5			Lindheimer's Panic Grass	N Grass
PANLINE	Panicum linearifolium	VU	6	5			Narrow-leaved Panic Grass	N Grass
PANMILI	Panicum miliaceum	lr		5		-1	Common Millet	A Grass
PANOLIG	Panicum oligosanthes	VU	7	3	S4		Few-flowered Panic Grass	N Grass
PANOLIG	Panicum oligosanthes	VU	7	3			Few-flowered Panic Grass	N Grass
PANPERL	Panicum perlongum	Rh	10	5	S1		Round-fruited Panic Grass	N Grass
PANPRAE	Panicum praecocius	R2	9	5	S2		Panic Grass	N Grass
PANQUIN	Panax quinquefolius	R2	9	5	S3		American Ginseng	N Forb
PANRIGI	Panicum rigidulum	R1	9	-3	S2		Stiff Panic Grass	N Grass
PANSPHA	Dichanthelium sphaerocarpon	R3	8	3	S3		Panic Grass	N Grass
PANTRIF	Panax trifolius	VU	8	5			Dwarf Ginseng	N Forb
PANTUCK	Panicum tuckermanii	R2	8	-3			Tuckerman's Witch Grass	N Grass
PANVIRG	Panicum virgatum	X	6	-1	S4		Switch Grass	N Grass
PARGLAU	Parnassia glauca	X	8	-5			Grass-of-Parnassus	N Forb
PARINSE	Parthenocissus inserta	X	3	3			Virginia Creeper	N Vine
PARPENS	Parietaria pensylvanica	VU	3	3			Pellitory	N Forb
PARQUIN	Parthenocissus quinquefolia	X	6	1			Virginia Creeper	N Vine
PASSATI	Pastinaca sativa	l		5		-3	Wild Parsnip	A Forb
PASSETA	Paspalum setaceum	R1	8	5	S2		Paspalum	N Grass
PEDCANA	Pedicularis canadensis	X	7	2			Wood-betony	N Forb
PEDLANC	Pedicularis lanceolata	X	9	-4	S4		Swamp Lousewort	N Forb
PENDIGI	Penstemon digitalis	X	6	1			Foxglove Beard-tongue	N Forb
PENHIRS	Penstemon hirsutus	R3	7	5			Hairy Beard-tongue	N Forb
PENSEDO	Penthorum sedoides	X	4	-5			Ditch Stonecrop	N Forb
PENTUBA	Penstemon tubaeiflorus	lr				-1	Tubular-flowered Beard-tongue	A Forb
PETCRIS	Petroselinum crispum	lr		5		-1	Common Parsley	A Forb
PETFRIG	Petasites frigidus	R1	8	-3			Sweet Coltsfoot	N Forb
PHAARUN	Phalaris arundinacea	X	0	-4			Reed Canary Grass	N Grass
PHACANA	Phalaris canariensis	l		3		-1	Canary Grass	A Grass
PHECONN	Phegopteris connectilis	R1	8	5			Northern Beech Fern	N Fern

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
PHEHEXA	Phegopteris hexagonoptera	R1	9	1	S3		Southern Beech Fern	N Fern
PHLDIVA	Phlox divaricata	X	7	3			Blue Phlox	N Forb
PHLPANI	Phlox paniculata	lr		3		-1	Garden Phlox	A Forb
PHLPRAT	Phleum pratense	lc		3		-1	Timothy	A Grass
PHLSUBU	PHLOX SUBULATA	Rh		5		-1	MOSS PHLOX; MOSS or ROSE PINK	A Forb
PHRAUST	Phragmites australis	X	0	-4			Common Reed	N Grass
PHRLEPT	Phryma leptostachya	X	6	5			Lopseed	N Forb
PHYALKE	Physalis alkekengi	lr		5		-1	Chinese Lantern	A Forb
PHYAMER	Phytolacca americana	X	3	1			Pokeweed	N Forb
PHYHETE	Physalis heterophylla	X	3	5			Clammy Ground-cherry	N Forb
PHYOPUL	Physocarpus opulifolius	X	5	-2			Ninebark	N Shrub
PHYSUBG	Physalis subglabrata	X	6	5			Smooth Ground-cherry	N Forb
PHYVIRG	Physostegia virginiana	R2	8	-3			False Dragonhead	N Forb
PICABIE	Picea abies	l		5		-1	Norway Spruce	A Tree
PICGLA*	PICEA GLAUCA	l		3		-1	WHITE SPRUCE (PLANTED)	A Tree
PICGLAU	Picea glauca	l	6	3			White Spruce	N Tree
PICHER	Picris hieracioides	l		5		-1	Ox-tongue	A Forb
PICMARI	Picea mariana	R1	8	-3			Black Spruce	N Tree
PILFONT	Pilea fontana	VU	5	-3			Clearweed	N Forb
PILPUMI	Pilea pumila	X	5	-3			Clearweed	N Forb
PINBANK	Pinus banksiana	l	9	3			Jack Pine	N Tree
PINRES*	PINUS RESINOSA	lr		3		-1	RED PINE (PLANTED)	A Tree
PINRESI	Pinus resinosa	lr	8	3			Red Pine	N Tree
PINSTRO	Pinus strobus	X	4	3			White Pine	N Tree
PINSYLV	Pinus sylvestris	lr		5		-3	Scots Pine	A Tree
PLABLEP	Platanthera blephariglottis	Rh	10	-5	S3		White Fringed-orchid	N Forb
PLACLAV	Platanthera clavellata	R1	8	-4			Little Club-spur Orchid	N Forb
PLACORD	Plantago cordata	R1	9	-5	S1		Heart-leaved Plantain	N Forb
PLADILA	Platanthera dilatata	R2	10	-3			Tall White Bog Orchid	N Forb
PLAHOOK	Platanthera hookeri	R2	8	-1			Hooker's Orchid	N Forb
PLAHYPE	Platanthera hyperborea	VU	5	-4			Tall Northern Green Orchid	N Forb
PLALACE	Platanthera lacera	X	6	-3			Ragged Fringed-orchid	N Forb
PLALANC	Plantago lanceolata	lc		0		-1	English Plantain	A Forb
PLALEUC	Platanthera leucophaea	R2	10	-4	S2		Prairie Fringed-orchid	N Forb
PLAMAJO	Plantago major	lc		-1		-1	Common Plantain	A Forb
PLAMEDI	Plantago media	lr		5		-1	Hoary Plantain	A Forb
PLAOCCI	Platanus occidentalis	X	8	-3			Sycamore	N Tree
PLAPSYC	Platanthera psycodes	R4	8	-3			Small Purple Fringed-orchid	N Forb
PLARUGE	Plantago rugelii	C	1	0			Rugel's Plantain	N Forb
POAALSO	Poa alsodes	X	7	-2			Woodland Poa	N Grass
POAANNU	Poa annua	lc		1		-2	Annual Blue Grass	A Grass
POABULB	Poa bulbosa	lvu		0		-1	Bulbous Poa	A Grass
POACOMP	Poa compressa	X	0	2			Canada Blue Grass	N Grass
POALANG	Poa languida	VU	8	5	S3		Languid Poa	N Grass
POANEMO	Poa nemoralis	lr		0		-1	Wood Blue Grass	A Grass
POAPALU	Poa palustris	X	5	-4			Fowl Meadow Grass	N Grass
POAPRAT	Poa pratensis	C	0	1			Kentucky Blue Grass	N Grass
POASYLV	Poa sylvestris	R1	10	0	S1		Woodland Poa	N Grass
POATRIV	Poa trivialis	l		-3		-1	Rough Blue Grass	A Grass
PODPELT	Podophyllum peltatum	X	5	3			May-apple	N Forb
POGOPHI	Pogonia ophioglossoides	R2	10	-5			Rose Pogonia	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
POLACHO	Polygonum achoreum	VU	0	5			Striate Knotweed	N Forb
POLACRO	Polystichum acrostichoides	X	5	5			Christmas Fern	N Fern
POLAMPH	Polygonum amphibium	X	5	-5			Water Smartweed	N Forb
POLAVIC	Polygonum aviculare	lc		1		-1	Prostrate Knotweed	A Forb
POLAVIC	Polygonum aviculare	lc		1		-1	Knotweed	A Forb
POLBIFL	Polygonatum biflorum	R1	8	3	S4		Solomon's-seal	N Forb
POLBUXI	Polygonum buxiforme	R1	0	5			Knotweed	N Forb
POLCANA	Polymnia canadensis	R3	8	5	S4		Leafcup	N Forb
POLCONV	Polygonum convolvulus	l		1		-1	Wild Buckwheat	A Vine
POLCUSP	Polygonum cuspidatum	lu		3		-1	Japanese Knotweed	A Forb
POLEREC	Polygonum erectum	Rh	2	3	S1		Erect Knotweed	N Forb
POLHYDD	Polygonum hydropiperoides	X	4	-5			Mild Water-pepper	N Forb
POLHYDR	Polygonum hydropiper	l	4	-5			Water-pepper	N Forb
POLLAPA	Polygonum lapathifolium	X	2	-4			Pale Smartweed	N Forb
POLMULT	Polygonatum multiflorum	lr				-1	Great Solomon's-seal	A Forb
POLORIE	Polygonum orientale	lr		5		-1	Prince's Feather	A Forb
POLPAUC	Polygala paucifolia	VU	6	3			Fringed Polygala	N Forb
POLPENS	Polygonum pensylvanicum	X	3	-4			Pinkweed	N Forb
POLPERS	Polygonum persicaria	l		-3		-1	Lady's-thumb	A Forb
POLPOLY	Polygala polygama	R1	9	4			Racemed Mikwort	N Forb
POLPUBE	Polygonatum pubescens	X	5	5			Hairy Solomon's-seal	N Forb
POLPUNC	Polygonum punctatum	X	4	-5			Smartweed	N Forb
POLSAGI	Polygonum sagittatum	R4	5	-5			Arrow-leaved Tear-thumb	N Forb
POLSCAN	Polygonum scandens	X	3	0			Climbing False Buckwheat	N Vine
POLSENE	Polygala senega	VU	7	3			Seneca Snakeroot	N Forb
POLTENU	Polygonum tenue	R1	10	5	S2		Slender Knotweed	N Forb
POLVERT	Polygala verticillata	Rh	7	5			Whorled Milkwort	N Forb
POLVIRG	Polygonum virginianum	X	6	0			Jumpseed	N Forb
POPALBA	Populus alba	l		5		-3	White Poplar	A Tree
POPBALS	Populus balsamifera	X	4	-3			Balsam Poplar	N Tree
POPDELT	Populus deltoides	X	4	-1			Cottonwood	N Tree
POPGRAN	Populus grandidentata	X	5	3			Large-toothed Aspen	N Tree
POPNIGR	Populus nigra	l		5		-1	Lombardy Poplar	A Tree
POPTREM	Populus tremuloides	X	2	0			Trembling Aspen	N Tree
POROLER	Portulaca oleracea	X	0	1			Common Purslane	N Forb
POTAMPL	Potamogeton amplifolius	R4	5	-5			Large-leaved Pondweed	N Forb
POTANSE	Potentilla anserina	X	5	-4			Silverweed	N Forb
POTARGE	Potentilla argentea	l		3		-2	Silvery Cinquefoil	A Forb
POTBERC	Potamogeton berchtoldii	R2	4	-5			Small Pondweed	N Forb
POTCRIS	Potamogeton crispus	l		-5		-3	Curly-leaved Pondweed	A Forb
POTFOLI	Potamogeton foliosus	R2	4	-5			Leafy Pondweed	N Forb
POTFRUT	Potentilla fruticosa	R1	9	-3			Shrubby Cinquefoil	N Shrub
POTGRAM	Potamogeton gramineus	R2	4	-5			Variable-leaved Pondweed	N Forb
POTILLI	Potamogeton illinoensis	R1	6	-5			Illinois Pondweed	N Forb
POTINCL	Potentilla inclinata	l		5		-1	Downy Cinquefoil	A Forb
POTNATA	Potamogeton natans	R2	5	-5			Floating Pondweed	N Forb
POTNODO	Potamogeton nodosus	R1	7	-5			Knotty Pondweed	N Forb
POTNORV	Potentilla norvegica	l	0	0			Rough Cinquefoil	N Forb
POTPALU	Potentilla palustris	R3	7	-5			Marsh Cinquefoil	N Forb
POTPECT	Potamogeton pectinatus	X	4	-5			Sago Pondweed	N Forb
POTPUSI	Potamogeton pusillus	R1	5	-5			Small Pondweed	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
POTRECT	Potentilla recta	I		5		-2	Rough-fruited Cinquefoil	A Forb
POTRICH	Potamogeton richardsonii	R2	5	-5			Richardson's Pondweed	N Forb
POTSIMP	Potentilla simplex	X	3	4			Common Cinquefoil	N Forb
POTSTRI	Potamogeton strictifolius	R1	8	-5	S4		Slender Pondweed	N Forb
POTZOST	Potamogeton zosteriformis	R1	5	-5			Flat-stemmed Pondweed	N Forb
PREALBA	Prenanthes alba	X	6	3			White-lettuce	N Forb
PREALTI	Prenanthes altissima	X	5	3			Tall White-lettuce	N Forb
PROPALU	Proserpinaca palustris	R4	7	-5			Mermaid-weed	N Forb
PRUAMER	Prunus americana	X	6	5	S4		Wild Plum	N Tree
PRUAVIU	Prunus avium	Ir		5		-2	Sweet Cherry	A Tree
PRUDOME	Prunus domestica	I		5		-1	Common Plum	A Tree
PRUNIGR	Prunus nigra	X	4	4			Canada Plum	N Tree
PRUPENS	Prunus pensylvanica	X	3	4			Pin Cherry	N Tree
PRUPERS	Prunus persica	Ir		5		-1	Peach	A Tree
PRUSERO	Prunus serotina	C	3	3			Wild Black Cherry	N Tree
PRUVIRG	Prunus virginiana	C	2	1			Choke Cherry	N Shrub
PRUVULG	Prunella vulgaris	C		0		-1	Heal-all	A Forb
PTEANDR	Pterospora andromedea	Rh	9	5	S1S2		Pine-drops	N Forb
PTEAQUI	Pteridium aquilinum	X	2	3			Eastern Bracken	N Fern
PTETRIF	Ptelea trifoliata	Ir	9	2	S3		Hop-tree	N Shrub
PUCDIST	Puccinellia distans	Ic		-5		-1	Reflexed Saltmarsh Grass	A Grass
PUCNUTT	Puccinellia nuttalliana	Ir		0		-1	Nuttall's Alkali Grass	A Grass
PYCTENU	Pycnanthemum tenuifolium	R2	8	0			Mountain-mint	N Forb
PYCVIRG	Pycnanthemum virginianum	VU	8	-4			Virginia Mountain-mint	N Forb
PYRAMER	Pyrola americana	R2	7	1			Round-leaved Pyrola	N Forb
PYRASAR	Pyrola asarifolia	R3	7	-3			Pink Pyrola	N Forb
PYRCOMM	Pyrus communis	I		5		-1	Pear	A Tree
PYRELLI	Pyrola elliptica	X	5	5			Shinleaf	N Forb
QUEALBA	Quercus alba	C	6	3			White Oak	N Tree
QUEBICO	Quercus bicolor	X	8	-4	S4		Swamp White Oak	N Tree
QUEMACR	Quercus macrocarpa	C	5	1			Bur Oak	N Tree
QUERUBR	Quercus rubra	C	6	3			Red Oak	N Tree
QUEVELU	Quercus velutina	X	8	5			Black Oak	N Tree
RANABOR	Ranunculus abortivus	C	2	-2			Kidney-leaved Buttercup	N Forb
RANACRI	Ranunculus acris	Ic		-2		-2	Common Buttercup	A Forb
RANBULB	Ranunculus bulbosus	Ih		-3		-1	Bulbous Buttercup	A Forb
RANFASC	Ranunculus fascicularis	R2	9	3	S4		Early Buttercup	N Forb
RANFICA	Ranunculus ficaria	Ir		-2		-1	Lesser-celandine	A Forb
RANFLAB	Ranunculus flabellaris	VU	7	-5			Yellow Water Buttercup	N Forb
RANHISC	Ranunculus hispidus	C	5	-5			Swamp Buttercup	N Forb
RANLONG	Ranunculus longirostris	R2	5	-5			White Water Crowfoot	N Forb
RANPENS	Ranunculus pensylvanicus	X	3	-5			Bristly Crowfoot	N Forb
RANRECU	Ranunculus recurvatus	X	4	-3			Hooked Buttercup	N Forb
RANREPE	Ranunculus repens	Ih		-1		-1	Creeping Buttercup	A Forb
RANRHOM	Ranunculus rhomboideus	R3	10	5	S4		Prairie Buttercup	N Forb
RANSCEL	Ranunculus sceleratus	X	2	-5			Cursed Crowfoot	N Forb
RATPINN	Ratibida pinnata	R2	9	5	S2		Gray-headed Coneflower	N Forb
RHAALNI	Rhamnus alnifolia	X	7	-5			Alder-leaved Buckthorn	N Shrub
RHACATH	Rhamnus cathartica	Ic		3		-3	Common Buckthorn	A Tree
RHAFRAN	Rhamnus frangula	Iu		-1		-3	Glossy Buckthorn	A Shrub
RHERHAB	Rheum rhabarbarum	I		5		-1	Rhubarb	A Forb

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RHUAROM	Rhus aromatica	R1	8	5			Fragrant Sumac	N Shrub
RHUCOPA	Rhus copallinum	R1	7	5	S3		Shining Sumac	N Shrub
RHUGLAB	Rhus glabra	VU	7	5			Smooth Sumac	N Tree
RHURADI	Rhus radicans	C	0	0			Poison-ivy	N Vine
RHURANE	Rhus radicans	X	5	-1			Climbing Poison-ivy	N Vine
RHUTYPH	Rhus typhina	C	1	5			Staghorn Sumac	N Tree
RHUVERN	Rhus vernix	R3	8	-5			Poison Sumac	N Shrub
RHUXPUL	Rhus x pulvinata	R1	2	5			(Rhus glabra X R. typhina)	N Tree
RHYALBA	Rhynchospora alba	R2	10	-5			White Beak-rush	N Sedge
RHYCAPI	Rhynchospora capillacea	R1	10	-5			Hair-like Beak-rush	N Sedge
RIBAMER	Ribes americanum	C	4	-3			Wild Black Currant	N Shrub
RIBCYN	Ribes cynosbati	C	4	5			Prickly Gooseberry	N Shrub
RIBHIRT	Ribes hirtellum	X	6	-3			Swamp Gooseberry	N Shrub
RIBNIGR	Ribes nigrum	lr		5		-1	Garden Black Currant	A Shrub
RIBODOR	Ribes odoratum	lr		1		-1	Golden Currant	A Shrub
RIBRUBR	Ribes rubrum	lr		5		-2	Garden Red Currant	A Shrub
RIBTRIS	Ribes triste	X	6	-5			Swamp Red Currant	N Shrub
ROBPSEU	Robinia pseudo-acacia	lc		4		-3	Black Locust	A Tree
RORSYLV	Rorippa sylvestris	l		-5		-1	Creeping Yellow Cress	A Forb
ROSACIC	Rosa acicularis	R1	7	3			Prickly Wild Rose	N Shrub
ROSLAN	Rosa blanda	X	3	3			Smooth Wild Rose	N Shrub
ROSCARO	Rosa carolina	R1	6	4			Carolina Rose	N Shrub
ROSMULT	Rosa multiflora	l		3		-3	Multiflora Rose	A Shrub
ROSPALU	Rosa palustris	X	7	-5			Swamp Rose	N Shrub
ROSRUBI	Rosa rubiginosa	l		5		-1	Sweetbrier	A Shrub
ROSSETI	Rosa setigera	R1	5	2	S3		Prairie Rose	N Shrub
RUBALLE	Rubus allegheniensis	C	2	2			Common Blackberry	N Shrub
RUBCANA	Rubus canadensis	R1	7	5			Smooth Blackberry	N Shrub
RUBFLAG	Rubus flagellaris	R4	4	4			Northern Dewberry	N Shrub
RUBHISP	Rubus hispidus	R4	6	-3			Swamp Dewberry	N Shrub
RUBIDAE	Rubus idaeus	X	0	-2			Wild Red Raspberry	N Shrub
RUBOCCI	Rubus occidentalis	X	2	5			Black Raspberry	N Shrub
RUBODOR	Rubus odoratus	R4	3	5			Purple-flowering Raspberry	N Shrub
RUBPUBE	Rubus pubescens	X	4	-4			Dwarf Raspberry	N Forb
RUDHIRT	Rudbeckia hirta	C	0	3			Black-eyed Susan	N Forb
RUDLACI	Rudbeckia laciniata	X	7	-4			Cut-leaved Coneflower	N Forb
RUDTRIL	Rudbeckia triloba	lr		1		-1	Thin-leaved Coneflower	A Forb
RUMACET	Rumex acetosella	lc		0		-2	Sheep Sorrel	A Forb
RUMALTI	Rumex altissimus	R1	8	-2			Pale Dock	N Forb
RUMLONG	Rumex longifolius	lr		0		-1	House Dock	A Forb
RUMOBTU	Rumex obtusifolius	l		-3		-1	Bitter Dock	A Forb
RUMORBI	Rumex orbiculatus	X	6	-5			Great Water Dock	N Forb
RUMSANG	Rumex sanguineus	lr		-3		-1	Dock	A Forb
RUMVERT	Rumex verticillatus	VU	7	-5			Water Dock	N Forb
SAGCUNE	Sagittaria cuneata	R1	7	-5			Arrowhead	N Forb
SAGITA.	Sagittaria sp.	C	4	-5			ARROWHEAD SPECIES (UNSPECIFIED)	N Forb
SAGLATI	Sagittaria latifolia	C	4	-5			Common Arrowhead	N Forb
SAGPROC	Sagina procumbens	lr		-3		-1	Pearlwort	A Forb
SALALBA	Salix alba	l		-3		-2	White Willow	A Tree
SALAMYG	Salix amygdaloides	X	6	-3			Peach-leaved Willow	N Tree
SALBEBB	Salix bebbiana	X	4	-4			Bebb's Willow	N Shrub

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
SALCAND	Salix candida	R1	10	-5			Hoary Willow	N Shrub
SALCINE	Salix cinerea	lr		5		-1	Gray Willow	A Shrub
SALCOLL	Salsola collina	lr		5		-1	Russian-thistle	A Forb
SALCORD	Salix cordata	R1	9	-1			Heart-leaved Willow	N Shrub
SALDISC	Salix discolor	X	3	-3			Pussy Willow	N Shrub
SALERIO	Salix eriocephala	X	4	-3			Heart-leaved Willow	N Shrub
SALEXIG	Salix exigua	C	3	-5			Sandbar Willow	N Shrub
SALFRAG	Salix fragilis	l		-1		-3	Crack Willow	A Tree
SALHUMI	Salix humilis	R3	7	3			Upland Willow	N Shrub
SALKALI	Salsola kali	l		3		-1	Russian-thistle	A Forb
SALLUCI	Salix lucida	X	5	-4			Shining Willow	N Shrub
SALMYRI	Salix myricoides	R1	10	-3			Blue-leaved Willow	N Shrub
SALNIGR	Salix nigra	X	6	-5			Black Willow	N Tree
SALPEDI	Salix pedicellaris	R1	9	-5			Bog Willow	N Shrub
SALPENT	Salix pentandra	lr		5		-1	Bay-leaved Willow	A Tree
SALPETI	Salix petiolaris	X	3	-4			Slender Willow	N Shrub
SALPURP	Salix purpurea	l		-3		-2	Basket Willow	A Shrub
SALPYRI	Salix pyrifolia	R1	10	-4			Balsam Willow	N Shrub
SALSERM	Salix serissima	VU	6	-5			Autumn Willow	N Shrub
SALXRUB	Salix x rubens	lr		-4		-3	(S. alba X S. fragilis)	A Tree
SAMCANA	Sambucus canadensis	X	5	-2			Common Elder	N Shrub
SAMPUBE	Sambucus racemosa	X	5	2			Red-berried Elder	N Shrub
SAMVALE	Samolus valerandi	VU	8	-5			Water Pimpernel	N Forb
SANCACA	Sanicula canadensis	R4	7	2			Canada Snakeroot	N Forb
SANCANA	Sanguinaria canadensis	X	5	4			Bloodroot	N Forb
SANCANG	Sanicula canadensis	Rh	7	2	SH		Long-styled Canada Snakeroot	N Forb
SANMARI	Sanicula marilandica	X	5	3			Black Snakeroot	N Forb
SANMINO	Sanguisorba minor	l		0		-1	Garden Burnet	A Forb
SANODOR	Sanicula odorata	X	6	-1			Yellow Snakeroot	N Forb
SANTRIF	Sanicula trifoliata	X	7	5	S5		Large-fruited Snakeroot	N Forb
SAPOFFI	Saponaria officinalis	l		3		-3	Bouncing Bet	A Forb
SARPURP	Sarracenia purpurea	R4	10	-5			Pitcher-plant	N Forb
SASALBI	Sassafras albidum	X	6	3	S4		Sassafras	N Tree
SAUCERN	Saururus cernuus	VU	8	-5			Lizard's-tail	N Forb
SAXVIRG	Saxifraga virginiana	R2	6	1			Early Saxifrage	N Forb
SCHPALU	Scheuchzeria palustris	Rh	10	-5			Bog-bean	N Forb
SCHPURP	Schizachne purpurascens	X	6	2			Purple Melic Grass	N Grass
SCHPURP	Schizachne purpurascens	X	6	2			Hairy False Melic Grass	N Grass
SCHSCOP	Schizachyrium scoparium	X	7	3			Little Bluestem	N Grass
SCIACUT	Scirpus acutus	R3	6	-5			Hard-stemmed Bulrush	N Sedge
SCIATRO	Scirpus atrovirens	C	3	-5			Dark Green Bulrush	N Sedge
SCIATRO	Scirpus atrovirens	C	3	-5			Dark Green Bulrush	N Sedge
SCICYPE	Scirpus cyperinus	C	4	-5			Wool-grass	N Sedge
SCIFLUV	Scirpus fluviatilis	R1	7	-5			Bulrush	N Sedge
SCIMICR	Scirpus microcarpus	R3	4	-5			Red-sheathed Bulrush	N Sedge
SCIPEDI	Scirpus pedicellatus	R1	8	-5			Pedicellate Wool-grass	N Sedge
SCIPEND	Scirpus pendulus	C	3	-5			Nodding Bulrush	N Sedge
SCIPUNG	Scirpus pungens	U	6	-5			Threesquare	N Sedge
SCISMIT	Scirpus smithii	R1	10	-5	S2		Smith's Club-rush	N Sedge
SCIVALI	Scirpus validus	C	5	-5			Soft-stem Bulrush	N Sedge
SCLANNU	Scleranthus annuus	l		3		-1	Knawel	A Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
SCLTRIG	<i>Scleria triglomerata</i>	Rh	10	0	S1		Tall Nut-rush	N Sedge
SCRLANC	<i>Scrophularia lanceolata</i>	R1	7	2			Lance-leaved Figwort	N Forb
SCRMARI	<i>Scrophularia marilandica</i>	X	7	4	S4		Carpenter's-square	N Forb
SCUGALE	<i>Scutellaria galericulata</i>	X	6	-5			Common Skullcap	N Forb
SCULATE	<i>Scutellaria lateriflora</i>	X	5	-5			Mad-dog Skullcap	N Forb
SCUPARV	<i>Scutellaria parvula</i> var. <i>parvula</i>	R1	9	0			LEONARD'S SMALL SKULLCAP	N Forb
SECCERE	<i>Secale cereale</i>	I		5		-1	Rye	A Grass
SEDACRE	<i>Sedum acre</i>	I		5		-3	Mossy Stonecrop	A Forb
SEDSPUR	<i>Sedum spurium</i>	Ir		5		-1	False Stonecrop	A Forb
SEDELE	<i>Sedum telephium</i>	Ir		5		-1	Live-forever	A Forb
SELAPOD	<i>Selaginella apoda</i>	X	7	-4			Northern Meadow Spikemoss	N Fern
SELRUPE	<i>Selaginella rupestris</i>	R1	8	5			Rock Spikemoss	N Fern
SENAURE	<i>Senecio aureus</i>	X	7	-3			Golden Ragwort	N Forb
SENPAP	<i>Senecio pauperculus</i>	VU	7	-1			Balsam Ragwort	N Forb
SENVISC	<i>Senecio viscosus</i>	Ir		5		-1	Sticky Ragwort	A Forb
SENVULG	<i>Senecio vulgaris</i>	I		5		-1	Common Groundsel	A Forb
SETFABE	<i>Setaria faberi</i>	Ic		2		-1	Giant Foxtail	A Grass
SETPUMI	<i>Setaria pumila</i>	I		0		-1	Yellow Foxtail	A Grass
SETVERT	<i>Setaria verticillata</i> (L.) P. Beauv.	I		0		-1	Bristly Foxtail	A Grass
SETVIRI	<i>Setaria viridis</i>	I		5		-1	Green Foxtail	A Grass
SHECANA	<i>Shepherdia canadensis</i>	R2	7	5			Soapberry	N Shrub
SICANGU	<i>Sicyos angulatus</i>	X	5	-2			Bur Cucumber	N Vine
SILANTI	<i>Silene antirrhina</i>	R4	3	5			Sleepy Catchfly	N Forb
SILDICH	<i>Silene dichotoma</i>	Ih		5		-1	Forking Catchfly	A Forb
SILLATI	<i>Silene latifolia</i>	I		5		-2	White Cockle	A Forb
SILNOCT	<i>Silene noctiflora</i>	I		5		-1	Night-flowering Catchfly	A Forb
SILPERF	<i>Silphium perfoliatum</i>	R1	9	-2	S2		Cup-plant	N Forb
SINARVE	<i>Sinapis arvensis</i>	I				-1	Charlock	A Forb
SISALTI	<i>Sisymbrium altissimum</i>	I		3		-1	Tumble Mustard	A Forb
SISANGU	<i>Sisyrinchium angustifolium</i>	R3	6	-2	S4		Narrow-leaved Blue-eyed Grass	N Forb
SISMONT	<i>Sisyrinchium montanum</i>	X	4	-1			Little Blue-eyed Grass	N Forb
SISMUCR	<i>Sisyrinchium mucronatum</i>	R4	10	-2			Blue-eyed Grass	N Forb
SISOFFI	<i>Sisymbrium officinale</i>	I		5		-1	Hedge Mustard	A Forb
SIUSUAV	<i>Sium suave</i>	C	4	-5			Water-parsnip	N Forb
SMIECIR	<i>Smilax ecirrhata</i>	R1	6	5			Carrion-flower	N Forb
SMIHERB	<i>Smilax herbacea</i>	X	5	0			Carrion-flower	N Forb
SMIHISP	<i>Smilax hispida</i>	X	6	0			Bristly Greenbrier	N Vine
SMILASI	<i>Smilax lasioneura</i>	X	5	5			Carrion-flower	N Vine
SOLALTI	<i>Solidago altissima</i>	U	1	3			Late Goldenrod	N Forb
SOLARGU	<i>Solidago arguta</i>	R1	8	3	S2		Sharp-leaved Goldenrod	N Forb
SOLBICO	<i>Solidago bicolor</i>	R1	8	5			Silverrod	N Forb
SOLCAES	<i>Solidago caesia</i>	X	5	3			Blue-stem Goldenrod	N Forb
SOLCANA	<i>Solidago canadensis</i>	X	1	3			Canada Goldenrod	N Forb
SOLCARO	<i>Solanum carolinense</i>	I		4		-1	Horse Nettle	A Forb
SOLDULC	<i>Solanum dulcamara</i>	Ic		0		-2	Climbing Nightshade	A Vine
SOLFLEX	<i>Solidago flexicaulis</i>	X	6	3			Zig-zag Goldenrod	N Forb
SOLGIGA	<i>Solidago gigantea</i>	X	4	-3			Tall Goldenrod	N Forb
SOLHISP	<i>Solidago hispida</i>	R1	7	5			Hairy Goldenrod	N Forb
SOLJUNC	<i>Solidago juncea</i>	X	3	5			Early Goldenrod	N Forb
SOLNEMO	<i>Solidago nemoralis</i>	X	2	5			Gray Goldenrod	N Forb
SOLOHIO	<i>Solidago ohioensis</i>	R1	10	-5	S4		Ohio Goldenrod	N Forb



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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
SOLPATU	Solidago patula	X	8	-5	S4		Rough-leaved Goldenrod	N Forb
SOLPTAR	Solidago ptarmicoides	R1	9	5			Upland White Aster	N Forb
SOLPTYC	Solanum ptycanthum	X		0		-1	Eastern Black Nightshade	A Forb
SOLRIDD	Solidago riddellii	R3	10	-5	S2		Riddell's Goldenrod	N Forb
SOLRIGI	Solidago rigida	U	9	4	S3		Stiff-leaved Goldenrod	N Forb
SOLRUGO	Solidago rugosa	X	4	-1			Rough Goldenrod	N Forb
SOLSQUA	Solidago squarrosa	Rh	10	5			Stout Goldenrod	N Forb
SOLTUBE	Solanum tuberosum	I		5		-1	Potato	A Forb
SOLULIG	Solidago uliginosa	R1	9	-5			Bog Goldenrod	N Forb
SOLULMI	Solidago ulmifolia	Rh	9	5	(S1)		Elm-leaved Goldenrod	N Forb
SONARVE	Sonchus arvensis	I		1		-1	Perennial Sow-thistle	A Forb
SONASPE	Sonchus asper	I		0		-1	Spiny-leaved Sow-thistle	A Forb
SONOLER	Sonchus oleraceus	I		3		-1	Annual Sow-thistle	A Forb
SORAUCU	Sorbus aucuparia	I		5		-2	European Mountain-ash	A Tree
SORBICO	Sorghum bicolor	Ir		5		-1	Sorghum	A Grass
SORHALE	Sorghum halepense	I		3		-1	Johnson Grass	A Grass
SORNUTA	Sorghastrum nutans	X	8	2			Indian Grass	N Grass
SORSORB	Sorbaria sorbifolia	Ir		5		-1	False Spiraea	A Shrub
SPAAMER	Sparganium americanum	R2	6	-5			American Bur-reed	N Forb
SPAANDR	Sparganium androcladum	R1	6	-5	S2		Branching Bur-reed	N Forb
SPAEMER	Sparganium emersum	VU	5	-5			Green-fruited Bur-reed	N Forb
SPAEURY	Sparganium eurycarpum	X	3	-5			Giant Bur-reed	N Forb
SPANATA	Sparganium natans	R1	8	-5			Small Bur-reed	N Forb
SPAPECT	Spartina pectinata	X	7	-4			Tall Cord Grass	N Grass
SPEMARI	Spargularia marina	Ir		-5	S1	-1	Sea-spurrey	A Forb
SPEMEDI	Spargularia media	Ir		3		-1	Sand-spurrey	A Forb
SPHINTE	Sphenopholis intermedia	X	6	0			Slender Wedge Grass	N Grass
SPIALBA	Spiraea alba	X	3	-4			Meadowsweet	N Shrub
SPICERN	Spiranthes cernua	X	5	-2			Nodding Ladies'-tresses	N Forb
SPIJAPO	Spiraea japonica	Ir		5		-1	Japanese Spiraea	A Shrub
SPILUCI	Spiranthes lucida	R1	9	-4			Shining Ladies'-tresses	N Forb
SPIMAGN	Spiranthes magnicamporum	R1	8	-3	S2		Great Plains Ladies'-tresses	N Forb
SPIOCHR	Spiranthes ochroleuca	VU	9	3	S2		Yellow Nodding Ladies'-tresses	N Forb
SPIPOLY	Spirodela polyrhiza	VU	4	-5			Greater Duckweed	N Forb
SPIROMA	Spiranthes romanzoffiana	R1	9	-4			Hooded Ladies'-tresses	N Forb
SPOASPE	Sporobolus asper	U	2	5	S1		Rough Dropseed	N Grass
SPOCRYP	Sporobolus cryptandrus	X	2	4	S5		Sand Dropseed	N Grass
SPONEGL	Sporobolus neglectus	X	1	5	S5		Overlooked Dropseed	N Grass
SPOVAGI	Sporobolus vaginiflorus	X	1	5			Ensheathed Dropseed	N Grass
SPOVAGI	Sporobolus vaginiflorus	X	1	5			Dropseed	N Grass
STAHISP	Stachys hispida	R2	7	-4			Rough Hedge-nettle	N Forb
STAPALU	Stachys palustris	I		-5		-1	Marsh Hedge-nettle	A Forb
STATRIF	Staphylea trifolia	X	7	0			Bladdernut	N Shrub
STEGRAM	Stellaria graminea	I		5		-2	Grass-leaved Stitchwort	A Forb
STELONG	Stellaria longifolia	X	2	-4			Long-leaved Chickweed	N Forb
STEMEDI	Stellaria media	Ic		3		-1	Common Chickweed	A Forb
STISPAR	Stipa spartea	R1	10	5	S3		Needle Grass	N Grass
STRROSE	Streptopus roseus	VU	7	0			Rose Twisted-stalk	N Forb
STYDIPH	Stylophorum diphyllum	R2	9	5	S1		Wood Poppy	N Forb
SUACALC	Suaeda calceoliformis	Ir		-3	S2	-1	Sea-blite	A Forb
SYMALBU	Symphoricarpos albus	X	7	4			Snowberry	N Shrub

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
SYMFOET	Symplocarpus foetidus	C	7	-5			Skunk-cabbage	N Forb
SYMOFFI	Symphytum officinale	I		5		-1	Common Comfrey	A Forb
SYMORBI	Symphoricarpos orbiculatus	Ir		3		-1	Coralberry	A Shrub
SYRVULG	Syringa vulgaris	I		5		-2	Common Lilac	A Shrub
TAEINTE	Taenidia integerrima	VU	9	5			Yellow-pimpernel	N Forb
TANVULG	Tanacetum vulgare	I		5		-1	Tansy	A Forb
TARERYT	Taraxacum erythrospermum	Ir		5		-1	Red-seeded Dandelion	A Forb
TAROFFI	Taraxacum officinale	Ic		3		-2	Common Dandelion	A Forb
TARPALU	Taraxacum palustre	Ivu		-5		-1	Marsh Dandelion	A Forb
TAXCANA	Taxus canadensis	X	7	3			American Yew	N Shrub
TEUCANA	Teucrium canadense	R3	6	-2			WOOD SAGE	N Forb
THADASY	Thalictrum dasycarpum	R1	8	-2			Purple Meadow-rue	N Forb
THADIOI	Thalictrum dioicum	X	5	2			Early Meadow-rue	N Forb
THAPUBE	Thalictrum pubescens	X	5	-2			Tall Meadow-rue	N Forb
THENOVE	Thelypteris noveboracensis	X	7	-1			New York Fern	N Fern
THEPALU	Thelypteris palustris	X	5	-4			Marsh Fern	N Fern
THLARVE	Thlaspi arvense	Ic		5		-1	Penny Cress	A Forb
THUOCCI	Thuja occidentalis	X	4	-3			White Cedar	N Tree
THYPULE	Thymus pulegioides	Ir		5		-1	Wild Thyme	A Forb
TIACORD	Tiarella cordifolia	X	6	1			Foamflower	N Forb
TILAMER	Tilia americana	C	4	3			Basswood	N Tree
TORJAPO	Torilis japonica	Ir		5		-3	Hedge Parsley	A Forb
TRADUBI	Tragopogon dubius	I		5		-1	Goat's-beard	A Forb
TRAPORR	Tragopogon porrifolius	Ir		5		-1	Common Salsify	A Forb
TRAPRAT	Tragopogon pratensis	I		5		-1	Yellow Goat's-beard	A Forb
TRIAEST	Triticum aestivum	Ir		5		-1	Common Wheat	A Grass
TRIAURA	Triosteum aurantiacum	X	7	5			Horse-gentian	N Forb
TRIAURE	Trifolium aureum	I		5		-1	Hop Clover	A Forb
TRIBORE	Trientalis borealis	X	6	-1			Starflower	N Forb
TRICAMP	Trifolium campestre	I		5		-1	Low Hop Clover	A Forb
TRIEREC	Trillium erectum	X	6	1			Red Trillium	N Forb
TRIFLEX	Trillium flexipes	R1	10	1	S1		Bent Trillium	N Forb
TRIFRAS	Triadenum fraseri	VU	7	-5			Marsh St. John's-wort	N Forb
TRIGRAN	Trillium grandiflorum	X	5	5			White Trillium	N Forb
TRIHYBR	Trifolium hybridum	I		1		-1	Alsike Clover	A Forb
TRIMARI	Triglochin maritimum	Ir	8	-5			Arrow-grass	N Forb
TRIPRAT	Trifolium pratense	I		2		-2	Red Clover	A Forb
TRIREPE	Trifolium repens	I		2		-1	White Clover	A Forb
TSUCANA	Tsuga canadensis	X	7	3			Eastern Hemlock	N Tree
TUSFARF	Tussilago farfara	Ic		3		-2	Coltsfoot	A Forb
TYPANGU	Typha angustifolia	X	3	-5			Narrow-leaved Cattail	N Forb
TYPLATI	Typha latifolia	X	3	-5			Common Cattail	N Forb
TYPXGLA	Typha x glauca	R1	3	-5			(T. angustifolia x T. latifolia)	N Forb
ULMAMER	Ulmus americana	X	3	-2			American Elm	N Tree
ULMPUMI	Ulmus pumila	Ir		5		-1	Siberian Elm	A Tree
ULMRUBR	Ulmus rubra	X	6	0			Slippery Elm	N Tree
ULMTHOM	Ulmus thomasii	VU	6	-1			Rock Elm	N Tree
URTDIDI	URTICA DIOICA SSP. DIOICA	Ir		-1		-1	NETTLE	A Forb
URTDIOG	Urtica dioica	C	2	-1			American Stinging Nettle	N Forb
URTUREN	Urtica urens	Ih		5		-1	Dwarf Nettle	A Forb
UTRCORN	Utricularia cornuta	R1	9	-5			Horned Bladderwort	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
UTRVULG	Utricularia vulgaris	VU	4	-5			Common Bladderwort	N Forb
UVUGRAN	Uvularia grandiflora	X	6	5			Large-flowered Bellwort	N Forb
UVUSESS	Uvularia sessilifolia	R2	7	1			Merrybells	N Forb
VACANGU	Vaccinium angustifolium	X	6	3			Lowbush Blueberry	N Shrub
VACCORY	Vaccinium corymbosum	X	8	-3			Highbush Blueberry	N Shrub
VACMACR	Vaccinium macrocarpon	R3	10	-5			Large Cranberry	N Shrub
VACMYRT	Vaccinium myrtilloides	R4	7	-2			Velvet-leaf Blueberry	N Shrub
VACOXYC	Vaccinium oxycoccus	R1	10	-5			Small Cranberry	N Shrub
VACPALL	Vaccinium pallidum	R1	9	5	S4		Dryland Blueberry	N Shrub
VALAMER	Vallisneria americana	R2	6	-5			Tape-grass	N Forb
VALEDUL	Valeriana edulis	Rh	10	-5	S1		Edible Valerian	N Forb
VALOFFI	Valeriana officinalis	lr		2		-1	Heliotrope	A Forb
VERAMER	Veronica americana	X	6	-5			American Brooklime	N Forb
VERANAG	Veronica anagallis-aquatica	l		-5		-1	Water Speedwell	A Forb
VERARVE	Veronica arvensis	l		5		-1	Corn Speedwell	A Forb
VERBECC	Veronica beccabunga	lr		-5		-1	Brooklime	A Forb
VERBLAT	Verbascum blattaria	lc		4		-1	Moth Mullein	A Forb
VERBRAC	Verbena bracteata	R	2	3			Prostrate Vervain	N Forb
VERCHAM	Veronica chamaedrys	lr		5		-1	Bird's-eye Speedwell	A Forb
VERFILI	Veronica filiformis	lr		5		-1	Slender Speedwell	A Forb
VERHAST	Verbena hastata	C	4	-4			Blue Vervain	N Forb
VERLONG	Veronica longifolia	lr		5		-1	Long-leaved Speedwell	A Forb
VEROFFI	Veronica officinalis	l		5		-2	Common Speedwell	A Forb
VERPERE	Veronica peregrina	VU	0	-4			Purslane Speedwell	N Forb
VERPERS	Veronica persica	lr		5		-1	Persian Speedwell	A Forb
VERPOLI	Veronica polita	lr		5		-1	Speedwell	A Forb
VERSCUT	Veronica scutellata	R2	7	-5			Marsh Speedwell	N Forb
VERSERP	Veronica serpyllifolia	l	0	-3			Thyme-leaved Speedwell	N Forb
VERSTRI	Verbena stricta	R4	7	5			Hoary Vervain	N Forb
VERTHAP	Verbascum thapsus	lc		5		-2	Common Mullein	A Forb
VERURTI	Verbena urticifolia	X	4	-1			White Vervain	N Forb
VIBACER	Viburnum acerifolium	X	6	5			Maple-leaved Viburnum	N Shrub
VIBCASS	Viburnum cassinoides	X	7	-3			Wild-raisin	N Shrub
VIBLANA	Viburnum lantana	lr		5		-1	Wayfaring Tree	A Shrub
VIBLENT	Viburnum lentago	C	4	-1			Nannyberry	N Shrub
VIBOPUL	Viburnum opulus	lr		0		-1	European Highbush-cranberry	A Shrub
VIBRAFI	Viburnum rafinesquianum	X	7	5			Downy Arrow-wood	N Shrub
VIBTRIL	Viburnum trilobum	X	5	-3			Highbush-cranberry	N Shrub
VICCRAC	Vicia cracca	l		5		-1	Cow Vetch	A Forb
VICSATI	Vicia sativa	l		4		-1	Common Vetch	A Forb
VICTETR	Vicia tetrasperma	l		5		-1	Sparrow Vetch	A Forb
VICVILL	Vicia villosa	l		5		-1	Hairy Vetch	A Forb
VINMINO	Vinca minor	lr		5		-2	Common Periwinkle	A Shrub
VIOAFFI	Viola affinis	R2	6	-3	S4		Le Conte's Marsh Violet	N Forb
VIOARVE	Viola arvensis	l		5		-1	Field Pansy	A Forb
VIOBLAN	Viola blanda	X	6	-2			Sweet White Violet	N Forb
VIOCANA	Viola canadensis	X	6	5			Canada Violet	N Forb
VIOCONS	Viola conspersa	X	4	-2			Dog Violet	N Forb
VIOCUCU	Viola cucullata	X	5	-5			Marsh Violet	N Forb
VIOMACL	Viola macloskeyi	R2	6	-5			Smooth White Violet	N Forb
VIONEPH	Viola nephrophylla	R1	7	-4			Northern Bog Violet	N Forb

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SP_CODE	SCI_NAME	MIDD	CC	CW	SRANK	WEED	COM_NAME	PHYSIOG
VIODOR	<i>Viola odorata</i>	lr		5		-1	Sweet Violet	A Forb
VIOPALM	<i>Viola palmata</i>	R1	9	5	S2		Wood Violet	N Forb
VIOPUBE	<i>Viola pubescens</i>	C	5	4			Yellow Violet	N Forb
VIORENI	<i>Viola renifolia</i>	?	7	-3			Kidney-leaved Violet	N Forb
VIOROST	<i>Viola rostrata</i>	X	6	3			Long-spurred Violet	N Forb
VIOROTU	<i>Viola rotundifolia</i>	Rh	10	0	S1		Round-leaved Violet	N Forb
VIOSAGI	<i>Viola sagittata</i>	X	9	-2	S4		Arrow-leaved Violet	N Forb
VIOSORO	<i>Viola sororia</i>	X	4	1			Common Blue Violet	N Forb
VIOSTRI	<i>Viola striata</i>	U	8	-3	S3		Striped Violet	N Forb
VIOTRIC	<i>Viola tricolor</i>	lr		5		-1	Johnny-jump-up	A Forb
VIOXBRA	<i>Viola x brauniae</i>	R1	8				( <i>V. rostrata</i> X <i>V. striata</i> )	N Forb
VITAEST	<i>Vitis aestivalis</i>	VU	7	3	S4		Summer Grape	N Vine
VITLABR	<i>Vitis labrusca</i>	R3	3	3			Fox Grape	N Vine
VITRIPA	<i>Vitis riparia</i>	C	0	-2			Riverbank Grape	N Vine
WALFRAG	<i>Waldsteinia fragarioides</i>	R4	5	5			Barren Strawberry	N Forb
WOLBORE	<i>Wolffia borealis</i>	VU	4	-5			Dotted Water-meal	N Forb
WOLCOLU	<i>Wolffia columbiana</i>	VU	4	-5			Water-meal	N Forb
WOOVIRG	<i>Woodwardia virginica</i>	R1	10	-5			Virginia Chain-fern	N Fern
XANSPIN	<i>Xanthium spinosum</i>	lh		3		-1	Cocklebur	A Forb
XANSTRU	<i>Xanthium strumarium</i>	C	2	0			Cocklebur	N Forb
ZANAMER	<i>Zanthoxylum americanum</i>	C	3	5			Prickly-ash	N Shrub
ZEAMAYS	<i>Zea mays</i>	lr		5		-1	Corn	A Grass
ZIZAPTE	<i>Zizia aptera</i>	Rh	9	3	S1		Heart-leaved Alexanders	N Forb
ZIZAURE	<i>Zizia aurea</i>	X	7	-1			Golden Alexanders	N Forb

## **APPENDIX 6**

### **DESCRIPTION OF THE GEODATABASE DIGITAL MAPPING LAYERS**

**NATURAL HERITAGE GEODATABASE**

<b>londonesa83:</b>	City of London Environmental Significant Areas ( <i>Corporation of City of London 2002</i> )
<b>buffer_of_londonesa83:</b>	750 m buffer on londonesa83 ( <i>UTRCA 2002</i> )
<b>esa_lamb83:</b>	Lambton County Environmental Significant Area 33L "Sydenham River Corridor" ( <i>Lambton County Official Plan 1996</i> )
<b>buffer_of_esalamb83:</b>	750 m buffer on esa_lamb83 ( <i>UTRCA 2002</i> )
<b>prov_ansi83:</b>	Areas of Natural and Scientific Interest (Life Science) as defined in the Middlesex County Official Plan (1997) ( <i>Natural Heritage Information Centre</i> )
<b>buffer_of_prov_ansi83:</b>	750 m buffer on prov_ansi83 ( <i>UTRCA 2002</i> )
<b>sna_op83:</b>	Significant Natural Areas as defined in the Middlesex County Official Plan (1997) ( <i>Hilts and Cook 1982</i> )
<b>buffer_of_sna_op83:</b>	750 m buffer on sna_op83 ( <i>UTRCA 2002</i> )
<b>Wetlands_2003:</b>	Provincially Designated Wetlands ( <i>Ontario Ministry of Natural Resources 2003</i> )
<b>Buffer_of_Wetands_2003:</b>	750 m buffer on Wetlands_2003 ( <i>UTRCA 2003</i> )
<b>BPcorridor_middlesex:</b>	Big Picture Natural Heritage Corridor in Hills' (1959) Site Region 7E  ( <i>Natural Heritage Information Centre 1999</i> )
<b>Bigger_Picture_Corridor:</b>	Big Picture Natural Heritage Corridor incorporating Hills' (1959) Site Region 6E  ( <i>Natural Heritage Information Centre 2003</i> )
<b>Buffer_of_Bigger_Picture_Corridor:</b>	200 m buffer on Bigger_Picture_Corridor ( <i>UTRCA 2003</i> )
<b>Middlesex_ABCA_Corridor:</b>	Natural Heritage Corridor ( <i>Ausable Bayfield Conservation Authority Watershed Management Strategy 1995</i> )
<b>Buffer_of_Thames_Corridor:</b>	200 m buffer on Thames River ( <i>Woodfern Research 1991</i> )
<b>Middlesex_Natural_HeritageCorridor:</b>	Final Natural Heritage Corridor - comprised of parts from: Big_Picture_Corridor,

Buffer\_of\_Bigger\_Picture\_Corridor,  
 Middlesex\_ABCA\_Corridor  
 Buffer\_of\_Thames\_Corridor  
 (UTRCA 2003)

**middlesex\_flow:** Surface and subsurface drainage and natural watercourses. ABCA and UTRCA removed subsurface segment from digital layer. Original info provided by OBM 1:10,000 1983 but updated by photography of the following years:

Ausable Bayfield 1999  
 Lower Thames River 1983  
 Kettle Creek 1997  
 Upper Thames River 1989  
 St. Clair River 1992

**buffer\_of\_middlesex\_flow:** 50 m buffer on middlesex\_flow  
 (UTRCA 2002)

**middlesex\_waterpoly:** Waterbodies and wetland features  
 (OBM 1983)

**Middlesex\_prairie\_grasslands:** Areas of grassland Prairie  
 (Tall Grass Ontario Files)

### PHYSICAL GEOGRAPHY GEODATABASE

**Mid\_soil\_83:** Middlesex County soils information  
 (Ontario Ministry of Agriculture and Food 1985)

**Soils\_fs83, \_fsl83, \_sl83, \_vfl83:** Soils types extracted from Mid\_soil\_83 to define areas of possible recharge  
 (Ontario Ministry of Agriculture and Food 1985)

**midphys\_83:** Middlesex County Physiography  
 (Chapman and Putnam 1972)

**middlesex\_landuse:** Middlesex County Agriculture Land Use  
 (Ontario Ministry of Agriculture and Food 1983 survey)

**Middlesex\_Geographic:** County boundary including City of London and First Nations Reserves as one file  
 (Municipal Housing and Affairs 2002)

**Middlesex\_proper:** Middlesex County boundary not including City of London nor the First Nations  
 (Municipal Housing and Affairs 2002)

**Middlesex\_FN\_London:** Middlesex\_Geographic including First Nations and City of London Boundaries as separate entities  
 (Municipal Housing and Affairs 2002)

**Middlesex\_Geographic2km:** 200m boundary on outside of Middlesex\_Geographic  
(*UTRCA 2002*)

### **VEGETATION GEODATABASE**

**vegmodelalldc2:** Updated vegetation layer (woodland patches)  
(*UTRCA 2002*)

**Buffer\_of\_vegmodel83alldc2\_2:** 100m buffer of vegmodelalldc2 on inside of polygon only  
(*UTRCA 2002*)

**vegmodel\_interior:** forest edge and interior attribute information  
(*UTRCA 2002*)

**interior\_forest:** all interior forest segments except segments less than  
2000m<sup>2</sup>  
(*UTRCA 2002*)

**interior\_calculation:** information regarding size of individual woodlands  
including total area, edge and amount of interior  
(*UTRCA 2002*)

**veg\_gt\_10ha:** Vegetation patches greater than 10 hectares extracted from  
vegmodelalldc2  
(*UTRCA 2002*)

**buffer of veg\_gt\_ha:** 100 m buffer on veg\_gt\_10ha  
(*UTRCA 2002*)



## **APPENDIX 7**

### **TREE SPECIES BY PHYSIOGRAPHIC TYPE**

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SPECIES CODE	BEACH	CLAY	KAME	PEAT	SAND	SPILL	TILLMOR	TILLPLA	TOTAL
ACENEGU						13	3	3	19
ACENIGR	1				1			1	3
ACERUBR	1	6	4	4	13	6	4	14	52
ACESACC	17	8	2		53	86	46	78	290
ACESACN	3	4	1	2	19	35	12	43	119
BETALLE	3				3	8	1	2	17
BETPAPY	1				1	3	3		8
CARCORD	4	2			6	16	13	24	65
CAROVAT	1	1			1	1	2	2	8
CELOCCI						1	1	1	3
CRATAE	1				1	3	1	1	7
FAGGRAN			1		4	17	4	14	40
FRAAMER	4	2			14	54	22	43	139
FRANIGR	1				2	2			5
FRAPENN		5	4			2	3	4	18
FRAVIN		4	4	1	2	5	5	16	37
GLETRIA							1	1	2
JUGCINE								1	1
JUGNIGR	2	2	2		2	11	5	8	32
LARLARI						5	1	1	7
MALPUMI						2	1		3
OSTVIRG								2	2
PICABIE						1			1
PINRESI						1		1	2
PINSTRO	3	2			4	6	4	5	24
PINSYLV						4	3	3	10
PLAOCCI						3			3
POPALBA						1			1
POPBALS						2	1	1	4
POPDELT	1			1	1	5	2	3	13
POPGRAN					1	4	3	3	11
POPTREM	4			2	8	42	13	27	96

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PRUSERO			2			4	1	1	<b>8</b>
QUEALBA					1	3	1		<b>5</b>
QUEMACR		2			2	4	1	5	<b>14</b>
QUERUBR					1	4	4	1	<b>10</b>
QUEVELU					1				<b>1</b>
ROBPSEU						2	2	1	<b>5</b>
SALIX	1		2			4	2		<b>9</b>
SALXRUB	2				7	28	14	20	<b>71</b>
THUOOCI	1				1	18	5		<b>25</b>
TILAMER						4	3	2	<b>9</b>
TSUCANA	1				1	7			<b>9</b>
ULMAMER	5	3		1	6	37	20	45	<b>117</b>
<b># TYPES</b>	<b>24</b>	<b>12</b>	<b>10</b>	<b>7</b>	<b>32</b>	<b>56</b>	<b>45</b>	<b>43</b>	<b>229</b>
<b># COMM</b>	<b>57</b>	<b>41</b>	<b>22</b>	<b>11</b>	<b>156</b>	<b>454</b>	<b>207</b>	<b>377</b>	<b>1325</b>
<b>DIVERSITY</b>	<b>0.87</b>	<b>0.94</b>	<b>0.95</b>	<b>0.84</b>	<b>0.74</b>	<b>0.78</b>	<b>0.82</b>	<b>0.75</b>	<b>N / A</b>