

**INTEGRATED WETLAND ASSESSMENT PROGRAM:
Part 9: Field Manual for the Vegetation Index of Biotic Integrity
for Wetlands v. 1.3**

Ohio EPA Technical Report WET/2004-9



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INTEGRATED WETLAND ASSESSMENT PROGRAM.
PART 9: FIELD MANUAL FOR THE VEGETATION INDEX OF BIOTIC INTEGRITY
FOR WETLANDS v. 1.3.

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ABSTRACT

A field manual has been developed documenting sampling, laboratory, and data analysis procedures necessary to calculate the Vegetation Index of Biotic Integrity for wetlands (Mack et al. 2000, Mack 2001b, Mack 2004a, and Mack 2004b). It is intended to be used to standardize vegetation sampling techniques for the development and use of wetland biological assessments using vascular plants as an indicator species. The methods outlined here can also be used in other situations including monitoring mitigation wetlands or for more general plant community characterization. This manual documents methods used in the Ohio Environmental Protection Agency's wetland program. The vegetation sampling procedures were adapted from methods developed for the North Carolina Vegetation Survey as described in Peet et al. (1998). Their method has been used at over 3000 sites for over ten years by the North Carolina Vegetation Survey. Ohio EPA has sampled over 250 plots between 1999-2004, including reference wetlands, mitigation banks, and individual mitigation wetlands. The most typical application of the method employs a set of 10 modules in a 20m x 50m layout. Within the site to be surveyed, the 20m x 50m grid is located such that the long axis of the plot is oriented to minimize the environmental heterogeneity within the plot. For very large natural wetlands or large mitigation or restoration sites, e.g. mitigation bank sites, a randomized variation was developed in which a standard 2 x 5 plot with 10 modules is taken apart and individual 10 x 10m modules randomly placed across the wetland or mitigation being sampled. Plot location rules were developed for consistent location of plots. Finally, steps for reducing and analyzing the data collected are outlined.

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INTRODUCTION

Background

This field manual documents sampling, laboratory, and data analysis procedures necessary to calculate the Vegetation Index of Biotic Integrity for wetlands (Mack 2004b). It is intended to be used to standardize and document vegetation sampling techniques for the development and use of wetland biological assessments using vascular plants as an indicator species. The methods outlined here can also be used in other situations including monitoring mitigation wetlands or for more general plant community characterization. This manual documents methods used in the Ohio Environmental Protection Agency's wetland program.

The Ohio EPA began evaluating vegetation sampling methods in 1996. Major concerns in selecting a sampling method were ease of use, cost, and reproducibility of results. Ohio EPA sampled disturbed and undisturbed wetlands in western and central Ohio in 1996-1998. Initially, Ohio EPA evaluated a fixed transect method with 1m² and 10m² circular nested quadrats spaced evenly along the transect. A minimum of 30 quadrats were sampled along 3 transects (30m² area sampled herbaceous vegetation and 300m² woody vegetation), with at least one transect oriented perpendicular to the other two. In addition, plants located outside the quadrats but within a 5m wide "belt" along the transect were identified but no density or dominance information was recorded for these plants (hereafter transect-belt method). Within the quadrats, percent cover and stem counts (woody only) were recorded for each species (Fennessy et al. 1998).

By 1999, it became apparent that many of the more successful attributes were associated with measures of dominance or abundance, e.g. percent cover, density (stems/ha), etc. However, using the transect-belt method, 30% to 60% of the plants

observed had only presence/absence data associated with them (Mack et al. 2000). There were also other problems. First, the area sampled to characterize forested communities appeared to be too small. The forestry literature recommends 400-1000m² as minimum area to adequately characterize eastern forest communities (Peet et al. 1998). Second, the transect method often passed through several different plant communities, homogenizing the vegetation data for wetlands with multiple plant communities. Finally, the transect method appeared to overemphasize wetland "edge" species. Because of this, Ohio EPA reevaluated its sampling method and adopted a method used by the North Carolina Vegetation Survey as described in Peet et al. (1998). This is a multipurpose sampling method that is appropriate for most types of vegetation, flexible in intensity and time commitment, compatible with other data types from other methods, and that provides information on species composition across spatial scales. This revised method has been extensively used by Ohio EPA since 1999.

Vegetation Index of Biotic Integrity

Although the data collected using this method can be used for many purposes, the most common application will be to collect vegetation data that will enable the calculation of the Vegetation IBI for wetlands. The background and development of the VIBI can be found in Mack et al. 2000, Mack 2001b, Mack 2004a and Mack 2004b.

The Vegetation IBI is a multimetric index comprised of 10 metrics with a maximum score of 100 and a minimum score of 0. The VIBI is calculated by summing the 10 metric scores. Metrics can receive a score of 0, 3, 7, or 10 based on the value of the metric (Table 2). The VIBI is actually three IBIs: the VIBI-EMERGENT (VIBI-E, including substitute metrics for Lake Erie coastal marshes and mitigation wetlands), the VIBI-FOREST (VIBI-F), and VIBI-SHRUB (VIBI-

SH). Each VIBI is designed to be used for wetlands dominated by emergent, forest, or shrub vegetation, respectively. There are 19 metrics in all (Table 3) and each VIBI has its own set of 10 metrics (Table 4). Detailed data collection, reduction, and analysis procedures for calculating the VIBI are discussed below.

Releve method for vegetation sampling - background

Even if only three main classes are identified (forested, shrub, and emergent), a single wetland can have several co-dominant vegetation classes, or a single dominant class and several minor subclasses. Thus, a sampling method should be flexible enough to account for horizontal and vertical variation in vegetation. The method described by Peet et al. (1998) can be used to sample such diverse communities as grass and forb dominated savannahs, dense shrub thickets, forest, and sparsely vegetated rock outcrops. This method incorporates use of reléves similar to that described in the Braun-Blanquet methodology (Mueller-Dombois and Ellenberg 1974) in as much as the length, width, and orientation of the plot is qualitatively determined by the investigator based on site characteristics; however, within the plot, standard quantitative floristic and forestry information is recorded, e.g. frequency, density, basal area, cover, etc. This method has been used at over 3000 sites for over ten years by the North Carolina Vegetation Survey (Peet et al. 1998) and at over 250 sites by Ohio EPA between 1999-2004, including reference wetlands, mitigation banks, and individual mitigation wetlands. In addition to the advantages mentioned above, this method also addresses the problem that processes affecting vegetation composition differ as spatial scales increase or decrease and that vegetation typically exhibits strong autocorrelation (Peet et al. 1998). According to Peet et al. (1998, p. 264), "Our solution to the problems of scale and spatial autocorrelation is to adopt a modular approach to plot layout, wherein all measurements are made in plots comprised of one or more 10m x 10m

quadrats or "modules" ($100\text{ m}^2 = 1\text{ are} = 0.01\text{ hectare}$). The module size and shape were chosen to provide a convenient building block for larger plots, and because a body of data already exists for plots of some multiple of this size. The square shape is efficient to lay out, ensures the observation is typical for species interactions at that scale of observation, and avoids biases built into methods with distributed quadrats or high perimeter-to-area ratios."

METHODS - FOCUSED (FIXED) PLOT SAMPLING DESIGN

The most typical application of the method employs a set of 10 modules in a 20m x 50m layout (Figure 1). The fixed plot sampling design is the basic method to be used in virtually every study of natural or mitigation wetlands in which a Vegetation IBI score is to be calculated. Within the site to be surveyed, the 20m x 50m grid is located such that the long axis of the plot is oriented to minimize the environmental heterogeneity within the plot. At least four 10m x 10m modules are intensively sampled with a series of nested quadrats. Within these "intensive" modules, species cover class values are estimated for the 0.01ha (100m^2) area of the each intensive module. Species located outside of the intensive modules (the "residual" modules) are also recorded and percent cover is estimated over the residual area (typically 0.06ha or 600m^2) of the non-intensive (residual) modules. Woody species are typically measured (diameter at breast height or dbh) and counted separately within each module of the plot.

Subsamples and supersamples

According to Peet et al. (1998), the standard plot can be adapted for unusually high stem densities of woody vegetation (e.g. a dense buttonbush swamp) or unusually low stem densities (e.g. an oak savannah), by sub-sampling or super-sampling the "problem" vegetation. This is accomplished by adjusting the width

of the module, as measured from the centerline of the plot by the appropriate percentage. Thus, after laying out a plot in a buttonbush swamp, the shrub stratum is measured in a 5x10m module by reducing the width of the module by 5m or 50% (a 50% subsample). The decision to perform a sub- or super-sample is typically made in the field.

Plot orientation

Plots should be placed to minimize within-plot environmental heterogeneity, which implies that the long axis of the plot encounter the least possible variation in these characteristics, unless the heterogeneity in question, would not affect the goal of characterizing the vegetation. In this situation, the particular heterogeneity can be ignored and the long-axis of the plot can be established without regard to that gradient. This situation occurs most frequently with mixed emergent marshes (see discussion below).

Selecting plot locations - General considerations

Prior to selecting the location of the plots, the investigator should be familiar with the site and its major characteristics and plant communities. This is most easily accomplished by one or several prior site visits where the investigator explores the site, walks the site perimeter, obtains a reasonably accurate measurement of the site, and understands the major hydrogeomorphic and landscape level ecological features surrounding the site.

Depending on the size and complexity of the site and the reasons for studying it, one to several plots may be needed. Smaller or differently scaled plots may be necessary. However, given resource limitations (time, personnel, money), it is also a goal to have the fewest number of plots sufficient to characterize the vegetation at a wetland. Ultimately, the decision of the size, shape, orientation, location, and number of the plots is made by the principal investigator; this information and reasons for the investigator's decision should be documented in the field notes for the site.

As opposed to fixed transect, random plot, and plotless methods of vegetation sampling, this method requires the investigator to qualitatively locate a plot or plots in locations which most representative of the plant community or communities of interest at a wetland. For the purposes of wetland IBI development or wetland condition assessment, the goal is to correlate a wetland's aggregate vegetation characteristics (quality) to measures of wetland disturbance and quality. Since the goal is not just plant community classification but also biological assessment, deciding where to place a survey plot should be based on both of these goals. Where the purpose is assessment of a wetland to determine its antidegradation category under Ohio Administrative Code (OAC) Rule 3745-1-54, the goal in locating a plot (or plots) is to best characterize the regulatory category of the wetland. A plot or plots should be located within areas of the wetland that are most representative of the communities present. Where the purpose is to assess the success (or failure) of a wetland mitigation site, the goal is again to locate a plot or plots in areas that are representative and typical of the mitigation site. For example, if the mitigation wetland has a small vegetated fringe of say 5% of the site and the rest of the site is unvegetated open water, the plot should be located such that focus of the plot is on the failed "pond" area.

At most sites, a "standard" plot will be established consisting of a 2 x 5 array of 10m x 10m modules, i.e. 20m wide by 50m long (equals $1000\text{m}^2 = 1 \text{ are} = 0.1 \text{ ha}$), within the jurisdictional boundary of the wetland and within each vegetation community of interest.² In some instances, heterogeneity of vegetation or environment, researcher time, or

² Peet et al. (1998) recommend 1000m^2 area for forest inventory of rich mesic forests and numerous North American forest studies have employed a 1000m^2 plots. This size plot is similar to the area recommended by Mueller-Dombois and Ellenberg (1974), i.e. $200\text{-}500\text{m}^2$.

significance of site will make a standard 0.1 ha plot inappropriate or impractical. Where the standard plot will not fit or will be inadequate or heterogeneous, the size or shape of the plot should be modified to obtain a representative sample of the community of interest. According to Peet et al. (1998), numerous plot configurations are possible. Where a standard 2 x 5 plot of 1000m² will not fit, a 2 x 2 plot of 400m² can be a good substitute. Strips of two, three, four, or five modules can also be used where homogeneity considerations limit the number of modules. However, it is desirable to increase the number of corners with nested subquadrats in each module when fewer than four intensive modules are measured. Peet et al. in one extreme case “stretched” a module to a 2 x 50m shape to accommodate a narrow rockface on a steep slope, or they sampled a ridge line using 1 x 5 array. They also state that where site conditions warrant it is even possible to change the shape of the module to ensure homogeneity although this should normally be avoided for reasons related to spatial autocorrelation.

Selecting plot locations - Specific guidelines

The following are specific plot location rules for locating plots to sample Ohio wetland communities:

1. Emergent communities. In mixed emergent marshes water depth generally decreases towards the upland boundary and the vegetation is zoned in narrow to broad bands. Typically, a narrow shrub zone gives way to a broad emergent zone which grades into a floating-leaved marsh to open water zone. In this situation, a sampling plot should be located such that the intensive modules are located within the emergent zone but the "tails" (ends) of the plot include portions of the shrub and aquatic bed zones. It is important to include the presence and percent cover of the species in the shrub and floating-leaved zones, but the main focus should be on

the emergent zone. Since the majority of mitigation wetlands are emergent communities, care should be taken to locate sample plots in areas that are typical of the vegetation (or lack thereof) at the mitigation site being sampled.

In sedge-grass dominated emergent communities (fens, wet prairies, sand prairies), the overall vegetation is often more uniform and does not exhibit the strong zonation of many mixed emergent marshes. Plots can be located in areas where the sedge-grass community is representative even if this is well away from the wetland edge, although shrubby areas or areas of deeper water like small prairie pothole marshes within a wet prairie can be included.

2. Shrub communities. Large, homogenous shrub swamps can be sampled in a manner similar to forest communities and sedge-grass emergent communities. However, many shrub swamps are relatively small and are surrounded by areas of upland forest and have a narrow forested fringe with an open canopy above the shrub swamp. In this situation, it is important to include the more shallowly inundated forested fringe within the plot, since a lot of the species diversity is around the shallow margins of the pool. It is easy to locate the side of a plot such that it includes this shaded margin, with the main body of the plot located in the unshaded areas of the shrub swamp. In addition, it is often easier to lay out a plot in a shrub swamp by first laying out this shaded 50m side line and then placing the shorter 20m perpendicular to this line. This minimizes the distance you need to travel through the dense shrub zone where sight lines are often very restricted and movement difficult.

3. Forest communities. Locating plots within wetlands with a closed canopy of trees (vernal pools, wet woods, densely vegetated forest pools) is generally very straight forward since the issue of zonation that occurs in many marshes is not present. If the forest is mature, the plots should be located to ensure the mature canopy is properly characterized. Microtopographic features (hummocks, coarse woody debris) should be included in the plot since much of the plant diversity in the herb layer will be located there. In some instances it may be necessary to locate part of plot along the upland edge of the pool to adequately characterize a forested wetland; in others, the plot can be located well within the upland edge. Small forested wetlands often make it difficult to locate a standard plot and alternate configurations (e.g. 1x5, 2x2) may be necessary.
4. Wetlands with multiple dominant plant communities. Codominant communities within a single wetland should be sampled with completely separate plots and data from each should be analyzed as if it were the only community present. Thus, forested wetland data sets should only be graphed and analyzed with other forested wetland data sets.³ Wetlands with a single dominant community with small amounts of other communities, e.g. the buttonbush swamp with a narrow forested

margin, the emergent marsh with a narrow shrub margin or small pool with floating aquatic plants, should be sampled using the plot location rules outlined above which require that the marginal community be included in the plot but not be the focus of the intensive modules.

5. Wetlands with multiple HGM classes. It is a relatively frequent occurrence to have a single large “wetland” comprised of multiple hydrogeomorphic (HGM) types. For example, a slope wetland (usually a forest seep or fen) may be contiguous with a riverine mainstem wetland (often a floodplain swamp forest). In this situation, separate plots should be established in each HGM type. The wetland classification system for Ohio wetlands (Mack 2004a) should be used to define HGM classes. The scoring boundary rules developed for ORAM v. 5.0 regulatory categorization purposes (Mack 2001a) can also be used to define “assessment units.” In order to use the ORAM, a “scoring boundary” needs to be established in order to determine what is being assessed and what is not. The main rule is that where strong changes in hydrology occur, wetland areas can be scored separately even if they are contiguous to each other. Thus, where a wetland can be split into separate scorable areas, separate sample plots should be established in each scoring area and the data evaluated, analyzed and used as if they were two geographically separated wetlands. For example, Watercress Marsh is a large wetland complex at the headwaters of the Mahoning River in Columbiana County. A large, sloped, tall shrub fen is present on one side of the complex; the rest of the marsh is primarily a cattail or floating leaved marsh with shrubby margins. The hydrology of the

³ However, from a bioassessment, use attainment, or antidegradation categorization perspective, a single wetland with two co-dominant communities should be assessed or categorized by looking at the result that gives you the best answer, e.g. the forested community has a Category 3 VIBI score while the buttonbush community has a Category 2 VIBI score: the wetland is categorized as a Category 3 wetland.

fen is driven by calcareous ground water expressing along the slope. The marsh areas receive this ground water but are also fed by run off from the watershed. The marsh is also very disturbed by nutrient enrichment from nearby farms and former road construction; the fen appears to be largely intact and very floristically diverse. Because of the hydrologic discontinuity at the base of the slope fen to the flat marsh, separate scoring boundaries can be established around these two hydrogeomorphically (and floristically) distinct communities.

6. Assessing localized versus global disturbances. It is a not uncommon situation, that a wetland has localized areas of disturbance (filling, cutting, invasive plants) that are relatively minor elements of the wetland's overall plant community(ies). In this situation, a plot should be located such that this minor area of degradation is not included. Alternatively, large portions of a wetland can be disturbed or show signs of expanding disturbance (invasive plants, nutrient or toxic "plumes", etc.), while other areas appear intact or relatively intact. In this situation, a decision should be made as to whether to sample the disturbed area in the same plot, in another plot, or not at all. This answer will vary depending on the purpose for sampling (regulatory categorization, IBI development, assessing degree of disturbance and causes, etc.)
7. Minor upland intrusions into a plot. In some instances, areas of upland impinge on the plot. If this occurs the plot location can be adjusted or plants growing in these areas can be ignored during data collection and a notation made on the field data sheets. This is different

from "upland" microtopographic features like hummocks in the margins or centers of wetlands. These should be included in the plot.

8. Applying the data. Once the data from a plot has been collected and analyzed the results need to be used. Depending on the purpose for sampling, the following rules apply: (a) when the purpose is regulatory categorization under the wetland antidegradation provisions of OAC Rule 3745-1-54, the "best" answer is used. Thus, if multiple plots are used to assess a single wetland with co-dominant plant communities, the plot with the highest VIBI score is used to define the regulatory category of the wetland; (b) When the purpose is to collect reference wetland data, the "answer" from all plots can be used. Thus, the data from each plot can be used as part of the appropriate data set: dominant plant community (forest, emergent, shrub); HGM class (depression, riverine, slope, etc.); condition (reference standard, etc.).

Laying out a plot

Once the general location, orientation, and size of the plot is determined, the plot must be measured, laid out, and marked on the ground. For the standard 2 x 5 plot, Peet et al. (1998) recommend laying out the center line and placing permanent markers every 10m along this line. Then 20m tapes are laid perpendicular to the center at the 0m, 10m, 20m, 30m, 40m, and 50m points to mark the outside points of the plot. For most emergent communities, only the corners of the intensive modules need to be marked and the outer corners of the plot visually identified; but in forested wetlands and shrub swamps it is very helpful to mark every corner to obtain an accurate stem count. If the center line and the sides are marked from the base, a frequent problem is having the sides of the plot converge due to small

deviations in compass bearings. The latitude and longitude of the permanent stake as well as the bearing of the center line should be determined and recorded. For dense shrub swamps, it is often easier to lay out the side of the plot (50m) along the edge of the wetland first and then run 20m lines into the shrub thicket.

The modules in the plot are numbered *counterclockwise*, starting with the first module on the baseline to the right of the centerline and proceeding down to the end of the centerline and then back to the baseline (Figure 1). Conversely, the corners of the modules are numbered *clockwise*, starting at the centerline and moving up or down the centerline to avoid having nested quadrats being placed side by side (Figure 1).

Selecting the intensive modules and locating the nested quadrats

In a standard 2 x 5 plot, intensive modules are generally be located in the center of the plot to ensure that the contents are as representative as possible and to reduce subjective bias associated with starting the tape in close proximity to these modules. For the standard plot, Peet et al. (1998) recommend modules 2, 3, 8, and 9 as the intensive modules (Figure 1). For other plot configurations, e.g. 2 x 2 or 1 x 4, all of the modules should be treated as "intensive" modules and the nested quadrats be located in the same positions as modules 2, 3, 8, and 9 of the standard 2x5 plot. For longer plots like 1x10 plots, every other module can be selected as intensive (e.g. 2, 4, 6, 8). Sometimes after sampling of a plot has commenced it is determined small portion of a module is located outside of the wetland edge. In this situation, the problem area or corner can be omitted. Peet et al. (1998, p. 269-270) state, "In the typical 0.1ha configuration [2 x 5 plot], two series of nested subquadrats are recorded for each of the four intensive modules, each series being located in a standard fashion that associates its common corner with a fixed stake. Use of the recommended corners distributes the nests and prevents nests from being adjacent. If disturbance

or other unusual conditions suggest that a specific corner would be inappropriate, it is possible to switch corners, omit corners, or omit portions of a module."

Background information and plant community and HGM class

A critical prerequisite to calculating a VIBI score is to properly classify the wetland type and its plant community or communities. This will ensure that the correct VIBI (Table 4), VIBI metrics (Table 3), and metric scoring ranges (Table 2) are used for the data collected in the necessary plot or plots. The Wetland Classification System for Ohio wetlands was discussed and evaluated in detail in *An Ordination and Classification of Wetlands in the Till and Lake Plains and Allegheny Plateau Regions* (Mack 2004a). Classification system reproduced in Tables 8A and 8B and these tables are also summarized on the reverse side of the Field Data Sheets (Appendix A). The header information on Field Data Sheets 1 and 2 require the investigator to classify the dominant plant community and HGM class within the area sampled in addition to other background information. General information on the wetland being sampled should be summarized on the Background Information Form (Appendix A). In addition, the Narrative and Quantitative Ratings for the Ohio Rapid Assessment Method for Wetlands (ORAM) should also be completed (Mack 2001a).

Sampling period

The sampling period for use of this method to calculate a Vegetation IBI score is June 15 to September 15, although it is possible to sample into October depending on the condition of the vegetation, the experience of the botanist in identifying plants that are well past flower, and time-sensitive project needs. Sampling as early as June 1 is also possible again dependent on the experience of the botanist. An early summer visit to collect and identify early blooming and fruiting sedges at sites with a high proportion of these

species (e.g. fens, wet prairies, and Lake Plains sand prairies) is helpful when the site will not be sampled until later in the summer.

Collecting quantitative vegetation data

The minimum field crew for this sample method is 2 and the recommended crew is 3. It is necessary that one person be proficient in identifying Ohio's wetland flora in fruit, flower, and vegetatively including difficult groups like the Cyperaceae and Poaceae. Users who are not so proficient, should collect and preserve for later confirmation by an experienced botanist specimens most or all plants encountered in a plot.⁴ Peet et al. (1998) recommend that the investigator most experienced with the local flora complete Data Sheet 1 (Appendix A) and the other persons do all of the other data collection (Data Sheet 2 and 3, clip plots, soil and water sampling, etc.). This has also worked out to be the most efficient field crew arrangement for Ohio EPA.

All vascular plant species within the modules must be identified to the lowest taxonomic level possible using vegetative, floral, and/or fruiting characteristics. In most instances this will be species or genus, except for the varieties and subspecies listed in Andreas et al. (2004) (Appendix C). Immature plants or plants missing structures (e.g. fruiting bodies, etc.) that cannot be identified to species should be identified to genus. Otherwise, record the plant as unknown and make a notation as to its type (graminoid, monocot, dicot, forb, etc.). If several unknowns of the same type are present but are obviously different species, they should be distinguished by assigning a number, e.g., unknown graminoid #1, #2, etc. Time and conditions in the field will make keying plants in the field difficult. If a positive sight identification cannot be made in the field, the plant *must be* collected for later identification

⁴ Essential botanical texts are listed at the end of this manual.

(See discussion below regarding voucher specimens).

Presence data is recorded in the form of a couplet with the first column used for the "depth" (see definitions) at which a species is first recorded as present and the second number of the couplet is for the cover class assigned to that species. The column in which this couplet is recorded has a heading comprised of the module and corner number (e.g. 2-2, 2-3, etc.), except for (where applicable) an aggregate pair headed R-R (for "releve" level) that contains species first recorded in an aggregate of modules that are supplemental to those sampled intensively (residual modules) (See Field Data Sheet 1, Appendix A). According to Peet et al. (1998, p. 270-273),

Within a typical intensive module, presence data are recorded for two corners. The normal eight corners for nests are 2-2, 2-4, 3-2, 3-4, 8-2, 8-4, 9-2, 9-4. Starting in the first corner (corner 2) of module 2 (2-2 in the standard 2x5 plot), all species rooted in (having a stem or stems emerging in) a 0.31.6m x 0.31.6m (0.1m²) subquadrat are listed and assigned a value of 4 in the left column (labeled "depth") of the pair of data columns for module 2 corner 2.⁵ A 1.0 x 1.0 m (1.0 m²) subquadrat is then surveyed and new species encountered are assigned a value of 3, followed by a 3.16 x 3.16 m (10m²) subquadrat with new species assigned values of 2.....The presence survey is then repeated in the second corner of the module (typically corner 4 in module 2). The presence values are again recorded in the left column of the pair for this corner at levels 4, 3, and 2, with new species names added as needed....The presence survey is completed by listing all species within the module that were

⁵ Peet et al. (1998) state that a 0.1 x 0.1 m (0.01m²) nested subquadrat can be sampled and marked depth 5. This level of resolution is not necessary for the purposes of this study and the smallest subquadrat recorded will be 0.1m². This is the size of the clip plot used for peak standing biomass estimation.

not encountered in a set of nested subquadrats and assigning each of them a value of 1, which is recorded in the first column surveyed (i.e., they occurred at level (depth) 1, which is the full 100m², an area shared by all nests within the module).....Cover data for the module are recorded next. When more than one column is available for recording cover in a module (which will be the case whenever more than one nest is recorded), only the first available column is used, and the others are left blank. Cover is recorded after all nests in a module have been completed, thereby assuring a complete species list and maximizing time for familiarization with vegetation in the module.

In summary, all species with stems covering any portion of the focal module should be listed and each of these species has a depth value of 4 (0.1m²), 3 (1m²), 2 (10m²), or 1 (100m²). Cover values are assigned using the cover classes in Table 1 for every species, except trees >6m tall where only basal area is measured (see measuring woody vegetation below). All shrubs and small trees below the canopy (<6m tall) should have cover values assigned. The midpoint of the cover class is then used in all subsequent analyses.

Measuring woody vegetation

For woody vegetation, stem counts should be made and basal area measured for all trees, shrubs and woody vines, including standing dead trees and shrubs, greater than 1 meter tall, with the exception of multi-stemmed shrubs, e.g. buttonbush. Shrubs with multiple stems from the same root (genets) can be counted once as a "shrub clump" and analyzed with the 0-1cm size class. The diameter classes and midpoints in Table 1 should be used, with stems greater than 40 cm measured to the nearest tenth centimeter and counted and analyzed individually. The midpoints of the class should be used to calculate basal area by class. All woody stems located within the plot should be counted and measured including stems in the residual modules. Data should be recorded for each module separately.

For example, in a typical 2 x 5 plot, woody stems are counted, measured, and recorded for module 1. Then the investigators move to module 2 and count, measure, and record all woody species in module 2, and so on (see Field Data Sheet 2, Appendix A).

Measuring standing biomass

Standing biomass (emergent wetlands only) should be estimated by harvesting to ground level all plants rooted in 0.1m² (1000cm²) square quadrats (31.6cm x 31.6cm) located in the nested corners (corners 2 and 4) of the intensive modules. Alternatively, the corners opposite the nest corners (corners 1 and 3) can be used if harvesting clip plots will interfere with species identification in the nested quadrats. Clip plots are usually collected on the same day vegetation sampling of the plot is done unless it is apparent that the plot is not at or approaching peak biomass, in which case the clip plots should be collected later. All plants within a quadrat should be cut at the soil surface and placed into paper sample bags (grocery bags work well).⁶ It is helpful to air dry the paper bags by placing them loose in a ventilated truck cap and allowing air to circulate around them when driving back from a sample site. If this is not possible bags be placed loosely in open baskets or boxes where they can air dry thoroughly if they are not immediately placed into an oven. The bags should be oven dried at 105 °C for at least 24 hours. Once the bag is dried, the bag (with the sample inside) should be weighed on scale accurate to one tenth of a gram (total weight). The bag is then emptied and the reweighed (bag weight). The bag weight is subtracted from the total weight to give standing biomass per 0.1m². Samples from all eight bags are then averaged and converted to

⁶ Only rooted emersed and floating aquatic plants are harvested in the clip plots, Floating aquatic plants are not harvested, e.g. *Ceratophyllum* sp., *Utricularia* sp., *Elodea* sp., *Lemna* sp., *Spirodela polyrhiza*, *Wolffia* sp., etc.

grams per meter squared.

Measuring physical attributes of the site

In addition to the quantitative vegetation data collected, various physical attributes of the wetland being sampled are also recorded (Field Data Sheet 3). These include depth of standing water, depth to saturated soils, litter depth, number of tussocks and hummocks, number of standing dead trees (snags), amount of coarse woody debris, microhabitat interspersions, physical characteristics of soils (color, texture, redox features, etc.), and where necessary pH and temperature of standing water.

Grab samples of soil and water should also be collected at the time other data in the plot is collected. Soil samples are collected from the center of the plot unless conditions at the wetland (depth of water, substrate characteristics, etc.) make this infeasible, in which case an alternative representative sampling location is identified. Soil samples are taken from the top 12 cm of soil. Samples can be collected with a soil probe or with a bucket auger. Samples should be oven dried at 105 °C for 24 hours, ground and passed through a 2mm sieve and then analyzed for the following parameters using the methods specified in *Recommended Chemical Soil Test Procedures for the North Central Region*, North Central Research Publication No. 221 (Revised January 1998) or equivalent methods: total organic matter, available phosphorus (Bray P1 extraction), exchangeable potassium, magnesium, calcium, hydrogen, bulk density, and pH. Total carbon and total nitrogen shall be measured using a LECO 2000 Analyzer, U.S. EPA Method 415.1 (Organic Carbon, Total, Combustion or Oxidation), SM 5310B (Total Organic Carbon (TOC): Combustion-Infrared Method), or other equivalent methods for measuring %carbon and %nitrogen.

A grab sample of water, if present, should be collected within or near the vegetation sampling location. Grab samples for water are collected by

directly filling one quart cubitainers with water from the wetland. Samples should be packed in ice. The samples should be analyzed for pH, temperature, ammonia-N, nitrate-nitrite, total phosphorus, total organic carbon, specific conductivity, turbidity, total solids, total suspended solids, and chloride.

Preserving voucher specimens and assigning voucher numbers

Voucher specimens should be regularly collected, especially the more taxonomically difficult genera and families. Proper calculation of the Vegetation IBI requires that all plant species, including very difficult genera and families like *Carex*, the Cyperaceae, and the Poaceae, that are capable of identification vegetatively, in flower, and/or in fruit, be identified to the lowest taxonomic level possible. Experienced botanists can identify many plants to species or at least genus in vegetative condition and this type of proficiency is expected for accurate calculation of a VIBI.

Although resources often make collecting vouchers of every vascular plant infeasible, a general goal is the collection of a voucher specimen for at least 10% of the vascular plant species observed at any given site. An excellent procedure for new users of this method is to collect every 5th, 10th, or 20th plant such that 10% of the species observed at a site are collected for later confirmation by an experienced botanist. At floristically diverse sites, the number of necessary voucher specimens will be higher; at very depauperate sites with very common wetland species, no vouchers may be needed. However, in every instance in which the identity of any species cannot be confirmed in the field, or where field personnel disagree as to the identity of a species, a voucher specimen should be collected for identification in the office. In particular, species in difficult genera and families, e.g., Cyperaceae and Poaceae, should almost always be collected until frequently encountered wetlands species are able to be reliably and consistently identified in the

field.

Ohio EPA uses the following procedure for collecting and maintaining plant vouchers. In the field a large plastic bag is used as a vasculum.⁷ Individual specimens are placed in gallon sized ziplock bags. Often 1 gallon bag per intensive module can be used. These individual plastic bags are then placed in the vasculum. The specimen is given a unique voucher number in the field. This is recorded on the Field Data Sheet and can also be written on the plastic bags. This double-bagging procedure has the advantage of keeping specimens fresher in hot weather and also keeping fragile specimens and plant parts retrievable, e.g. sedges that are well past fruiting. After sampling a plot, plant specimens are placed in a larger cooler half full of ice to keep the specimens fresh and arrest decomposition in hot weather.

After returning to the office, specimens are immediately pressed in plant press⁸ or, if this is not possible, placed in a refrigerator (Figure 2). Woody and graminoid specimens can often be maintained for 1 to 2 weeks this way. More fragile flowering plants or ferns may maintain their condition for a few days. All voucher specimens at Ohio EPA are placed in a plant press, although specimens can also be identified and confirmed fresh if time permits. Confirmation by an outside botanist will almost always require pressing voucher specimens. Ohio EPA presses specimens

between sheets of newspaper. On the inside of the paper, the voucher number, plant name, date collected, county collected, and site collected are written directly on the newspaper in indelible ink.

After the press is filled up, it is placed on its side on a plant press drier for several days. This is a simple wood frame with three 100 watt light bulbs in the bottom that allows warm, dry air to circulate through the press desiccating the specimen and killing many insects and insect eggs (Figure 2). Quick drying also improves the color and quality of the specimen. After drying, specimens are removed in their newspaper, and placed in a subzero freezer for at least a two weeks to kill any remaining insect eggs.

Vouchers are removed from the freezer and stored in air-tight herbarium cabinets until they are identified. Ohio EPA then mounts and retains the specimen in a reference collection or sends the specimen to a local or regional herbaria. Half or full size museum quality herbarium cabinets are available at a reasonable cost (\$500 to \$1000) (Figure 3). Using this procedure, vouchers can be stored indefinitely for later confirmation. Alternatively, specimens can be stored in non air-tight containers or cabinets with moth balls. Ten or 20 gallon storage bins that are large enough to hold specimens can be purchased from local department stores. With moth balls inside, specimens can be maintained in reasonably good condition for long periods if the moth balls are replaced regularly.

Since this may be the only time that a professional biologist ever visits or collects at that particular wetland, it is strongly recommended and encouraged, from a purely scientific perspective, that plant vouchers be collected and retained and then sent on to regional herbaria for permanent preservation. More pragmatically, developing a reference collection, and keeping pressed specimens for later identification and confirmation also is the best, and perhaps only way, to become proficient in identifying Ohio's flora, and in a year or two, will result in noticeable improvements in positive field identification, and a reduction in the

⁷ A "vasculum" is container for collecting plants in the field for later pressing. Traditionally, a vasculum is a metal container with a sealable opening and a carrying strap. Heavy duty ice bags or garbage bags can make portable vasculums.

⁸ A plant press is made of 2 wood frames (riveted oak slats or ply wood), multiple corrugated card board ventilators and felt blotters and newspaper with compression straps. They can be purchased from an herbarium supply company (about \$70) or homemade. The voucher specimen is placed between sheets of newspaper, felt blotters, and cardboard.

number of "unknown" plants that "need" to be collected.

METHODS - RANDOM PLOT VARIATION

General description

In most instances, a properly positioned fixed plot will provide data that is representative of the plant community and/or wetland being assessed. In some situations however, fixed plots alone may not be sufficient to provide data required to assess or evaluate the wetland or mitigation site. For very large natural wetlands or large mitigation or restoration sites, e.g. mitigation bank sites, statistically reliable estimates of percent area vegetated or dominated by invasive species may be needed in order to assess mitigation performance or overall site characteristics and plant community types. In this situation, a standard 2 x 5 plot with 10 modules can be "deconstructed" or taken apart and individual 10 x 10m modules randomly placed across the wetland or mitigation being sampled. A two part sampling scheme should be used with focused (fixed) plots and randomized plots. Focused plots are placed and sampled as outlined above. For the randomized design, a geospatially referenced 10m x 10m grid is overlayed on the site and a simple or stratified (if there are multiple subareas of the site) random sample of points is selected. The same data is collected in the random modules as in the "intensive" modules of the focused plots.

Protocols for selecting random plot locations

The maps and descriptions of site should be reviewed. The site should be visited at least once and a detailed site reconnaissance performed. Subareas of the site, HGM classes, and dominant plant communities should be identified and a determination made whether to stratify the site for focused and random plot sampling. A geospatially referenced 10x10m grid is then created on a map of each site (Figure 4).

Depending on the information available, existing maps can geospatially referenced, the perimeters of the site can be mapped using GPS unit, or existing digital map files, can be used to create the 10x10m grid.

Once the grid is created, each grid square is assigned a unique number associated with the latitude and longitude of the center of the square. The list of grid numbers is imported into a statistics program capable of extracting a simple random sample of points. At least twice the number of points needed to sample the area should be selected and grouped into sets of 5, 10, or 20 points depending on the size of the area being sampled. The number of random samples selected will depend on the study design, but Ohio EPA has used the following guidelines in its evaluation of large mitigation bank sites: less than 500 squares (<5 ha) approximately 5 random points; 500-2000 squares (5 to 20 ha) approximately 10 random points; >2000 squares (>20 ha) approximately 20 random points.

A map showing the selected points should be produced for each bank or subunit of a bank that is being sampled (Figure 5). Once the map is created, the location of random points can be evaluated. The first group of points (usually 10) are evaluated in order. If a point is rejected (see below), the second group of random points is evaluated in order. For example, 10 random points will be sampled in a subunit of a mitigation bank. After mapping the points, point No. 5 is found to be located within an existing wetland that was included in the larger bank subunit. This point is then rejected. The next point evaluated as a substitute is point No. 11, the first point in the second set of 10 random points. Ohio EPA has used the following rules for rejecting a point in the office:

1. It is located outside or on the dike of the site.
2. It is located within a preexisting wetland area that was included in the perimeter of a mitigation site, unless the preexisting wetland areas was included as enhancement credit.

3. It is located immediately adjacent to another random point grid square.
4. It is otherwise determined to not be a representative sample point.

The reasons for rejecting a point in the office should be documented in the site file. Finally, an efficient route from point to point is developed to minimize crossing and recrossing the area being sampled.

In the field, a point will be visited after entering the coordinates into a GPS unit and navigating to the point. Once the point is reached a 10 x 10m plot is established with the random point positioned in the center of the plot. Ohio EPA has used the following rules for rejecting a point in the field:

1. It must be possible to wade to the point in chest waders. If the point is located in a deep water area that is not wadable, i.e. greater than about 1.5m, it should be recorded as “non-wetland, deep open water” with 100% open water cover, and water depth >1.5m. This rule does not apply to very localized areas of deeper water like small holes or ditches, etc. In this situation, the sample point should be moved 10m in a randomly selected cardinal compass direction. If the point still cannot be reached, the point should be rejected and an alternate point used.
2. If the point lies outside the wetland or mitigation site, or on a dike or other engineered structure, or is otherwise not “in the wetland” or representative, it should be rejected and an alternate point used. The reasons for rejecting a point should be documented in the field notebook, maps, or field data sheets.

METHODS - DATA REDUCTION, ANALYSIS AND METRIC CALCULATION

The following is a narrative outline of the steps required to reduce and analyze quantitative vegetation data to calculate the Vegetation IBI. Example data and calculations are provided in Appendix B. To calculate the Vegetation IBI requires successive steps of data reduction, calculation, and coding. Once data has been collected, vouchers checked, a final species list with species codes completed, the VIBI can be calculated by hand with a calculator. The procedure outlined here is suggested if more than a few sites are being evaluated at once. As discussed below, Excel™ is the initial data entry and manipulation software. These steps can be automated using a database software.

STEP 1 - 1st data reduction (Field Data Sheet 1)

Immediately after leaving the site, the lead investigator should review the field data sheets for missing data points especially missing cover class values. If the investigator can recall the cover class of species with missing data, the estimated class should be recorded, otherwise record "md" (missing data) in the cover class column. Emendations should be noted with reviewer's initials.

After the data sheets have been reviewed, raw data from field data sheets should be entered into a spreadsheet or database. Using a spreadsheet, an electronic version of the field data sheet is created (Appendix B) with site name, date, species, voucher number, notes, module, corner, and cover class. Background information (investigators present, lat-longs, etc.) can be entered in a separate tab of the spreadsheet. Any vouchers collected should be identified or confirmed and the species list in the 1st data reduction amended to reflect changes in species names. After the initial data entry, the spreadsheet should be printed and the entered values compared to the field data sheet for errors. Standardize the file name

convention for the spreadsheet (or database) which houses raw data, e.g. 1st reduction plant data 2004.xls.

STEP 2 - Second data reduction (Field Data Sheet 1)

Using the 1st reduction spreadsheet, save it as a new file that can be called, e.g. 2nd _reduction_plant_data_2004.xls. Strip off (delete) the level information from the spreadsheet leaving only site name, date, species name, module number and cover classes (Note: on field data sheet 1, the level is the first number of the couplet; the second number is the cover class for that species in that module). Any species which could not be identified to at least genus should be deleted from the data set here. Any plant that could only identified to genus is retained as separate "species" in the data set, if it can confirmed that, even though the particular plant is not identifiable to species level, it is definitely different from other member(s) of that genus observed at the site. For example, *Carex lupulina* and *Carex grayi* are both collected at a buttonbush swamp along with one other *Carex* spp. that is vegetatively distinct from *C. lupulina* and *C. grayi*. The unidentified *Carex* is retained as a separate species as *Carex* #1. For this buttonbush swamp, the *Carex* metric value is 3 and the *Carex* metric score is 3 (Table 2). If it is not clear that the unidentified *Carex* is different from the two known species, the unidentified *Carex* data should be deleted from the spreadsheet at this step. If multiple plants are observed but can only be identified as belong to the same genus, their cover values should be merged and analyzed as a single "species." For example, what appear to be several different immature specimens of sedges in the Ovals group are collected at a site and recorded as *Carex* #1, *Carex* #2, and *Carex* #3, but they cannot be definitely identified or confirmed as different. Cover values for all three are merged and the plant is recorded and analyzed as *Carex* sp. The *Carex* metric value for this site is 1 if these were the only carices identified and the metric score is 0 (Table 2).

Next, the cover class numbers (0 to 10) should

be recoded to the midpoint of that cover class (Table 1). For example, a plant was assigned cover class "5" (5-10% cover). The number "5" should be recoded to 0.075 (7.5%), which is the midpoint of the 5-10% cover class. Where data from a single site is being analyzed, this can be done manually or by using FIND/REPLACE command in Excel. If multiple sites are being recoded, it is recommended that a statistical program like Minitab or SPSS be used that can perform large data recoding operations with no errors. The data can be temporarily imported into the statistical program, recoded, and then copied back into Excel. Alternatively, a database can be developed which automates this operation.

Once the cover classes have been recoded to cover midpoints, the relative cover of each plant species at the site must be calculated. This is a critical value for several VIBI metrics. Relative cover is calculated by summing the cover midpoints for each species ($\sum A_i$). Next, the total cover per species is summed to yield the total cover of all species at the site ($\sum A_{ij}$). Then the total cover for each species is divided by the total cover for all species to obtain relative cover for each plant species, or

$$RC = \sum A_i / \sum A_{ij}$$

where A_i = the percent cover midpoints recorded for a species (total cover for each species), and A_{ij} = total cover of all species A_i , A_j , etc. Relative cover should be calculated including the cover of bryophyte species in the total cover of all species at a site.

STEP 3 - 3rd data reduction (Field Data Sheet 1)

The final data reduction step is to proof and edit the 2nd reduction spreadsheet for calculation errors, misspellings of plant names, and other data entry errors. Once this is done, the various species, genus, family, and FQAI codes necessary to calculate VIBI metrics should be added as columns in the spreadsheet. Most codes necessary to calculate VIBI metrics are in

Appendix C. The following coding columns should be added to the spreadsheet for the 3rd reduction: lifeform (tree, shrub, forb, etc.), group (dicot, monocot, etc.), habit (annual, perennial, etc.)⁹, indicator status (FACW, FAC, etc.)¹⁰, shade tolerance (shade, partial shade (facultative shade), tree, adventive), and Coefficient of Conservatism (0, 1, 2, etc.). In addition, for larger data sets a coding column with the following will be helpful: *Carex*, *Cyperaceae*, *Cephalanthus*, *Typha*, *Phragmites*, and *Phalaris* with all other species coded as "other."

With these codes, the VIBI metrics can be easily calculated using basic descriptive statistics commands and data manipulations in statistical programs. For example, using Minitab v. 12.0, the "store descriptive statistics" command can be used to calculate number of species by wetland indicator status by site. The output from this operation can be "unstacked" into a site x indicator status table and then the FACW and OBL columns added together to obtain the hydrophyte richness metric for the VIBI-E and VIBI-SH. This type of operation can then be repeated until all metrics are calculated. Again, these data operations can be programmed into a database so that the necessary calculations are performed automatically after the data is entered.

STEP 4 - Woody stem data reduction (Field Data Sheet 2)

As discussed above, woody stem counts and dbh measurements are recorded separately for each module of the plot. The main data reduction task is to merge the counts from each module into a site x species x stem count table with stem counts summed by size class or in the case of trees >40cm dbh, individually

recorded (Appendix B). The goal of the woody stem data analysis is to calculate the relative density of trees in the 10-25 cm size classes and importance values of all species at a site. Importance value is the average of relative frequency, relative density, and relative dominance.

Frequency is typically defined as the number of quadrats a species occurs in and relative frequency is the number quadrats a species occurs in divided by the total number of quadrats. For the VIBI metrics, frequency is defined as the number of dbh size classes a species has stems in, and relative frequency is the number of dbh classes with stems of that species divided by all dbh size classes (12).

Density is the number of stems of a species in the plot and is usually recorded as number of stems per hectare. Relative density is the number of stems of a species divided by the total number of stems of all species. Density and relative density should also be calculated separately for each size class (Appendix C). To calculate size class density, the number of stems in that size class, e.g. 10-15 cm dbh class, are counted and converted to stems per hectare; relative size class density is the number of stems in that size class divided by all stems. To calculate the pole timber (small tree) metric for the VIBI-F, the relative size class density of 10-15 cm, 15-20 cm and 20-25 cm trees must be calculated and then the three relative density values are summed to get the pole timber metric value (Table 3).

The subcanopy IV and canopy IV metrics require the calculation of the average of the average importance value of shade tolerant subcanopy species (small tree and shrub), shade facultative subcanopy species (small tree and shrub), and canopy tree species, respectively. Canopy species are coded as "tree" in the life form column in Appendix C; subcanopy species are coded as "small tree" or "shrub" in the life form column of Appendix C. Shade tolerant species are coded as "shade" in Appendix C and shade facultative species are code as "partial" in Appendix C.

Relative frequency and relative density are

⁹ Note that woody species are coded as "woody" not as "perennials."

¹⁰ Note that the + and - (e.g. FACW+, FAC-) can be ignored and just the main indicator categories used (UPL, FACU, FAC, FACW, OBL).

calculated as described above. Relative dominance (basal area) is the basal area (m²) per hectare of each species at a site. Relative dominance is calculated by multiplying the number of stems per hectare in each size class (density) by the midpoint of the size class (Table 1). Each of these basal area values is then added together to obtain the dominance value for that species. Relative dominance is calculated by dividing the basal area of a tree or shrub species by the basal area of all species at a site. The subcanopy IV metric is calculated by summing the importance value of small tree species plus the importance value of shrub species subcanopy species; the canopy IV is calculated by average the IVs of all canopy species.¹¹ Finally, stems of standing dead woody vegetation are included in all forest metric calculations.

STEP 5 - Metric and VIBI Score Calculation

Once the appropriate metric values have been calculated for the VIBI-E, VIBI-E_{COASTAL}, VIBI-E_{MITIGATION}, VIBI-SH, or VIBI-F, the metric values are recoded to a metric score of 0, 3, 7, or 10 using the scoring ranges in Table 2. This operation can be automated using a database or easily performed using the recoding features of statistical programs like Minitab or SPSS. Once the metric values have been recoded to the appropriate metric score, the 10 scores are summed and the VIBI score is obtained. This score can then be compared to the wetland aquatic life use and antidegradation category in Table 7 to determine the wetland's regulatory status.

Other attributes

Of course, many other community characteristics can be calculated from the information

recorded in a standard plot other than the metrics needed to calculate a VIBI score. Some of this information may be required as part of mitigation performance standards or of interest for other reasons, e.g. ordination of wetland plant community data.

Wetland aquatic life use and Antidegradation category

A main wetland program goal in developing wetland specific IBIs is to be able to specify numeric biological criteria for wetlands that correspond to various wetland designated uses. Aquatic life use for wetlands have been proposed (Mack 2004b) with differing biological expectations based on landscape positions, plant communities, and ecoregions in Ohio: limited quality wetland habitat (LQWLH), restorable wetland habitat (RWLH), wetland habitat, and superior wetland habitat (SWLH) (Table 7).

Using Tables 5 to 7, a wetland TALU and antidegradation category (OAC 3745-1-54) can be assigned as described in the following example: the wetland being evaluated is a pumpkin ash (*Fraxinus profunda*) swamp in Fowler Woods State Nature Preserve. This is a swamp forest in a depressional landscape position. After a detailed vegetation survey, a Vegetation IBI score of 76 is calculated. Referring to Tables 1A and 1B in Mack (2004a), this wetland is classified as "surface water depression/swamp forest" and receives the use code "IA1a" (back side of Data Sheets 1 and 2). Referring to Tables 5 and 7, a Vegetation IBI score of 76 is in the SWLH (Superior Wetland Habitat) use range. Finally, Table 6 is consulted and it is determined that the wetland has educational uses as a state nature preserve that is open to the public. The Wetland Aquatic Life use designation can then be summarized as, "SWLH-IA1a_B", where SWLH = means Superior Wetland Habitat, IA1a = surface water depression swamp forest, and the subscript _B = a special use of "educational." The wetland TALUSs correspond to the three antidegradation categories (Category 1, 2, 3) listed in

¹¹ Note that a "canopy" species includes immature individuals of that species that are presently located in the subcanopy, with canopy referring to the ultimate growth habit of the tree species.

Ohio Administrative Code (OAC Rule 3745-1-54). However, there may be some instances where a wetland shows moderate to substantial impairment, but it is still categorized as a Category 2 or 3 wetland under the antidegradation rule because it exhibits one or more residual functions or values at moderate to superior levels, e.g. water quality improvement or flood retention. Where a "special use" is assigned to a moderately or severely degraded wetland under the wetland TALUs proposed here, it can serve as an "alert" for antidegradation review purposes that the wetland has a residual function or value that should be protected. In addition, the Narrative Rating in the Ohio Rapid Assessment Method (Mack 2001a) provides for "automatic" categorization of certain types of wetlands regardless of their ecological quality.

DATA REPORTING AND SUBMISSION

Data collected using this method will typically be reported to state or federal agencies. The following information should, at a minimum, be submitted:

Copies of all field data sheets

1st data reduction tables

2nd data reduction tables

3rd data reduction tables

Woody stem data reduction tables

Table with metric values, scores, and VIBI score

List of vouchers and voucher numbers collected

HOW TO CALCULATE VIBI METRICS

The various VIBI metrics and metric scoring ranges are summarized in Tables 2 and 3. Below is a detailed narrative description of how to calculate these metrics.

Carex metric. The *Carex* metric is calculated by counting the number of species in the genus *Carex*. The *Carex* metric is used in the VIBI-E (except for

Lake Erie coastal marshes) and the VIBI-SH

Cyperaceae metric. The Cyperaceae metric is calculated by counting the number of species in the sedge family (Cyperaceae) including species in the following genera: *Bolboschoenus*, *Carex*, *Cyperus*, *Eleocharis*, *Schoenoplectus*, *Scirpus* (the major wetland genera in the Cyperaceae although other Cyperaceae genera should be counted if they are encountered). The Cyperaceae metric is used in the VIBI-E_{COASTAL} as a substitute for the *Carex* metric when the VIBI-E is calculated for Lake Erie coastal marshes.

Dicot metric. The dicot metric is calculated by counting the number of native, dicotyledon (dicot) species using the nativity and group codes in Appendix C.¹² Only dicotyledon species are counted; monocot (monocotyledon), gymnosperm, or seedless vascular plant (fern, fern allies) are excluded. The dicot metric is used in the VIBI-E and the VIBI-SH.

Shrub metric. The shrub metric is calculated by counting the number of native, wetland (FACW, OBL) woody species that have a "shrub" lifeform using the codes for nativity, wetland status, and lifeform in Appendix C. The shrub metric is used in the VIBI-E and the VIBI-SH.

Hydrophyte metric. The hydrophyte metric is calculated by counting the number of native species that have a FACW or OBL wetland indicator status

¹² All of the codes needed to calculate the various Vegetation IBI metrics are included in **Appendix C** of this manual and can also be found in Appendix A of the Floristic Quality Assessment Index for Vascular Plants and Mosses for the State of Ohio (Andreas et al. 2004). A spreadsheet version is downloadable from http://www.epa.state.oh.us/dsw/wetlands/wetland_bioasses_s.html.

using the wetland and nativity codes in Appendix C. The hydrophyte metric is used in the VIBI-E and the VIBI-SH.

Shade metric. The shade metric is calculated by counting the number of native species that have shade or facultative shade (partial) tolerance status using the shade and nativity codes in Appendix C. Tree (canopy species) and adventives are excluded. Small trees (subcanopy species) and shrubs are included (Codes for these are provided in the "shade" column of Appendix C). The shade metric is used in the VIBI-F.

Seedless Vascular Plant (SVP) metric. The SVP metric is calculated by counting the number of seedless vascular plants (ferns and fern allies) using the group code in Appendix C. The SVP metric is used in the VIBI-F and VIBI-SH.

Annual/Perennial metric. The annual/perennial (A/P) metric is calculated by dividing the number of annual species by the number of perennial species using the codes for reproductive habit (annual, perennial, biennial, woody) in Appendix C. The A/P metric is used in all versions of the VIBI-E.

FQAI metric. The FQAI (Floristic Quality Assessment Index) metric is calculated by using Equation 7 in Andreas et al. (2004):

$$I = \sum (CC_i) / \sqrt{N_{\text{all species}}}$$

where I = the FQAI score, CC_i = the coefficient of conservatism of plant species i , and $N_{\text{all species}}$ = the total number of species both native and non-native (Fennessy et al. 1998a, 1998b; Lopez and Fennessy 2002). The FQAI metric is used in all variations of the VIBI.

%bryophyte metric. The %bryophyte metric is calculated by summing the relative cover values for all bryophyte species (all moss species plus the aquatic

lichens *Riccia* and *Ricciocarpos*). When completing Field Data Sheet 1, the cover of mosses and aquatic lichens, individually or in the aggregate, should be recorded. Mosses do not need to be identified to any level beyond moss ("true" mosses or Musci of Division Bryophyta), or can be recorded as Moss #1, Moss #2, etc. All cover values assigned to mosses or aquatic lichens are summed into an aggregate bryophyte "species" and the relative cover of bryophytes calculated as described above.

%hydrophyte metric. The %hydrophyte metric is calculated by summing the relative cover value (as calculated above) for native, hydrophytic plant species using the nativity and indicator status codes (FACW, OBL) in Appendix C. The %hydrophyte metric is used in the VIBI-F.

%tolerant metric. The %tolerant metric is calculated by summing the relative cover values of all species, including adventive species, with Coefficients of Conservatism of 0, 1, and 2 using the coefficients in Andreas et al. (2004) (Appendix C). The %tolerant metric is used in all variations of the VIBI.

%sensitive metric. The %sensitive metric is calculated by summing the relative cover values of all species with Coefficients of Conservatism of 6, 7, 8, 9 and 10 using the coefficients in Andreas et al. (2004) (Appendix C). This is the calculation for the VIBI-E and VIBI-F. For the VIBI-SH, the relative cover of buttonbush (*Cephalanthus occidentalis*) is deducted from the sum of relative cover values of species with C of C's of 6 to 10.

%invasive graminoid metric. The %invasive graminoid metric is calculated by summing the relative cover values of reed canary grass (*Phalaris arundinacea*), cattails (*Typha angustifolia*, *T. latifolia*, *T. x glauca*), and giant reed (*Phragmites australis*). The invasive graminoid metric is used in the VIBI-E.

Pole timber density metric. The pole timber metric is calculated by summing the relative density of tree species in the 10-15 cm, 15-20 cm and 20-25 cm size classes. Relative density of a tree species is calculated by dividing the number of stems counted for that species on Field Data Sheet 2 (woody stem) by the total number of stems of all species counted (see above). The pole timber metric is used in the VIBI-F.

Subcanopy IV metric. The subcanopy importance value (IV) metric is calculated by summing the average importance value of native shade tolerant subcanopy species (shrubs and small trees) plus the average importance value of native facultative shade subcanopy (small tree and shrub) species using the nativity, lifeform, and shade tolerance codes in Appendix C. Subcanopy trees are coded as “small trees” in Appendix C and are tree species which at maturity do not reach the canopy of the forest, e.g. *Carpinus caroliniana*. The subcanopy metric is used in the VIBI-SH and VIBI-F.

Canopy IV metric. The canopy importance value (IV) metric is calculated by summing average relative frequency, average relative density, and average relative dominance (basal area) of native canopy (tree) species using the nativity and lifeform codes in Appendix C. Canopy tree species are species which at maturity will grow in the canopy of the forest, even though at the time of the sampling immature individuals are growing in the subcanopy. The canopy IV metric is used in the VIBI-F.

Biomass metric. The biomass metric is calculated by averaging the the grams per square meter of standing biomass samples (usually 8) collected in a standard 2x5 plot. Standing biomass is typically sampled by collecting eight 0.1m² clip plots of standing biomass (vegetation) in the corners of the intensive modules of a standard plot. The biomass metric is used in the VIBI-E.

%unvegetated metric. The %unvegetated metric is calculated in two steps. First, the percent unvegetated open water and bare ground (top lines on Field Data Sheet 1) are summed. Note that these are true estimates of the percent of a module that does not have vegetation and not the relative cover of unvegetated areas. Next, the relative cover annual species is calculated using the growth habit codes in Appendix C. The percent unvegetated area and the relative cover of annual species are summed to obtain the %unvegetated metric value. This metric is used a substitute for the biomass metric when the VIBI-E is used for emergent mitigation wetlands, although the biomass metric value should also be calculated and reported.

EQUIPMENT AND SUPPLIES

In order to sample a plot using the methods outlined in this manual, the following equipment will be needed:

100m measuring tape
clip boards (3)
Data Forms (Appendix B) on waterproof paper
Waterproof field notebook
Waterproof pens
Compass
GPS unit
0.1m² and 1 m² quadrat frames¹³
dbh measuring tape (cm)
Regular measuring tape (cm)
1m stake flags (18 per plot) (flourescent pink recommended)
Flagging tape (flourescent pink recommended)
1m permanent stake (rebar or oak survey stake)

¹³ A hinged quadrat frame is the easiest to use in the field. A simple design is to cut a piece 1x2" hardwood (poplar, oak) into the appropriate lengths (31.6cm and 1m) and attach a simple strap hinge. The frame folds flat for easy storage and carrying and is very easy to slide into dense vegetation.

Plant press(es)
 Vasculum or large garbage size bags and 1 gallon freezer bags for individual specimens)
 10x hand lens
 Munsell soil color chart
 Soil probe, soil auger, and soil sampling containers
 Water sampling containers and preservatives
 Ice chest
 Chest waders and hip boots
 Water bottles
 Emergency medical kit
 Hand lens
 Camera
 Shovel (shooter spade)
 Pruning shears
 Paper bags (grocery bag size), permanent marker, and stapler for clip plots

BASIC OHIO BOTANICAL TEXTS

Essential texts

Persons already proficient in Ohio field botany will be familiar with most of these texts. Persons needing to gain the botanical proficiency necessary to use the methods described in this manual should acquire or have access to the following botanical texts and field guides:

Manual of Vascular Plants of Northeastern United States and Adjacent Canada, 2nd Edition (Gleason and Cronquist 1991). This is the best and most complete all around key for the flora of Ohio. It can be usefully supplemented by referring to published volumes of the Flora of North America for new species and nomenclatural changes as well as by referring to Andreas et al. (2004).

The Illustrated Companion to Gleason and Cronquist's Manual (Holmgren et al. 1998). The essential companion volume with excellent line drawings of all species in the manual.

The Monocotyledonae of Ohio (Braun 1967). A little out of date but still an excellent reference for the Ohio species of the Poaceae and Cyperaceae as well as other monocots.

The Woody Plants of Ohio (Braun 1961). An essential text for identifying woody species in twig and leaf. Other texts generally require fruiting and/or flowering material which is usually lacking during wetland vegetation surveys.

Newcomb's Wildflower Guide (Newcomb 1977). An excellent "genus" key for unknown flowers, shrubs and vines. The best beginners guide to "showy" flowering plants available. Unfortunately, there is presently no published equivalent of *Newcomb's Wildflower Guide* for grasses, sedges, and rushes. Most or all published non-technical guides to grasses, sedges, and rushes are of relatively limited utility because of their incomplete coverage of species and lack of keys.

How to Identify Grasses and Grasslike Plants (Harrington 1977). An indispensable picture glossary of technical characters for grasses, sedges, and rushes. Excellent for persons attempting to become proficient in these difficult groups.

Floristic Quality Assessment Index (FQAI) for Vascular Plants and Mosses for the State of Ohio (Andreas et al. 2004). While not intended to be a flora and not containing taxonomic keys, this is complete summary of native and naturalized vascular plants with nomenclature updated from the *Flora of North America* volumes published as of May 2004, and can be used to supplement and update Gleason and Cronquist (1991).

Additional texts

The Dicotyledonae of Ohio. Part 2. Linaceae through Campanulaceae (Cooperrider 1995). A useful supplement to Gleason and Cronquist (1991) with a

focus on Ohio material only.

The Dicotyledonae of Ohio. Part 3. Asteraceae (Fisher 1988). A useful supplement to Gleason and Cronquist (1991) with a focus on Ohio material only.

Vascular Plants of Ohio (Braun 1971). Somewhat out of date nomenclaturally and missing many new members of Ohio's flora discovered since it was last revised, but still the most compact and affordable single volume manual to Ohio's flora available.

Michigan Flora series (Voss 1972, 1985, 1996). This is an excellent and affordable series that is very useful in northern Ohio. Part 1 is very useful for its excellent *Carex* keys and descriptions especially for the notoriously difficult Ovales section.

The Illustrated Flora of Illinois, Sedges: Carex (Mohlenbrock 1999). This volume includes most Ohio species of *Carex* and uses a somewhat different key based on more easily observable gross characteristics than most other keys. It also has an excellent overview and discussion of the ecology and evolution of this fascinating genus.

The Vascular Flora of the Glaciated Allegheny Plateau Region of Ohio (Andreas 1985). Not a key but an excellent reference for the vascular plants which can be encountered in the glaciated Allegheny Plateau (northeast Ohio), their habitats, and known counties.

The Vascular Plants of Unglaciated Ohio (Cusick and Silberhorn 1977). Not a key but an excellent reference for the vascular plants which can be encountered in the unglaciated Ohio (southeast Ohio), their habitats, and known counties.

Fruit and Twig Key to Trees and Shrubs (Harlow 1959). A useful and inexpensive key to twigs and fruits of northeastern U.S. woody species.

Aquatic and Wetland Plants of Northeast North America (Crow and Hellquist 2002). A purported new edition to Fassett's *Manual of Aquatic and Wetland Plants*, but really an expanded desktop edition that provides many additional line sketches of the included plants.

Flora of North America series. As of this writing, seven volumes of the *Flora of North America* have been published. These are expensive but useful additions to a botanical library. Several volumes a year should be published.

GLOSSARY OF TERMS

Are - one-hundredth of a hectare (0.01 ha) or 100m². A single module is 1 are.

Cover - the percentage of ground surface obscured by the vertical projection of all above ground parts of a given species onto that surface. No single species may exceed 100% cover, though the sum of cover estimates across all species often (usually) exceeds 100%. A plant need not be rooted in the module or plot to have cover in the module or plot. Cover can be estimated separately for each module of a plot or for each intensive module and any residual (nonintensive) modules depending on the study design. Percent cover is recorded for all species less than 6m tall.

Density - the number of stems of a tree or shrub >1m tall in plot. Density should be reported in units of stems per hectare.

Depth (of occurrence) - the size of the subquadrat in which the presence of a species is first noted. In this manual, depth can range from 1 to 3. For example, if the presence of species is first observed in the 1m² subquadrat, the depth of occurrence is 3.

Dominance - the sum of the surface area (basal area) measured at breast height of a tree or shrub >1m tall in a plot. Basal area of woody plant species should be reported in units of square meters per hectare.

FQAI - the FQAI is a variation of the weighted averaging technique (Gauch 1982) that can be conceptualized as a weighted richness metric which assigns Coefficients of Conservatism (C of C's) from 0 to 10 to every species in the flora with these coefficients representing the narrowness or breadth of a species' habitat preferences (Andreas et al. 2004). Coefficients of Conservatism from Andreas et al. (2004) are included in Appendix C.

Frequency - the number diameter classes (Table 1) a woody species has occurrences of at least one stem (size class frequency). In other applications, frequency is the number of quadrats in which a species occurs in.

Hectare - 10,000m² or 100 ares. A typical 2 x 5 plot is made up of 10 modules and is 0.1 hectares.

Importance value (IV) - the average of the relative frequency, relative density, and relative basal area of a woody plant species.

Level (of occurrence) - a synonym for "depth."

Module - the basic unit of sampling under this method and consists of a 10 x 10m (100m²) quadrat. A plot is made up of one or more (typically 10) modules.

Presence - the occurrence of a species (based on the emergence or aerial cover of stem or stems) within a quadrat, module, or plot.

Plot - an area where vegetation is being sampled at a particular site. A plot is made up of one or more modules. Plots can also be called "relevés."

Releve - a synonym for "plot" or if a plot is comprised of only 1 module, then a synonym for "module." When cover is estimated for nonintensive (residual) modules, it is said to be estimated at the "relevé" level.

Relative cover - the sum of the cover values recorded for a plant species in a plot divided by the sum of cover values for all plant species in the plot.

Relative density - the sum of the number of stems of a woody plant species in a plot divided by the sum of all stems of all woody plants in the plot.

Relative dominance - the sum of the surface area (basal area) of all individuals of a woody plant species measured at breast height divided by the sum of the surface areas of all woody plant species in a plot.

Relative frequency - the number of diameter size classes a woody species occurs in divided by the total number of diameter classes (11). In other applications, relative frequency is defined as the number of quadrats a species occurs in divided by the total number of quadrats.

Quadrat - quadrat refers to the one or more nested quadrats of increasing area (0.1m², 1m², 10m²) that are located in corners of an intensive module (usually corners 2 and 4). Technically, the module itself is a 100m² "quadrat" but in this manual the term quadrat is generally used to describe the smaller nested quadrats located in the corners of the intensive modules.

Richness - the number of taxa in a particular taxa group, e.g. the number of species in a particular genus, the number of shrub species (in a shrub lifeform class), the number of plant species that are "hydrophytes," etc.

Richness ratio. The number of taxa in particular taxa category or group divided by the total number taxa (usually species).

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Table 1. Cover and dbh classes and midpoints. The midpoints of the cover classes are used in the calculation of relative cover. The midpoints of the dbh classes are used in the calculation of basal area (dominance) and relative dominance.

cover class	% cover	midpoint	dbh class	dbh (cm)	mid point (cm)	basal area (cm ²)
1	solitary or few	0.0001	1	0-1	0.5	0.196
2	0-1%	0.005	2	1-2.5	1.75	2.41
3	1-2%	0.015	3	2.5-5	3.75	11.0
4	2-5%	0.035	4	5-10	7.5	44.2
5	5-10%	0.075	5	10-15	12.5	122.7
6	10-25%	0.175	6	15-20	17.5	240.5
7	25-50%	0.375	7	20-25	22.5	397.6
8	50-75%	0.625	8	25-30	27.5	594.0
9	75-95%	0.85	9	30-35	32.5	829.6
10	95-99%	0.97	10	35-40	37.5	1104.5
---	---	---	11	>40 cm	individually	individually

Table 2. Scoring ranges for assigning metric scores for Vegetation IBIs. Descriptions of metrics are found in Table 3. E = Emergent, SH = Shrub, F = Forest, E_{COASTAL} = Lake Erie Coastal Marshes, MITIGATION = emergent mitigation wetlands. For metric values that are decimals and occur between classes, scoring ranges should be rounded up starting at 0. For example, in the bryophyte metric, if the metric value is 0.0106 and the scoring ranges are 0 - 0.01 = 0 and 0.01 - 0.03 = 3, the scoring range should be interpreted as 0 - 0.0109 and a score of 0 assigned.

metric	community	score 0	score 3	score 7	score 10
<i>Carex</i>	E, SH	0 - 1	2 - 3	4	≥5
Cyperaceae	E _{COASTAL}	0 - 1	2 - 3	4 - 6	≥7
dicot	E	0 - 10	10 - 17	18 - 25	≥25
	SH	0 - 9	10 - 14	15 - 23	≥24
shade	F	0 - 7	8 - 13	14 - 20	≥21
shrub	E, SH	0 - 1	2	3 - 4	≥5
hydrophyte	E	0 - 10	11 - 20	21 - 30	≥31
	SH	0 - 9	10 - 14	15 - 20	≥21
A/P ratio	E	>0.48	0.32 - 0.48	0.20 - 0.32	0.0 - 0.20
SVP	F, SH	0	1	2	≥3
FQAI	E, SH	0 - 9.9	10.0 - 14.3	14.4 - 21.4	≥21.5
	F	0 - 14.0	14.1 - 19.0	19.1 - 24.0	≥24.1
%bryophyte	F, SH	0 - 0.01	0.01 - 0.03	0.031 - 0.06	≥0.06
%hydrophyte	F	0 - 0.1	0.1 - 0.15	0.151 - 0.28	≥0.281
%sensitive	E	0 - 0.025	0.025 - 0.10	0.10 - 0.15	0.15 - 1.0
	F	0 - 0.035	0.035 - 0.12	0.21 - 0.3	0.31 - 1.0
	SH	0 - 0.02	0.021 - 0.06	0.061 - 0.13	0.131 - 1.0
%tolerant	E	0.60 - 1.0	0.40 - 0.60	0.20 - 0.40	0 - 0.20
	F	0.45 - 1.0	0.30 - 0.45	0.15 - 0.30	0 - 0.15
	SH	0.15 - 1.0	0.10 - 0.15	0.05 - 0.10	0 - 0.05
%invasive graminoids	E	0.31 - 1.0	0.15 - 0.3	0.03 - 0.15	0 - 0.03
small tree	F	0.32 - 1.0	0.22 - 0.32	0.11 - 0.22	0 - 0.11
subcanopy IV	F	0 - 0.02	0.02 - 0.072	0.072 - 0.13	≥0.131
	SH	0 - 0.02	0.02 - 0.05	0.05 - 0.1	≥ 0.11
canopy IV	F	0.21 - 1.0	0.17 - 0.21	0.14 - 0.17	0 - 0.14
%unvegetated	MITIGATION	≥0.46	0.31 - 0.46	0.15 - 0.31	0 - 0.15
biomass	E	≥801	451 - 800	201 - 450	0 - 200

Table 3. Description of metrics used in the VIBI-E, VIBI-F, VIBI-SH. “E” = emergent, “E_{coastal}” = Lake Erie Coastal Marsh, “E_{MITIGATION}” = Mitigation Marshes, “F” = forested, “SH” = shrub.

metric	E, F, SH	code	type	metric increase or decrease w/ disturbance	description
number of <i>Carex</i> spp.	E, SH	Carex	richness	decrease	Number of species in the genus <i>Carex</i>
number of Cyperaceae spp.	E _{coastal}	Cyperaceae	richness	decrease	Number of species in the Cyperaceae family
number of native dicot spp.	E, SH	dicot	richness	decrease	Number of native dicot (dicotyledon) species
number of native shade spp.	F	shade	richness	decrease	Number of native shade ¹⁴ tolerant or shade facultative species
number of native, wetland shrubs	E, SH	shrub	richness	decrease	Number of shrub species that are native and wetland (FACW, OBL) species
number of hydrophyte spp.	E, SH	hydrophyte	richness	decrease	Number of vascular plant species with a Facultative Wet (FACW) or Obligate (OBL) wetland indicator status (Reed 1988; 1997; Andreas et al. 2004).
ratio of annual to perennial spp.	E	A/P	richness ratio	decrease	Ratio of number of nonwoody species with annual life cycles to number of nonwoody species with perennial life cycles. Biennial species excluded from calculation
number of seedless vascular plant spp.	F, SH	SVP	richness	decrease	Number of seedless vascular plant (ferns, fern allies) species
FQAI score	E, F, SH	FQAI	weighted richness index	decrease	The Floristic Quality Assessment Index score calculated using Eqn. 7 and the coefficients in Andreas et al. (2004)
relative cover of bryophytes	F, SH	%bryophyte	dominance ratio	decrease	Percent cover of all bryophyte species divided by total percent cover of all plant species (mosses and aquatic lichens <i>Riccia</i> and <i>Ricciocarpos</i>)
relative cover of shade tolerant hydrophyte spp.	F	%hydrophyte	dominance ratio	decrease	Percent coverage of shade or partial shade tolerant FACW and OBL plants in the herb and shrub strata divided by total percent coverage of all plants
relative cover of sensitive plant spp.	E, F, SH	%sensitive	dominance ratio	decrease	Percent coverage of plants in herb and shrub strata with a Coefficient of Conservatism (C) of 6, 7, 8, 9 and 10 (Andreas et al. 2004) divided by total percent coverage of all plants
relative cover tolerant plant spp.	E, F, SH	%tolerant	dominance ratio	increase	Percent coverage of plants in herb and shrub strata with a C of 0, 1, and 2 (Andreas et al. 2004) divided by total percent coverage of all plants
relative cover of invasive graminoid spp.	E	%invgram	dominance ratio	increase	Percent coverage of <i>Typha</i> spp., <i>Phalaris arundinacea</i> , and <i>Phragmites australis</i> divided by total percent coverage of all plants

Table 3. Description of metrics used in the VIBI-E, VIBI-F, VIBI-SH. “E” = emergent, “E_{coastal}” = Lake Erie Coastal Marsh, “E_{MITIGATION}” = Mitigation Marshes, “F” = forested, “SH” = shrub.

metric	E, F, SH	code	type	metric increase or decrease w/ disturbance	description
relative density of small trees (pole timber)	F	pole timber	density ratio	increase	The density (stems/ha) of a tree species in size classes between 10 and 25 cm dbh divided by the density of all trees
mean importance value of native shade and facultative shade subcanopy spp.	F, SH	shrub IV	importance value	decrease	The mean of importance values for native, shade and facultative shade shrub species is the sum of the mean importance value of shade tolerant subcanopy (shrub, subcanopy tree) species plus facultative shade subcanopy (shrub, small tree) species where importance value is the average of relative size class frequency ² , relative density, and relative basal area. Subcanopy trees are tree species which only grow in the subcanopy, e.g. <i>Carpinus caroliniana</i> .
mean importance value of canopy spp.	F	mean IV	importance value	decrease	The mean of the importance values of canopy species where importance value is calculated by averaging relative size class frequency, relative density, and relative basal area. Canopy tree species are species which at maturity will inhabit the upper canopy of the forest even if at the time of sampling they are growing in the subcanopy
sum of relative cover of annual spp. and cover of unvegetated areas	E _{MITIGATION}	%unvegetated	dominance ratio	increase	The sum of the relative cover of annual plant species (percent annual spp. cover divided by total spp. cover) and the percent cover of unvegetated areas.
mean standing biomass	E	biomass	primary production	increase	The average grams per square meter of clip plot samples collected at each emergent wetland

² Size class frequency is the number of size classes in which there is at least one stem for that woody species. There are 11 size classes 0-1, 1-2.5, 2.5-5, 5-10, 10-15, 15-20, 20-25, 25-30, 30-35, 35-40, and >40 cm.

Table 4. Summary of metrics for Vegetation IBIs. See Table 3 for definitions.

VIBI-E	VIBI-E _{COASTAL}	VIBI-E _{MITIGATION}	VIBI-SH	VIBI-F
---	Cyperaceae	---	---	---
<i>Carex</i>	---	<i>Carex</i>	<i>Carex</i>	---
Dicot, native	Dicot, native	Dicot, native	Dicot, native	---
Shrub, native, wetland	Shrub, native, wetland	Shrub, native, wetland	Shrub, native, wetland	---
Hydrophyte, native	Hydrophyte, native	Hydrophyte, native	Hydrophyte, native	---
A/P ratio	A/P ratio	A/P ratio	---	---
FQAI score	FQAI score	FQAI score	FQAI score	FQAI score
%tolerant	%tolerant	%tolerant	%tolerant	%tolerant
%sensitive	%sensitive	%sensitive	%sensitive	%sensitive
%invasive graminoids	%invasive graminoids	%invasive graminoids	---	---
biomass	biomass	---	---	---
---	---	%unvegetated	---	---
---	---	---	---	Shade
---	---	---	SVP	SVP
---	---	---	---	%hydrophyte
---	---	---	%bryophyte	%bryophyte
---	---	---	---	pole timber density
---	---	---	subcanopy IV	subcanopy IV
---	---	---	---	canopy IV

Table 5. General Wetland Aquatic Life Use Designations.

code	designation	definition
SWLH	Superior Wetland Habitat	Wetlands that are capable of supporting and maintaining a high quality community with species composition, diversity, and functional organization comparable to the vegetation IBI score of <u>at least 83% (five-sixths)</u> of the 95 th percentile for the appropriate wetland type and region as specified in Table 11.
WLH	Wetland Habitat	Wetlands that are capable of supporting and maintaining a balanced, integrated, adaptive community having a species composition, diversity, and functional organization comparable to the vegetation IBI score of <u>at least 66% (two-thirds)</u> of the 95 th percentile for the appropriate wetland type and region as specified in Table 11.
RWLH	Restorable Wetland Habitat	Wetlands which are degraded but have a reasonable potential for regaining the capability of supporting and maintaining a balanced, integrated, adaptive community of vascular plants having a species composition, diversity, and functional organization comparable to the vegetation IBI score of <u>at least 33% (one-third)</u> of the 95 th percentile distribution for the appropriate wetland type and region as specified in Table 11.
LQWLH	Limited Quality Wetland Habitat	Wetlands which are seriously degraded and which do not have a reasonable potential for regaining the capability of supporting and maintaining a balanced, integrated, adaptive community having a species composition, diversity, and functional organization comparable to the vegetation IBI score of <u>less 33% (one-third)</u> of the 95 th percentile for the appropriate wetland type and region as specified in Table 11.

Table 6. Special wetland use designations.

subscript	special uses	description
A	recreation	wetlands with known recreational uses including hunting, fishing, birdwatching, etc. that are publicly available
B	education	wetlands with known educational uses, e.g. nature centers, schools, etc.
C	fish reproduction habitat	wetlands that provide important reproductive habitat for fish
D	bird habitat	wetlands that provide important breeding and nonbreeding habitat for birds
E	T or E habitat	wetlands that provide habitat for federal or state endangered or threatened species
F	flood storage	wetlands located in landscape positions such that they have flood retention functions
G	water quality improvement	wetlands located in landscape positions such that they can perform water quality improvement functions for streams, lakes, or other wetlands

Table 7. Wetland Tiered Aquatic Life Uses (WTALUs) for specific plant communities and landscape positions. tbd = to be developed. LQWLH = limited quality wetland habitat, RWLH = restorable wetland habitat, WLH = wetland habitat, SWLH = superior wetland habitat. Equivalent antidegradation categories as specified in Ohio Administrative Code Rule 3745-1-54 are indicated in parentheses below the TALU category.

HGM class	HGM subclass	plant community	ecoregions	95 th percentile	LQWLH (Category 1)	RWLH (modified Category 2)	WLH (Category 2)	SWLH (Category 3)
Depression	all	Swamp forest, Marsh, Shrub swamp	EOLP	91	0 - 30	30 - 60	61 - 75	76 - 100
			all other regions	75	0 - 24	25 - 50	51 - 62	63 - 100
	all	Wet Meadow (incl. prairies and sedge/grass dominated communities that are not slopes)	all regions	91	0 - 29	30 - 59	60 - 75	76 - 100
Impoundment	all	Marsh, Shrub Swamp	EOLP	80	0 - 26	27 - 52	53 - 66	67 - 100
			all other regions	71	0 - 24	25 - 47	48 - 63	64 - 100
		Wet Meadow (incl. prairies and sedge/grass dominated communities that are not slopes)	all regions	91	0 - 29	30 - 59	60 - 75	76 - 100
Riverine	Headwater	all	EOLP	84	0 - 27	28 - 56	57 - 69	70 - 100
			all other regions	71	0 - 23	24 - 47	47 - 59	60 - 100
	Mainstem	all	EOLP	89	0 - 29	30 - 56	57 - 73	74 - 100
			all other regions	64	0 - 20	21 - 41	42 - 52	53 - 100
	Headwater or Mainstem	Wet Meadow (incl. prairies and sedge/grass dominated communities that are not slopes)	all regions	91	0 - 29	30 - 59	60 - 75	76 - 100
Slope	all	Wet meadow (fen), tall shrub fen, forest seep	all regions	92	0 - 29	30 - 59	60 - 75	76 - 100
Fringing ¹	Natural Lakes (excluding lacustrine fens) and reservoirs	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Coastal ²	closed embayment, barrier-protected, river mouth	all	all regions	75	0 - 24	25 - 49	50 - 61	62 - 100
	open embayment, diked (managed unmanaged failed)	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Bog	weakly ombrotrophic	Tamarack-hardwood bog, Tall shrub bog	all regions	100	0 - 32	33 - 65	66 - 82	83 - 100
	moderately to strongly ombrotrophic	Tamarack, Leatherleaf and Sphagnum bogs	all regions	72	0 - 23	24 - 47	48 - 59	60 - 100

1. Depending on the circumstances, scoring breaks for depression, impoundment, or riverine may be used.

2. Scoring breaks for coastal embayment, barrier-protected, and river mouth may be usable.

Table 8A. Hydrogeomorphic classes for wetland classification system for Ohio wetlands adapted from Brinson (1993), Mack (2001b, Tables 6, 7, and 42), Mack (2000a, Table 1) Smith et al. (1995); Cole et al. (1997); Anderson (1982), Cowardin et al. (1978), Chow-Fraser and Albert 1998; Minc and Albert 1998.

class		class modifiers
I	Depression (incl. areas that could be considered flats, e.g. "wet woods")	(A) Surface water (sheet flow, precipitation) (B) Ground water (seasonal to permanent input)
II	Impoundment	(A) Beaver (B) Human
III	Riverine	(A) Headwater depression (1 st or 2 nd) (B) Mainstem depression (3 rd order or >) (C) Channel
IV	Slope (incl. hillside fens, mound fens, and lacustrine fens)	(A) Riverine (B) Isolated (C) Fringing
V	Fringing (does not include lacustrine fens)	(A) Reservoir (B) Natural lake
VI	Coastal	(A) Open embayment (B) Closed embayment (C) Barrier-protected (D) River mouth (barred and open) (E) Diked - managed (F) Diked - unmanaged (G) Diked - failed (H) Beach swale
VII	Bog	(A) Strongly ombrotrophic (B) Moderately ombrotrophic (C) Weakly ombrotrophic
add code	Mitigation	Add appropriate pre-code to HGM class: mr - mitigation, restoration mc - mitigation, creation e.g. "mrll" = mitigation, restoration, impoundment

Table 8B. Plant community modifiers for wetland classification system for Ohio wetlands adapted from after Brinson (1993), Mack (2001b, Tables 6, 7, and 42), Mack (2000a, Table 1) Smith et al. (1995); Cole et al. (1997); Anderson (1982), Cowardin et al. (1978).

(1) Forest	(2) Emergent	(3) Shrub
(a) Swamp forest	(a) Marsh	(a) Shrub Swamp
(I) oak-maple	(I) submergent marsh	(I) buttonbush swamp
(ii) oak -maple-ash	(ii) floating-leaved marsh	(ii) alder swamp
(iii) maple-ash	(iii) mixed emergent marsh	(iii) mixed shrub swamp
(iv) pin oak	(iv) cattail marsh	(iv) other (specify)
(v) pumpkin ash		
(vi) mixed forest		
(vii) red maple		
(viii) white pine		
(ix) cottonwood		
(x) river birch		
(xi) other (specify)		
(b) Bog Forest	(b) Wet meadow	(b) Bog shrub swamp
(I) tamarack bog	(I) wet prairie	(I) tall shrub bog
(ii) tamarack-hardwood bog	(ii) oak openings sand prairie	(ii) leatherleaf bog
	(iii) prairie sedge meadow	
	(iv) fen	
	(v) reed canary grass meadow	
	(vi) other (specify)	
(c) Forest seep	(c) Sphagnum bog (incl. open kettle bogs with scattered shrubs, classic ringed bogs with open water centers and perimeters of shrubs and tamarack)	(c) Tall shrub fen
(I) skunk cabbage seep		
(ii) sedge seep		
(iii) skunk cabbage-sedge seep		
(iv) other (specify)		

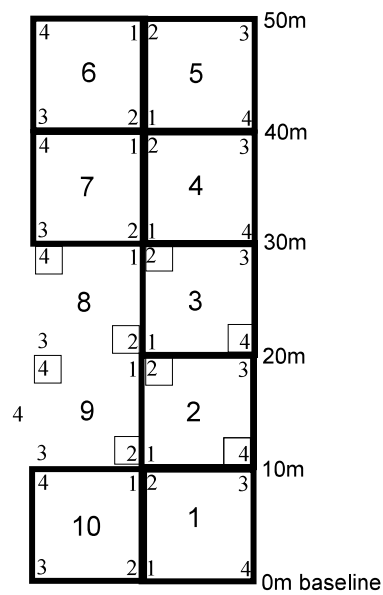


Figure 1. Standard 2 x 5 (20m x 50m) plot with ten modules. Modules are numbered counterclockwise as you move down and back along the long axis of the plot. Module corners are numbered clockwise in direction of movement along the long axis of the plot (down the plot from modules 1 to 5, returning to the baseline from modules 6 to 10). Standard intensive modules are shaded (2, 3, 6, 9). Standard nested quadrat corners of intensive modules are 2 and 4.



Figure 2. Plant presses and homemade plant press dryer.



Figure 3. Professional herbarium cabinet.

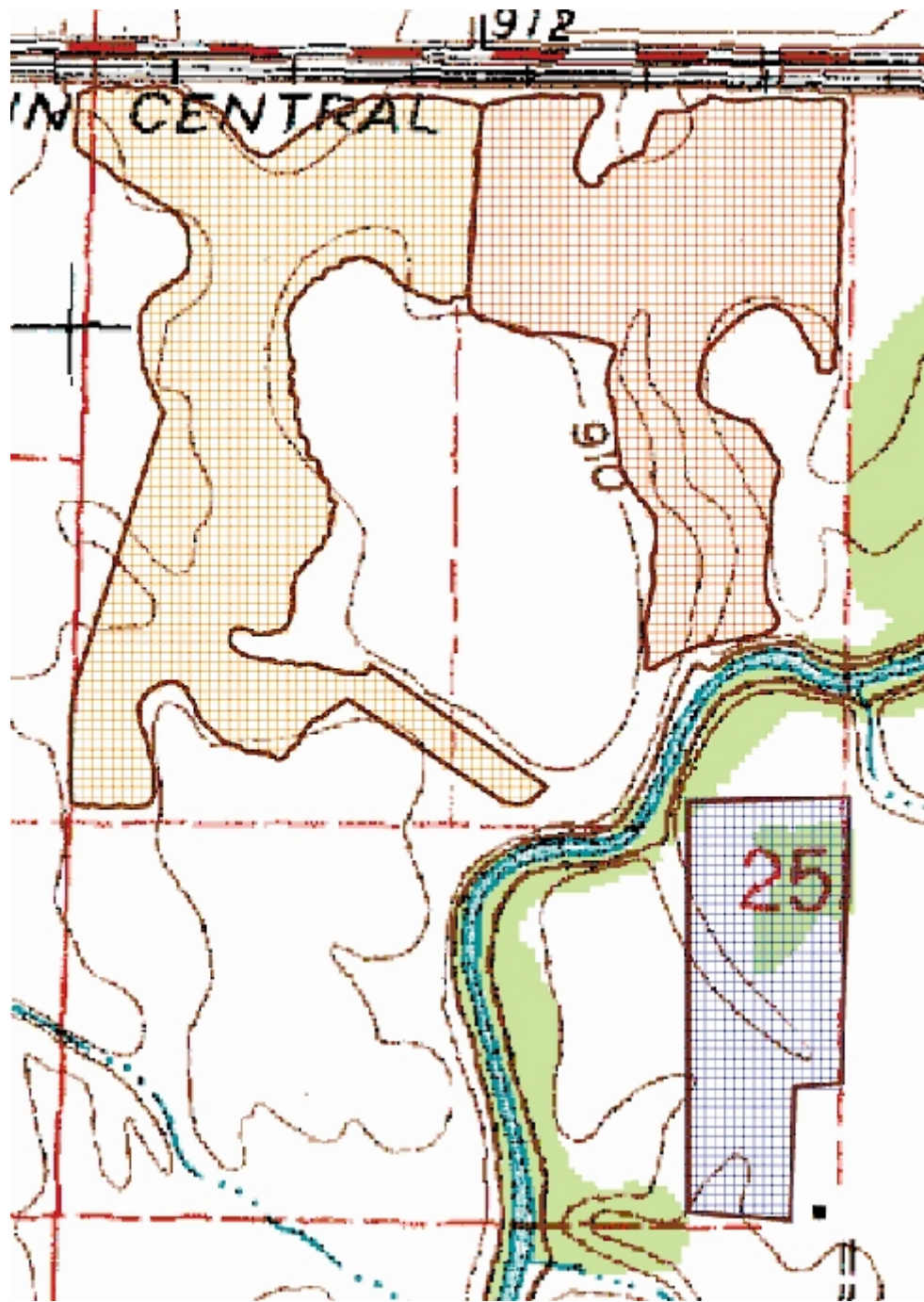


Figure 4. Georeferenced 10m x 10m grid at Little Scioto Mitigation Bank, Marion County, Ohio.

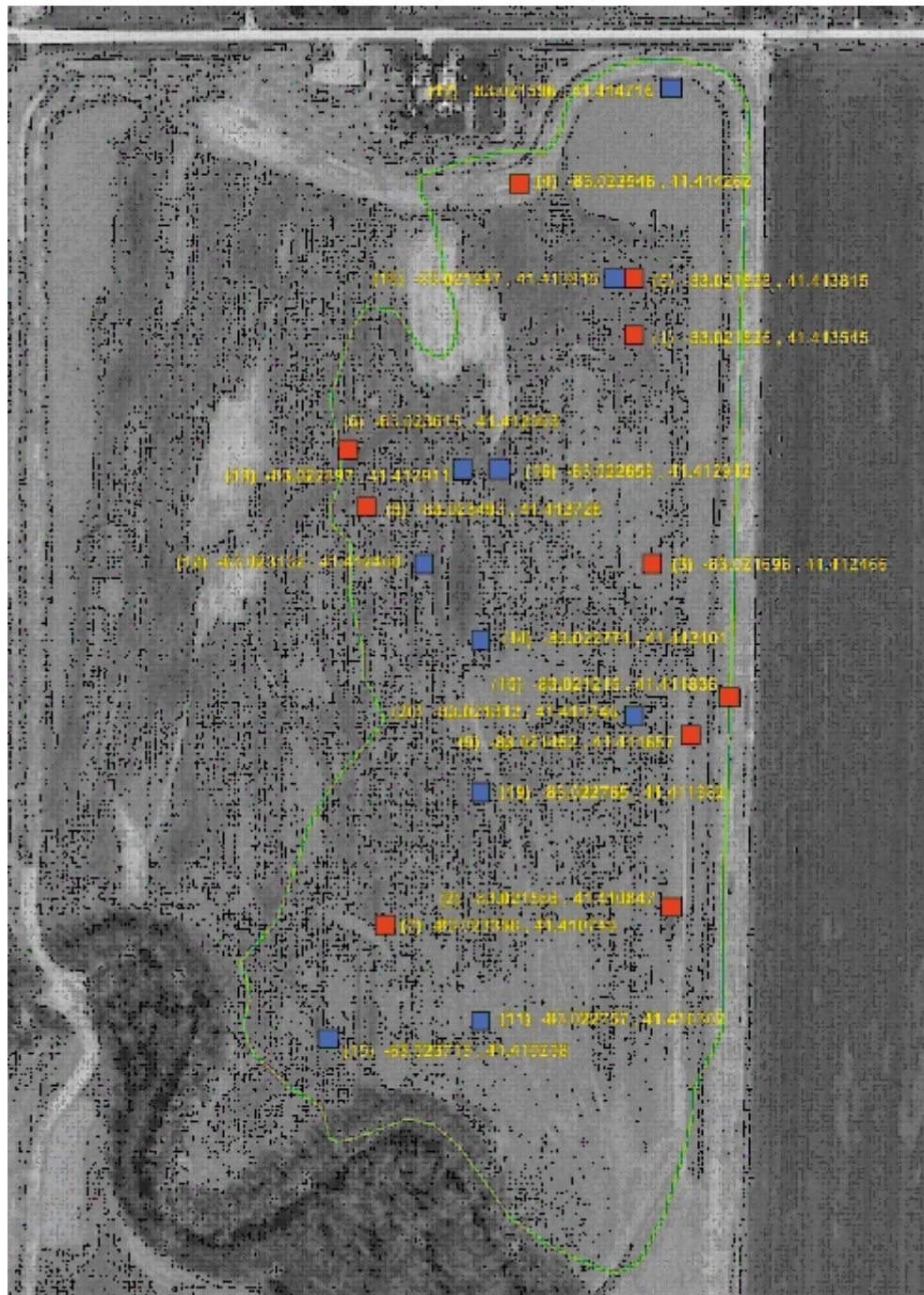


Figure 5. Random point map for Three Eagles Mitigation Bank (NE Marsh Area), Sandusky County, Ohio. Red squares are first 10 random points, blue squares are second 10 random points.

APPENDICES

APPENDIX A - FIELD DATA SHEETS

APPENDIX B - EXAMPLE CALCULATIONS

APPENDIX C - SPECIES CODES FOR VIBI METRIC CALCULATION

APPENDIX A - FIELD DATA SHEETS

BACKGROUND INFORMATION FORM

Site name and county:

Investigator(s):

Sampling date(s):

Affiliation:

Address:

Phone number:

e-mail address:

Plant communit(ies) (describe):

HGM Class(es) (describe):

YES NO Is the wetland an automatic category 3 using the ORAM v. 5.0 Narrative Rating? If yes, describe.

YES NO Is the wetland degraded but still exhibits at least one function or value at medium to high levels? If yes, describe.

Antidegradation category in accordance with OAC Rule 3745-1-54 (Circle One):

Category 1

Category 2

Category 3

Wetland Tiered Aquatic Life Use. Using Tables 5-7 in the Field Manual, describe the wetland's Tiered Aquatic Life Use:

YES NO Map attached of wetland location. If no, include sketch of general location of wetland include north arrow, landmarks, roads, etc.

Information sources consulted (check all that apply):

___ USGS Topo Map ___ National Wetland Inventory ___ Ohio Wetland Inventory ___ Soil Survey

___ Delineation report ___ Other (list)

BACKGROUND INFORMATION FORM

Site name and county:

Site sketch and plot location(s)

Rationale for location of plot(s). Describe the reasons for establishing the vegetation sampling plot or plots in the configuration, direction, and locations used to sample the site.

I hereby certify that I am sufficiently proficient in the identification of the vascular flora of Ohio vegetatively, in fruit, and in flower to enable the collection of vegetation data for the accurate calculation of a Vegetation Index of Biotic Integrity score, or that I have collected voucher specimens for identification and confirmation by an experienced botanist, and that the location of the plot or plots and the quantitative vegetation data collected therein, is representative of the plant community(ies) and quality of the wetland being sampled.

Signature

Date

Name (print)

Cover Classes

class	% cover
1	solitary/few
2	0-1%
3	1-2%
4	2-5%
5	5-10%
6	10-25%
7	25-50%
8	50-75%
9	75-90%
10	95-99%

Depth (level) Code

quadrat size	quadrat area	code
10x10m	1000m ²	1 (releve)
3.16x3.16m	10m ²	2
1x1m	1m ²	3
0.32x0.32m	0.1m ²	4
0.1x0.1m	0.01m ²	5

Vertical Strata Codes

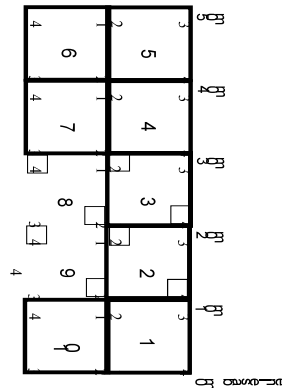
stratum	height	code
herb layer	0-2m	1
shrub/sapling	2-5m	2
pole timber	5-15m	3
tree	15-35m	4
canopy tree	>35	5

Standard plot

nest corners
2-2 2-4
3-2 3-4
8-2 8-4
9-2 9-4

Part 2. Modifiers for dominant vegetation used for each HGM class

class	community	type
1	Forest	a Swamp forest (i) oak-maple, (ii) oak-maple-ash, (iii) maple-ash, (iv) pin oak, (v) pumpkin ash, (vi) mixed forest, (vii) red maple, (viii) white pine, (ix) cottonwood, (x) river birch, (xi) other (specify)
		b Bog forest (i) tamarack bog, (ii) tamarack-hardwood bog
		c Forest seep (i) skunk cabbage seep, (ii) sedge seep, (iii) skunk cabbage-sedge seep, (iv) other (specify)
	Shrub	a Shrub Swamp (i) buttonbush swamp, (ii) alder swamp, (iii) mixed shrub swamp, (iv) other (specify)
		b Bog Shrub Swamp (i) tall shrub bog, (ii) leatherleaf bog
		c Fen Shrub Swamp (i) tall shrub fen
3	Emergent	a Marsh (i) submergent marsh, (ii) floating-leaved marsh, (iii) mixed emergent marsh, (iv) cattail
		b Sedge-grass meadow (i) wet prairie, (ii) oak openings sand prairie, (iii) prairie sedge meadow, (iv) fen (v) reed canary grass meadow, (vi) other (specify)
	Bog	(i) Sphagnum bog



Wetland Classification System Part 1

class	subclass
I	Depression (A) Surface water (B) Ground water
II	Impoundment (A) Beaver (B) Human
III	Riverine (A) Headwater depression (1 st , 2 nd order) (B) Mainstem depression (3 rd or > order) (C) Channel
V	Slope (A) Headwater (B) Mainstem (C) Isolated (D) Fringing
VI	Fringing (A) Reservoir (B) Natural lake
VII	Bog (A) Strongly ombrotrophic (B) Moderately ombrotrophic (C) Weakly ombrotrophic
VIII	Coastal (A) Open embayment (B) Closed embayment (C) Barrier-beach lagoon (D) Drowned river mouth (E) Diked - managed (F) Diked - unmanaged (G) Diked - failed
add code	Mitigation Add appropriate pre-code to HGM class: mr - mitigation, restoration mc - mitigation, creation e.g. "mrl" = mitigation, restoration, impoundment

Cover Classes

class	% cover
1	solitary/few
2	0-1%
3	1-2%
4	2-5%
5	5-10%
6	10-25%
7	25-50%
8	50-75%
9	75-90%
10	95-99%

Depth (level) Code

quadrat size	quadrat area	code
10x10m	1000m ²	1 (releve)
3.16x3.16m	10m ²	2
1x1m	1m ²	3
0.32x0.32m	0.1m ²	4
0.1x0.1m	0.01m ²	5

Vertical Strata Codes

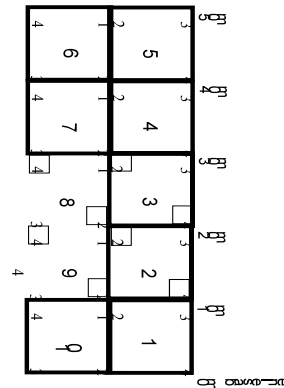
stratum	height	code
herb layer	0-2m	1
shrub/sapling	2-5m	2
pole timber	5-15m	3
tree	15-35m	4
canopy tree	>35	5

Standard plot

nest corners
2-2 2-4
3-2 3-4
8-2 8-4
9-2 9-4

Part 2. Modifiers for dominant vegetation used for each HGM class

class	community	type
1	Forest	a Swamp forest (i) oak-maple, (ii) oak -maple-ash, (iii) maple-ash, (iv) pin oak, (v) pumpkin ash, (vi) mixed forest, (vii) red maple, (viii) white pine, (ix) cottonwood, (x) river birch, (xi) other (specify)
		b Bog forest (i) tamarack bog, (ii) tamarack-hardwood bog
		c Forest seep (i) skunk cabbage seep, (ii) sedge seep, (iii) skunk cabbage-sedge seep, (iv) other (specify)
	Shrub	a Shrub Swamp (i) buttonbush swamp, (ii) alder swamp, (iii) mixed shrub swamp, (iv) other (specify)
		b Bog Shrub Swamp (i) tall shrub bog, (ii) leatherleaf bog
		c Fen Shrub Swamp (i) tall shrub fen
3	Emergent	a Marsh (i) submergent marsh, (ii) floating-leaved marsh, (iii) mixed emergent marsh, (iv) cattail
		b Sedge-grass meadow (i) wet prairie, (ii) oak openings sand prairie, (iii) prairie sedge meadow, (iv) fen (v) reed canary grass meadow, (vi) other (specify)
	e Bog	(i) Sphagnum bog



Wetland Classification System Part 1

class	subclass
I	Depression (A) Surface water (B) Ground water
II	Impoundment (A) Beaver (B) Human
III	Riverine (A) Headwater depression (1 st , 2 nd order) (B) Mainstem depression (3 rd or > order) (C) Channel
V	Slope (A) Headwater (B) Mainstem (C) Isolated (D) Fringing
VI	Fringing (A) Reservoir (B) Natural lake
VII	Bog (A) Strongly ombrotrophic (B) Moderately ombrotrophic (C) Weakly ombrotrophic
VIII	Coastal (A) Open embayment (B) Closed embayment (C) Barrier-beach lagoon (D) Drowned river mouth (E) Diked - managed (F) Diked - unmanaged (G) Diked - failed
add code	Mitigation Add appropriate pre-code to HGM class: mr - mitigation, restoration mc - mitigation, creation e.g. "mrll" = mitigation, restoration, impoundment

Investigator(s)
Site
County
Date

Total Modules	
Intensive Modules	
Plot configuration	
Total area (ha)	

Page	of
------	----

module	corner	water depth center of intensive modules (cm)	litter depth center of intensive modules (cm)	depth to saturated soil center of intensive modules (cm)	number of tussocks level 3 1x1m count	number of hummocks level 2 3.16x3.16m count	number of macro- topographic depressions* level 1 10x10m count	course woody debris 0-12cm level 1 10x10m count	course woody debris 12-40cm level 1 10x10m (count)	course woody debris >40cm level 1 10x10m (count)	microhabitat interspersions (scale on back) level 1 (rank)

SOIL CHARACTERISTICS IN THE CENTER OF THE PLOT

	matrix color	mottle color	%mottle	oxid. roots	texture*	redox. feat.	hydr. cond.**
5cm				Y N		Y N	
20cm				Y N		Y N	

* LM = loam, SAL = sandy loam, SIL = silty loam, CL = clay, SACL = silty clay loam, C = clay, SAC = sandy clay, SIC = silty clay, P = peat, M = muck, O = other (specify); ** I = inundated, S = saturated, M = moist, D = dry

Parameter	Soil Sample	Water Sample	clip plots	pH	Temp
Collected?	Y N	Y N	Y N	Y N	Y N
Collection time					
If No, reason?*					
List Mod/Corner and/or Location					
Reading					
Calibrated Prior to Reading?					

* pc = previously collected, nw = no water, ns = substrate not sampleable, na = not applicable

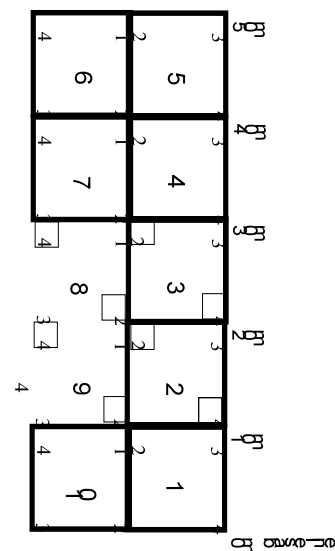
Cover Classes	
class	% cover
1	solitary/few
2	0-1%
3	1-2%
4	2-5%
5	5-10%
6	10-25%
7	25-50%
8	50-75%
9	75-90%
10	95-99%

Depth (level) Code		
quadrat size	quadrat area	code
10x10m	1000m ²	1 (releve)
3.16x3.16m	10m ²	2
1x1m	1m ²	3
0.32x0.32m	0.1m ²	4
0.1x0.1m	0.01m ²	5

Vertical Strata Codes		
stratum	height	code
herb layer	0-2m	1
shrub/sapling	2-5m	2
pole timber	5-15m	3
tree	15-35m	4
canopy tree	>35	5

Standard plot	
nest corners	
2-2	2-4
3-2	3-4
8-2	8-4
9-2	9-4

Cover scale for microtopographic habitat features. Select one or select intermediate value.	
microtopographic habitat quality	narrative description
0	feature is absent or functionally absent from the wetland
3	feature is present in the wetland in very small amounts or if more common, of low quality
7	feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
10	present in moderate or greater amounts and of highest quality



APPENDIX B - EXAMPLE CALCULATIONS

APPENDIX B EXAMPLE CALCUATIONS VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
Buttonbush swamp; beaver Impoundment
Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

1ST DATA REDUCTION PRESENCE - FIELD DATA SHEET 1

	voucher #	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#
		2	2	2	4	3	2	3	4	8	2	8	4	9	2	9	4	R	R
		depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover
Alnus serrulata	2182			1	5			1	5										
Ilex verticillata				2	6			2	4										
Cephalanthus occidentalis				2	5			2	7	4		4	9	4		4	8		
Bidens sp.	prob. discoidea			1	3	4	3			2		3	4	4		3	3		
unknown grass sp.				1	4	2	3												
Moss sp. #1	2184 on buttonbush			1	3			2	2										
Lemna minor	2180			3	2	3	2			2		3	3			1	3		
Utricularia gibba	2181	4	8			4		2	8			1	5	4		3	6		
Betula nigra	2183			3	4	4		2	6										
Galium tinctorium		3	3							3		2	3			2	3		
Polygonum sp.				1	2														
Rosa palustris				1	3														
Osmunda regalis				1	4			4	5										
Sparganium americanum				1	2														
Carex sp.	no fruits			1	1														
Triadenum sp.	see # 2176			1	1														
Moss sp. #2	2185 on buttonbush									3		3	3	2	3				
Moss sp. #3	2186 on buttonbush									3		2	3	2	2				
Juncus effusus								2	2										
Acer rubrum																			
Spiraea tomentosa																		R	2
Scirpus cyperinus																		R	2
Carex crinita	crinita																	R	1
Boehmeria cylindrica																		R	1
Smilax sp.																		R	1
Thelypteris noveboracensis																		R	2

APPENDIX B EXAMPLE CALCUATIONS
VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
Buttonbush swamp; beaver Impoundment
Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

2ND DATA REDUCTION - FIELD DATA SHEET 1

species	authority	cover1	cover2	cover2	cover3	cover4	cover5	cover6	cover7	cover8	cover9	total cover	relative cover
Acer rubrum	L.	*	*	*	*	*	*	*	*	*	*	*	*
Alnus serrulata	(Aiton) Willd.	*	0.075	*	0.075	*	*	*	*	*	*	0.15	3.4204%
Betula nigra	L.	*	0.035	*	0.175	*	*	*	*	*	*	0.21	4.7885%
Bidens sp.	ND	*	0.015	0.015	*	*	0.035	*	0.015	*	*	0.08	1.8242%
Boehmeria cylindrica	(L.) Sw.	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Bryophyte	ND	*	0.015	*	0.005	*	0.015	0.015	*	0.015	0.005	0.07	1.5962%
Carex crinita	Lam.	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Carex sp.	ND	*	0.0001	*	*	*	*	*	*	*	*	0.0001	0.0023%
Cephalanthus occidentalis	L.	*	0.075	*	0.375	*	0.85	*	0.625	*	*	1.925	43.8947%
Galium tinctorium	(L.) Scop.	0.015	*	*	*	*	0.015	*	0.015	*	*	0.045	1.0261%
Ilex verticillata	(L.) A. Gray	*	0.175	*	0.035	*	*	*	*	*	*	0.21	4.7885%
Juncus effusus	L.	*	*	*	0.005	*	*	*	*	*	*	0.005	0.1140%
Lemna minor	L.	*	0.005	0.005	*	*	0.015	*	0.015	*	*	0.04	0.9121%
Osmunda regalis	L.	*	0.035	*	0.075	*	*	*	*	*	*	0.11	2.5083%
Polygonum sp.	ND	*	0.005	*	*	*	*	*	*	*	*	0.005	0.1140%
Rosa palustris	Marshall	*	0.015	*	*	*	*	*	*	*	*	0.015	0.3420%
Scirpus cyperinus	(L.) Kunth	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Smilax sp.	ND	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Sparganium americanum	Nutt.	*	0.005	*	*	*	*	*	*	*	*	0.005	0.1140%
Spiraea tomentosa	L.	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Thelypteris noveboracensis	(L.) Nieuwl.	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Triadenum sp.	ND	*	0.0001	*	*	*	*	*	*	*	*	0.0001	0.0023%
Utricularia gibba	L.	0.625	*	*	0.625	*	0.075	*	0.175	*	*	1.5	34.2036%
												4.3855	

APPENDIX B EXAMPLE CALCUATIONS VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
Buttonbush swamp; beaver Impoundment
Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

3RD DATA REDUCTION - FIELD DATA SHEET 1

species	citation	genus code	family	family code	C of C	lifeform	shade tolerance	habit	native	group	4 indicator	total cover	relative cover
Acer rubrum	L.	other	Aceraceae	other	2	tree	tree	WOODY	native	dicot	FAC	*	*
Alnus serrulata	(Aiton) Willd.	other	Betulaceae	other	6	shrub	full	WOODY	native	dicot	OBL	0.1500	0.03420
Betula nigra	L.	other	Betulaceae	other	9	tree	tree	WOODY	native	dicot	FACW	0.2100	0.04789
Bidens sp.	ND	other	Asteraceae	other	*	forb	full	AN	ND	dicot	ND	0.0800	0.01824
Boehmeria cylindrica	(L.) Sw.	other	Urticaceae	other	4	forb	shade	PE	native	dicot	FACW	0.0001	0.00002
Bryophyte	ND	other	ND	moss	*	moss	bryophyte	ND	ND	bryophyte	ND	0.0700	0.01596
Carex crinita var. crinita	Lam.	carex	Cyperaceae	cyper	3	sedge	shade	PE	native	monocot	OBL	0.0001	0.00002
Carex sp.	ND	carex	Cyperaceae	cyper	*	sedge	ND	PE	native	monocot	ND	0.0001	0.00002
Cephalanthus occidentalis	L.	cephalanthus	Rubiaceae	other	6	shrub	full	WOODY	native	dicot	OBL	1.9250	0.43895
Galium tinctorium	(L.) Scop.	other	Rubiaceae	other	4	forb	full	PE	native	dicot	OBL	0.0450	0.01026
Ilex verticillata	(L.) A. Gray	other	Aquifoliaceae	other	6	shrub	shade	WOODY	native	dicot	FACW	0.2100	0.04789
Juncus effusus	L.	other	Juncaceae	other	1	forb	full	PE	native	monocot	FACW	0.0050	0.00114
Lemna minor	L.	other	Lemnaceae	other	3	forb	full	AN	native	monocot	OBL	0.0400	0.00912
Osmunda regalis	L.	other	Osmundaceae	other	7	fern	partial	PE	native	svp	OBL	0.1100	0.02508
Polygonum sp.	ND	other	Polygonaceae	other	*	forb	ND	ND	ND	dicot	ND	0.0050	0.00114
Rosa palustris	Marshall	other	Rosaceae	other	5	shrub	full	WOODY	native	dicot	OBL	0.0150	0.00342
Scirpus cyperinus	(L.) Kunth	other	Cyperaceae	cyper	1	sedge	full	PE	native	monocot	FACW	0.0050	0.00114
Smilax sp.	ND	other	Smilacaceae	other	*	ND	ND	PE	native	monocot	ND	0.0001	0.00002
Sparganium americanum	Nutt.	other	Sparganiaceae	other	6	forb	full	PE	native	monocot	OBL	0.0050	0.00114
Spiraea tomentosa	L.	other	Rosaceae	other	4	shrub	full	WOODY	native	dicot	FACW	0.0050	0.00114
Thelypteris noveboracensis	(L.) Nieuwl.	other	Thelypteridaceae	other	4	fern	shade	PE	native	svp	FAC	0.0050	0.00114
Triadenum sp.	ND	other	Clusiaceae	other	*	forb	ND	PE	native	dicot	OBL	0.0001	0.00002
Utricularia gibba	L.	other	Lentibulariaceae	other	8	forb	full	PE	native	dicot	OBL	1.5000	0.34204
					sum CofC =	79						TOTAL COVER ALL SPECIES AT SITE	4.3855
					FQAI N =	17							
					FQAI score =	19.2							

APPENDIX B EXAMPLE CALCUATIONS
VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
Buttonbush swamp; beaver Impoundment
Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

1ST REDUCTION WOODY STEM - FIELD DATA SHEET 2

mod #	species	vouch #	area (ha)	%subsample	size class (cm) woody stems >1m												>40 (record each tree)
					0	1	2	3	4	5	6	7	8	9	10		
					shrub clump	0-<1	1-<2.5	2.5-<5	5-<10	10-<15	15-<20	20-<25	25-<30	30-<35	35-<40		
2	Ilex verticillata		0.1	0.50	7												
2	Betula nigra		0.1	0.50		4											
2	Alnus serrulata		0.1	0.50		1	2	1									
2	Cephalanthus occidentalis		0.1	0.50	2												
2	Standing dead		0.1	0.50							2	1					
1	Alnus serrulata		0.1	0.50	7												
1	Standing dead		0.1	0.50						1							
1	Acer rubrum		0.1	0.50						2	3						
1	Cephalanthus occidentalis		0.1	0.50	2												
3	Acer rubrum		0.1	0.50											1	42.5	
3	Ilex verticillata		0.1	0.50	3												
3	Standing dead		0.1	0.50							1						
3	Betula nigra		0.1	0.50		6											
3	Alnus serrulata		0.1	0.50	1												
3	Cephalanthus occidentalis		0.1	0.50	5												
4	Cephalanthus occidentalis		0.1	0.50	7												
4	Alnus serrulata		0.1	0.50	6												
4	Betula nigra		0.1	0.50		3											
4	Standing dead		0.1	0.50									1				
4	Acer rubrum		0.1	0.50			3	1	2								
5	Acer rubrum		0.1	0.50		3			4		1			1			
5	Alnus serrulata		0.1	0.50	4			1									
5	Ilex verticillata		0.1	0.50	4												
5	Standing dead		0.1	0.50												51	
5	Cephalanthus occidentalis		0.1	0.50	3												
5	Betula nigra		0.1	0.50		11		1									

APPENDIX B EXAMPLE CALCUATIONS
VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
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Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

2nd REDUCTION WOODY STEM - FIELD DATA SHEET 2

species	shade spp	lifeform	indicator	area (ha)	%subsample	clumps	0-<1	1-<2.5	2.5-<5	5-<10	10-<15	15-<20	20-<25	25-<30	30-<35	35-<40	>40 all	>40-1
Acer rubrum	tree	tree	FAC	0.08	0.50	0	3	3	1	6	2	4	0	1	0	1	1	42.5
Alnus serrulata	full sun	shrub	OBL	0.08	0.50	18	1	2	2	0	0	0	0	0	0	0	0	0
Betula nigra	tree	tree	FACW	0.08	0.50	24	0	0	1	0	0	0	0	0	0	0	0	0
Cephalanthus occidentalis	full sun	shrub	OBL	0.08	0.50	19	0	0	0	0	0	0	0	0	0	0	0	0
Ilex verticillata	shade	shrub	FACW	0.08	0.50	14	0	0	0	0	0	0	0	0	0	0	0	0
Standing dead	dead	ND	ND	0.08	0.50	0	0	0	0	0	1	3	1	1	0	0	1	51

APPENDIX B EXAMPLE CALCUATIONS VEGETATION FIELD MANUAL

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3rd REDUCTION WOODY STEM - FIELD DATA SHEET 2

species	class	relative frequency	c5 density stems/ha	c6 density stems/ha	c7 density stems/ha	c5 relative density	c6 relative density	c7 relative density	relative density	dominance m2/ha	relative dominance	importance value
Acer rubrum	9	0.750	50	100	0	0.01818	0.03636	0.00000	0.20000	0.4608	0.53961	0.4965
Alnus serrulata	4	0.333	0	0	0	0.00000	0.00000	0.00000	0.20909	0.0031	0.00359	0.1820
Betula nigra	2	0.167	0	0	0	0.00000	0.00000	0.00000	0.22727	0.0016	0.00184	0.1319
Cephalanthus occidentalis	1	0.083	0	0	0	0.00000	0.00000	0.00000	0.17273	0.0004	0.00044	0.0855
Ilex verticillata	1	0.083	0	0	0	0.00000	0.00000	0.00000	0.12727	0.0003	0.00032	0.0703
Standing dead	5	0.417	25	75	25	0.00909	0.02727	0.00909	0.06364	0.3879	0.45420	0.3115

	metric value
Relative density of C5-C7 stems(pole timber metric) =	0.100
Average subcanopy IV metric	0.0703
Average canopy IV metric =	0.314

VIBI SUMMARY TABLE

	value	score
Carex metric =	2	3
Dicot metric =	13	3
Shrub metric =	5	10
Hydrophyte metric =	16	7
SVP metric =	2	7
FQAI score metric =	19.2	7
%bryophyte metric	0.07	10
%tolerant metric =	0.0022802	10
%sensitive metric =	0.4640292	10
subcanopy IV metric =	0.0703	7
VIBI score =		74

APPENDIX C - SPECIES CODES FOR VIBI METRIC CALCULATION

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
ABUTHE	*	<i>ABUTILON THEOPHRASTI</i>	Medik.	Malvaceae	VELVETLEAF	UPL	forb	AN	DI	advent
ACADEA	0	<i>Acalypha deamii</i>	(Weath.) Ahles.	Euphorbiaceae	DEAM'S TWO-SEEDED MERCURY	[FAC]	forb	AN	DI	partial
ACAOST	*	<i>ACALYPHA OSTRYIFOLIA</i>	Riddell	Euphorbiaceae	HORNBEAM THREE-S. MERCURY	[FACU-]	forb	AN	DI	advent
ACARHO	0	<i>Acalypha rhomboidea</i>	Raf.	Euphorbiaceae	RHOMBIC THREE-S. MERCURY	FACU-	forb	AN	DI	partial
ACAVIR	0	<i>Acalypha virginica</i>	L.	Euphorbiaceae	VIRGINIA THREE-S. MERCURY	FACU-	forb	AN	DI	partial
ACENEG	3	<i>Acer negundo</i>	L.	Aceraceae	BOX ELDER	FAC+	tree	W	DI	tree
ACEPEN	10	<i>Acer pensylvanicum</i>	L.	Aceraceae	STRIPED MAPLE	FACU	tree	W	DI	tree
ACEPLA	*	<i>ACER PLATANOIDES</i>	L.	Aceraceae	NORWAY MAPLE	UPL	tree	W	DI	advent
ACERUB	2	<i>Acer rubrum</i>	L.	Aceraceae	RED MAPLE	FAC	tree	W	DI	tree
ACESAC	3	<i>Acer saccharinum</i>	L.	Aceraceae	SILVER MAPLE	FACW	tree	W	DI	tree
ACESAR	5	<i>Acer saccharum</i>	Marshall	Aceraceae	SUGAR MAPLE	FACU-	tree	W	DI	tree
ACESPI	8	<i>Acer spicatum</i>	Lam.	Aceraceae	MOUNTAIN MAPLE	FACU-	tree	W	DI	tree
ACHMIL	1	<i>Achillea millefolium</i>	DC.	Asteraceae	YARROW	FACU	forb	PE	DI	full
ACONOV	10	<i>Aconitum noveboracense</i>	A. Gray	Ranunculaceae	NORTHERN MONKSHOOD	[UPL]	forb	PE	DI	shade
ACOUNC	10	<i>Aconitum uncinatum</i>	L.	Ranunculaceae	SOUTHERN MONKSHOOD	[FAC+]	forb	PE	DI	shade
ACOAME	6	<i>Acorus americanus</i>	(Raf.) Raf.	Acoraceae	AMERICAN SWEET-FLAG	[OBL]	forb	PE	DI	full
ACOCAL	*	<i>ACORUS CALAMUS</i>	L.	Acoraceae	SWEET-FLAG	OBL	forb	PE	DI	advent
ACTALB	7	<i>Actaea alba</i>	(L.) Mill.	Ranunculaceae	WHITE BANEERRY	UPL	forb	PE	DI	shade
ACTRUB	7	<i>Actaea rubra</i>	(Aiton) Willd.	Ranunculaceae	RED BANEERRY	UPL	forb	PE	DI	shade
ADIFED	6	<i>Adiantum pedatum</i>	L.	Pteridaceae	MAIDENHAIR FERN	FAC-	fern	PE	SVP	shade
ADLFUN	8	<i>Adlumia fungosa</i>	(Aiton) Greene ex B.S.P.	Fumariaceae	MOUNTAIN-FRINGE	[UPL]	forb	BI	DI	shade
AEGPOD	*	<i>AEGOPODIUM PODAGRARIA</i>	L.	Apiaceae	GOUTWEED	FACU	forb	PE	DI	advent
AESFLA	7	<i>Aesculus flava</i>	Aiton	Hippocastanaceae	YELLOW BUCKEYE	[UPL]	tree	W	DI	tree
AESGLA	6	<i>Aesculus glabra</i>	Willd.	Hippocastanaceae	OHIO BUCKEYE	FACU+	tree	W	DI	tree
TOMAU	8	<i>Agalinis auriculata</i>	(Michx.) S.F. Blake	Scrophulariaceae	EAR-LEAVED FOXGLOVE	[UPL]	forb	AN	DI	full
AGAGAT	8	<i>Agalinis gattingeri</i>	(Small) Small ex Britton	Scrophulariaceae	GATTINGER'S FOXGLOVE	[FACW]	forb	AN	DI	full
AGAPUPA	10	<i>Agalinis purpurea</i> (L.) Pennell var. <i>parviflora</i>	(Benth.) B. Boivin	Scrophulariaceae	SMALL PURPLE FOXGLOVE	FACW+	forb	AN	DI	full
AGAPUPU	6	<i>Agalinis purpurea</i> var. <i>purpurea</i>	(L.) Pennell	Scrophulariaceae	LARGE PURPLE FOXGLOVE	FACW-	forb	AN	DI	full
AGASKI	10	<i>Agalinis skinneriana</i>	(A.W. Wood) Britton	Scrophulariaceae	SKINNER'S FOXGLOVE	[FACW]	forb	AN	DI	full
AGATEN	4	<i>Agalinis tenuifolia</i>	(M. Vahl) Raf.	Scrophulariaceae	SLENDER FOXGLOVE	FAC	forb	AN	DI	full
AGANEP	4	<i>Agastache nepetoides</i>	(L.) Kuntze	Lamiaceae	YELLOW GIANT-HYSSOP	FACU	forb	PE	DI	shade
AGASCR	4	<i>Agastache scrophulariifolia</i>	(Willd.) Kuntze	Lamiaceae	PURPLE GIANT-HYSSOP	[UPL]	forb	PE	DI	shade
AGRGRY	3	<i>Agrimonia gryposepala</i>	Wallr.	Rosaceae	TALL AGRIMONY	FACU	forb	PE	DI	partial
AGRPAR	2	<i>Agrimonia parviflora</i>	Aiton	Rosaceae	SMALL-FLOWERED AGRIMONY	FAC	forb	PE	DI	shade
AGRPUB	5	<i>Agrimonia pubescens</i>	Wallr.	Rosaceae	DOWNY AGRIMONY	[UPL]	forb	PE	DI	shade
AGRRROS	5	<i>Agrimonia rostellata</i>	Wallr.	Rosaceae	WOODLAND AGRIMONY	FACU	forb	PE	DI	shade
AGRSTR	7	<i>Agrimonia striata</i>	Michx.	Rosaceae	LINED AGRIMONY	FACU-	forb	PE	DI	shade
AGRGIT	*	<i>AGROSTEMMA GITHAGO</i>	L.	Caryophyllaceae	CORN-COCKLE	[FACU]	forb	BI	DI	advent
AGRCAP	*	<i>AGROSTIS CAPILLARIS</i>	L.	Poaceae	RHODE ISLAND BENT GRASS	[UPL]	grass	PE	MONO	advent
AGRELL	5	<i>Agrostis elliotiana</i>	Schult.	Poaceae	ELLIOTT'S BENT GRASS	[UPL]	grass	AN	MONO	full
AGRGIG	*	<i>AGROSTIS GIGANTEA</i>	Roth	Poaceae	REDTOP	FACW	grass	PE	MONO	advent
AGRHYE	3	<i>Agrostis hyemalis</i>	(Walter) B.S.P.	Poaceae	TICKLEGRASS	FAC	grass	PE	MONO	shade
AGRPER	4	<i>Agrostis perennans</i>	(Walter) Tuck.	Poaceae	AUTUMN BENT GRASS	FACU	grass	PE	MONO	partial
AGRSTO	*	<i>AGROSTIS STOLONIFERA</i>	L.	Poaceae	CREEPING BENT GRASS	FACW	grass	PE	MONO	advent
AGR TEN	*	<i>AGROSTIS TENUIS</i>	Sibth.	Poaceae	COLONIAL BENT GRASS	[FACU-]	grass	PE	MONO	advent
AILALT	*	<i>AILANTHUS ALTISSIMA</i>	(Mill.) Swingle	Simaroubaceae	TREE-OF-HEAVEN	FACU-	tree	W	DI	advent
AJUREP	*	<i>AJUGA REPTANS</i>	L.	Lamiaceae	CARPET BUGLE-WEED	[UPL]	forb	PE	DI	advent
AKEQUI	*	<i>AKEBIA QUINATA</i>	(Houtt.) Decne.	Lardizabalaceae	CHOCOLATE-VINE	[UPL]	vine	W	DI	advent
ALBJUL	*	<i>ALBIZIA JULIBRISSIN</i>	Durazz.	Mimosaceae	SILK-TREE	[UPL]	tree	W	DI	advent
ALEFAR	8	<i>Aletris farinosa</i>	L.	Liliaceae	COLIC-ROOT	FAC	forb	PE	MONO	full
ALISUB	2	<i>Alisma subcordatum</i>	Raf.	Alismataceae	SOUTHERN WATER-PLANTAIN	OBL	forb	PE	MONO	full
ALITRI	6	<i>Alisma triviale</i>	Pursh	Alismataceae	NORTHERN WATER-PLANTAIN	[OBL]	forb	PE	MONO	full
ALLPET	*	<i>ALLIARIA PETIOLATA</i>	(M. Bieb.) Cavara & Grande	Brassicaceae	GARLIC MUSTARD	FACU-	forb	BI	DI	advent
ALLCAN	2	<i>Allium canadense</i>	L.	Liliaceae	WILD GARLIC	FACU	forb	PE	MONO	full

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
ALLCER	5	<i>Allium cernuum</i>	Roth	Liliaceae	NODDING WILD ONION	[FACU]	forb	PE	MONO	full
ALLSAT	*	<i>ALLIUM SATIVUM</i>	L.	Liliaceae	GARLIC	[UPL]	forb	PE	MONO	advent
ALLTRI	5	<i>Allium tricoccum</i>	Aiton	Liliaceae	WILD LEEK	FACU+	forb	PE	MONO	shade
ALLVIN	*	<i>ALLIUM VINEALE</i>	L.	Liliaceae	FIELD GARLIC	FACU-	forb	PE	MONO	advent
ALNGLU	*	<i>ALNUS GLUTINOSA</i>	(L.) Gaertn.	Betulaceae	BLACK ALDER	FACW-	shrub	W	DI	advent
ALNINC	6	<i>Alnus incana</i>	(L.) Moench	Betulaceae	SPECKLED ALDER	FACW+	shrub	W	DI	full
ALNSER	6	<i>Alnus serrulata</i>	(Aiton) Willd.	Betulaceae	SMOOTH ALDER	OBL	shrub	W	DI	full
ALOAEG	3	<i>Alopecurus aequalis</i>	Sobol.	Poaceae	SHORT-AWNED FOXTAIL	OBL	grass	PE	MONO	partial
ALOCAR	1	<i>Alopecurus carolinianus</i>	Walter	Poaceae	CAROLINA FOXTAIL	FACW	grass	AN	MONO	partial
ALTOFF	*	<i>ALTHAEA OFFICINALIS</i>	L.	Malvaceae	MARSH-MALLOW	FACW+	forb	PE	DI	advent
ALTROS	*	<i>ALTHAEA ROSEA</i>	(L.) Cav.	Malvaceae	HOLLYHOCK	[UPL]	forb	BI	DI	advent
ALYALY	*	<i>ALYSSUM ALYSSOIDES</i>	(L.) L.	Brassicaceae	ALYSSUM	[UPL]	forb	AN	DI	advent
AMAALB	0	<i>Amaranthus albus</i>	L.	Amaranthaceae	TUMBLEWEED	FACU	forb	AN	DI	full
AMABLI	*	<i>AMARANTHUS BLITOIDES</i>	S. Watson	Amaranthaceae	MAT AMARANTH	[UPL]	forb	AN	DI	advent
AMAHYB	*	<i>AMARANTHUS HYBRIDUS</i>	L.	Amaranthaceae	SMOOTH PIGWEED	[UPL]	forb	AN	DI	advent
AMARET	*	<i>AMARANTHUS RETROFLEXUS</i>	L.	Amaranthaceae	REDROOT	FACU	forb	AN	DI	advent
AMARUD	*	<i>AMARANTHUS RUDIS</i>	Sauer	Amaranthaceae	WESTERN AMARANTH	FACW-	forb	AN	DI	advent
AMASPI	*	<i>AMARANTHUS SPINOSUS</i>	L.	Amaranthaceae	SPINY AMARANTH	FACU	forb	AN	DI	advent
AMATUB	1	<i>Amaranthus tuberculatus</i>	(Moq.) J.D. Sauer	Amaranthaceae	TUBERCLED AMARANTH	FACW	forb	AN	DI	full
AMBART	0	<i>Ambrosia artemisiifolia</i>	L.	Asteraceae	COMMON RAGWEED	FACU	forb	AN	DI	full
AMBBID	1	<i>Ambrosia bidentata</i>	Michx.	Asteraceae	LANCELEAVED RAGWEED	[UPL]	forb	AN	DI	full
AMBPSI	*	<i>AMBROSIA PSILOSTACHYA</i>	DC.	Asteraceae	WESTERN RAGWEED	FACU-	forb	PE	DI	advent
AMBTRI	0	<i>Ambrosia trifida</i>	L.	Asteraceae	GIANT RAGWEED	FAC	forb	AN	DI	full
AMEARB	5	<i>Amelanchier arborea</i>	(F. Michx.) Fernald	Rosaceae	DOWNY SERVICEBERRY	FAC-	sm tree	W	DI	shade
AMEINT	4	<i>Amelanchier interior</i>	Nielsen	Rosaceae	INTERIOR SERVICEBERRY	[FACU]	sm tree	W	DI	shade
AMELAE	5	<i>Amelanchier laevis</i>	Wiegand	Rosaceae	SMOOTH SERVICEBERRY	[FAC]	sm tree	W	DI	shade
AMESAN	7	<i>Amelanchier sanguinea</i>	(Pursh) DC.	Rosaceae	ROCK SERVICEBERRY	[UPL]	sm tree	W	DI	shade
AMESPI	7	<i>Amelanchier spicata</i>	(Lam.) K. Koch	Rosaceae	DWARF SERVICEBERRY	[FACU]	sm tree	W	DI	shade
AMMCOC	7	<i>Ammannia coccinea</i>	Rottb.	Lythraceae	LONG-LEAVED TOOTH-CUP	OBL	forb	AN	DI	full
AMMROB	7	<i>Ammannia robusta</i>	Heer & Regel	Lythraceae	SESSILE TOOTH-CUP	OBL	forb	AN	DI	full
AMMBRE	10	<i>Ammophila breviligulata</i>	Fernald	Poaceae	BEACH GRASS	FACU-	grass	PE	DI	full
AMOFRU	3	<i>Amorpha fruticosa</i>	L.	Fabaceae	FALSE INDIGO	FACW	forb	PE	DI	full
AMPALB	1	<i>Ampelamus albidus</i>	(Nutt.) Britton	Asclepiadaceae	SAND-VINE	FAC	vine	PE	DI	full
AMPBRE	*	<i>AMPELOPSIS BREVIPEDUNCULATA</i>	(Maxim.) Trautv.	Vitaceae	PORCELAIN-BERRY	[UPL]	vine	W	DI	advent
AMPCOR	7	<i>Ampelopsis cordata</i>	Michx.	Vitaceae	RACCOON-GRAPE	FAC+	vine	W	DI	shade
AMPDRA	*	<i>AMPHIACHYRIS DRACUNCULOIDES</i>	(DC.) Nutt.	Asteraceae	BROOMWEED	[UPL]	forb	AN	DI	advent
AMPBRA	4	<i>Amphicarpaea bracteata</i>	(L.) Fernald	Fabaceae	HOG-PEANUT	FAC	forb	PE	DI	shade
ANAARV	*	<i>ANAGALLIS ARVENSIS</i>	L.	Primulaceae	SCARLET PIMPERNEL	[FACU]	forb	AN	DI	advent
ANAMAR	5	<i>Anaphalis margaritacea</i>	(L.) Benth. & Hook.	Asteraceae	PEARLY EVERLASTING	[UPL]	forb	PE	DI	full
ANDGLA	10	<i>Andromeda glaucophylla</i>	Link.	Ericaceae	BOG-ROSEMARY	OBL	shrub	W	DI	full
ANDGER	5	<i>Andropogon gerardii</i>	Vitman	Poaceae	BIG BLUESTEM	FAC	grass	PE	MONO	full
ANDVIRA	6	<i>Andropogon glomeratus</i>	(Walter) B.S.P.	Poaceae	BUSHY BROOM-SEDGE	FACW+	grass	PE	MONO	full
ANDGYR	3	<i>Andropogon gyrans</i>	Ashe	Poaceae	ELLIOTT'S BEARD GRASS	[UPL]	grass	PE	MONO	full
ANDVIRV	3	<i>Andropogon virginicus</i>	L.	Poaceae	COMMON BROOM-SEDGE	FACU	grass	PE	MONO	full
ANDOCC	10	<i>Androsace occidentalis</i>	Pursh	Primulaceae	WESTERN ROCK-JASMINE	[FACU]	forb	AN	DI	full
ANECAN	5	<i>Anemone canadensis</i>	L.	Ranunculaceae	CANADA ANEMONE	FACW	forb	PE	DI	full
ANECYL	8	<i>Anemone cylindrica</i>	A. Gray	Ranunculaceae	PRAIRIE THIMBLEWEED	[UPL]	forb	PE	DI	full
ANEQUI	5	<i>Anemone quinquefolia</i>	L.	Ranunculaceae	WOOD ANEMONE	FACU	forb	PE	DI	shade
ANEVIR	3	<i>Anemone virginiana</i>	L.	Ranunculaceae	WOODLAND THIMBLEWEED	FACU	forb	PE	DI	shade
ANETHA	6	<i>Anemonella thalictroides</i>	(L.) Spach.	Ranunculaceae	RUE ANEMONE	[UPL]	forb	PE	DI	shade
ANGATR	6	<i>Angelica atropurpurea</i>	L.	Apiaceae	PURPLE-STEMMED ANGELICA	OBL	forb	PE	DI	partial
ANGVEN	6	<i>Angelica venenosa</i>	(Greenway) Fernald	Apiaceae	HAIRY ANGELICA	[FACU]	forb	PE	DI	full
ANOCRI	*	<i>ANODA CRISTATA</i>	(L.) Schlechtend.	Malvaceae	SPURRED ANODA	UPL	forb	AN	DI	advent
ANTNEG	1	<i>Antennaria neglecta</i>	Greene	Asteraceae	FIELD PUSSY-TOES	FACU-	forb	PE	DI	full

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ANTPLA	1	<i>Antennaria plantaginifolia</i>	(L.) Richardson	Asteraceae	PLANTAIN-LEAVED PUSSY-TOES	[UPL]	forb	PE	DI	full
ANTSOL	3	<i>Antennaria solitaria</i>	Rydb.	Asteraceae	SINGLE-HEADED PUSSY-TOES	[UPL]	forb	PE	DI	full
ANTVIR	9	<i>Antennaria virginica</i>	Stebbins	Asteraceae	SHALE BARREN PUSSY-TOES	[UPL]	forb	PE	DI	full
ANTARV	*	<i>ANTHEMIS ARVENSIS</i>	L.	Asteraceae	CORN-CHAMOMILE	[UPL]	forb	AN	DI	advent
ANTCOT	*	<i>ANTHEMIS COTULA</i>	L.	Asteraceae	DOGFENNEL	FACU-	forb	AN	DI	advent
ANTTIN	*	<i>ANTHEMIS TINCTORIA</i>	L.	Asteraceae	YELLOW CHAMOMILE	[UPL]	forb	PE	DI	advent
ANTODO	*	<i>ANTHOXANTHUM ODORATUM</i>	L.	Poaceae	SWEET VERNAL GRASS	FACU	grass	PE	MONO	advent
APIAME	3	<i>Apios americana</i>	Medik.	Fabaceae	COMMON GROUNDNUT	FACW	forb	PE	DI	partial
APLHYE	7	<i>Aplectrum hyemale</i>	(Muhl. ex Willd.) Torr.	Orchidaceae	PUTTY ROOT	FAC	forb	PE	MONO	shade
APOAND	6	<i>Apocynum androsaemifolium</i>	L.	Apocynaceae	SPREADING DOGBANE	FACU-	forb	PE	DI	full
APOCAN	1	<i>Apocynum cannabinum</i>	L.	Apocynaceae	INDIAN HEMP	FACU	forb	PE	DI	full
APOSIB	4	<i>Apocynum sibiricum</i>	Jacq.	Apocynaceae	CLASP.-LEAV. DOGBANE	FAC	forb	PE	DI	full
AQUCAN	6	<i>Aquilegia canadensis</i>	L.	Ranunculaceae	WILD COLUMBINE	FAC	forb	PE	DI	shade
ARATHA	*	<i>ARABIDOPSIS THALIANA</i>	(L.) Heynh.	Brassicaceae	MOUSE-EAR CRESS	[UPL]	forb	AN	DI	advent
ARACAN	5	<i>Arabis canadensis</i>	L.	Brassicaceae	SICKLE-POD	[UPL]	forb	BI	DI	shade
ARADIV	9	<i>Arabis divaricarpa</i>	A. Nelson	Brassicaceae	LIMESTONE ROCKCRESS	FACU	forb	BI	DI	full
ARADRU	9	<i>Arabis drummondii</i>	A. Gray	Brassicaceae	DRUMMOND'S ROCKCRESS	FACU	forb	BI	DI	partial
ARAGLA	3	<i>Arabis glabra</i>	(L.) Bernh.	Brassicaceae	TOWER MUSTARD	[UPL]	forb	BI	DI	full
ARAHIRA	4	<i>Arabis hirsuta</i> (L.) Scop. var. <i>adpressipilis</i>	(M. Hopkins) Rollins	Brassicaceae	SMALL HAIRY ROCK CRESS	FACU	forb	BI	DI	shade
ARAHIRP	6	<i>Arabis hirsuta</i> (L.) Scop. var. <i>pyncocarpa</i>	(M. Hopkins) Rollins	Brassicaceae	WESTERN HAIRY ROCK CRESS	FACU	forb	BI	DI	partial
ARALAE	4	<i>Arabis laevigata</i>	(Muhl. ex Willd.) Poir.	Brassicaceae	SMOOTH ROCK CRESS	[UPL]	forb	BI	DI	shade
ARALYR	6	<i>Arabis lyrata</i>	L.	Brassicaceae	LYRE-LEAF ROCK CRESS	FACU	forb	BI	DI	full
ARAMIS	9	<i>Arabis missouriensis</i>	Greene	Brassicaceae	MISSOURI ROCK CRESS	[UPL]	forb	BI	DI	shade
ARAPAT	10	<i>Arabis patens</i>	Sull.	Brassicaceae	SPREADING ROCK CRESS	[UPL]	forb	BI	DI	shade
ARASHO	7	<i>Arabis shortii</i>	(Fernald) Gleason	Brassicaceae	SHORT'S ROCK CRESS	[UPL]	forb	PE	DI	shade
ARAHIS	7	<i>Aralia hispida</i>	Vent.	Araliaceae	BRISTLY SARSAPARILLA	[UPL]	forb	PE	DI	shade
ARANUD	5	<i>Aralia nudicaulis</i>	L.	Araliaceae	WILD SARSAPARILLA	FACU	forb	PE	DI	shade
ARARAC	5	<i>Aralia racemosa</i>	L.	Araliaceae	SPIKENARD	[UPL]	forb	PE	DI	shade
ARASPI	5	<i>Aralia spinosa</i>	L.	Araliaceae	DEVIL'S WALKINGSTICK	FAC	shrub	W	DI	shade
ARCLAP	*	<i>ARCTIUM LAPPA</i>	L.	Asteraceae	GREAT BURDOCK	[FACU+]	forb	BI	DI	advent
ARCMIN	*	<i>ARCTIUM MINUS</i>	Berhn.	Asteraceae	COMMON BURDOCK	FACU-	forb	BI	DI	advent
ARCUVA	10	<i>Arctostaphylos uva-ursi</i>	(L.) Spreng.	Ericaceae	BEARBERRY	[UPL]	shrub	W	DI	full
ARELAT	7	<i>Arenaria lateriflora</i>	L.	Caryophyllaceae	GROVE SANDWORT	[FACU-]	forb	PE	DI	full
AREPAT	9	<i>Arenaria patula</i>	Michx.	Caryophyllaceae	SPREADING SANDWORT	[UPL]	forb	AN	DI	full
ARESER	*	<i>ARENARIA SERPYLLIFOLIA</i>	L.	Caryophyllaceae	THYME-LEAVED SANDWORT	FAC	forb	AN	DI	advent
ARESTR	10	<i>Arenaria stricta</i>	Michx.	Caryophyllaceae	ROCK SANDWORT	[UPL]	forb	PE	DI	full
AREBUL	10	<i>Arethusa bulbosa</i>	L.	Orchidaceae	DRAGON'S MOUTH	OBL	forb	PE	MONO	full
ARIDRA	5	<i>Arisaema dracontium</i>	(L.) Schott	Araceae	GREEN DRAGON	FACW	forb	PE	MONO	shade
ARITRIS	7	<i>Arisaema triphyllum</i> (L.) Schott subsp. <i>stewardsonii</i>	(Britton) Huttleston	Araceae	SWAMP JACK-PULPIT	[FACW-]	forb	PE	MONO	shade
ARITRIT	3	<i>Arisaema triphyllum</i> subsp. <i>triphyllum</i>	(L.) Schott	Araceae	JACK-IN-THE-PULPIT	[FACU-]	forb	PE	MONO	shade
ARIDIC	1	<i>Aristida dichotoma</i>	Michx.	Poaceae	POVERTY GRASS	UPL	grass	AN	MONO	full
ARILONG	8	<i>Aristida longespica</i> Poir. var. <i>geniculata</i>	(Raf.) Fernald	Poaceae	FALSE ARROW-FEATHER	[UPL]	grass	AN	MONO	full
ARILONL	4	<i>Aristida longespica</i> var. <i>longespica</i>	Poir.	Poaceae	THREE-AWNED GRASS	UPL	grass	AN	MONO	full
ARIOLI	1	<i>Aristida oligantha</i>	Michx.	Poaceae	PLAINS THREE-AWNED GRASS	[UPL]	grass	AN	MONO	full
ARIPUR	7	<i>Aristida purpurascens</i>	Poir.	Poaceae	PURPLE THREE-AWNED GRASS	[UPL]	grass	PE	MONO	full
ARISER	7	<i>Aristolochia serpentaria</i>	L.	Aristolochiaceae	VIRGINIA SNAKEROOT	[UPL]	forb	PE	DI	shade
ARITOM	*	<i>ARISTOLOCHIA TOMENTOSA</i>	Sims	Aristolochiaceae	PIPE-VINE	FAC	vine	W	DI	advent
ARMLAC	10	<i>Armoracia lacustris</i>	(A. Gray) Al-Sheh. & V.M. Bates	Brassicaceae	LAKE CRESS	OBL	forb	PE	DI	full
AROARB	9	<i>Aronia arbutifolia</i>	(L.) Pers.	Rosaceae	RED CHOKEBERRY	FACW	shrub	W	DI	partial
AROMEL	5	<i>Aronia melanocarpa</i>	(Michx.) Elliott	Rosaceae	BLACK CHOKEBERRY	FAC	shrub	W	DI	partial
ARRELA	*	<i>ARRHENATHERUM ELATIUS</i>	P. Beauv.	Poaceae	TALL OATGRASS	FACU	grass	PE	MONO	advent
ARTANN	*	<i>ARTEMISIA ANNUA</i>	L.	Asteraceae	ANNUAL WORMWOOD	FACU	forb	AN	DI	advent
ARTBIE	*	<i>ARTEMISIA BIENNIS</i>	Willd.	Asteraceae	BIENNIAL WORMWOOD	FACU-	forb	BI	DI	advent
ARTCAM	10	<i>Artemisia campestris</i> L. var. <i>caudata</i>	(Michx.) E.J. Palm. & Steyerf.	Asteraceae	BEACH WORMWOOD	[FAC+]	forb	PE	DI	full

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ARTLUD	*	<i>ARTEMISIA LUDOVICIANA</i>	Nutt.	Asteraceae	WESTERN MUGWORT	[UPL]	forb	PE	DI	advent
ARTPON	*	<i>ARTEMISIA PONTICA</i>	L.	Asteraceae	ROMAN WORMWOOD	[UPL]	forb	PE	DI	advent
ARTVUL	*	<i>ARTEMISIA VULGARIS</i>	L.	Asteraceae	COMMON MUGWORT	FACU-	forb	PE	DI	advent
ARTHIS	*	<i>ARTHRAOXON HISPIDUS</i>	(Thunb.) Makino	Poaceae	HAIRY JOINT GRASS	FAC	grass	AN	MONO	advent
ARUDIO	6	<i>Aruncus dioicus</i>	(Walter) Fernald	Rosaceae	GOAT'S-BEARD	FACU	forb	PE	DI	shade
ARUGIG	7	<i>Arundinaria gigantea</i>	(Walter) Muhl.	Poaceae	GIANT CANE	FACW	grass	PE	MONO	full
ASACAN	6	<i>Asarum canadense</i>	L.	Aristolochiaceae	WILD GINGER	FACU-	forb	PE	DI	shade
ASCAMP	7	<i>Asclepias amplexicaulis</i>	Sm.	Asclepiadaceae	CLASPING-LEAVED MILKWEED	[UPL]	forb	PE	DI	full
ASCEXA	8	<i>Asclepias exaltata</i>	L.	Asclepiadaceae	POKE MILKWEED	FACU	forb	PE	DI	full
ASCHIR	8	<i>Asclepias hirtella</i>	(Pennell) Woodson	Asclepiadaceae	SAND MILKWEED	[UPL]	forb	PE	DI	full
ASCINC	4	<i>Asclepias incarnata</i>	L.	Asclepiadaceae	SWAMP MILKWEED	OBL	forb	PE	DI	full
ASCPUR	7	<i>Asclepias purpurascens</i>	L.	Asclepiadaceae	PURPLE MILKWEED	FACU	forb	PE	DI	full
ASCQUA	6	<i>Asclepias quadrifolia</i>	Jacq.	Asclepiadaceae	FOUR-LEAVED MILKWEED	[UPL]	forb	PE	DI	full
ASCSUL	8	<i>Asclepias sullivantii</i>	Engelm. ex A. Gray	Asclepiadaceae	SULLIVANT'S MILKWEED	[UPL]	forb	PE	DI	full
ASCSYR	1	<i>Asclepias syriaca</i>	L.	Asclepiadaceae	COMMON MILKWEED	FACU-	forb	PE	DI	full
ASCTUB	4	<i>Asclepias tuberosa</i>	L.	Asclepiadaceae	BUTTERFLY-WEED	[UPL]	forb	PE	DI	full
ASCVAR	7	<i>Asclepias variegata</i>	L.	Asclepiadaceae	WHITE MILKWEED	FACU	forb	PE	DI	full
ASCOVER	4	<i>Asclepias verticillata</i>	L.	Asclepiadaceae	WHORLED MILKWEED	[UPL]	forb	PE	DI	full
ASCVIR	5	<i>Asclepias viridiflora</i>	Raf.	Asclepiadaceae	GREEN MILKWEED	[UPL]	forb	PE	DI	full
ASCVID	7	<i>Asclepias viridis</i>	Walter	Asclepiadaceae	SPIDER MILKWEED	[UPL]	forb	PE	DI	full
ASITRI	6	<i>Asimina triloba</i>	(L.) Dunal	Annonaceae	PAWPAW	FACU+	sm tree	W	DI	shade
ASPOFF	*	<i>ASPARAGUS OFFICINALIS</i>	L.	Liliaceae	ASPARAGUS	FACU	forb	PE	MONO	advent
ASPBRA	8	<i>Asplenium bradleyi</i>	DC. Eaton	Aspleniaceae	BRADLEY'S SPLEENWORT	[UPL]	fern	PE	SVP	shade
ASPMON	7	<i>Asplenium montanum</i>	Willd.	Aspleniaceae	MOUNTAIN SPLEENWORT	[UPL]	fern	PE	SVP	shade
ASPPIN	8	<i>Asplenium pinnatifidum</i>	Nutt.	Aspleniaceae	LOBED SPLEENWORT	[UPL]	fern	PE	SVP	shade
ASPLA	3	<i>Asplenium platyneuron</i>	(L.) B.S.P.	Aspleniaceae	EBONY SPLEENWORT	FACU	fern	PE	SVP	shade
ASPRES	7	<i>Asplenium resiliens</i>	Kunze	Aspleniaceae	BLACK-STEMMED SPLEENWORT	[UPL]	fern	PE	SVP	shade
ASPRHI	7	<i>Asplenium rhizophyllum</i>	L.	Aspleniaceae	WALKING FERN	[UPL]	fern	PE	SVP	shade
ASPRUT	10	<i>Asplenium ruta-muraria</i>	L.	Aspleniaceae	WALL-RUE	[UPL]	fern	PE	SVP	shade
ASPTRI	7	<i>Asplenium trichomanes</i>	L.	Aspleniaceae	MAIDENHAIR SPLEENWORT	[UPL]	fern	PE	SVP	shade
ASTACU	8	<i>Aster acuminatus</i>	Michx.	Asteraceae	MOUNTAIN ASTER	FACU+	forb	PE	DI	full
ASTBOR	9	<i>Aster borealis</i>	Prov.	Asteraceae	NORTHERN BOG ASTER	OBL	forb	PE	DI	full
ASTBRA	*	<i>ASTER BRACHYACTIS</i>	S.F. Blake	Asteraceae	WESTERN ANNUAL ASTER	[FAC]	forb	AN	DI	advent
ASTCOR	4	<i>Aster cordifolius</i>	L.	Asteraceae	BLUE WOOD ASTER	[UPL]	forb	PE	DI	shade
ASTDIV	5	<i>Aster divaricatus</i>	L.	Asteraceae	WHITE WOOD ASTER	[UPL]	forb	PE	DI	shade
ASTDRU	6	<i>Aster drummondii</i>	Lindl.	Asteraceae	DRUMMOND'S ASTER	[UPL]	forb	PE	DI	shade
ASTDUM	9	<i>Aster dumosus</i>	L.	Asteraceae	BUSHY ASTER	FAC	forb	PE	DI	full
ASTERI	2	<i>Aster ericoides</i>	L.	Asteraceae	WHITE HEATH ASTER	FACU	forb	PE	DI	full
ASTFIR	7	<i>Aster firmus</i>	Nees	Asteraceae	SHINING ASTER	[OBL]	forb	PE	DI	full
ASTINF	8	<i>Aster infirmus</i>	Michx.	Asteraceae	WEAK ASTER	[UPL]	forb	PE	DI	shade
ASTLAE	6	<i>Aster laevis</i>	L.	Asteraceae	SMOOTH ASTER	UPL	forb	PE	DI	full
ASTLAN	3	<i>Aster lanceolatus</i>	Willd.	Asteraceae	EASTERN LINED ASTER	[FACW]	forb	PE	DI	full
ASTLAT	2	<i>Aster lateriflorus</i>	(L.) Britton	Asteraceae	CALICO ASTER	FACW-	forb	PE	DI	shade
ASTLIN	8	<i>Aster linariifolius</i>	L.	Asteraceae	STIFF ASTER	[UPL]	forb	PE	DI	shade
ASTLOW	6	<i>Aster lowrieanus</i>	T.C. Porter	Asteraceae	LOWRIES' ASTER	[UPL]	forb	PE	DI	shade
ASTMAC	5	<i>Aster macrophyllus</i>	L.	Asteraceae	BIG-LEAVED ASTER	UPL	forb	PE	DI	shade
ASTNOV	2	<i>Aster novae-angliae</i>	L.	Asteraceae	NEW ENGLAND ASTER	FACW-	forb	PE	DI	full
ASTOBL	7	<i>Aster oblongifolius</i>	Nutt.	Asteraceae	SHALE BARREN A.	[UPL]	forb	PE	DI	full
ASTONT	7	<i>Aster ontarionis</i>	Wiegand	Asteraceae	BOTTOMLAND ASTER	FAC	forb	PE	DI	shade
ASTOOL	7	<i>Aster oolentangiensis</i>	Riddell	Asteraceae	SKY BLUE ASTER	[UPL]	forb	PE	DI	full
ASTPAT	6	<i>Aster patens</i>	Aiton	Asteraceae	CLASPING-LEAVED ASTER	[UPL]	forb	PE	DI	partial
ASTPTR	4	<i>Aster paternus</i>	Cronquist	Asteraceae	TOOTHED WHITE-TOPPED ASTER	[UPL]	forb	PE	DI	shade
ASTPIL	1	<i>Aster pilosus</i>	Willd.	Asteraceae	AWL ASTER	UPL	forb	PE	DI	full
ASTPRA	6	<i>Aster praealtus</i>	Poir.	Asteraceae	VEINY LINED ASTER	FACW	forb	PE	DI	full

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ASTPRE	4	<i>Aster prenanthoides</i>	Muhl. ex Willd.	Asteraceae	ZIGZAG ASTER	FAC	forb	PE	DI	partial
ASTPUN	7	<i>Aster puniceus</i>	L.	Asteraceae	FEN ASTER	OBL	forb	PE	DI	full
ASTRAC	2	<i>Aster racemosus</i>	Elliott	Asteraceae	SMALL-HEADED ASTER	FACW	forb	PE	DI	full
ASTSAG	3	<i>Aster sagittifolius</i>	Wedem. ex Willd.	Asteraceae	ARROW-LEAVED ASTER	[UPL]	forb	PE	DI	shade
ASTSCH	5	<i>Aster schreberi</i>	Nees	Asteraceae	LARGE-LEAVED ASTER	[FACU+]	forb	PE	DI	shade
ASTSHO	4	<i>Aster shortii</i>	Lindl.	Asteraceae	SHORT'S ASTER	[UPL]	forb	PE	DI	shade
ASTSOL	8	<i>Aster solidagineus</i>	Michx.	Asteraceae	NARROW-LEAVED ASTER	[UPL]	forb	PE	DI	partial
ASTSUB	*	<i>ASTER SUBULATUS</i>	Michx.	Asteraceae	ANNUAL SALT-MARSH ASTER	OBL	forb	AN	DI	advent
ASTSUR	9	<i>Aster surculosus</i>	Michx.	Asteraceae	CREEPING ASTER	[UPL]	forb	PE	DI	full
ASTUMB	3	<i>Aster umbellatus</i>	Mill.	Asteraceae	FLAT-TOPPED WHITE ASTER	FACW	forb	PE	DI	partial
ASTUND	3	<i>Aster undulatus</i>	L.	Asteraceae	CLASPING HEART-LEAVED ASTER	[UPL]	forb	PE	DI	full
ASTCAN	3	<i>Astragalus canadensis</i>	L.	Fabaceae	CANADA MILK-VETCH	FAC	forb	PE	DI	full
ASTNEG	10	<i>Astragalus neglectus</i>	(Torr. & A. Gray) E. Sheld.	Fabaceae	COOPER'S MILK-VETCH	FACU	forb	PE	DI	full
ATHFEL	5	<i>Athyrium filix-femina</i>	(L.) Roth ex Mert.	Dryopteridaceae	LADY FERN	FAC	fern	PE	SVP	shade
ATHPYC	8	<i>Athyrium pycnocarpon</i>	(Spreng.) Tidestr.	Dryopteridaceae	NARROW-LEAVED GLADE FERN	FAC	fern	PE	SVP	shade
ATHTHE	6	<i>Athyrium thelypteroides</i>	(Michx.) Desv.	Dryopteridaceae	SILVERY GLADE FERN	FAC	fern	PE	SVP	shade
ATRPAT	*	<i>ATRIPLEX PATULA</i>	L.	Chenopodiaceae	SPEAR-SCALE	FACW	forb	AN	DI	advent
AURFLA	7	<i>Aureolaria flava</i>	(L.) Farw.	Scrophulariaceae	SMALL FALSE FOXGLOVE	[UPL]	forb	PE	DI	full
AURLAE	8	<i>Aureolaria laevigata</i>	(Raf.) Raf.	Scrophulariaceae	APPALACHIAN FALSE FOXGLOVE	[UPL]	forb	PE	DI	full
AURPEDA	10	<i>Aureolaria pedicularia</i> (L.) Raf. var. <i>ambigens</i>	(Fernald) Farw.	Scrophulariaceae	PRAIRIE FERN-LEAVED FALSE F.	[UPL]	forb	AN	DI	full
AURPEDP	8	<i>Aureolaria pedicularia</i> var. <i>pedicularia</i>	(L.) Raf.	Scrophulariaceae	WOODLAND FERN-L. FALSE F.	[UPL]	forb	AN	DI	shade
AURVIR	8	<i>Aureolaria virginica</i>	(L.) Pennell	Scrophulariaceae	DOWNY FALSE FOXGLOVE	[UPL]	forb	PE	DI	full
AZOCAR	*	<i>AZOLLA CAROLINIANA</i>	Willd.	Salviniaceae	MOSQUITO-FERN	OBL	fern	PE	SVP	advent
BAPPAUS	6	<i>Baptisia australis</i>	(L.) R. Br.	Fabaceae	BLUE FALSE INDIGO	[FACU-]	forb	PE	DI	full
BAPLAC	8	<i>Baptisia lactea</i>	(Raf.) Thieret	Fabaceae	WHITE FALSE INDIGO	FACU	forb	PE	DI	full
BAPTIN	6	<i>Baptisia tinctoria</i>	(L.) R. Br.	Fabaceae	YELLOW FALSE INDIGO	[UPL]	forb	PE	DI	full
BARVER	*	<i>BARBAREA VERNA</i>	(Mill.) Asch.	Brassicaceae	EARLY WINTER CRESS	[UPL]	forb	BI	DI	advent
BARVUL	*	<i>BARBAREA VULGARIS</i>	R. Br.	Brassicaceae	YELLOW ROCKET	FACU	forb	BI	DI	advent
BARPAN	10	<i>Bartonia paniculata</i>	(Michx.) Muhl.	Gentianaceae	TWINING SCREWSTEM	OBL	forb	AN	DI	full
BARVIR	6	<i>Bartonia virginica</i>	(L.) B.S.P.	Gentianaceae	SCREW-STEM	FACW	forb	AN	DI	full
BELCHI	*	<i>BELAMCANDA CHINENSIS</i>	(L.) DC.	Iridaceae	BLACKBERRY-LILY	[UPL]	forb	PE	MONO	advent
BELPER	*	<i>BELLIS PERENNIS</i>	L.	Asteraceae	ENGLISH DAISY	[UPL]	forb	PE	DI	advent
BERTHU	*	<i>BERBERIS THUNBERGII</i>	DC.	Berberidaceae	JAPANESE BARBERRY	FACU	shrub	W	DI	advent
BERVUL	*	<i>BERBERIS VULGARIS</i>	L.	Berberidaceae	COMMON BARBERRY	FACU	shrub	W	DI	advent
BERINC	*	<i>BERTEROA INCANA</i>	(L.) DC.	Brassicaceae	HOARY-ALYSSUM	[UPL]	forb	AN	DI	advent
BESBUL	9	<i>Besseyia bullii</i>	(Eaton) Rydb.	Scrophulariaceae	KITTEN-TAILS	[UPL]	forb	PE	DI	full
BETALL	7	<i>Betula alleghaniensis</i>	Britton	Betulaceae	YELLOW BIRCH	FAC	tree	W	DI	tree
BETLEN	7	<i>Betula lenta</i>	L.	Betulaceae	SWEET BIRCH	FACU	tree	W	DI	tree
BETNIG	9	<i>Betula nigra</i>	L.	Betulaceae	RIVER BIRCH	FACW	tree	W	DI	tree
BETPOP	5	<i>Betula populifolia</i>	Marshall	Betulaceae	GRAY BIRCH	FAC	tree	W	DI	tree
BETPUM	10	<i>Betula pumila</i>	L.	Betulaceae	SWAMP BIRCH	OBL	shrub	W	DI	full
BIDARI	4	<i>Bidens aristosa</i>	(Michx.) Britton	Asteraceae	MIDWEST TICKSEED-SUNFLOWER	FACW-	forb	AN	DI	full
BIDBEC	10	<i>Bidens beckii</i>	Torr. ex Spreng.	Asteraceae	WATER-MARIGOLD	OBL	forb	PE	DI	full
BIDBIP	2	<i>Bidens bipinnata</i>	L.	Asteraceae	SPANISH-NEEDLES	[FACU]	forb	AN	DI	full
BIDCER	3	<i>Bidens cernua</i>	L.	Asteraceae	NODDING BEGGAR'S-TICK	OBL	forb	AN	DI	full
BIDCOM	3	<i>Bidens comosa</i>	(A. Gray) Wiegand	Asteraceae	SWAMP TICKSEED	FACW	forb	AN	DI	full
BIDCON	3	<i>Bidens connata</i>	Muhl. ex Willd.	Asteraceae	PURPLE-STEMMED BEGGAR'S-TICK	FACW+	forb	AN	DI	full
BIDCOR	3	<i>Bidens coronata</i>	(L.) Britton	Asteraceae	NORTHERN TICKSEED-SUNFLOWER	OBL	forb	AN	DI	full
BIDDIS	7	<i>Bidens discoidea</i>	(Torr. & A. Gray) Britton	Asteraceae	FEW-BRACTED BEGGAR'S-TICK	FACW	forb	AN	DI	partial
BIDFRO	2	<i>Bidens frondosa</i>	L.	Asteraceae	DEVIL'S BEGGAR'S-TICK	FACW	forb	AN	DI	full
BIDPOL	*	<i>BIDENS POLYLEPIS</i>	S.F. Blake	Asteraceae	OZARK TICKSEED-SUNFLOWER	FACW	forb	AN	DI	advent
BIDVUL	2	<i>Bidens vulgata</i>	Greene	Asteraceae	TALL BEGGAR'S-TICKS	[FACW]	forb	AN	DI	full
BIGCAP	7	<i>Bignonia capreolata</i>	L.	Bignoniaceae	CROSS-VINE	FAC+	vine	W	DI	
BLECIL	4	<i>Blephilia ciliata</i>	(L.) Benth.	Lamiaceae	DOWNY WOODMINT	[UPL]	forb	PE	DI	shade

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BLEHIR	4	<i>Blephilia hirsuta</i>	(Pursh) Benth.	Lamiaceae	HAIRY WOODMINT	FACU-	forb	PE	DI	shade
BOECYL	4	<i>Boehmeria cylindrica</i>	(L.) Sw.	Urticaceae	FALSE NETTLE	FACW+	forb	PE	DI	shade
BOLFLU	5	<i>Bolboschoenus fluvialis</i>	(Torr.) Sojak	Cyperaceae	RIVER BULRUSH	OBL	sedge	PE	MONO	full
BOLAST	7	<i>Boltonia asteroides</i>	(L.) L'Her	Asteraceae	FALSE ASTER	FACW	forb	PE	DI	full
BOTBIT	4	<i>Botrychium bitermum</i>	(Savigny) Underw.	Ophioglossaceae	SPARSE-LOBED GRAPE FERN	FAC	fern	PE	SVP	shade
BOTDIS	3	<i>Botrychium dissectum</i>	Spreng.	Ophioglossaceae	LACE-FROND GRAPE FERN	FAC	fern	PE	SVP	shade
BOTLAN	8	<i>Botrychium lanceolatum</i>	(S.G. Gmelin) Angstr.	Ophioglossaceae	TRIANGLE GRAPE FERN	FACW	fern	PE	SVP	shade
BOTMAT	5	<i>Botrychium matricariifolium</i>	(Doll) A. Braun ex W. D. J. Koch	Ophioglossaceae	DAISY-LEAVED GRAPE FERN	FACU	fern	PE	SVP	shade
BOTMUL	4	<i>Botrychium multifidum</i>	(S.G. Gmelin) Rupr.	Ophioglossaceae	LEATHERY GRAPE FERN	FACU	fern	PE	SVP	shade
BOTONE	4	<i>Botrychium oneidense</i>	(Gilbert) House	Ophioglossaceae	BLUNT-LOBED GRAPE FERN	[UPL]	fern	PE	SVP	shade
BOTSIM	7	<i>Botrychium simplex</i>	E. Hitchc.	Ophioglossaceae	LEAST GRAPE FERN	FACU	fern	PE	SVP	shade
BOTVIR	4	<i>Botrychium virginianum</i>	(L.) Sw.	Ophioglossaceae	RATTLESNAKE FERN	FACU	fern	PE	SVP	shade
BOUCUR	8	<i>Bouteloua curtipendula</i>	(Michx.) Torr.	Poaceae	SIDE-OATS GRAMA GRASS	[UPL]	grass	PE	MONO	full
BRAARI	7	<i>Brachyelytrum aristosum</i>	(Michx.) Trel.	Poaceae	NORTHERN SHORTHUSK	[FAC]	grass	PE	MONO	shade
BRAERE	5	<i>Brachyelytrum erectum</i>	(Schreb. ex Spreng.) P. Beauv.	Poaceae	LONG-AWNED WOOD GRASS	[UPL]	grass	PE	MONO	shade
BRASCH	7	<i>Brasenia schreberi</i>	J.F. Gmel.	Cabombaceae	WATER-SHIELD	OBL	forb	PE	DI	full
BRAJUN	*	<i>BRASSICA JUNCEA</i>	(L.) Czern.	Brassicaceae	BROWN MUSTARD	[UPL]	forb	AN	DI	advent
BRANAP	*	<i>BRASSICA NAPUS</i>	L.	Brassicaceae	RAPE	[UPL]	forb	AN	DI	advent
BRANIG	*	<i>BRASSICA NIGRA</i>	(L.) K. Koch	Brassicaceae	BLACK MUSTARD	[UPL]	forb	AN	DI	advent
BRARAP	*	<i>BRASSICA RAPA</i>	L.	Brassicaceae	FIELD MUSTARD	[UPL]	forb	AN	DI	advent
BROCIL	7	<i>Bromus ciliatus</i>	L.	Poaceae	FRINGED BROME	FACW	grass	PE	MONO	full
BROCOM	*	<i>BROMUS COMMUTATUS</i>	Schrad.	Poaceae	HAIRY CHESS	[UPL]	grass	AN	MONO	advent
BROINE	*	<i>BROMUS INERMIS</i>	Leys.	Poaceae	HUNGARIAN BROME	UPL	grass	PE	MONO	advent
BROJAP	*	<i>BROMUS JAPONICUS</i>	Thunb. ex Murray	Poaceae	JAPANESE BROME	FACU-	grass	AN	MONO	advent
BROKAL	8	<i>Bromus kalmii</i>	A. Gray	Poaceae	KALM'S BROME	FAC-	grass	PE	MONO	full
BROALT	6	<i>Bromus latiglumis</i>	(Scribn. ex Shear) Hitchc.	Poaceae	EAR-LEAVED BROME	FACW	grass	PE	MONO	shade
BRONOT	7	<i>Bromus nottowavanus</i>	Fernald	Poaceae	SATIN BROME	[FACU+]	grass	PE	MONO	shade
BROPUB	4	<i>Bromus pubescens</i>	Muhl. ex Willd.	Poaceae	CANADA BROME	[FACU]	grass	PE	MONO	shade
BROSEC	*	<i>BROMUS SECALINUS</i>	L.	Poaceae	CHEAT	[UPL]	grass	AN	MONO	advent
BROTEC	*	<i>BROMUS TECTORUM</i>	L.	Poaceae	DOWNY BROME	[UPL]	grass	AN	MONO	advent
BROPAP	*	<i>BROUSSONETIA PAPYRIFERA</i>	(L.) Vent	Moraceae	PAPER-MULBERRY	[UPL]	tree	W	DI	advent
BUCAME	8	<i>Buchnera americana</i>	L.	Scrophulariaceae	BLUEHEARTS	FACU	forb	PE	DI	full
BULCAP	3	<i>Bulbostylis capillaris</i>	(L.) Kunth ex C.B. Clarke	Cyperaceae	THREAD-LEAVED SEDGE	FACU	sedge	AN	MONO	full
BUTUMB	*	<i>BUTOMUS UMBELLATUS</i>	L.	Butomaceae	FLOWERING-RUSH	OBL	forb	PE	MONO	full
CABCAR	*	<i>CABOMBA CAROLINIANA</i>	A. Gray	Cabombaceae	FANWORT	OBL	forb	PE	DI	full
CACATR	6	<i>Cacalia atriplicifolia</i>	L.	Asteraceae	PALE INDIAN-PLANTAIN	[UPL]	forb	PE	DI	full
CACMUH	6	<i>Cacalia muhlenbergii</i>	(Schultz-Bip.) Fernald	Asteraceae	GREAT INDIAN-PLANTAIN	[UPL]	forb	PE	DI	full
CACPLA	10	<i>Cacalia plantaginea</i>	(Raf.) Shinnars	Asteraceae	FEN INDIAN-PLANTAIN	FACW	forb	PE	DI	full
CACSUA	7	<i>Cacalia suaveolens</i>	L.	Asteraceae	SWEET INDIAN-PLANTAIN	FAC-	forb	PE	DI	full
CAKEDE	10	<i>Cakile edentula</i>	(Bigelow) Hook.	Brassicaceae	SEA ROCKET	FACU	forb	AN	DI	full
CALCAN	4	<i>Calamagrostis canadensis</i>	(Michx.) P. Beauv.	Poaceae	CANADA BLUEJOINT	FACW+	grass	PE	MONO	full
CALINS	8	<i>Calamagrostis insperata</i>	Swallen	Poaceae	BARTLEY'S REED GRASS	[UPL]	grass	PE	MONO	shade
CALSTR	7	<i>Calamagrostis stricta</i>	(Timm) Koeler	Poaceae	NORTHERN REED GRASS	FACW	grass	PE	MONO	full
CALARK	8	<i>Calamintha arkansana</i>	(Nutt.) Shinnars	Lamiaceae	LIMESTONE SAVORY	FACU	forb	PE	DI	full
CLLPAL	10	<i>Calla palustris</i>	L.	Araceae	WILD CALLA	OBL	forb	PE	MONO	partial
CALHET	4	<i>Callitriche heterophylla</i>	Pursh	Callitrichaceae	LARGER WATER-STARWORT	OBL	forb	AN	DI	full
CALPAL	9	<i>Callitriche palustris</i>	L.	Callitrichaceae	VERNAL WATER-STARWORT	OBL	forb	AN	DI	full
CALTER	6	<i>Callitriche terrestris</i>	Raf.	Callitrichaceae	TERRESTRIAL WATER-STARWORT	FACW+	forb	AN	DI	full
CALTUB	9	<i>Calopogon tuberosus</i>	(L.) B.S.P.	Orchidaceae	GRASS-PINK	FACW+	forb	PE	MONO	full
CLTPAL	6	<i>Caltha palustris</i>	L.	Ranunculaceae	MARSH-MARIGOLD	OBL	forb	PE	DI	shade
CALFLOG	6	<i>Calycanthus floridus</i> L. var. <i>glaucus</i>	(Willd.) Torr. & A. Gray	Calycanthaceae	SWEET-SHRUB	[FACU]	shrub	W	DI	shade
CALHED	*	<i>CALYSTEGIA HEDERACEA</i>	Wall.	Convolvulaceae	JAPANESE BINDWEED	[UPL]	forb	PE	DI	advent
CALSEP	1	<i>Calystegia sepium</i>	(L.) R. Br.	Convolvulaceae	HEDGE BINDWEED	FAC-	forb	PE	DI	full
CALSPI	4	<i>Calystegia spithamea</i>	(L.) Pursh	Convolvulaceae	UPRIGHT BINDWEED	[UPL]	forb	PE	DI	full

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CAMSCI	6	<i>Camassia scilloides</i>	(Raf.) Cory	Liliaceae	WILD HYACINTH	FAC	forb	PE	MONO	partial
CAMMIC	*	<i>CAMELINA MICROCARPA</i>	Andrz. ex DC.	Brassicaceae	SMALL-SEEDED FALSE FLAX	[UPL]	forb	AN	DI	advent
CAMSAT	*	<i>CAMELINA SATIVA</i>	(L.) Crantz	Brassicaceae	LARGE-SEEDED FALSE FLAX	UPL	forb	AN	DI	advent
CAMAME	4	<i>Campanula americana</i>	L.	Campanulaceae	TALL BELLFLOWER	FAC	forb	BI	DI	shade
CAMAPA	7	<i>Campanula aparinoides</i>	Pursh	Campanulaceae	MARSH BELLFLOWER	OBL	forb	PE	DI	full
CAMRAP	*	<i>CAMPANULA RAPUNCULOIDES</i>	L.	Campanulaceae	EUROPEAN BELLFLOWER	[UPL]	forb	PE	DI	advent
CAMROT	10	<i>Campanula rotundifolia</i>	L.	Campanulaceae	HAREBELL	FACU	forb	PE	DI	full
CAMTRA	*	<i>CAMPANULA TRACHELIUM</i>	L.	Campanulaceae	THROATWORT	[UPL]	forb	PE	DI	advent
CAMRAD	1	<i>Campsis radicans</i>	(L.) See. ex Bureau	Bignoniaceae	TRUMPET-CREEPER	FAC	vine	W	DI	full
CANSAT	*	<i>CANNABIS SATIVA</i>	L.	Cannabaceae	HEMP	FACU	forb	AN	DI	advent
CAPBUR	*	<i>CAPSELLA BURSA-PASTORIS</i>	(L.) Medik.	Brassicaceae	SHEPHERD'S-PURSE	FACU	forb	AN	DI	advent
CARANG	7	<i>Cardamine angustata</i>	O.E. Schulz	Brassicaceae	APPALACHIAN TOOTHWORT	FACU	forb	PE	DI	shade
CARCON	3	<i>Cardamine concatenata</i>	(Michx.) O. Schwarz	Brassicaceae	CUT-LEAVED TOOTHWORT	FACU	forb	PE	DI	shade
CARDIP	4	<i>Cardamine diphylla</i>	(Michx.) A.W. Wood	Brassicaceae	TWO-LEAVED TOOTHWORT	FACU	forb	PE	DI	shade
CARDIS	7	<i>Cardamine dissecta</i>	(Leavenw.) Al-Sheh.	Brassicaceae	NARROW-LEAVED TOOTHWORT	[FACU+]	forb	PE	DI	shade
CARDOU	5	<i>Cardamine douglassii</i>	Britton	Brassicaceae	PURPLE SPRING CRESS	FACW+	forb	PE	DI	shade
CARFLE	*	<i>CARDAMINE FLEXUOSA</i>	With.	Brassicaceae	BENDING BITTER CRESS	OBL	forb	PE	DI	advent
CARHIR	*	<i>CARDAMINE HIRSUTA</i>	L.	Brassicaceae	HOARY BITTER CRESS	FACU	forb	AN	DI	advent
CARIMP	*	<i>CARDAMINE IMPATIENS</i>	L.	Brassicaceae	EUROPEAN BITTER CRESS	[UPL]	forb	AN	DI	advent
CARPAR	2	<i>Cardamine parviflora</i>	L.	Brassicaceae	DRY-LAND BITTER CRESS	FACU	forb	AN	DI	full
CARPEN	3	<i>Cardamine pensylvanica</i>	Muhl. ex Willd.	Brassicaceae	PENNSYLVANIA BITTER CRESS	OBL	forb	AN	DI	partial
CARPRA	9	<i>Cardamine pratensis</i>	L.	Brassicaceae	AMERICAN CUCKOO-FLOWER	OBL	forb	PE	DI	partial
CARRHO	5	<i>Cardamine rhomboidea</i>	(Pers.) DC.	Brassicaceae	SPRING CRESS	OBL	forb	PE	DI	shade
CARROT	9	<i>Cardamine rotundifolia</i>	Michx.	Brassicaceae	TRAILING BITTER CRESS	OBL	forb	PE	DI	partial
CARDRA	*	<i>CARDARIA DRABA</i>	(L.) Desv.	Brassicaceae	HOARY-CRESS	[UPL]	forb	PE	DI	advent
CARACA	*	<i>CARDUUS ACANTHOIDES</i>	L.	Asteraceae	PLUMELESS THISTLE	[UPL]	forb	BI	DI	advent
CARNUT	*	<i>CARDUUS NUTANS</i>	L.	Asteraceae	NODDING THISTLE	[UPL]	forb	BI	DI	advent
CXAGGR	2	<i>Carex aggregata</i>	Mack.	Cyperaceae	GLOMERATE SEDGE	[UPL]	sedge	PE	MONO	full
CXALAT	7	<i>Carex alata</i>	Torr.	Cyperaceae	BROAD-WINGED SEDGE	OBL	sedge	PE	MONO	full
CXALBAA	4	<i>Carex albicans</i> var. <i>albicans</i>	Willd. ex Spreng.	Cyperaceae	OAK SEDGE	[UPL]	sedge	PE	MONO	shade
CXALBEE	8	<i>Carex albicans</i> Willd. ex Spreng. var. <i>emmonsii</i>	(Dewey ex Torr.) Rettig	Cyperaceae	EMMONS' SEDGE	[UPL]	sedge	PE	MONO	shade
CXALBO	7	<i>Carex albolutescens</i>	Schwein.	Cyperaceae	PALE STRAW SEDGE	FACW	sedge	PE	MONO	shade
CXALBU	6	<i>Carex albursina</i>	E. Sheld.	Cyperaceae	WING-STEMMED WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXALOP	5	<i>Carex alopecoidea</i>	Tuck.	Cyperaceae	NORTHERN FOX SEDGE	FACW	sedge	PE	MONO	full
CXAMPH	5	<i>Carex amphibola</i>	Steud.	Cyperaceae	E. NARROW-LEAVED SEDGE	FAC	sedge	PE	MONO	shade
CXANNE	3	<i>Carex annexens</i>	(E.P. Bicknell) E.P. Bicknell	Cyperaceae	YELLOW FOX SEDGE	FACW	sedge	PE	MONO	full
CXAPPA	8	<i>Carex appalachica</i>	J.M. Webber & P.W. Ball	Cyperaceae	APPALACHIAN SEDGE	[UPL]	sedge	PE	MONO	shade
CXAQUA	9	<i>Carex aquatilis</i>	Wahlenb.	Cyperaceae	LEAFY TUSsock SEDGE	OBL	sedge	PE	MONO	full
CXARCT	10	<i>Carex arctata</i>	W. Boott ex Hook.	Cyperaceae	DROOPING WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXARGY	10	<i>Carex argyrantha</i>	Tuck.	Cyperaceae	SILVERY SEDGE	[FACU]	sedge	PE	MONO	full
CXATHE	7	<i>Carex atherodes</i>	Spreng.	Cyperaceae	WHEAT SEDGE	OBL	sedge	PE	MONO	full
CXATLAC	9	<i>Carex atlantica</i> L.H. Bailey subsp. <i>capillacea</i>	(L.H. Bailey) Reznicek	Cyperaceae	HOWE'S SEDGE	OBL	sedge	PE	MONO	full
CXATLAA	8	<i>Carex atlantica</i> subsp. <i>atlantica</i>	L.H. Bailey	Cyperaceae	BOG SEDGE	FACW+	sedge	PE	MONO	full
CXAURE	7	<i>Carex aurea</i>	Nutt.	Cyperaceae	GOLDEN-FRUITED SEDGE	FACW	sedge	PE	MONO	full
CXBEBB	7	<i>Carex bebbii</i>	Olney ex Fernald	Cyperaceae	BEBB'S SEDGE	OBL	sedge	PE	MONO	full
CXBICK	9	<i>Carex bicknellii</i>	Britton	Cyperaceae	BICKNELL'S SEDGE	FACU	sedge	PE	MONO	full
CXBLAN	1	<i>Carex blanda</i>	Dewey	Cyperaceae	COMMON WOOD SEDGE	FAC	sedge	PE	MONO	shade
CXBREV	8	<i>Carex brevior</i>	(Dewey) Mack. ex Lunell	Cyperaceae	TUFTED-FESCUE SEDGE	UPL	sedge	PE	MONO	full
CXBROM	7	<i>Carex bromoides</i>	Schkuhr ex Willd.	Cyperaceae	BROME SEDGE	FACW	sedge	PE	MONO	shade
CXBRUN	9	<i>Carex brunnescens</i>	(Pers.) Poir.	Cyperaceae	BROWNISH SEDGE	FACW	sedge	PE	MONO	partial
CXBUSH	8	<i>Carex bushii</i>	Mack.	Cyperaceae	BUSH'S SEDGE	FACW	sedge	PE	MONO	shade
CXBUXB	8	<i>Carex buxbaumii</i>	Wahlenb.	Cyperaceae	BUXBAUM'S SEDGE	OBL	sedge	PE	MONO	full
CXCANE	7	<i>Carex canescens</i>	L.	Cyperaceae	GLAUcous SEDGE	OBL	sedge	PE	MONO	shade
CXCARE	7	<i>Carex careyana</i>	Torr. ex Dewey	Cyperaceae	CAREY'S SEDGE	[UPL]	sedge	PE	MONO	shade

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CXCARO	4	<i>Carex caroliniana</i>	Schwein.	Cyperaceae	CAROLINA SEDGE	FACU	sedge	PE	MONO	full
CXCPHLO	7	<i>Carex cephaloidea</i>	(Dewey) Dewey	Cyperaceae	THIN-LEAVED SEDGE	FAC+	sedge	PE	MONO	shade
CXCPHLA	5	<u><i>Carex cephalophora</i></u>	Muhl. ex Willd.	Cyperaceae	OVAL-HEADED SEDGE	FACU	sedge	PE	MONO	shade
CXCOMM	4	<i>Carex communis</i>	L.H. Bailey	Cyperaceae	BEECH SEDGE	[UPL]	sedge	PE	MONO	partial
CXCOMO	2	<i>Carex comosa</i>	Boott	Cyperaceae	BEARDED SEDGE	OBL	sedge	PE	MONO	full
CXCONJ	5	<i>Carex conjuncta</i>	Boott	Cyperaceae	SOFT FOX SEDGE	FACW	sedge	PE	MONO	full
CXCONO	8	<i>Carex conoidea</i>	Schkuhr ex Willd.	Cyperaceae	FIELD SEDGE	FACU	sedge	PE	MONO	full
CXCRAW	8	<i>Carex crawei</i>	Dewey	Cyperaceae	CRAWE'S SEDGE	FACW	sedge	PE	MONO	full
CXCRINB	3	<i>Carex crinita</i> Lam. var. <i>brevicrinis</i>	Fernald	Cyperaceae	SHORT-FRINGED SEDGE	[OBL]	sedge	PE	MONO	shade
CXCRINC	3	<i>Carex crinita</i> var. <i>crinita</i>	Lam.	Cyperaceae	TASSELED SEDGE	OBL	sedge	PE	MONO	shade
CXCRIS	3	<i>Carex cristatella</i>	Britton	Cyperaceae	CRESTED SEDGE	FACW	sedge	PE	MONO	full
CXCRUS	8	<i>Carex crus-corvi</i>	Shuttlew. ex Kunze	Cyperaceae	RAVEN-FOOT SEDGE	OBL	sedge	PE	MONO	shade
CXCRYP	9	<i>Carex cryptolepis</i>	Mack.	Cyperaceae	LITTLE YELLOW SEDGE	OBL	sedge	PE	MONO	full
CXCUMB	6	<i>Carex cumberlandensis</i>	Naczi, Cral & Bryson	Cyperaceae	THICKET SEDGE	[FAC]	sedge	PE	MONO	shade
CXDAVI	5	<i>Carex davisii</i>	Schwein & Torr.	Cyperaceae	DAVIS' SEDGE	FAC-	sedge	PE	MONO	shade
CXDEBIR	8	<i>Carex debilis</i> Michx. var. <i>rudgei</i>	L.H. Bailey	Cyperaceae	RUDGE'S SEDGE	[FAC]	sedge	PE	MONO	shade
CXDEBID	7	<i>Carex debilis</i> var. <i>debilis</i>	Michx.	Cyperaceae	WEAK SEDGE	FAC	sedge	PE	MONO	shade
CXDECO	10	<i>Carex decomposita</i>	Muhl.	Cyperaceae	CYPRESS-KNEE SEDGE	OBL	sedge	PE	MONO	partial
CXDEWE	10	<i>Carex deweyana</i>	Schwein.	Cyperaceae	DEWEY'S SEDGE	FACU	sedge	PE	MONO	shade
CXDIAN	9	<i>Carex diandra</i>	Schrank	Cyperaceae	LESSER PANICLED SEDGE	OBL	sedge	PE	MONO	full
CXDIGI	4	<i>Carex digitalis</i>	Willd.	Cyperaceae	SLENDER WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXDISP	10	<i>Carex disperma</i>	Dewey	Cyperaceae	TWO-SEEDED SEDGE	FACW+	sedge	PE	MONO	partial
CXEBCUR	8	<i>Carex eburnea</i>	Boott	Cyperaceae	BRISTLE-LEAVED SEDGE	FACU	sedge	PE	MONO	shade
CXECHI	10	<i>Carex echinata</i>	Murray	Cyperaceae	LITTLE PRICKLY SEDGE	OBL	sedge	PE	MONO	full
CXEMOR	8	<i>Carex emoryi</i>	Dewey	Cyperaceae	EMORY'S SEDGE	OBL	sedge	PE	MONO	partial
CXFEST	7	<i>Carex festuacea</i>	Schkuhr ex Willd.	Cyperaceae	FESCUE SEDGE	FAC	sedge	PE	MONO	partial
CXFLAV	8	<i>Carex flava</i>	L.	Cyperaceae	YELLOW SEDGE	OBL	sedge	PE	MONO	full
CXFOLL	7	<i>Carex folliculata</i>	L.	Cyperaceae	LONG-FRUITED SEDGE	OBL	sedge	PE	MONO	partial
CXFORM	10	<i>Carex formosa</i>	Dewey	Cyperaceae	HANDSOME SEDGE	FAC	sedge	PE	MONO	shade
CXFRAN	2	<i>Carex frankii</i>	Kunth	Cyperaceae	FRANK'S SEDGE	OBL	sedge	PE	MONO	full
CXGARB	9	<u><i>Carex garberi</i></u>	Fernald	Cyperaceae	GARBER'S SEDGE	FACW	sedge	PE	MONO	partial
CXGLAU	5	<u><i>Carex glaucoidea</i></u>	Tuck. ex Olney	Cyperaceae	BLUE-GREEN SEDGE	FAC	sedge	PE	MONO	shade
CXGRCLE	3	<i>Carex gracilescens</i>	Steud.	Cyperaceae	SLENDER WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXGRCLI	4	<i>Carex gracillima</i>	Schwein.	Cyperaceae	GRACEFUL SEDGE	FACU	sedge	PE	MONO	shade
CXGRAN	3	<i>Carex granularis</i>	Muhl. ex Willd.	Cyperaceae	MEADOW SEDGE	FACW+	sedge	PE	MONO	full
CXGRAY	5	<i>Carex grayi</i>	J. Carey	Cyperaceae	GRAY'S SEDGE	FACW+	sedge	PE	MONO	shade
CXGRIS	4	<u><i>Carex grisea</i></u>	Wahlenb.	Cyperaceae	NARROW-LEAVED SEDGE	[FAC]	sedge	PE	MONO	shade
CXGYNA	3	<i>Carex gynandra</i>	Schwein.	Cyperaceae	NODDING SEDGE	OBL	sedge	PE	MONO	shade
CXHAYD	7	<i>Carex haydenii</i>	Dewey	Cyperaceae	HAYDEN'S SEDGE	OBL	sedge	PE	MONO	partial
CXHIRS	2	<u><i>Carex hirsutella</i></u>	Mack.	Cyperaceae	HIRSUTE SEDGE	FACU	sedge	PE	MONO	partial
CXHIRT	3	<i>Carex hirtifolia</i>	Mack.	Cyperaceae	HAIRY-LEAVED SEDGE	[UPL]	sedge	PE	MONO	shade
CXHITC	7	<i>Carex hitchcockiana</i>	Dewey	Cyperaceae	HITCHCOCK'S SEDGE	[UPL]	sedge	PE	MONO	shade
CXHYAL	5	<i>Carex hyalinolepis</i>	Steud.	Cyperaceae	SWEET MARSH SEDGE	OBL	sedge	PE	MONO	partial
CXHYST	5	<i>Carex hystericina</i>	Muhl. ex Willd.	Cyperaceae	PORCUPINE SEDGE	OBL	sedge	PE	MONO	full
CXINTE	8	<i>Carex interior</i>	L.H. Bailey	Cyperaceae	INTERIOR SEDGE	OBL	sedge	PE	MONO	full
CXINTU	5	<i>Carex intumescens</i>	Rudge	Cyperaceae	BLADDER SEDGE	FACW+	sedge	PE	MONO	shade
CXJAME	6	<i>Carex jamesii</i>	Schwein.	Cyperaceae	JAMES' SEDGE	[UPL]	sedge	PE	MONO	shade
CXJUNI	10	<u><i>Carex juniperorum</i></u>	Catling, Reznicek, & Crins	Cyperaceae	JUNIPER SEDGE	[UPL]	sedge	PE	MONO	partial
CXKRAL	4	<u><i>Carex kraliana</i></u>	Naczi & Bryson	Cyperaceae	KRAL'S SEDGE	[FACU]	sedge	PE	MONO	shade
CXLACU	5	<i>Carex lacustris</i>	Willd.	Cyperaceae	LAKE SEDGE	OBL	sedge	PE	MONO	partial
CXLAEV	6	<i>Carex laevivaginata</i>	(Kuk.) Mack.	Cyperaceae	SMOOTH-SHEATHED FOX SEDGE	OBL	sedge	PE	MONO	shade
CXLASI	8	<i>Carex lasiocarpa</i>	Ehrh.	Cyperaceae	QUILL-LEAVED SEDGE	OBL	sedge	PE	MONO	full
CXLAXC	3	<i>Carex laxiculmis</i>	Schwein.	Cyperaceae	SPREADING SEDGE	[UPL]	sedge	PE	MONO	shade
CXLAXF	3	<i>Carex laxiflora</i>	Lam.	Cyperaceae	TWO-EDGED WOOD SEDGE	FACU	sedge	PE	MONO	shade

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CXLEAV	3	<i>Carex leavenworthii</i>	Dewey	Cyperaceae	LEAVENWORTH'S SEDGE	[UPL]	sedge	PE	MONO	partial
CXLEPTA	7	<i>Carex leptalea</i>	Wahlenb.	Cyperaceae	DELICATE SEDGE	OBL	sedge	PE	MONO	full
CXLPTON	4	<i>Carex leptoneuria</i>	(Fernald) Fernald	Cyperaceae	NERVELESS WOOD SEDGE	FACW	sedge	PE	MONO	shade
CXMAGE	10	<i>Carex limosa</i>	L.	Cyperaceae	MUD SEDGE	OBL	sedge	PE	MONO	full
CXLONG	10	<i>Carex longii</i>	Mack.	Cyperaceae	LONG'S SEDGE	OBL	sedge	PE	MONO	full
CXLOUS	10	<i>Carex louisianica</i>	L.H. Bailey	Cyperaceae	LOUISIANA SEDGE	OBL	sedge	PE	MONO	shade
CXLUCO	9	<i>Carex lucorum</i>	Willd. ex Link	Cyperaceae	FIRE SEDGE	[UPL]	sedge	PE	MONO	full
CXLUPF	9	<i>Carex lupuliformis</i>	Sartwell ex Dewey	Cyperaceae	FALSE HOP SEDGE	FACW+	sedge	PE	MONO	partial
CXLUPL	3	<i>Carex lupulina</i>	Muhl. ex Willd.	Cyperaceae	HOP SEDGE	OBL	sedge	PE	MONO	full
CXLURI	3	<i>Carex lurida</i>	Wahlenb.	Cyperaceae	BOTTLEBRUSH SEDGE	OBL	sedge	PE	MONO	full
CXMEAD	7	<i>Carex meadii</i>	Dewey	Cyperaceae	MEAD'S SEDGE	FAC	sedge	PE	MONO	full
CXMERF	10	<i>Carex merritt-fernaldii</i>	Mack.	Cyperaceae	FERNALD'S SEDGE	[UPL]	sedge	PE	MONO	full
CXMESO	6	<i>Carex mesochorea</i>	Mack.	Cyperaceae	MIDLAND SEDGE	[UPL]	sedge	PE	MONO	full
CXMOLE	3	<i>Carex molesta</i>	Mack. ex Bright	Cyperaceae	TROUBLESOME SEDGE	[FACU]	sedge	PE	MONO	full
CXMUHL	7	<i>Carex muhlenbergii</i>	Schkuhr ex Willd.	Cyperaceae	MUHLENBERG'S SEDGE	[UPL]	sedge	PE	MONO	full
CXMUSK	7	<i>Carex muskingumensis</i>	Schwein.	Cyperaceae	MUSKINGUM SEDGE	OBL	sedge	PE	MONO	shade
CXNIGR	8	<i>Carex nigromarginata</i>	Schwein.	Cyperaceae	BLACK-MARGINED SEDGE	[UPL]	sedge	PE	MONO	partial
CXNORM	4	<i>Carex normalis</i>	Mack.	Cyperaceae	LARGE STRAW SEDGE	FACU	sedge	PE	MONO	shade
CXOLIGC	6	<i>Carex oligocarpa</i>	Schkuhr ex Willd.	Cyperaceae	FEW-FRUITED SEDGE	[UPL]	sedge	PE	MONO	shade
CSOLIGS	10	<i>Carex oligosperma</i>	Michx.	Cyperaceae	FEW-SEEDED SEDGE	OBL	sedge	PE	MONO	shade
CXPALL	5	<i>Carex pallescens</i>	L.	Cyperaceae	PALE SEDGE	[FACU]	sedge	PE	MONO	full
CXPECK	10	<i>Carex peckii</i>	Howe	Cyperaceae	PECK'S SEDGE	[UPL]	sedge	PE	MONO	shade
CXPEDU	7	<i>Carex pedunculata</i>	Muhl. ex Willd.	Cyperaceae	LONG-STALKED SEDGE	[UPL]	sedge	PE	MONO	shade
CXPELL	6	<i>Carex pellita</i>	Muhl.	Cyperaceae	WOOLLY SEDGE	OBL	sedge	PE	MONO	full
CXPENS	3	<i>Carex pennsylvanica</i>	Lam.	Cyperaceae	PENNSYLVANIA SEDGE	[UPL]	sedge	PE	MONO	shade
CXPLAN	6	<i>Carex planispicata</i>	Naczi	Cyperaceae	FLAT-SPIKED SEDGE	[FACU]	sedge	PE	MONO	shade
CXPLNT	8	<i>Carex plantaginea</i>	Lam.	Cyperaceae	PLANTAIN SEDGE	[FACU-]	sedge	PE	MONO	shade
CXPLAT	6	<i>Carex platyphylla</i>	J. Carey	Cyperaceae	BROAD-LEAVED WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXPRAE	*	<i>CAREX PRAEGRACILIS</i>	Boott	Cyperaceae	FREEWAY SEDGE	UPL	sedge	PE	MONO	advent
CXPRAI	9	<i>Carex prairea</i>	Dewey ex A.W. Wood	Cyperaceae	PRAIRIE SEDGE	FACW	sedge	PE	MONO	full
CXPRAS	8	<i>Carex prasina</i>	Wahlenb.	Cyperaceae	DROOPING SEDGE	OBL	sedge	PE	MONO	shade
CXPROJ	8	<i>Carex projecta</i>	Mack.	Cyperaceae	NECKLACE SEDGE	FACW	sedge	PE	MONO	partial
CXPSEU	6	<i>Carex pseudocyperus</i>	L.	Cyperaceae	NORTHERN BEARDED SEDGE	OBL	sedge	PE	MONO	full
CXPURP	9	<i>Carex purpurifera</i>	Mack.	Cyperaceae	PURPLE WOOD SEDGE	[UPL]	sedge	PE	MONO	shade
CXRADI	6	<i>Carex radiata</i>	(Wahlenb.) Small	Cyperaceae	RADIATE SEDGE	[FAC]	sedge	PE	MONO	shade
CXRTRF	4	<i>Carex retroflexa</i>	Muhl. ex Willd.	Cyperaceae	REFLEXED SEDGE	[UPL]	sedge	PE	MONO	full
CXRTRS	9	<i>Carex retrorsa</i>	Schwein.	Cyperaceae	REFLEXED BLADDER SEDGE	FACW+	sedge	PE	MONO	full
CXRICH	10	<i>Carex richardsonii</i>	R. Br.	Cyperaceae	RICHARDSON'S SEDGE	[UPL]	sedge	PE	MONO	shade
CXROSE	3	<i>Carex rosea</i>	Schkuhr ex Willd.	Cyperaceae	ROSE SEDGE	[UPL]	sedge	PE	MONO	shade
CXSART	8	<i>Carex sartwellii</i>	Dewey	Cyperaceae	SARTWELL'S SEDGE	OBL	sedge	PE	MONO	full
CXSCAB	6	<i>Carex scabrata</i>	Schwein.	Cyperaceae	ROUGH SEDGE	OBL	sedge	PE	MONO	partial
CXSCOP	3	<i>Carex scoparia</i>	Schkuhr ex Willd.	Cyperaceae	POINTED BROOM SEDGE	FACW	sedge	PE	MONO	full
CXSEOR	7	<i>Carex seorsa</i>	Howe	Cyperaceae	WEAK STELLATE SEDGE	FACW	sedge	PE	MONO	shade
CXSHOR	2	<i>Carex shortiana</i>	Dewey	Cyperaceae	SHORT'S SEDGE	FAC	sedge	PE	MONO	full
CXSICC	8	<i>Carex siccata</i>	Dewey	Cyperaceae	HAY SEDGE	[UPL]	sedge	PE	MONO	full
CXSPAR	3	<i>Carex sparganioides</i>	Muhl. ex Willd.	Cyperaceae	BUR-REED SEDGE	FACU	sedge	PE	MONO	shade
CXSPIC	*	<i>CAREX SPICATA</i>	Huds.	Cyperaceae	SPIKED SEDGE	[UPL]	sedge	PE	MONO	advent
CXSPRE	8	<i>Carex sprengelii</i>	Dewey ex Spreng.	Cyperaceae	SPRENGEL'S SEDGE	FACU	sedge	PE	MONO	shade
CXSQUA	4	<i>Carex squarrosa</i>	L.	Cyperaceae	SQUARROSE SEDGE	FACW	sedge	PE	MONO	shade
CXSTER	8	<i>Carex sterilis</i>	Willd.	Cyperaceae	FEN SEDGE	OBL	sedge	PE	MONO	full
CXSTIP	2	<i>Carex stipata</i>	Muhl. ex Willd.	Cyperaceae	CROWDED SEDGE	OBL	sedge	PE	MONO	partial
CXSTRM	4	<i>Carex straminea</i>	Willd. ex Schkuhr	Cyperaceae	STRAW SEDGE	OBL	sedge	PE	MONO	full
CXSTRT	5	<i>Carex striatula</i>	Michx.	Cyperaceae	LINED SEDGE	[UPL]	sedge	PE	MONO	shade
CXSTRC	5	<i>Carex stricta</i>	Lam.	Cyperaceae	TUSSOCK SEDGE	OBL	sedge	PE	MONO	full

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CXSTYL	8	<i>Carex styloflexa</i>	Buckley	Cyperaceae	LOWLAND WOOD SEDGE	FACW-	sedge	PE	MONO	shade
CXSUBE	8	<i>Carex suberecta</i>	(Olney) Britton	Cyperaceae	PRAIRIE STRAW SEDGE	OBL	sedge	PE	MONO	full
CXSWAN	4	<i>Carex swanii</i>	(Fernald) Mack.	Cyperaceae	SWAN'S SEDGE	FACU	sedge	PE	MONO	shade
CXTENE	6	<i>Carex tenera</i> Dewey var. <i>echinodes</i>	(Fernald) Wiegand	Cyperaceae	BRISTLY SLENDER SEDGE	[FAC]	sedge	PE	MONO	shade
CXTENT	8	<i>Carex tenera</i> var. <i>tenera</i>	Dewey	Cyperaceae	SLENDER SEDGE	[FAC]	sedge	PE	MONO	shade
CXTENU	10	<i>Carex tenuiflora</i>	Wahlenb.	Cyperaceae	THIN-FLOWERED SEDGE	OBL	sedge	PE	MONO	full
CXTETA	7	<i>Carex tetanica</i>	Schkuhr	Cyperaceae	RIGID SEDGE	FACW	sedge	PE	MONO	full
CXTESE	*	<i>CAREX TEXENSIS</i>	(Torr. ex L.H. Bailey) L.H. Bailey	Cyperaceae	TEXAS SEDGE	[UPL]	sedge	PE	MONO	advent
CXTIMI	5	<i>Carex timida</i>	Naczi & B.A. Ford	Cyperaceae	TIMID SEDGE	[UPL]	sedge	PE	MONO	shade
CXTONS	8	<i>Carex tonsa</i>	(Fernald) E.P. Bicknell	Cyperaceae	LOW SAND SEDGE	[UPL]	sedge	PE	MONO	full
CXTORT	8	<i>Carex torta</i>	Boott ex Tuck.	Cyperaceae	TWISTED SEDGE	FACW	sedge	PE	MONO	full
CXTRIB	4	<i>Carex tribuloides</i>	Wahlenb.	Cyperaceae	BLUNT BROOM SEDGE	FACW+	sedge	PE	MONO	partial
CXTRIC	8	<i>Carex trichocarpa</i>	Willd.	Cyperaceae	HAIRY-FRUITED SEDGE	OBL	sedge	PE	MONO	full
CXTRIS	8	<i>Carex trisperma</i>	Dewey	Cyperaceae	THREE-SEEDED SEDGE	OBL	sedge	PE	MONO	shade
CXTUCK	8	<i>Carex tuckermanni</i>	Dewey	Cyperaceae	TUCKERMAN'S SEDGE	OBL	sedge	PE	MONO	shade
CXTYPH	5	<i>Carex typhina</i>	Michx.	Cyperaceae	CAT-TAIL SEDGE	FACW+	sedge	PE	MONO	shade
CXUMBE	4	<i>Carex umbellata</i>	Schkuhr ex Willd.	Cyperaceae	CLUSTERED SEDGE	[UPL]	sedge	PE	MONO	full
CXUTRI	7	<i>Carex utriculata</i>	Boott	Cyperaceae	BEAKED SEDGE	[OBL]	sedge	PE	MONO	full
CXVESI	7	<i>Carex vesicaria</i>	L.	Cyperaceae	INFLATED SEDGE	OBL	sedge	PE	MONO	partial
CXVIRE	6	<i>Carex virescens</i>	Muhl. ex Willd.	Cyperaceae	GREENISH SEDGE	[FACU]	sedge	PE	MONO	shade
CXVIRI	8	<i>Carex viridula</i>	Michx.	Cyperaceae	LITTLE GREEN SEDGE	OBL	sedge	PE	MONO	full
CXVULP	1	<i>Carex vulpinoidea</i>	Michx.	Cyperaceae	FOX SEDGE	OBL	sedge	PE	MONO	full
CXWILL	6	<i>Carex willdenowii</i>	Schkuhr ex Willd.	Cyperaceae	WILLDENOW'S SEDGE	UPL	sedge	PE	MONO	shade
CXWOOD	7	<i>Carex woodii</i>	Dewey	Cyperaceae	WOOD'S SEDGE	UPL	sedge	PE	MONO	shade
CXSUBI	5	<i>Carex X subimpressa</i>	Clokey	Cyperaceae	CLOKEY'S LAKE SEDGE	[OBL]	sedge	PE	MONO	partial
CRPCAR	5	<i>Carpinus caroliniana</i>	Walter	Betulaceae	BLUE-BEECH	FAC	sm tree	W	DI	shade
CARCAR	*	<i>CARUM CARVI</i>	L.	Apiaceae	CARAWAY	[UPL]	forb	BI	DI	advent
CARCOR	5	<i>Carya cordiformis</i>	(Wangenh.) K. Koch	Juglandaceae	BITTERNUT HICKORY	FACU+	tree	W	DI	tree
CARGLA	5	<i>Carya glabra</i>	(Mill.) Sweet	Juglandaceae	PIGNET HICKORY	FACU-	tree	W	DI	tree
CARLAC	7	<i>Carya laciniosa</i>	(F. Michx.) Loudon	Juglandaceae	SHELLBARK HICKORY	FAC	tree	W	DI	tree
CAROVL	5	<i>Carya ovalis</i>	(Wangenh.) Sarg.	Juglandaceae	SWEET PIGNUT HICKORY	[UPL]	tree	W	DI	tree
CAROVY	6	<i>Carya ovata</i>	(Miller) K. Koch	Juglandaceae	SHAGBARK HICKORY	FACU-	tree	W	DI	tree
CARTOM	6	<i>Carya tomentosa</i>	(Poir.) Nutt.	Juglandaceae	MOCKERNUT HICKORY	[UPL]	tree	W	DI	tree
CASDEN	6	<i>Castanea dentata</i>	(Marshall) Borkh.	Fagaceae	AMERICAN CHESTNUT	[UPL]	tree	W	DI	tree
CASCOC	6	<i>Castilleja coccinea</i>	(L.) Spreng.	Scrophulariaceae	INDIAN PAINTBRUSH	FAC	forb	AN	DI	full
CATBIG	*	<i>CATALPA BIGNONIODES</i>	Walter	Bignoniaceae	SOUTHERN CATALPA	UPL	tree	W	DI	advent
CATSPE	*	<i>CATALPA SPECIOSA</i>	(Warder) Warder ex Engelm.	Bignoniaceae	NORTHERN CATALPA	FAC	tree	W	DI	advent
CAUTHA	7	<i>Caulophyllum thalictroides</i>	(L.) Michx.	Berberidaceae	BLUE COHOSH	[UPL]	forb	PE	DI	shade
CEAAME	5	<i>Ceanothus americanus</i>	L.	Rhamnaceae	NEW JERSEY TEA	[UPL]	shrub	W	DI	full
CEAHER	9	<i>Ceanothus herbaceus</i>	Raf.	Rhamnaceae	PRAIRIE-REDROOT	[UPL]	shrub	W	DI	full
CELORB	*	<i>CELASTRUS ORBICULATUS</i>	Thunb.	Celastraceae	ORIENTAL BITTERSWEET	FACU	vine	W	DI	advent
CELSCA	2	<i>Celastrus scandens</i>	L.	Celastraceae	BITTERSWEET	FACU-	vine	W	DI	shade
CELARG	*	<i>CELOSIA ARGENTEA</i>	L.	Amaranthaceae	COCK'S COMB	[UPL]	forb	AN	DI	advent
CELOCC	4	<i>Celtis occidentalis</i>	L.	Ulmaceae	HACKBERRY	FACU	tree	W	DI	tree
CELTEN	8	<i>Celtis tenuifolia</i>	Nutt.	Ulmaceae	DWARF HACKBERRY	[UPL]	tree	W	DI	tree
CENLON	3	<i>Cenchrus longispinus</i>	(Hack.) Fernald	Poaceae	COMMON SANDBUR	[UPL]	grass	AN	MONO	full
CENCYA	*	<i>CENTAUREA CYANUS</i>	L.	Asteraceae	CORNFLOWER	[UPL]	forb	AN	DI	advent
CENDUB	*	<i>CENTAUREA DUBIA</i>	Suter	Asteraceae	SHORT-FRINGED KNAPWEED	[UPL]	forb	PE	DI	advent
CENJAC	*	<i>CENTAUREA JACEA</i>	L.	Asteraceae	BROWN KNAPWEED	[UPL]	forb	PE	DI	advent
CENMAC	*	<i>CENTAUREA MACULOSA</i>	Lam.	Asteraceae	SPOTTED KNAPWEED	[UPL]	forb	BI	DI	advent
CENNIG	*	<i>CENTAUREA NIGRA</i>	L.	Asteraceae	BLACK KNAPWEED	[UPL]	forb	PE	DI	advent
CENPUL	*	<i>CENTAURIUM PULCHELLUM</i>	(Sw.) Druce	Gentianaceae	BRANCHING CENTAURY	FAC	forb	AN	DI	advent
CENMIN	8	<i>Centunculus minimus</i>	L.	Primulaceae	CHAFFWEED	FACW	forb	AN	DI	full
CEPOCC	6	<i>Cephalanthus occidentalis</i>	L.	Rubiaceae	BUTTONBUSH	OBL	shrub	W	DI	full

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
CERARV	2	<i>Cerastium arvense</i>	L.	Caryophyllaceae	FIELD CHICKWEED	UPL	forb	PE	DI	full
CERBRA	*	<i>CERASTIUM BRACHYPETALUM</i>	Pers.	Caryophyllaceae	GRAY CHICKWEED	[UPL]	forb	AN	DI	advent
CERNUT	3	<i>Cerastium nutans</i>	Raf.	Caryophyllaceae	NODDING MOUSE-EAR CHICKWEED	FAC	forb	AN	DI	full
CERPUM	*	<i>CERASTIUM PUMILUM</i>	Curtis	Caryophyllaceae	CURTIS' MOUSE-EAR CHICKWEED	[UPL]	forb	AN	DI	advent
CERSEM	*	<i>CERASTIUM SEMIDECANDRUM</i>	L.	Caryophyllaceae	SMALL MOUSE-EAR CHICKWEED	[UPL]	forb	AN	DI	advent
CERVIS	*	<i>CERASTIUM VISCOSUM</i>	L.	Caryophyllaceae	CLAMMY CHICKWEED	[UPL]	forb	AN	DI	advent
CERVUL	*	<i>CERASTIUM VULGATUM</i>	L.	Caryophyllaceae	COMMON CHICKWEED	FACU-	forb	PE	DI	advent
CERDEM	2	<i>Ceratophyllum demersum</i>	L.	Ceratophyllaceae	COONTAIL	OBL	forb	PE	DI	full
CERECH	8	<i>Ceratophyllum echinatum</i>	A. Gray	Ceratophyllaceae	PRICKLY HORNWORT	[OBL]	forb	PE	DI	full
CERCAN	3	<i>Cercis canadensis</i>	L.	Caesalpiniaceae	REDBUD	FACU-	sm tree	W	DI	shade
CHAMIN	*	<i>CHAENORRHINUM MINUS</i>	(L.) Lange	Scrophulariaceae	DWARF SNAPDRAGON	[UPL]	forb	AN	DI	advent
CHAPRO	4	<i>Chaerophyllum procumbens</i>	(L.) Crantz	Apiaceae	WILD CHERVIL	FACW	forb	AN	DI	shade
CHAFAS	3	<i>Chamaecrista fasciculata</i>	(Michx.) Greene	Fabaceae	PARTRIDGE-PEA	FACU	forb	AN	DI	full
CHANIC	4	<i>Chamaecrista nictitans</i>	(L.) Moench	Fabaceae	WILD SENSITIVE PLANT	FACU-	forb	AN	DI	full
CHACAL	9	<i>Chamaedaphne calyculata</i>	(L.) Moench	Ericaceae	LEATHER-LEAF	OBL	shrub	W	DI	full
CHALUT	7	<i>Chamaelirium luteum</i>	(L.) A. Gray	Liliaceae	DEVIL'S BIT	FAC	forb	PE	MONO	shade
CHALAT	7	<i>Chasmanthium latifolium</i>	(Michx.) H.O. Yates	Poaceae	WILD RIVER OATS	FACU	grass	PE	MONO	partial
CHEMAJ	*	<i>CHELIDONIUM MAJUS</i>	L.	Papaveraceae	CELANDINE	UPL	forb	BI	DI	advent
CHEGLA	6	<i>Chelone glabra</i>	L.	Scrophulariaceae	TURTLEHEAD	OBL	forb	PE	DI	partial
CHEALB	*	<i>CHENOPODIUM ALBUM</i>	L.	Chenopodiaceae	LAMB'S-QUARTERS	FACU+	forb	AN	DI	advent
CHEAMB	*	<i>CHENOPODIUM AMBROSIOIDES</i>	L.	Chenopodiaceae	MEXICAN-TEAW	FACU	forb	AN	DI	advent
CHEBER	1	<i>Chenopodium berlandieri</i>	Moq.	Chenopodiaceae	PITSEED GOOSEFOOT	[UPL]	forb	AN	DI	full
CHEBOT	*	<i>CHENOPODIUM BOTRYS</i>	L.	Chenopodiaceae	JERUSALEM-OAK	UPL	forb	AN	DI	advent
CHECAP	2	<i>Chenopodium capitatum</i>	(L.) Asch.	Chenopodiaceae	STRAWBERRY-BLITE	[UPL]	forb	AN	DI	full
CHEGLA	*	<i>CHENOPODIUM GLAUCUM</i>	L.	Chenopodiaceae	OAK-LEAVED GOOSEFOOT	FACW-	forb	AN	DI	advent
CHELEP	2	<i>Chenopodium leptophyllum</i>	(Moq.) Nutt. ex S. Watson	Chenopodiaceae	SLENDER GOOSEFOOT	FAC	forb	AN	DI	full
CHEMUR	*	<i>CHENOPODIUM MURALE</i>	L.	Chenopodiaceae	NETTLE-LEAVED GOOSEFOOT	[UPL]	forb	AN	DI	advent
CHEPOL	*	<i>CHENOPODIUM POLYSPERMUM</i>	L.	Chenopodiaceae	MANY-SEEDED GOOSEFOOT	[UPL]	forb	AN	DI	advent
CHENPRA	1	<i>Chenopodium pratericola</i>	Rydb.	Chenopodiaceae	FIELD GOOSEFOOT	[UPL]	forb	AN	DI	full
CHESIM	1	<i>Chenopodium simplex</i>	(Torr.) Raf.	Chenopodiaceae	MAPLE-LEAVED GOOSEFOOT	[UPL]	forb	AN	DI	full
CHESTA	4	<i>Chenopodium standleyanum</i>	Aellen	Chenopodiaceae	WOODLAND GOOSEFOOT	[UPL]	forb	AN	DI	full
CHEURB	*	<i>CHENOPODIUM URBICUM</i>	L.	Chenopodiaceae	CITY GOOSEFOOT	[UPL]	forb	AN	DI	advent
CHEVUL	*	<i>CHENOPODIUM VULVARIA</i>	L.	Chenopodiaceae	STINKING GOOSEFOOT	[UPL]	forb	AN	DI	advent
CHIMAC	7	<i>Chimaphila maculata</i>	(L.) Pursh	Pyrolaceae	SPOTTED WINTERGREEN	[UPL]	forb	PE	DI	shade
CHIUMB	8	<i>Chimaphila umbellata</i>	(L.) W.P.C. Barton	Pyrolaceae	PIPSISSEWA	[UPL]	forb	PE	DI	shade
CHIVIR	6	<i>Chionanthus virginicus</i>	L.	Oleaceae	FRINGE-TREE	FAC+	sm tree	W	DI	partial
CHRBAL	*	<i>CHRYSANTHEMUM BALSAMITA</i>	L.	Asteraceae	COSTMARY	[UPL]	forb	PE	DI	advent
CHRLEU	*	<i>CHRYSANTHEMUM LEUCANTHEMUM</i>	L.	Asteraceae	OX-EYE DAISY	[UPL]	forb	PE	DI	advent
CHRPAR	*	<i>CHRYSANTHEMUM PARTHENIUM</i>	(L.) Bernh.	Asteraceae	FEVERFEW	[UPL]	forb	PE	DI	advent
CHRVIR	6	<i>Chrysogonum virginianum</i>	L.	Asteraceae	GOLDEN-KNEES	[UPL]	forb	PE	DI	shade
CHRGRA	9	<i>Chrysopsis graminifolia</i>	(Michx.) Elliott	Asteraceae	GRASS-LEAVED GOLDEN ASTER	[UPL]	forb	PE	DI	full
CHRMAR	6	<i>Chrysopsis mariana</i>	(L.) Elliott	Asteraceae	GOLDEN ASTER	UPL	forb	PE	DI	full
CHROME	8	<i>Chrysosplenium americanum</i>	Schwein. ex Hook.	Saxifragaceae	GOLDEN-SAXIFRAGE	OBL	forb	PE	DI	shade
CICINT	*	<i>CICHORIUM INTYBUS</i>	L.	Asteraceae	CHICORY	[UPL]	forb	PE	DI	advent
CICBUL	3	<i>Cicuta bulbifera</i>	L.	Apiaceae	BULBLET-BEARING WATER-HEML.	OBL	forb	PE	DI	full
CICMAC	3	<i>Cicuta maculata</i>	L.	Apiaceae	WATER-HEMLOCK	OBL	forb	PE	DI	full
CIMRAC	7	<i>Cimicifuga racemosa</i>	(L.) Nutt.	Ranunculaceae	BLACK SNAKEROOT	[FACU]	forb	PE	DI	shade
CINARU	4	<i>Cinna arundinacea</i>	L.	Poaceae	COMMON WOOD-REED	FACW	grass	PE	MONO	shade
CINLAT	8	<i>Cinna latifolia</i>	(Trevir. ex R. Geopp.) Griseb.	Poaceae	NORTHERN WOOD-REED	FACW	grass	PE	MONO	shade
CIRALP	9	<i>Circaea alpina</i>	L.	Onagraceae	SMALL ENCHANTER'S NIGHTSH.	FACW	forb	PE	DI	shade
CIRLUT	3	<i>Circaea lutetiana</i>	L.	Onagraceae	ENCHANTER'S-NIGHTSHADE	FACU	forb	PE	DI	shade
CIRALT	4	<i>Cirsium altissimum</i>	(L.) Hill	Asteraceae	TALL THISTLE	[UPL]	forb	PE	DI	full
CIRARV	*	<i>CIRSIUM ARVENSE</i>	(L.) Scop.	Asteraceae	CANADA THISTLE	FACU	forb	PE	DI	advent
CIRCAR	7	<i>Cirsium carolinianum</i>	(Walt.) Fernald & B.G. Schub.	Asteraceae	CAROLINA THISTLE	[UPL]	forb	BI	DI	full

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CIRDIS	4	<i>Cirsium discolor</i>	(Muhl. ex Willd.) Spreng.	Asteraceae	FIELD THISTLE	UPL	forb	PE	DI	full
CIRMUT	8	<i>Cirsium muticum</i>	Michx.	Asteraceae	SWAMP THISTLE	OBL	forb	BI	DI	full
CIRPUM	4	<i>Cirsium pumilum</i>	(Nutt.) Spreng.	Asteraceae	PASTURE THISTLE	[UPL]	forb	BI	DI	full
CIRVUL	*	<i>CIRSIUM VULGARE</i>	(Savi) Ten.	Asteraceae	BULL THISTLE	FACU-	forb	BI	DI	advent
CLAMAR	9	<i>Cladium mariscoides</i>	(Muhl.) Torr.	Cyperaceae	TWIG-RUSH	OBL	sedge	PE	MONO	full
CLACAR	6	<i>Claytonia caroliniana</i>	Michx.	Portulacaceae	CAROLINA SPRING-BEAUTY	FACU	forb	PE	DI	shade
CALVIR	2	<i>Claytonia virginica</i>	L.	Portulacaceae	SPRING-BEAUTY	FACU	forb	PE	DI	shade
CLEOCC	9	<i>Clematis occidentalis</i>	(Hornem.) DC.	Ranunculaceae	PURPLE VIRGIN'S-BOWER	[UPL]	forb	PE	DI	partial
CLEVIO	6	<i>Clematis viorna</i>	L.	Ranunculaceae	LEATHER-FLOWER	[FAC-]	forb	PE	DI	partial
CLEVIR	3	<i>Clematis virginiana</i>	L.	Ranunculaceae	VIRGIN'S-BOWER	FAC	forb	PE	DI	partial
CLEHAS	*	<i>CLEOME HASSLERIANA</i>	Chodat	Capparaceae	SPIDER-FLOWER	[FACU-]	forb	AN	DI	advent
CLIVUL	2	<i>Clinopodium vulgare</i>	L.	Lamiaceae	WILD BASIL	[UPL]	forb	PE	DI	shade
CLIBOR	10	<i>Clintonia borealis</i>	(Aiton) Raf.	Liliaceae	BLUE BEAD-LILY	FAC	forb	PE	MONO	shade
CLIUMB	6	<i>Clintonia umbellulata</i>	(Michx.) Morong	Liliaceae	SPECKLED WOOD-LILY	[UPL]	forb	PE	MONO	shade
CLIMAR	6	<i>Clitoria mariana</i>	L.	Fabaceae	BUTTERFLY-PEA	[UPL]	forb	PE	DI	partial
COEVIR	8	<i>Coeloglossum viride</i> (L.) Hartman var. <i>virescens</i>	(Muhl. ex Willd.) Luer	Orchidaceae	LONG-BRACTED ORCHID	[FACU]	forb	PE	MONO	shade
COLVER	8	<i>Collinsia verna</i>	Nutt.	Scrophulariaceae	BLUE-EYED MARY	FAC-	forb	AN	DI	shade
COLCAN	5	<i>Collinsia canadensis</i>	L.	Lamiaceae	RICH WEED	FAC+	forb	PE	DI	shade
COLVER	9	<i>Collinsia verticillata</i>	Baldwin	Lamiaceae	EARLY STONEROOT	[UPL]	forb	PE	DI	shade
COLLIN	*	<i>COLLOMIA LINEARIS</i>	Nutt.	Polemoniaceae	SLENDER GLIA	FACU	forb	AN	DI	advent
COMUMB	5	<i>Comandra umbellata</i>	(L.) Nutt.	Santalaceae	BASTARD TOAD-FLAX	FACU-	forb	PE	DI	full
COMCOM	*	<i>COMMELINA COMMUNIS</i>	L.	Commelinaceae	COMMON DAY-FLOWER	FAC-	forb	AN	DI	advent
COMDIF	*	<i>COMMELINA DIFFUSA</i>	Burm. f.	Commelinaceae	SPREADING DAY-FLOWER	FACW	forb	AN	DI	advent
COMVIR	6	<i>Commelina virginica</i>	L.	Commelinaceae	VIRGINIA DAY-FLOWER	FACW	forb	PE	DI	shade
COMPER	8	<i>Comptonia peregrina</i>	(L.) J. M. Coulter	Myricaceae	SWEET-FERN	[UPL]	shrub	W	DI	full
CONCHI	8	<i>Conioselinum chinense</i>	(L.) B.S.P.	Apiaceae	HEMLOCK-PARSLEY	FACW	forb	PE	DI	full
CONMACU	*	<i>CONIUM MACULATUM</i>	L.	Apiaceae	POISON-HEMLOCK	FACW	forb	BI	DI	advent
CONAME	7	<i>Conopholis americana</i>	(L.) Wallr.	Orobanchaceae	SQUAWROOT	[UPL]	forb	AN	DI	shade
CONORI	*	<i>CONRINGIA ORIENTALIS</i>	(L.) Andr.	Brassicaceae	HARE'S-EAR MUSTARD	[UPL]	forb	AN	DI	advent
CONMAJ	*	<i>CONVALLARIA MAJALIS</i>	L.	Liliaceae	LILY-OF-THE-VALLEY	[UPL]	forb	PE	DI	advent
CONARV	*	<i>CONVOLVULUS ARVENSIS</i>	L.	Convolvulaceae	FIELD BINDWEED	[UPL]	forb	PE	DI	advent
CONCAN	0	<i>Conyza canadensis</i>	(L.) Cronquist	Asteraceae	HORSEWEED	UPL	forb	AN	DI	full
CONRAM	9	<i>Conyza ramosissima</i>	Cronquist	Asteraceae	BUSHY HORSEWEED	[UPL]	forb	AN	DI	full
COPTRI	7	<i>Coptis trifolia</i>	(L.) Salisb.	Ranunculaceae	GOLDTHREAD	FACW	forb	PE	DI	shade
CORMAC	5	<i>Corallorhiza maculata</i>	(Raf.) Raf.	Orchidaceae	SPOTTED CORAL-ROOT	FACU	forb	PE	MONO	shade
CORODO	4	<i>Corallorhiza odontorhiza</i>	(Willd.) Poir.	Orchidaceae	FALL CORAL-ROOT	[UPL]	forb	PE	MONO	shade
CORTRI	9	<i>Corallorhiza trifida</i>	Chatel.	Orchidaceae	EARLY CORAL-ROOT	FACW	forb	PE	MONO	shade
CORWIS	6	<i>Corallorhiza wisteriana</i>	Conrad	Orchidaceae	SPRING CORAL-ROOT	FAC	forb	PE	MONO	shade
CORGRA	*	<i>COREOPSIS GRANDIFLORA</i>	R. Hogg. ex Sweet	Asteraceae	LARGE-FLOWERED TICKSEED	[UPL]	forb	PE	DI	advent
CORLAN	*	<i>COREOPSIS LANCEOLATA</i>	L.	Asteraceae	LONG-STALKED TICKSEED	FACU	forb	PE	DI	advent
CORMAJ	7	<i>Coreopsis major</i>	Walter	Asteraceae	FOREST TICKSEED	[UPL]	forb	PE	DI	shade
CORTIN	*	<i>COREOPSIS TINCTORIA</i>	Nutt.	Asteraceae	PLAINS TICKSEED	FAC-	forb	AN	DI	advent
CORTRP	5	<i>Coreopsis tripteris</i>	L.	Asteraceae	TALL TICKSEED	FAC	forb	PE	DI	partial
CORHYS	*	<i>CORISPERMUM HYSSOPIFOLIUM</i>	L.	Chenopodiaceae	BUGSEED	FACU	forb	AN	DI	advent
CORNIT	*	<i>CORISPERMUM NITIDUM</i>	Kit. ex Schult.	Chenopodiaceae	NEAT BUGSEED	[FACU]	forb	AN	DI	advent
CORALT	5	<i>Cornus alternifolia</i>	L.f.	Cornaceae	ALTERNATE-LEAVED DOGWOOD	[UPL]	shrub	W	DI	shade
CORAMO	2	<i>Cornus amomum</i>	Mill.	Cornaceae	SILKY DOGWOOD	FACW	shrub	W	DI	full
CORCAN	8	<i>Cornus canadensis</i>	L.	Cornaceae	BUNCHBERRY	FAC-	shrub	W	DI	shade
CORDRU	3	<i>Cornus drummondii</i>	C.A. Mey.	Cornaceae	ROUGH-LEAVED DOGWOOD	FAC	shrub	W	DI	partial
CORFLO	5	<i>Cornus florida</i>	L.	Cornaceae	FLOWERING DOGWOOD	FACU-	sm tree	W	DI	shade
CORRAC	1	<i>Cornus racemosa</i>	Lam.	Cornaceae	GRAY DOGWOOD	FAC-	shrub	W	DI	full
CORRUG	8	<i>Cornus rugosa</i>	Lam.	Cornaceae	ROUND-LEAVED DOGWOOD	[UPL]	shrub	W	DI	full
CORSER	3	<i>Cornus sericea</i>	L.	Cornaceae	RED-OSIER DOGWOOD	FACW+	shrub	W	DI	full
CORVAR	*	<i>CORONILLA VARIA</i>	L.	Fabaceae	CROWN-VETCH	[UPL]	forb	PE	DI	advent

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CORDID	*	<i>CORONOPUS DIDYMUS</i>	(L.) Sm.	Brassicaceae	SWINE CRESS	[UPL]	forb	AN	DI	advent
CORFLA	4	<i>Corydalis flavula</i>	(Raf.) DC.	Fumariaceae	YELLOW HARLEQUIN	FACU	forb	AN	DI	partial
CORSEM	9	<i>Corydalis sempervirens</i>	(L.) Pers.	Fumariaceae	ROCK-HARLEQUIN	[UPL]	forb	BI	DI	shade
CORAME	4	<i>Corylus americana</i>	Walter	Betulaceae	AMERICAN HAZEL	FACU-	shrub	W	DI	full
CORCOR	7	<i>Corylus cornuta</i>	Marshall	Betulaceae	BEAKED HAZEL	FACU-	shrub	W	DI	full
CRABRA	6	<i>Crataegus brainerdii</i>	Sarg.	Rosaceae	BRAINERD'S HAWTHORN	[UPL]	sm tree	W	DI	full
CRACAL	4	<i>Crataegus calpodendron</i>	(Ehrh.) Medik.	Rosaceae	PEAR HAWTHORN	[UPL]	sm tree	W	DI	full
CRACHR	6	<i>Crataegus chrysocarpa</i>	Ashe	Rosaceae	FIREBERRY HAWTHORN	[UPL]	sm tree	W	DI	full
CRACOC	3	<i>Crataegus coccinea</i>	L.	Rosaceae	SCARLET HAWTHORN	[UPL]	sm tree	W	DI	full
CRACRU	3	<i>Crataegus crus-galli</i>	L.	Rosaceae	COCKSPUR	FACU	sm tree	W	DI	full
CRAFLA	3	<i>Crataegus flabellata</i>	(Spach) G. Kirchn.	Rosaceae	FANLEAVED HAWTHORN	[UPL]	sm tree	W	DI	full
CRAINT	4	<i>Crataegus intricata</i>	Lange	Rosaceae	BILTMORE HAWTHORN	[UPL]	sm tree	W	DI	full
CRAMOL	3	<i>Crataegus mollis</i>	Scheele	Rosaceae	DOWNY HAWTHORN	FACU	sm tree	W	DI	full
CRAMON	*	<i>CRATAEGUS MONOGYNA</i>	Jacq.	Rosaceae	ONE-SEEDED HAWTHORN	[UPL]	sm tree	W	DI	advent
CRAPHA	*	<i>CRATAEGUS PHAENOPYRUM</i>	(L.f.) Medik.	Rosaceae	WASHINGTON HAWTHORN	FAC	sm tree	W	DI	advent
CRAPRU	2	<i>Crataegus pruinosa</i>	(H.L. Wendl.) K. Koch	Rosaceae	FROSTED HAWTHORN	[UPL]	sm tree	W	DI	full
CRAPUN	3	<i>Crataegus punctata</i>	Jacq.	Rosaceae	DOTTED HAWTHORN	[UPL]	sm tree	W	DI	full
CRASUC	4	<i>Crataegus succulenta</i>	Schrad. ex Link	Rosaceae	FLESHY HAWTHORN	[UPL]	sm tree	W	DI	full
CRAUNI	8	<i>Crataegus uniflora</i>	Muenchh.	Rosaceae	DWARF HAWTHORN	[UPL]	sm tree	W	DI	full
CRECAP	*	<i>CREPIS CAPILLARIS</i>	(L.) Wallr.	Asteraceae	SMOOTH HAWK'S-BEARD	[UPL]	forb	AN	DI	advent
CREPUL	*	<i>CREPIS PULCHRA</i>	L.	Asteraceae	HANDSOME HAWK'S-BEARD	[UPL]	forb	AN	DI	advent
CROSAG	*	<i>CROTALARIA SAGITTALIS</i>	L.	Fabaceae	RATTLEBOX	[UPL]	forb	AN	DI	advent
CROCAP	*	<i>CROTON CAPITATUS</i>	Michx.	Euphorbiaceae	WOOLLY CROTON	[UPL]	forb	AN	DI	advent
CROGLA	0	<i>Croton glandulosus</i>	L.	Euphorbiaceae	NORTHERN CROTON	[UPL]	forb	AN	DI	full
CROMON	*	<i>CROTON MONANTHOGYNUS</i>	Michx.	Euphorbiaceae	PRAIRIE-TEA	[UPL]	forb	AN	DI	advent
CRYCAN	3	<i>Cryptotaenia canadensis</i>	(L.) DC.	Apiaceae	HONEWORT	FAC	forb	PE	DI	shade
CUNORI	6	<i>Cunila origanoides</i>	(L.) Britton	Lamiaceae	DITTANY	[UPL]	forb	PE	DI	shade
CUPVIS	3	<i>Cuphea viscosissima</i>	Jacq.	Lythraceae	BLUE WAX-WEED	FAC-	forb	AN	DI	full
CUSCEP	6	<i>Cuscuta cephalanthi</i>	Engelm.	Cuscutaceae	BUTTONBUSH DODDER	[UPL]	forb	AN	DI	full
CUSCOM	8	<i>Cuscuta compacta</i>	Juss ex Choisy	Cuscutaceae	SESSILE DODDER	[UPL]	forb	AN	DI	full
CUSCOR	5	<i>Cuscuta coryli</i>	Engelm.	Cuscutaceae	HAZEL DODDER	[UPL]	forb	AN	DI	full
CUSCUS	8	<i>Cuscuta cuspidata</i>	Engelm.	Cuscutaceae	CUSPIDATE DODDER	[FACW]	forb	AN	DI	full
CUSEPI	*	<i>CUSCUTA EPITHYMUM</i>	L.	Cuscutaceae	CLOVER DODDER	[UPL]	forb	AN	DI	advent
CUSGLO	9	<i>Cuscuta glomerata</i>	Choisy	Cuscutaceae	COMPOSITE DODDER	[FAC]	forb	AN	DI	full
CUSGRO	3	<i>Cuscuta gronovii</i>	Willd. ex Schulte	Cuscutaceae	COMMON DODDER	[FACW+]	forb	AN	DI	full
CUSIND	8	<i>Cuscuta indecora</i>	Choisy	Cuscutaceae	PRETTY DODDER	[FAC]	forb	AN	DI	full
CUSPEN	3	<i>Cuscuta pentagona</i>	Engelm.	Cuscutaceae	FIVE-ANGLED DODDER	[UPL]	forb	AN	DI	full
CUCPOL	5	<i>Cuscuta polygonorum</i>	Engelm.	Cuscutaceae	SMARTWEED DODDER	[UPL]	forb	AN	DI	full
CYCATR	*	<i>CYCLOLOMA ATRIPLICIFOLIUM</i>	(Spreng.) J.M. Coult.	Chenopodiaceae	WINGED PIGWEED	FACU-	forb	AN	DI	advent
CYNDAC	*	<i>CYNODON DACTYLON</i>	(L.) Pers.	Poaceae	BERMUDA GRASS	FACU	grass	PE	DI	advent
CYNOFF	*	<i>CYNOGLOSSUM OFFICINALE</i>	L.	Boraginaceae	HOUD'S TONGUE	[UPL]	forb	BI	MONO	advent
CYNVIRB	5	<i>Cynoglossum virginianum</i> L. var. <i>boreale</i>	(Fernald) Cooperrider	Boraginaceae	NORTHERN WILD COMFREY	[UPL]	forb	PE	MONO	shade
CYNVIRV	5	<i>Cynoglossum virginianum</i> var. <i>virginianum</i>	L.	Boraginaceae	SOUTHERN WILD COMFREY	[UPL]	forb	PE	MONO	shade
CYNCRI	*	<i>CYNOSURUS CRISTATUS</i>	L.	Poaceae	DOG'S-TAIL GRASS	UPL	grass	PE	DI	advent
CYPACU	8	<i>Cyperus acuminatus</i>	Torr. & Hook. ex Torr.	Cyperaceae	PALE UMBRELLA-SEDGE	OBL	sedge	AN	MONO	full
CYPBIP	3	<i>Cyperus bipartitus</i>	Torr.	Cyperaceae	UMBRELLA-SEDGE	FACW+	sedge	AN	MONO	full
CYPDIA	7	<i>Cyperus diandrus</i>	Torr.	Cyperaceae	LOW UMBRELLA-SEDGE	FACW	sedge	AN	MONO	full
CYPERY	4	<i>Cyperus erythrorhizos</i>	Muhl.	Cyperaceae	RED-ROOTED UMBRELLA-SEDGE	FACW+	sedge	AN	MONO	full
CYPESC	0	<i>Cyperus esculentus</i>	L.	Cyperaceae	YELLOW NUT-SEDGE	FACW	sedge	PE	MONO	full
CYPFLA	3	<i>Cyperus flavescens</i>	L.	Cyperaceae	YELLOW UMBRELLA-SEDGE	OBL	sedge	AN	MONO	full
CYPLAN	4	<i>Cyperus lancastricensis</i>	Porter ex A. Gray	Cyperaceae	MANY-FLOWERED UMBRELLA-S.	FACU	sedge	PE	MONO	full
CYPLUP	4	<i>Cyperus lupulinus</i>	(Spreng.) Marks	Cyperaceae	SLENDER UMBRELLA-SEDGE	[UPL]	sedge	PE	MONO	full
CYPODO	4	<i>Cyperus odoratus</i>	L.	Cyperaceae	RUSTY UMBRELLA-SEDGE	FACW	sedge	AN	MONO	full
CYPREF	6	<i>Cyperus refractus</i>	Engelm. ex Boeck	Cyperaceae	REFLEXED UMBRELLA-SEDGE	FACU+	sedge	PE	MONO	full

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CYPRTF	4	<i>Cyperus retrofractus</i>	(L.) Torr.	Cyperaceae	ROUGH UMBRELLA-SEDGE	[UPL]	sedge	PE	MONO	full
CYPSCH	10	<i>Cyperus schweinitzii</i>	Torr.	Cyperaceae	SCHWEINITZ'S UMBRELLA-SEDGE	FACU	sedge	PE	MONO	full
CYPSQU	3	<i>Cyperus squarrosus</i>	L.	Cyperaceae	AWNED UMBRELLA-SEDGE	FACW+	sedge	AN	MONO	full
CYPSTR	1	<i>Cyperus strigosus</i>	L.	Cyperaceae	STRAW-COLORED UMBRELLA-S.	FACW	sedge	PE	MONO	full
CYPACA	8	<i>Cypripedium acaule</i>	Aiton	Orchidaceae	MOCCASIN-FLOWER	FACU	forb	PE	MONO	partial
CYPCAN	9	<i>Cypripedium candidum</i>	Muhl. ex Willd.	Orchidaceae	WHITE LADY'S-SLIPPER	OBL	forb	PE	MONO	partial
CYPPRP	7	<i>Cypripedium parviflorum</i> Salisb. var. <i>pubescens</i>	(Willd.) O.W. Knight	Orchidaceae	LARGE YELLOW LADY'S-SLIPPER	FAC+	forb	PE	MONO	partial
CYPPRPA	10	<i>Cypripedium parviflorum</i> var. <i>parviflorum</i>	Salisb.	Orchidaceae	SMALL YELLOW LADY'S-SLIPPER	FACW-	forb	PE	MONO	partial
CYPREG	10	<i>Cypripedium reginae</i>	Walter	Orchidaceae	SHOWY LADY'S-SLIPPER	FACW	forb	PE	MONO	partial
CYSBUL	7	<i>Cystopteris bulbifera</i>	(L.) Bernh.	Dryopteridaceae	BULBLET FERN	FAC	fern	PE	SVP	shade
CYSFRA	7	<i>Cystopteris fragilis</i>	(L.) Bernh.	Dryopteridaceae	BRITTLE BLADDER FERN	FACU	fern	PE	SVP	shade
CYSPRO	5	<i>Cystopteris protusa</i>	(Weath.) Blasdell	Dryopteridaceae	LOWLAND BLADDER FERN	[UPL]	fern	PE	SVP	shade
CYSTNN	6	<i>Cystopteris tennesseensis</i>	Shaver	Dryopteridaceae	TENNESSEE BLADDER FERN	[UPL]	fern	PE	SVP	shade
CYSTEN	5	<i>Cystopteris tenuis</i>	(Michx.) Desv.	Dryopteridaceae	BLADDER FERN	[UPL]	fern	PE	SVP	shade
DACGLO	*	<i>DACTYLIS GLOMERATA</i>	L.	Poaceae	ORCHARD GRASS	FACU	grass	PE	MONO	advent
DALPUR	9	<i>Dalea purpurea</i>	Vent.	Fabaceae	PURPLE PRAIRIE-CLOVER	[UPL]	forb	PE	MONO	full
DALREP	8	<i>Dalibarda repens</i>	L.	Rosaceae	ROBIN-RUN-AWAY	FAC	forb	PE	DI	shade
DANCOM	4	<i>Danthonia compressa</i>	Austin ex Peck	Poaceae	FLATTENED WILD OAT GRASS	FACU-	grass	PE	MONO	shade
DANSPI	4	<i>Danthonia spicata</i>	(L.) P. Beauv. ex Roem. & Schult.	Poaceae	POVERTY OAT GRASS	[UPL]	grass	PE	MONO	shade
DASMAC	5	<i>Dasistoma macrophylla</i>	(Nutt.) Raf.	Scrophulariaceae	MULLEIN-FOXGLOVE	FACU	forb	PE	DI	shade
DATSTR	*	<i>DATURA STRAMONIUM</i>	L.	Solanaceae	JIMSONWEED	[UPL]	forb	AN	DI	advent
DAUCAR	*	<i>DAUCUS CAROTA</i>	L.	Apiaceae	QUEEN-ANNE'S-LACE	[UPL]	forb	BI	DI	advent
DECVER	6	<i>Decodon verticillatus</i>	(L.) Elliott	Lythraceae	SWAMP LOOSESTRIFE	OBL	forb	PE	DI	full
DELAMB	*	<i>DELPHINIUM AMBIGUUM</i>	L.	Ranunculaceae	ROCKET LARKSPUR	[UPL]	forb	AN	DI	advent
DELEXA	7	<i>Delphinium exaltatum</i>	Aiton	Ranunculaceae	TALL LARKSPUR	[FACU]	forb	PE	DI	shade
DELTRI	4	<i>Delphinium tricorne</i>	Michx.	Ranunculaceae	DWARF LARKSPUR	[UPL]	forb	PE	DI	shade
DENPUN	6	<i>Dennstaedtia punctilobula</i>	(Michx.) T. Moore	Dennstaedtiaceae	HAY-SCENTED FERN	UPL	fern	PE	SVP	shade
DESCES	10	<i>Deschampsia cespitosa</i>	(L.) P. Beauv.	Poaceae	TUFTED HAIRGRASS	FACW	grass	PE	MONO	full
DESFLA	8	<i>Deschampsia flexuosa</i>	(L.) Trin.	Poaceae	CRINKLED HAIRGRASS	[UPL]	grass	PE	MONO	full
DESPINB	8	<i>Descurainia pinnata</i> (Walt.) Britt. var. <i>brachycarpa</i>	(Richardson) Fernald	Brassicaceae	TANSY-MUSTARD	[UPL]	forb	AN	DI	full
DESPINP	*	<i>DESCURAINIA PINNATA</i> var. <i>PINNATA</i>	(Walt.) Britt.	Brassicaceae	TANSY-MUSTARD	[UPL]	forb	AN	DI	advent
DESSOP	*	<i>DESCURAINIA SOPHIA</i>	(L.) Webb ex Prantl	Brassicaceae	HERB SOPHIA	[UPL]	forb	AN	DI	advent
DSMILL	3	<i>Desmanthus illinoensis</i>	(Michx.) MacMill.	Mimosaceae	PRAIRIE BUNDLE-FLOWER	FAC	forb	PE	DI	full
DESCNA	4	<i>Desmodium canadense</i>	(L.) DC.	Fabaceae	CANADA TICK-TREFOIL	FAC	forb	PE	DI	full
DESCNE	4	<i>Desmodium canescens</i>	(L.) DC.	Fabaceae	HOARY TICK-TREFOIL	[UPL]	forb	PE	DI	full
DESCIL	6	<i>Desmodium ciliare</i>	(Muhl.) DC.	Fabaceae	LITTLE-LEAVED TICK-TREFOIL	[UPL]	forb	PE	DI	full
DESCUS	4	<i>Desmodium cuspidatum</i>	(Muhl. ex Willd.) DC. ex Loudon	Fabaceae	BIG TICK-TREFOIL	[UPL]	forb	PE	DI	partial
DESGLA	6	<i>Desmodium glabellum</i>	(Michx.) DC.	Fabaceae	HAIRY TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DESGLU	5	<i>Desmodium glutinosum</i>	(Muhl. ex Willd.) A.W. Wood	Fabaceae	CLUSTERED-LEAVED TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DESILL	9	<i>Desmodium illinoense</i>	A. Gray	Fabaceae	PRAIRIE TICK-TREFOIL	[UPL]	forb	PE	DI	full
DESLAE	5	<i>Desmodium laevigatum</i>	(Nutt.) DC.	Fabaceae	SMOOTH TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DESMAR	5	<i>Desmodium marilandicum</i>	(L.) DC.	Fabaceae	MARYLAND TICK-TREFOIL	[UPL]	forb	PE	DI	partial
DESNUD	5	<i>Desmodium nudiflorum</i>	(L.) DC.	Fabaceae	NAKED TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DESOBT	7	<i>Desmodium obtusum</i>	(Muhl. ex Willd.) DC.	Fabaceae	STIFF TICK-TREFOIL	[FACU]	forb	PE	DI	full
DESPAN	3	<i>Desmodium paniculatum</i>	(L.) DC.	Fabaceae	SHOWY TICK-TREFOIL	UPL	forb	PE	DI	shade
DESPA	6	<i>Desmodium pauciflorum</i>	(Nutt.) DC.	Fabaceae	FEW-FLOWERED TICK-TREFOIL	[FACU]	forb	PE	DI	shade
DESROT	6	<i>Desmodium rotundifolium</i>	DC.	Fabaceae	ROUND-LEAVED TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DESSSES	8	<i>Desmodium sessilifolium</i>	(Torr.) Torr. & A. Gray	Fabaceae	SESSILE TICK-TREFOIL	[UPL]	forb	PE	DI	full
DESVIR	5	<i>Desmodium viridiflorum</i>	(L.) DC.	Fabaceae	VELVETY TICK-TREFOIL	[UPL]	forb	PE	DI	shade
DIAARM	*	<i>DIANTHUS ARMERIA</i>	L.	Caryophyllaceae	DEPTFORD-PINK	UPL	forb	AN	DI	advent
DIABAR	*	<i>DIANTHUS BARBATUS</i>	L.	Caryophyllaceae	SWEET WILLIAM	[UPL]	forb	PE	DI	advent
DIADL	*	<i>DIANTHUS DELTOIDES</i>	L.	Caryophyllaceae	MAIDEN-PINK	[UPL]	forb	PE	DI	advent
DIAAME	7	<i>Diarrhena americana</i>	P. Beauv. (<i>sensu stricto</i>)	Poaceae	AMERICAN BEAK GRASS	[FAC+]	grass	PE	MONO	shade
DIAOBO	7	<i>Diarrhena obovata</i>	(Gleason) Brandenburg	Poaceae	OBOVATE BEAK GRASS	[FAC+]	grass	PE	MONO	shade

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DICCAN	6	<i>Dicentra canadensis</i>	(Goldie) Walp.	Fumariaceae	SQUIRREL-CORN	[UPL]	forb	PE	DI	shade
DICCUC	6	<i>Dicentra cucullaria</i>	(L.) Bernh.	Fumariaceae	DUTCHMAN'S-BREECHES	[UPL]	forb	PE	DI	shade
DIELON	7	<i>Diervilla lonicera</i>	Mill.	Caprifoliaceae	BUSH-HONEYSUCKLE	[UPL]	shrub	W	DI	full
DIGFIL	4	<i>Digitaria filiformis</i>	(L.) Koeler	Poaceae	SLENDER CRAB GRASS	[UPL]	grass	AN	MONO	full
DIGISC	*	<i>DIGITARIA ISCHAEMUM</i>	(Schreb.) Muhl.	Poaceae	SMOOTH CRAB GRASS	UPL	grass	AN	MONO	advent
DIGSAN	*	<i>DIGITARIA SANGUINALIS</i>	(L.) Scop.	Poaceae	NORTHERN CRAB GRASS	FACU-	grass	AN	MONO	advent
DIOTER	3	<i>Diodia teres</i>	Walter	Rubiaceae	ROUGH BUTTONWEED	[UPL]	forb	AN	DI	full
DIOVIR	8	<i>Diodia virginiana</i>	L.	Rubiaceae	VIRGINIA BUTTONWEED	FACW	forb	AN	DI	full
DIOBAT	*	<i>DIOSCOREA BATATAS</i>	Decne.	Dioscoreaceae	CINNAMON-VINE	[FACU]	vine	PE	DI	advent
DIOQUA	5	<i>Dioscorea quaternata</i>	J.F. Gmel.	Dioscoreaceae	WHORLED-LEAVED YAM	FACU	vine	PE	DI	partial
DIOVIL	4	<i>Dioscorea villosa</i>	L.	Dioscoreaceae	WILD YAM	FAC+	vine	PE	DI	partial
DSPVIR	4	<i>Diospyros virginiana</i>	L.	Ebenaceae	PERSIMMON	FAC-	sm tree	W	DI	shade
DIPDIG	1	<i>Diphasiastrum digitatum</i>	(Dill. ex A. Braun) Holub	Lycopodiaceae	GROUND-PINE	FACU-	fern	PE	SVP	shade
DIPTRI	3	<i>Diphasiastrum tristachyum</i>	(Pursh) Holub	Lycopodiaceae	BLUE GROUND-PINE	[UPL]	fern	PE	SVP	shade
DIPMUR	*	<i>DIPLOTAXIS MURALIS</i>	(L.) DC.	Brassicaceae	SAND ROCKET	[UPL]	forb	AN	DI	advent
DIPTEN	*	<i>DIPLOTAXIS TENUIFOLIA</i>	(L.) DC.	Brassicaceae	WALL ROCKET	[UPL]	forb	PE	DI	advent
DIPFUL	*	<i>DIPSACUS FULLONUM</i>	L.	Dipsacaceae	WILD TEASEL	FACU-	forb	BI	DI	advent
DIPLAC	*	<i>DIPSACUS LACINIATUS</i>	L.	Dipsacaceae	CUT-LEAVED TEASEL	[UPL]	forb	BI	DI	advent
DIRPAL	7	<i>Dirca palustris</i>	L.	Thymelaeaceae	LEATHERWOOD	FAC	sm tree	W	DI	shade
DODMEA	7	<i>Dodecatheon meadia</i>	L.	Primulaceae	SHOOTING STAR	FACU	forb	PE	DI	partial
DRABRA	9	<i>Draba brachycarpa</i>	Nutt. ex Torr. & A. Gray	Brassicaceae	LITTLE WHITLOW-GRASS	[UPL]	forb	AN	DI	full
DRACUN	9	<i>Draba cuneifolia</i>	Nutt. ex Torr. & A. Gray	Brassicaceae	WEDGE-LEAVED WHITLOW-GR.	[UPL]	forb	AN	DI	full
DRAREP	7	<i>Draba reptans</i>	(Lam.) Fernald	Brassicaceae	CAROLINA WHITLOW-GRASS	[UPL]	forb	AN	DI	full
DROINT	9	<i>Drosera intermedia</i>	Hayne	Droseraceae	NARROW-LEAVED SUNDEW	OBL	forb	PE	DI	full
DROROT	7	<i>Drosera rotundifolia</i>	L.	Droseraceae	ROUND-LEAVED SUNDEW	OBL	forb	PE	DI	full
DRYCAR	5	<i>Dryopteris carthusiana</i>	(Vill.) H.P. Fuchs	Dryopteridaceae	SPINULOSE WOOD FERN	FAC+	fern	PE	SVP	shade
DRYCEL	8	<i>Dryopteris celsa</i>	(W. Palmer) Small	Dryopteridaceae	LOG WOOD FERN	OBL	fern	PE	SVP	shade
DRYCLI	8	<i>Dryopteris clintoniana</i>	(DC. Eaton) Dowell	Dryopteridaceae	CLINTON'S WOOD FERN	FACW+	fern	PE	SVP	shade
DRYCRI	8	<i>Dryopteris cristata</i>	(L.) A. Gray	Dryopteridaceae	CRESTED WOOD FERN	FACW+	fern	PE	SVP	shade
DRYFIL	8	<i>Dryopteris filix-mas</i>	L.	Dryopteridaceae	MALE FERN	[UPL]	fern	PE	SVP	shade
DRYGOL	7	<i>Dryopteris goldiana</i>	(Hook. ex Goldie) A. Gray	Dryopteridaceae	GOLDIE'S FERN	FAC+	fern	PE	SVP	shade
DRYINT	6	<i>Dryopteris intermedia</i>	(Muhl. ex Willd.) A. Gray	Dryopteridaceae	EVERGREEN WOOD FERN	FACU	fern	PE	SVP	shade
DRYMAR	5	<i>Dryopteris marginalis</i>	(L.) A. Gray	Dryopteridaceae	MARGINAL WOOD FERN	FACU-	fern	PE	SVP	shade
DUCIND	*	<i>DUCHESNEA INDICA</i>	(Andrews) Focke	Rosaceae	INDIAN-STRAWBERRY	FACU-	forb	PE	DI	advent
DULARU	6	<i>Dulichium arundinaceum</i>	(L.) Britton	Cyperaceae	THREE-WAY SEDGE	OBL	sedge	PE	MONO	full
DYSAP	*	<i>DYSSODIA PAPPOSA</i>	(Vent.) Hitchc.	Asteraceae	STINKING-MARIGOLD	[UPL]	forb	PE	DI	advent
ECHPUR	6	<i>Echinacea purpurea</i>	(L.) Moench	Asteraceae	PURPLE CONEFLOWER	[UPL]	forb	PE	DI	full
ECHCRU	*	<i>ECHINOCHLOA CRUSGALLI</i>	(L.) P. Beauv.	Poaceae	BARNYARD GRASS	FACU	grass	AN	MONO	advent
ECHMUR	3	<i>Echinochloa muricata</i>	(P. Beauv.) Fernald	Poaceae	ROUGH BARNYARD GRASS	FACW+	grass	AN	MONO	full
ECHWAL	6	<i>Echinochloa walteri</i>	(Pursh) A. Heller	Poaceae	WALTER'S MILLET	FACW+	grass	AN	MONO	full
ECHLOB	2	<i>Echinocystis lobata</i>	(Michx.) Torr. & A. Gray	Cucurbitaceae	WILD CUCUMBER	FAC	vine	AN	DI	shade
ECHBER	9	<i>Echinodorus berteroi</i>	(Spreng.) Fassett	Alismataceae	BUR-HEAD	OBL	forb	AN	DI	full
ECHVUL	*	<i>ECHIUM VULGARE</i>	L.	Boraginaceae	VIPER'S BUGLOSS	[UPL]	forb	BI	DI	advent
ECLPRO	3	<i>Eclipta prostrata</i>	(L.) L.	Asteraceae	YERBA-DE-TAJO	FAC	forb	AN	DI	full
ELAANG	*	<i>ELAEAGNUS ANGUSTIFOLIA</i>	L.	Elaeagnaceae	RUSSIAN-OLIVE	FACU	sm tree	W	DI	advent
ELAUMB	*	<i>ELAEAGNUS UMBELLATA</i>	Thun.	Elaeagnaceae	AUTUMN-OLIVE	[FACU]	sm tree	W	DI	advent
ELATRI	10	<i>Elatine triandra</i>	Schkuhr	Elatinaceae	WATERWORT	OBL	forb	AN	DI	full
ELEACI	5	<i>Eleocharis acicularis</i>	(L.) Roem. & Schult.	Cyperaceae	NEEDLE SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELECOM	7	<i>Eleocharis compressa</i>	Sull.	Cyperaceae	FLAT-STEM SPIKE-RUSH	FACW+	sedge	PE	MONO	full
ELEELL	7	<i>Eleocharis elliptica</i>	Kunth	Cyperaceae	YELLOW-SEEDED SPIKE-RUSH	[FACW+]	sedge	PE	MONO	full
ELEENG	9	<i>Eleocharis engelmannii</i>	Steud.	Cyperaceae	ENGELMANN'S SPIKE-RUSH	FACW+	sedge	AN	MONO	full
ELEERY	4	<i>Eleocharis erythropoda</i>	Steud.	Cyperaceae	RED-FOOTED SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEFLAO	8	<i>Eleocharis flavescens</i> (Poir.) Urban var. <i>olivacea</i>	(Torr.) Gleason	Cyperaceae	OLIVACEOUS SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEGEN	9	<i>Eleocharis geniculata</i>	(L.) Roem. & Schult.	Cyperaceae	CARIBBEAN SPIKE-RUSH	FACW	sedge	AN	MONO	full

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ELEINT	7	<i>Eleocharis intermedia</i>	Schult.	Cyperaceae	MATTED SPIKE-RUSH	FACW+	sedge	AN	MONO	full
ELEOBT	1	<i>Eleocharis obtusa</i>	(Willd.) Schult.	Cyperaceae	BLUNT SPIKE-RUSH	OBL	sedge	AN	MONO	full
ELEOVA	9	<i>Eleocharis ovata</i>	(Roth) Roem. & Schult.	Cyperaceae	OVATE SPIKE-RUSH	OBL	sedge	AN	MONO	full
ELEPAL	5	<i>Eleocharis palustris</i>	Britton	Cyperaceae	SMALL'S SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEPAR	9	<i>Eleocharis parvula</i>	(Roem. & Schult.) Link	Cyperaceae	LEAST SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEQUA	4	<i>Eleocharis quadrangulata</i>	(Michx.) Roem. & Schult.	Cyperaceae	FOUR-ANGLED SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEQUI	10	<i>Eleocharis quinqueflora</i>	(Hartmann) O. Scharz	Cyperaceae	FEW-FLOWERED SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEROB	10	<i>Eleocharis robbinsii</i>	Oakes	Cyperaceae	ROBBINS' SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELEROS	10	<i>Eleocharis rostellata</i>	(Torr.) Torr.	Cyperaceae	WALKING SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELETENV	7	<i>Eleocharis tenuis</i> (Willd.) Schult. var. <i>verrucosa</i>	(Svenson) Svenson	Cyperaceae	VERRUCOSE SPIKE-RUSH	[FACW+]	sedge	PE	MONO	full
ELETENT	9	<i>Eleocharis tenuis</i> var. <i>tenuis</i>	(Willd.) Schult.	Cyperaceae	SLENDER SPIKE-RUSH	FACW+	sedge	PE	MONO	full
ELEWOL	9	<i>Eleocharis wolfii</i>	(A. Gray) A. Gray ex Britton	Cyperaceae	WOLF'S SPIKE-RUSH	OBL	sedge	PE	MONO	full
ELPCAR	4	<i>Elephantopus carolinianus</i>	Raeusch.	Asteraceae	ELEPHANT'S-FOOT	FACU	forb	PE	DI	shade
ELEIND	*	<i>ELEUSINE INDICA</i>	(L.) Gaertn.	Poaceae	GOOSE GRASS	FACU-	grass	AN	MONO	advent
ELOCAN	3	<i>Elodea canadensis</i>	Michx.	Hydrocharitaceae	COMMON WATERWEED	OBL	forb	PE	MONO	full
ELONUT	5	<i>Elodea nuttallii</i>	(Planch.) St. John	Hydrocharitaceae	NUTTALL'S WATERWEED	OBL	forb	PE	MONO	full
ELYPAN	6	<i>Elymus canadensis</i>	L.	Poaceae	CANADA WILD RYE	FACU+	grass	PE	MONO	full
ELYHYS	4	<i>Elymus hystrix</i>	L.	Poaceae	BOTTLEBRUSH GRASS	UPL	grass	PE	MONO	shade
ELYMAC	6	<i>Elymus macgregorii</i>	R. Brooks & J.J.N. Campb.	Poaceae	MACGREGOR'S WILD RYE	[FACW]	grass	PE	MONO	shade
ELYRIP	5	<i>Elymus riparius</i>	Wiegand	Poaceae	RIVERBANK WILD RYE	FACW	grass	PE	MONO	partial
ELYTRA	7	<i>Elymus trachycaulus</i>	(Link) Gould ex Shinners	Poaceae	BEARDED WHEAT GRASS	FACU	grass	PE	MONO	partial
ELYVIL	4	<i>Elymus villosus</i>	Muhl. ex Willd.	Poaceae	HAIRY WILD RYE	FACU-	grass	PE	MONO	partial
ELYVIR	3	<i>Elymus virginicus</i>	L.	Poaceae	VIRGINIA WILD RYE	FACW-	grass	PE	MONO	partial
ELYREP	*	<i>ELYTRIGIA REPENS</i>	(L.) Desv. ex B.D. Jacks	Poaceae	QUACKGRASS	FACU-	grass	PE	MONO	advent
ELYSMI	*	<i>ELYTRIGIA SMITHII</i>	(Rydb.) Nevski	Poaceae	WESTERN WHEAT GRASS	[UPL]	grass	PE	MONO	advent
EPIVIR	10	<i>Epifagus virginiana</i>	(L.) Barton	Orobanchaceae	BEECH DROPS	[UPL]	forb	AN	DI	shade
EPIREP	8	<i>Epigaea repens</i>	L.	Ericaceae	TRAILING ARBUTUS	[UPL]	shrub	W	DI	shade
EPIANG	7	<i>Epilobium angustifolium</i>	L.	Onagraceae	FIREWEED	FAC	forb	PE	DI	full
EPICIL	4	<i>Epilobium ciliatum</i>	Raf.	Onagraceae	NORTHERN WILLOW-HERB	FAC-	forb	PE	DI	full
EPICOL	1	<i>Epilobium coloratum</i>	Biehler	Onagraceae	PURPLE-LEAVED WILLOW-HERB	OBL	forb	PE	DI	full
EPIHIR	*	<i>EPILOBIUM HIRSUTUM</i>	L.	Onagraceae	HAIRY WILLOW-HERB	FACW	forb	PE	DI	advent
EPILEP	7	<i>Epilobium leptophyllum</i>	Raf.	Onagraceae	NARROW-LEAVED WILLOW-HERB	OBL	forb	PE	DI	full
EPIPAR	*	<i>EPILOBIUM PARVIFLORUM</i>	Schreb.	Onagraceae	SMALL-FLOWERED WILLOW-HERB	[FACW]	forb	PE	DI	advent
EPISTR	9	<i>Epilobium strictum</i>	Muhl. ex Spreng.	Onagraceae	SIMPLE WILLOW-HERB	OBL	forb	PE	DI	shade
EPIHEL	*	<i>EPIPACTIS HELLEBORINE</i>	(L.) Crantz	Equisetaceae	HELLEBORINE	[UPL]	forb	PE	DI	advent
EQUARV	0	<i>Equisetum arvense</i>	L.	Equisetaceae	FIELD HORSETAIL	FAC	fern	PE	SVP	full
EQUFLU	7	<i>Equisetum fluviatile</i>	L.	Equisetaceae	WATER HORSETAIL	OBL	fern	PE	SVP	full
EQUHYE	2	<i>Equisetum hyemale</i>	L.	Equisetaceae	SCOURING-RUSH	FACW	fern	PE	SVP	full
EQU LAE	6	<i>Equisetum laevigatum</i>	A. Braun	Equisetaceae	SMOOTH SCOURING-RUSH	FACW	fern	PE	SVP	full
EQU SYL	7	<i>Equisetum sylvaticum</i>	L.	Equisetaceae	WOODLAND HORSETAIL	FACW	fern	PE	SVP	partial
EQUVAR	8	<i>Equisetum variegatum</i>	Schleich. ex F. Weber & D. Mohr	Equisetaceae	VARIEGATED SCOURING-RUSH	FACW	fern	PE	SVP	full
ERACAP	3	<i>Eragrostis capillaris</i>	(L.) Nees	Poaceae	LACE GRASS	[UPL]	grass	AN	MONO	partial
ERACIL	*	<i>ERAGROSTIS CILIANENSIS</i>	(All.) Vignolo ex Janch.	Poaceae	STINK GRASS	FACU	grass	AN	MONO	advent
ERAFRA	3	<i>Eragrostis frankii</i>	C.A. Mey. ex Steud.	Poaceae	FRANK'S LOVE GRASS	FACW	grass	AN	MONO	full
ERAHYP	4	<i>Eragrostis hypnoides</i>	(Lam.) B.S.P.	Poaceae	CREeping LOVE GRASS	OBL	grass	AN	MONO	full
ERAMIN	*	<i>ERAGROSTIS MINOR</i>	Host	Poaceae	LOW LOVE GRASS	[UPL]	grass	AN	MONO	advent
ERAPEC	1	<i>Eragrostis pectinacea</i>	(Michx.) Nees ex Steud.	Poaceae	CAROLINA LOVE GRASS	FAC	grass	AN	MONO	full
ERAPIL	*	<i>ERAGROSTIS PILOSA</i>	(L.) P. Beauv.	Poaceae	INDIA LOVE GRASS	FACU	grass	PE	MONO	advent
ERASPE	2	<i>Eragrostis spectabilis</i>	(Pursh) Steud.	Poaceae	PURPLE LOVE GRASS	[UPL]	grass	PE	MONO	partial
EREHIE	2	<i>Erechtites hieracifolia</i>	(L.) Raf. ex DC.	Asteraceae	PILEWORT	FACU	forb	AN	DI	full
ERIBUL	6	<i>Erigenia bulbosa</i>	(Michx.) Nutt.	Apiaceae	HARBINGER-OF-SPRING	[UPL]	forb	PE	DI	shade
ERIANN	0	<i>Erigeron annuus</i>	(L.) Pers.	Asteraceae	DAISY FLEABANE	FACU	forb	AN	DI	full
ERIPHI	2	<i>Erigeron philadelphicus</i>	L.	Asteraceae	PHILADELPHIA FLEABANE	FACU	forb	BI	DI	full
ERIPUL	5	<i>Erigeron pulchellus</i>	Michx.	Asteraceae	ROBIN'S-PLANTAIN	FACU	forb	PE	DI	full

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ERISTR	1	<i>Erigeron strigosus</i>	Muhl. ex Willd.	Asteraceae	ROUGH FLEABANE	FACU+	forb	AN	DI	full
ERIAQU	10	<i>Eriocaulon aquaticum</i>	(Hill) Druce	Eriocaulaceae	WHITE-BUTTONS	OBL	forb	PE	DI	full
ERIVRG		<i>Eriophorum virginicum</i>	L.	Cyperaceae	TAWNY COTTON-GRASS	OBL	sedge	PE	MONO	full
ERIVRD	10	<i>Eriophorum viridicarinatum</i>	(Engelm.) Fernald	Cyperaceae	GREEN COTTON-GRASS	OBL	sedge	PE	MONO	full
EROIC	*	<i>ERODIUM CICUTARIUM</i>	(L.) L'Her ex Aiton	Geraniaceae	REDSTEMMED-FILAREE	[UPL]	forb	AN	DI	advent
EROVER	*	<i>EROPHILA VERNA</i>	(L.) Besser	Brassicaceae	WHITLOW-GRASS	[UPL]	forb	AN	DI	advent
ERUGAL	*	<i>ERUCASTRUM GALLICUM</i>	(Willd.) O.E. Schulz	Brassicaceae	DOG-MUSTARD	[UPL]	forb	AN	DI	advent
ERYYUC	7	<i>Eryngium yuccifolium</i>	Michx.	Apiaceae	RATTLESNAKE-MASTER	FAC	forb	PE	DI	full
ERYASPA	10	<i>Erysimum aspera</i> (Nutt.) DC. var. <i>aspera</i>	(Nutt.) DC.	Brassicaceae	WESTERN WALLFLOWER	[UPL]	forb	BI	DI	full
ERYCHE	*	<i>ERYSIMUM CHEIRANTHOIDES</i>	L.	Brassicaceae	WORMSEED-MUSTARD	FAC	forb	AN	DI	advent
ERYINC	*	<i>ERYSIMUM INCONSPICUUM</i>	(S. Watson) MacMill.	Brassicaceae	PLAINS WALLFLOWER	[UPL]	forb	PE	DI	advent
ERYREP	*	<i>ERYSIMUM REPANDUM</i>	L.	Brassicaceae	BUSHY WALLFLOWER	[UPL]	forb	AN	DI	advent
ERYALB	5	<i>Erythronium albidum</i>	Nutt.	Liliaceae	WHITE TROUT-LILY	FACU	forb	PE	MONO	shade
ERYAME	4	<i>Erythronium americanum</i>	Ker Gawl.	Liliaceae	YELLOW TROUT-LILY	[UPL]	forb	PE	MONO	shade
ERYROS	9	<i>Erythronium rostratum</i>	W. Wolf	Liliaceae	GOLDENSTAR	UPL	forb	PE	MONO	shade
EUOALA	*	<i>EUONYMUS ALATUS</i>	(Thunb.) Siebold	Celastraceae	WINGED WAHOO	[UPL]	shrub	W	DI	advent
EUOAME	6	<i>Euonymus americanus</i>	L.	Celastraceae	AMERICAN STRAWBERRY-BUSH	FAC	shrub	W	DI	partial
EUOATR	3	<i>Euonymus atropurpureus</i>	Jacq.	Celastraceae	BURNING-BUSH	FACU	shrub	W	DI	partial
EUOEUR	*	<i>EUONYMUS EUROPAEUS</i>	L.	Celastraceae	EUROPEAN SPINDLE TREE	[UPL]	shrub	W	DI	advent
EUOFOR	*	<i>EUONYMUS FORTUNEI</i>	(Turcz.) Hand.-Mazz.	Celastraceae	WINTERCREEPER	[UPL]	vine	W	DI	advent
EUOOBO	5	<i>Euonymus obovatus</i>	Nutt.	Celastraceae	RUNNING STRAWBERRY-BUSH	[FAC]	shrub	W	DI	full
EUPALB	8	<i>Eupatorium album</i>	L.	Asteraceae	WHITE THOROUGHWORT	[UPL]	forb	PE	DI	shade
EUPALT	0	<i>Eupatorium altissimum</i>	L.	Asteraceae	TALL BONESET	[UPL]	forb	PE	DI	partial
EUPARO	6	<i>Eupatorium aromaticum</i>	L.	Asteraceae	SMOOTH WHITE SNAKEROOT	[UPL]	forb	PE	DI	shade
EUPCOE	3	<i>Eupatorium coelestinum</i>	L.	Asteraceae	MISTFLOWER	FAC	forb	PE	DI	partial
EUPFIS	6	<i>Eupatorium fistulosum</i>	Barratt	Asteraceae	HOLLOW-STEMMED JOE-PYE W.	FACW	forb	PE	DI	partial
EUPHYS	4	<i>Eupatorium hyssopifolium</i>	L.	Asteraceae	HYSSOP THOROUGHWORT	[UPL]	forb	PE	DI	full
EUPINC	4	<i>Eupatorium incarnatum</i>	Walter	Asteraceae	PINK THOROUGHWORT	FAC	forb	PE	DI	shade
EUPMAC	6	<i>Eupatorium maculatum</i>	L.	Asteraceae	SPOTTED JOE-PYE WEED	FACW	forb	PE	DI	full
EUPPER	3	<i>Eupatorium perfoliatum</i>	L.	Asteraceae	COMMON BONESET	FACW+	forb	PE	DI	full
EUPPUR	5	<i>Eupatorium purpureum</i>	L.	Asteraceae	PURPLE JOE-PYE WEED	FAC	forb	PE	DI	partial
EUPROT	6	<i>Eupatorium rotundifolium</i>	L.	Asteraceae	ROUND-LEAVED THOROUGHWORT	FAC-	forb	PE	DI	shade
EUPRUG	3	<i>Eupatorium rugosum</i>	Houtt.	Asteraceae	WHITE SNAKEROOT	[FACU]	forb	PE	DI	shade
EUPSER	2	<i>Eupatorium serotinum</i>	Michx.	Asteraceae	LATE-FLOWERING BONESET	FAC-	forb	PE	DI	shade
EUPSES	4	<i>Eupatorium sessilifolium</i>	L.	Asteraceae	UPLAND BONESET	[UPL]	forb	PE	DI	shade
EUPHCM	5	<i>Euphorbia commutata</i>	Engelm.	Euphorbiaceae	WOOD SPURGE	FACU	forb	PE	DI	shade
EUPHCO	4	<i>Euphorbia corollata</i>	L.	Euphorbiaceae	FLOWERING SPURGE	[UPL]	forb	PE	DI	full
EUPHCY	*	<i>EUPHORBIA CYPARISSIAS</i>	L.	Euphorbiaceae	CYPRESS SPURGE	[UPL]	forb	PE	DI	advent
EUPHDE	*	<i>EUPHORBIA DENTATA</i>	Michx.	Euphorbiaceae	TOOTHED SPURGE	[UPL]	forb	AN	DI	advent
EUPHES	*	<i>EUPHORBIA ESULA</i>	L.	Euphorbiaceae	LEAFY SPURGE	[UPL]	forb	PE	DI	advent
EUPHHU	3	<i>Euphorbia humistrata</i>	Engelm.	Euphorbiaceae	SPREADING SPURGE	FACU	forb	AN	DI	partial
EUPHMA	0	<i>Euphorbia maculata</i>	L.	Euphorbiaceae	SPOTTED SPURGE	FACU-	forb	AN	DI	full
EUPHMR	*	<i>EUPHORBIA MARGINATA</i>	Pursh	Euphorbiaceae	SNOW-ON-MOUNTAIN	UPL	forb	AN	DI	advent
EUPHNU	0	<i>Euphorbia nutans</i>	Lagasca	Euphorbiaceae	EYEBANE	FACU-	forb	AN	DI	full
EUPHOB	4	<i>Euphorbia obtusata</i>	Pursh	Euphorbiaceae	BLUNT-LEAVED SPURGE	FACU-	forb	AN	DI	shade
EUPHPE	*	<i>EUPHORBIA PEPLUS</i>	L.	Euphorbiaceae	PETTY SPURGE	[UPL]	forb	AN	DI	advent
EUPHPL	*	<i>EUPHORBIA PLATYPHYLLOS</i>	L.	Euphorbiaceae	BROAD-LEAVED SPURGE	[UPL]	forb	AN	DI	advent
EUPHPO	10	<i>Euphorbia polygonifolia</i>	L.	Euphorbiaceae	SEASIDE SPURGE	FACU	forb	AN	DI	full
EUPHPU	9	<i>Euphorbia purpurea</i>	(Raf.) Fernald	Euphorbiaceae	GLADE SPURGE	FAC	forb	PE	DI	shade
EUPHSE	8	<i>Euphorbia serpens</i>	Kunth	Euphorbiaceae	ROUND LEAVED SPURGE	[FACW]	forb	AN	DI	full
EUPHVE	0	<i>Euphorbia vermiculata</i>	Raf.	Euphorbiaceae	HAIRY SPURGE	[UPL]	forb	AN	DI	full
EUTGRA	2	<i>Euthamia graminifolia</i>	(L.) Nutt.	Asteraceae	FLAT-TOPPED GOLDENROD	FAC	forb	PE	DI	full
EUTREM	9	<i>Euthamia remota</i>	Greene	Asteraceae	GREAT LAKES FLAT-TOPPED G.	FAC	forb	PE	DI	full
FAGESC	*	<i>FAGOPYRUM ESCULENTUM</i>	Moench	Polygonaceae	BUCKWHEAT	[UPL]	forb	AN	DI	advent

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FAGGRA	7	<i>Fagus grandifolia</i>	Ehrh.	Fagaceae	AMERICAN BEECH	FACU	tree	W	DI	tree
FESELA	*	<i>FESTUCA ELATIOR</i>	L.	Poaceae	TALL FESCUE	FACU	grass	PE	MONO	advent
FESOFI	*	<i>FESTUCA OVINA</i>	L.	Poaceae	SHEEP FESCUE	[UPL]	grass	PE	MONO	advent
FESPPA	*	<i>FESTUCA PRATENSIS</i>	Huds.	Poaceae	MEADOW FESCUE	FACU-	grass	PE	MONO	advent
FESRUB	*	<i>FESTUCA RUBRA</i>	L.	Poaceae	RED FESCUE	FACU	grass	PE	MONO	advent
FESSUB	5	<i>Festuca subverticillata</i>	(Pers.) E. Alexeev	Poaceae	NODDING FESCUE	FACU	grass	PE	MONO	shade
FILGER	*	<i>FILAGO GERMANICA</i>	(L.) Huds.	Asteraceae	COTTON-ROSE	[UPL]	forb	AN	DI	advent
FILRUB	8	<i>Filipendula rubra</i>	(Hill) B.L. Rob.	Rosaceae	QUEEN-OF-THE-PRAIRIE	FACW	forb	PE	DI	full
FILULM	*	<i>FILIPENDULA ULMARIA</i>	(L.) Maxim.	Rosaceae	QUEEN-OF-THE-MEADOW	[UPL]	forb	PE	DI	advent
FIMAUT	5	<i>Fimbristylis autumnalis</i>	(L.) Roem. & Schult.	Cyperaceae	AUTUMN SEDGE	FACW+	sedge	AN	MONO	full
FLOPRO	5	<i>Floerkea proserpinacoides</i>	Willd.	Limnanthaceae	FALSE MERMAID-WEED	FAC	forb	AN	DI	shade
FRAVESA	3	<i>Fragaria vesca</i> L. var. <i>americana</i>	Porter	Rosaceae	AM. WOODLAND STRAWBERRY	[UPL]	forb	PE	DI	full
FRAVESV	*	<i>FRAGARIA VESCA</i> var. <i>VESCA</i>	L.	Rosaceae	EUR. WOODLAND STRAWBERRY	[UPL]	forb	PE	DI	advent
FRVIR	1	<i>Fragaria virginiana</i>	Duchesne	Rosaceae	WILD STRAWBERRY	FACU	forb	PE	DI	full
FRACAR	7	<i>Frasera carolinensis</i>	Walter	Gentianaceae	AMERICAN COLUMBO	[UPL]	forb	PE	DI	shade
FRAAME	6	<i>Fraxinus americana</i>	L.	Oleaceae	WHITE ASH	FACU	tree	W	DI	tree
FRANIG	7	<i>Fraxinus nigra</i>	Marshall	Oleaceae	BLACK ASH	FACW	tree	W	DI	tree
FRAPEN	3	<i>Fraxinus pennsylvanica</i>	Marshall	Oleaceae	GREEN ASH	FACW	tree	W	DI	tree
FRAPRO	7	<i>Fraxinus profunda</i>	(Bush) Bush	Oleaceae	PUMPKIN ASH	OBL	tree	W	DI	tree
FRAQUA	7	<i>Fraxinus quadrangulata</i>	Michx.	Oleaceae	BLUE ASH	[UPL]	tree	W	DI	tree
FROFLO	2	<i>Froelichia floridana</i>	(Nutt.) Moq.	Amaranthaceae	COTTONWEED	[UPL]	forb	AN	DI	full
FROGRA	*	<i>FROELICHIA GRACILIS</i>	(Hook.) Moq.	Amaranthaceae	SLENDER COTTONWEED	[UPL]	forb	AN	DI	advent
FUMOFF	*	<i>FUMARIA OFFICINALIS</i>	L.	Fumariaceae	FUMITORY	[UPL]	forb	AN	DI	advent
GALVOL	9	<i>Galactia volubilis</i>	(L.) Britton	Fabaceae	MILK-PEA	FAC+	forb	PE	DI	full
GALLAD	*	<i>GALEOPSIS LADANUM</i>	L.	Lamiaceae	RED HEMP-NETTLE	[UPL]	forb	AN	DI	advent
GALTET	*	<i>GALEOPSIS TETRAHIT</i>	L.	Lamiaceae	HEMP-NETTLE	[UPL]	forb	AN	DI	advent
GALPAR	*	<i>GALINSOGA PARVIFLORA</i>	Cav.	Asteraceae	LESSER QUICKWEED	[UPL]	forb	AN	DI	advent
GALQUA	*	<i>GALINSOGA QUADRIRADIATA</i>	Ruiz & Pav.	Asteraceae	COMMON QUICKWEED	[UPL]	forb	AN	DI	advent
GALAPA	0	<i>Galium aparine</i>	L.	Rubiaceae	CLEAVERS	FACU	forb	AN	DI	partial
GALASP	4	<i>Galium asprellum</i>	Michx.	Rubiaceae	ROUGH BEDSTRAW	OBL	forb	PE	DI	partial
GALBOR	8	<i>Galium boreale</i>	L.	Rubiaceae	NORTHERN BEDSTRAW	FACU	forb	PE	DI	partial
GALCIR	4	<i>Galium circaezans</i>	Michx.	Rubiaceae	WILD LICORICE	[UPL]	forb	PE	DI	shade
GALCON	5	<i>Galium concinnum</i>	Torr. & A. Gray	Rubiaceae	SHINING BEDSTRAW	UPL	forb	PE	DI	shade
GALLAB	10	<i>Galium labradoricum</i>	(Wiegand) Wiegand	Rubiaceae	BOG BEDSTRAW	OBL	forb	PE	DI	partial
GALLAN	5	<i>Galium lanceolatum</i>	Torr.	Rubiaceae	LANCE-LEAVED BEDSTRAW	[UPL]	forb	PE	DI	shade
GALMOL	*	<i>GALIUM MOLLUGO</i>	L.	Rubiaceae	WHITE BEDSTRAW	[UPL]	forb	PE	DI	advent
GALOB	5	<i>Galium obtusum</i>	Bigelow	Rubiaceae	BLUNT-LEAVED BEDSTRAW	FACW+	forb	PE	DI	full
GALODO	*	<i>GALIUM ODORATUM</i>	(L.) Scop.	Rubiaceae	SWEET WOODRUFF	[UPL]	forb	PE	DI	advent
GALPAL	9	<i>Galium palustre</i>	L.	Rubiaceae	MARSH BEDSTRAW	OBL	forb	PE	DI	full
GALPED	*	<i>GALIUM PEDEMONTANUM</i>	(Bellardi) All.	Rubiaceae	PIEDMONT BEDSTRAW	[UPL]	forb	AN	DI	advent
GALPIL	4	<i>Galium pilosum</i>	Aiton	Rubiaceae	HAIRY BEDSTRAW	[UPL]	forb	PE	DI	shade
GALTIN	4	<i>Galium tinctorium</i>	(L.) Scop.	Rubiaceae	SMALL THREE-LOBED BEDSTRAW	OBL	forb	PE	DI	full
GALTFI	7	<i>Galium trifidum</i>	L.	Rubiaceae	NORTHERN THREE-LOBED BED.	FACW+	forb	PE	DI	partial
GALTFL	4	<i>Galium triflorum</i>	Michx.	Rubiaceae	SWEET-SCENTED BEDSTRAW	FACU	forb	PE	DI	shade
GALVER	*	<i>GALIUM VERUM</i>	L.	Rubiaceae	YELLOW BEDSTRAW	[UPL]	forb	PE	DI	advent
GAUHI	5	<i>Gaultheria hispidula</i>	(L.) Muhl. ex Bigelow	Ericaceae	CREeping SNOWBERRY	FACW	shrub	W	DI	shade
GAUPRO	5	<i>Gaultheria procumbens</i>	L.	Ericaceae	TEABERRY	FACU	shrub	W	DI	shade
GAUBIE	1	<i>Gaura biennis</i>	L.	Onagraceae	GAURA	FACU	forb	BI	DI	full
GAYBAC	6	<i>Gaylussacia baccata</i>	(Wangenh.) K. Koch	Ericaceae	HUCKLEBERRY	FACU	shrub	W	DI	partial
GENAND	5	<i>Gentiana andrewsii</i>	Griseb.	Gentianaceae	BOTTLE GENTIAN	FACW	forb	PE	DI	full
GENCLA	6	<i>Gentiana clausa</i>	Raf.	Gentianaceae	CLOSED GENTIAN	FACW	forb	PE	DI	full
GENFLA	8	<i>Gentiana flavida</i>	A. Gray	Gentianaceae	YELLOWISH GENTIAN	FACU	forb	PE	DI	full
GENPUB	10	<i>Gentiana puberulenta</i>	J.S. Pringle	Gentianaceae	PRAIRIE GENTIAN	[FACU+]	forb	PE	DI	full
GENSAP	10	<i>Gentiana saponaria</i>	L.	Gentianaceae	SOAPWORT GENTIAN	FACW	forb	PE	DI	full

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
GENVIL	7	<i>Gentiana villosa</i>	L.	Gentianaceae	SAMPSON'S SNAKEROOT	[UPL]	forb	PE	DI	full
GENQUI	8	<i>Gentianella quinquefolia</i>	(L.) Small	Gentianaceae	STIFF GENTIAN	FAC	forb	BI	DI	full
GENCRI	7	<i>Gentianopsis crinita</i>	(Froelich) Ma	Gentianaceae	FRINGED GENTIAN	OBL	forb	AN	DI	full
GENPRO	7	<i>Gentianopsis procera</i>	(T. Holm) Ma	Gentianaceae	WESTERN FRINGED GENTIAN	FACW+	forb	AN	DI	full
GERBIC	7	<i>Geranium bicknellii</i>	Britton	Geraniaceae	BICKNELL'S GERANIUM	[UPL]	forb	AN	DI	full
GERCAR	3	<i>Geranium carolinianum</i>	L.	Geraniaceae	CAROLINA CRANE'S-BILL	[UPL]	forb	AN	DI	full
GERCOL	*	<i>GERANIUM COLUMBINUM</i>	L.	Geraniaceae	LONG-STALKED CRANE'S-BILL	[UPL]	forb	AN	DI	advent
GERDIS	*	<i>GERANIUM DISSECTUM</i>	L.	Geraniaceae	CUT-LEAVED CRANE'S-BILL	[UPL]	forb	AN	DI	advent
GERMAC	4	<i>Geranium maculatum</i>	L.	Geraniaceae	WILD GERANIUM	FACU	forb	PE	DI	shade
GERMOL	*	<i>GERANIUM MOLLE</i>	L.	Geraniaceae	DOVE'S-FOOT CRANE'S-BILL	[UPL]	forb	AN	DI	advent
GERPUS	*	<i>GERANIUM PUSILLUM</i>	L.	Geraniaceae	SMALL-FLOWERED CRANE'S-BILL	[UPL]	forb	AN	DI	advent
GERROB	4	<i>Geranium robertianum</i>	L.	Geraniaceae	HERB ROBERT	[UPL]	forb	AN	DI	shade
GEUALE	3	<i>Geum aleppicum</i>	Jacq.	Rosaceae	YELLOW AVENS	FAC	forb	PE	DI	shade
GEUCAN	2	<i>Geum canadense</i>	Jacq.	Rosaceae	WHITE AVENS	FACU	forb	PE	DI	shade
GEULAC	2	<i>Geum laciniatum</i>	Murray	Rosaceae	ROUGH AVENS	FAC+	forb	PE	DI	shade
GEURIV	9	<i>Geum rivale</i>	L.	Rosaceae	WATER AVENS	OBL	forb	PE	DI	shade
GEUVER	2	<i>Geum vernum</i>	(Raf.) Torr. & A. Gray	Rosaceae	SPRING AVENS	FACU	forb	PE	DI	shade
GEUVIR	3	<i>Geum virginianum</i>	L.	Rosaceae	CREAM-COLORED AVENS	FAC-	forb	PE	DI	shade
GLEHED	*	<i>GLECHOMA HEDERACEA</i>	L.	Lamiaceae	GROUND IVY	FACU	forb	PE	DI	advent
GLETRI	4	<i>Gleditsia triacanthos</i>	L.	Caesalpinaceae	HONEY LOCUST	FAC-	tree	W	DI	tree
GLYACU	9	<i>Glyceria acutiflora</i>	Torr.	Poaceae	SHARP-GLUMED MANNA GRASS	OBL	grass	PE	MONO	partial
GLYBOR	9	<i>Glyceria borealis</i>	(Nash) Batch.	Poaceae	NORTHERN MANNA GRASS	OBL	grass	PE	MONO	full
GLYCAN	7	<i>Glyceria canadensis</i>	(Michx.) Trin.	Poaceae	RATTLESNAKE MANNA GRASS	OBL	grass	PE	MONO	full
GLYGRA	7	<i>Glyceria grandis</i>	S. Watson	Poaceae	TALL MANNA GRASS	OBL	grass	PE	MONO	full
GLYMEL	7	<i>Glyceria melicaria</i>	(Michx.) F.T. Hubb.	Poaceae	LONG MANNA GRASS	OBL	grass	PE	MONO	full
GLYSEP	6	<i>Glyceria septentrionalis</i>	Hitchc.	Poaceae	FLOATING MANNA GRASS	OBL	grass	PE	MONO	shade
GLYSTR	2	<i>Glyceria striata</i>	(Lam.) Hitchc.	Poaceae	FOWL MANNA GRASS	OBL	grass	PE	MONO	shade
GNAMAC	3	<i>Gnaphalium macounii</i>	Greene	Asteraceae	CLAMMY CUDWEED	[UPL]	forb	AN	DI	full
GNAOBT	2	<i>Gnaphalium obtusifolium</i>	L.	Asteraceae	FRAGRANT CUDWEED	[UPL]	forb	AN	DI	full
GNAPUR	3	<i>Gnaphalium purpureum</i>	L.	Asteraceae	PURPLE CUDWEED	[FACU]	forb	AN	DI	full
GNAULI	*	<i>GNAPHALIUM ULIGINOSUM</i>	L.	Asteraceae	LOW CUDWEED	FAC	forb	AN	DI	advent
GOOPUB	6	<i>Goodyera pubescens</i>	(Willd.) R. Br. ex W.T. Aiton	Orchidaceae	DOWNY RATTLESNAKE-PLANTAIN	FACU-	forb	PE	MONO	shade
GOOTES	10	<i>Goodyera tessellata</i>	Lodd.	Orchidaceae	CHECKERED RATTLESNAKE-PL.	FACU-	forb	PE	MONO	shade
GRANEG	3	<i>Gratiola neglecta</i>	Torr.	Scrophulariaceae	CLAMMY HEDGE-HYSSOP	OBL	forb	AN	DI	full
GRAVIR	5	<i>Gratiola virginiana</i>	L.	Scrophulariaceae	ROUND-FRUITED HEDGE-HYSSOP	OBL	forb	AN	DI	full
GRAVIS	6	<i>Gratiola viscidula</i>	Pennell	Scrophulariaceae	VISCID HEDGE-HYSSOP	OBL	forb	PE	DI	full
GRILAN	*	<i>GRINDELIA LANCEOLATA</i>	Nutt.	Asteraceae	SPINY-TOOTHED GUM-WEED	[UPL]	forb	PE	DI	advent
GRISQU	*	<i>GRINDELIA SQUARROSA</i>	(Pursh) Dunal	Asteraceae	CURLY-TOPPED GUM-WEED	FACU	forb	BI	DI	advent
GYMAPP	9	<i>Gymnocarpium appalachianum</i>	Pryer & Haufler	Dryopteridaceae	APPALACHIAN OAK FERN	[UPL]	fern	PE	SVP	shade
GYMDRY	7	<i>Gymnocarpium dryopteris</i>	(L.) Newman	Dryopteridaceae	OAK FERN	UPL	fern	PE	SVP	shade
GYMDIO	3	<i>Gymnocladus dioica</i>	(L.) K. Koch	Fabaceae	KENTUCKY COFFEE-TREE	[UPL]	tree	W	DI	tree
GYMAMB	8	<i>Gymnopogon ambiguus</i>	(Michx.) B.S.P.	Poaceae	BEARD GRASS	[UPL]	grass	PE	MONO	full
HACDEF	6	<i>Hackelia deflexa</i>	(Wahlenb.) Opiz.	Boraginaceae	NORTHERN STICKSEED	[UPL]	forb	BI	DI	shade
HACVIR	2	<i>Hackelia virginiana</i>	(L.) I. M. Johnst.	Boraginaceae	VIRGINIA STICKSEED	FACU	forb	BI	DI	shade
HALCAR	5	<i>Halesia carolina</i>	L.	Styracaceae	SILVERBELL	FACU	sm tree	W	DI	shade
HAMVIR	5	<i>Hamamelis virginiana</i>	L.	Hamamelidaceae	WITCH-HAZEL	FAC-	sm tree	W	DI	shade
HEDHIS	7	<i>Hedeoma hispida</i>	Pursh	Lamiaceae	ROUGH PENNYROYAL	[UPL]	forb	AN	DI	full
HEDPUL	2	<i>Hedeoma pulegioides</i>	(L.) Pers.	Lamiaceae	AMERICAN PENNYROYAL	[UPL]	forb	AN	DI	shade
HEDHEL	*	<i>HEDERA HELIX</i>	L.	Araliaceae	ENGLISH IVY	[UPL]	vine	W	DI	advent
HEDCAE	3	<i>Hedyotis caerulea</i>	(L.) Hook.	Rubiaceae	BLUETS	FACU	forb	PE	DI	full
HEDCAN	6	<i>Hedyotis canadensis</i>	(Willd. ex Roem. & Schult.) Fosberg	Rubiaceae	CANADA BLUETS	[UPL]	forb	PE	DI	partial
HEDLON	5	<i>Hedyotis longifolia</i>	(Gaertn.) Hook.	Rubiaceae	LONG-LEAVED SUMMER BLUETS	[UPL]	forb	PE	DI	full
HEDNIG	8	<i>Hedyotis nigricans</i>	(Lam.) Fosb.	Rubiaceae	NARROW-LEAVED SUMMER BLUET?	[UPL]	forb	PE	DI	full
HEDPUR	5	<i>Hedyotis purpurea</i>	(L.) Torr. & A. Gray	Rubiaceae	LARGE SUMMER BLUETS	[UPL]	forb	PE	DI	partial

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HELAUT	4	<i>Helenium autumnale</i>	L.	Asteraceae	COMMON SNEEZEWEED	FACW+	forb	PE	DI	full
HELFLE	*	<i>HELENIUM FLEXUOSUM</i>	Raf.	Asteraceae	NAKED SNEEZEWEED	FAC-	forb	PE	DI	advent
HELBIC	9	<i>Helianthemum bicknellii</i>	Fernald	Cistaceae	PLAINS FROSTWEED	[UPL]	forb	PE	DI	full
HELCAN	9	<i>Helianthemum canadense</i>	(L.) Michx.	Cistaceae	CANADA FROSTWEED	[UPL]	forb	PE	DI	full
HELANN	*	<i>HELIANTHUS ANNUUS</i>	L.	Asteraceae	COMMON SUNFLOWER	FAC-	forb	AN	DI	advent
HELDEC	4	<i>Helianthus decapetalus</i>	L.	Asteraceae	FOREST SUNFLOWER	FACU	forb	PE	DI	shade
HELDIV	4	<i>Helianthus divaricatus</i>	L.	Asteraceae	WOODLAND SUNFLOWER	[UPL]	forb	PE	DI	shade
HELIGG	6	<i>Helianthus giganteus</i>	L.	Asteraceae	SWAMP SUNFLOWER	FACW	forb	PE	DI	full
HELGRO	4	<i>Helianthus grosseserratus</i>	M. Martens	Asteraceae	SAWTOOTH SUNFLOWER	FACW	forb	PE	DI	full
HELHIR	4	<i>Helianthus hirsutus</i>	Raf.	Asteraceae	HAIRY SUNFLOWER	[UPL]	forb	PE	DI	full
HELMAX	*	<i>HELIANTHUS MAXIMILIANI</i>	Schrad.	Asteraceae	MAXIMILIAN SUNFLOWER	UPL	forb	PE	DI	advent
HELMIC	5	<i>Helianthus microcephalus</i>	Torr. & A. Gray	Asteraceae	SMALL-HEADED SUNFLOWER	[UPL]	forb	PE	DI	shade
HELMOL	7	<i>Helianthus mollis</i>	Lam.	Asteraceae	ASHY SUNFLOWER	[UPL]	forb	PE	DI	full
HELOCC	7	<i>Helianthus occidentalis</i>	Riddell	Asteraceae	WESTERN SUNFLOWER	UPL	forb	PE	DI	full
HELPET	*	<i>HELIANTHUS PETIOLARIS</i>	Nutt.	Asteraceae	PLAINS SUNFLOWER	[UPL]	forb	AN	DI	advent
HELSTR	4	<i>Helianthus strumosus</i>	L.	Asteraceae	ROUGH-LEAVED SUNFLOWER	[UPL]	forb	PE	DI	full
HELTUB	3	<i>Helianthus tuberosus</i>	L.	Asteraceae	JERUSALEM-ARTICHOKE	FAC	forb	PE	DI	full
HELHEL	5	<i>Heliopsis helianthoides</i>	(L.) Sweet	Asteraceae	SMOOTH OXEYE	[UPL]	forb	PE	DI	full
HEMFUL	*	<i>HEMEROCALLIS FULVA</i>	(L.) L.	Liliaceae	ORANGE DAY-LILY	[UPL]	forb	PE	MONO	advent
HEPACU	5	<i>Hepatica acutiloba</i>	DC.	Ranunculaceae	SHARP-LOBED HEPATICA	[UPL]	forb	PE	DI	shade
HEPAME	5	<i>Hepatica americana</i>	(DC.) Ker Gawl.	Ranunculaceae	ROUND-LOBED HEPATICA	[UPL]	forb	PE	DI	shade
HERLAN	4	<i>Heracleum lanatum</i>	Michx.	Apiaceae	COW-PARSNIP	FACU-	forb	PE	DI	full
HESMAT	*	<i>HESPERIS MATRONALIS</i>	L.	Brassicaceae	DAME'S ROCKET	FACU-	forb	BI	DI	advent
HETREN	10	<i>Heteranthera reniformis</i>	Ruiz & Pav.	Pontederiaceae	MUD-PLANTAIN	OBL	forb	PE	DI	full
HEUAME	4	<i>Heuchera americana</i>	L.	Saxifragaceae	COMMON ALUM-ROOT	FACU-	forb	PE	DI	shade
HEULON	8	<i>Heuchera longiflora</i>	Rydb.	Saxifragaceae	LONG-FLOWERED ALUM-ROOT	[UPL]	forb	PE	DI	shade
HEUPAR	10	<i>Heuchera parviflora</i>	Bartl.	Saxifragaceae	SMALL-FLOWERED ALUM-ROOT	[UPL]	forb	PE	DI	shade
HEUVIL	10	<i>Heuchera villosa</i>	Michx.	Saxifragaceae	HAIRY ALUM-ROOT	[UPL]	forb	PE	DI	shade
HEXSPI	9	<i>Hexalectris spicata</i>	(Walter) Barnhart	Orchidaceae	CRESTED CORAL-ROOT	UPL	forb	PE	MONO	shade
HIBLAE	7	<i>Hibiscus laevis</i>	All.	Malvaceae	HALBERD-LEAVED ROSE-MALLOW	OBL	forb	PE	DI	full
HIBMOS	4	<i>Hibiscus moscheutos</i>	L.	Malvaceae	SWAMP ROSE-MALLOW	OBL	forb	PE	DI	full
HIBTRI	*	<i>HIBISCUS TRIONUM</i>	L.	Malvaceae	FLOWER-OF-AN-HOUR	[UPL]	forb	AN	DI	advent
HIEAUR	*	<i>HIERACIUM AURANTIACUM</i>	L.	Asteraceae	ORANGE HAWKWEED	[UPL]	forb	PE	DI	advent
HIECAE	*	<i>HIERACIUM CAESPITOSUM</i>	Dumort	Asteraceae	YELLOW KING-DEVIL	[UPL]	forb	PE	DI	advent
HIEFLO	*	<i>HIERACIUM FLORIBUNDUM</i>	Wimm. & Grab.	Asteraceae	GLAUCCOUS HAWKWEED	[UPL]	forb	PE	DI	advent
HIEGRO	5	<i>Hieracium gronovii</i>	L.	Asteraceae	BEAKED HAWKWEED	[UPL]	forb	PE	DI	partial
HIEKALF	6	<i>Hieracium kalmii</i> L. var. <i>fasciculatum</i>	(Pursh) Lepage	Asteraceae	CANADA HAWKWEED	[UPL]	forb	PE	DI	full
HIELON	9	<i>Hieracium longipilum</i>	Torr.	Asteraceae	LONG-BEARDED HAWKWEED	[UPL]	forb	PE	DI	full
HIEPAN	6	<i>Hieracium paniculatum</i>	L.	Asteraceae	PANICLED HAWKWEED	[UPL]	forb	PE	DI	shade
HIEPLSA	*	<i>HIERACIUM PILOSELLA</i>	L.	Asteraceae	MOUSE-EAR HAWKWEED	[UPL]	forb	PE	DI	advent
HIEPLOI	*	<i>HIERACIUM PILOSELLOIDES</i>	Vill.	Asteraceae	GLAUCCOUS KING-DEVIL	[UPL]	forb	PE	DI	advent
HIESCA	5	<i>Hieracium scabrum</i>	Michx.	Asteraceae	ROUGH HAWKWEED	[UPL]	forb	PE	DI	full
HIEVEN	6	<i>Hieracium venosum</i>	L.	Asteraceae	RATTLESNAKE HAWKWEED	[UPL]	forb	PE	DI	shade
HIEODO	8	<i>Hierochloa odorata</i>	(L.) P. Beauv.	Poaceae	VANILLA GRASS	FACW	grass	PE	MONO	full
HOLLAN	*	<i>HOLCUS LANATUS</i>	L.	Poaceae	VELVET GRASS	FACU	grass	PE	MONO	advent
HOLUMB	*	<i>HOLOSTEUM UMBELLATUM</i>	L.	Caryophyllaceae	JAGGED CHICKWEED	[UPL]	forb	AN	DI	advent
HORJUB	*	<i>HORDEUM JUBATUM</i>	L.	Poaceae	SQUIRREL-TAIL BARLEY	FAC	grass	PE	MONO	advent
HORPUS	*	<i>HORDEUM PUSILLUM</i>	L.	Poaceae	LITTLE BARLEY	FAC	grass	AN	MONO	advent
HOSVEN	*	<i>HOSTA VENTRICOSA</i>	(Salisb.) Stearn	Liliaceae	PLANTAIN-LILY	[FAC]	forb	PE	MONO	advent
HOTINF	8	<i>Hottonia inflata</i>	Elliott	Primulaceae	FEATHERFOIL	OBL	forb	AN	DI	full
HUDTOM	*	<i>HUDSONIA TOMENTOSA</i>	Nutt.	Cistaceae	BEACH HEATHER	[UPL]	forb	PE	DI	advent
HUMJAP	*	<i>HUMULUS JAPONICUS</i>	Siebold & Zucc.	Cannabaceae	JAPANESE HOPS	FACU	vine	AN	DI	advent
HUMLUP	2	<i>Humulus lupulus</i>	L.	Cannabaceae	COMMON HOPS	FACU	vine	PE	DI	shade
HUPAPP	8	<i>Huperzia appalachiana</i>	Beitel & Mickel	Lycopodiaceae	MOUNTAIN FIR-MOSS	[UPL]	fern	PE	SVP	shade

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HUPLUC	5	<i>Hyperzia lucidula</i>	(Michx.) Trevis	Lycopodiaceae	SHINING CLUB-MOSS	FACW-	fern	PE	SVP	shade
HUPPOR	9	<i>Hyperzia porophila</i>	(F. E. Lloyd & Underw.) Holub	Lycopodiaceae	ROCK CLUB-MOSS	FACU-	fern	PE	SVP	shade
HYBCON	7	<i>Hybanthus concolor</i>	(T. Forst.) Spreng.	Violaceae	GREEN VIOLET	FACU-	forb	PE	DI	shade
HYDARB	7	<i>Hydrangea arborescens</i>	L.	Hydrangeaceae	WILD HYDRANGEA	FACU	shrub	W	DI	shade
HDRCAN	7	<i>Hydrastis canadensis</i>	L.	Ranunculaceae	GOLDENSEAL	[UPL]	forb	PE	DI	shade
HYDAME	7	<i>Hydrocotyle americana</i>	L.	Apiaceae	AMERICAN WATER-PENNYWORT	OBL	forb	PE	DI	shade
HYDRAN	*	<i>HYDROCOTYLE RANUNCULOIDES</i>	L. f.	Apiaceae	BUTTERCUP-PENNYWORT	OBL	forb	PE	DI	advent
HYDUMB	8	<i>Hydrocotyle umbellata</i>	L.	Apiaceae	NAVELWORT	OBL	forb	PE	DI	shade
HYDAPP	5	<i>Hydrophyllum appendiculatum</i>	Michx.	Hydrophyllaceae	APPENDAGED WATERLEAF	[UPL]	forb	BI	DI	shade
HYDCAN	5	<i>Hydrophyllum canadense</i>	L.	Hydrophyllaceae	MAPLE-LEAVED WATERLEAF	FACU	forb	PE	DI	shade
HYDMAC	6	<i>Hydrophyllum macrophyllum</i>	Nutt.	Hydrophyllaceae	LARGED-LEAVED WATERLEAF	[FACU]	forb	PE	DI	shade
HYDVIR	4	<i>Hydrophyllum virginianum</i>	L.	Hydrophyllaceae	VIRGINIA WATERLEAF	FAC	forb	PE	DI	shade
HYMHHER	10	<i>Hymenoxys herbacea</i>	(Greene) Cusick	Asteraceae	LAKESIDE DAISY	[UPL]	forb	PE	DI	full
HYPBOR	9	<i>Hypericum boreale</i>	(Britton) E.P. Bicknell	Clusiaceae	NORTHERN ST. JOHN'S-WORT	OBL	forb	PE	DI	full
HYPCAN	7	<i>Hypericum canadense</i>	L.	Clusiaceae	CANADA ST. JOHN'S-WORT	FACW	forb	AN	DI	full
HYPDEN	7	<i>Hypericum denticulatum</i>	Walter	Clusiaceae	COPPERY ST. JOHN'S-WORT	FACW-	forb	PE	DI	partial
HYPDRU	4	<i>Hypericum drummondii</i>	(Grev. & Hook.) Torr. & A. Gray	Clusiaceae	NITS-AND-LICE	[UPL]	forb	AN	DI	full
HYPELL	8	<i>Hypericum ellipticum</i>	Hook.	Clusiaceae	FEW-FLOWERED ST. JOHN'S-WORT	OBL	forb	PE	DI	full
HYPGEN	3	<i>Hypericum gentianoides</i>	(L.) B.S.P.	Clusiaceae	ORANGE-GRASS	UPL	forb	AN	DI	full
HYPGYM	9	<i>Hypericum gymnanthum</i>	Engelm. & A. Gray	Clusiaceae	LEAST ST. JOHN'S-WORT	OBL	forb	AN	DI	full
HYPHYP	6	<i>Hypericum hypericoides</i>	(L.) Crantz	Clusiaceae	ST. ANDREW'S CROSS	[UPL]	shrub	W	DI	full
HYPKAL	8	<i>Hypericum kalmianum</i>	L.	Clusiaceae	KALM'S ST. JOHN'S-WORT	FAC	shrub	W	DI	full
HYPMAS	6	<i>Hypericum majus</i>	(A. Gray) Britton	Clusiaceae	TALL ST. JOHN'S-WORT	FACW	forb	PE	DI	full
HYPMUT	3	<i>Hypericum mutilum</i>	L.	Clusiaceae	SLENDER ST. JOHN'S-WORT	FACW	forb	AN	DI	full
HYPPER	*	<i>HYPERICUM PERFORATUM</i>	L.	Clusiaceae	COMMON ST. JOHN'S-WORT	[UPL]	forb	PE	DI	advent
HYPPRO	3	<i>Hypericum prolificum</i>	L.	Clusiaceae	SHRUBBY ST. JOHN'S-WORT	FACU	shrub	W	DI	full
HYPPUN	2	<i>Hypericum punctatum</i>	Lam.	Clusiaceae	SPOTTED ST. JOHN'S-WORT	FAC-	forb	PE	DI	full
HYPPYR	7	<i>Hypericum pyramidatum</i>	Aiton	Clusiaceae	GREAT ST. JOHN'S-WORT	FAC	forb	BI	DI	full
HYPSPH	6	<i>Hypericum sphaerocarpon</i>	Michx.	Clusiaceae	ROUND-FRUITED ST. JOHN'S-WORT	FACU	forb	PE	DI	partial
HYPRAD	*	<i>HYPOCHOERIS RADICATA</i>	L.	Asteraceae	SPOTTED CAT'S-EAR	[UPL]	forb	PE	DI	advent
HYPHIR	6	<i>Hypoxis hirsuta</i>	(L.) Coville	Liliaceae	YELLOW STAR-GRASS	FAC	forb	PE	MONO	partial
ILEOPA	*	<i>ILEX OPACA</i>	Aiton	Aquifoliaceae	AMERICAN HOLLY	FACU+	sm tree	W	DI	advent
ILEVER	6	<i>Ilex verticillata</i>	(L.) A. Gray	Aquifoliaceae	WINTERBERRY	FACW+	shrub	W	DI	shade
IMPCAP	2	<i>Impatiens capensis</i>	Meerb.	Balsaminaceae	SPOTTED TOUCH-ME-NOT	FACW	forb	AN	DI	partial
IMPPAL	3	<i>Impatiens pallida</i>	Nutt.	Balsaminaceae	PALE TOUCH-ME-NOT	FACW	forb	AN	DI	shade
INUHEL	*	<i>INULA HELENIUM</i>	L.	Asteraceae	ELECAMPANE	FACU	forb	AN	DI	advent
IODPIN	7	<i>Iodanthus pinnatifidus</i>	(Michx.) Steud.	Brassicaceae	PURPLE ROCKET	FACW	forb	AN	DI	shade
IPOCOC	*	<i>IPOMOEA COCCINEA</i>	L.	Convolvulaceae	RED MORNING-GLORY	FACU	forb	AN	DI	advent
IPOHED	*	<i>IPOMOEA HEDERACEA</i>	Jacq.	Convolvulaceae	IVY-LEAVED MORNING-GLORY	FACU	forb	AN	DI	advent
IPOLAC	4	<i>Ipomoea lacunosa</i>	L.	Convolvulaceae	WHITE MORNING-GLORY	FACW	forb	AN	DI	full
IPOPAN	2	<i>Ipomoea pandurata</i>	(L.) G. Mey.	Convolvulaceae	POTATO-VINE	FACU	forb	AN	DI	full
IPOPUR	*	<i>IPOMOEA PURPUREA</i>	(L.) Roth	Convolvulaceae	COMMON MORNING-GLORY	UPL	forb	AN	DI	advent
IRIBRE	7	<i>Iris brevicaulis</i>	Raf.	Iridaceae	LEAFY BLUE FLAG	OBL	forb	PE	MONO	partial
IRICRI	5	<i>Iris cristata</i>	Aiton	Iridaceae	DWARF CRESTED IRIS	[UPL]	forb	PE	MONO	partial
IRIPSE	*	<i>IRIS PSEUDACORUS</i>	L.	Iridaceae	YELLOW FLAG	OBL	forb	PE	MONO	advent
IRIVERN	9	<i>Iris verna</i>	L.	Iridaceae	DWARF IRIS	[UPL]	forb	PE	MONO	partial
IRIVERS	6	<i>Iris versicolor</i>	L.	Iridaceae	NORTHERN BLUE FLAG	OBL	forb	PE	MONO	partial
IRIVIR	6	<i>Iris virginica</i>	L.	Iridaceae	SOUTHERN BLUE FLAG	OBL	forb	PE	MONO	partial
ISABRA	3	<i>Isanthus brachiatus</i>	(L.) B.S.P.	Lamiaceae	FALSE PENNYROYAL	[UPL]	forb	AN	DI	full
ISOECH	10	<i>Isoetes echinospora</i>	Durieu	Isoetaceae	SPINY-SPORED QUILLWORT	OBL	fern	PE	SVP	full
ISOENG	6	<i>Isoetes engelmannii</i>	A. Braun	Isoetaceae	APPALACHIAN QUILLWORT	OBL	fern	PE	SVP	full
ISOBIT	7	<i>Isoopyrum bitematum</i>	(Raf.) (Torr. & A. Gray)	Ranunculaceae	FALSE RUE-ANEMONE	[FAC]	forb	PE	DI	shade
ISOMED	7	<i>Isotria medeoloides</i>	(Pursh) Raf.	Orchidaceae	SMALL WHORLED POGONIA	FACU	forb	PE	MONO	shade
ISOVER	7	<i>Isotria verticillata</i>	Raf.	Orchidaceae	LARGE WHORLED POGONIA	FACU	forb	PE	MONO	shade

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JEFDIP	6	<i>Jeffersonia diphylla</i>	(L.) Pers.	Berberidaceae	TWINLEAF	[UPL]	forb	PE	DI	shade
JUGCIN	7	<i>Juglans cinerea</i>	L.	Juglandaceae	BUTTERNUT	FACU+	tree	W	DI	tree
JUGNIG	5	<i>Juglans nigra</i>	L.	Juglandaceae	BLACK WALNUT	FACU	tree	W	DI	tree
JUNACU	4	<i>Juncus acuminatus</i>	Michx.	Juncaceae	SHARP-FRUITED RUSH	OBL	forb	PE	MONO	full
JUNALP	8	<i>Juncus alpinus</i>	Vill.	Juncaceae	ALPINE RUSH	[OBL]	forb	PE	MONO	full
JUNANT	4	<i>Juncus anthelatus</i>	(Wigand) R.E. Brooks	Juncaceae	BRANCHED RUSH	[FAC-]	forb	PE	MONO	full
JUNART	3	<i>Juncus articulatus</i>	L.	Juncaceae	JOINTED RUSH	OBL	forb	PE	MONO	full
JUNARC	6	<i>Juncus balticus</i>	Willd.	Juncaceae	BALTIC RUSH	FACW+	forb	PE	MONO	full
JUNBRCR	5	<i>Juncus brachycarpus</i>	Engelm.	Juncaceae	SHORT-FRUITED RUSH	FACW	forb	PE	MONO	full
JUNBRCP	8	<i>Juncus brachycephalus</i>	(Engelm.) Buchenau	Juncaceae	SHORT-HEADED RUSH	OBL	forb	PE	MONO	full
JUNBUF	2	<i>Juncus bufonius</i>	L.	Juncaceae	TOAD RUSH	FACW	forb	AN	MONO	full
JUNCAN	4	<i>Juncus canadensis</i>	J. Gay ex Laharpe	Juncaceae	CANADA RUSH	OBL	forb	PE	MONO	full
JUNDIC	5	<i>Juncus dichotomous</i>	Elliott	Juncaceae	FLAT-LEAVED RUSH	FACW-	forb	PE	MONO	full
JUNDIF	6	<i>Juncus diffusissimus</i>	Buckley	Juncaceae	DIFFUSE RUSH	FACW	forb	PE	MONO	full
JUNDUD	3	<i>Juncus dudleyi</i>	Wiegand	Juncaceae	DUDLEY'S RUSH	[FACW-]	forb	PE	MONO	full
JUNEFF	1	<i>Juncus effusus</i>	L.	Juncaceae	SOFT RUSH	FACW+	forb	PE	MONO	full
JUNGER	*	<i>JUNCUS GERARDII</i>	Loisel.	Juncaceae	BLACK-GRASS	FACW+	forb	PE	MONO	advent
JUNGRE	7	<i>Juncus greenei</i>	Oakes & Tuck.	Juncaceae	GREENE'S RUSH	FAC	forb	PE	MONO	full
JUNINT	4	<i>Juncus interior</i>	Wiegand	Juncaceae	INLAND RUSH	FACU	forb	PE	MONO	full
JUNMAR	4	<i>Juncus marginatus</i>	Rostk.	Juncaceae	GRASS-LEAVED RUSH	FACW	forb	PE	MONO	full
JUNNOD	5	<i>Juncus nodosus</i>	L.	Juncaceae	KNOTTED RUSH	OBL	forb	PE	MONO	full
JUNSEC	5	<i>Juncus secundus</i>	P. Beauv. ex Poir.	Juncaceae	ONE-SIDED RUSH	FACU	forb	PE	MONO	full
JUNSUB	6	<i>Juncus subcaudatus</i>	(Engelm.) Coville & S.F. Blake	Juncaceae	SHORT-TAILED RUSH	OBL	forb	PE	MONO	full
JUNTEN	1	<i>Juncus tenuis</i>	Willd.	Juncaceae	PATH RUSH	FAC-	forb	PE	MONO	partial
JUNTOR	3	<i>Juncus torreyi</i>	Coville	Juncaceae	TORREY'S RUSH	FACW	forb	PE	MONO	full
JUNCOM	8	<i>Juniperus communis</i>	L.	Cupressaceae	COMMON JUNIPER	[FACU-]	shrub	W	GYMN	tree
JUNVIR	3	<i>Juniperus virginiana</i>	L.	Cupressaceae	EASTERN RED CEDAR	FACU	tree	W	GYMN	tree
JUSAME	9	<i>Justicia americana</i>	(L.) M. Vahl.	Acanthaceae	WATER-WILLOW	OBL	forb	PE	DI	full
KALLAT	7	<i>Kalmia latifolia</i>	L.	Ericaceae	MOUNTAIN LAUREL	FACU	shrub	W	DI	shade
KICELA	*	<i>KICKXIA ELATINE</i>	(L.) Dumort	Scrophulariaceae	SHARP-POINTED CANKERROOT	FAC	forb	AN	DI	advent
KOCSO	*	<i>KOCHIA SCOPARIA</i>	(L.) Roth ex Schrad.	Chenopodiaceae	SUMMER-CYPRESS	[UPL]	forb	AN	DI	advent
KOEPYR	10	<i>Koeleria pyramidata</i>	(Lam.) P. Beauv.	Poaceae	JUNE GRASS	[UPL]	grass	PE	MONO	full
KRIBIF	5	<i>Krigia biflora</i>	(Walter) S.F. Blake	Asteraceae	ORANGE DWARF-DANDELION	FACU	forb	PE	DI	full
KRIDAN	6	<i>Krigia dandelion</i>	(L.) Nutt.	Asteraceae	POTATO-DANDELION	FAC	forb	PE	DI	full
KRIVIR	8	<i>Krigia virginica</i>	(L.) Willd.	Asteraceae	DWARF-DANDELION	UPL	forb	AN	DI	full
KUHEUP	7	<i>Kuhnia eupatorioides</i>	L.	Asteraceae	FALSE BONESET	[UPL]	forb	PE	DI	full
KYLPUM	4	<i>Kyllinga pumila</i>	Michx.	Cyperaceae	THIN-LEAVED UMBRELLA-SEDGE	FACW	sedge	AN	MONO	full
LACBIE	1	<i>Lactuca biennis</i>	(Moench) Fernald	Asteraceae	TALL BLUE LETTUCE	FACU	forb	BI	DI	partial
LACCAN	1	<i>Lactuca canadensis</i>	L.	Asteraceae	WILD LETTUCE	FACU-	forb	BI	DI	partial
LACFLO	3	<i>Lactuca floridana</i>	(L.) Gaertn.	Asteraceae	WOODLAND LETTUCE	FACU-	forb	BI	DI	partial
LACHIR	7	<i>Lactuca hirsuta</i>	Muhl. ex Nutt.	Asteraceae	HAIRY LETTUCE	[UPL]	forb	BI	DI	partial
LACPUL	*	<i>LACTUCA PULCHELLA</i>	(Pursh) DC.	Asteraceae	WESTERN BLUE LETTUCE	FAC	forb	PE	DI	advent
LACSAL	*	<i>LACTUCA SALIGNA</i>	L.	Asteraceae	WILLOW-LEAVED LETTUCE	[FACU]	forb	BI	DI	advent
LACSER	*	<i>LACTUCA SERRIOLA</i>	L.	Asteraceae	PRICKLY LETTUCE	FAC-	forb	BI	DI	advent
LAMAMP	*	<i>LAMIUM AMPLEXICAULE</i>	L.	Lamiaceae	HENBIT	[UPL]	forb	AN	DI	advent
LAMMAC	*	<i>LAMIUM MACULATUM</i>	L.	Lamiaceae	SPOTTED DEAD-NETTLE	[UPL]	forb	PE	DI	advent
LAMPUR	*	<i>LAMIUM PURPUREUM</i>	L.	Lamiaceae	PURPLE DEAD-NETTLE	[UPL]	forb	AN	DI	advent
LAPCAN	5	<i>Laportea canadensis</i>	(L.) Wedd.	Urticaceae	WOOD-NETTLE	FACW	forb	PE	DI	shade
LAPSQU	*	<i>LAPPULA SQUARROSA</i>	(Retz.) Dumort.	Boraginaceae	EUROPEAN STICKSEED	[UPL]	forb	AN	DI	advent
LAPCOM	*	<i>LAPSANA COMMUNIS</i>	L.	Asteraceae	NIPPLEWORT	[UPL]	forb	AN	DI	advent
LARLAR	9	<i>Larix laricina</i>	(Du Roi) K. Koch	Pinaceae	TAMARACK	FACW	tree	W	GYMN	tree
LATLAT	*	<i>LATHYRUS LATIFOLIUS</i>	L.	Fabaceae	EVERLASTING PEA	[UPL]	forb	PE	DI	advent
LATMAR	10	<i>Lathyrus maritimus</i>	(L.) Bigelow	Fabaceae	INLAND BEACH PEA	[FACU-]	forb	PE	DI	full
LATOC	9	<i>Lathyrus ochroleucus</i>	Hook.	Fabaceae	YELLOW VETCHLING	[UPL]	forb	PE	DI	full

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LATODO	*	<i>LATHYRUS ODORATUS</i>	L.	Fabaceae	SWEET PEA	[UPL]	forb	AN	DI	advent
LATPAL	5	<i>Lathyrus palustris</i>	L.	Fabaceae	MARSH PEA	FACW+	forb	PE	DI	full
LATTUB	*	<i>LATHYRUS TUBEROSUS</i>	L.	Fabaceae	TUBEROUS VETCHLING	[UPL]	forb	PE	DI	advent
LATVEN	8	<i>Lathyrus venosus</i>	Muhl. ex Willd.	Fabaceae	WILD PEA	FACW	forb	PE	DI	full
LEAUNI	9	<i>Leavenworthia uniflora</i>	(Michx.) Britton	Brassicaceae	LEAVENWORTHIA	FAC	forb	AN	DI	full
LECINT	7	<i>Lechea intermedia</i>	Legg. ex Britton	Cistaceae	ROUND-FRUITED PINWEED	[UPL]	forb	PE	DI	full
LECMIN	8	<i>Lechea minor</i>	L.	Cistaceae	THYME-LEAVED PINWEED	[UPL]	forb	PE	DI	full
LECMUC	7	<i>Lechea mucronata</i>	Raf.	Cistaceae	HAIRY PINWEED	[UPL]	forb	PE	DI	full
LECPUL	7	<i>Lechea pulchella</i>	Raf.	Cistaceae	LEGGETT'S PINWEED	[UPL]	forb	PE	DI	full
LECRAC	5	<i>Lechea racemulosa</i>	Michx.	Cistaceae	RACEMED PINWEED	[UPL]	forb	PE	DI	full
LECTEN	8	<i>Lechea tenuifolia</i>	Michx.	Cistaceae	NARROW-LEAVED PINWEED	[UPL]	forb	PE	DI	full
LEDGRO	10	<i>Ledum groenlandicum</i>	Oeder	Ericaceae	LABRADOR-TEA	OBL	shrub	W	DI	full
LEELN	9	<i>Leersia lenticularis</i>	Michx.	Poaceae	CATCHFLY GRASS	OBL	grass	PE	MONO	partial
LEEORY	1	<i>Leersia oryzoides</i>	(L.) Sw.	Poaceae	RICE CUT GRASS	OBL	grass	PE	MONO	full
LEEVIR	4	<i>Leersia virginica</i>	Willd.	Poaceae	WHITE GRASS	FACW	grass	PE	MONO	shade
LEMMIN	3	<i>Lemna minor</i>	L.	Lemnaceae	COMMON DUCKWEED	OBL	forb	AN	MONO	full
LEMTRI	6	<i>Lemna trisulca</i>	L.	Lemnaceae	STAR DUCKWEED	OBL	forb	AN	MONO	full
LEMVAL	8	<i>Lemna valdiviana</i>	Phil.	Lemnaceae	PALE DUCKWEED	OBL	forb	AN	MONO	full
LEOAUT	*	<i>LEONTODON AUTUMNALIS</i>	L.	Asteraceae	FALL-DANDELION	[UPL]	forb	PE	DI	advent
LEOHIS	*	<i>LEONTODON HISPIDUS</i>	L.	Asteraceae	BIG HAWKBIT	[UPL]	forb	PE	DI	advent
LEOCAR	*	<i>LEONURUS CARDIACA</i>	L.	Lamiaceae	MOTHERWORT	[UPL]	forb	PE	DI	advent
LEOMAR	*	<i>LEONURUS MARRUBIASTRUM</i>	L.	Lamiaceae	HOREHOUND MOTHERWORT	[UPL]	forb	BI	DI	advent
LEPCAM	*	<i>LEPIDIUM CAMPESTRE</i>	(L.) R. Br.	Lamiaceae	FIELD PEPPER-GRASS	[UPL]	forb	AN	DI	advent
LEPDEN	*	<i>LEPIDIUM DENSIFLORUM</i>	Schrad.	Brassicaceae	PRAIRIE PEPPER-GRASS	FAC	forb	AN	DI	advent
LEPPER	*	<i>LEPIDIUM PERFOLIATUM</i>	L.	Brassicaceae	CLASPING PEPPER-GRASS	UPL	forb	AN	DI	advent
LEPRUD	*	<i>LEPIDIUM RUDERALE</i>	L.	Brassicaceae	STINKING PEPPER-GRASS	[UPL]	forb	AN	DI	advent
LEPVIR	1	<i>Lepidium virginicum</i>	L.	Brassicaceae	COMMON PEPPER-GRASS	FACU-	forb	AN	DI	full
LEPFAS	*	<i>LEPTOCHLOA FASCICULARIS</i>	(Lam.) A. Gray	Poaceae	SPRANGLETOP GRASS	FACW	grass	AN	MONO	advent
LEPCOG	4	<i>Leptoloma cognatum</i>	(Schultes) Chase	Poaceae	FALL WITCH GRASS	[UPL]	grass	PE	MONO	full
LESCAP	5	<i>Lespedeza capitata</i>	Michx.	Fabaceae	ROUND-HEADED BUSH-CLOVER	FACU-	forb	PE	DI	full
LESCUN	*	<i>LESPEDEZA CUNEATA</i>	(Dumont) G. Don	Fabaceae	CHINESE BUSH-CLOVER	FACU-	forb	PE	DI	advent
LESHIR	5	<i>Lespedeza hirta</i>	(L.) Hornem.	Fabaceae	HAIRY BUSH-CLOVER	[UPL]	forb	PE	DI	full
LESINT	3	<i>Lespedeza intermedia</i>	(S. Watson) Britton	Fabaceae	WAND BUSH-CLOVER	[UPL]	forb	PE	DI	full
LESPRO	5	<i>Lespedeza procumbens</i>	Michx.	Fabaceae	TRAILING BUSH-CLOVER	[UPL]	forb	PE	DI	full
LESREP	6	<i>Lespedeza repens</i>	(L.) Barton	Fabaceae	SMALL TRAILING BUSH-CLOVER	[UPL]	forb	PE	DI	full
LESSTI	*	<i>LESPEDEZA STIPULACEA</i>	Maxim.	Fabaceae	KOREAN-CLOVER	[FACU]	forb	PE	DI	advent
LESSTR	*	<i>LESPEDEZA STRIATA</i>	(Thunb.) Hook. & Arn.	Fabaceae	JAPANESE-CLOVER	[FACU]	forb	PE	DI	advent
LESVIO	4	<i>Lespedeza violacea</i>	(L.) Pers.	Fabaceae	VIOLET BUSH-CLOVER	[UPL]	forb	PE	DI	full
LESVIR	3	<i>Lespedeza virginica</i>	(L.) Britton	Fabaceae	VIRGINIA BUSH-CLOVER	[UPL]	forb	PE	DI	full
LEUMUL	5	<i>Leucospora multifida</i>	(Michx.) Nutt.	Scrophulariaceae	LEUCOSPORA	OBL	forb	AN	DI	full
LIAASP	6	<i>Liatris aspera</i>	Michx.	Asteraceae	ROUGH BLAZING-STAR	[UPL]	forb	PE	DI	full
LIACYL	8	<i>Liatris cylindracea</i>	Michx.	Asteraceae	SLENDER BLAZING-STAR	[UPL]	forb	PE	DI	full
LIAPYC	*	<i>LIATRIS PYCNOSTACHYA</i>	(L.) Willd.	Asteraceae	THICK-SPIKED BLAZING-STAR	FACU	forb	PE	DI	advent
LIASCA	6	<i>Liatris scariosa</i>	(L.) Willd.	Asteraceae	NORTHERN BLAZING-STAR	[UPL]	forb	PE	DI	full
LIASPI	7	<i>Liatris spicata</i>	(L.) Willd.	Asteraceae	SPIKED BLAZING-STAR	FAC+	forb	PE	DI	full
LIASQU	8	<i>Liatris squarrosa</i>	(L.) Michx.	Asteraceae	SCALY BLAZING-STAR	[UPL]	forb	PE	DI	full
LIGCAN	6	<i>Ligusticum canadense</i>	(L.) Britton	Apiaceae	AMERICAN LOVAGE	FAC	forb	PE	DI	shade
LIGOBT	*	<i>LIGUSTRUM OBTUSIFOLIUM</i>	Sieb. & Zucc.	Oleaceae	JAPANESE PRIVET	[UPL]	shrub	W	DI	advent
LIGVUL	*	<i>LIGUSTRUM VULGARE</i>	L.	Oleaceae	COMMON PRIVET	FACU	shrub	W	DI	advent
LILCAN	5	<i>Lilium canadense</i>	L.	Liliaceae	CANADA LILY	FAC+	forb	PE	MONO	partial
LILMIC	6	<i>Lilium michiganense</i>	Farw.	Liliaceae	MICHIGAN LILY	[FAC+]	forb	PE	MONO	shade
LILPHI	7	<i>Lilium philadelphicum</i>	L.	Liliaceae	WOOD LILY	FACU+	forb	PE	MONO	shade
LILSUP	8	<i>Lilium superbum</i>	L.	Liliaceae	TURK'S-CAP LILY	FACW+	forb	PE	MONO	partial
LINCAN	4	<i>Linaria canadensis</i>	(L.) Chaz.	Scrophulariaceae	OLD-FIELD TOADFLAX	[UPL]	forb	AN	DI	full

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LINVUL	*	<i>LINARIA VULGARIS</i>	Mill.	Scrophulariaceae	BUTTER-AND-EGGS	[UPL]	forb	PE	DI	advent
LINBEN	5	<i>Lindera benzoin</i>	(L.) Blume	Lauraceae	SPICEBUSH	FACW-	shrub	W	DI	shade
LINDUB	2	<i>Lindernia dubia</i>	(L.) Pennell	Scrophulariaceae	FALSE PIMPERNEL	OBL	forb	AN	DI	full
LINBOR	10	<i>Linnaea borealis</i>	L.	Caprifoliaceae	TWINFLOWER	FAC	forb	PE	DI	full
LINMED	5	<i>Linum medium</i>	(Planch.) Britton	Linaceae	STIFF YELLOW FLAX	FACU	forb	PE	DI	full
LINPER	*	<i>LINUM PERENNE</i>	L.	Linaceae	PERENNIAL FLAX	[UPL]	forb	PE	DI	advent
LINSTR	5	<i>Linum striatum</i>	Walter	Linaceae	RIDGED YELLOW FLAX	FACW	forb	PE	DI	full
LINSUL	7	<i>Linum sulcatum</i>	Riddell	Linaceae	GROOVED FLAX	[UPL]	forb	AN	DI	full
LINUSI	*	<i>LINUM USITATISSIMUM</i>	L.	Linaceae	COMMON FLAX	[UPL]	forb	AN	DI	advent
LINVIR	4	<i>Linum virginianum</i>	L.	Linaceae	SLENDER YELLOW FLAX	FACU	forb	PE	DI	full
LIPLIL	5	<i>Liparis lilifolia</i>	(L.) Rich.	Orchidaceae	LARGE TWAYBLADE	FACU-	forb	PE	MONO	full
LIPLOE	7	<i>Liparis loeselii</i>	(L.) Rich.	Orchidaceae	BOG TWAYBLADE	FACW	forb	PE	MONO	full
LIPDRU	10	<i>Lipocarpa drummondii</i>	(Nees) G.C. Tucker	Cyperaceae	DRUMMOND'S DWARF BULLRUSH	OBL	sedge	AN	MONO	full
LIPMIC	8	<i>Lipocarpa micrantha</i>	(Vahl) G.C. Tucker	Cyperaceae	DWARF BULRUSH	FACW+	sedge	AN	MONO	full
LIQSTY	6	<i>Liquidambar styraciflua</i>	L.	Hamamelidaceae	SWEETGUM	FAC	tree	W	DI	tree
LIRTUL	6	<i>Liriodendron tulipifera</i>	L.	Magnoliaceae	TULIP TREE	FACU	tree	W	DI	tree
LISCOR	10	<i>Listera cordata</i>	(L.) R. Br.	Orchidaceae	HEARTLEAF TWAYBLADE	FACW+	forb	PE	MONO	full
LITARV	*	<i>LITHOSPERMUM ARVENSE</i>	L.	Boraginaceae	CORN GROMWELL	[UPL]	forb	AN	DI	full
LITCAN	6	<i>Lithospermum canescens</i>	(Michx.) Lehm.	Boraginaceae	HOARY PUCCOON	[UPL]	forb	PE	DI	full
LITCAR	9	<i>Lithospermum carolinense</i>	(Walter ex J.F. Gmel.) MacMill.	Boraginaceae	PLAINS PUCCOON	[UPL]	forb	PE	DI	full
LITLAT	7	<i>Lithospermum latifolium</i>	Michx.	Boraginaceae	AMERICAN GROMWELL	[UPL]	forb	PE	DI	full
LOBCAR	5	<i>Lobelia cardinalis</i>	L.	Campanulaceae	CARDINAL-FLOWER	FACW+	forb	PE	DI	partial
LOBINF	1	<i>Lobelia inflata</i>	L.	Campanulaceae	INDIAN-TOBACCO	FACU	forb	AN	DI	full
LOBKAL	9	<i>Lobelia kalmii</i>	L.	Campanulaceae	KALM'S LOBELIA	OBL	forb	PE	DI	full
LOBPUB	5	<i>Lobelia puberula</i>	Michx.	Campanulaceae	DOWNY LOBELIA	FACW-	forb	PE	DI	shade
LOBSIP	3	<i>Lobelia siphilitica</i>	L.	Campanulaceae	GREAT BLUE LOBELIA	FACW+	forb	PE	DI	shade
LOBSPI	5	<i>Lobelia spicata</i>	Lam.	Campanulaceae	PALE-SPIKE LOBELIA	FAC-	forb	PE	DI	full
LOBMAR	*	<i>LOBULARIA MARITIMA</i>	(L.) Desv.	Brassicaceae	SWEET ALYSSUM	[UPL]	forb	AN	DI	advent
LOLPER	*	<i>LOLIUM PERENNE</i>	L.	Poaceae	PERENNIAL RYEGRASS	FACU-	grass	PE	MONO	advent
LONCAN	8	<i>Lonicera canadensis</i>	Barton ex Marshall	Caprifoliaceae	CANADA FLY HONEYSUCKLE	FACU	shrub	W	DI	shade
LONDIO	5	<i>Lonicera dioica</i>	L.	Caprifoliaceae	WILD HONEYSUCKLE	FACU	vine	W	DI	shade
LONFLA	8	<i>Lonicera flava</i>	Sims	Caprifoliaceae	YELLOW HONEYSUCKLE	[UPL]	vine	W	DI	shade
LONFRA	*	<i>LONICERA FRAGRANTISSIMA</i>	Lindl. & Paxt.	Caprifoliaceae	SWEET-BREATH-SPRING	[UPL]	shrub	W	DI	advent
LONJAP	*	<i>LONICERA JAPONICA</i>	Thunb.	Caprifoliaceae	JAPANESE HONEYSUCKLE	FAC-	vine	W	DI	advent
LONMAA	*	<i>LONICERA MAACKII</i>	(Rupr.) Maxim.	Caprifoliaceae	AMUR HONEYSUCKLE	[UPL]	shrub	W	DI	advent
LONMOR	*	<i>LONICERA MORROWII</i>	A. Gray	Caprifoliaceae	MORROW'S HONEYSUCKLE	FACU	shrub	W	DI	advent
LONOBL	9	<i>Lonicera oblongifolia</i>	(Goldie) Hook.	Caprifoliaceae	SWAMP FLY HONEYSUCKLE	OBL	shrub	W	DI	partial
LONRET	7	<i>Lonicera reticulata</i>	Raf.	Caprifoliaceae	GRAPE HONEYSUCKLE	[UPL]	vine	W	DI	shade
LONSEM	*	<i>LONICERA SEMPERVIRENS</i>	L.	Caprifoliaceae	TRUMPET HONEYSUCKLE	FACU	vine	W	DI	advent
LONTAT	*	<i>LONICERA TATARICA</i>	L.	Caprifoliaceae	TATARIAN HONEYSUCKLE	FACU	shrub	W	DI	advent
LONVIL	9	<i>Lonicera villosa</i>	(Michx.) Schult.	Caprifoliaceae	MOUNTAIN FLY HONEYSUCKLE	[FACW+]	shrub	W	DI	shade
LONXYL	*	<i>LONICERA XYLOSTEUM</i>	L.	Caprifoliaceae	EUROPEAN FLY HONEYSUCKLE	[UPL]	shrub	W	DI	advent
LOTCOR	*	<i>LOTUS CORNICULATUS</i>	L.	Fabaceae	BIRD'S-FOOT TREFOIL	FACU-	forb	PE	DI	advent
LUDALT	3	<i>Ludwigia alternifolia</i>	L.	Onagraceae	SEEDBOX	FACW+	forb	PE	DI	full
LUDDEC	*	<i>LUDWIGIA DECURRENS</i>	Walter	Onagraceae	ERECT PRIMROSE-WILLOW	OBL	forb	AN	DI	advent
LUDLEP	*	<i>LUDWIGIA LEPTOCARPA</i>	(Nutt.) Hara	Onagraceae	HAIRY PRIMROSE-WILLOW	OBL	forb	AN	DI	advent
LUDPAL	3	<i>Ludwigia palustris</i>	(L.) Elliott	Onagraceae	WATER-PURSLANE	OBL	forb	AN	DI	full
LUDPEP	*	<i>LUDWIGIA PEPOIDES</i>	(Kunth) P.H. Raven	Onagraceae	CREeping PRIMROSE-WILLOW	OBL	forb	PE	DI	advent
LUDPOL	5	<i>Ludwigia polycarpa</i>	Short & R. Peter	Onagraceae	FALSE LOOSESTRIPE	OBL	forb	PE	DI	full
LUNANN	*	<i>LUNARIA ANNUA</i>	L.	Brassicaceae	MONEY-PLANT	[UPL]	forb	AN	DI	advent
LUPPER	7	<i>Lupinus perennis</i>	L.	Fabaceae	WILD LUPINE	[UPL]	forb	PE	DI	full
LUZACU	6	<i>Luzula acuminata</i>	Raf.	Juncaceae	HAIRY WOODRUSH	FAC	forb	PE	MONO	shade
LUZBUL	5	<i>Luzula bulbosa</i>	(A.W. Wood) Rydb.	Juncaceae	SOUTHERN WOODRUSH	FACU	forb	PE	MONO	shade
LUZECH	4	<i>Luzula echinata</i>	(Small) F.J. Herm.	Juncaceae	ROUND-LEAVED WOODRUSH	FACU	forb	PE	MONO	shade

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
LUZMUL	3	<i>Luzula multiflora</i>	(Retz.) Lej.	Juncaceae	COMMON WOODRUSH	FACU	forb	PE	MONO	shade
LYCCOR	*	<i>LYCHNIS CORONARIA</i>	(L.) Desr.	Caryophyllaceae	MULLEIN-PINK	[UPL]	forb	PE	DI	advent
LYCBAR	*	<i>LYCIUM BARBARUM</i>	L.	Solanaceae	COMMON MATRIMONY-VINE	[UPL]	shrub	W	DI	advent
LYCESC	*	<i>LYCOPERSICON ESCULENTUM</i>	Mill.	Solanaceae	TOMATO	[UPL]	forb	AN	DI	advent
LYCINU	7	<i>Lycopodiella inundata</i>	(L.) Holub	Lycopodiaceae	NORTHERN BOG CLUB-MOSS	OBL	fern	PE	SVP	shade
LYCMAR	7	<i>Lycopodiella marquetiae</i>	J.G. Bruce, W.H. Wagner & Beitel	Lycopodiaceae	NORTHERN PROSTRATE CLUB-M.	[FACW]	fern	PE	SVP	shade
LYCSUB	9	<i>Lycopodiella subapressa</i>	J.G. Bruce, W.H. Wagner & Beitel	Lycopodiaceae	APPRESSED BOG CLUB-MOSS	[FACW]	fern	PE	SVP	shade
LYCCLA	3	<i>Lycopodium clavatum</i>	L.	Lycopodiaceae	RUNNING GROUND-PINE	FAC	fern	PE	SVP	shade
LYCDEN	5	<i>Lycopodium dendroideum</i>	Michx.	Lycopodiaceae	TREE CLUB-MOSS	FACU	fern	PE	SVP	shade
LYCHIC	5	<i>Lycopodium hickeyi</i>	W.H. Wagner, Beitel & DC. Moran	Lycopodiaceae	ROUND-BRANCHED TREE CLUB-M.	[FACU]	fern	PE	SVP	shade
LYCLAG	3	<i>Lycopodium lagopus</i>	(Laest. ex Hartm.) G. Zinserl. ex Kuzen	Lycopodiaceae	ONE-CONED CLUB-MOSS	[UPL]	fern	PE	SVP	shade
LYCOBS	5	<i>Lycopodium obscurum</i>	L.	Lycopodiaceae	FLAT-BRANCHED TREE CLUB-M.	FACU	fern	PE	SVP	shade
LYCAME	3	<i>Lycopus americanus</i>	Muhl. ex W.P.C. Barton	Lamiaceae	AMERICAN WATER-HOREHOUND	OBL	forb	PE	DI	full
LYCASP	*	<i>LYCOPUS ASPER</i>	Greene	Lamiaceae	ROUGH WATER-HOREHOUND	OBL	forb	PE	DI	advent
LYCEUR	*	<i>LYCOPUS EUROPAEUS</i>	L.	Lamiaceae	EUROPEAN BUGLE-WEED	OBL	forb	PE	DI	advent
LYCRUB	4	<i>Lycopus rubellus</i>	Moench	Lamiaceae	STALKED WATER-HOREHOUND	OBL	forb	PE	DI	full
LYCUNI	3	<i>Lycopus uniflorus</i>	Michx.	Lamiaceae	NORTHERN WATER-HOREHOUND	OBL	forb	PE	DI	full
LYCVIR	3	<i>Lycopus virginicus</i>	L.	Lamiaceae	VIRGINIA BUGLE-WEED	OBL	forb	PE	DI	full
LYGPAL	5	<i>Lygodium palmatum</i>	(Bernh.) Sw.	Schizaeaceae	CLIMBING FERN	FACW	fern	PE	DI	full
LYOLIG	8	<i>Lyonia ligustrina</i>	(L.) DC.	Ericaceae	MALEBERRY	FACW	shrub	W	DI	partial
LYSCIL	4	<i>Lysimachia ciliata</i>	L.	Primulaceae	FRINGED LOOSESTRIFE	FACW	forb	PE	DI	shade
LYSLAN	6	<i>Lysimachia lanceolata</i>	Walter	Primulaceae	LANCE-LEAVED LOOSESTRIFE	FAC	forb	PE	DI	full
LYSNUM	*	<i>LYSIMACHIA NUMMULARIA</i>	L.	Primulaceae	MONEYWORT	OBL	forb	PE	DI	advent
LYSQFL	7	<i>Lysimachia quadriflora</i>	Sims	Primulaceae	LINEAR-LEAVED LOOSESTRIFE	FACW+	forb	PE	DI	partial
LYSQFO	5	<i>Lysimachia quadrifolia</i>	L.	Primulaceae	WHORLED LOOSESTRIFE	FACU-	forb	PE	DI	partial
LYSTER	6	<i>Lysimachia terrestris</i>	(L.) B.S.P.	Primulaceae	SWAMP-CANDLES	OBL	forb	PE	DI	full
LYSTHY	6	<i>Lysimachia thyrsiflora</i>	L.	Primulaceae	TUFTED LOOSESTRIFE	OBL	forb	PE	DI	full
LYSVUL	*	<i>LYSIMACHIA VULGARIS</i>	L.	Primulaceae	GARDEN LOOSESTRIFE	FAC+	forb	PE	DI	advent
LYTALA	6	<i>Lythrum alatum</i>	Pursh	Lythraceae	WINGED LOOSESTRIFE	FACW+	forb	PE	DI	full
LYTSAL	*	<i>LYTHRUM SALICARIA</i>	L.	Lythraceae	PURPLE LOOSESTRIFE	FACW+	forb	PE	DI	advent
MACPOM	*	<i>MACLURA POMIFERA</i>	(Raf.) C.K. Schneid.	Moraceae	OSAGE-ORANGE	UPL	tree	W	DI	advent
MAGACU	7	<i>Magnolia acuminata</i>	(L.) L.	Magnoliaceae	CUCUMBER TREE	[UPL]	tree	W	DI	tree
MAGMAC	8	<i>Magnolia macrophylla</i>	Michx.	Magnoliaceae	BIGLEAF MAGNOLIA	[UPL]	tree	W	DI	tree
MAGTRI	8	<i>Magnolia tripetala</i>	(L.) L.	Magnoliaceae	UMBRELLA MAGNOLIA	FACU	tree	W	DI	tree
MAICAN	6	<i>Maianthemum canadense</i>	Desf.	Liliaceae	CANADA MAYFLOWER	FAC-	forb	PE	MONO	shade
MAIRAC	4	<i>Maianthemum racemosum</i>	(L.) Link	Liliaceae	FALSE SOLOMON'S-SEAL	FACU-	forb	PE	MONO	shade
MAISTE	7	<i>Maianthemum stellatum</i>	(L.) Link	Liliaceae	STARRY FALSE SOLOMON'S-SEAL	FACW	forb	PE	MONO	shade
MAITRI	10	<i>Maianthemum trifolium</i>	(L.) Sloboda	Liliaceae	THREE-LEAVED FALSE SOL.-SEAL	OBL	forb	PE	MONO	shade
MALBAY	6	<i>Malaxis bayardii</i>	Fern.	Orchidaceae	BAYARD'S ADDER'S-MOUTH	[UPL]	forb	PE	MONO	shade
MALUNI	6	<i>Malaxis unifolia</i>	Michx.	Orchidaceae	GREEN ADDER'S-MOUTH	FAC	forb	PE	MONO	shade
MALMOS	*	<i>MALVA MOSCHATA</i>	L.	Malvaceae	MUSK MALLOW	UPL	forb	PE	DI	advent
MALNEG	*	<i>MALVA NEGLECTA</i>	Wallr.	Malvaceae	CHEESE MALLOW	[UPL]	forb	AN	DI	advent
MALROT	*	<i>MALVA ROTUNDIFOLIA</i>	L.	Malvaceae	ROUND-LEAVED MALLOW	[UPL]	forb	AN	DI	advent
MALSYL	*	<i>MALVA SYLVESTRIS</i>	L.	Malvaceae	HIGH MALLOW	[UPL]	forb	BI	DI	advent
MANVIR	9	<i>Manfreda virginica</i>	(L.) Salisb. ex Rose	Agavaceae	AMERICAN ALOE	[UPL]	forb	PE	MONO	full
MARVUL	*	<i>MARRUBIUM VULGARE</i>	L.	Lamiaceae	COMMON HOREHOUND	UPL	forb	PE	DI	advent
MATOB	4	<i>Matelea obliqua</i>	(Jacq.) Woodson	Asclepiadaceae	ANGLE-POD	[UPL]	vine	PE	DI	partial
MATMAR	*	<i>MATRICARIA MARITIMA</i>	L.	Asteraceae	SCENTLESS CHAMOMILE	[UPL]	forb	AN	DI	advent
MATMAT	*	<i>MATRICARIA MATRICARIOIDES</i>	(Less.) Porter	Asteraceae	PINEAPPLE-WEED	FACU	forb	AN	DI	advent
MATREC	*	<i>MATRICARIA RECUTITA</i>	L.	Asteraceae	CHAMOMILE	[UPL]	forb	AN	DI	advent
MATSTR	6	<i>Matteuccia struthiopteris</i>	(L.) Tod.	Dryopteridaceae	OSTRICH FERN	FACW	fern	PE	DI	shade
MEDVIR	6	<i>Medeola virginiana</i>	L.	Liliaceae	INDIAN CUCUMBER-ROOT	[UPL]	forb	PE	MONO	shade
MEDLUP	*	<i>MEDICAGO LUPULINA</i>	L.	Fabaceae	BLACK MEDICK	UPL	forb	AN	DI	advent
MEDSAT	*	<i>MEDICAGO SATIVA</i>	L.	Fabaceae	ALFALFA	[UPL]	forb	PE	DI	advent

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MEECOR	7	<i>Meekania cordata</i>	(Nutt.) Britton	Lamiaceae	MEEHANIA	[FACU+]	forb	PE	DI	shade
MELLIN	8	<i>Melampyrum lineare</i>	Desr.	Scrophulariaceae	COW-WHEAT	FACU	forb	AN	DI	shade
MELVIR	9	<i>Melanthium virginicum</i>	L.	Liliaceae	BUNCHFLOWER	FACW+	forb	PE	MONO	full
MELWOO	10	<i>Melanthium woodii</i>	(J.W. Robbins ex A.W. Wood) Baker	Liliaceae	WOOD'S HELLEBORE	[UPL]	forb	PE	MONO	shade
MELNIT	8	<i>Melica nitens</i>	(Scribn.) Nutt. ex Piper	Poaceae	THREE-FLOWERED MELIC	[UPL]	grass	PE	MONO	shade
MELALB	*	<i>MELILOTUS ALBA</i>	Medik.	Fabaceae	WHITE SWEET-CLOVER	FACU-	forb	BI	DI	advent
MELOFF	*	<i>MELILOTUS OFFICINALIS</i>	(L.) Pall.	Fabaceae	YELLOW SWEET-CLOVER	FACU-	forb	BI	DI	advent
MLIOFF	*	<i>MELISSA OFFICINALIS</i>	L.	Lamiaceae	COMMON BALM	[UPL]	forb	PE	DI	advent
MENCAN	5	<i>Menispermum canadense</i>	L.	Menispermaceae	CANADA MOONSEED	FACU	vine	PE	DI	shade
MENARV	2	<i>Mentha arvensis</i>	L.	Lamiaceae	FIELD MINT	FACW	forb	PE	DI	full
MENLON	*	<i>MENTHA LONGIFOLIA</i>	(L.) L.	Lamiaceae	EUROPEAN HORSEMINT	FACU	forb	PE	DI	advent
MENSPI	*	<i>MENTHA SPICATA</i>	L.	Lamiaceae	SPEARMINT	FACW+	forb	PE	DI	advent
MENPIP	*	<i>MENTHA x PIPERATA</i>	L.	Lamiaceae	PEPPERMINT	FACW+	forb	PE	DI	advent
MENTRI	9	<i>Menyanthes trifoliata</i>	L.	Menyanthaceae	BUCKBEAN	OBL	forb	PE	DI	full
MERANN	*	<i>MERCURIALIS ANNUA</i>	L.	Euphorbiaceae	MERCURY	[UPL]	forb	AN	DI	advent
MERVIR	6	<i>Mertensia virginica</i>	(L.) Pers. ex Link	Boraginaceae	BLUEBELLS	FACW	forb	PE	DI	shade
MICVIM	*	<i>MICROSTEGIUM VIMINEUM</i>	(Trin.) A. Camus	Poaceae	RECLINING EULALIA	FAC	grass	AN	MONO	advent
MIKSCA	6	<i>Mikania scandens</i>	(L.) Willd.	Asteraceae	CLIMBING HEMPWEED	FACW+	shrub	W	DI	shade
MILEFF	7	<i>Milium effusum</i>	L.	Poaceae	WOOD MILLET	[UPL]	grass	PE	MONO	shade
MIMALA	6	<i>Mimulus alatus</i>	Aiton	Scrophulariaceae	WINGED MONKEY-FLOWER	OBL	forb	PE	DI	full
MIMRIN	4	<i>Mimulus ringens</i>	L.	Scrophulariaceae	COMMON MONKEY-FLOWER	OBL	forb	PE	DI	full
MIRJAL	*	<i>MIRABILIS JALAPA</i>	L.	Nyctaginaceae	FOUR-O'CLOCK	[UPL]	forb	PE	DI	advent
MIRNYC	*	<i>MIRABILIS NYCTAGINEA</i>	(Michx.) MacMill.	Nyctaginaceae	HEART-LEAVED UMBRELLA-WORT	FACU-	forb	PE	DI	advent
MISSIN	*	<i>MISCANTHUS SINENSIS</i>	Andersson	Poaceae	EULALIA	FACU	grass	PE	MONO	advent
MITREP	5	<i>Mitchella repens</i>	L.	Rubiaceae	PARTRIDGE-BERRY	FACU	forb	PE	DI	shade
MITDIP	6	<i>Mitella diphylla</i>	L.	Saxifragaceae	MITERWORT	FACU	forb	PE	DI	shade
MOLVER	*	<i>MOLLUGO VERTICILLATA</i>	L.	Molluginaceae	CARPET-WEED	FAC	forb	AN	DI	advent
MONCLI	4	<i>Monarda clinopodia</i>	L.	Lamiaceae	BASIL BEE-BALM	[FAC+]	forb	PE	DI	partial
MONDID	6	<i>Monarda didyma</i>	L.	Lamiaceae	BEE-BALM	FAC+	forb	PE	DI	partial
MONFIS	3	<i>Monarda fistulosa</i>	L.	Lamiaceae	WILD BERGAMOT	UPL	forb	PE	DI	full
MONPUN	7	<i>Monarda punctata</i>	L.	Lamiaceae	DOTTED HORSEMINT	UPL	forb	PE	DI	full
MONUNI	8	<i>Moneses uniflora</i>	(L.) A. Gray	Pyrolaceae	ONE-FLOWERED WINTERGREEN	[FACU]	forb	PE	DI	shade
MONHYP	6	<i>Monotropa hypopithys</i>	L.	Monotropaceae	PINESAP	[UPL]	forb	PE	DI	shade
MNTUNI	5	<i>Monotropa uniflora</i>	L.	Monotropaceae	INDIAN PIPE	FACU-	forb	PE	DI	shade
MORALB	*	<i>MORUS ALBA</i>	L.	Moraceae	WHITE MULBERRY	UPL	tree	W	DI	advent
MORRUB	7	<i>Morus rubra</i>	L.	Moraceae	RED MULBERRY	FACU	tree	W	DI	tree
MUHASP	*	<i>MUHLENBERGIA ASPERIFOLIA</i>	(Nees & Meyen ex Trin.) Parodi	Poaceae	SCRATCH GRASS	FACW	grass	PE	MONO	advent
MUHCAP	8	<i>Muhlenbergia capillaris</i>	(Lam.) Trin.	Poaceae	HAIR GRASS	FACU-	grass	PE	MONO	full
MUHCUS	9	<i>Muhlenbergia cuspidata</i>	(Torr. ex Hook.) Rydb.	Poaceae	PLAINS MUHLENBERGIA	[UPL]	grass	PE	MONO	full
MUHFRO	3	<i>Muhlenbergia frondosa</i>	(Poir.) Fernald	Poaceae	COMMON SATIN GRASS	FAC	grass	PE	MONO	full
MUHGLA	5	<i>Muhlenbergia glabrifloris</i>	Scribn.	Poaceae	INLAND MUHLY	[FACW]	grass	PE	MONO	shade
MUHGLO	9	<i>Muhlenbergia glomerata</i>	(Willd.) Trin.	Poaceae	MARSH MUHLY	FACW	grass	PE	MONO	full
MUHMEX	4	<i>Muhlenbergia mexicana</i>	(L.) Trin.	Poaceae	LEAFY SATIN GRASS	FACW	grass	PE	MONO	full
MUHSCH	0	<i>Muhlenbergia schreberi</i>	J.F. Gmel.	Poaceae	NIMBLEWILL	FAC	grass	PE	MONO	full
MUHSOB	8	<i>Muhlenbergia sobolifera</i>	(Muhl. ex Willd.) Trin.	Poaceae	ROCK SATIN GRASS	[UPL]	grass	PE	MONO	shade
MUHSYL	6	<i>Muhlenbergia sylvatica</i>	(Torr.) Torr. ex A. Gray	Poaceae	WOODLAND SATIN GRASS	FAC+	grass	PE	MONO	shade
MUHTEN	6	<i>Muhlenbergia tenuiflora</i>	(Willd.) B.S.P.	Poaceae	SLENDER SATIN GRASS	[UPL]	grass	PE	MONO	shade
MUSBOT	*	<i>MUSCARI BOTRYOIDES</i>	(L.) Mill.	Liliaceae	GRAPE-HYACINTH	[UPL]	forb	PE	MONO	advent
MYOARV	*	<i>MYOSOTIS ARVENSIS</i>	(L.) Hill	Boraginaceae	FIELD FORGET-ME-NOT	UPL	forb	AN	DI	advent
MYODIS	*	<i>MYOSOTIS DISCOLOR</i>	Pers.	Boraginaceae	TWO-COLORED FORGET-ME-NOT	UPL	forb	AN	DI	advent
MYOLAX	7	<i>Myosotis laxa</i>	Lehm.	Boraginaceae	SMALLER FORGET-ME-NOT	OBL	forb	PE	DI	partial
MYOMAC	4	<i>Myosotis macrosperma</i>	Engelm.	Boraginaceae	BRISTLY SCORPION-GRASS	FAC	forb	AN	DI	shade
MYOMIC	*	<i>MYOSOTIS MICRANTHA</i>	Pall. ex Lehm.	Boraginaceae	SM.-FLOWERED FORGET-ME-NOT	[UPL]	forb	AN	DI	advent
MYOSCO	*	<i>MYOSOTIS SCORPIOIDES</i>	L.	Boraginaceae	TRUE FORGET-ME-NOT	OBL	forb	PE	DI	advent

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MYOSYL	*	<i>MYOSOTIS SYLVATICA</i>	Ehrh. ex Hoffm.	Boraginaceae	GARDEN FORGET-ME-NOT	UPL	forb	PE	DI	advent
MYOVER	4	<i>Myosotis verna</i>	Nutt.	Boraginaceae	SPRING FORGET-ME-NOT	FAC-	forb	AN	DI	partial
MYOMIN	*	<i>MYOSURUS MINIMUS</i>	L.	Ranunculaceae	MOUSE-TAIL	FACW+	forb	AN	DI	advent
MYRPEN	10	<i>Myrica pensylvanica</i>	Loesel	Myricaceae	BAYBERRY	FAC	shrub	W	DI	
MYRHET	10	<i>Myriophyllum heterophyllum</i>	Michx.	Haloragaceae	TWO-LEAVED WATER-MILFOIL	OBL	forb	PE	DI	full
MYRSIB	9	<i>Myriophyllum sibiricum</i>	Kom.	Haloragaceae	AMERICAN WATER-MILFOIL	[OBL]	forb	PE	DI	full
MYRSPI	*	<i>MYRIOPHYLLUM SPICATUM</i>	L.	Haloragaceae	EUROPEAN WATER-MILFOIL	OBL	forb	PE	DI	advent
MYRVER	10	<i>Myriophyllum verticillatum</i>	L.	Haloragaceae	GREEN WATER-MILFOIL	OBL	forb	PE	DI	full
NAJFLE	5	<i>Najas flexilis</i>	(Willd.) Rostk. & W.L.E Schmidt	Najadaceae	NORTHERN WATER-NYMPH	OBL	forb	AN	MONO	full
NAJGRA	10	<i>Najas gracillima</i>	(A. Braun ex Engelm.) Magnus	Najadaceae	THREAD-LIKE WATER-NYMPH	OBL	forb	AN	MONO	full
NAJGUA	6	<i>Najas guadalupensis</i>	(Spreng.) Magnus	Najadaceae	SOUTHERN WATER-NYMPH	OBL	forb	AN	MONO	full
NAJMARA	*	<i>NAJAS MARINA</i>	L.	Najadaceae	ALKALINE WATER-NYMPH	OBL	forb	AN	MONO	advent
NAJMARN	8	<i>Najas marina</i>	L.	Najadaceae	ALKALINE WATER-NYMPH	OBL	forb	AN	MONO	full
NAJMIN	*	<i>NAJAS MINOR</i>	All.	Najadaceae	EURASIAN WATER-NYMPH	OBL	forb	AN	MONO	advent
NAPDIO	4	<i>Napaea dioica</i>	L.	Malvaceae	GLADE-MALLOW	FACW	forb	PE	DI	shade
NELLUT	7	<i>Nelumbo lutea</i>	Willd.	Nelumbonaceae	AMERICAN LOTUS	OBL	forb	PE	DI	full
NEMMUC	10	<i>Nemopanthus mucronatus</i>	(L.) Loes.	Aquifoliaceae	CATBERRY	OBL	shrub	W	DI	partial
NEPCAT	*	<i>NEPETA CATARIA</i>	L.	Lamiaceae	CATNIP	FACU	forb	PE	DI	advent
NESPAN	*	<i>NESLIA PANICULATA</i>	(L.) Desv.	Brassicaceae	BALL-MUSTARD	[UPL]	forb	AN	DI	advent
NICPHY	*	<i>NICANDRA PHYSALODES</i>	(L.) Gaertn.	Solanaceae	APPLE-OF-PERU	[UPL]	forb	AN	DI	advent
NICTAB	*	<i>NICOTIANA TABACUM</i>	L.	Solanaceae	TOBACCO	[UPL]	forb	PE	DI	advent
NOTBIV	7	<i>Nothoscordum bivalve</i>	(L.) Britton	Liliaceae	FALSE GARLIC	FACU	forb	PE	MONO	partial
NUPADV	4	<i>Nuphar advena</i>	(Aiton) W.T. Aiton	Nymphaeaceae	SPATTERDOCK	OBL	forb	PE	DI	full
NUPVAR	10	<i>Nuphar variegata</i>	Durand	Nymphaeaceae	BULLHEAD-LILY	OBL	forb	PE	DI	full
NYMODO	6	<i>Nymphaea odorata</i>	Aiton	Nymphaeaceae	FRAGRANT WATER-LILY	OBL	forb	PE	DI	full
NYSSYL	7	<i>Nyssa sylvatica</i>	Marshall	Cornaceae	BLACK-GUM	FAC	tree	W	DI	tree
OBOVIR	7	<i>Obolaria virginica</i>	L.	Gentianaceae	PENNYWORT	[UPL]	forb	PE	DI	shade
OENBIE	1	<i>Oenothera biennis</i>	L.	Onagraceae	COMMON EVENING-PRIMROSE	FACU-	forb	BI	DI	full
OENCLE	8	<i>Oenothera clelandii</i>	W. Dietr. P.H. Raven, & W.L. Wagner	Onagraceae	CLELAND'S EVENING-PRIMROSE	[UPL]	forb	BI	DI	full
OENFRU	4	<i>Oenothera fruticosa</i>	L.	Onagraceae	SOUTHERN SUNDROPS	FAC	forb	BI	DI	full
OENLAC	4	<i>Oenothera laciniata</i>	Hill	Onagraceae	CUT-LEAVED EVENING PRIMROSE	FACU-	forb	AN	DI	full
OENOAK	10	<i>Oenothera oakesiana</i>	(A. Gray) J. W. Robbins	Onagraceae	OAKES' EVENING PRIMROSE	[FACU-]	forb	AN	DI	full
OENPAR	7	<i>Oenothera parviflora</i>	L.	Onagraceae	SMALL-FLOWERED EVENING-PRIM.	FACU-	forb	BI	DI	full
OENPER	3	<i>Oenothera perennis</i>	L.	Onagraceae	SMALL SUNDROPS	FAC-	forb	PE	DI	partial
OENPIL	3	<i>Oenothera pilosella</i>	Raf.	Onagraceae	MEADOW SUNDROPS	FAC	forb	PE	DI	partial
OENSPE	*	<i>OENOTHERA SPECIOSA</i>	Nutt.	Onagraceae	WHITE EVENING-PRIMROSE	[UPL]	forb	PE	DI	advent
OENTET	4	<i>Oenothera tetragona</i>	Roth	Onagraceae	NORTHERN SUNDROPS	[FAC]	forb	PE	DI	partial
ONosen	2	<i>Onoclea sensibilis</i>	L.	Dryopteridaceae	SENSITIVE FERN	FACW	fern	PE	SVP	full
ONOACA	*	<i>ONOPORDIUM ACANTHIUM</i>	L.	Asteraceae	SCOTCH-THISTLE	[UPL]	forb	BI	DI	advent
ONOMOL	7	<i>Onosmodium molle</i>	Michx.	Boraginaceae	LIME GROMWELL	[FACU]	forb	PE	DI	full
OPHENG	9	<i>Ophioglossum engelmannii</i>	Prantl.	Ophioglossaceae	LIMESTONE ADDER'S-TONGUE	FACU	fern	PE	SVP	shade
OPHPUS	6	<i>Ophioglossum pusillum</i>	Raf.	Ophioglossaceae	NORTHERN ADDER'S-TONGUE	[FACW]	fern	PE	SVP	shade
OPHVUL	6	<i>Ophioglossum vulgatum</i>	L.	Ophioglossaceae	SOUTHERN ADDER'S-TONGUE	FACW	fern	PE	SVP	shade
OPUHUM	8	<i>Opuntia humifusa</i>	(Raf.) Raf.	Cactaceae	COMMON PRICKLY-PEAR	[UPL]	shrub	W	DI	full
ORBONO	5	<i>Orbexilum onobrychis</i>	(Nutt.) Rydb.	Fabaceae	SCURF-PEA	[UPL]	forb	PE	DI	full
ORBPED	7	<i>Orbexilum pedunculatum</i>	(Miller) Rydb.	Fabaceae	FALSE SCURF-PEA	[UPL]	forb	PE	DI	full
ORCSPE	7	<i>Orchis spectabilis</i>	L.	Orchidaceae	SHOWY ORCHIS	[UPL]	forb	PE	MONO	shade
ORNUMB	*	<i>ORNITHOGALUM UMBELLATUM</i>	L.	Liliaceae	STAR-OF-BETHLEHEM	FACU	forb	PE	MONO	advent
OROLUD	2	<i>Orobanche ludoviciana</i>	Nutt.	Orobanchaceae	LOUISIANA BROOM-RAPE	[UPL]	forb	PE	DI	full
OROUNI	6	<i>Orobanche uniflora</i>	L.	Orobanchaceae	ONE-FLOWERED CANCER-ROOT	FACU	forb	PE	DI	full
ORYASP	10	<i>Oryzopsis asperifolia</i>	Michx.	Poaceae	LARGE-LEAVED MOUNTAIN-RICE	[UPL]	grass	PE	MONO	shade
ORYRAC	10	<i>Oryzopsis racemosa</i>	(Sm.) Ricker ex Hitchc.	Poaceae	MOUNTAIN-RICE	[UPL]	grass	PE	MONO	shade
OSMOCL	4	<i>Osmorhiza claytonii</i>	(Michx.) C.B. Clarke	Apiaceae	WOOLLY SWEET CICELY	FACU-	forb	PE	DI	shade
OSMOLO	4	<i>Osmorhiza longistylis</i>	(Torr.) DC.	Apiaceae	SMOOTH SWEET CICELY	FACU	forb	PE	DI	shade

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OSMCIN	6	<i>Osmunda cinnamomea</i>	L.	Osmundaceae	CINNAMON FERN	FACW	fern	PE	SVP	partial
OSMCLA	6	<i>Osmunda claytoniana</i>	L.	Osmundaceae	INTERRUPTED FERN	FAC	fern	PE	SVP	shade
OSMREG	7	<i>Osmunda regalis</i>	L.	Osmundaceae	ROYAL FERN	OBL	fern	PE	SVP	shade
OSTVIR	5	<i>Ostrya virginiana</i>	(Miller) K. Koch	Betulaceae	HOP-HORNBEAM	FACU-	tree	W	DI	tree
OXAACE	9	<i>Oxalis acetosella</i>	L.	Oxalidaceae	WHITE WOOD-SORREL	[FAC-]	forb	PE	DI	shade
OXACOR	*	<i>OXALIS CORNICULATA</i>	L.	Oxalidaceae	CREeping WOOD-SORREL	FACU	forb	PE	DI	advent
OXADIL	0	<i>Oxalis dillenii</i>	Jacq.	Oxalidaceae	SOUTHERN YELLOW WOOD-SOR.	[FACU]	forb	PE	DI	full
OXAGRA	7	<i>Oxalis grandis</i>	Small	Oxalidaceae	GREAT YELLOW WOOD-SORREL	[UPL]	forb	PE	DI	shade
OXASTR	0	<i>Oxalis stricta</i>	L.	Oxalidaceae	COMMON YELLOW WOOD-SORREL	UPL	forb	PE	DI	full
OXAVIO	6	<i>Oxalis violacea</i>	L.	Oxalidaceae	VIOLET WOOD-SORREL	[UPL]	forb	PE	DI	shade
OXYARB	7	<i>Oxydendron arboreum</i>	(L.) DC.	Ericaceae	SOURWOOD	UPL	tree	W	DI	tree
OXYRIG	7	<i>Oxypolis rigidior</i>	(L.) Raf.	Apiaceae	COWBANE	OBL	forb	PE	DI	full
PANQUI	6	<i>Panax quinquefolius</i>	L.	Araliaceae	GINSENG	[UPL]	forb	PE	DI	shade
PANTRI	6	<i>Panax trifolius</i>	L.	Araliaceae	DWARF GINSENG	[FACU]	forb	PE	DI	shade
PANACU	2	<i>Panicum acuminatum</i>	Sw.	Poaceae	TAPERED ROSETTE GRASS	FAC	grass	PE	MONO	full
PANANC	3	<i>Panicum anceps</i>	Michx.	Poaceae	BEAKED PANIC GRASS	FAC	grass	PE	MONO	full
PANBOR	6	<i>Panicum boreale</i>	Nash	Poaceae	NORTHERN PANIC GRASS	FACU	grass	PE	MONO	full
PANBOS	6	<i>Panicum boscii</i>	Poir.	Poaceae	BOSC'S PANIC GRASS	[UPL]	grass	PE	MONO	shade
PANCAP	1	<i>Panicum capillare</i>	L.	Poaceae	WITCH GRASS	FAC-	grass	AN	MONO	full
PANCLA	2	<i>Panicum clandestinum</i>	L.	Poaceae	DEER'S-TONGUE PANIC GRASS	FAC+	grass	PE	MONO	shade
PANCOL	6	<i>Panicum columbianum</i>	Scribn.	Poaceae	AMERICAN PANIC GRASS	FACU	grass	PE	MONO	full
PANCOM	9	<i>Panicum commonsianum</i>	Ashe	Poaceae	COMMON'S PANIC GRASS	FACU	grass	PE	MONO	full
PANCOM	5	<i>Panicum commutatum</i>	Schult.	Poaceae	VARIABLE PANIC GRASS	FACU+	grass	PE	MONO	shade
PANDEP	8	<i>Panicum depauperatum</i>	Muhl.	Poaceae	STARVED PANIC GRASS	[UPL]	grass	PE	MONO	shade
PANDIC	0	<i>Panicum dichotomiflorum</i>	Michx.	Poaceae	FALL PANIC GRASS	FACW-	grass	AN	MONO	full
PANDIC	4	<i>Panicum dichotomum</i>	L.	Poaceae	FORKING PANIC GRASS	FAC	grass	PE	MONO	partial
PANFLE	5	<i>Panicum flexile</i>	(Gatt.) Scribn.	Poaceae	FLEXUOUS PANIC GRASS	FACU	grass	AN	MONO	partial
PANIMP	9	<i>Panicum implicatum</i>	Scribn.	Poaceae	SOUTHERN HAIRY PANIC GRASS	[FACW]	grass	PE	MONO	full
PANLAN	3	<i>Panicum lanuginosum</i>	Elliott	Poaceae	WESTERN PANIC GRASS	FAC	grass	PE	MONO	full
PANLAT	4	<i>Panicum latifolium</i>	L.	Poaceae	BROAD-LEAVED PANIC GRASS	FACU-	grass	PE	MONO	shade
PANLAX	7	<i>Panicum laxiflorum</i>	Lam.	Poaceae	PALE GREEN PANIC GRASS	FACU	grass	PE	MONO	shade
PANLEI	8	<i>Panicum leibergii</i>	(Vasey) Scribn.	Poaceae	LEIBERG'S PANIC GRASS	FACU	grass	PE	MONO	full
PANLIN	9	<i>Panicum lindheimeri</i>	Nash	Poaceae	LINDHEIMER'S PANIC GRASS	[OBL]	grass	PE	MONO	full
PANLIN	4	<i>Panicum linearifolium</i>	Scribn.	Poaceae	LINEAR-LEAVED PANIC GRASS	[UPL]	grass	PE	MONO	full
PANRIGP	9	<i>Panicum longifolium</i>	Torr.	Poaceae	LONG-LEAVED PANIC GRASS	OBL	grass	PE	MONO	full
PANMER	9	<i>Panicum meridionale</i>	Ashe	Poaceae	SOUTHERN HAIRY PANIC GRASS	[UPL]	grass	PE	MONO	full
PANMIC	5	<i>Panicum microcarpon</i>	Muhl. ex Elliott	Poaceae	SMALL-FRUITED PANIC GRASS	[FACU]	grass	PE	MONO	full
PANOLI	6	<i>Panicum oligosanthos</i>	Schult.	Poaceae	FEW-FLOWERED PANIC GRASS	FACU	grass	PE	MONO	partial
PANPER	9	<i>Panicum perlongum</i>	Nash	Poaceae	LONG-PANICLED PANIC GRASS	[UPL]	grass	PE	MONO	full
PANPHI	4	<i>Panicum philadelphicum</i>	Bernh. ex Trin.	Poaceae	PHILADELPHIA PANIC GRASS	FAC-	grass	AN	MONO	full
PANPOL	3	<i>Panicum polyanthes</i>	Schult.	Poaceae	MANY-FLOWERED PANIC GRASS	[FACU]	grass	PE	MONO	shade
PANPRA	9	<i>Panicum praecocius</i>	Hitchc. & Chase	Poaceae	EARLY PANIC GRASS	[UPL]	grass	PE	MONO	full
PANRIGR	5	<i>Panicum rigidulum</i>	Bosc ex Nees	Poaceae	RIGID PANIC GRASS	FACW+	grass	PE	MONO	full
PANSCO	6	<i>Panicum scoparium</i>	Lam.	Poaceae	VELVET PANIC GRASS	FACW	grass	PE	MONO	full
PANSPH	4	<i>Panicum sphaerocarpon</i>	Muhl. ex Elliott	Poaceae	ROUND-FRUITED PANIC GRASS	FACU	grass	PE	MONO	shade
PANSPR	9	<i>Panicum spretum</i>	Schult.	Poaceae	NARROW-HEADED PANIC GRASS	[FAC]	grass	PE	MONO	full
PANVER	7	<i>Panicum verrucosum</i>	Muhl.	Poaceae	WARTY PANIC GRASS	FACW	grass	AN	MONO	shade
PANVIR	4	<i>Panicum virgatum</i>	L.	Poaceae	SWITCH GRASS	FAC	grass	PE	MONO	full
PANYAD	7	<i>Panicum yadkinense</i>	Ashe	Poaceae	SPOTTED PANIC GRASS	[FAC]	grass	PE	MONO	shade
PAPDUB	*	<i>PAPAVER DUBIUM</i>	L.	Papaveraceae	SCARLET POPPY	[UPL]	forb	AN	DI	advent
PAPRHO	*	<i>PAPAVER RHOEAS</i>	L.	Papaveraceae	CORN POPPY	[UPL]	forb	AN	DI	advent
PAPSOM	*	<i>PAPAVER SOMNIFERUM</i>	L.	Papaveraceae	OPIMUM POPPY	[UPL]	forb	AN	DI	advent
PARPEN	4	<i>Parietaria pensylvanica</i>	Muhl. ex Willd.	Urticaceae	PELLITORY	FACU-	forb	AN	DI	shade
PARGLA	10	<i>Parnassia glauca</i>	Raf.	Saxifragaceae	GRASS-OF-PARNASSUS	OBL	forb	PE	DI	full

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PARCAN	5	<i>Paronychia canadensis</i>	(L.) A.W. Wood	Caryophyllaceae	FORKED-CHICKWEED	[UPL]	forb	AN	DI	full
PARFAS	5	<i>Paronychia fastigiata</i>	(Raf.) Fernald	Caryophyllaceae	LOW FORKED-CHICKWEED	[UPL]	forb	AN	DI	partial
PARQUI	2	<i>Parthenocissus quinquefolia</i>	(L.) Planch.	Vitaceae	VIRGINIA CREEPER	FACU	vine	W	DI	shade
PARVIT	1	<i>Parthenocissus vitacea</i>	(Kner) Hitchc.	Vitaceae	THICKET CREEPER	FACU	vine	W	DI	shade
PASLAE	2	<i>Paspalum laeve</i>	Michx.	Poaceae	FIELD PASPALUM	FAC+	grass	PE	MONO	full
PAS PUB	3	<i>Paspalum pubiflorum</i>	Rupr. ex Fourn.	Poaceae	HAIRY-FLOWERED PASPALUM	FAC	grass	PE	MONO	full
PASFLU	9	<i>Paspalum repens</i>	Berg.	Poaceae	RIVERBANK PASPALUM	OBL	grass	PE	MONO	full
PASSET	2	<i>Paspalum setaceum</i>	Michx.	Poaceae	THIN PASPALUM	FACU+	grass	PE	MONO	partial
PASINC	6	<i>Passiflora incarnata</i>	L.	Passifloraceae	PASSION-FLOWER	[UPL]	vine	PE	DI	full
PASLUT	4	<i>Passiflora lutea</i>	L.	Passifloraceae	YELLOW PASSION-FLOWER	[UPL]	vine	PE	DI	partial
PASSAT	*	<i>PASTINACA SATIVA</i>	L.	Apiaceae	WILD PARSNIP	[UPL]	forb	BI	DI	advent
PAUTOM	*	<i>PAULOWNIA TOMENTOSA</i>	(Thunb.) Siebold & Zucc. ex Steud.	Bignoniaceae	PRINCESS TREE	UPL	tree	W	DI	advent
PAXCAN	10	<i>Paxistima canbyi</i>	A. Gray	Celastraceae	CLIFF-GREEN	[UPL]	shrub	W	DI	shade
PEDCAN	6	<i>Pedicularis canadensis</i>	L.	Scrophulariaceae	COMMON LOUSEWORT	FACU	forb	PE	DI	full
PEDLAN	8	<i>Pedicularis lanceolata</i>	Michx.	Scrophulariaceae	SWAMP LOUSEWORT	FACW	forb	PE	DI	full
PELATR	10	<i>Pellaea atropurpurea</i>	(L.) Link	Pteridaceae	PURPLE CLIFF-BRAKE	[UPL]	fern	PE	SVP	shade
PELGLA	10	<i>Pellaea glabella</i>	Mett. ex Kuhn	Pteridaceae	SMOOTH CLIFF-BRAKE	[UPL]	fern	PE	SVP	shade
PELVIR	5	<i>Peltandra virginica</i>	(L.) Schott	Araceae	ARROW-ARUM	OBL	forb	PE	MONO	full
PENCAL	2	<i>Penstemon calycosus</i>	Small	Scrophulariaceae	FIELD BEARD-TONGUE	UPL	forb	PE	DI	full
PENCAN	6	<i>Penstemon canescens</i>	(Britton) Britton	Scrophulariaceae	GRAY BEARD-TONGUE	[UPL]	forb	PE	DI	full
PENDIG	2	<i>Penstemon digitalis</i>	Nutt. ex Sims	Scrophulariaceae	FOXGLOVE BEARD-TONGUE	FAC	forb	PE	DI	full
PENHIR	3	<i>Penstemon hirsutus</i>	(L.) Willd.	Scrophulariaceae	HAIRY BEARD-TONGUE	[UPL]	forb	PE	DI	full
PENLAE	5	<i>Penstemon laevigatus</i>	Aiton	Scrophulariaceae	SMOOTH BEARD-TONGUE	FACU	forb	PE	DI	full
PENPAL	5	<i>Penstemon pallidus</i>	Small	Scrophulariaceae	DOWNY WHITE BEARD-TONGUE	FACU	forb	PE	DI	full
PENTUB	5	<i>Penstemon tubaeiflorus</i>	Nutt.	Scrophulariaceae	WHITE-WAND BEARD-TONGUE	[UPL]	forb	PE	DI	full
PENSED	2	<i>Penthorum sedoides</i>	L.	Saxifragaceae	DITCH-STONECROP	OBL	forb	PE	DI	full
PERAME	8	<i>Perideridia americana</i>	(Nutt.ex DC.) Rchb.	Apiaceae	PERIDERIDIA	[UPL]	forb	PE	DI	full
PERFRU	*	<i>PERILLA FRUTESCENS</i>	(L.) Britton	Lamiaceae	BEEFSTEAK-PLANT	FACU+	forb	AN	DI	advent
PHABIP	4	<i>Phacelia bipinnatifida</i>	Michx.	Hydrophyllaceae	FERN-LEAVED SCORPION-WEED	[FACW-]	forb	BI	DI	shade
PHADUB	10	<i>Phacelia dubia</i>	(L.) Trel.	Hydrophyllaceae	SMALL-FLOWERED SCORPION-W.	[UPL]	forb	AN	DI	shade
PHAPUR	4	<i>Phacelia purshii</i>	Buckley	Hydrophyllaceae	MIAMI-MIST	[UPL]	forb	AN	DI	shade
PHARAN	8	<i>Phacelia ranunculacea</i>	(Nutt.) Constance	Hydrophyllaceae	BLUE SCORPION-WEED	FACW	forb	AN	DI	shade
PHAARU	0	<i>Phalaris arundinacea</i>	L.	Poaceae	REED CANARY GRASS	FACW+	grass	PE	MONO	full
PHAPOL	3	<i>Phaseolus polystachios</i>	(L.) B.S.P.	Fabaceae	WILD BEAN	[UPL]	forb	PE	DI	shade
PHICOR	*	<i>PHILADELPHUS CORONARIUS</i>	L.	Hydrangeaceae	EUROPEAN MOCK-ORANGE	[UPL]	shrub	W	DI	advent
PHLPRA	*	<i>PHLEUM PRATENSE</i>	L.	Poaceae	TIMOTHY	FACU	grass	PE	MONO	advent
PHLDIV	4	<i>Phlox divaricata</i>	L.	Polemoniaceae	BLUE PHLOX	FACU	forb	PE	DI	shade
PHLGLA	5	<i>Phlox glaberrima</i>	L.	Polemoniaceae	SMOOTH PHLOX	FAC	forb	PE	DI	partial
PHLMAC	7	<i>Phlox maculata</i>	L.	Polemoniaceae	SPOTTED PHLOX	FACW	forb	PE	DI	partial
PHLOVA	9	<i>Phlox ovata</i>	L.	Polemoniaceae	MOUNTAIN PHLOX	[UPL]	forb	PE	DI	shade
PHLPAN	2	<i>Phlox paniculata</i>	L.	Polemoniaceae	GARDEN PHLOX	FACU	forb	PE	DI	shade
PHLPIL	6	<i>Phlox pilosa</i>	L.	Polemoniaceae	DOWNY PHLOX	FACU	forb	PE	DI	partial
PHLSTO	9	<i>Phlox stolonifera</i>	Sims	Polemoniaceae	CREeping PHLOX	[UPL]	forb	PE	DI	shade
PHLSUBA	*	<i>PHLOX SUBULATA</i>	L.	Polemoniaceae	CREeping PHLOX	[UPL]	forb	PE	DI	advent
PHLSUBN	7	<i>Phlox subulata</i>	L.	Polemoniaceae	MOSS PHLOX	[UPL]	forb	PE	DI	full
PHOSER	9	<i>Phoradendron serotinum</i>	(Raf.) M.C. Johnst.	Viscaceae	MISTLETOE	[UPL]	shrub	W	DI	full
PHRAUS	0	<i>Phragmites australis</i>	(Cav.) Trin.	Poaceae	GIANT REED	FACW	grass	PE	MONO	full
PHRLEP	5	<i>Phryma leptostachya</i>	L.	Verbenaceae	LOPSEED	FACU-	forb	PE	DI	shade
PHYLAN	3	<i>Phyla lanceolata</i>	(Michx.) Greene	Verbenaceae	FOG-FRUIT	OBL	forb	PE	DI	full
PHYCAR	6	<i>Phyllanthus carolinensis</i>	Walter	Euphorbiaceae	CAROLINA LEAF-FLOWER	FAC+	forb	AN	DI	full
PHYALK	*	<i>PHYSALIS ALKEKENGI</i>	L.	Solanaceae	CHINESE LANTERN	[UPL]	forb	PE	DI	advent
PHYHET	1	<i>Physalis heterophylla</i>	Nees	Solanaceae	CLAMMY GROUND-CHERRY	[UPL]	forb	PE	DI	partial
PHYLON	1	<i>Physalis longifolia</i>	Nutt.	Solanaceae	SMOOTH GROUND-CHERRY	[UPL]	forb	PE	DI	partial
PHYPUB	1	<i>Physalis pubescens</i>	L.	Solanaceae	DOWNY GROUND-CHERRY	FACU-	forb	AN	DI	full

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PHYVIR	7	<i>Physalis virginiana</i>	Mill.	Solanaceae	VIRGINIA GROUND-CHERRY	[UPL]	forb	PE	DI	partial
PHYOPU	4	<i>Physocarpus opulifolius</i>	(L.) Maxim.	Rosaceae	NINEBARK	FACW-	shrub	W	DI	full
PHSVIR	5	<i>Physostegia virginiana</i>	(L.) Benth.	Lamiaceae	OBEDIENT PLANT	FAC+	forb	PE	DI	full
PHYAME	1	<i>Phytolacca americana</i>	L.	Phytolaccaceae	POKEWEED	FACU+	forb	PE	DI	full
PILFON	4	<i>Pilea fontana</i>	(Lunnell) Rydb.	Urticaceae	COOLWORT	FACW+	forb	AN	DI	partial
PILPUM	2	<i>Pilea pumila</i>	(L.) A. Gray	Urticaceae	CLEARWEED	FACW	forb	AN	DI	partial
PINECH	8	<i>Pinus echinata</i>	Mill.	Pinaceae	SHORTLEAF PINE	[UPL]	tree	W	GYMN	tree
PINNIG	*	<i>PINUS NIGRA</i>	Arn.	Pinaceae	AUSTRIAN PINE	[UPL]	tree	W	GYMN	tree
PINRES	*	<i>PINUS RESINOSA</i>	Aiton	Pinaceae	RED PINE	FACU	tree	W	GYMN	tree
PINRIG	7	<i>Pinus rigida</i>	Mill.	Pinaceae	PITCH PINE	FACU	tree	W	GYMN	tree
PINSTR	*	<i>PINUS STROBUS</i>	L.	Pinaceae	WHITE PINE	FACU	tree	W	GYMN	tree
PINSTRN	6	<i>Pinus strobus</i>	L.	Pinaceae	WHITE PINE	FACU	tree	W	GYMN	tree
PINSYL	*	<i>PINUS SYLVESTRIS</i>	L.	Pinaceae	SCOTCH PINE	[UPL]	tree	W	GYMN	tree
PINVIR	3	<i>Pinus virginiana</i>	Mill.	Pinaceae	VIRGINIA PINE	[UPL]	tree	W	GYMN	tree
PIPAVE	8	<i>Piptochaetium avenaceum</i>	(L.) Parodi	Poaceae	BLACKSEED NEEDLE GRASS	[UPL]	grass	PE	MONO	shade
PLANAR	*	<i>PLANTAGO ARISTATA</i>	Michx.	Plantaginaceae	BRACTED PLANTAIN	[UPL]	forb	AN	DI	advent
PLANCO	9	<i>Plantago cordata</i>	Lam.	Plantaginaceae	HEART-LEAVED PLANTAIN	OBL	forb	PE	DI	full
PLANLA	*	<i>PLANTAGO LANCEOLATA</i>	L.	Plantaginaceae	ENGLISH PLANTAIN	UPL	forb	PE	DI	advent
PLANMA	*	<i>PLANTAGO MAJOR</i>	L.	Plantaginaceae	COMMON PLANTAIN	FACU	forb	PE	DI	advent
PLANPA	7	<i>Plantago patagonica</i>	Jacq.	Plantaginaceae	WOOLLY PLANTAIN	UPL	forb	AN	DI	full
PLANPS	*	<i>PLANTAGO PSYLLIUM</i>	L.	Plantaginaceae	FLEAWORT	[UPL]	forb	AN	DI	advent
PLANRU	0	<i>Plantago rugelii</i>	Decne.	Plantaginaceae	RUGEL'S PLANTAIN	FACU	forb	PE	DI	full
PLANVI	1	<i>Plantago virginica</i>	L.	Plantaginaceae	VIRGINIA PLANTAIN	[UPL]	forb	AN	DI	full
PLAAQU	8	<i>Platanthera aquilonis</i>	Sheviak	Orchidaceae	TALL NORTHERN GREEN ORCHID	FACW	forb	PE	MONO	partial
PLABLE	10	<i>Platanthera blephariglotis</i>	(Willd.) Lindl.	Orchidaceae	WHITE FRINGED ORCHID	OBL	forb	PE	MONO	partial
PLACIL	8	<i>Platanthera ciliaris</i>	(L.) Lindl.	Orchidaceae	YELLOW FRINGED ORCHID	FACW	forb	PE	MONO	partial
PLACLA	6	<i>Platanthera clavellata</i>	(Michx.) Luer	Orchidaceae	GREEN WOODLAND ORCHID	[FACW+]	forb	PE	MONO	shade
PLAFLA	6	<i>Platanthera flava</i>	(L.) Lindl.	Orchidaceae	TUBERCLED REIN-ORCHID	FACW	forb	PE	MONO	partial
PLAGRA	10	<i>Platanthera grandiflora</i>	(Bigelow) Lindl.	Orchidaceae	LARGE PURPLE FRINGED ORCHID	FACW	forb	PE	MONO	partial
PLAHOO	8	<i>Platanthera hookeri</i>	(Torr. ex A. Gray) Lindl.	Orchidaceae	HOOKE'S ORCHID	FAC	forb	PE	MONO	shade
PLALAC	3	<i>Platanthera lacera</i>	(Michx.) G. Don	Orchidaceae	RAGGED FRINGED ORCHID	FACW	forb	PE	MONO	full
PLALEU	8	<i>Platanthera leucophaea</i>	(Nutt.) Lindl.	Orchidaceae	PRAIRIE FRINGED ORCHID	FACW+	forb	PE	MONO	full
PLAORB	7	<i>Platanthera orbiculata</i>	(Pursh) Lindl.	Orchidaceae	LARGE ROUND-LEAVED ORCHID	FAC	forb	PE	MONO	shade
PLAPER	6	<i>Platanthera peramoena</i>	(A. Gray) A. Gray	Orchidaceae	PURPLE FRINGELESS ORCHID	FACW	forb	PE	MONO	partial
PLAPSY	8	<i>Platanthera psycodes</i>	(L.) Lindl.	Orchidaceae	SMALL PURPLE FRINGED ORCHID	FACW	forb	PE	MONO	partial
PLAOCC	7	<i>Platanus occidentalis</i>	L.	Platanaceae	SYCAMORE	FACW-	tree	W	DI	tree
POLPOL	8	<i>Pleopeltis polypodioides</i>	(L.) E.G. Andrews & Windham	Polypodiaceae	RESURRECTION FERN	[UPL]	fern	PE	SVP	shade
PLUCAM	6	<i>Pluchea camphorata</i>	(L.) DC.	Asteraceae	CAMPHORWEED	FACW	forb	AN	DI	partial
POAALS	5	<i>Poa alsodes</i>	A. Gray	Poaceae	WOODLAND BLUEGRASS	FACW-	grass	PE	DI	shade
POAANN	*	<i>POA ANNUA</i>	L.	Poaceae	ANNUAL BLUEGRASS	FACU	grass	AN	MONO	advent
POABUL	*	<i>POA BULBOSA</i>	L.	Poaceae	BULB-BEARING BLUEGRASS	[FAC]	grass	PE	MONO	advent
POACHA	*	<i>POA CHAPMANIANA</i>	Scribn.	Poaceae	CHAPMAN'S BLUEGRASS	UPL	grass	AN	MONO	advent
POACOM	*	<i>POA COMPRESSA</i>	L.	Poaceae	CANADA BLUEGRASS	FACU	grass	PE	MONO	advent
POACUS	7	<i>Poa cuspidata</i>	Nutt.	Poaceae	EARLY BLUEGRASS	[UPL]	grass	PE	MONO	shade
POALAN	6	<i>Poa languida</i>	Hitchc.	Poaceae	WEAK SPEAR GRASS	[UPL]	grass	PE	MONO	shade
POANEM	*	<i>POA NEMORALIS</i>	L.	Poaceae	FOREST BLUEGRASS	FAC	grass	PE	MONO	advent
POAPLU	9	<i>Poa paludigena</i>	Fernald & Wiegand	Poaceae	MARSH SPEAR GRASS	FACW+	grass	PE	MONO	partial
POAPAL	5	<i>Poa palustris</i>	L.	Poaceae	FOWL MEADOW GRASS	FACW	grass	PE	MONO	full
POAPRA	*	<i>POA PRATENSIS</i>	L.	Poaceae	KENTUCKY BLUEGRASS	FACU	grass	PE	MONO	advent
POASAL	8	<i>Poa saltuensis</i>	Fernald & Wiegand	Poaceae	PASTURE BLUEGRASS	[UPL]	grass	PE	MONO	partial
POASYL	5	<i>Poa sylvestris</i>	A. Gray	Poaceae	WOODS BLUEGRASS	FACW	grass	PE	MONO	shade
POATRI	*	<i>POA TRIVIALIS</i>	L.	Poaceae	ROUGH BLUEGRASS	FACW	grass	PE	MONO	advent
POAWOL	7	<i>Poa wolfii</i>	Scribn.	Poaceae	WOLF'S BLUEGRASS	[UPL]	grass	PE	MONO	shade
PODPEL	4	<i>Podophyllum peltatum</i>	L.	Berberidaceae	MAYAPPLE	FACU	forb	PE	MONO	shade

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
PODCER	10	<i>Podostemum ceratophyllum</i>	Michx.	Podostemaceae	RIVERWEED	OBL	forb	PE	DI	full
POGOPH	9	<i>Pogonia ophioglossoides</i>	(L.) Ker Gawl.	Orchidaceae	ROSE POGONIA	OBL	forb	PE	MONO	full
POLDOD	3	<i>Polanisia dodecandra</i>	(L.) DC.	Capparaceae	CLAMMY-WEED	FACU	forb	AN	DI	full
POLREP	5	<i>Polemonium reptans</i>	L.	Polemoniaceae	SPREADING JACOB'S LADDER	FACU	forb	PE	DI	shade
PLYCRU	10	<i>Polygala cruciata</i>	L.	Polygalaceae	CROSS-LEAVED MILKWORT	FACW+	forb	AN	DI	full
PLYCUR	8	<i>Polygala curtissii</i>	A. Gray	Polygalaceae	CURTISS' MILKWORT	[UPL]	forb	AN	DI	full
PLYINC	6	<i>Polygala incarnata</i>	L.	Polygalaceae	PINK MILKWORT	UPL	forb	AN	DI	full
PLYPAU	8	<i>Polygala paucifolia</i>	Willd.	Polygalaceae	FRINGED MILKWORT	FACU	forb	PE	DI	full
PLYPOL	10	<i>Polygala polygama</i>	Walter	Polygalaceae	RACEMED MILKWORT	UPL	forb	PE	DI	full
PLYSAN	2	<i>Polygala sanguinea</i>	L.	Polygalaceae	FIELD MILKWORT	FACU	forb	AN	DI	full
PLYSEN	7	<i>Polygala senega</i>	L.	Polygalaceae	SENECA SNAKEROOT	FACU	forb	PE	DI	full
PLYVER	2	<i>Polygala verticillata</i>	L.	Polygalaceae	WHORLED MILKWORT	UPL	forb	AN	DI	full
POLBIF	4	<i>Polygonatum biflorum</i>	(Walter) Elliott	Liliaceae	SMOOTH SOLOMON'S-SEAL	FACU	forb	PE	MONO	shade
POLPUB	5	<i>Polygonatum pubescens</i>	(Willd.) Pursh	Liliaceae	DOWNY SOLOMON'S-SEAL	[UPL]	forb	PE	MONO	shade
PLGACH	*	<i>POLYGONUM ACHOREUM</i>	S.F. Blake	Polygonaceae	KNOTWEED	FACU	forb	AN	DI	advent
PLGAMP	4	<i>Polygonum amphibium</i>	L.	Polygonaceae	WATER SMARTWEED	OBL	forb	PE	DI	full
PLGARI	4	<i>Polygonum arifolium</i>	L.	Polygonaceae	HALBERD-LEAVED TEARTHUMB	OBL	forb	AN	DI	full
PLGAVI	*	<i>POLYGONUM AVICULARE</i>	L.	Polygonaceae	COMMON KNOTWEED	FACU	forb	AN	DI	advent
PLGCAR	9	<i>Polygonum careyi</i>	Olney	Polygonaceae	CAREY'S SMARTWEED	FACW	forb	AN	DI	full
PLGCEs	*	<i>POLYGONUM CESPITOSUM</i>	Blume	Polygonaceae	LONG-BRISTLED SMARTWEED	FACU-	forb	AN	DI	advent
PLGCIL	8	<i>Polygonum cilinode</i>	Michx.	Polygonaceae	MOUNTAIN BINDWEED	[UPL]	vine	PE	DI	shade
PLGCON	*	<i>POLYGONUM CONVULVULUS</i>	L.	Polygonaceae	BLACK BINDWEED	FACU	vine	AN	DI	advent
PLGCUS	*	<i>POLYGONUM CUSPIDATUM</i>	Siebold & Zucc.	Polygonaceae	JAPANESE KNOTWEED	FACU-	forb	PE	DI	advent
PLGERE	1	<i>Polygonum erectum</i>	L.	Polygonaceae	ERECT KNOTWEED	FACU	forb	AN	DI	full
PLGHPR	1	<i>Polygonum hydropiper</i>	L.	Polygonaceae	WATER-PEPPER	OBL	forb	AN	DI	full
PLGHPO	6	<i>Polygonum hydropiperoides</i>	Michx.	Polygonaceae	MILD WATER-PEPPER	OBL	forb	PE	DI	full
PLGLAP	1	<i>Polygonum lapathifolium</i>	L.	Polygonaceae	DOCK-LEAVED SMARTWEED	FACW+	forb	AN	DI	full
PLGORI	*	<i>POLYGONUM ORIENTALE</i>	L.	Polygonaceae	PRINCE'S FEATHER	FACU-	forb	AN	DI	advent
PLGPEN	0	<i>Polygonum pensylvanicum</i>	L.	Polygonaceae	PINKWEED	FACW	forb	AN	DI	full
PLGPER	*	<i>POLYGONUM PERSICARIA</i>	L.	Polygonaceae	LADY'S THUMB	FACW	forb	AN	DI	advent
PLGPUN	6	<i>Polygonum punctatum</i>	Elliott	Polygonaceae	DOTTED SMARTWEED	OBL	forb	PE	DI	full
PLGRAM	1	<i>Polygonum ramosissimum</i>	Michx.	Polygonaceae	BUSHY KNOTWEED	FAC	forb	AN	DI	full
PLGROB	5	<i>Polygonum robustius</i>	(Small) Fernald	Polygonaceae	COARSE SMARTWEED	OBL	forb	PE	DI	full
PLGSAC	*	<i>POLYGONUM SACHALINENSE</i>	F. W. Schmidt ex Maxim.	Polygonaceae	GIANT KNOTWEED	[UPL]	forb	PE	DI	advent
PLGSAG	2	<i>Polygonum sagittatum</i>	L.	Polygonaceae	ARROW-LEAVED TEARTHUMB	OBL	forb	AN	DI	full
PLGSCA	2	<i>Polygonum scandens</i>	L.	Polygonaceae	CLIMBING FALSE BUCKWHEAT	FAC	vine	PE	DI	partial
PLGSET	6	<i>Polygonum setaceum</i>	Baldwin	Polygonaceae	BRISTLY SMARTWEED	OBL	forb	PE	DI	full
PLGTEN	4	<i>Polygonum tenue</i>	Michx.	Polygonaceae	SLENDER KNOTWEED	[UPL]	forb	AN	DI	full
PLGVIR	3	<i>Polygonum virginianum</i>	L.	Polygonaceae	JUMPSEED	FAC	forb	PE	DI	shade
POLCAN	5	<i>Polymnia canadensis</i>	L.	Asteraceae	LEAFCUP	[UPL]	forb	PE	DI	shade
POLUVE	7	<i>Polymnia uvedalia</i>	(L.) L.	Asteraceae	LARGE-FLOWERED LEAFCUP	[UPL]	forb	PE	DI	shade
POLAPP	8	<i>Polypodium appalachianum</i>	Hautfler & Windham	Polypodiaceae	APPALACHIAN POLYPODY	[UPL]	fern	PE	SVP	shade
POLVIG	8	<i>Polypodium virginianum</i>	L.	Polypodiaceae	ROCK POLYPODY	[UPL]	fern	PE	SVP	shade
POLACR	3	<i>Polystichum acrostichoides</i>	(Michx.) Schott	Dryopteridaceae	CHRISTMAS FERN	FACU-	fern	PE	SVP	shade
PONCOR	6	<i>Pontederia cordata</i>	L.	Pontederiaceae	PICKEREL-WEED	OBL	forb	PE	MONO	full
POPALB	*	<i>POPULUS ALBA</i>	L.	Salicaceae	WHITE POPLAR	[UPL]	tree	W	DI	advent
POPBAL	3	<i>Populus balsamifera</i>	L.	Salicaceae	BALSAM POPLAR	FACW	tree	W	DI	tree
POPDEL	3	<i>Populus deltoides</i>	W. Bartram ex Marshall	Salicaceae	EASTERN COTTONWOOD	FAC	tree	W	DI	tree
POPGRA	2	<i>Populus grandidentata</i>	Michx.	Salicaceae	BIG-TOOTH ASPEN	FACU-	tree	W	DI	tree
POPHET	9	<i>Populus heterophylla</i>	L.	Salicaceae	SWAMP COTTONWOOD	FACW+	tree	W	DI	tree
POPNIg	*	<i>POPULUS NIGRA</i> L. var. <i>ITALICA</i>	Du Roi	Salicaceae	LOMBARDY POPLAR	[UPL]	tree	W	DI	advent
POPTRE	2	<i>Populus tremuloides</i>	Michx.	Salicaceae	QUAKING ASPEN	[FACU]	tree	W	DI	tree
PORSTI	6	<i>Porteranthus stipulatus</i>	(Muhl. ex Willd.) Britton	Rosaceae	AMERICAN IPECAC	[UPL]	forb	PE	DI	shade
PORTRI	6	<i>Porteranthus trifoliatus</i>	(L.) Britton	Rosaceae	BOWMAN'S-ROOT	[UPL]	forb	PE	DI	shade

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POROLE	*	<i>PORTULACA OLERACEA</i>	L.	Portulacaceae	COMMON PURSLANE	FAC	forb	AN	DI	advent
PTMAMP	8	<i>Potamogeton amplifolius</i>	Tuck.	Potamogetonaceae	LYRE-LEAVED PONDWEED	OBL	forb	PE	MONO	full
PTMCRI	*	<i>POTAMOGETON CRISPUS</i>	L.	Potamogetonaceae	CURLY-LEAVED PONDWEED	OBL	forb	PE	MONO	advent
PTMDIV	5	<i>Potamogeton diversifolius</i>	Raf.	Potamogetonaceae	SNAILSEED PONDWEED	OBL	forb	PE	MONO	full
PTMEPI	6	<i>Potamogeton epihydrus</i>	Raf.	Potamogetonaceae	RIBBON-LEAVED PONDWEED	OBL	forb	PE	MONO	full
PTMFOL	2	<i>Potamogeton foliosus</i>	Raf.	Potamogetonaceae	LEAFY PONDWEED	OBL	forb	PE	MONO	full
PTMFRI	10	<i>Potamogeton friesii</i>	Rupr.	Potamogetonaceae	FRIES' PONDWEED	OBL	forb	PE	MONO	full
PTMGRA	10	<i>Potamogeton gramineus</i>	L.	Potamogetonaceae	GRASS-LIKE PONDWEED	OBL	forb	PE	MONO	full
PTMHIL	9	<i>Potamogeton hillii</i>	Morong	Potamogetonaceae	HILL'S PONDWEED	OBL	forb	PE	MONO	full
PTMILL	8	<i>Potamogeton illinoensis</i>	Morong	Potamogetonaceae	ILLINOIS PONDWEED	OBL	forb	PE	MONO	full
PTMNAT	8	<i>Potamogeton natans</i>	L.	Potamogetonaceae	FLOATING PONDWEED	OBL	forb	PE	MONO	full
PTMNOD	3	<i>Potamogeton nodosus</i>	Poir.	Potamogetonaceae	LONG-LEAVED PONDWEED	OBL	forb	PE	MONO	full
PTMPER	10	<i>Potamogeton perfoliatus</i>	L.	Potamogetonaceae	RED-HEADED PONDWEED	OBL	forb	PE	MONO	full
PTMPRA	10	<i>Potamogeton praelongus</i>	Wulfen	Potamogetonaceae	WHITE-STEMMED PONDWEED	OBL	forb	PE	MONO	full
PTMPUL	8	<i>Potamogeton pulcher</i>	Tuck.	Potamogetonaceae	SPOTTED PONDWEED	OBL	forb	PE	MONO	full
PTMPUS	4	<i>Potamogeton pusillus</i>	L.	Potamogetonaceae	SMALL PONDWEED	OBL	forb	PE	MONO	full
PTMRIC	10	<i>Potamogeton richardsonii</i>	(A. Benn.) Rydb.	Potamogetonaceae	RICHARDSON'S PONDWEED	OBL	forb	PE	MONO	full
PTMROB	10	<i>Potamogeton robbinsii</i>	Oakes	Potamogetonaceae	ROBBINS' PONDWEED	OBL	forb	PE	MONO	full
PTMSPI	10	<i>Potamogeton spirillus</i>	Tuck.	Potamogetonaceae	SPIRAL PONDWEED	OBL	forb	PE	MONO	full
PTMSTR	10	<i>Potamogeton strictifolius</i>	A. Benn.	Potamogetonaceae	STRAIGHT-LEAVED PONDWEED	OBL	forb	PE	MONO	full
PTMTEN	9	<i>Potamogeton tennesseensis</i>	Fernald	Potamogetonaceae	TENNESSEE PONDWEED	OBL	forb	PE	MONO	full
PTMVAS	10	<i>Potamogeton vaseyi</i>	J.W. Robbins	Potamogetonaceae	VASEY'S PONDWEED	OBL	forb	PE	MONO	full
PTMZOS	8	<i>Potamogeton zosteriformis</i>	Fernald	Potamogetonaceae	FLAT-STEMMED PONDWEED	OBL	forb	PE	MONO	full
POTANS	5	<i>Potentilla anserina</i>	L.	Rosaceae	SILVERWEED	OBL	forb	PE	DI	full
POTARG	*	<i>POTENTILLA ARGENTEA</i>	L.	Rosaceae	SILVERY CINQUEFOIL	UPL	forb	PE	DI	advent
POTARU	5	<i>Potentilla arguta</i>	Pursh	Rosaceae	TALL CINQUEFOIL	UPL	forb	PE	DI	full
POTCAN	3	<i>Potentilla canadensis</i>	L.	Rosaceae	RUNNING CINQUEFOIL	[UPL]	forb	PE	DI	full
POTFRU	10	<i>Potentilla fruticosa</i>	L.	Rosaceae	SHRUBBY CINQUEFOIL	FACW	shrub	W	DI	full
POTINT	*	<i>POTENTILLA INTERMEDIA</i>	L.	Rosaceae	INTERMEDIATE CINQUEFOIL	[UPL]	forb	PE	DI	advent
POTNOR	1	<i>Potentilla norvegica</i>	L.	Rosaceae	STRAWBERRY-WEED	FACU	forb	AN	DI	full
POTPAL	8	<i>Potentilla palustris</i>	(L.) Scop.	Rosaceae	MARSH CINQUEFOIL	OBL	forb	PE	DI	full
POTPAR	9	<i>Potentilla paradoxa</i>	Nutt.	Rosaceae	BUSHY CINQUEFOIL	OBL	forb	AN	DI	full
POTREC	*	<i>POTENTILLA RECTA</i>	L.	Rosaceae	ROUGH-FRUITED CINQUEFOIL	[UPL]	forb	PE	DI	advent
POTREP	*	<i>POTENTILLA REPTANS</i>	L.	Rosaceae	CREeping CINQUEFOIL	[UPL]	forb	PE	DI	advent
POTSIM	1	<i>Potentilla simplex</i>	Michx.	Rosaceae	OLD FIELD CINQUEFOIL	FACU-	forb	PE	DI	full
PREALB	5	<i>Prenanthes alba</i>	L.	Asteraceae	WHITE RATTLESNAKE-ROOT	FACU	forb	PE	DI	shade
PREALT	4	<i>Prenanthes altissima</i>	L.	Asteraceae	TALL RATTLESNAKE-ROOT	FACU-	forb	PE	DI	shade
PREASP	9	<i>Prenanthes aspera</i>	Michx.	Asteraceae	ROUGH RATTLESNAKE-ROOT	[UPL]	forb	PE	DI	shade
PRECRE	8	<i>Prenanthes crepidinea</i>	Michx.	Asteraceae	NODDING RATTLESNAKE-ROOT	FACU	forb	PE	DI	shade
PRERAC	8	<i>Prenanthes racemosa</i>	Michx.	Asteraceae	PRAIRIE RATTLESNAKE-ROOT	FACW-	forb	PE	DI	full
PRESER	5	<i>Prenanthes serpentaria</i>	Pursh	Asteraceae	LION'S FOOT	[UPL]	forb	PE	DI	shade
PRETRI	10	<i>Prenanthes trifoliolata</i>	(Cass.) Fernald	Asteraceae	GALL-OF-THE-EARTH	[UPL]	forb	PE	DI	shade
PROLOU	*	<i>PROBOSCIDEA LOUISIANICA</i>	(Mill.) Thell.	Pedaliaceae	UNICORN-PLANT	FACU	forb	AN	DI	advent
PROLAN	7	<i>Prosartes lanuginosa</i>	(Michx.) D. Don	Liliaceae	YELLOW MANDARIN	[UPL]	forb	PE	DI	shade
PROMAC	9	<i>Prosartes maculata</i>	(Buckley) A. Gray	Liliaceae	NODDING MANDARIN	[UPL]	forb	PE	DI	shade
PROPAL	7	<i>Proserpinaca palustris</i>	L.	Haloragaceae	MERMAID-WEED	OBL	forb	PE	DI	full
PRUVUL	0	<i>Prunella vulgaris</i>	L.	Lamiaceae	SELF-HEAL	FACU+	forb	PE	DI	partial
PRUAME	3	<i>Prunus americana</i>	Marshall	Rosaceae	AMERICAN PLUM	FACU-	sm tree	W	DI	partial
PRUAVE	*	<i>PRUNUS AVIUM</i>	L.	Rosaceae	SWEET CHERRY	[UPL]	sm tree	W	DI	advent
PRUCER	*	<i>PRUNUS CERASUS</i>	L.	Rosaceae	SOUR CHERRY	[UPL]	sm tree	W	DI	advent
PRUHOR	3	<i>Prunus hortulana</i>	L.H. Bailey	Rosaceae	HORTULAN PLUM	[UPL]	sm tree	W	DI	full
PRUMAH	*	<i>PRUNUS MAHALEB</i>	L.	Rosaceae	MAHALEB CHERRY	[UPL]	sm tree	W	DI	advent
PRUMEX	8	<i>Prunus mexicana</i>	S. Watson	Rosaceae	BIGTREE PLUM	[UPL]	sm tree	W	DI	full
PRUMUN	3	<i>Prunus munsoniana</i>	W. Wight & Hedrick	Rosaceae	MUNSON'S PLUM	[UPL]	sm tree	W	DI	full

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
PRUNIG	4	<i>Prunus nigra</i>	Aiton	Rosaceae	CANADA PLUM	UPL	sm tree	W	DI	full
PRUPEN	4	<i>Prunus pensylvanica</i>	L.f.	Rosaceae	FIRE CHERRY	FACU-	sm tree	W	DI	partial
PRUPER	*	<i>PRUNUS PERSICA</i>	(L.) Batsch	Rosaceae	PEACH	[UPL]	sm tree	W	DI	full
PRUPUM	10	<i>Prunus pumila</i>	L.	Rosaceae	SAND CHERRY	[UPL]	sm tree	W	DI	full
PRUSER	3	<i>Prunus serotina</i>	Ehrh.	Rosaceae	BLACK CHERRY	FACU	tree	W	DI	tree
PRUVIR	2	<i>Prunus virginiana</i>	L.	Rosaceae	CHOKE CHERRY	FACU	sm tree	W	DI	shade
PTETRI	5	<i>Ptelea trifoliata</i>	L.	Rutaceae	HOP-TREE	FAC	sm tree	W	DI	shade
PTEAQU	1	<i>Pteridium aquilinum</i>	(L.) Kuhn	Dennstaedtiaceae	BRACKEN FERN	FACU	fern	PE	SVP	partial
PUCDIS	*	<i>PUCCINELLIA DISTANS</i>	(L.) Parl.	Poaceae	EUROPEAN ALKALI GRASS	OBL	grass	PE	MONO	advent
PUCPAL	7	<i>Puccinellia pallida</i>	(Torr.) R.T. Clausen	Poaceae	PALE MANNA GRASS	OBL	grass	PE	MONO	partial
PUELOB	*	<i>PUERARIA LOBATA</i>	(Willd.) Ohwi	Fabaceae	KUDZU	[UPL]	vine	W	DI	advent
PYCINC	6	<i>Pycnanthemum incanum</i>	(L.) Michx.	Lamiaceae	HOARY MOUNTAIN-MINT	[UPL]	forb	PE	DI	shade
PYCMUT	6	<i>Pycnanthemum muticum</i>	(Michx.) Pers.	Lamiaceae	BLUNT MOUNTAIN-MINT	FACW	forb	PE	DI	partial
PYCPYC	6	<i>Pycnanthemum pycnanthemoides</i>	(Leavenw.) Fernald	Lamiaceae	SOUTHERN MOUNTAIN-MINT	[UPL]	forb	PE	DI	shade
PYCTEN	4	<i>Pycnanthemum tenuifolium</i>	Schrad.	Lamiaceae	NARROW-LEAVED MOUNTAIN-MINT	FACW	forb	PE	DI	full
PYCVERP	5	<i>Pycnanthemum verticillatum</i> var. <i>pilosum</i>	(Nutt.) Cooperrider	Lamiaceae	HAIRY MOUNTAIN-MINT	[FAC]	forb	PE	DI	partial
PYCVERV	4	<i>Pycnanthemum verticillatum</i> var. <i>verticillatum</i>	(Michx.) Pers.	Lamiaceae	WHORLED MOUNTAIN-MINT	[FAC]	forb	PE	DI	partial
PYCVIR	4	<i>Pycnanthemum virginianum</i>	(L.) Durand & B.D. Jackson	Lamiaceae	VIRGINIA MOUNTAIN-MINT	FAC	forb	PE	DI	full
PYRCHL	8	<i>Pyrola chlorantha</i>	Sw.	Pyrolaceae	GREEN-FLOWERED WINTERGREEN	[FACU]	forb	PE	DI	shade
PYRELL	7	<i>Pyrola elliptica</i>	Nutt.	Pyrolaceae	SHINLEAF	[UPL]	forb	PE	DI	shade
PYRROT	7	<i>Pyrola rotundifolia</i> var. <i>americana</i>	(Sweet) Fernald	Pyrolaceae	ROUND-LEAVED WINTERGREEN	FAC	forb	PE	DI	shade
PYRSEC	8	<i>Pyrola secunda</i>	L.	Pyrolaceae	ONE-SIDED WINTERGREEN	FAC	forb	PE	DI	shade
PYRANG	5	<i>Pyrus angustifolia</i>	Aiton	Rosaceae	NARROW-LEAVED CRABAPPLE	[UPL]	sm tree	W	DI	full
PYRCOM	*	<i>PYRUS COMMUNIS</i>	L.	Rosaceae	PEAR	[UPL]	sm tree	W	DI	full
PYRCOR	3	<i>Pyrus coronaria</i>	L.	Rosaceae	WILD CRABAPPLE	[UPL]	sm tree	W	DI	full
PYRIOE	*	<i>PYRUS IOENSIS</i>	(A.W. Wood) L.H. Bailey	Rosaceae	PRAIRIE CRABAPPLE	[UPL]	sm tree	W	DI	full
PYRMAL	*	<i>PYRUS MALUS</i>	L.	Rosaceae	APPLE	[UPL]	sm tree	W	DI	full
QUEALB	6	<i>Quercus alba</i>	L.	Fagaceae	WHITE OAK	FACU-	tree	W	DI	tree
QUEBIC	7	<i>Quercus bicolor</i>	Willd.	Fagaceae	SWAMP WHITE OAK	FACW+	tree	W	DI	tree
QUECOC	6	<i>Quercus coccinea</i>	Muenchh.	Fagaceae	SCARLET OAK	[UPL]	tree	W	DI	tree
QUEFAL	7	<i>Quercus falcata</i>	Michx.	Fagaceae	SPANISH OAK	FACU-	tree	W	DI	tree
QUEIMB	5	<i>Quercus imbricaria</i>	Michx.	Fagaceae	SHINGLE OAK	FAC	tree	W	DI	tree
QUEMAC	6	<i>Quercus macrocarpa</i>	Michx.	Fagaceae	BUR OAK	FAC-	tree	W	DI	tree
QUEMAR	8	<i>Quercus marilandica</i>	Munchh.	Fagaceae	BLACKJACK OAK	[UPL]	tree	W	DI	tree
QUEMUE	7	<i>Quercus muehlenbergii</i>	Engelm.	Fagaceae	CHINQUAPIN OAK	UPL	tree	W	DI	tree
QUEPAL	5	<i>Quercus palustris</i>	Muenchh.	Fagaceae	PIN OAK	FACW	tree	W	DI	tree
QUEPRI	7	<i>Quercus prinus</i>	L.	Fagaceae	ROCK CHESTNUT OAK	[UPL]	tree	W	DI	tree
QUERUB	6	<i>Quercus rubra</i>	L.	Fagaceae	RED OAK	FACU-	tree	W	DI	tree
QUESHU	7	<i>Quercus shumardii</i>	Buckley	Fagaceae	SHUMARD OAK	FAC+	tree	W	DI	tree
QUESTE	7	<i>Quercus stellata</i>	Wangenh.	Fagaceae	POST OAK	[UPL]	tree	W	DI	tree
QUEVEL	7	<i>Quercus velutina</i>	Lam.	Fagaceae	BLACK OAK	[UPL]	tree	W	DI	tree
RANABO	1	<i>Ranunculus abortivus</i>	L.	Ranunculaceae	KIDNEY-LEAVED BUTTERCUP	FACW-	forb	PE	DI	shade
RANACR	*	<i>RANUNCULUS ACRIS</i>	L.	Ranunculaceae	TALL BUTTERCUP	FAC+	forb	PE	DI	advent
RANALL	5	<i>Ranunculus allegheniensis</i>	Britton	Ranunculaceae	ALLEGHENY CROWFOOT	FAC	forb	PE	DI	shade
RANAMB	8	<i>Ranunculus ambigens</i>	S. Watson	Ranunculaceae	WATER-PLANTAIN SPEARWORT	OBL	forb	PE	DI	partial
RANBUL	*	<i>RANUNCULUS BULBOSUS</i>	L.	Ranunculaceae	BULBOUS BUTTERCUP	UPL	forb	PE	DI	advent
RANFAS	6	<i>Ranunculus fascicularis</i>	Muhl. ex Bigelow	Ranunculaceae	EARLY BUTTERCUP	FACU	forb	PE	DI	partial
RANFIC	*	<i>RANUNCULUS FICARIA</i>	L.	Ranunculaceae	LESSER CELANDINE	FAC	forb	PE	DI	advent
RANFLA	8	<i>Ranunculus flabellaris</i>	Raf.	Ranunculaceae	YELLOW WATER-BUTTERCUP	OBL	forb	PE	DI	partial
RANHIS	4	<i>Ranunculus hispidus</i>	Michx.	Ranunculaceae	NORTHERN SWAMP BUTTERCUP	FAC	forb	PE	DI	shade
RANLON	5	<i>Ranunculus longirostris</i>	Godr.	Ranunculaceae	WHITE WATER-CROWFOOT	OBL	forb	PE	DI	full
RANMIC	5	<i>Ranunculus micranthus</i>	Nutt.	Ranunculaceae	SMALL-FLOWERED CROWFOOT	FACU	forb	PE	DI	shade
RANPEN	4	<i>Ranunculus pensylvanicus</i>	L.f.	Ranunculaceae	BRISTLY CROWFOOT	OBL	forb	PE	DI	full
RANPUS	8	<i>Ranunculus pusillus</i>	Poir.	Ranunculaceae	LOW SPEARWORT	OBL	forb	AN	DI	full

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RANREC	3	<i>Ranunculus recurvatus</i>	Poir.	Ranunculaceae	HOOKED CROWFOOT	FAC+	forb	PE	DI	shade
RANREP	*	<i>RANUNCULUS REPENS</i>	L.	Ranunculaceae	CREeping BUTTERCUP	FAC	forb	PE	DI	advent
RANSCE	1	<i>Ranunculus sceleratus</i>	L.	Ranunculaceae	CURSED CROWFOOT	OBL	forb	PE	DI	full
RANTES	*	<i>RANUNCULUS TESTICULATUS</i>	Crantz	Ranunculaceae	BUR BUTTERCUP	[UPL]	forb	AN	DI	advent
RATPIN	5	<i>Ratibida pinnata</i>	(Vent.) Barnhart	Asteraceae	GRAY-HEADED CONEFLOWER	[UPL]	forb	PE	DI	full
RHAALN	8	<i>Rhamnus alnifolia</i>	L'Her	Rhamnaceae	ALDER-LEAVED BUCKTHORN	OBL	shrub	W	DI	partial
RHACAR	4	<i>Rhamnus caroliniana</i>	Walter	Rhamnaceae	CAROLINA BUCKTHORN	FAC	shrub	W	DI	partial
RHACAT	*	<i>RHAMNUS CATHARTICA</i>	L.	Rhamnaceae	EUROPEAN BUCKTHORN	FACU+	sm tree	W	DI	advent
RHAFRA	*	<i>RHAMNUS FRANGULA</i>	L.	Rhamnaceae	GLOSSY BUCKTHORN	FAC	shrub	W	DI	advent
RHALAN	4	<i>Rhamnus lanceolata</i>	Pursh	Rhamnaceae	LANCE-LEAVED BUCKTHORN	[FACU-]	shrub	W	DI	partial
RHEVIR	7	<i>Rhexia virginica</i>	L.	Melastomataceae	VIRGINIA MEADOW-BEAUTY	OBL	forb	PE	DI	full
RHOAL	8	<i>Rhododendron calendulaceum</i>	(Michx.) Torr.	Ericaceae	FLAME AZALEA	[UPL]	shrub	W	DI	shade
RHOMAX	8	<i>Rhododendron maximum</i>	L.	Ericaceae	GREAT RHODODENDRON	FAC	shrub	W	DI	shade
RHOPER	7	<i>Rhododendron periclymenoides</i>	(Michx.) Shinnars	Ericaceae	PINKSTER-FLOWER	FAC	shrub	W	DI	shade
RHOPRI	7	<i>Rhododendron prinophyllum</i>	(Small) Millais	Ericaceae	ROSESHILL AZALEA	FAC	shrub	W	DI	shade
RHUAARE	10	<i>Rhus aromatica</i> Aiton var. <i>arenaria</i>	(Greene) Fernald	Anacardiaceae	BEACH SUMAC	[UPL]	shrub	W	DI	full
RHUAARO	3	<i>Rhus aromatica</i> var. <i>aromatica</i>	Aiton	Anacardiaceae	FRAGRANT SUMAC	[UPL]	shrub	W	DI	full
RHUCOP	4	<i>Rhus copallinum</i>	L.	Anacardiaceae	WINGED SUMAC	FACU-	shrub	W	DI	full
RHUGLA	2	<i>Rhus glabra</i>	L.	Anacardiaceae	SMOOTH SUMAC	[UPL]	shrub	W	DI	full
RHUTYP	2	<i>Rhus typhina</i>	L.	Anacardiaceae	STAGHORN SUMAC	[UPL]	shrub	W	DI	full
RHYALB	10	<i>Rhynchospora alba</i>	(L.) Vahl	Cyperaceae	WHITE BEAK-RUSH	OBL	sedge	PE	MONO	full
RHYCPC	9	<i>Rhynchospora capillacea</i>	Torr.	Cyperaceae	NEEDLE BEAK-RUSH	OBL	sedge	PE	MONO	full
RHYCPT	7	<i>Rhynchospora capitellata</i>	(Michx.) Vahl	Cyperaceae	BROWNISH BEAK-RUSH	OBL	sedge	PE	MONO	full
RHYREC	10	<i>Rhynchospora recognita</i>	(Gale) Kral	Cyperaceae	GRASS-LIKE BEAK-RUSH	[FACW]	sedge	PE	MONO	full
RIBAME	4	<i>Ribes americanum</i>	Mill.	Grossulariaceae	WILD BLACK CURRANT	FACW	shrub	W	DI	partial
RIBCYN	3	<i>Ribes cynosbati</i>	L.	Grossulariaceae	DOGBERRY	[UPL]	shrub	W	DI	partial
RIBGLA	10	<i>Ribes glandulosum</i>	Grauer	Grossulariaceae	SKUNK CURRANT	FACW	shrub	W	DI	partial
RIBHIR	7	<i>Ribes hirtellum</i>	Michx.	Grossulariaceae	SWAMP GOOSEBERRY	FAC	shrub	W	DI	partial
RIBMIS	8	<i>Ribes missouriense</i>	Nutt.	Grossulariaceae	MISSOURI GOOSEBERRY	[UPL]	shrub	W	DI	partial
RIBODO	*	<i>RIBES ODORATUM</i>	H. Wendl.	Grossulariaceae	BUFFALO CURRANT	FACU	shrub	W	DI	advent
RIBSAT	*	<i>RIBES SATIVUM</i>	Syme	Grossulariaceae	GARDEN RED CURRANT	[UPL]	shrub	W	DI	advent
RIBTRI	8	<i>Ribes triste</i>	Pall.	Grossulariaceae	SWAMP RED CURRANT	OBL	shrub	W	DI	full
RICCOM	*	<i>RICINUS COMMUNIS</i>	L.	Euphorbiaceae	CASTOR-BEAN	[UPL]	forb	AN	DI	advent
ROBHIS	*	<i>ROBINIA HISPIDA</i>	L.	Fabaceae	BRISTLY LOCUST	[UPL]	shrub	W	DI	advent
ROBPSE	0	<i>Robinia pseudoacacia</i>	L.	Fabaceae	BLACK LOCUST	FACU-	tree	W	DI	tree
ROBVIS	*	<i>ROBINIA VISCOSA</i>	Vent.	Fabaceae	CLAMMY LOCUST	[UPL]	tree	W	DI	tree
RORNAS	*	<i>RORIPPA NASTURTIUM-AQUATICUM</i>	(L.) Hayek	Brassicaceae	WATERCRESS	OBL	forb	PE	DI	partial
RORPAL	2	<i>Rorippa palustris</i>	(L.) Besser	Brassicaceae	YELLOW CRESS	OBL	forb	AN	DI	full
RORSES	6	<i>Rorippa sessiliflora</i>	(Nutt.) Hitchc.	Brassicaceae	SOUTHERN YELLOW CRESS	OBL	forb	AN	DI	full
RORSYL	*	<i>RORIPPA SYLVESTRIS</i>	(L.) Besser	Brassicaceae	CREeping YELLOW CRESS	FACW	forb	PE	DI	full
ROSARK	4	<i>Rosa arkansana</i>	Porter	Rosaceae	PRAIRIE ROSE	[UPL]	shrub	W	DI	full
ROSBLA	4	<i>Rosa blanda</i>	Aiton	Rosaceae	SMOOTH ROSE	FACU	shrub	W	DI	full
ROSCAN	*	<i>ROSA CANINA</i>	L.	Rosaceae	DOG ROSE	[UPL]	shrub	W	DI	full
ROSCAR	4	<i>Rosa carolina</i>	L.	Rosaceae	PASTURE ROSE	[UPL]	shrub	W	DI	full
ROSEGL	*	<i>ROSA EGLANTERIA</i>	L.	Rosaceae	SWEETBRIER	[UPL]	shrub	W	DI	advent
ROSMIC	*	<i>ROSA MICRANTHA</i>	J. E. Smith	Rosaceae	SMALL-FLOWERED ROSE	FACU	shrub	W	DI	advent
ROSMUL	*	<i>ROSA MULTIFLORA</i>	Thunb. ex Murray	Rosaceae	MULTIFLORA ROSE	FACU	shrub	W	DI	advent
ROSPAL	5	<i>Rosa palustris</i>	Marshall	Rosaceae	SWAMP ROSE	OBL	shrub	W	DI	full
ROSRUG	*	<i>ROSA RUGOSA</i>	Thunb.	Rosaceae	RUGOSA ROSE	FACU-	shrub	W	DI	advent
ROSSET	4	<i>Rosa setigera</i>	Michx.	Rosaceae	CLIMBING PRAIRIE ROSE	FACU	shrub	W	DI	full
ROSWIC	*	<i>ROSA WICHURAIANA</i>	Crep.	Rosaceae	MEMORIAL ROSE	[UPL]	shrub	W	DI	advent
ROTRAM	6	<i>Rotala ramosior</i>	(L.) Koehne	Lythraceae	TOOTH-CUP	OBL	forb	AN	DI	full
RUBALL	1	<i>Rubus allegheniensis</i>	Porter	Rosaceae	COMMON BLACKBERRY	FACU-	shrub	W	DI	full
RUBFLA	1	<i>Rubus flagellaris</i>	Willd.	Rosaceae	NORTHERN DEWBERRY	FACU	shrub	W	DI	full

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RUBHIS	5	<i>Rubus hispidus</i>	L.	Rosaceae	SWAMP DEWBERRY	FACW	forb	PE	DI	partial
RUBIDAS	6	<i>Rubus idaeus</i> L. var. <i>strigosus</i>	(Michx.) Maxim.	Rosaceae	WILD RED RASPBERRY	[FAC-]	shrub	W	DI	full
RUBIDAI	*	<i>RUBUS IDEAUS</i> var. <i>IDEAUS</i>	L.	Rosaceae	RED RASPBERRY	FAC-	shrub	W	DI	advent
RUBLAC	*	<i>RUBUS LACINIATUS</i>	Willd.	Rosaceae	CUT-LEAVED BLACKBERRY	[UPL]	shrub	W	DI	advent
RUBOCC	1	<i>Rubus occidentalis</i>	L.	Rosaceae	BLACK RASPBERRY	[UPL]	shrub	W	DI	full
RUBODO	5	<i>Rubus odoratus</i>	L.	Rosaceae	FLOWERING RASPBERRY	[UPL]	shrub	W	DI	full
RUBPEN	1	<i>Rubus pensylvanicus</i>	Poir.	Rosaceae	PENNSYLVANIA BLACKBERRY	[FACU]	shrub	W	DI	full
RUBPHO	*	<i>RUBUS PHOENICOLASIVS</i>	Maxim.	Rosaceae	WINEBERRY	[UPL]	shrub	W	DI	advent
RUBPUB	7	<i>Rubus pubescens</i>	Raf.	Rosaceae	DWARF RASPBERRY	FACW	forb	PE	DI	partial
RUDFUL	6	<i>Rudbeckia fulgida</i>	Aiton	Asteraceae	ORANGE CONEFLOWER	FAC	forb	PE	DI	full
RUDHIR	1	<i>Rudbeckia hirta</i>	L.	Asteraceae	BLACK-EYED SUSAN	FACU-	forb	PE	DI	full
RUDLAC	6	<i>Rudbeckia laciniata</i>	L.	Asteraceae	GREEN-HEADED CONEFLOWER	FACW	forb	PE	DI	full
RUDTRI	5	<i>Rudbeckia triloba</i>	L.	Asteraceae	THREE-LOBED CONEFLOWER	FACU	forb	BI	DI	full
RUECAR	4	<i>Ruellia caroliniensis</i>	(J.F. Gmel.) Steud.	Acanthaceae	CAROLINA RUELLIA	[UPL]	forb	PE	DI	full
RUEHUM	6	<i>Ruellia humilis</i>	Nutt.	Acanthaceae	WILD PETUNIA	UPL	forb	PE	DI	full
RUESTR	5	<i>Ruellia strepens</i>	L.	Acanthaceae	SMOOTH RUELLIA	FAC	forb	PE	DI	full
RUMACE	*	<i>RUMEX ACETOSELLA</i>	L.	Polygonaceae	SHEEP SORREL	UPL	forb	PE	DI	advent
RUMALT	2	<i>Rumex altissimus</i>	A.W. Wood	Polygonaceae	PALE DOCK	FACW-	forb	PE	DI	full
RUMCRI	*	<i>RUMEX CRISPUS</i>	L.	Polygonaceae	CURLY DOCK	FACU	forb	PE	DI	advent
RUMMAR	*	<i>RUMEX MARITIMUS</i>	L.	Polygonaceae	GOLDEN DOCK	FACW	forb	AN	DI	advent
RUMOBT	*	<i>RUMEX OBTUSIFOLIUS</i>	L.	Polygonaceae	BITTER DOCK	FACU-	forb	PE	DI	advent
RUMORB	5	<i>Rumex orbiculatus</i>	A. Gray	Polygonaceae	GREAT WATER DOCK	OBL	forb	PE	DI	full
RUMPAT	*	<i>RUMEX PATIENTIA</i>	L.	Polygonaceae	PATIENCE DOCK	[UPL]	forb	PE	DI	advent
RUMVER	6	<i>Rumex verticillatus</i>	L.	Polygonaceae	SWAMP DOCK	OBL	forb	PE	DI	full
RUPCIR	3	<i>Ruppia cirrhosa</i>	(Petagna) Grande	Ruppiaceae	DITCH-GRASS	[OBL]	forb	PE	MONO	full
SABANG	4	<i>Sabatia angularis</i>	(L.) Pursh	Gentianaceae	ROSE-PINK	FAC+	forb	BI	DI	full
ERIALO	6	<i>Saccharum alopecuroidum</i>	(L.) Nutt.	Poaceae	SILVER PLUME GRASS	FAC	grass	PE	DI	full
SAGDEC	0	<i>Sagina decumbens</i>	(Eit.) Torr. & A. Gray	Caryophyllaceae	WESTERN PEARLWORT	FAC	forb	AN	DI	full
SAGPRO	*	<i>SAGINA PROCUMBENS</i>	L.	Caryophyllaceae	PEARLWORT	FACW-	forb	PE	DI	advent
SAGAUS	3	<i>Sagittaria australis</i>	(J.G. Sm.) Small	Alismataceae	LONG-BEAKED ARROWHEAD	OBL	forb	PE	MONO	full
SAGBRE	6	<i>Sagittaria brevirostra</i>	Mack. & Bush	Alismataceae	MIDWESTERN ARROWHEAD	OBL	forb	PE	MONO	full
SAGCUN	8	<i>Sagittaria cuneata</i>	E. Sheld.	Alismataceae	WAPATO	OBL	forb	PE	MONO	full
SAGGRA	9	<i>Sagittaria graminea</i>	Michx.	Alismataceae	GRASS-LEAVED ARROWHEAD	OBL	forb	PE	MONO	full
SAGLAT	1	<i>Sagittaria latifolia</i>	Willd.	Alismataceae	COMMON ARROWHEAD	OBL	forb	PE	MONO	full
SAGCAL	8	<i>Sagittaria montevidensis</i>	Cham. & Schlect.	Alismataceae	SOUTHERN WAPATO	OBL	forb	AN	MONO	full
SAGPLA	6	<i>Sagittaria platyphylla</i>	(Engelm.) J.G. Sm.	Alismataceae	ELLIPTIC-LEAVED ARROWHEAD	OBL	forb	PE	MONO	full
SAGRIG	8	<i>Sagittaria rigida</i>	Pursh	Alismataceae	DEER'S-TONGUE ARROWHEAD	OBL	forb	PE	MONO	full
SALEUR	*	<i>SALICORNIA EUROPAEA</i>	L.	Chenopodiaceae	GLASSWORT	OBL	forb	AN	DI	advent
SLXALB	*	<i>SALIX ALBA</i>	L.	Salicaceae	WHITE WILLOW	FACW	tree	W	DI	tree
SLXAMY	3	<i>Salix amygdaloides</i>	Andersson	Salicaceae	PEACH-LEAVED WILLOW	FACW	tree	W	DI	tree
SLXBAB	*	<i>SALIX BABYLONICA</i>	L.	Salicaceae	WEeping WILLOW	FACW-	tree	W	DI	tree
SLXBEB	5	<i>Salix bebbiana</i>	Sarg.	Salicaceae	BEbb's WILLOW	FACW	shrub	W	DI	full
SLXCAN	10	<i>Salix candida</i>	Flugge ex Willd.	Salicaceae	HOARY WILLOW	OBL	shrub	W	DI	full
SLXCAP	*	<i>SALIX CAPREA</i>	L.	Salicaceae	GOAT WILLOW	[UPL]	shrub	W	DI	advent
SLXCAR	10	<i>Salix caroliniana</i>	Michx.	Salicaceae	CAROLINA WILLOW	OBL	shrub	W	DI	full
SLXDIS	3	<i>Salix discolor</i>	Muhl.	Salicaceae	PUSSY WILLOW	FACW	shrub	W	DI	full
SLXERI	2	<i>Salix eriocephala</i>	Michx.	Salicaceae	HEART-LEAVED WILLOW	FACW	shrub	W	DI	full
SLXEXI	1	<i>Salix exigua</i>	Nutt.	Salicaceae	SANDBAR WILLOW	OBL	shrub	W	DI	full
SLXFRA	*	<i>SALIX FRAGILIS</i>	L.	Salicaceae	CRACK WILLOW	FAC+	tree	W	DI	tree
SLXHUM	4	<i>Salix humilis</i>	Marshall	Salicaceae	PRAIRIE WILLOW	FACU	shrub	W	DI	full
SLXLUC	4	<i>Salix lucida</i>	Muhl.	Salicaceae	SHINING WILLOW	FACW	shrub	W	DI	full
SLXMYR	10	<i>Salix myricoides</i>	(Muhl.) J. Carey	Salicaceae	BLUE-LEAVED WILLOW	FAC	shrub	W	DI	full
SLXNIG	2	<i>Salix nigra</i>	Marshall	Salicaceae	BLACK WILLOW	FACW+	tree	W	DI	tree
SLXOCC	5	<i>Salix occidentalis</i>	Walter	Salicaceae	WESTERN WILLOW	[UPL]	shrub	W	DI	full

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
SLXPED	9	<i>Salix pedicellaris</i>	Pursh	Salicaceae	BOG WILLOW	OBL	shrub	W	DI	full
SLXPEN	*	<i>SALIX PENTANDRA</i>	L.	Salicaceae	BAY-LEAVED WILLOW	[UPL]	tree	W	DI	advent
SLXPET	8	<i>Salix petiolaris</i>	Sm.	Salicaceae	SLENDER WILLOW	OBL	shrub	W	DI	full
SLXPUR	*	<i>SALIX PURPUREA</i>	L.	Salicaceae	BASKET WILLOW	[FACW]	shrub	W	DI	advent
SLXSRC	4	<i>Salix sericea</i>	Marshall	Salicaceae	SILKY WILLOW	OBL	shrub	W	DI	full
SLXSRS	10	<i>Salix serissima</i>	(L.H. Bailey) Fernald	Salicaceae	AUTUMN WILLOW	OBL	shrub	W	DI	full
SALKAL	*	<i>SALSOLA KALI</i>	L.	Chenopodiaceae	RUSSIAN THISTLE	FACU	forb	AN	DI	advent
SALLYR	3	<i>Salvia lyrata</i>	L.	Lamiaceae	LYRE-LEAVED SAGE	[UPL]	forb	PE	DI	full
SALREF	*	<i>SALVIA REFLEXA</i>	Hornem.	Lamiaceae	ROCKY MOUNTAIN SAGE	[UPL]	forb	AN	DI	advent
SAMCAN	3	<i>Sambucus canadensis</i>	L.	Caprifoliaceae	COMMON ELDERBERRY	FACW-	shrub	W	DI	full
SAMPUB	7	<i>Sambucus pubens</i>	(Michx.) House	Caprifoliaceae	RED-BERRIED ELDER	FACU	shrub	W	DI	full
SAMPAR	4	<i>Samolus floribundus</i>	Kunth	Primulaceae	WATER-PIMPERNEL	OBL	forb	PE	DI	full
SANCAN	5	<i>Sanguinaria canadensis</i>	L.	Papaveraceae	BLOODROOT	UPL	forb	PE	DI	shade
SANGCA	8	<i>Sanguisorba canadensis</i>	L.	Rosaceae	CANADA BURNET	FACW+	forb	PE	DI	full
SANICAN	3	<i>Sanicula canadensis</i>	L.	Apiaceae	SHORT-STYLED SNAKEROOT	UPL	forb	PE	DI	shade
SANIGR	3	<i>Sanicula gregaria</i>	E.P. Bicknell	Apiaceae	CLUSTERED SNAKEROOT	FACU	forb	PE	DI	shade
SANIMA	3	<i>Sanicula marilandica</i>	L.	Apiaceae	BLACK SNAKEROOT	UPL	forb	PE	DI	shade
SANITR	3	<i>Sanicula trifoliata</i>	E.P. Bicknell	Apiaceae	LARGE-FRUITED SNAKEROOT	[UPL]	forb	PE	DI	shade
SAPOFF	*	<i>SAPONARIA OFFICINALIS</i>	L.	Caryophyllaceae	SOAPWORT	FACU-	forb	PE	DI	advent
SARPUR	9	<i>Sarracenia purpurea</i>	L.	Sarraceniaceae	PITCHER-PLANT	OBL	forb	PE	DI	full
SASALB	3	<i>Sassafras albidum</i>	(Nutt.) Nees	Lauraceae	SASSAFRAS	FACU-	tree	W	DI	tree
SAUCER	8	<i>Saururus cernuus</i>	L.	Saururaceae	LIZARD'S-TAIL	OBL	forb	PE	MONO	shade
SAXPEN	7	<i>Saxifraga pensylvanica</i>	L.	Saxifragaceae	SWAMP SAXIFRAGE	OBL	forb	PE	DI	partial
SAXVIR	5	<i>Saxifraga virginensis</i>	Michx.	Saxifragaceae	EARLY SAXIFRAGE	FAC-	forb	PE	DI	shade
SCHPAL	10	<i>Scheuchzeria palustris</i>	L.	Scheuchzeriaceae	POD-GRASS	OBL	forb	PE	MONO	full
SCHPUR	10	<i>Schizachne purpurascens</i>	(Torr.) Swallen	Poaceae	FALSE MELIC	FACU-	grass	PE	MONO	shade
SCHSCOL	10	<i>Schizachyrium littorale</i>	(Nash) E.P. Bicknell	Poaceae	COASTAL LITTLE BLUESTEM	[UPL]	grass	PE	MONO	full
SCHSCOS	5	<i>Schizachyrium scoparium</i>	(Michx.) Nash	Poaceae	LITTLE BLUESTEM	FACU-	grass	PE	MONO	full
SCHACU	7	<i>Schoenoplectus acutus</i>	(Muhl. ex Bigelow) A. Love & D. Love	Cyperaceae	HARD-STEMMED BULRUSH	OBL	sedge	PE	MONO	full
SCHAME	9	<i>Schoenoplectus americanus</i>	(Pers.) Volk. ex Schinz & R. Keller	Cyperaceae	OLNEY'S BULRUSH	OBL	sedge	PE	MONO	full
SCHPUN	5	<i>Schoenoplectus pungens</i>	(Vahl) Palla	Cyperaceae	THREE-SQUARE	FACW+	sedge	PE	MONO	full
SCHPUR	6	<i>Schoenoplectus purshianus</i>	(Fernald) M.T. Strong	Cyperaceae	PURSH'S BULRUSH	OBL	sedge	AN	MONO	full
SCHSMI	9	<i>Schoenoplectus smithii</i>	(A. Gray) Sojak	Cyperaceae	SMITH'S BULRUSH	OBL	sedge	AN	MONO	full
SCHSUB	10	<i>Schoenoplectus subterminalis</i>	(Torr.) Sojak	Cyperaceae	SWAYING-RUSH	OBL	sedge	PE	MONO	full
SCHTAB	2	<i>Schoenoplectus tabernaemontani</i>	(C.C. Gmel.) Palla	Cyperaceae	SOFT-STEMMED BULRUSH	OBL	sedge	PE	MONO	full
SCHTOR	10	<i>Schoenoplectus torreyi</i>	(Olney) Palla	Cyperaceae	TORREY'S BULRUSH	OBL	sedge	PE	MONO	full
SCINON	*	<i>SCILLA NON-SCRIPTA</i>	(L.) Hoffmanns. & Link	Liliaceae	ENGLISH BLUEBELL	[UPL]	forb	PE	MONO	advent
SCIATR	1	<i>Scirpus atrovirens</i>	Willd.	Cyperaceae	GREEN BULRUSH	OBL	sedge	PE	MONO	full
SCICYP	1	<i>Scirpus cyperinus</i>	(L.) Kunth.	Cyperaceae	WOOL-GRASS	FACW+	sedge	PE	MONO	full
SCIEXP	9	<i>Scirpus expansus</i>	Fernald	Cyperaceae	WOODLAND BULRUSH	OBL	sedge	PE	MONO	partial
SCIGEO	2	<i>Scirpus georgianus</i>	R.M. Harper	Cyperaceae	GEORGIA BULRUSH	OBL	sedge	PE	MONO	full
SCIHAT	1	<i>Scirpus hattorianus</i>	Makino	Cyperaceae	SMOOTH-LVD. DARK GREEN BULR.	[OBL]	sedge	PE	MONO	full
SCIPED	3	<i>Scirpus pedicellatus</i>	Fernald	Cyperaceae	STALKED BULRUSH	OBL	sedge	PE	MONO	full
SCIPEN	2	<i>Scirpus pendulus</i>	Muhl.	Cyperaceae	DROOPING BULRUSH	OBL	sedge	PE	MONO	full
SCIPOL	6	<i>Scirpus polyphyllus</i>	Vahl	Cyperaceae	LEAFY BULRUSH	OBL	sedge	PE	MONO	full
SCLANN	*	<i>SCLERANTHUS ANNUUS</i>	L.	Caryophyllaceae	ANNUAL KNAWEI	FACU-	forb	AN	DI	advent
SCLOLI	9	<i>Scleria oligantha</i>	Michx.	Cyperaceae	TUBERCLED NUT-RUSH	FACU+	sedge	PE	MONO	full
SCLPAU	9	<i>Scleria pauciflora</i>	Muhl. ex Willd.	Cyperaceae	FEW-FLOWERED NUT-RUSH	FACU+	sedge	PE	MONO	full
SCLTRI	7	<i>Scleria triglomerata</i>	Michx.	Cyperaceae	TALL NUT-RUSH	FAC	sedge	PE	MONO	full
SCLVER	9	<i>Scleria verticillata</i>	Muhl. ex Willd.	Cyperaceae	LOW NUT-RUSH	OBL	sedge	AN	MONO	full
SCRLAN	4	<i>Scrophularia lanceolata</i>	Pursh	Scrophulariaceae	AMERICAN FIGWORT	FACU+	forb	PE	DI	partial
SCRMAR	4	<i>Scrophularia marilandica</i>	L.	Scrophulariaceae	MARYLAND FIGWORT	FACU-	forb	PE	DI	shade
SCUELL	5	<i>Scutellaria elliptica</i>	Muhl. ex Spreng.	Lamiaceae	HAIRY SKULLCAP	[UPL]	forb	PE	DI	partial
SCUGAL	6	<i>Scutellaria galericulata</i>	L.	Lamiaceae	MARSH SKULLCAP	OBL	forb	PE	DI	full

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SCUINC	4	<i>Scutellaria incana</i>	Biehler	Lamiaceae	DOWNY SKULLCAP	[UPL]	forb	PE	DI	shade
SCUINT	6	<i>Scutellaria integrifolia</i>	L.	Lamiaceae	HYSSOP SKULLCAP	FACW	forb	PE	DI	partial
SCULAT	3	<i>Scutellaria lateriflora</i>	L.	Lamiaceae	MAD-DOG SKULLCAP	FACW+	forb	PE	DI	partial
SCUNER	6	<i>Scutellaria nervosa</i>	Pursh	Lamiaceae	VEINED SKULLCAP	FAC	forb	PE	DI	shade
SCUOVA	5	<i>Scutellaria ovata</i>	Hill	Lamiaceae	HEART-LEAVED SKULLCAP	FACU	forb	PE	DI	shade
SCUPAR	6	<i>Scutellaria parvula</i>	Michx.	Lamiaceae	SMALL SKULLCAP	UPL	forb	PE	DI	full
SCUSAX	8	<i>Scutellaria saxatilis</i>	Riddell	Lamiaceae	ROCK SKULLCAP	[UPL]	forb	PE	DI	partial
SCUSER	7	<i>Scutellaria serrata</i>	Andrews	Lamiaceae	SHOWY SKULLCAP	[UPL]	forb	PE	DI	shade
SECCER	*	<i>SECALE CEREALE</i>	L.	Poaceae	ANNUAL RYE	[UPL]	grass	AN	MONO	advent
SEDACR	*	<i>SEDUM ACRE</i>	L.	Crassulaceae	GOLDEN-CARPET	[UPL]	forb	PE	DI	advent
SEDALB	*	<i>SEDUM ALBUM</i>	L.	Crassulaceae	WHITE STONECROP	[UPL]	forb	PE	DI	advent
SEDPUR	*	<i>SEDUM PURPUREUM</i>	(L.) J.A. Schultes	Crassulaceae	GARDEN ORPINE	[UPL]	forb	PE	DI	advent
SEDSAR	*	<i>SEDUM SARMENTOSUM</i>	Bunge	Crassulaceae	CREeping STONECROP	[UPL]	forb	PE	DI	advent
SEDTER	5	<i>Sedum ternatum</i>	Michx.	Crassulaceae	WILD STONECROP	[UPL]	forb	PE	DI	full
SELAPO	7	<i>Selaginella apoda</i>	(L.) Spring	Selaginellaceae	MEADOW SPIKE-MOSS	FACW	fern	PE	SVP	partial
SELECL	9	<i>Selaginella eclipes</i>	W.R. Buck	Selaginellaceae	MIDWEST SPIKE-MOSS	[FACW+]	fern	PE	SVP	partial
SELRUP	10	<i>Selaginella rupestris</i>	(L.) Spring	Selaginellaceae	ROCK SPIKE-MOSS	[UPL]	fern	PE	SVP	full
SENANO	2	<i>Senecio anonymous</i>	A.W. Wood	Asteraceae	APPALACHIAN SQUAW-WEED	[UPL]	forb	PE	DI	full
SENAUR	4	<i>Senecio aureus</i>	L.	Asteraceae	GOLDEN RAGWORT	FACW	forb	PE	DI	shade
SENGLA	*	<i>SENECIO GLABELLUS</i>	Poir.	Asteraceae	BUTTERWEED	OBL	forb	AN	DI	advent
SENOBO	4	<i>Senecio obovatus</i>	Muhl. ex Willd.	Asteraceae	ROUND-LEAVED SQUAW-WEED	FACU-	forb	PE	DI	shade
SENPAU	9	<i>Senecio pauperculus</i>	Michx.	Asteraceae	BALSAM SQUAW-WEED	FAC	forb	PE	DI	full
SENPLA	5	<i>Senecio plattensis</i>	Nutt.	Asteraceae	PRAIRIE RAGWORT	UPL	forb	B	DI	full
SENVUL	*	<i>SENECIO VULGARIS</i>	L.	Asteraceae	COMMON SQUAW-WEED	FACU	forb	AN	DI	advent
SENHEB	4	<i>Senna hebecarpa</i>	(Fernald) Irwin & Barneby	Fabaceae	NORTHERN WILD SENNA	FAC	forb	PE	DI	full
SENMAR	4	<i>Senna marilandica</i>	(L.) Link	Fabaceae	SOUTHERN WILD SENNA	FAC+	forb	PE	DI	full
SETFAB	*	<i>SETARIA FABERI</i>	R.A.W. Herrm.	Poaceae	GIANT FOXTAIL GRASS	UPL	grass	AN	MONO	advent
SETGEN	*	<i>SETARIA GENICULATA</i>	(Lam.) P. Beauv.	Poaceae	JOINTED FOXTAIL GRASS	FAC	grass	PE	MONO	advent
SETGLA	*	<i>SETARIA GLAUCA</i>	(L.) P. Beauv.	Poaceae	YELLOW FOXTAIL GRASS	FAC	grass	AN	MONO	advent
SETITA	*	<i>SETARIA ITALICA</i>	(L.) P. Beauv.	Poaceae	FOXTAIL-MILLET	FACU	grass	AN	MONO	advent
SETVER	*	<i>SETARIA VERTICILLATA</i>	(L.) P. Beauv.	Poaceae	BUR FOXTAIL GRASS	FAC	grass	AN	MONO	advent
SETVIR	*	<i>SETARIA VIRIDIS</i>	(L.) P. Beauv.	Poaceae	GREEN FOXTAIL GRASS	[UPL]	grass	AN	MONO	advent
SHECAN	9	<i>Shepherdia canadensis</i>	(L.) Nutt.	Elaeagnaceae	CANADA BUFFALO-BERRY	UPL	forb	PE	DI	full
SHEARV	*	<i>SHERARDIA ARVENSIS</i>	L.	Rubiaceae	FIELD MADDER	[UPL]	forb	AN	DI	advent
SIBVIR	*	<i>SIBARA VIRGINICA</i>	(L.) Rollins	Brassicaceae	VIRGINIA ROCK CRESS	UPL	forb	AN	DI	advent
SICANG	3	<i>Sicyos angulatus</i>	L.	Cucurbitaceae	BUR-CUCUMBER	FACU	vine	AN	DI	partial
SIDHER	6	<i>Sida hermaphrodita</i>	(L.) Rusby	Malvaceae	VIRGINIA MALLOW	FAC	forb	PE	DI	full
SIDSPI	*	<i>SIDA SPINOSA</i>	L.	Malvaceae	PRICKLY SIDA	UPL	forb	AN	DI	advent
SILANT	1	<i>Silene antirrhina</i>	L.	Caryophyllaceae	SLEEPY CATCHFLY	[UPL]	forb	AN	DI	full
SILARM	*	<i>SILENE ARMERIA</i>	L.	Caryophyllaceae	GARDEN CATCHFLY	[UPL]	forb	AN	DI	advent
SILCARP	8	<i>Silene caroliniana</i> Walter var. <i>pennsylvanica</i>	(Michx.) Fernald	Caryophyllaceae	CAROLINA CATCHFLY	[UPL]	forb	PE	DI	full
SILCARW	9	<i>Silene caroliniana</i> Walter var. <i>wherryi</i>	(Small) Fernald	Caryophyllaceae	WHERRY'S CATCHFLY	[UPL]	forb	PE	DI	full
SILCSE	*	<i>SILENE CSEREI</i>	Baumg.	Caryophyllaceae	GLAUCOUS CAMPION	[UPL]	forb	BI	DI	advent
SILDIC	*	<i>SILENE DICHOTOMA</i>	Ehrh.	Caryophyllaceae	FORKED CATCHFLY	[UPL]	forb	AN	DI	advent
SILDIO	*	<i>SILENE DIOICA</i>	(L.) Clairv.	Caryophyllaceae	RED CAMPION	[UPL]	forb	PE	DI	advent
SILLAT	*	<i>SILENE LATIFOLIA</i>	Poir.	Caryophyllaceae	WHITE CAMPION	[UPL]	forb	BI	DI	advent
SILNIV	8	<i>Silene nivea</i>	(Nutt.) Muhl. ex Otth.	Caryophyllaceae	SNOWY CAMPION	FAC	forb	PE	DI	shade
SILNOC	*	<i>SILENE NOCTIFLORA</i>	L.	Caryophyllaceae	NIGHT-FLOWERING CATCHFLY	[UPL]	forb	AN	DI	advent
SILREG	8	<i>Silene regia</i>	Sims	Caryophyllaceae	ROYAL CATCHFLY	[UPL]	forb	PE	DI	full
SILROT	10	<i>Silene rotundifolia</i>	Nutt.	Caryophyllaceae	ROUND-LEAVED CATCHFLY	[UPL]	forb	PE	DI	full
SILSTE	6	<i>Silene stellata</i>	(L.) W.T. Aiton	Caryophyllaceae	STARRY CAMPION	[UPL]	forb	PE	DI	shade
SILVIR	5	<i>Silene virginica</i>	L.	Caryophyllaceae	FIRE-PINK	[UPL]	forb	PE	DI	full
SILVUL	*	<i>SILENE VULGARIS</i>	(Moench) Garcke	Caryophyllaceae	BLADDER CAMPION	[UPL]	forb	PE	DI	advent
SLPLAC	8	<i>Silphium laciniatum</i>	L.	Asteraceae	COMPASS PLANT	[UPL]	forb	PE	DI	full

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SLPPER	6	<i>Silphium perfoliatum</i>	L.	Asteraceae	CUP-PLANT	FACU	forb	PE	DI	full
SLPTER	8	<i>Silphium terebinthinaceum</i>	Jacq.	Asteraceae	PRAIRIE DOCK	UPL	forb	PE	DI	full
SLPTRI	5	<i>Silphium trifoliatum</i>	L.	Asteraceae	WHORLED ROSIN-WEED	[FAC]	forb	PE	DI	full
SILMAR	*	<i>SILYBUM MARIANUM</i>	(L.) Gaertn.	Asteraceae	MILK-THISTLE	[UPL]	forb	BI	DI	advent
SINALB	*	<i>SINAPSIS ALBA</i>	L.	Brassicaceae	WHITE MUSTARD	[UPL]	forb	AN	DI	advent
SINARV	*	<i>SINAPSIS ARVENSIS</i>	L.	Brassicaceae	CHARLOCK	[UPL]	forb	AN	DI	advent
SISALT	*	<i>SISYMBRIUM ALTISSIMUM</i>	L.	Brassicaceae	TALL TUMBLE MUSTARD	FACU-	forb	AN	DI	advent
SISLOE	*	<i>SISYMBRIUM LOESELII</i>	L.	Brassicaceae	TALL HEDGE MUSTARD	[UPL]	forb	AN	DI	advent
SISOFF	*	<i>SISYMBRIUM OFFICINALE</i>	(L.) Scop.	Brassicaceae	HEDGE MUSTARD	[UPL]	forb	AN	DI	advent
SISALB	6	<i>Sisyrinchium albidum</i>	Raf.	Iridaceae	PALE BLUE-EYED-GRASS	FAC	forb	PE	MONO	full
SISANG	2	<i>Sisyrinchium angustifolium</i>	Mill.	Iridaceae	STOUT BLUE-EYED-GRASS	FACW-	forb	PE	MONO	full
SISATL	10	<i>Sisyrinchium atlanticum</i>	E.P. Bicknell	Iridaceae	ATLANTIC BLUE-EYED-GRASS	FACW	forb	PE	MONO	full
SISMON	7	<i>Sisyrinchium montanum</i>	Greene	Iridaceae	NORTHERN BLUE-EYED-GRASS	FAC	forb	PE	MONO	full
SISMUC	8	<i>Sisyrinchium mucronatum</i>	Michx.	Iridaceae	NARROW-LEAVED BLUE-EYED-G.	FAC+	forb	PE	MONO	full
SISUA	6	<i>Sium suave</i>	Walter	Apiaceae	WATER-PARSNIP	OBL	forb	PE	DI	partial
SMXECI	5	<i>Smilax ecirrhata</i>	(Engelm.) S. Watson	Smilacaceae	UPRIGHT CARRION-FLOWER	[UPL]	forb	PE	MONO	shade
SMXGLA	5	<i>Smilax glauca</i>	Walter	Smilacaceae	CAT GREENBRIER	FACU	vine	W	MONO	shade
SMXHERH	4	<i>Smilax herbacea</i>	L.	Smilacaceae	CARRION-FLOWER	FAC	forb	PE	MONO	partial
SMXHIS	3	<i>Smilax hispida</i>	Muhl.	Smilacaceae	BRISTLY GREENBRIER	[FAC]	vine	W	MONO	shade
SMXILL	6	<i>Smilax illinoensis</i>	Mangalay	Smilacaceae	ILLINOIS GREENBRIER	[UPL]	vine	W	MONO	shade
SMXHERL	6	<i>Smilax lasioneura</i>	Hook.	Smilacaceae	PALE CARRION-FLOWER	[FAC]	forb	PE	MONO	shade
SMXHERP	6	<i>Smilax pulverulenta</i>	Michx.	Smilacaceae	DOWNY CARRION-FLOW.	FACU	forb	PE	MONO	shade
SMXROT	4	<i>Smilax rotundifolia</i>	L.	Smilacaceae	COMMON GREENBRIER	FAC	vine	W	MONO	shade
SLMCAR	*	<i>SOLANUM CAROLINENSE</i>	L.	Solanaceae	HORSE NETTLE	UPL	forb	PE	DI	advent
SLMDUL	*	<i>SOLANUM DULCAMARA</i>	L.	Solanaceae	BITTERSWEET NIGHTSHADE	FAC-	vine	PE	DI	advent
SLMNIG	1	<i>Solanum nigrum</i>	L.	Solanaceae	BLACK NIGHTSHADE	FACU-	forb	AN	DI	partial
SLMROS	*	<i>SOLANUM ROSTRATUM</i>	Dunal	Solanaceae	BUFFALO-BUR	[UPL]	forb	AN	DI	advent
SOLARG	6	<i>Solidago arguta</i>	Aiton	Asteraceae	CUT-LEAF GOLDENROD	[UPL]	forb	PE	DI	partial
SOLBIC	5	<i>Solidago bicolor</i>	L.	Asteraceae	WHITE GOLDENROD	[UPL]	forb	PE	DI	shade
SOLCAE	5	<i>Solidago caesia</i>	L.	Asteraceae	BLUE-STEMMED GOLDENROD	FACU	forb	PE	DI	shade
SOLCAN	1	<i>Solidago canadensis</i>	L.	Asteraceae	CANADA GOLDENROD	FACU	forb	PE	DI	full
SOLERE	6	<i>Solidago erecta</i>	Pursh	Asteraceae	SLENDER GOLDENROD	[UPL]	forb	PE	DI	shade
SOLFLE	5	<i>Solidago flexicaulis</i>	L.	Asteraceae	ZIGZAG GOLDENROD	FACU	forb	PE	DI	shade
SOLGIG	3	<i>Solidago gigantea</i>	Aiton	Asteraceae	SMOOTH GOLDENROD	FACW	forb	PE	DI	full
SOLHIS	4	<i>Solidago hispida</i>	Muhl. ex Willd.	Asteraceae	HAIRY GOLDENROD	[UPL]	forb	PE	DI	full
SOLJUN	2	<i>Solidago juncea</i>	Aiton	Asteraceae	PLUME GOLDENROD	[UPL]	forb	PE	DI	partial
SOLNEM	2	<i>Solidago nemoralis</i>	Aiton	Asteraceae	GRAY GOLDENROD	[UPL]	forb	PE	DI	full
SOLODO	8	<i>Solidago odora</i>	Aiton	Asteraceae	SWEET GOLDENROD	[UPL]	forb	PE	DI	shade
SOLOHI	9	<i>Solidago ohioensis</i>	Riddell	Asteraceae	OHIO GOLDENROD	OBL	forb	PE	DI	full
SOLPAT	6	<i>Solidago patula</i>	Muhl. ex Willd.	Asteraceae	ROUGH-LEAVED GOLDENROD	OBL	forb	PE	DI	full
SOLPTA	10	<i>Solidago ptarmicoides</i>	(Nees) B. Boivin	Asteraceae	WHITE UPLAND GOLDENROD	[UPL]	forb	PE	DI	full
SOLPUB	5	<i>Solidago puberula</i>	Nutt.	Asteraceae	DUSTY GOLDENROD	FACU-	forb	PE	DI	full
SOLRID	8	<i>Solidago riddellii</i>	Frank ex Riddell	Asteraceae	RIDDELL'S GOLDENROD	OBL	forb	PE	DI	full
SOLRIG	8	<i>Solidago rigida</i>	L.	Asteraceae	STIFF GOLDENROD	UPL	forb	PE	DI	full
SOLRUG	2	<i>Solidago rugosa</i>	Mill.	Asteraceae	ROUGH GOLDENROD	FAC	forb	PE	DI	full
SOLSEM	*	<i>SOLIDAGO SEMPERVIRENS</i>	L.	Asteraceae	SEASIDE GOLDENROD	FACW	forb	PE	DI	advent
SOLSPE	5	<i>Solidago speciosa</i>	Nutt.	Asteraceae	SHOWY GOLDENROD	[UPL]	forb	PE	DI	full
SOLSPH	7	<i>Solidago sphacelata</i>	Raf.	Asteraceae	FALSE GOLDENROD	[UPL]	forb	PE	DI	shade
SOLSQU	7	<i>Solidago squarrosa</i>	Muhl.	Asteraceae	LEAFY GOLDENROD	[UPL]	forb	PE	DI	shade
SOLULI	9	<i>Solidago uliginosa</i>	Nutt.	Asteraceae	BOG GOLDENROD	OBL	forb	PE	DI	full
SOLULM	5	<i>Solidago ulmifolia</i>	Muhl. ex Willd.	Asteraceae	ELM-LEAVED GOLDENROD	[UPL]	forb	PE	DI	shade
SONARV	*	<i>SONCHUS ARVENSIS</i>	L.	Asteraceae	FIELD SOW-THISTLE	UPL	forb	PE	DI	advent
SONASP	*	<i>SONCHUS ASPER</i>	(L.) Hill	Asteraceae	PRICKLY SOW-THISTLE	FAC	forb	AN	DI	advent
SONOLE	*	<i>SONCHUS OLERACEUS</i>	L.	Asteraceae	COMMON SOW-THISTLE	UPL	forb	AN	DI	advent

ACRONYM	CofC	SCIENTIFIC NAME	AUTHORITY	FAMILY	COMMON NAME	WET	FORM	HABIT	GROUP	SHADE
SORSOR	*	SORBARIA SORBIFOLIA	(L.) A. Br.	Rosaceae	FALSE SPIRAEA	[UPL]	shrub	W	DI	advent
SORAU	*	SORBUS AUCUPARIA	L.	Rosaceae	EUROPEAN MOUNTAIN-ASH	[UPL]	sm tree	W	DI	advent
SORDEC	4	<i>Sorbus decora</i>	(Sarg.) C.K. Schneid.	Rosaceae	WESTERN MOUNTAIN-ASH	FAC	sm tree	W	DI	shade
SORNUT	5	<i>Sorghastrum nutans</i>	(L.) Nash	Poaceae	INDIAN GRASS	UPL	grass	PE	MONO	full
SORBIC	*	SORGHUM BICOLOR	(L.) Moench	Poaceae	SORGHUM	UPL	grass	AN	MONO	advent
SORHAL	*	SORGHUM HALEPENSE	(L.) Pers.	Poaceae	JOHNSON GRASS	FACU	grass	PE	MONO	advent
SPAAME	6	<i>Sparganium americanum</i>	Nutt.	Sparganiaceae	AMERICAN BUR-REED	OBL	forb	PE	MONO	full
SPAAND	7	<i>Sparganium androcladum</i>	(Engelm.) Morong	Sparganiaceae	KEELED BUR-REED	OBL	forb	PE	MONO	full
SPACHL	8	<i>Sparganium emersum</i>	Rehmann	Sparganiaceae	SMALL BUR-REED	OBL	forb	PE	MONO	full
SPAEUR	4	<i>Sparganium eurycarpum</i>	Engelm. ex A. Gray	Sparganiaceae	GIANT BUR-REED	OBL	forb	PE	MONO	full
SPAPEC	5	<i>Spartina pectinata</i>	Link	Poaceae	PRAIRIE CORD GRASS	OBL	grass	PE	MONO	full
SPEARV	*	SPERGULA ARVENSIS	L.	Caryophyllaceae	CORN SPURREY	[UPL]	forb	AN	DI	advent
SPEMAR	*	SPERGULARIA MARINA	(L.) Griseb.	Caryophyllaceae	SALT MARSH SAND-SPURREY	OBL	forb	AN	DI	advent
SPEMED	*	SPERGULARIA MEDIA	(L.) C. Presl. ex Griseb.	Caryophyllaceae	SALT SPURREY	FACW	forb	PE	DI	advent
SPERUB	*	SPERGULARIA RUBRA	(L.) J. Presl. & C. Presl.	Caryophyllaceae	SAND SPURREY	FACU	forb	AN	DI	advent
SPEGLA	8	<i>Spermocoe glabra</i>	Michx.	Rubiaceae	SMOOTH BUTTONWEED	FACW	forb	PE	DI	shade
SPHNIT	7	<i>Sphenopholis nitida</i>	(Biehl.) Scribn.	Poaceae	SHINING WEDGE GRASS	[UPL]	grass	PE	MONO	shade
SPHOB TM	4	<i>Sphenopholis obtusata</i> (Michx.) Scribn. var. <i>major</i>	(Torr.) Erdman	Poaceae	SLENDER WEDGE GRASS	[FAC]	grass	PE	MONO	full
SPHOBTO	8	<i>Sphenopholis obtusata</i> var. <i>obtusata</i>	(Michx.) Scribn.	Poaceae	PRAIRIE WEDGE GRASS	FAC-	grass	PE	MONO	full
SPHPEN	6	<i>Sphenopholis pennsylvanica</i>	(L.) Hitchc.	Poaceae	SWAMP-OATS	OBL	grass	PE	MONO	full
SPIALA	3	<i>Spiraea alba</i>	Du Roi	Rosaceae	MEADOW-SWEET	FACW+	shrub	W	DI	full
SPIPRU	*	SPIRAEA PRUNIFOLIA	Siebold & Zucc.	Rosaceae	BRIDLE-WREATH	[UPL]	shrub	W	DI	advent
SPITOM	4	<i>Spiraea tomentosa</i>	L.	Rosaceae	STEEPLEBUSH	FACW	shrub	W	DI	full
SPIVIR	10	<i>Spiraea virginiana</i>	Britton	Rosaceae	APPALACHIAN SPIRAEA	FACU	shrub	W	DI	shade
SPRCERO	5	<i>Spiranthes cernua</i> (Rydb.) Ames var. <i>ochroleuca</i>	(Rydb.) Ames	Orchidaceae	YELLOW LADIES'-TRESSES	[FACU]	forb	PE	MONO	full
SPRCERC	4	<i>Spiranthes cernua</i> var. <i>cernua</i>	(L.) Rich.	Orchidaceae	NODDING LADIES'-TRESSES	FACW	forb	PE	MONO	full
SPRLAC	4	<i>Spiranthes lacera</i>	(Raf.) Raf.	Orchidaceae	SLENDER LADIES'-TRESSES	FACU-	forb	PE	MONO	full
SPRLUC	7	<i>Spiranthes lucida</i>	(H. H. Eaton) Ames	Orchidaceae	SHINING LADIES'-TRESSES	FACW	forb	PE	MONO	full
SPRMAG	8	<i>Spiranthes magnicamporum</i>	Sheviak	Orchidaceae	GREAT PLAINS LADIES'-TRESSES	FACU-	forb	PE	MONO	full
SPROVA	6	<i>Spiranthes ovalis</i>	Lindl.	Orchidaceae	LESSER LADIES'-TRESSES	FAC	forb	PE	MONO	full
SPRRROM	10	<i>Spiranthes romanzoffiana</i>	Cham.	Orchidaceae	HOODED LADIES'-TRESSES	OBL	forb	PE	MONO	full
SPRTUB	6	<i>Spiranthes tuberosa</i>	Raf.	Orchidaceae	LITTLE LADIES'-TRESSES	FACU-	forb	PE	MONO	full
SPRVER	7	<i>Spiranthes vernalis</i>	Engelm. & A. Gray	Orchidaceae	NARROW-LEAVED LADIES'-TR.	FAC	forb	PE	MONO	full
SPIPOL	5	<i>Spirodela polyrrhiza</i>	(L.) Schleid.	Lemnaceae	GREATER DUCKWEED	OBL	forb	AN	MONO	full
SPOASP	2	<i>Sporobolus asper</i>	(P. Beauv.) Kunth	Poaceae	TALL DROPSEED	[UPL]	grass	PE	MONO	full
SPOCRY	6	<i>Sporobolus cryptandrus</i>	(Torr.) A. Gray	Poaceae	SAND DROPSEED	[UPL]	grass	PE	MONO	full
SPOHET	8	<i>Sporobolus heterolepis</i>	(A. Gray) A. Gray	Poaceae	PRAIRIE DROPSEED	[UPL]	grass	PE	MONO	full
SPONEG	2	<i>Sporobolus neglectus</i>	Nash	Poaceae	SMALL RUSH GRASS	FACU-	grass	AN	MONO	full
SPOOZA	5	<i>Sporobolus ozarkanus</i>	Fernald	Poaceae	OZARK RUSH GRASS	[UPL]	grass	AN	MONO	full
SPOVAG	2	<i>Sporobolus vaginiflorus</i>	(Torr.) A.W. Wood	Poaceae	SHEATHED RUSH GRASS	UPL	grass	AN	MONO	full
STAASP	2	<i>Stachys aspera</i>	Michx.	Lamiaceae	ROUGH HEDGE-NETTLE	FACW	forb	PE	DI	full
STACOR	4	<i>Stachys cordata</i>	Riddell	Lamiaceae	HEART-LEAVED HEDGE-NETTLE	FAC	forb	PE	DI	full
STAPAL	6	<i>Stachys palustris</i>	L.	Lamiaceae	MARSH HEDGE-NETTLE	OBL	forb	PE	DI	full
STATEN	4	<i>Stachys tenuifolia</i>	Willd.	Lamiaceae	SMOOTH HEDGE-NETTLE	FACW+	forb	PE	DI	full
STATRI	6	<i>Staphylea trifolia</i>	L.	Staphyleaceae	BLADDERNUT	FAC	shrub	W	DI	shade
STEAQU	*	STELLARIA AQUATICA	(L.) Scop.	Caryophyllaceae	WATER CHICKWEED	FACW	forb	PE	DI	full
STEGRA	*	STELLARIA GRAMINEA	L.	Caryophyllaceae	COMMON STITCHWORT	FACU-	forb	PE	DI	full
STELON	4	<i>Stellaria longifolia</i>	Muhl. ex Willd.	Caryophyllaceae	LONG-LEAVED STITCHWORT	FACW	forb	PE	DI	shade
STEMED	*	STELLARIA MEDIA	(L.) Vill.	Caryophyllaceae	COMMON CHICKWEED	UPL	forb	AN	DI	full
STEPAL	*	STELLARIA PALLIDA	(Dumort) Pire	Caryophyllaceae	LESSER CHICKWEED	[UPL]	forb	AN	DI	full
STEPUB	5	<i>Stellaria pubera</i>	Michx.	Caryophyllaceae	STAR CHICKWEED	[UPL]	forb	PE	DI	full
STNGRA	8	<i>Stenanthium gramineum</i>	(Ker Gawl.) Morong	Liliaceae	FEATHER-BELLS	FACW	forb	PE	DI	shade
STISPA	10	<i>Stipa spartea</i>	Trin.	Poaceae	PORCUPINE GRASS	[UPL]	grass	PE	MONO	full
STRROS	8	<i>Streptopus lanceolatus</i>	(Aiton) Reveal	Liliaceae	ROSE TWISTED-STALK	FAC-	forb	PE	DI	shade

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STRHEL	3	<i>Strophostyles helvula</i>	(L.) Elliott	Fabaceae	WILD BEAN	FACU-	forb	AN	DI	partial
STRUMB	*	<i>STROPHOSTYLES UMBELLATA</i>	(Muhl. ex Willd.) Britton	Fabaceae	PERENNIAL WILD BEAN	FACU	forb	PE	DI	advent
STUFIL	10	<i>Stuckenia filiformis</i>	(Pers.) Boerner	Potamogetonaceae	FILIFORM PONDWEED	OBL	forb	PE	MONO	full
STUPEC	2	<i>Stuckenia pectinata</i>	(L.) Boerner	Potamogetonaceae	SAGO PONDWEED	OBL	forb	PE	MONO	full
STYDIP	6	<i>Stylophorum diphyllum</i>	(Michx.) Nutt.	Papaveraceae	WOOD POPPY	[UPL]	forb	PE	DI	shade
STYBIF	3	<i>Stylosanthes biflora</i>	(Michx.) B.S.P.	Fabaceae	PENCIL-FLOWER	[UPL]	forb	PE	DI	shade
STYGRA	9	<i>Styrax grandifolius</i>	Aiton	Styracaceae	BIGLEAF SNOWBELL	FACU	shrub	W	DI	shade
SULSUL	9	<i>Sullivantia sullivantii</i>	(Torr. & A. Gray) Britton	Saxifragaceae	SULLIVANTIA	[UPL]	forb	PE	DI	shade
SYMALBA	8	<i>Symphoricarpos albus</i> var. <i>albus</i>	(L.) S.F. Blake	Caprifoliaceae	SNOWBERRY	FACU-	shrub	W	DI	partial
SYMALBL	*	<i>SYMPHORICARPOS ALBUS</i> var. <i>LAEVIGATUS</i>	(Fernald) S.F. Blake	Caprifoliaceae	WESTERN SNOWBERRY	[UPL]	shrub	W	DI	advent
SYMORB	3	<i>Symphoricarpos orbiculatus</i>	Moench	Caprifoliaceae	CORALBERRY	UPL	shrub	W	DI	partial
SYMASP	*	<i>SYMPHYTUM ASPERUM</i>	Lepech.	Boraginaceae	ROUGH COMFREY	[UPL]	forb	PE	DI	advent
SYMOFF	*	<i>SYMPHYTUM OFFICINALE</i>	L.	Boraginaceae	COMMON COMFREY	[UPL]	forb	PE	DI	advent
SYMFOE	7	<i>Symplocarpus foetidus</i>	(L.) Salisb. ex Barton	Araceae	SKUNK-CABBAGE	OBL	forb	PE	MONO	shade
SYNHIS	7	<i>Synandra hispidula</i>	(Michx.) Baill.	Lamiaceae	SYNANDRA	FAC-	forb	PE	DI	shade
SYRVUL	*	<i>SYRINGA VULGARIS</i>	L.	Oleaceae	COMMON LILAC	[UPL]	shrub	W	DI	advent
TAEINT	6	<i>Taenidia integririma</i>	(L.) Drude	Apiaceae	YELLOW-PIMPERNEL	[UPL]	forb	PE	DI	full
TANVUL	*	<i>TANACETUM VULGARE</i>	L.	Asteraceae	COMMON TANSY	[UPL]	forb	PE	DI	advent
TARLAE	*	<i>TARAXACUM LAEVIGATUM</i>	(Willd.) DC.	Asteraceae	RED-SEEDED DANDELION	[UPL]	forb	PE	DI	advent
TAROFF	*	<i>TARAXACUM OFFICINALE</i>	Weber ex F.H. Wigg.	Asteraceae	COMMON DANDELION	FACU-	forb	PE	DI	advent
TAXDIS	*	<i>TAXODIUM DISTICHUM</i>	(L.) Rich	Taxodiaceae	BALD CYPRESS	OBL	tree	W	DI	advent
TAXCAN	8	<i>Taxus canadensis</i>	Marshall	Taxaceae	AMERICAN YEW	FAC	shrub	W	GYMN	shade
TEPVIR	6	<i>Tephrosia virginiana</i>	(L.) Pers.	Fabaceae	GOAT'S-RUE	[UPL]	forb	PE	DI	full
TEUCAN	3	<i>Teucrium canadense</i>	Fisch.	Lamiaceae	AMERICAN GERMANDER	FACW-	forb	PE	DI	full
THADAS	4	<i>Thalictrum dasycarpum</i>	Fisch. & Ave-Lall.	Ranunculaceae	PURPLE MEADOW-RUE	FACW	forb	PE	DI	full
THADIO	5	<i>Thalictrum dioicum</i>	L.	Ranunculaceae	EARLY MEADOW-RUE	FAC	forb	PE	DI	full
THAPUB	5	<i>Thalictrum pubescens</i>	Pursh	Ranunculaceae	TALL MEADOW-RUE	FACW+	forb	PE	DI	full
THAREV	7	<i>Thalictrum revolutum</i>	DC.	Ranunculaceae	SKUNK MEADOW-RUE	UPL	forb	PE	DI	full
THABAR	4	<i>Thaspium barbinode</i>	(Michx.) Nutt.	Apiaceae	BEARDED MEADOW-PARSNIP	UPL	forb	PE	DI	full
THATRI	4	<i>Thaspium trifoliatum</i>	(L.) A. Gray	Apiaceae	YELLOW MEADOW-PARSNIP	[FACU]	forb	PE	DI	full
THEHEX	7	<i>Thelypteris hexagonaptera</i>	(Michx.) Weath.	Thelypteridaceae	BROAD BEECH-FERN	FAC	fern	PE	SVP	shade
THENOV	4	<i>Thelypteris noveboracensis</i>	(L.) Nieuwl.	Thelypteridaceae	NEW YORK FERN	FAC	fern	PE	SVP	shade
THEPAL	6	<i>Thelypteris palustris</i>	Schott	Thelypteridaceae	MARSH FERN	FACW+	fern	PE	SVP	full
THEPHE	9	<i>Thelypteris phegopteris</i>	(L.) Sloss	Thelypteridaceae	LONG BEECH-FERN	FACU	fern	PE	SVP	shade
THLARV	*	<i>THLASPI ARVENSE</i>	L.	Brassicaceae	FIELD PENNY CRESS	UPL	forb	AN	DI	advent
THLPER	*	<i>THLASPI PERFOLIATUM</i>	L.	Brassicaceae	PERFOLIATE PENNY CRESS	[UPL]	forb	AN	DI	advent
THUOCC	9	<i>Thuja occidentalis</i>	L.	Cupressaceae	ARBOR VITAE	FACW	tree	W	GYMN	tree
TIACOR	6	<i>Tiarella cordifolia</i>	L.	Saxifragaceae	FOAMFLOWER	FAC-	forb	PE	DI	shade
TILAME	6	<i>Tilia americana</i>	L.	Tiliaceae	AMERICAN BASSWOOD	FACU	tree	W	DI	tree
TILHET	6	<i>Tilia heterophylla</i>	Vent.	Tiliaceae	WHITE BASSWOOD	[FACU]	tree	W	DI	tree
TIPDIS	6	<i>Tipularia discolor</i>	(Pursh) Nutt.	Orchidaceae	CRANE-FLY ORCHID	FACU	forb	PE	MONO	shade
TORARV	*	<i>TORILIS ARVENSIS</i>	(Huds.) Link	Apiaceae	FIELD HEDGE-PARSLEY	[UPL]	forb	AN	DI	advent
TORJAP	*	<i>TORILIS JAPONICA</i>	(Houtt.) DC.	Apiaceae	JAPANESE HEDGE-PARSLEY	[UPL]	forb	AN	DI	advent
TOXRAD	1	<i>Toxicodendron radicans</i>	(L.) Kuntze	Anacardiaceae	POISON-IVY	FAC	vine	W	DI	partial
TOXRYD	3	<i>Toxicodendron rydbergii</i>	(Small ex Rydb.) Greene	Anacardiaceae	NORTHERN POISON-IVY	FAC-	vine	W	DI	partial
TOXVER	7	<i>Toxicodendron vernix</i>	(L.) Kuntze	Anacardiaceae	POISON SUMAC	OBL	shrub	W	DI	full
TRAQHI	5	<i>Tradescantia ohienensis</i>	Raf.	Commelinaceae	OHIO SPIDERWORT	FAC	forb	PE	DI	full
TRASUB	5	<i>Tradescantia subaspera</i>	Ker Gawl.	Commelinaceae	ZIGZAG SPIDERWORT	[FACU]	forb	PE	DI	shade
TRAVIR	5	<i>Tradescantia virginiana</i>	L.	Commelinaceae	VIRGINIA SPIDERWORT	FACU	forb	PE	DI	shade
TRADUB	*	<i>TRAGOPOGON DUBIUS</i>	Scop.	Asteraceae	FIELD GOAT'S-BEARD	[UPL]	forb	PE	DI	advent
TRAPOR	*	<i>TRAGOPOGON PORRIFOLIUS</i>	L.	Asteraceae	SALSIFY	[UPL]	forb	PE	DI	advent
TRAPRA	*	<i>TRAGOPOGON PRATENSIS</i>	L.	Asteraceae	YELLOW GOAT'S-BEARD	[UPL]	forb	PE	DI	advent
TRIFRA	6	<i>Triadenum fraseri</i>	(Spach) Gleason	Clusiaceae	FRASER'S ST. JOHN'S-WORT	OBL	forb	PE	DI	full
TRITUB	8	<i>Triadenum tubulosum</i>	(Walter) Gleason	Clusiaceae	MARSH ST. JOHN'S-WORT	OBL	forb	PE	DI	shade

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TRIVIR	6	<i>Triadenum virginicum</i>	(L.) Raf.	Clusiaceae	VIRGINIA MARSH ST. JOHN'S-W.	OBL	forb	PE	DI	full
TRIWA	8	<i>Triadenum walteri</i>	(J.G. Gmel) Gleason	Clusiaceae	WALTER'S ST. JOHN'S-WORT	OBL	forb	PE	DI	partial
TRIGLU	10	<i>Triantha glutinosa</i>	(Michx.) Baker	Liliaceae	FALSE ASPHODEL	OBL	forb	PE	MONO	full
TRITER	*	<i>TRIBULUS TERRESTRIS</i>	L.	Zygophyllaceae	PUNCTURE-VINE	[UPL]	forb	AN	DI	advent
TRIBOS	10	<i>Trichomanes boschianum</i>	J. W. Sturm	Hymenophyllaceae	APPALACHIAN FILMY FERN	FACW	fern	PE	SVP	shade
TRIINT	10	<i>Trichomanes intricatum</i>	Farrar	Hymenophyllaceae	WEFT FERN	[UPL]	fern	PE	SVP	shade
TRIPLA	7	<i>Trichophorum planifolium</i>	(Spreng.) Palla	Cyperaceae	FLAT-LEAVED BULRUSH	[UPL]	sedge	PE	MONO	partial
TRIDOC	4	<i>Trichostema dichotomum</i>	L.	Lamiaceae	BLUECURLS	[UPL]	forb	AN	DI	full
TRiset	7	<i>Trichostema setaceum</i>	Houtt.	Lamiaceae	NARROW-LEAVED BLUECURLS	[UPL]	forb	AN	DI	full
TRIFLA	1	<i>Tridens flavus</i>	(L.) Hitchc.	Poaceae	GREASE GRASS	FACU	grass	PE	MONO	full
TRIBOR	7	<i>Trientalis borealis</i>	Raf.	Primulaceae	STARFLOWER	FAC	forb	PE	DI	shade
TRFARV	*	<i>TRIFOLIUM ARVENSE</i>	L.	Fabaceae	RABBIT-FOOT CLOVER	[UPL]	forb	AN	DI	advent
TRFAUR	*	<i>TRIFOLIUM AUREUM</i>	Pollich	Fabaceae	PALMATE HOP CLOVER	[UPL]	forb	AN	DI	advent
TRFCAM	*	<i>TRIFOLIUM CAMPESTRE</i>	Schreb.	Fabaceae	PINNATE HOP CLOVER	[UPL]	forb	AN	DI	advent
TRFDUB	*	<i>TRIFOLIUM DUBIUM</i>	Sibth.	Fabaceae	LITTLE HOP CLOVER	UPL	forb	AN	DI	advent
TRFHYB	*	<i>TRIFOLIUM HYBRIDUM</i>	L.	Fabaceae	ALSIKE CLOVER	FACU-	forb	PE	DI	advent
TRFINC	*	<i>TRIFOLIUM INCARNATUM</i>	L.	Fabaceae	CRIMSON CLOVER	[UPL]	forb	AN	DI	advent
TRFPRA	*	<i>TRIFOLIUM PRATENSE</i>	L.	Fabaceae	RED CLOVER	FACU-	forb	PE	DI	advent
TRFREF	8	<i>Trifolium reflexum</i>	L.	Fabaceae	BUFFALO CLOVER	[UPL]	forb	BI	DI	
TRFREP	*	<i>TRIFOLIUM REPENS</i>	L.	Fabaceae	WHITE CLOVER	FACU-	forb	PE	DI	advent
TRFSTO	5	<i>Trifolium stoloniferum</i>	Muhl. ex Eaton	Fabaceae	RUNNING BUFFALO CLOVER	[FACU+]	forb	PE	DI	partial
TRIMAR	10	<i>Triglochin maritima</i>	L.	Juncaginaceae	SEASIDE ARROW-GRASS	OBL	forb	PE	MONO	full
TRIPAL	10	<i>Triglochin palustre</i>	L.	Juncaginaceae	MARSH ARROW-GRASS	OBL	forb	PE	MONO	full
TRL CER	7	<i>Trillium cernuum</i>	L.	Liliaceae	NODDING TRILLIUM	FACW	forb	PE	MONO	shade
TRLER	7	<i>Trillium erectum</i>	L.	Liliaceae	PURPLE TRILLIUM	FACU-	forb	PE	MONO	shade
TRLFLE	6	<i>Trillium flexipes</i>	Raf.	Liliaceae	DROOPING TRILLIUM	FAC	forb	PE	MONO	shade
TRLGRA	5	<i>Trillium grandiflorum</i>	(Michx.) Salisb.	Liliaceae	LARGE-FLOWERED TRILLIUM	[UPL]	forb	PE	MONO	shade
TRLNIV	9	<i>Trillium nivale</i>	Riddell	Liliaceae	SNOW TRILLIUM	[UPL]	forb	PE	MONO	shade
TRLREC	6	<i>Trillium recurvatum</i>	L.C. Beck	Liliaceae	PRAIRIE WAKE-ROBIN	UPL	forb	PE	MONO	shade
TRLSES	5	<i>Trillium sessile</i>	L.	Liliaceae	TOAD-SHADE	UPL	forb	PE	MONO	shade
TRLUND	8	<i>Trillium undulatum</i>	Willd.	Liliaceae	PAINTED TRILLIUM	FACU	forb	PE	MONO	shade
TRDPER	2	<i>Triodanis perfoliata</i>	(L.) Nieuwl.	Scrophulariaceae	VENUS'-LOOKING-GLASS	FAC	forb	AN	DI	full
TRIANG	5	<i>Triosteum angustifolium</i>	L.	Caprifoliaceae	LESSER HORSE-GENTIAN	FAC	forb	PE	DI	full
TRIAUR	5	<i>Triosteum aurantiacum</i>	E.P. Bicknell	Caprifoliaceae	WILD COFFEE	[UPL]	forb	PE	DI	full
TRIPER	5	<i>Triosteum perfoliatum</i>	L.	Caprifoliaceae	TINKER'S-WEED	[UPL]	forb	PE	DI	full
TRITRI	9	<i>Triphora trianthophora</i>	(Sw.) Rydb.	Orchidaceae	THREE-BIRD ORCHID	UPL	forb	PE	MONO	shade
TRIPUR	9	<i>Triplasis purpurea</i>	(Walter) Chapm.	Poaceae	PURPLE SAND GRASS	[UPL]	grass	AN	MONO	full
TROLAX	9	<i>Trollius laxus</i>	Salisb.	Ranunculaceae	SPREADING GLOBEFLOWER	OBL	forb	PE	DI	partial
TSUCAN	8	<i>Tsuga canadensis</i>	(L.) Carriere	Pinaceae	EASTERN HEMLOCK	FACU	tree	W	GYMN	tree
TUSFAR	*	<i>TUSSILAGO FARFARA</i>	L.	Asteraceae	COLTSFOOT	FACU	forb	PE	DI	advent
TYPANG	*	<i>TYPHA ANGUSTIFOLIA</i>	L.	Typhaceae	NARROW-LEAVED CAT-TAIL	OBL	forb	PE	MONO	advent
TYPLAT	1	<i>Typha latifolia</i>	L.	Typhaceae	BROAD-LEAVED CAT-TAIL	OBL	forb	PE	MONO	full
TYPGLA	*	<i>TYPHA X GLAUCA</i>	Godr.	Typhaceae	HYBRID CAT-TAIL	OBL	forb	PE	MONO	advent
ULMAME	2	<i>Ulmus americana</i>	L.	Ulmaceae	AMERICAN ELM	FACW-	tree	W	DI	tree
ULMPUM	*	<i>ULMUS PUMILA</i>	L.	Ulmaceae	SIBERIAN ELM	[UPL]	tree	W	DI	tree
ULMRUB	3	<i>Ulmus rubra</i>	Muhl.	Ulmaceae	SLIPPERY ELM	FAC	tree	W	DI	tree
ULMTHO	7	<i>Ulmus thomasii</i>	Sarg.	Ulmaceae	ROCK ELM	FACU+	sm tree	W	DI	partial
URTCHA	9	<i>Urtica chamaedryoides</i>	Pursh	Urticaceae	SPRING NETTLE	FACU	forb	AN	DI	shade
URTDIOP	1	<i>Urtica dioica</i> L. var. <i>procera</i>	(Muhl. ex Willd.) Wedd.	Urticaceae	AMERICAN STINGING NETTLE	[FAC-]	forb	PE	DI	full
URTDIOD	*	<i>URTICA DIOICA</i> var. <i>DIOICA</i>	L.	Urticaceae	EUROPEAN STINGING NETTLE	[FACU]	forb	PE	DI	advent
UTRCOR	10	<i>Utricularia cornuta</i>	Michx.	Lentibulariaceae	HORNED BLADDERWORT	OBL	forb	PE	DI	full
UTRGEM	10	<i>Utricularia geminiscapa</i>	Benj.	Lentibulariaceae	TWO-SCAPED BLADDERWORT	OBL	forb	PE	DI	full
UTRGIB	8	<i>Utricularia gibba</i>	L.	Lentibulariaceae	HUMPED BLADDERWORT	OBL	forb	PE	DI	full
UTRINT	10	<i>Utricularia intermedia</i>	Hayne	Lentibulariaceae	FLAT-LEAVED BLADDERWORT	OBL	forb	PE	DI	full

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UTRMN	8	<i>Utricularia minor</i>	L.	Lentibulariaceae	LESSER BLADDERWORT	OBL	forb	PE	DI	full
UTRVUL	6	<i>Utricularia vulgaris</i>	L.	Lentibulariaceae	COMMON BLADDERWORT	OBL	forb	PE	DI	full
UVUGRA	5	<i>Uvularia grandiflora</i>	Sm.	Liliaceae	LARGE-FLOWERED BELLWORT	[UPL]	forb	PE	MONO	shade
UVUPER	5	<i>Uvularia perfoliata</i>	L.	Liliaceae	PERFOLIATE BELLWORT	FACU	forb	PE	MONO	shade
UVUSES	5	<i>Uvularia sessilifolia</i>	L.	Liliaceae	MERRY-BELLS	FACU-	forb	PE	MONO	shade
VACHIS	*	<i>VACCARIA HISPANICA</i>	(Mill.) Rauschert	Caryophyllaceae	COW-HERB	[UPL]	forb	AN	DI	advent
VACANG	7	<i>Vaccinium angustifolium</i>	Aiton	Ericaceae	LOW SUGARBERRY	FACU-	shrub	W	DI	shade
VACCOR	6	<i>Vaccinium corymbosum</i>	L.	Ericaceae	HIGHBUSH BLUEBERRY	FACW-	shrub	W	DI	partial
VACMAC	8	<i>Vaccinium macrocarpon</i>	Aiton	Ericaceae	LARGE CRANBERRY	OBL	shrub	W	DI	full
VACMYR	9	<i>Vaccinium myrtilloides</i>	Michx.	Ericaceae	VELVET-LEAVED BLUEBERRY	FAC	shrub	W	DI	shade
VACODY	10	<i>Vaccinium oxycoccos</i>	L.	Ericaceae	SMALL CRANBERRY	OBL	shrub	W	DI	full
VACPAL	6	<i>Vaccinium pallidum</i>	Aiton	Ericaceae	LOW BLUEBERRY	[UPL]	shrub	W	DI	shade
VACSTA	6	<i>Vaccinium stamineum</i>	L.	Ericaceae	DEERBERRY	FACU-	shrub	W	DI	shade
VALCIL	10	<i>Valeriana ciliata</i>	Torr. & A. Gray	Valerianaceae	PRAIRIE VALERIAN	OBL	forb	PE	DI	full
VALOFF	*	<i>VALERIANA OFFICINALIS</i>	L.	Valerianaceae	GARDEN VALERIAN	[FACU]	forb	PE	DI	advent
VALPAU	7	<i>Valeriana pauciflora</i>	Michx.	Valerianaceae	LARGE-FLOWERED VALERIAN	FACW	forb	PE	DI	full
VALULI	10	<i>Valeriana uliginosa</i>	(Torr. & A. Gray) Rydb.	Valerianaceae	SWAMP VALERIAN	[FACW+]	forb	PE	DI	full
VALCHE	4	<i>Valerianella chenopodifolia</i>	(Pursh) DC.	Valerianaceae	GOOSEFOOT CORN-SALAD	[FAC-]	forb	AN	DI	full
VALLOC	*	<i>VALERIANELLA LOCUSTA</i>	(L.) Latourr.	Valerianaceae	EUROPEAN CORN-SALAD	[UPL]	forb	AN	DI	advent
VALUMB	2	<i>Valerianella umblicata</i>	(Sull.) A.W. Wood	Valerianaceae	BEAKED CORN-SALAD	FAC	forb	AN	DI	full
VALAME	8	<i>Vallisneria americana</i>	Michx.	Hydrocharitaceae	WATER-CELERY	OBL	forb	PE	MONO	full
VERVIR	6	<i>Veratrum viride</i>	Aiton	Liliaceae	FALSE HELLEBORE	FACW+	forb	PE	MONO	shade
VERBLA	*	<i>VERBASCUM BLATTARIA</i>	L.	Scrophulariaceae	MOTH MULLEIN	[UPL]	forb	BI	DI	advent
VERTHA	*	<i>VERBASCUM THAPSUS</i>	L.	Scrophulariaceae	COMMON MULLEIN	[UPL]	forb	BI	DI	advent
VERBRA	0	<i>Verbena bracteata</i>	Lag. & Rodr.	Verbenaceae	BRACTED VERVAIN	UPL	forb	PE	DI	full
VERCAN	*	<i>VERBENA CANADENSIS</i>	(L.) Britton	Verbenaceae	ROSE VERVAIN	[UPL]	forb	PE	DI	advent
VERHAS	4	<i>Verbena hastata</i>	L.	Verbenaceae	BLUE VERVAIN	FACW+	forb	PE	DI	full
VERSIM	5	<i>Verbena simplex</i>	Lehm.	Verbenaceae	NARROW-LEAVED VERVAIN	[UPL]	forb	PE	DI	full
VERSTR	3	<i>Verbena stricta</i>	Vent.	Verbenaceae	HOARY VERVAIN	[UPL]	forb	PE	DI	full
VERURT	3	<i>Verbena urticifolia</i>	L.	Verbenaceae	WHITE VERVAIN	FACU	forb	PE	DI	full
VERALT	5	<i>Verbesina alternifolia</i>	(L.) Britton ex Kearney	Asteraceae	WINGSTEM	FAC	forb	PE	DI	partial
VERHEL	5	<i>Verbesina helianthoides</i>	Michx.	Asteraceae	HAIRY WINGSTEM	[UPL]	forb	PE	DI	full
VEROCC	5	<i>Verbesina occidentalis</i>	(L.) Walter	Asteraceae	YELLOW CROWN-BEARD	UPL	forb	PE	DI	shade
VERFAS	8	<i>Vernonia fasciculata</i>	Michx.	Asteraceae	WESTERN IRONWEED	FAC+	forb	PE	DI	full
VERGIG	2	<i>Vernonia gigantea</i>	(Walter) Trel.	Asteraceae	TALL IRONWEED	FAC	forb	PE	DI	full
VERMIS	8	<i>Vernonia missurica</i>	Raf.	Asteraceae	MISSOURI IRONWEED	FACU+	forb	PE	DI	full
VERNOV	3	<i>Vernonia noveboracensis</i>	(L.) Michx.	Asteraceae	NEW YORK IRONWEED	FACW+	forb	PE	DI	full
VERAGR	*	<i>VERONICA AGRESTIS</i>	L.	Scrophulariaceae	FIELD SPEEDWELL	[UPL]	forb	AN	DI	advent
VERAME	6	<i>Veronica americana</i>	Schwein. ex Benth.	Scrophulariaceae	AMERICAN BROOKLIME	OBL	forb	PE	DI	partial
VERANA	6	<i>Veronica anagallis-aquatica</i>	L.	Scrophulariaceae	WATER SPEEDWELL	OBL	forb	PE	DI	full
VERARV	*	<i>VERONICA ARVENSIS</i>	L.	Scrophulariaceae	CORN SPEEDWELL	[UPL]	forb	AN	DI	advent
VERBEC	*	<i>VERONICA BECCABUNGA</i>	L.	Scrophulariaceae	EUROPEAN BROOKLIME	OBL	forb	PE	DI	advent
VERCAT	6	<i>Veronica catenata</i>	Pennell	Scrophulariaceae	SWEET-WATER SPEEDWELL	OBL	forb	PE	DI	full
VERCHA	*	<i>VERONICA CHAMAEDRYS</i>	L.	Scrophulariaceae	BIRD'S-EYE SPEEDWELL	[UPL]	forb	PE	DI	advent
VERFIL	*	<i>VERONICA FILIFORMIS</i>	Sm.	Scrophulariaceae	CREeping SPEEDWELL	[UPL]	forb	PE	DI	advent
VERHED	*	<i>VERONICA HEDERAEFOLIA</i>	L.	Scrophulariaceae	IVY-LEAVED SPEEDWELL	[UPL]	forb	AN	DI	advent
VERLAT	*	<i>VERONICA LATIFOLIA</i>	L.	Scrophulariaceae	BROAD-LEAVED SPEEDWELL	[UPL]	forb	PE	DI	advent
VERLON	*	<i>VERONICA LONGIFOLIA</i>	L.	Scrophulariaceae	GARDEN SPEEDWELL	[UPL]	forb	PE	DI	advent
VEROFF	*	<i>VERONICA OFFICINALIS</i>	L.	Scrophulariaceae	COMMON SPEEDWELL	FACU-	forb	PE	DI	advent
VERPERP	1	<i>Veronica peregrina</i> var. <i>peregrina</i>	L.	Scrophulariaceae	PURSLANE SPEEDWELL	FACU-	forb	AN	DI	full
VERPER	*	<i>VERONICA PERSICA</i>	Poir.	Scrophulariaceae	CAT'S-EYE SPEEDWELL	[UPL]	forb	AN	DI	advent
VERPOL	*	<i>VERONICA POLITA</i>	Fr.	Scrophulariaceae	WAYSIDE SPEEDWELL	[UPL]	forb	AN	DI	advent
VERSCU	6	<i>Veronica scutellata</i>	L.	Scrophulariaceae	MARSH SPEEDWELL	OBL	forb	PE	DI	full
VERSER	*	<i>VERONICA SERPYLLIFOLIA</i>	L.	Scrophulariaceae	THYME-LEAVED SPEEDWELL	FAC+	forb	PE	DI	advent

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VERVER	*	VERONICA VERNA	L.	Scrophulariaceae	SPRING SPEEDWELL	[UPL]	forb	AN	DI	advent
VERVIN	7	Veronicastrum virginicum	(L.) Farw.	Scrophulariaceae	CULVER'S-ROOT	FACU	forb	PE	DI	full
VIBACE	6	Viburnum acerifolium	L.	Caprifoliaceae	MAPLE-LEAVED VIBURNUM	[UPL]	shrub	W	DI	shade
VIBALN	8	Viburnum alnifolium	Marshall	Caprifoliaceae	HOBBLEBUSH	FAC	shrub	W	DI	shade
VIBCAS	5	Viburnum cassinoides	L.	Caprifoliaceae	WITHE-ROD	FACW	shrub	W	DI	shade
VIBDEN	2	<u>Viburnum dentatum</u>	L.	Caprifoliaceae	ARROW-WOOD	FAC	shrub	W	DI	full
VIBLAN	*	VIBURNUM LANTANA	L.	Caprifoliaceae	WAYFARING TREE	[UPL]	shrub	W	DI	advent
VIBLEN	5	Viburnum lentago	L.	Caprifoliaceae	NANNYBERRY	FAC	shrub	W	DI	partial
VIBMOL	6	Viburnum molle	Michx.	Caprifoliaceae	SOFT-LEAVED ARROW-WOOD	[UPL]	shrub	W	DI	shade
VIBOPUA	8	Viburnum opulus L. var. americana	Aiton	Caprifoliaceae	HIGHBUSH-CRANBERRY	FACW	shrub	W	DI	shade
VIBOPUO	*	VIBURNUM OPULUS var. OPULUS	L.	Caprifoliaceae	EUROPEAN CRANBERRY-BUSH	FACW	shrub	W	DI	advent
VIBPRU	4	Viburnum prunifolium	L.	Caprifoliaceae	BLACK-HAW	FACU	shrub	W	DI	shade
VIBRAF	5	Viburnum rafinesquianum	Schult.	Caprifoliaceae	DOWNY ARROW-WOOD	[UPL]	shrub	W	DI	shade
VIBREC	2	<u>Viburnum recognitum</u>	Aiton	Caprifoliaceae	NORTHERN ARROW-WOOD	FACW-	shrub	W	DI	partial
VIBRUF	6	Viburnum rufidulum	Raf.	Caprifoliaceae	SOUTHERN BLACK-HAW	[UPL]	shrub	W	DI	partial
VICAME	5	Vicia americana	Muhl. ex Willd.	Fabaceae	AMERICAN VETCH	[UPL]	forb	PE	DI	full
VICCAR	5	Vicia caroliniana	Walter	Fabaceae	CAROLINA WOOD VETCH	FACU-	forb	PE	DI	full
VICCRA	*	VICIA CRACCA	L.	Fabaceae	BIRD VETCH	[UPL]	forb	PE	DI	advent
VICDAS	*	VICIA DASycARPA	Ten.	Fabaceae	WOOLLY-PODDED VETCH	[UPL]	forb	AN	DI	advent
VICHIR	*	VICIA HIRSUTA	(L.) Gray	Fabaceae	TINY VETCH	[UPL]	forb	AN	DI	advent
VICSAT	*	VICIA SATIVA	L.	Fabaceae	COMMON VETCH	FACU-	forb	AN	DI	advent
VICVIL	*	VICIA VILLOSA	Roth	Fabaceae	HAIRY VETCH	[UPL]	forb	AN	DI	advent
VINMIN	*	VINCA MINOR	L.	Apocynaceae	PERIWINKLE	[UPL]	vine	PE	DI	advent
VINNIG	*	VINCETOXICUM NIGRUM	(L.) Moench	Asclepiadaceae	BLACK SWALLOW-WORT	[UPL]	forb	PE	DI	advent
VIOARV	*	VIOLA ARVENSIS	Murray	Violaceae	EUROPEAN FIELD-PANSY	[UPL]	forb	AN	DI	advent
VIOBLA	7	Viola blanda	Willd.	Violaceae	SWEET WHITE VIOLET	FACW	forb	PE	DI	shade
VIOCAN	5	Viola canadensis	L.	Violaceae	CANADA VIOLET	[UPL]	forb	PE	DI	shade
VIOCON	5	Viola conspersa	Rchb.	Violaceae	AMERICAN DOG VIOLET	FACW	forb	PE	DI	partial
VIOCUC	6	Viola cucullata	Aiton	Violaceae	MARSH BLUE VIOLET	FACW+	forb	PE	DI	partial
VIOHAS	7	Viola hastata	Michx.	Violaceae	HALBERD-LEAVED VIOLET	[UPL]	forb	PE	DI	shade
VIOLAN	8	Viola lanceolata	L.	Violaceae	LANCE-LEAVED VIOLET	OBL	forb	PE	DI	full
VIOMAC	8	Viola macloskeyi	F.E. Lloyd	Violaceae	NORTHERN WHITE VIOLET	[OBL]	forb	PE	DI	partial
VIOMIS	10	<u>Viola missouriensis</u>	Greene	Violaceae	MISSOURI VIOLET	FACU	forb	PE	DI	shade
VIONEP	10	Viola nephrophylla	Greene	Violaceae	NORTHERN BOG VIOLET	FACW	forb	PE	DI	partial
VIOODO	*	VIOLA ODORATA	L.	Violaceae	SWEET VIOLET	[UPL]	forb	PE	DI	advent
VIOPPED	9	Viola palmata L. var. pedatifida	(G. Don) Cronquist	Violaceae	PRAIRIE VIOLET	FACU-	forb	PE	DI	full
VIOPPAL	4	Viola palmata var. palmata	L.	Violaceae	PALMATE-LEAVED VIOLET	FACW	forb	PE	DI	partial
VIOPED	8	Viola pedata	L.	Violaceae	BIRD-FOOT VIOLET	UPL	forb	PE	DI	full
VIOPRI	8	Viola primulifolia	L.	Violaceae	PRIMROSE-LEAVED VIOLET	FAC+	forb	PE	DI	full
VIOPUB	4	Viola pubescens	Aiton	Violaceae	DOWNY YELLOW VIOLET	FACU-	forb	PE	DI	shade
VIORAF	2	Viola rafinesquii	Greene	Violaceae	FIELD PANSY	[UPL]	forb	AN	DI	full
VIOROS	5	Viola rostrata	Pursh	Violaceae	LONG-SPURRED VIOLET	FACU	forb	PE	DI	shade
VIOROT	8	Viola rotundifolia	Michx.	Violaceae	ROUND-LEAVED VIOLET	FAC+	forb	PE	DI	shade
VIOSAG	4	Viola sagittata	Aiton	Violaceae	ARROW-LEAVED VIOLET	FACW	forb	PE	DI	full
VIOSOR	1	Viola sororia	Willd.	Violaceae	COMMON BLUE VIOLET	FAC-	forb	PE	DI	shade
VIOSTR	5	Viola striata	Aiton	Violaceae	STRIPED CREAMY VIOLET	FACW	forb	PE	DI	partial
VIOTRC	*	VIOLA TRICOLOR	L.	Violaceae	JOHNNY-JUMP-UP	[UPL]	forb	AN	DI	advent
VIOTRP	7	Viola tripartita	Elliott	Violaceae	WEDGE-LEAVED VIOLET	[UPL]	forb	PE	DI	shade
VIOVIL	6	Viola villosa	Brainerd	Violaceae	SOUTHERN WOOD VIOLET	FACU-	forb	PE	DI	full
VIOVAL	9	Viola walteri	House	Violaceae	WALTER'S VIOLET	[UPL]	forb	PE	DI	shade
VITAES	4	Vitis aestivalis	Michx.	Vitaceae	SUMMER GRAPE	FACU	vine	W	DI	shade
VITCIN	6	Vitis cinerea	(Engelm.) Millard	Vitaceae	PIGEON GRAPE	FACW	vine	W	DI	partial
VITLAB	3	Vitis labrusca	L.	Vitaceae	FOX GRAPE	FACU	vine	W	DI	full
VITRIP	3	Vitis riparia	Michx.	Vitaceae	RIVERBANK GRAPE	FACW	vine	W	DI	partial

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VITVUL	3	<i>Vitis vulpina</i>	L.	Vitaceae	FROST GRAPE	FAC	vine	W	DI	shade
VITAPP	10	<i>Vittaria appalachiana</i>	Farrar & Mickel	Vittariaceae	APPALACHIAN SHOESTRING FERN	[FACU]	fern	PE	DI	shade
VULOC	4	<i>Vulpia octoflora</i>	(Walter) Rydb.	Poaceae	SIX-WEEKS FESCUE	[UPL]	grass	AN	MONO	full
WALFRA	6	<i>Waldsteinia fragarioides</i>	(Michx.) Tratt.	Rosaceae	BARREN STRAWBERRY	[UPL]	forb	PE	DI	full
WOLBOR	6	<i>Wolffia borealis</i>	(Engelm. ex Hegelm.) Landolt	Lemnaceae	NORTHERN WATER-MEAL	OBL	forb	AN	MONO	full
WOLBRA	6	<i>Wolffia brasiliensis</i>	Weddell	Lemnaceae	BRAZILIAN WATER-MEAL	OBL	forb	AN	MONO	full
WOLCOL	3	<i>Wolffia columbiana</i>	Karsten	Lemnaceae	COMMON WATER-MEAL	OBL	forb	AN	MONO	full
WOLGLA	7	<i>Wolffiella gladiata</i>	(Hegelm.) Hegelm.	Lemnaceae	WOLFFIELLA	OBL	forb	AN	MONO	full
WOOLV	9	<i>Woodsia ilvensis</i>	(L.) R. Br.	Dryopteridaceae	RUSTY CLIFF FERN	[UPL]	fern	PE	SVP	shade
WOOOBT	6	<i>Woodsia obtusa</i>	(Spreng.) Torr.	Dryopteridaceae	BLUNT-LOBED CLIFF FERN	[UPL]	fern	PE	SVP	shade
WOOARE	6	<i>Woodwardia areolata</i>	(L.) T. Moore	Blechnaceae	NETTED CHAIN FERN	FACW+	fern	PE	SVP	full
WOOVIR	8	<i>Woodwardia virginica</i>	(L.) Sm.	Blechnaceae	VIRGINIA CHAIN FERN	OBL	fern	PE	SVP	full
XANSPI	*	<i>XANTHIUM SPINOSUM</i>	L.	Asteraceae	SPINY COCKLEBUR	FACU	forb	AN	DI	advent
XANSTR	*	<i>XANTHIUM STRUMARIUM</i>	L.	Asteraceae	COMMON COCKLEBUR	FAC	forb	AN	DI	advent
XYRDIF	10	<i>Xyris difformis</i>	Chapm.	Xyridaceae	CAROLINA YELLOW-EYED-GRASS	OBL	forb	PE	MONO	full
XYRTOR	10	<i>Xyris torta</i>	Sm.	Xyridaceae	TWISTED YELLOW-EYED-GRASS	OBL	forb	PE	MONO	full
ZANPAL	6	<i>Zannichellia palustris</i>	L.	Najadaceae	HORNED-PONDWEED	OBL	forb	PE	MONO	full
ZANAME	3	<i>Zanthoxylum americanum</i>	Mill.	Rutaceae	PRICKLY-ASH	FACU	shrub	W	DI	shade
ZIGELE	10	<i>Zigadenus elegans</i>	Pursh	Liliaceae	WAND-LILY	FAC+	forb	PE	MONO	shade
ZIZAQU	9	<i>Zizania aquatica</i>	L.	Poaceae	WILD RICE	OBL	grass	AN	DI	full
ZIZAPT	7	<i>Zizia aptera</i>	(A. Gray) Fernald	Apiaceae	HEART-LEAVED GOLDEN ALEX.	FAC	forb	PE	DI	full
ZIZAUR	6	<i>Zizia aurea</i>	(L.) W.D.J. Koch	Apiaceae	GOLDEN ALEXANDERS	FAC	forb	PE	DI	full
ZOSDUB	5	<i>Zosterella dubia</i>	(Jacq.) Small	Pontederiaceae	WATER STAR-GRASS	OBL	forb	PE	MONO	full