

Coefficient of Conservatism Database Development for Wetland Plants Occurring in the Southeastern United States

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List of Abbreviations

C-value - Coefficient of Conservatism value, a number from 0-10 rating the fidelity of a plant species to pristine habitat

CP - Coastal Plain

DWR - Division of Water Resources (within NCDENR)

EPA - Environmental Protection Agency

FQI - Floristic Quality Index

NCDENR - North Carolina Department of Environment and Natural Resources

NRCS - Natural Resource Conservation Service

NWPL - National Wetland Plant List

Pdmnt - Piedmont

SCP - Southern Coastal Plain

SD/St.Dev. - Standard Deviation

USDA - United States Department of Agriculture

Wetness Classifications (based on the National Wetland Category for Region 3 of the United States Fish and Wildlife Service (Reed, 1988):

FAC - Facultative Plant Species (Equally likely to occur in wetlands or non-wetlands)

FACU - Facultative Upland Plant Species (Occasionally occurs in wetlands, but usually occurs in non-wetlands)

FACW - Facultative Wetland Plant Species (Usually occurs in wetlands, but occasionally found in non-wetlands)

OBL - Obligate Wetland Plant Species (Occurs almost always in wetlands under natural conditions)

UPL - Upland Plant Species (Occurs almost never in wetlands under natural conditions)

ABSTRACT

Floristic quality assessment is a recognized technique for assessing habitat quality of wetland sites. The Floristic Quality Index (FQI), the most widely used metric in floristic quality assessment for wetland and terrestrial ecosystems, employs a measure of conservatism (Coefficient of Conservatism) along with richness of a plant community to derive an estimate of habitat quality (Wilhelm & Ladd 1988, Ladd 1993, Taft et al. 1997, Matthews 2003, Lopez & Fennessy 2002). Coefficient of Conservatism values (C-values)(ranging from 0 to 10) have hitherto been available only for selected parts of the Southeast, but a comprehensive wetland database of these values has never been developed for much of the Southeast. This project undertook the task of assembling 15 expert botanists to create a large database of C-values for wetland plant taxa occurring across the Southeast. The resulting database includes C-values for 2,523 wetland taxa, across five separate Southeast ecoregions, totaling over 7,100 C-values available for floristic quality assessment. A very small portion (1%) of wetland plant C-values remains unassigned, because the botanist panel had insufficient experience with particular taxa to confidently assign C-values. A large portion (51%) of native wetland taxa are intolerant of disturbance (C-value ≥ 7), while tolerant taxa (C-value ≤ 3) comprise only 9% of native wetland taxa of the Southeast. Longer duration taxa are more sensitive than annuals, though 22% of annuals are also sensitive. Various other analyses were performed including distributional analyses, C-value assignment ranges, listed versus non-listed taxa C-value assignments, growth form distribution, and an overall comparison of results to the Northeast and Mid-Atlantic C-value assignment efforts.

INTRODUCTION

Floristic quality assessment is a recognized technique for assessing habitat quality of wetland sites, as it summarizes data collected from a floristic inventory of a given area. The Floristic Quality Index (FQI), the most widely used metric in floristic quality assessment for wetland and terrestrial ecosystems, employs a measure of intolerance to disturbance (Coefficient of Conservatism) along with richness of a plant community to derive an estimate of habitat quality (Wilhelm & Ladd 1988, Ladd 1993, Taft et al. 1997, Matthews 2003, Lopez & Fennessy 2002). The Coefficient of Conservatism is an integer (C-value) between 0 and 10 assigned to each taxon, indicating its fidelity to specific habitat types and degree of ecological tolerance (Taft et al. 1997, Swink & Wilhelm 1979). Plant taxa that are obligate to high quality natural areas are given high C-values, whereas taxa typically found in a wide variety of habitats and that are tolerant of disturbance are assigned low C-values. Non-native taxa receive a C-value of zero (0). Although subjectively assigned by expert botanists, studies of bias have found this method to be remarkably accurate when compared to data-driven assignment or ranking (Chamberlain and Ingram 2012, Rocchio 2007, Bourdaghs et al. 2006, Mushet et al. 2002). The FQI is computed using the following formula:

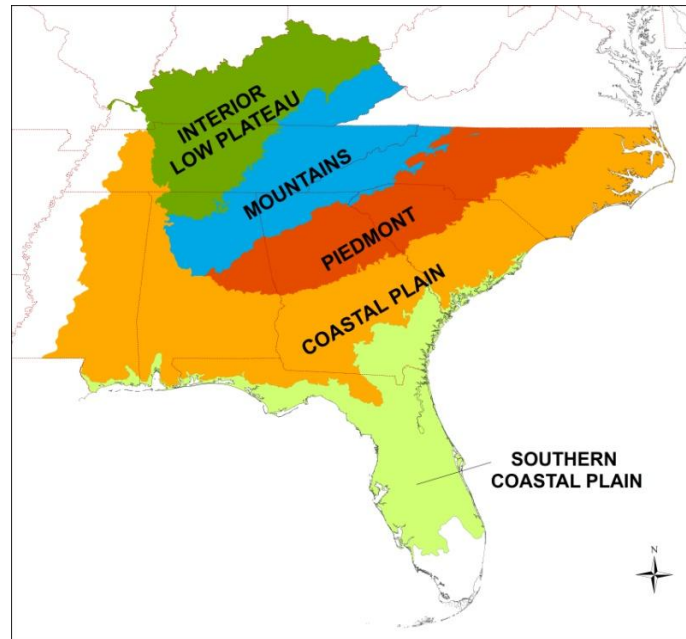
$$FQI = \bar{C}\sqrt{N}$$

where \bar{C} is the mean of the C-values for all taxa on a site or in a sufficient sampling area, and N is the total number of native taxa. The Floristic Quality Index was developed by Swink and Wilhelm in the 1970s as a method of determining habitat degradation (Swink and Wilhelm 1979). Interest in the index gained momentum in the 1990s and 2000s as several states adopted the method as a condition assessment tool, including Missouri (Ladd 1993), Michigan (Herman et al. 1997), Illinois (Taft et al. 1997), North Dakota (Mushet et al. 2002), Wisconsin (Bernthal 2003), Ohio (Andreas et al. 2004), Indiana (Rothrock 2004), Florida (Mortellaro et al. 2012), and others. Mean C of a site has been found to be correlated with increasing human disturbance (Andreas et al. 2004, Wilhelm and Masters 1996, Taft et al. 1997, Lopez and Fennessy 2002, Cohen et al. 2004). The Floristic Quality Index can be useful in a variety of ways, including:

- 1) Identifying quality natural areas;
- 2) Comparing similar and dissimilar sites, regardless of community types;
- 3) Monitoring natural area or restoration site quality through time;
- 4) Assisting in habitat restoration and informing mitigation policy;
- 5) Comparing mitigation sites to reference sites.

C-values have hitherto been available for selected parts of the Southeast, but a comprehensive wetland C-value database has never been developed for much of the Southeast. This project undertook the task of assembling expert botanists to create a large database of C-values for wetland plant taxa occurring across the Southeast. The eight (8) state region of the Southeast includes Kentucky, Tennessee, Mississippi, Alabama, North Carolina, South Carolina, Georgia, and Florida; these are the states within EPA's Region 4, which funded the effort. Extreme South Florida was excluded because this area already has a large working C-value list (1,343 species; see Mortellaro et al. 2012) and because the flora of South Florida is predominately tropical in nature, compared to the rest of the Southeast. Western Mississippi was also excluded because its ecoregions are Mississippi River alluvial plains and valley rather than Southeastern US ecoregions. A map of the project area is shown in Figure 1.

Figure 1. Project area and ecoregions for Southeast wetland plant Coefficient of Conservatism database development project.



METHODS

The overall plan for this project was to compile a database of wetland plants, assemble a team of qualified botanists, obtain preliminary values for a subset of taxa, and convene a meeting for C-value assignment to the remaining taxa. This approach is a combination of methods used by other states and groups, some of which used independent scoring (Herman et al. 2006, Cohen et al. 2004, Allain et al. 2004, Herman et al. 1997, Andreas and Lichvar 1995), and others used a panel meeting (Chamberlain and Ingram 2012, Northern Great Plains Floristic Quality Assessment Panel 2001). Our method was

similar to that used in Louisiana by Cretini et al. (2011), who solicited C-values from a number of botanists, then met with a core group of botanists to review scores and come to a consensus on scores.

Preliminary Research:

Prior to beginning development of a database or selection of botanists to participate, I surveyed the literature through internet searching and scientific literature database searching, and created a summary table containing information from all of the Coefficient of Conservatism efforts I was able to locate at the time (Table A-1). This information included number of taxa scored, number of botanists involved, method used to create the C-value database, assignment criteria used, etc. This table was utilized to gain an understanding of the various methods and criteria used, as well as a way of locating botanists who had participated in C-value assignment meetings. I then created a survey questionnaire to garner advice and recommendations from these experienced botanists who had attended assignment meetings. Fifteen responses were received, plus one personal email, which were very helpful in planning this project (Survey A-1). The main thrust of the responses recommended finding the most experienced field botanists possible, over plant taxonomists or herbaria botanists, as well as allowing enough meeting time in combination with appropriate breaks and evening rest time to do the work effectively.

Ecoregions:

C-values were developed on an ecoregion basis, rather than a state boundary basis, to maximize accuracy, as ecoregions encompass areas similar in topography, climate, and geography (Milburn et al. 2007, Bourdaghs et al. 2006). Omernik (1987) Level III ecoregions were used as a basis, but since the 11 Level III Ecoregions in the Southeast would have resulted in nearly 11,000 C-values needed from botanists, and differences in C-value assignment at such a fine scale were questionable, Level III Ecoregions were combined into five broader ecoregions: Interior Low Plateau, Mountains, Piedmont, Coastal Plain, and Southern Coastal Plain (Figure 1). The result of the ecoregion grouping was something of an intermediary between Level II and Level III Ecoregions, and a more manageable workload for botanists. The decision to group Level III ecoregions was supported by Gerould Wilhelm, co-author of the C-value index (pers. comm. 10/24/12), NC Natural Heritage Program botanist Mike Schafale, and by Teresa Magee and Glenn Griffith of the National Environmental Protection Agency (pers. comm. 11/5/12). Grouping the ecoregions in this way lessened the total number of scores to be assigned to approximately 7,000. The area under consideration encompassed 476 counties in eight states, a 1,020,807 sq km area, or approximately 13% of the contiguous United States.

The *Interior Low Plateau* is characterized by broad open hills, flat-bottomed terraced valleys, and dissected glacial till plains. Steeper slopes and rounded hills are generally in forest, while lower valleys contain farms and residential developments. The *Mountains* ecoregion contains the central and Southwestern Appalachian Mountains, varying from narrow ridges to hilly plateaus to more massive mountainous areas, with high peaks reaching over 6,600 feet. Slopes are mostly forested, with cool, clear streams and high floral and faunal diversity. The southern portion of this ecoregion contains lower mountains and a mosaic of woodlands and agricultural lands. The *Piedmont* represents a transitional area between the Appalachians and the relatively flat coastal plain to the southeast, being dissected by irregular plains and some hills. Most of this land is cultivated woodlands or agricultural lands, with an increasing conversion to suburban and urban land cover. The *Coastal Plain* consists of irregular plains in a mosaic of cropland, pasture, woodland, and forest (mostly cultivated). Naturally forested lands are dominated by sparse longleaf pines. Closer to the coast, these plains are low elevation, with many swamps, marshes, and estuaries. The *Southern Coastal Plain* makes up most of Florida, and is characterized by mostly flat plains, with a heterogeneous mix of discontinuous highlands, numerous lakes, swampy lowlands, coastal lagoons, marshes, and barrier islands. This ecoregion is lower in elevation than the Coastal Plain, and has a longer growing season. Natural land cover includes a large variety of tree species, but most of the region has been converted to slash and loblolly pine, citrus groves, pastureland, and urban development.

Using GIS layers, I generated a list of counties associated with each ecoregion. Counties straddling ecoregion boundaries were visually assessed and if a county was approximately 75% (three-quarters) or more within one ecoregion, it was considered to be solely in that ecoregion. However, if a county was divided between ecoregions such that any one section was less than 75%, the county was placed into both/all ecoregions.

Selection of Botanists:

Botanists were located via networking with southeast regional wetland manager and academic contacts, as well as contacting botanists in all state Natural Heritage Programs. An online survey was created and disseminated via email to garner specific experience and availability information from interested botanists (Survey A-2). During selection of botanists, emphasis was placed on field experience with wetland plants over purely academic or herbarium type experience, because the Coefficient of Conservatism scoring system requires knowledge of species' growth habits and range of tolerance of different environmental conditions. In general, I sought botanists with at least 15 years of experience

with wetland plants, and at least 25% of this time spent in the field in a range of habitat quality. I was able to assemble a group of 15 expert botanists (available and qualified) from all over the Southeast, such that all states in the 8-state region were covered by a minimum of 2 botanists, with up to 10 botanists in some areas. Although those who participated were able to evaluate all eight states, I was unsuccessful in obtaining botanists from Mississippi and South Carolina, despite significant effort to include botanists from all eight states. The C-value list could still benefit from further input from expert botanists from Mississippi and South Carolina. A list of participating botanists is provided in Table A-3.

Preliminary Scoring Database Development:

Plant species information was downloaded from the United States Department of Agriculture (USDA) PLANTS online database in the winter of 2012/2013. This included all vascular plants, subspecies and varieties included, with records in any of the eight states. The county/ecoregion list was then used to assign ecoregion presence information to each taxon, based on USDA county record information for each. This was done using a V-Lookup macro in Microsoft Excel. In instances where the USDA database did not include any county occurrence information for some states or at all, county occurrence records were consulted in the online Taxonomic Data Center (Kartesz 2013) to determine which ecoregions a given taxon occurred in.

Because the 2012 National Wetland Plant List (NWPL) was not yet included in the USDA PLANTS database at the time of download, the 2012 NWPL status information (Lichvar 2012) had to be added to the downloaded database for the two regions in the project area: Eastern Mountains/Piedmont and Atlantic/Gulf Coastal Plain. This was done by joining the USDA list with the 2012 NWPL using SAS JMP software. Wetland plants were defined as those with a 2012 NWPL status of Facultative (FAC) or wetter (Facultative Wetland-FACW, or Obligate-OBL) in at least one region. Facultative species are equally likely to occur in wetlands and non-wetlands (Lichvar 2012). Facultative wetland taxa usually occur in wetlands, but are occasionally found in non-wetlands. The list of plants meeting these criteria became the basis for scoring by botanists. Taxa labeled as upland taxa in the 2012 NWPL (Facultative Upland – FACU, or Upland – UPL) were left in the database but tagged as upland taxa and not considered for scoring. A significant number of taxa were absent from the 2012 NWPL, but determining their wetland status was beyond the scope of this project, so they were also excluded from scoring. The database also included a small number of taxa which were on the 1988 Wetland Plant List, but are not on the 2012 NWPL for various reasons. These taxa were included in the C-value database because many scientists still are more familiar with the 1988 Wetland Plant List.

Available C-values were obtained for states within EPA Region 4, as well as from some states adjacent to the region (such as Virginia), to provide as a reference point for botanists while assigning scores. State lists (or partial state lists) were included in the botanist's scoring database from Kentucky, Indiana, Tennessee, West Virginia, North Carolina, Virginia, Mississippi, and Florida. Sources for these reference C-values are included in the Appendix (Table A-2). They were not included in the final database, to prevent confusion.

Because the taxonomic authority for each of these state lists was often an authority other than the USDA, the online Taxonomic Name Resolution Service (TNRS) was used to "convert" names to the USDA accepted names (Boyle et al. 2013). Once matching USDA names were obtained, the C-values were able to be joined to the scoring database using SAS 9.3 JMP® software (SAS Institute, 2013).

Scoring Method:

In March 2013, a webinar was held and attended (or viewed later) by participating botanists to introduce the database and scoring criteria (adapted from Swink & Wilhelm 1994 and Taft et al. 1997). Fifteen (15) botanists participated, along with some North Carolina Department of Natural Resources (NCDENR) Division of Water Resources (DWR) staff. Some discussion during the webinar ensued over how to handle natural disturbance vs. anthropogenic disturbance in regards to thinking about species tolerance of disturbance. A revised scoring criteria narrative was arrived at by consensus, and then disseminated to botanists by email as a basis for scoring. The narrative was as follows:

The Coefficient of Conservatism concept will be thought of primarily in the context of a species' ability to tolerate anthropogenic alteration. This is a concept distinct from generalized disturbance, specifically natural disturbance, such as fire or flooding. A plant species which requires a high frequency of natural disturbance may receive a high C-value, if it shows a low tolerance of anthropogenically-driven alteration. While there is a loose correlation between rarity and high C-value, rarity alone is not an indicator of a species tolerance to alteration, and will therefore not be relied upon in the development of C scores.

0-1: Taxa adapted to severe anthropogenic habitat alteration, occurring so frequently that often only brief periods are available for growth and reproduction of the species. These species are also able to colonize areas with high degrees of anthropogenic alteration. Many also do well with severe natural disturbance, but most occurrences are in heavily altered areas. (Zero confidence that a specimen brought into an herbarium was collected from a remnant or high-quality natural area.) Non-native and adventive species are automatically assigned a C-value of zero.

2-3: Taxa associated with somewhat more stable, though degraded, environments.

4-6: Taxa that persist with moderate alteration, but which decline with more intense, long-lasting, or frequent anthropogenic alteration. Many are also present in natural areas, and may be dominant or matrix species with broad habitat tolerance. (A specimen brought into an herbarium may be from either a high-quality natural area or from a moderately altered site).

7-8: Taxa associated mostly with well-established natural areas, but that can be found persisting where the habitat has been degraded somewhat.

9-10: Considered to be restricted to high-quality natural areas, including those which show high frequencies of natural disturbance such as flooding or fire. These species often exhibit a high degree of fidelity to a narrow range of habitat requirements, but may be tolerant of a broader range of high-quality natural habitats. (Nearly 100% confidence that a sample brought into an herbarium was collected from a remnant or high-quality natural area.)

Botanists were asked to review the database of wetland taxa and use the above scoring criteria as a basis to begin pre-scoring prior to a score assignment meeting in June 2013. Duplicate entries, omissions, synonymy, and nomenclature changes were identified prior to release and after review by botanists. Pre-assignment was requested on the most broadly-occurring taxa, ie. those which occurred in four or all of the five ecoregions. This amounted to approximately 625 taxa (25%). Botanists were asked to consider each ecoregion separately and provide a score for each ecoregion in which a given taxon occurred. In May 2013, preliminary scores were obtained from 12 botanists and compiled. Taxa which had received similar or identical scores were taken “off the table”, so the face-to-face meeting time could be focused on those taxa which were unassigned or those which received a large range in pre-scores. Scores were considered in agreement and the average score was accepted if individual scores were within two points of each other (eg. two and four were not considered different and were averaged to create the final assignment) *and* at least three botanists gave a score. Additionally, if four or more botanists assigned scores, then a range of three was accepted and the average was taken as the final score. If a taxon received widely varying pre-scores (ie. a range of 4 points or more), it was flagged for special attention during the face-to-face meeting, where botanists discussed and reached consensus on a final assignment.

The 4-day botanist scoring meeting was held in Cary, NC in June 2013. Eleven botanists attended, and four additional botanists contributed by scoring remotely because they could not attend the meeting. All botanists (who were not NCDENR employees) received a stipend and all those who attended the meeting received reimbursement for travel expenses. A list of all participating botanists is provided in

the Appendix (Table A-2). Total botanist input into the final database represented 368 combined years of wetland botanical experience.

During the meeting, the overall group of 11 botanists was divided into three smaller groups in an effort to maximize the number of scores that could be assigned at any one time. The three smaller groups focused on the Interior Low Plateau and Mountains, Coastal Plain and Piedmont, and the Southern Coastal Plain. Some botanists had expertise in more than one region, so over the course of the 4-day meeting, they were placed in both groups, to get their input in all areas of their expertise. In addition, botanists became familiar with who knew plants in what areas, and routinely consulted with botanists outside of their group as they reviewed each taxon.

During the meeting, if botanists felt further research was needed before they could assign a C-value to a particular taxon, especially for less well known taxa, the taxon was tabled for later review. After the meeting, a list of tabled taxa was compiled. The result was 201 taxa with some part of their range tabled for research before scoring, for a total of 219 tabled C-value assignments. This small database was distributed to botanists for further research and review. All 11 botanists who attended the meeting replied with input on the tabled values, which reduced the number of undetermined values by more than half. If no input was received or botanists were unable to score a taxon (or a taxon in a certain ecoregion) for lack of experience or information about the taxon, the letters UND (undetermined) were included in place of a C-value.

Additionally, botanists occasionally provided feedback before and during the meeting about additional taxa not included in the 2012 NWPL but known to occur in wetlands. These (58) taxa were labeled in the database as "Added; Absent from NWPL" and included in scoring efforts.

A post-meeting survey was created and distributed to garner advice for future C-value assignment efforts by other regions (Survey A-3).

Once final scores were received from all botanists, analysis of the data was performed, for the purposes of describing the results and comparing them with other regions. Descriptive distributions were generated, showing proportions of upland and wetland taxa in the overall Southeast flora, on the NWPL, and for native vs. non-native taxa. I analyzed the number of botanists assigning any given score in the database, as well as the amount of agreement between botanists. Distributions of C-values were created for annual taxa and perennial taxa, as well as for all individual ecoregions. The distribution of C-

values for the entire Southeast wetland flora was also compared to that of the Mid-Atlantic wetland flora.

The finalized electronic database was released to the public via the Southeast Wetland Workgroup website (sewwg.rti.org) and a webinar was held (recorded and posted to the same website) to describe the process used to develop the C-value database for the region and present the results. The final database is presented as a Microsoft Excel document, and contains four worksheets: the C-value database, a column heading key table, extra information tables (scoring criteria, botanists involved, botanical resources), and an excluded taxa list. The list of taxa in the main C-value database contains main names and synonyms, as well as common names, USDA accepted symbols (for referencing the PLANTS database) for main names and synonyms. A NWPL status column indicates whether a taxon is an upland taxon, non-upland taxon, absent from the NWPL, or added by botanists as a wetland taxon. NWPL (2012) status information is included for both the Eastern Mountains region and the Coastal Plain region. The main database is included in Appendix B.

Users of the database are encouraged to pay attention to the botanists' notes column in the database, as this information provides insight into C-value assignments, particularly in cases where a C-value may vary widely across an ecoregion (eg. *Cyperus distans* is native only in Florida, but the Southern Coastal Plain ecoregion extends outside of Florida, where this species would have a C-value of zero), or instances where the USDA PLANTS database labeled a taxon as native to the Lower 48 states, but participating botanists identified it as non-native to the Southeast using a variety of other sources.

Following the botanist notes column are the C-value assignments for each ecoregion, as well as columns which indicate the number of botanists who worked to assign a given ecoregion C-value. The number of botanists assigning is reported for all native taxa (non-natives automatically were assigned a C-value of zero). This information yields a de facto measure of confidence for any given score. The remaining columns in the database include botanical information from the USDA PLANTS database, such as duration, growth habit, native status, and protected status.

RESULTS

As a result of botanist discussions during the face-to-face meeting, 132 taxa were recommended by the botanists to be excluded from the original downloaded PLANTS database. These taxa were excluded for a variety of reasons, such as taxonomic changes or redundancy, cases where so little of the range was within the Southeast region that inclusion was not warranted, or epiphytic species.

Upon exclusion of the above mentioned 132 taxa, the database of all Southeast region taxa, acquired from USDA PLANTS (USDA, NRCS, 2013), included 6,506 individual taxa, and an additional 10,662 synonyms. The main list of all taxa includes 1,400 subspecies and varieties, some of which were scored separately by botanists because they were on the NWPL or deemed wetland plants. About half (3,194 taxa) of the total Southeastern flora is absent from the NWPL (Figure 2). Over a third (38%) of taxa was listed as non-upland on the 2012 NWPL (FAC or wetter in at least one of the applicable regions) and botanists identified another 1% (58 taxa) as taxa which they knew to occur in wetlands at least sometimes. These were labeled “Added; Absent from NWPL” in the database. Twelve percent (791 taxa) of the taxa are noted as upland taxa in the 2012 NWPL. Figures 3 and 4 show the distributions of native and non-native taxa on the NWPL.

Figure 2. Wetland/upland status of Southeastern taxa based on the 2012 National Wetland Plant List.

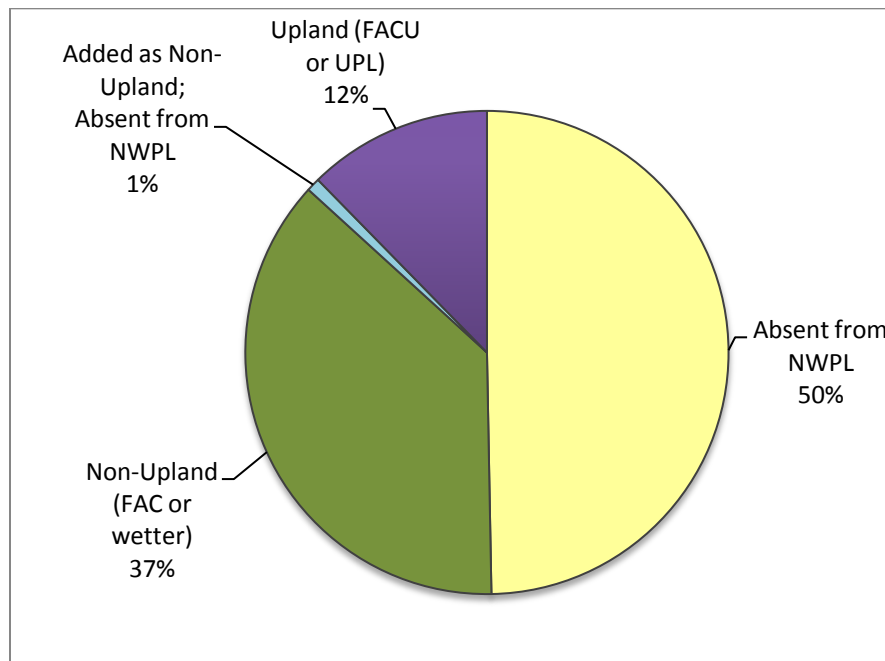


Figure 3. Wetland/upland status of native taxa in the 2012 National Wetland Plant List for Southeastern flora.

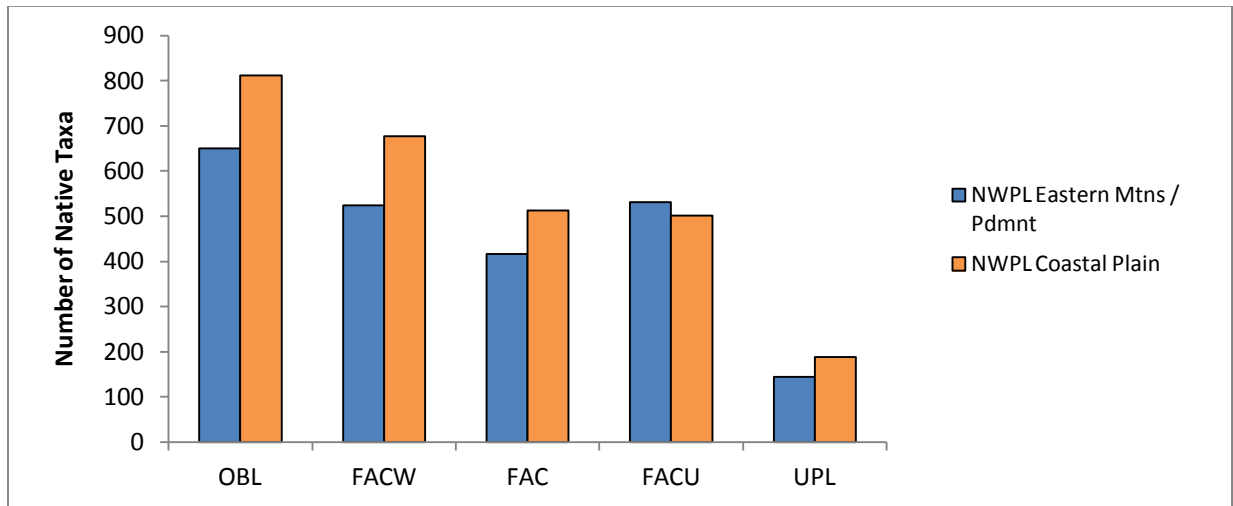
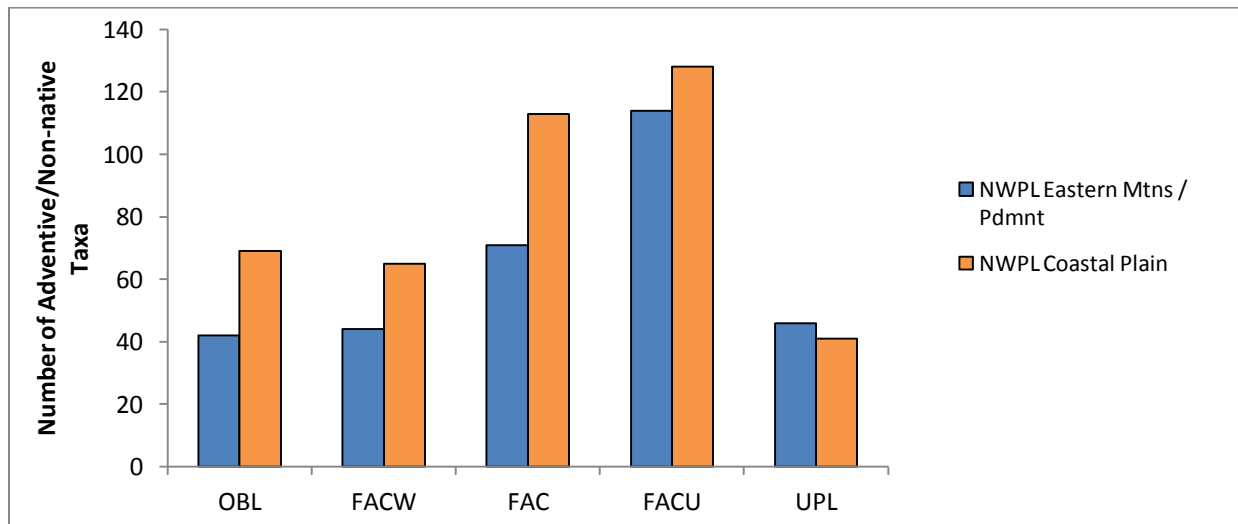


Figure 4. Wetland/upland status of adventive and non-native taxa in the 2012 National Wetland Plant List for Southeastern flora.



Upon exclusion of the aforementioned 132 taxa, and inclusion of additional taxa as wetland plants by botanists, 7,252 C-values were needed to generate the database, given the number of wetland taxa and their ecoregional occurrences. During the database pre-scoring prior to the meeting, approximately 400 taxa received agreeing scores, based on the predetermined rules, for all regions of occurrence and did not require discussion at the face-to-face scoring meeting. In addition, further scores for individual regions were also in agreement and were able to be excluded from discussion, leaving only the ecoregions that did not receive enough pre-scores or needed revisiting at the meeting to gain consensus. In summary, the prescoring prior to the meeting resulted in 2,086 (29%) accepted final

scores out of the total needed. During the face-to-face meeting, 4,330 consensus scores were arrived at in addition to the prescoring. After the meeting, two additional botanists reviewed the C-values from the meeting and submitted their own C-values, which were incorporated into the main database for a total of 7,161 C-values. After all botanists revisited and scored taxa needing further research, 91 C-values (1%) remained undetermined and were labeled as “UND” in the database because participating botanists possessed insufficient experience and knowledge of those taxa (or those taxa in certain ecoregions). Many of these taxa were obscure or rarely encountered species with few records.

The C-value database created by this effort includes 2,523 scored wetland taxa (native and non-native) and 7,161 C-values (Appendix B). This total includes scores for 82 taxa which were on the 1988 Wetland Plant List, but are not on the 2012 NWPL. These taxa were included in the C-value database because many scientists still are more familiar with the 1988 Wetland Plant List.

A concerted effort was made to obtain more than one botanist’s input into every C-value, and in the vast majority of (native taxa) cases (86%), three or more botanists worked to assign a given C-value. Approximately one-third (29%) of the database (native taxa) C-values were assigned by 6-10 botanists (Figure 5). Only 3% (209) of C-values is based on one botanist’s rating, indicating that the vast majority of taxa (or taxa in certain ecoregions) were known to the panel. Of the ecoregions with taxa with undetermined (UND) C-values (91 unassigned values), the Piedmont ecoregion stood out as containing the highest proportion of taxa for which the panel could not assign values (Figure 6).

To measure consistency among botanists, I calculated the range of assigned C-values for any given taxon and ecoregion. All in all, agreement among the botanists was very good, whether they attended the face-to-face meeting or scored outside of the meeting. Nearly 40% of scores were within one point or in perfect agreement among botanists, and a total of 95% of scores assigned were within three points of each other (Figure 7). With the remaining 5% of scores, botanists assignments differed by 4 points or more. In these cases, the group discussed and settled on a consensus score. The consensus C-value (which may have differed from the average) was accepted as the final value in these instances.

Figure 5. Distribution of number of botanists assigning/contributing to a given C-value within an ecoregion (native taxa only).

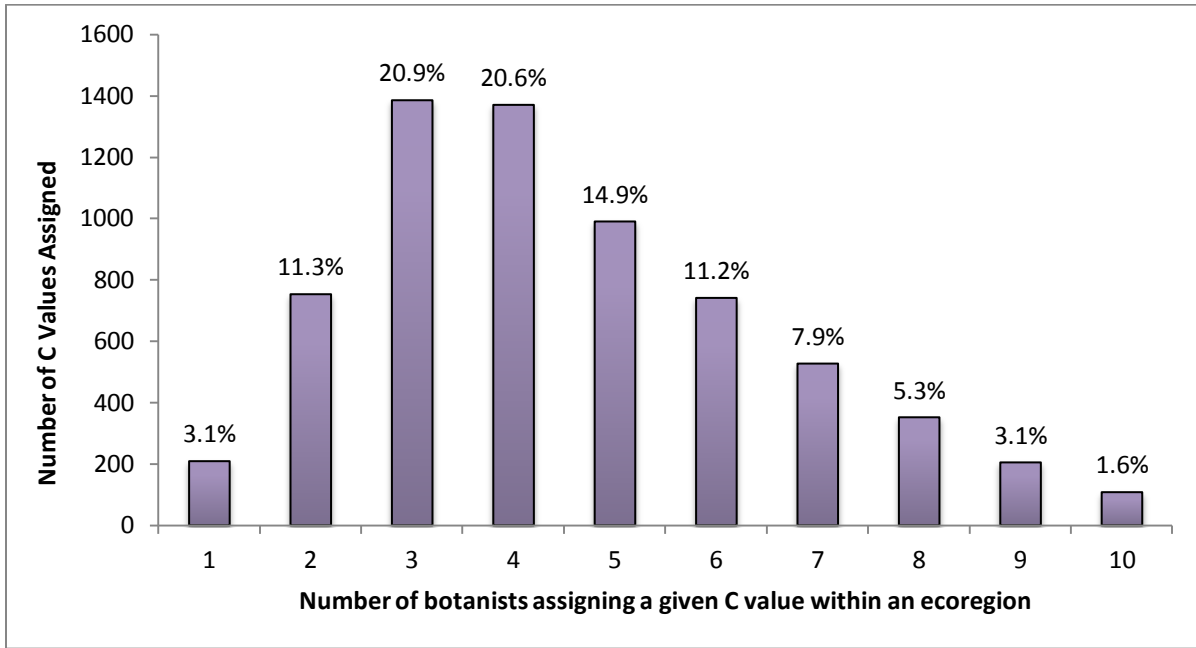


Figure 6. Distribution of the 91 undetermined/unassigned C-values by ecoregion.

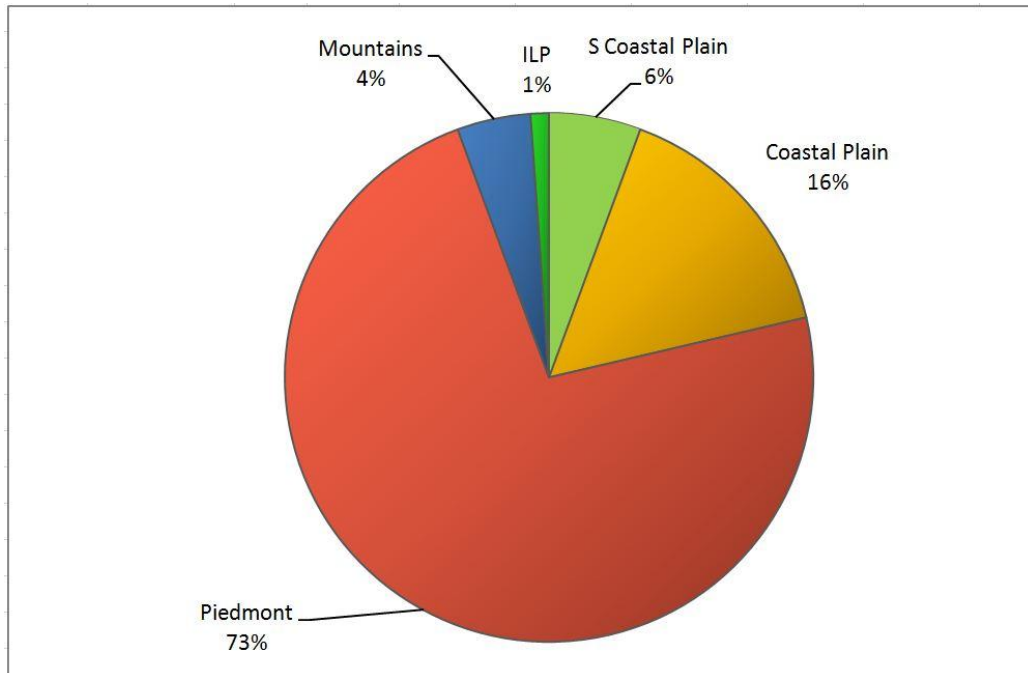
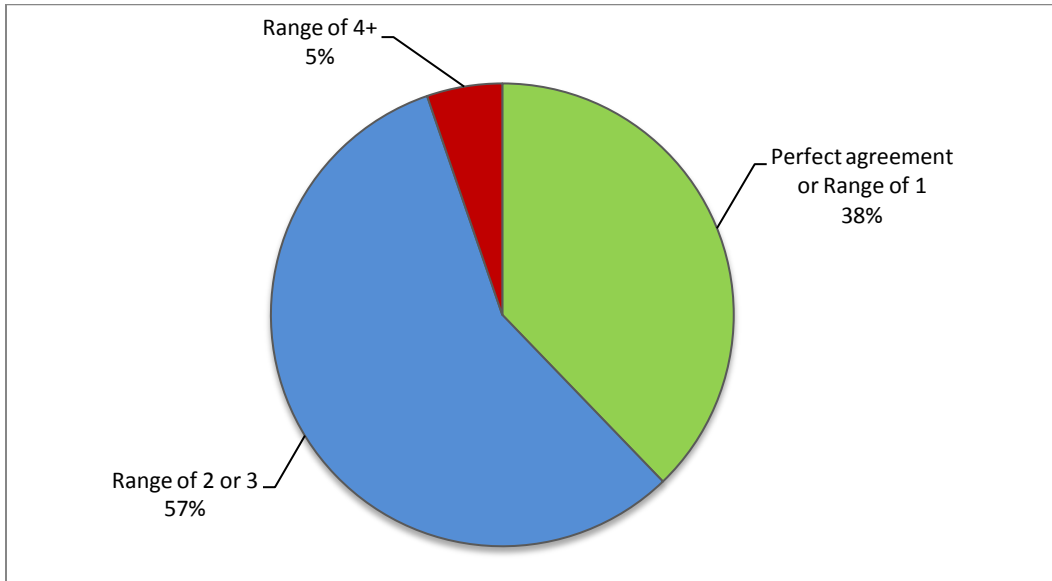


Figure 7. Difference in individual scores assigned for any given taxon and ecoregion.



In general, C-values do not differ appreciably from one ecoregion of occurrence to the next. Within taxa, the majority of C-values across ecoregions were identical or they differed by only one point when they occurred in multiple ecoregions (Figure 8). A few varied widely, as there were some taxa which are native in one ecoregion but adventive (C-value = 0) in another ecoregion. When C-value distributions were compared between ecoregions, most were significantly different from each other, when paired in a Wilcoxon signed-ranks test (Table 1). Distributions of wetland C-values in the Piedmont, Coastal Plain, and Southern Coastal Plain were indistinguishable from each other.

Figure 8. Distribution of range of C-values across ecoregions for taxa occurring in 2-5 ecoregions.

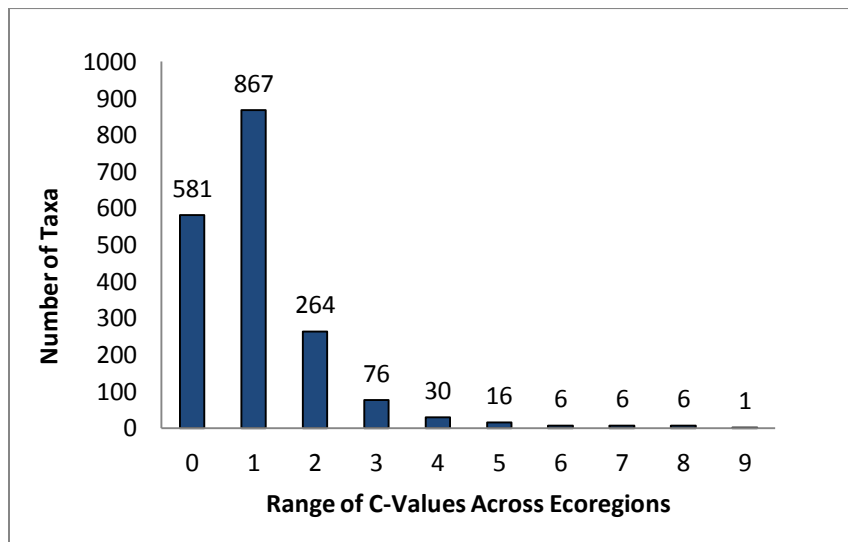


Table 1. P-values from Wilcoxon signed ranks tests on C-value distributions of all five ecoregions. Asterisks denote significant differences after Holm-Bonferonni correction.

	Southern Coastal Plain	Coastal Plain	Piedmont	Mountains
Coastal Plain	0.0349			
Piedmont	0.1255	0.7876		
Mountains	< 0.0001*	< .0001*	< 0.0001*	
Interior Low Plateau	< 0.0001*	< 0.0001*	< 0.0001*	0.0002*

Most taxa are either found in a few ecoregions, or the entire Southeast (Figure 9); only 20% of taxa are found in three or four of the Southeast ecoregions. The Southern Coastal Plain and Coastal Plain ecoregions contain slightly more wetland taxa than the other three ecoregions combined, a reflection of greater numbers and varieties of wetlands in those regions (Figure 10).

Figure 9. Number of ecoregions in which wetland taxa occur in the Southeast; based on ecoregions in Figure 1.

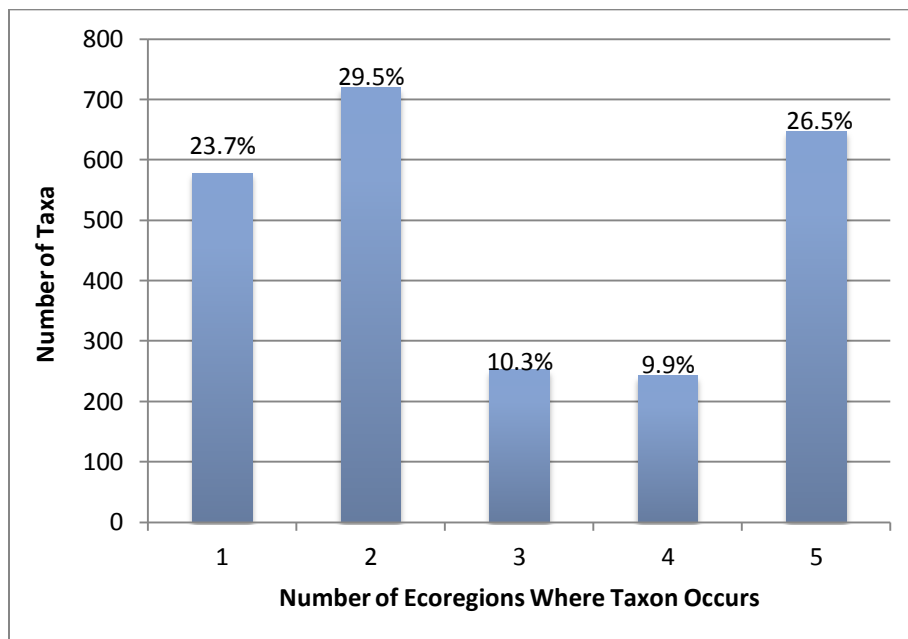
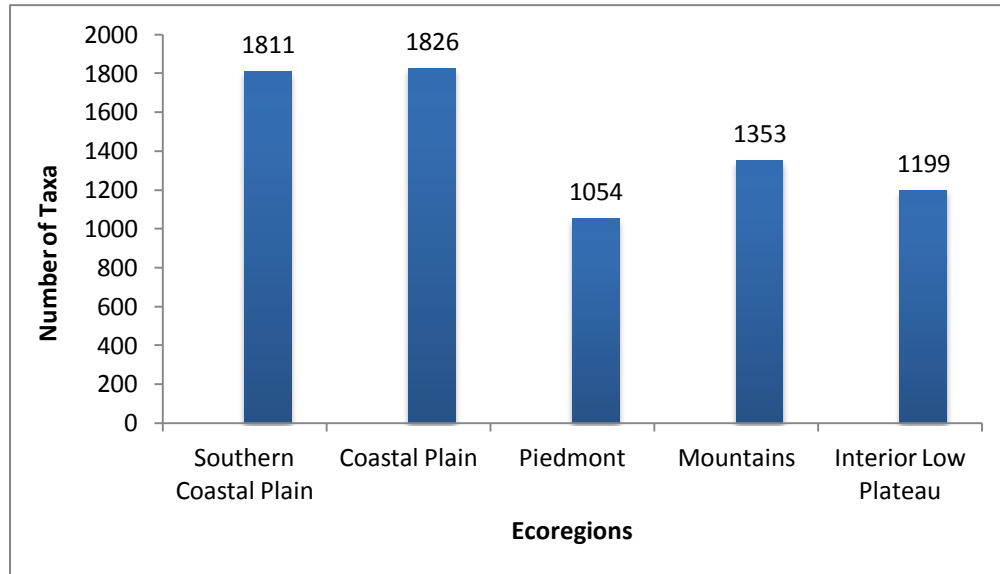


Figure 10. Ecoregional occurrence of wetland taxa in the Southeast; based on ecoregions in Figure 1. Many taxa occur in multiple ecoregions.



Perennial forbs and graminoids make up the majority of wetland flora in the Southeast (Figure 11), similar to the Mid-Atlantic region (Chamberlain and Ingram 2012). Shrubs, vines, trees, and annuals comprise a smaller portion of the Southeast wetland flora. Approximately 87% of the Southeast wetland flora is native, 10% is non-native, and 3% is remaining taxa which exhibit partial nativity across the Southeast, i.e. native to one ecoregion, but adventive in another. These statistics exclude South Florida, although South Florida has a similar proportion of non-native wetland taxa (12%) (based on data from Wunderlin and Hansen 2008).

Figure 12 shows the distribution of C-values (averaged across all ecoregions of occurrence) for the Southeast region wetland flora. Bars are divided into listed and non-listed taxa, based on information gleaned from the USDA PLANTS database. Taxa were considered listed in the ecoregion if they were nationally protected or on a protected species list in any state that was in that ecoregion. Although the Coefficient of Conservatism is not the same as rarity, there does seem to be some consistency between listed status and conservatism. Listed species are more likely to be highly conservative. However, factors other than rarity influenced rank, because 15% of listed species were not considered to be overly sensitive to anthropogenic disturbance (average C-value ≤ 6).

The overall average C-value for native Southeast wetland flora 6.3 (Standard Deviation [SD]=2.0)(2,192 taxa), while the Mid-Atlantic region’s overall average C-value for all native wetland flora is also 6.7 (SD=2.5)(2,325 taxa). When non-natives are included, the average C-value for Southeast wetland flora drops to 5.6 (SD=2.7)(2,523 taxa), and for the Mid-Atlantic region it decreases to 6.3 (SD=2.9)(2,485 taxa).

Figure 11. Growth form and native status of Southeastern wetland flora. Taxa with uncertain nativity were excluded from this graph. A=Annual, P=Perennial.

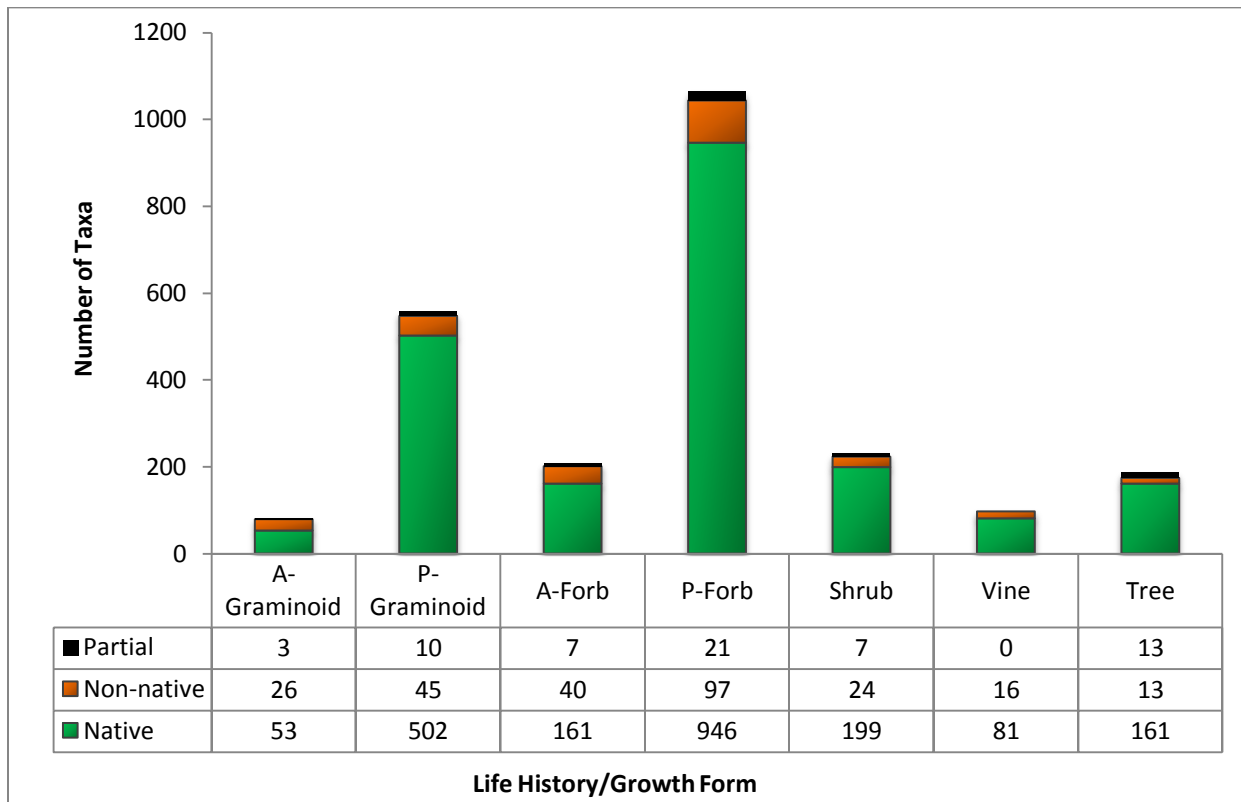
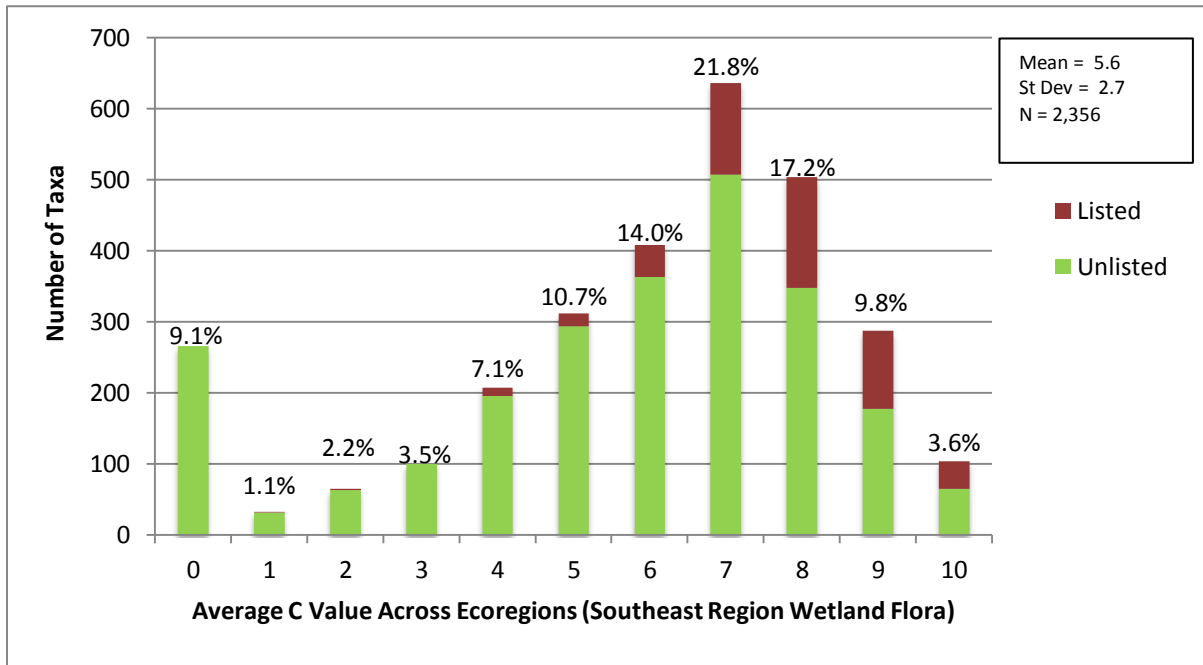
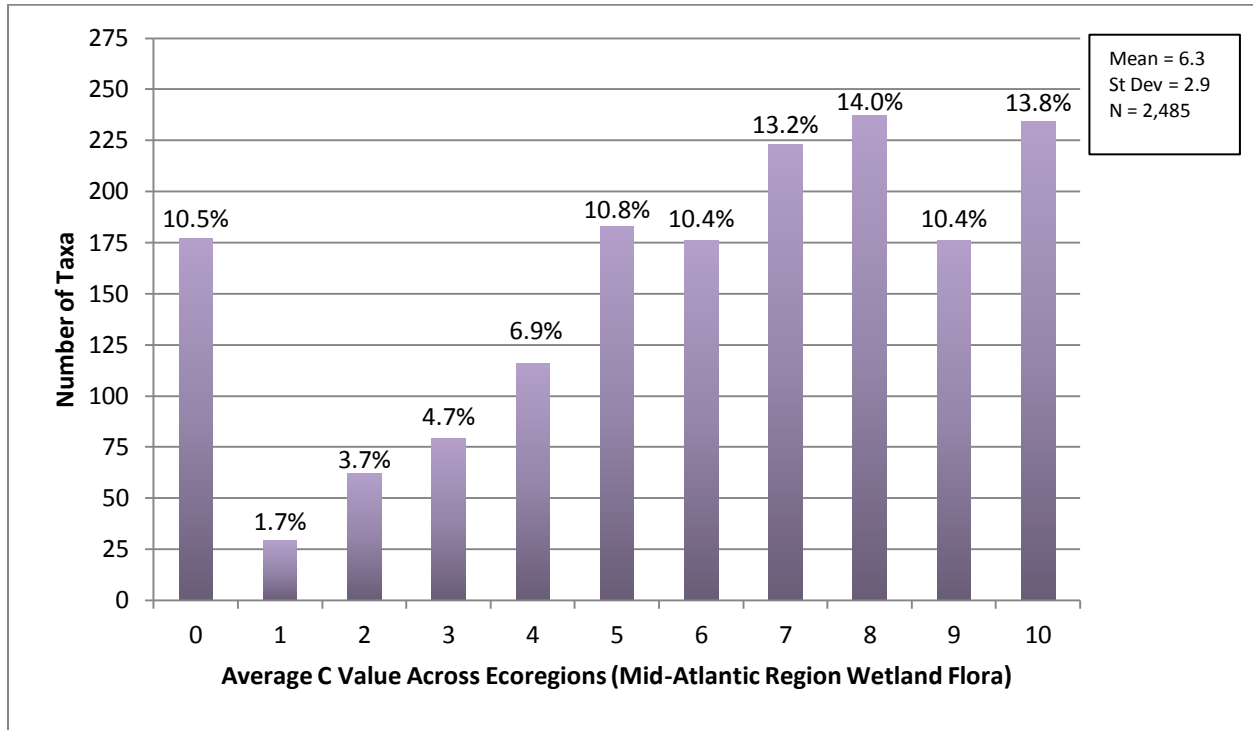


Figure 12. Distribution of overall average C-values for the Southeast region wetland flora, native and non-native. Percentages are for the column totals. Taxa with undetermined scores were excluded from this graph.



Overall, the wetland flora of the Southeast is more conservative than not, with the majority of taxa tending to be found mainly in higher quality wetlands. This negative skew in the C-value distribution is a pattern also exhibited in other FQA efforts (Andreas et al. 2004, Herman et al. 1997, Taft et al. 1997). Approximately 46% of Southeast wetland flora have C-values of ≥ 7 , and tolerant taxa ($C \leq 3$) comprise 19%, including non-natives which have C-values of zero (Figure 12). If non-natives are excluded, sensitive taxa ($C \geq 7$) comprise 51% of native taxa, and tolerant taxa make up 9%. The Mid-Atlantic region has 54.8% of wetland flora with C-values of ≥ 7 (Figure 13). However, 38% of Minnesota's wetland taxa fall into this category, so the level of conservatism within wetland flora may vary regionally (Milburn et al. 2007). Mid-Atlantic region wetland flora exhibits a slightly different distribution from the Southeast (Figure 13), but this may be because many of their high C-value species are at the northern end of their range in the region (Chamberlain, pers. comm.).

Figure 13. Distribution of overall average C-values for the Mid-Atlantic region wetland flora (FAC or wetter), native and non-native (Chamberlain and Ingram 2012). (24 native taxa were given scores of zero, in addition to 160 non-native taxa)



Tolerant native taxa ($C \leq 3$) comprise 9% of the native Southeast wetland taxa, compared to 18% of Mid-Atlantic wetland taxa. Wilhelm, the co-author of the index, notes that typically the group of species with C-values ≤ 3 is less than 12% of a flora (Rocchio 2007). This suggests that the native wetland flora of the Southeast has evolved to be more conservative than that of the Mid-Atlantic region. However, when examining all species (wetland and upland), Rocchio (2007) noted more disparity among Midwestern states on the lower end of the scale than the higher end, with 8% to 17% of states' flora with C-values ≤ 3 .

Annual wetland taxa show a more or less flat distribution across the C-value distribution with very few highly conservative taxa (Figure 14 and 15). Longer duration biennial/perennial taxa are overall much more conservative, although 22% of annuals are also sensitive ($C \geq 7$). The number of longer duration wetland taxa also greatly outnumber annual taxa. A large portion of the annual wetland flora in the Southeast is not native, and very few annuals are highly conservative.

Figure 14. Distribution of average C-values for annual wetland taxa occurring in the Southeast.

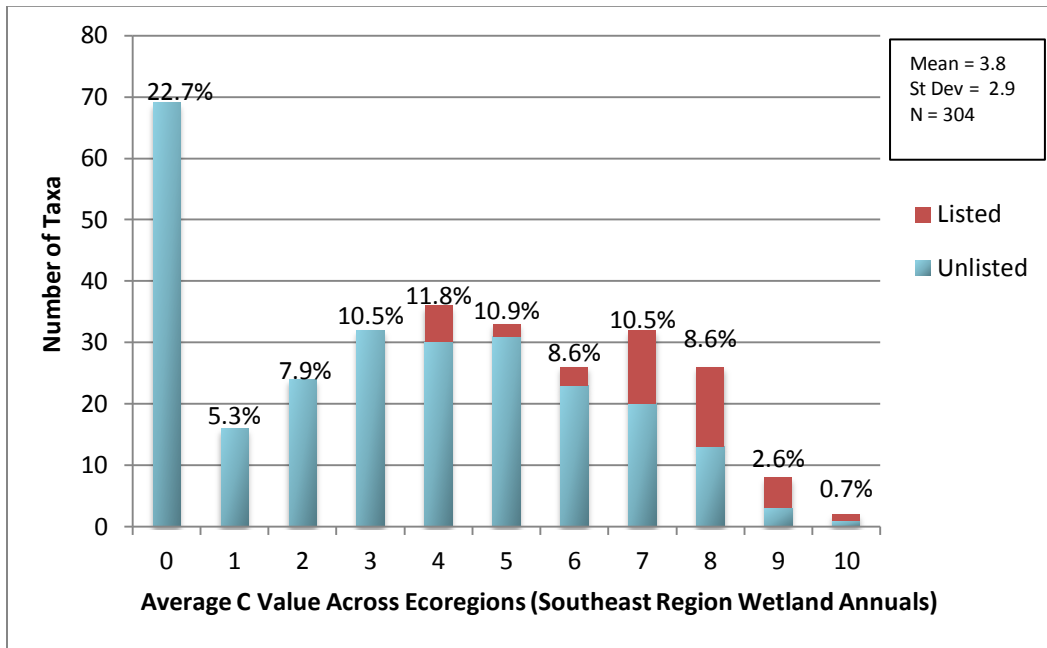
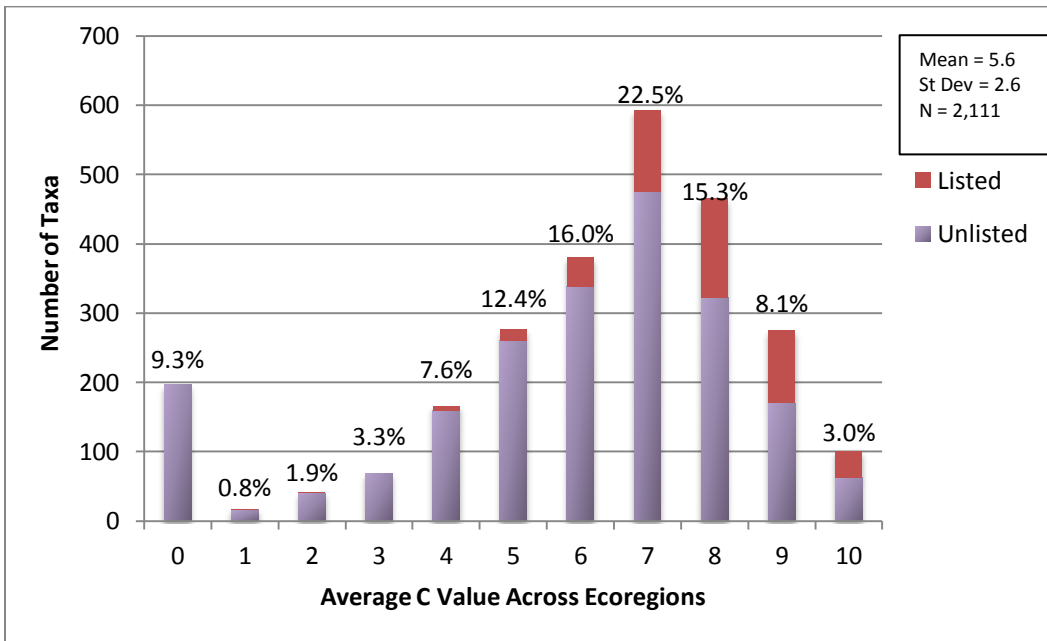


Figure 15. Distribution of average C-values for biennial & perennial wetland taxa occurring in the Southeast.



Figures 16-20 show the distributions of C-values for wetland taxa within each ecoregion. The Piedmont is also distinct among the ecoregions in having few listed taxa. The Coastal Plain ecoregions have a greater number of wetland taxa than the other ecoregions, a reflection of greater numbers and varieties of wetlands in those regions.

Figure 16. Distribution of C-values for wetland plants in the Southern Coastal Plain ecoregion.

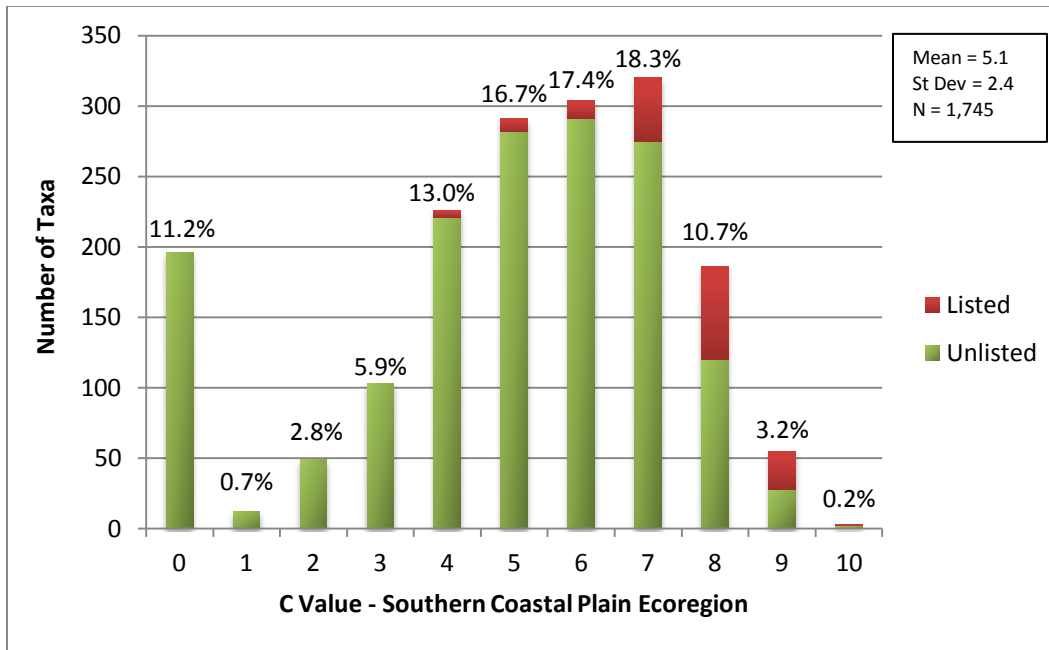


Figure 17. Distribution of C-values for wetland plants in the Coastal Plain ecoregion.

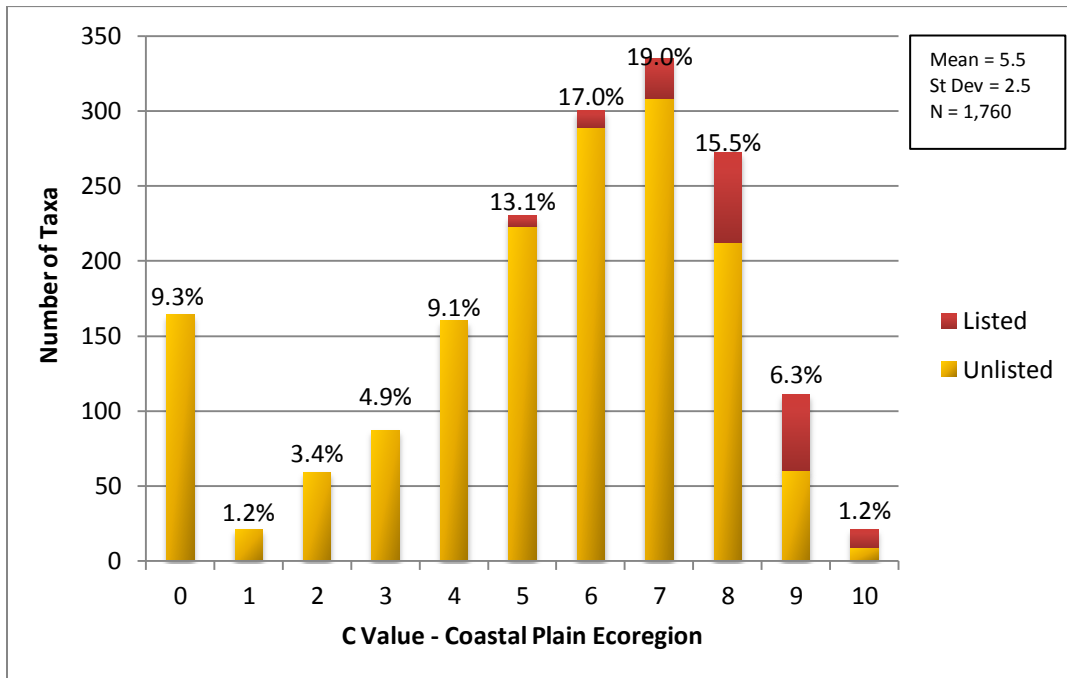


Figure 18. Distribution of C-values for wetland plants in the Piedmont ecoregion.

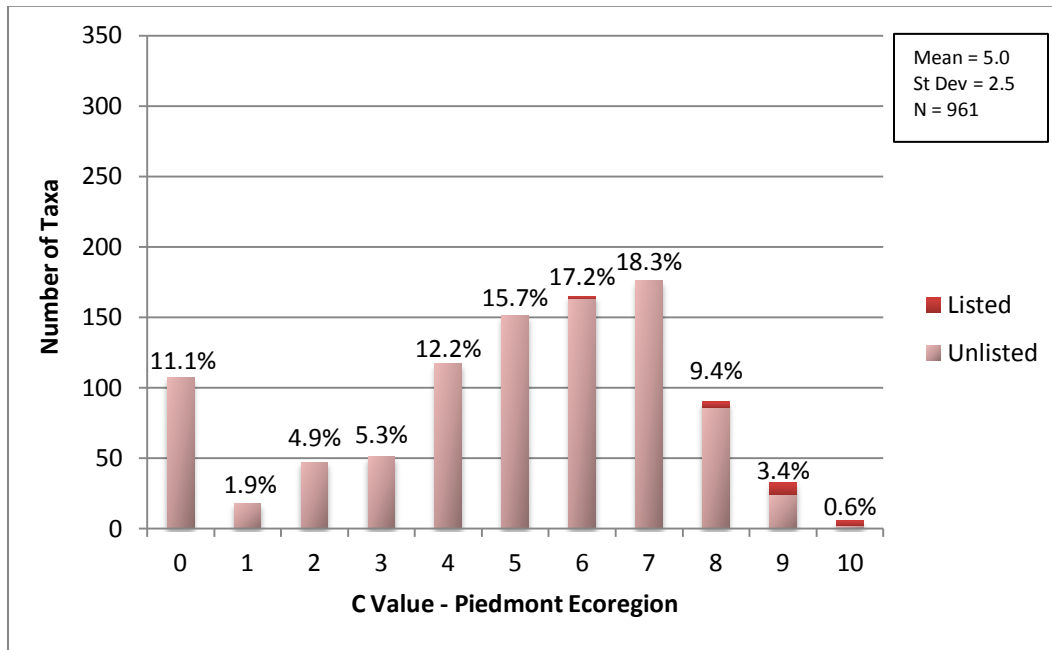


Figure 19. Distribution of C-values for wetland plants in the Mountains ecoregion.

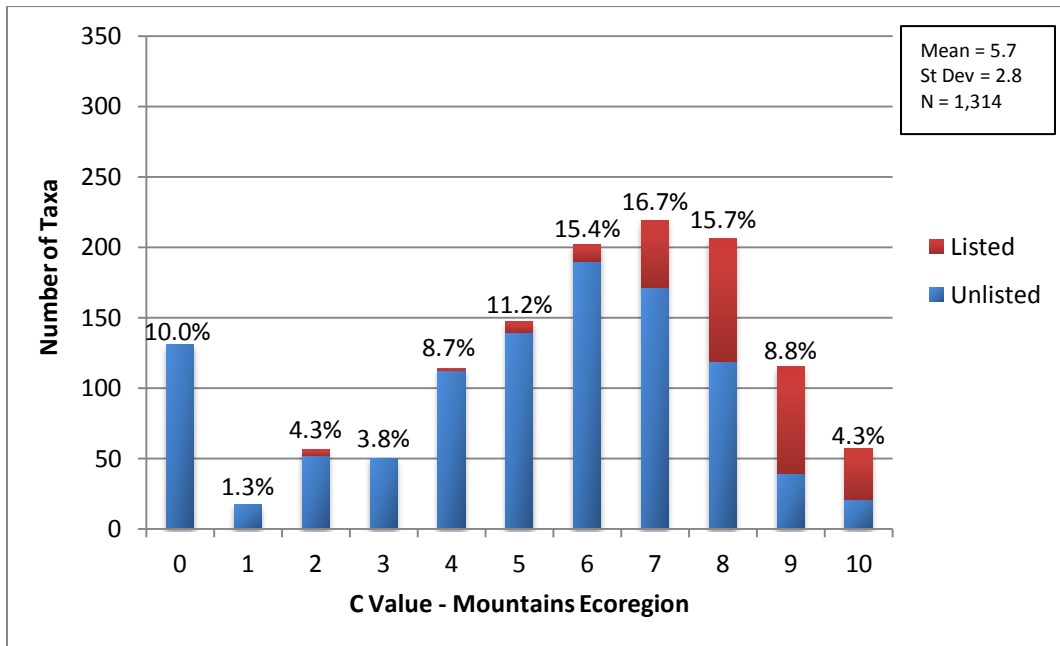
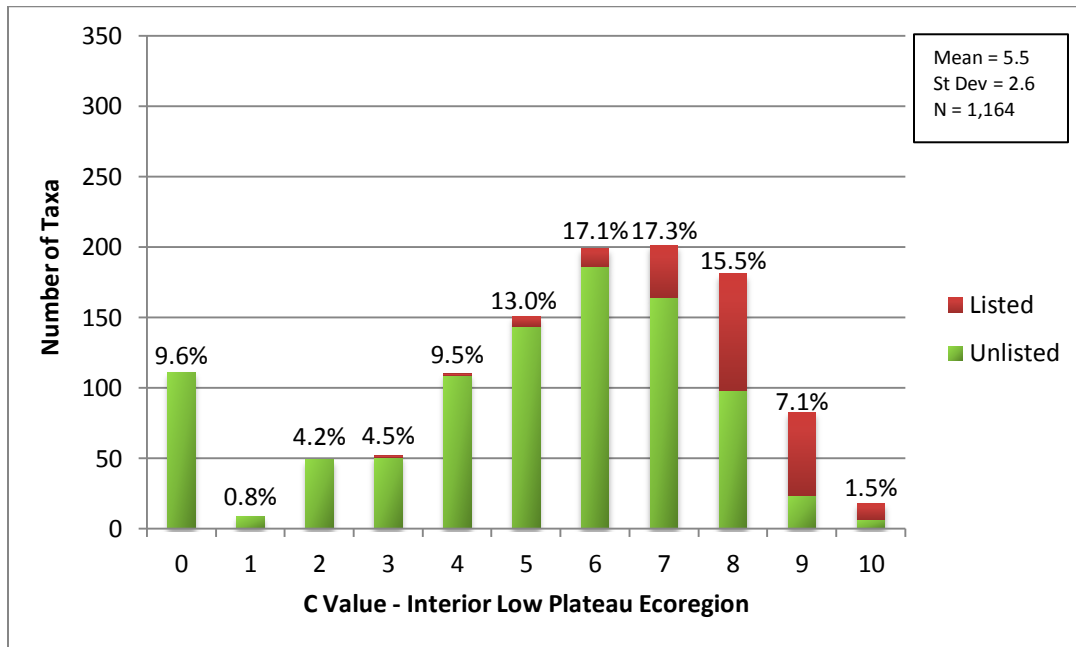


Figure 20. Distribution of C-values for wetland plants in the Interior Low Plateau.



CONCLUSIONS

This project has resulted in a significant database now available which includes C-values for 2,523 wetland taxa, across five separate Southeast ecoregions, totaling over 7,100 C-values available for floristic quality assessment. A very small portion (1%) of wetland plant C-values remains unassigned, because the botanist panel did not have enough experience with particular taxa (within certain ecoregions) to confidently assign C-values.

Approximately 87% of the Southeast wetland flora is native, 10% is non-native, and 3% is remaining taxa which exhibit partial nativity across the Southeast. A large portion (51%) of native wetland taxa are intolerant of disturbance (C-value ≥ 7), while tolerant taxa (C-value ≤ 3) comprise only 9% of native wetland taxa of the Southeast. Annual taxa are generally less conservative than longer duration taxa, which are on the whole more sensitive to anthropogenic disturbance. These factors carry implications for wetland conservation and restoration in the Southeast.

The majority of Coefficient of Conservatism lists (13 of 20)(Table A-1) have been developed without a consensus meeting, perhaps because of lack of funding or coordinator resources. Without a meeting, the method generally involved providing taxa lists to expert botanists and requesting volunteer input for scores, or C-values were assigned by authors (with and without review by other experts) based on their

own expertise (7 of 20). Our method involved independent pre-scoring by a large number of expert botanists, followed by assembly of botanists in a dedicated time and place, and providing stipends and travel costs. This method costs more to implement, however, because it relied less on volunteers to fit the work into their schedules and return their results, this method may have enabled this large project to be executed in a more timely manner. The pre-meeting webinar and pre-scoring was essential to the efficiency of the project, as it allowed a significant amount of the work to be completed prior to the meeting, where time was focused on the more difficult or less common taxa. Our consensus meeting also allowed interaction between botanists on scoring criteria, as well as helpful exchanges concerning specific taxa, where one botanist may have seen the taxon primarily in pristine habitats, while another had observed it also in ditches. In a group where all voices can be heard, consensus scoring may be more accurate because pooling of field observations can broaden the basis for scoring particular taxa.

Advice garnered from surveying botanists who had participated in other C-value assignment efforts was extremely helpful, and helped to direct some of the decisions made for this project and contributed to its success and efficiency. Surveyed botanists were strongly in favor of a group assignment meeting over independent scoring (Appendix A: Survey 1). Selecting botanists with a large amount of primarily field experience, as opposed to mostly herbarium or academic experience, was imperative for accurate assignment. The particular group assembled for this project worked very well together, without any one or few person(s) dominating the discussions.

Several existing C-value lists have been assigned on a state-wide basis, rather than an ecoregional basis. Some have expressed concern about assignment of C-values by geopolitical boundaries rather than by ecologically meaningful units (Bourdaghs et al. 2006, Milburn et al. 2007, and see Appendix A: Survey 1). An analysis of scores assigned for adjacent ecoregions in this project showed that in the vast majority of the cases, only small differences existed (ie. between any two adjacent ecoregions, 96% - 99% of scores differed by two points or less). However, scores differed for some taxa by as much as nine points between adjacent ecoregions, so caution is still warranted in averaging every taxon's scores for all ecoregions within a state.

As a result of this project, C-values are available for 39% of the entire Southeast flora, which is approximately 6,500 upland and wetland taxa, and excluding those taxa unique to South Florida. (Mortellaro et al. [2012] have published a large C-value list for South Florida which includes upland and wetland plants.) The taxa not included in this project include 198 (3%) non-native taxa (C-value = 0) and 3,788 (58%) native upland taxa (FACU or UPL) or native taxa absent from the 2012 NWPL. [Note: 1,305

of these native upland/absent taxa are subspecies or varieties.] As the primary objective of this project was to facilitate floristic quality assessment for wetlands of the Southeast, scoring for upland species was beyond the scope of this project. C-values need to be developed for upland flora to provide the same benefits of floristic quality assessment for monitoring and assessing upland plant communities of the Southeast.

Literature Cited

- Allain, L., L., Smith, C., Allen, M. Vidrine, and J. Grace. 2004. A floristic quality assessment system for the coastal prairie of Louisiana. Proceedings of the North American Prairie Conferences. Paper 62.
- Andreas, B. K. and R. W. Lichvar. 1995. Floristic index for establishing assessment standards: A case study for northern Ohio. Technical Report WRP-DE-8, U. S. Army Waterways Experiment Station, Vicksburg, MS. 16 pp. + Appendices.
- Andreas, B., J. Mack, and J. McCormac. 2004. Floristic quality assessment index (FQAI) for vascular plants and mosses for the State of Ohio. Ohio Environmental Protection Agency, Division of Surface Water, Wetland Ecology Group, Columbus, OH. 219pp.
- Bernthal, T. 2003. Development of a floristic quality assessment methodology for Wisconsin. Wisconsin Department of Natural Resources, Bureau of Integrated Science Services, Madison, WI, PUB-SS-986 2003. 22pp.
- Bourdaghs, M. C. Johnston, and R. Regal. 2006. Properties and performance of the floristic quality index in Great Lakes coastal wetlands. *Wetlands* 26:718-735.
- Boyle, B. et.al. 2013. The taxonomic name resolution service: an online tool for automated standardization of plant names. *BMC Bioinformatics*. 2013, 14:16.doi:10.1186/1471-2105-14-16.
- Bried, J., K. Strout, and T. Portante. 2012. Coefficients of conservatism for the vascular flora of New York and New England: Inter-state comparisons and expert opinion bias. *Northeastern Naturalist* 19(Special Issue 6):101-114.
- Chamberlain, S. and H. Ingram. 2012. Developing coefficients of conservatism to advance floristic quality assessments in the Mid-Atlantic region. *Journal of the Torrey Botanical Society* 139(4):416-427.
- Cohen, M., S. Carstenn, and C. Lane. 2004. Floristic quality indices for biotic assessment of Depressional marsh condition in Florida. *Ecological Applications* 14(3):784-794.
- Cretini, K. J. Visser, K. Krauss, and G. Steyer. 2011. Development and use of a floristic quality index for coastal Louisiana marshes. *Environmental Monitoring and Assessment* (2012) 184:2389–2403.
- Herman, B., J. Madsen, and G. Ervin. 2006. Development of coefficients of conservatism for wetland vascular flora of North and Central Mississippi. *GeoResources Institute Report 4001 (Water Resources)*. 15pp.
- Herman, K., L. Masters, M. Penskar, A. Reznicek, G. Wilhelm, and W. Brodowicz. 1997. Floristic quality assessment: development and application in the state of Michigan (USA). *Natural Areas Journal* 17:265-279.
- Kartesz, J.T., The Biota of North America Program (BONAP). 2013. Taxonomic Data Center. (<http://www.bonap.net/tdc>). Chapel Hill, N.C. [maps generated from Kartesz, J.T. 2013. Floristic Synthesis of North America, Version 1.0. Biota of North America Program (BONAP). (in press)]

- Ladd, D. 1993. Coefficients of conservatism for Missouri vascular flora. The Nature Conservancy, St. Louis, MO. 78pp.
- Lichvar, R. 2012. The National Wetland Plant List. US. Army Corps of Engineers, Engineer Research and Development Center. ERDC/CCREL TR-12-11.
- Lopez, R. and M. Fennessy. 2002. Testing the floristic quality assessment index as an indicator of wetland condition. *Ecological Applications* 12:487-497.
- Matthews, J. 2003. Assessment of the floristic quality index for use in Illinois, USA, wetlands. *Natural Area Journal*. 23:53-60.
- Mushet, D. N. Euliss Jr. and T. Shaffer. 2002. Floristic quality assessment of one natural and three restored wetland complexes in North Dakota, USA. *Wetlands* 22:126-138.
- Milburn, S. M. Bourdaghs, and J. Husveth. 2007. Floristic Quality Assessment for Minnesota wetlands. Minnesota Pollution Control Agency. 23pp.
- Mortellaro, S. M. Barry, G. Gann, J. Zahina, S. Channon, C. Hilsenbeck, D. Scofield, G. Wilder, and G. Wilhelm. 2012. Coefficients of Conservatism Values and the Floristic Quality Index for the Vascular Plants of South Florida. *Southeastern Naturalist* 11 (Monograph 3):1-62.
- Northern Great Plains Floristic Quality Assessment Panel. 2001. Floristic quality assessment for plant communities of North Dakota, South Dakota (excluding the Black Hills), and adjacent grasslands. Jamestown, ND: Northern Prairie Wildlife Research Center Online. <http://www.npwrc.usgs.gov/resource/plants/fqa/index.htm> (Version 26JAN2001).
- Omernik, J. 1987. Ecoregions of the conterminous United States. *Annals of the Association of American Geographers* 77:118-125.
- Reed, P. Jr. 1988. National list of plant species that occur in wetlands: north central (Region 3). U.S. Fish and Wildlife Service Biological Report 88 (26.3).
- Rocchio, J. 2007. Floristic Quality Assessment Indices for Colorado plant communities. Colorado Natural Heritage Program: Colorado State University. 234 pp.
- Rothrock, P. 2004. Floristic quality assessment in Indiana: the concept, use, and development of coefficients of conservatism. Indiana Department of Environmental Management, Office of Water Quality, Indianapolis, IN, USA. Final Report for ARN A305-4-53. EPA Wetland Program Development Grant CD975586-01. 96p.
- SAS Institute Inc., Version 9.3. 2013. Cary, NC.
- Swink, F. and G. Wilhelm. 1979. Plants of the Chicago Region, 2nd Ed. Morton Arboretum, Lisle, IL. 922pp.
- Swink, F. and G. Wilhelm. 1994. Plants of the Chicago Region, 4th Ed. Indiana Academy of Science, Indianapolis, Indiana.

- Taft, J. G. Wilhelm, D. Ladd, and L. Masters. 1997. Floristic quality assessment for vegetation in Illinois, a method for assessing vegetation integrity. *Erigenia* 15:3-95.
- The Taxonomic Name Resolution Service. iPlant Collaborative. Version 3.2 accessed on 23 January 2013 and 14 February 2013. Available at <http://tnrs.iplantcollaborative.org>.
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2013. The PLANTS Database (<http://plants.usda.gov>, data downloaded 21 November 2012 and 23 January 2013). National Plant Data Team, Greensboro, NC 27401-4901.
- Wilhelm, G. and D. Ladd. 1988. Natural area assessment in the Chicago region. *Transactions of the 53rd North American Wildlife and Natural Resources Conference*. 3:361-375.
- Wilhelm, G., and L. Masters. 1996. Floristic quality assessment in the Chicago region. *The Morton Arboretum*, Lisle, IL.
- Wunderlin, R. and B. Hansen. 2008. Atlas of Florida Vascular Plants (<http://www.plantatlas.usf.edu>). Last accessed 14 February 2014. [S. M. Landry and K. N. Campbell (application development), Florida Center for Community Design and Research.] Institute for Systematic Botany, University of South Florida, Tampa.

APPENDIX A

Table A-1. Comparison of methods used to assign Coefficient of Conservatism scores in the United States

Location	Author(s)	Document	Pub. Date	CC List in Pub?	No. Experts	No. Species	Method	Notes	Interpretation of Scores
Delaware, Maryland, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia	Chamberlain, S, and H. Ingram	Developing coefficients of conservatism to advance floristic quality assessment in the Mid-Atlantic region	2012	On Riparia / MAWWG website	13	2,794	USDA plant database for initial list, 4208 unique; 2794 native/no hybrids, meeting of experts to arrive at scores by consensus. 4 days Nov 13-16, 2009		
Florida	Cohen, M., S. Carstenn, and C. Lane	Floristic Quality Indices for biotic assessment of depressional marsh condition in Florida	2004	Yes in Appendix A, Ecological Archives A014-015-A1	10 working independently	397	collected a list of plants from a specific community type and we solicited community specific CC scores. Expert botanists were consulted independently rather than establishing CC scores by panel consensus. Ten expert botanists from consulting firms, regulatory agencies, and university faculty, with wetlands expertise throughout peninsular Florida, independently assigned coefficients of conservatism (CC) to each species sampled. Each botanist was asked to provide a CC for each species based on specific criteria (Table 1, after Andreas 1995).	developed an empirical analog to CC scores in order to compare expert estimates (step 2) with observed species disturbance tolerance data. ***Final CC scores for each wetland species were calculated as the mean of coefficients assigned by individual botanists. Using the arithmetic mean resulted in a range of scores that no longer encompassed the entire 0 to 10 scale due to central tendency. Consequently, CC scores were relativized such that species with the highest mean score were fixed at 10 and other species scores were adjusted proportionally. Appendix of CC values found at http://www.esapubs.org/archive/appi/A014/015/appendix-A.htm	0 Alien taxa, and those native taxa that are opportunistic invaders or common components of disturbed communities 1-3 Widespread taxa that are found in a variety of communities, including disturbed sites 4-6 Taxa that display fidelity to a particular community, but tolerate moderate disturbance to that community 7-8 Taxa that are typical of well-established communities, which have sustained only minor disturbances 9-10 Taxa that exhibit high degrees of fidelity to a narrow set of ecological conditions
Florida (South Florida)	Mortelaro, S., M. Barry, G. Gann, J. Zahms, S. Channon, C. Hilsenbeck, D. Scofield, C. Wilder, and G. Wilhelm	Coefficients of Conservatism Values and the Floristic Quality Index for the Vascular Plants of South Florida	2009		3 core team; 4 peer review team	1,343	A core team of botanists was contacted to meet and provide their collective knowledge to the assignment of C scores; peer review team subsequently met and discussed their collective experiences to reach a consensus score.		The scalar value 0 indicates the species is obligate to ruderal areas. That is the rater is 95% confident it was growing in non-native or highly degraded area. These plants are limited in their occurrence to areas of severe anthropogenic disturbances. A ranking of 0 indicates there is little confidence (less than 5% confidence) that the plant was collected from a remnant natural area. These native taxa are weedy and thrive in highly disturbed sites such as cracks in sidewalks, fill sites, canal banks, etc. The scalar values for 1 to 3 indicate levels of confidence that when a plant is encountered it is growing in degraded or non-natural areas. These plants have an affinity to disturbed sites and are non-dependent native lands species. Plants ranked within this range are generally associated with lands that have been greatly disturbed such as those that have been mechanically (i.e. new ground), hydrologically, or chemically altered. New ground is land that has been stripped of its vegetation (usually by mechanical means), where the top layer of soil has been removed or severely damaged. The scalar values 4 to 6 provide levels of confidence that when a plant is encountered it's in a natural area. These plants are more often found in natural areas and variously attest to the floristic quality of that area. The value 5 is pivotal in the rankings; it is the point at which plants are considered obligate to native lands, with a 95% certainty it is growing in a natural area. However, the floristic quality of the natural area cannot be certain and is likely low. The scalar values 7 to 9 provide varying levels of confidence that when a plant is encountered it is in a high quality natural area. These plants have a fidelity to native lands of high quality. The scalar value 10 indicates the species is obligate to high quality natural areas, rater 95% confident it was growing in an undisturbed or native land of high quality.
Illinois	Taft, John, Gerould Wilhelm, Douglas Ladd, Linda Masters	Floristic Quality Assessment for Vegetation in Illinois a Method for Assessing Vegetation Integrity	1997 or later	Yes, in appendix	4	2,091	assigned by the authors		
Indiana	Rothrock, Paul	Floristic Quality Assessment in Indiana: the concept, use, and development of Coefficients of Conservatism	2004	Yes	core group of 5; supporting panel of 3	hundreds (they do not list the number in the paper)	consensus values determined by regional botanical experts; list circulated to core and supporting panel for completeness and initial assignment of CC values; work meeting February 26 to 28, 2004; various rules to apply to arrive at C value for entire state because of regional differences between N/S, etc. parts of Indiana. Conference was facilitated by G. Wilhelm		0-3 Species that provide little or no confidence that its inhabitation signifies remnant conditions. 4-6 Species that are typically associated with remnant plant community, but tolerate significant to moderate disturbance. 7-8 Species found in high-quality remnant plant communities but appear to endure, from time to time, some disturbance. 9-10 Species restricted to remnant landscapes that appear to have suffered very little post-settlement trauma.
Kansas	Freeman, C.C., and C.A. Morse.	Freeman, C.C., and C.A. Morse. 2002. Kansas floristic quality assessment: coefficients of conservatism for plants in southeast Kansas. Kansas Department of Health and Environment, Lawrence.	2002	no	2 authors plus 17 reviewers	1300	assigned by authors, reviewed by 17 experts		
Kentucky	Shea, M., D. White, D. Ladd, and M. Evans	KY Coefficient of Conservatism data	about 1997	YES	4 authors plus 5 reviewers	1,918	List of plants from annotated catalog of KY plants. Authors assigned scores, then sent list out to 15 botanists throughout the state for comment; 5 responded with comments - most suggestions to change score up or down by 1 or 2 points	http://www.droppednursery.com/plants.html Doug Ladd is with the Nature Conservancy Missouri Field office; Species nomenclature follows Kartez	C values range from 10 for species that occur exclusively in pristine natural areas and 0 for those that persist after extensive degradation of the natural features of a site. While there is loose correlation between rarity and a high "C" rank, rarity alone is not an indicator of a species tolerance to disturbance and was therefore not considered in development of this rank.
Louisiana	K. Cretini, J. Visser, K. Krauss, Gregory D. Steyer	Development and use of a floristic quality index for coastal Louisiana marshes	2011	no	24, with 11 reviewers	849	The species list (421 species) and a list of CC score descriptions for coastal Louisiana (Table 1) were provided to 40 Louisiana coastal vegetation experts and their input on scoring was requested. Twenty-four individuals responded to this request. A panel of seven individuals, consisting of the authors and experts from the larger group, met to review the twenty-four individual responses and establish a final score by consensus, if more than one species for the genus was listed and those species CC scores were within a three-point range, the mode of the species scores was assigned to the genus. If the CC scores for the species within the genus had a wider range than three points, no CC score was assigned. the panel assigned more scores to remaining species to total 849		
Louisiana	Allain, Larry, Latimore Smith, Charles Allen, Malcolm F. Vidrine, James B. Grace	A Floristic Quality Assessment System for the Coastal Prairie of Louisiana	2004	Yes	5 (authors)	594	Coefficients were based primarily on the authors' experience with coastal prairie flora. Sources such as herbarium specimens, distribution maps, and descriptions of habitat preferences in floras were also used. The scores assigned by the authors were compared, discussed, revised, and then averaged.	assigned C values from -1 to -3 to nonnative species based on the perceived threat of their invasive potential and ability to exclude native species	high C values are also considered to be intolerant of disturbance. A C value of 0-3 indicates an early succession species adapted to severe disturbance, where as a C value of 8-10 indicates a species from a community that has little history of disturbance. A species with a C value of 5 represents a plant from a remnant natural community that may be severely degraded.
Michigan	Herman, Kim D., Linda A. Masters, Michael R. Penskar, Anton A. Reznicek, Gerould S. Wilhelm, William W. Brodovich, Kevin P. Gardiner	Floristic Quality Assessment with wetland categories and examples of computer application for the state of Michigan Appendix C: Michigan Plants Database - 2001 Compiled by: M. R. Penskar, A. A. Reznicek, W. W. Brodovich, G. S. Wilhelm, L. A. Masters, K. D. Herman, and K. P. Gardiner.	2001	Yes	7	1,815	assigned by the authors		
Minnesota	Milburn, Scott A., Michael Bourdaghs, Jason J. Husveth	Floristic Quality Assessment for Minnesota Wetlands	2007	Yes in Appendix	18	1,108	iterative process of initial assignment by limited number of personnel, submittal to other experts for review, etc.; no meeting		used narrative table from Andreas 2004
Mississippi	Herman, Brook, John Madsen, Gary Ervin	Development of Coefficients of Conservatism for Wetland Vascular Flora of North and Central Mississippi	2006	YES	8	411	team of professionals, w expertise in various wetland taxa, were asked separately to assign CoCs		
North Carolina	Division of Water Quality, North Carolina Dept. of Env. and Nat. Resources	unpubl.	unpubl.	unpubl.	2 to 3	about 700	species submitted to local experts who assigned CC scores, scores then averaged		
North Dakota	Mushet, David M., Ned H. Euliss, Jr., and Terry L. Shaffer	Floristic quality assessment of one natural and three restored wetland complexes in North Dakota, USA	2002	Yes	unnamed	244	Assigned by experts; also separate dataset assigned using wetland species DATA ie. if a plant species only occurred in the native prairie wetlands sampled, it was considered to be very conservative and was assigned a C value of 10. If a species occurred in the native prairie wetlands and also in the planted grass wetlands, it was assigned a C value of 8 or 9 depending on whether it occurred more often in the native prairie or the planted grass wetlands. If a species occurred only in the planted grass wetlands, it was assigned a C value of 7. We assigned a C value of 6 to those species that occurred in native prairie, planted grass, and only the oldest restored wetlands sampled. Species that occurred in recently restored wetlands and drained wetlands were considered to be the least conservative and were assigned C values ranging from 0 to 5 depending upon which wetland type they occurred in most frequently	article found at: http://www.nprwc.usgs.gov/resource/wetlands/ndwetind/index.htm	

Table A-1. Comparison of methods used to assign Coefficient of Conservatism scores in the United States

Location	Author(s)	Document	Pub. Date	CC List in Pub?	No. Experts	No. Species	Method	Notes	Interpretation of Scores
North Dakota and South Dakota	Rocchio, J.	Floristic Quality Assessment for Plant Communities of North Dakota, South Dakota (excluding the Black Hills), and Adjacent Grasslands	2007	Yes	10	1,309	Developed species list using the "Atlas of the Flora of the Great Plains" and the "Flora of the Great Plains" (Great Plains Flora Association 1977, 1991) as primary reference sources. In January, 2000, the panel met for a 3-day workshop at the North Dakota State University herbarium, in Fargo, North Dakota, where we assigned a C value to each taxon on the checklist		We assigned a coefficient of 0 to weedy species that can flourish in the most highly disturbed habitats (freshly tilled fields, gardens, new road cuts, etc.). Although native to our region, these weedy taxa provided us with 0 confidence that a specimen brought into the herbarium was collected from a remnant natural area. We assigned coefficients ranging from 1 to 4 to taxa that occur in natural areas but also in highly degraded habitats. Thus, a taxon receiving a 3 provided only about 30% confidence that this plant came from a remnant natural area. Taxa to which we assigned coefficients ranging from 5 to 9 are usually found in natural areas but have decreasing degrees of tolerance to disturbance. A taxon with a coefficient of 5 likely came from a natural area, but it could have been a very disturbed natural area, and a taxon receiving a 9 likely came from a relatively undisturbed or otherwise high quality natural area. We reserved the coefficient 10 for those taxa virtually restricted to natural, undisturbed habitats in the Dakotas (i.e., we could be nearly 100% confident that a sample brought into the herbarium was collected from a high quality natural remnant).
Ohio	Andreas, Barbara K., John J. Mack, James S. McCormac	Floristic quality assessment index (FQA) for vascular plants and mosses for the State of Ohio	2004	YES	3 (authors); 2 reviewers (maybe for document only?)	over 2000 (number not given)	based on the authors' collective extensive field experience in Ohio, information on herbarium labels primarily in herbaria at Kent State University (KE) and The Ohio State University (OS), and information obtained from local and regional manuals such as Voss	coefficient of conservatism is independent of commonness, T-E species don't automatically receive high score	0 Plants with a wide range of ecological tolerances. Often these are opportunistic invaders of natural areas (e.g. Phragmites australis, Phalaris arundinacea) or native taxa that are typically part of a ruderal community 1-2 Widespread taxa that are not typical of (or only marginally typical of) a particular community 3-5 Plants with an intermediate range of ecological tolerances that typify a stable phase of some native community, but persist under some disturbance 6-8 Plants with a narrow range of ecological tolerances that typify a stable or near "climax" community 9-10 Plants with a narrow range of ecological tolerances that exhibit relatively high degrees of fidelity to a narrow range of habitat requirements
Ohio	Andreas, Barbara, and Robert Lichvar	Floristic Index for Establishing Assessment Standards: A Case Study for Northern Ohio; Corps of Engineers Research Report Summary	1995	No	2	2063	assigned by the authors		
Virginia	Virginia Dept. of Environmental Quality	Virginia Department of Environmental Quality. 2004. Virginia wetland plants C-value list. Office of Wetlands, Water Protection Compliance, Richmond, Virginia.	2004	unpubl.	4	?	A committee of four (4) botanical experts (chaired by VDEQ staff) determined, through consensus, a coefficient of conservatism (C) for each plant species on the list.		The C-value ranges from 0 (most likely to occur in disturbed landscapes or a non-native species) to 10 (most likely to occur in undisturbed landscapes). Intermediate integers were assigned based upon the species tolerance to disturbance.
West Virginia	Rentch, James S., and James T. Anderson	A Floristic Quality Index for West Virginia Wetland and Riparian Plant Communities	2006	Yes	11	1,745	Of the 30 botanists contacted, 11 participated fully (see Appendix 1), contributing nearly 24,000 values. For each taxon, we calculated a mean C value, along with a standard deviation, range, and the number of contributors. Revised lists were sent back to contributors for reconsideration until the following conditions were met: • At least two C values were submitted for a taxon; • The range of values submitted for a taxon was 3 or less; • For taxa with more than two values, the standard deviation was less than the mean.		habitat degradation. Disturbance occurs so frequently, or with such intensity that often only brief periods are available for growth and reproduction. These are primarily weedy species that can flourish in the most highly degraded habitats. Introduced or exotic species automatically receive a rank of 0, while native "weedy" species such as ragweed (<i>Ambrosia artemisiifolia</i> var. <i>elliotii</i> and barnyard grass (<i>Echinochloa crus-galli</i>) are ranked 1. • 2-3 Taxa associated with more stable though degraded habitat, but may be found in a variety of habitats. They are generally widespread and not an indicator of a particular community type. Examples include hay-scented fern (<i>Dennstaedtia punctilobula</i>) 2, and common rush (<i>Juncus effusus</i>) and red maple (<i>Acer rubrum</i>) 3. • 4-6 Taxa have a high consistency of occurrence with a given community type and include many common dominant species. Species can persist under moderate degradation. Examples of this range include the sedge <i>Carex lurida</i> , and New York Ironweed (<i>Vernonia noveboracensis</i>) 4; sensitive fern (<i>Onoclea sensibilis</i>) and pipestem (<i>Spiraea alba</i>) 5, and Glade St. Johnswort (<i>Hypericum densiflorum</i>) and smooth arrowwood (<i>Viburnum recognitum</i>) 6. • 7-8 Taxa associated mostly with natural areas but can persist where the habitat has been somewhat degraded. Increases in the intensity or frequency of disturbance may result in reduction of population size. Examples include <i>Carex atlantica</i>
Wisconsin	Bernthal, Thomas	Development of a Floristic Quality Assessment Methodology for Wisconsin	2003	Yes in appendix	12 survey respondents; 7 at meeting for 2 days	1,788	A survey was sent to over 30 botanists (12 responded) asking them to assign coefficients to those plants they know well. An Excel spreadsheet provided by the University of Wisconsin Herbarium from its database of 1,788 vascular plant species that are considered native to Wisconsin was provided. Core group of 7 experts met intensively 2 days; survey results were guide to facilitate final assignment of coefficients; arrived at by consensus	The most conservative species require a narrow range of ecological conditions, are intolerant of disturbance, and are unlikely to be found outside undegraded remnant natural areas, while the least conservative species can be found in a wide variety of settings and thrive on disturbance.	0-3: taxa found in a wide variety of plant communities and very tolerant of disturbance 4-6: taxa typically associated with a specific plant community, but tolerate moderate disturbance 7-8: taxa found in a narrow range of plant communities in advanced stages of succession, but can tolerate minor disturbance 9-10: taxa restricted to a narrow range of synecological conditions, with low tolerance of disturbance.

Table A-2. Source list for reference C-values included in the scoring database provided to botanists.

FL	Cohen M.J. S. Carstenn, and C.R. Lane. 2004. Floristic quality indices for biotic assessment of depressional marsh condition in Florida. <i>Ecological Applications</i> 14:784-794.
IN	Rothrock, John. 2004. Floristic Quality Assessment in Indiana: The Concept, Use, and Development of Coefficient of Conservatism. Final Report to the EPA for WPD Grant CD975586-01
KY	Web-Published list by Margaret Shea, Deborah White, Douglas M. Ladd, and Marc Evans at Dropseed Nursery website http://www.dropseednursery.com/plants.html
MS	Herman, B.D. J.D. Madsen, G.N. Ervin. 2006. Development of Coefficients of Conservatism for Wetland Vascular Flora of North and Central Mississippi. Mississippi State, Department of Biological Sciences, GeoResources Institute Report.
NC	Weakley, Alan, Peter White, and Johnny Randall. 2012. Unpublished List of Coefficient of Conservatism values for selected plant species occurring in North Carolina. Division of Water Resources, Dept. of Environment and Natural Resources
TN	Preliminary values from Dwayne Estes, Austin Peay University, 2013.
VA	VA Dept. of Environmental Quality http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/MonitoringAssessmentStrategy.aspx
WV	Rentch, James, and James Anderson. 2006. A Floristic Quality Index for West Virginia Wetland and Riparian Plant Communities. Final Report to the USDA CREES, Award No. 2004-38874-02133.

Table A-3. List of participants in the Southeast Wetland Plant Coefficient of Conservatism Panel

Name	Address	Email/Phone
Quinton "Guy" Anglin	Florida Dept. of Environmental Protection (Home address) 4700 River Road Bascom, FL 32423	(850) 694-0999 cell ganglin@hughes.net
Julian Campbell	Bluegrass Woodland Restoration Center 3525 Willowood Rd Lexington, KY 40517	(859) 271-4392 juliancampbell53@gmail.com
S. Lee Echols	North American Land Trust Georgia Field Office 3012 Windfield Circle Tucker, GA 30084	(706) 338-2157 lee_echols@nalt.org
L. Dwayne Estes	Austin Peay State University Center of Excellence for Field Biology P.O. Box 4718 Clarksville, TN 37044	(931) 221-7771 estesl@apsu.edu
Derick Poindexter	UNC Herbarium (NCU) North Carolina Botanical Garden University of North Carolina Chapel Hill, North Carolina 27599-3280	(919) 962-6931 poindexter@appstate.edu
Milo Pyne	NatureServe (Home address) 806 Vickers Ave Durham, NC 27701	(919) 943-9327 milopyne@yahoo.com
Mike Schafale	North Carolina Natural Heritage Program N.C. Dept. of Environment and Natural Resources 1601 Mail Service Center Raleigh, NC 27699-1601	(919) 707-8627 michael.schafale@ncdenr.gov
Al Schotz	Alabama Natural Heritage Program 1090 South Donahue Drive Auburn University, AL 36849	(334) 844-5019 ars0002@auburn.edu
Ed Schwartzman	North Carolina Natural Heritage Program N.C. Dept. of Environment and Natural Resources 37 McDade St Asheville, NC 28806	(828) 553-3563 edward.schwartzman@ncdenr.gov
Bruce Sorrie	North Carolina Natural Heritage Program NC Dept. of Environment and Natural Resources 3076 Niagara-Carthage Road Whispering Pines, NC 28327	(910) 949-2625 bruce.sorrie@ncdenr.gov
Dan D. Spaulding	Anniston Museum of Natural History PO Box 1587 Anniston, Alabama 36202	(256) 237-6766 dspaulding@annistonmuseum.org
Bob Upcavage	Environmental Consultants & University of South Florida P.O. Box 919 Thonotosassa, Florida 33592	(813) 317-5497 bob@ecollc.biz
Alan Weakley	Department of Biology, CB#3280 University of North Carolina Chapel Hill, NC 27599-3280 USA	(919) 962-6931 weakley@unc.edu
Deborah White	Kentucky State Nature Preserves Commission Natural Heritage Program 801 Schenkel Lane Frankfort, KY 40601	(502) 573-2886 Deborah.White@ky.gov
Wendy Zomlefer	University of Georgia Dept. of Plant Biology 2502 Miller Plant Sciences Athens, GA 30602-7271	(706) 583-0389 wendyz@plantbio.uga.edu

Survey A-1: Coefficient of Conservatism Methods Survey Results

***Sent to 24 people who participated in a Coefficient of Conservatism effort in the U.S. They were located through literature and internet research. Administered through SurveyMonkey.com*

1. You have been sent this survey because you have participated in a meeting to assign Coefficient of Conservatism scores to plants. What role(s) did you play at the meeting? (check all that apply)

	Response Percent	Response Count
Expert Botanist	90.9%	10
Meeting Facilitator	18.2%	2
Meeting Administrator	9.1%	1
Expert Reviewer	18.2%	2

2. How many full days did you participate at the meeting?

VA DEQ - 5-7 days plus follow-up via email coordination; Mid-Atlantic Region - 5 days (?) plus follow-up via email
10/25/2012 12:04 AM

2: these answers refer to the regional group meeting organized by Riparia, not the WV independent assignment project
10/24/2012 10:09 AM

3
10/24/2012 7:51 AM

3-4
10/24/2012 6:21 AM

2
10/23/2012 6:17 PM

2-3
10/23/2012 4:14 PM

2
10/22/2012 11:39 AM

3
10/19/2012 10:44 AM

2
10/17/2012 3:49 PM

not recalling, but at least 3, no more than 5
10/17/2012 2:37 PM

5
10/17/2012 1:05 PM

3. Did you receive the plant list in advance of the meeting?

	Response Percent	Response Count
Yes	72.7%	8
No	0.0%	0
I don't remember	27.3%	3

4. Did you begin assigning scores in advance of the meeting?

	Response Percent	Response Count
I don't remember	0.0%	0
No	54.5%	6
Yes	54.5%	6
If yes, did you have "training" or a meeting on guidelines for assigning scores?		6

VA DEQ - scores were assigned prior to then a statistical algorithm was used to determine which scores needed to be further evaluated (this was one of my tasks); Mid-Atlantic Region - scores were assigned during the meeting

10/25/2012 12:04 AM

After about a half hour background discussion to set up rules for how we would proceed, and reinforce consensus on the concept of conservatism. We invited Gerry Wilhelm to be on the panel for the purpose of making sure we didn't stray from the conservatism concept.

10/23/2012 6:17 PM

yes

10/23/2012 4:14 PM

No, I relied on reading guidelines published by Wilhelm.

10/22/2012 11:39 AM

Informal meeting on guidelines.

10/19/2012 10:44 AM

Was already familiar with the process

10/17/2012 1:05 PM

5. How did you feel about the amount of time allocated for the number of scores you needed to assign?

	Response Percent	Response Count
Just the right amount of time	54.5%	6
Not enough time	45.5%	5
Too much time	0.0%	0
	Other (explain)	4

I was amazed we made it through all 1700 species in 2 days but they did it.

10/23/2012 6:17 PM

Too much to bear. Not enough to do it right.

10/23/2012 4:14 PM

Probably should have discussed certain species at greater length.

10/17/2012 2:37 PM

Some were quite easy, others more difficult

10/17/2012 1:05 PM

6. What is your opinion about group assignment vs. independent assignment of scores? (ie. at a meeting by consensus vs. independently outside of a meeting)

There is great benefit in assigning scores ahead of time and then running a statistical review (such as SD of the median) to further evaluate. We did this on the VA DEQ list and found that it cut down the time immensely. It allowed us to put aside the scores that we already agreed upon (the ones that had a low SD med score), and focus on the ones that needed further evaluation. I would be happy to share with anyone who is interested in the concept. (be advised that you should have at least 8 botanists on the panel). Contact info: Doug DeBerry - dadeberry@wm.edu; 757-903-7310

10/25/2012 12:04 AM

I have done both. In WV, the state assignments were done independently and compiled. For the region, we met as a group and offered consensus. The group activity resulted in a very rapid assignment of scores, and it benefited from the personal interaction (botanists who knew the species well would be more emphatic and usually carry more weight). The group process also benefitted from a thorough discussion of the criteria, and did not seem to suffer from dominant personalities. On the other hand, we moved so quickly through the species that it felt rather breathless, and the some of the results may have suffered. It was a great opportunity to interact with regional botanists. The independent ranking that we did in WV began with a short face-to-face meeting to discuss the approach, and it also worked well. Jim Rentch, who coordinated the WV wetland effort, was diligent about iterating the independent input for any species with large standard deviations in ranking.

10/24/2012 10:09 AM

I prefer group assignment, you are more likely to get closer to accurate (usually)

10/24/2012 7:51 AM

Group assignment is probably the best approach as people assigning independent scores if far too much work, and there will be taxa for which an expert botanist is unfamiliar or for which they have not encountered the full spectrum of habitats where the taxon is found.

10/24/2012 6:21 AM

We actually did a hybrid using both. I sent the list of Wisconsin's 1700+ native species to a group of about 15 botanists around the state and asked them to rate the plants that they knew well enough to be comfortable giving a rating. I got about a

dozen responses. I compiled the survey results and gave the resulting spreadsheet to the expert of 8 botanists. I tracked how many people, rated the species, the average, the high and low rating and flagged those which had a difference of more than 2 between the high/low rating. The 8 core group botanists also were asked to make these ratings and respond to the survey. The experts had the survey spreadsheet data to refer to when they went down the list alphabetically to do the ratings as a group. The survey results, plus being asked to participate in the survey, helped get the experts into the right frame of mind. Sometimes they used the survey results, sometimes they ignored it. I think in-person was essential to develop the group dynamic that took hold and made them very productive.

10/23/2012 6:17 PM

Independent allows access to more resources (databases, literature, etc...), but requires more time. Ideal would be to bring independent assignments to meeting for discussion and consensus.

10/23/2012 4:14 PM

A group of experts in a meeting is preferable.

10/22/2012 11:39 AM

Group assignment of scores I think are more valid.

10/19/2012 10:44 AM

I felt that the discussion was important because various contributors had knowledge of different parts of the state or special knowledge of particular groups.

10/17/2012 3:49 PM

group assignment worked, although there is a tendency for the group to follow the first person that speaks

10/17/2012 2:37 PM

Consensus opinion is critical. Possible "pre-vote" to get opinions but final decisions need to be by consensus

7. Please estimate the amount of time it took to assign a typical score (or range of time).

regional group meeting: 2 minutes; independent: 5 minutes

10/24/2012 10:09 AM

10 seconds to 5 minutes, assignments sped up as we understood the concept better

10/24/2012 7:51 AM

2 minutes.

10/24/2012 6:21 AM

Divide 1754 by about 14 hours. At the beginning of the list it took longer but as the group began to gel things went pretty quickly. Some difficult groups caused slow-downs but the group plowed through.

10/23/2012 6:17 PM

1-30 minutes

10/23/2012 4:14 PM

Varied depending on knowledge of the species; some only several seconds, others a couple of minutes in consultation.

10/22/2012 11:39 AM

One to two minutes on most species.

10/19/2012 10:44 AM

It varied greatly. Most species there was immediate consensus, but a minority took much longer to discuss.

10/17/2012 3:49 PM

30 seconds - 1 minute

10/17/2012 2:37 PM

Did one state flora in 5 days. Don't remember the number of species, but even the arguable species was easy to reach consensus

10/17/2012 1:05 PM

8. What advice would you give to someone who is organizing a meeting of this type (to assign Coefficient of Conservatism scores)?

Find a polite way to keep the botanical egos "in check" during the process...the discussions can get long-winded, and often times botanists argue over points for a long time before they realize that they actually agree

10/25/2012 12:04 AM

Almost any method should work well if you have a good geographic and taxonomic group representation of botanists and a thorough discussion of the criteria for ranking prior to assigning ranks. It is important to have a confidence score for each rank so that you know which ones need additional attention.

10/24/2012 10:09 AM

have breaks & snacks available regularly so your experts don't get burnt out. Have fun!

10/24/2012 7:51 AM

Don't have too many botanists as it really can slow the process down and there seems to be a handful who will 'lead' anyways.

10/24/2012 6:21 AM

I think having the survey ahead of time, having Gerry there and having a good group dynamic were the key factors in our success. Emmet Judziewicz emerged as a natural leader and ally for me in keeping things moving along. We kept reinforcing that small differences in ratings were not the end of the world and that it was ok to average across the ecoregions of the state. By acknowledging that our "region" was an artificial construct, they gradually got comfortable with averaging between different ecoregions of the state. It helped to point out that, should they want to remain true to the regional flora concept they would have to do this same process 2-6 times over again, depending on how many regions they wanted to use.

10/23/2012 6:17 PM

Choose participants wisely. Have taxonomy and synonymy worked out and distributed before meeting. Allow time for follow up on difficult taxa. Do not overwork participants (I walked out of our meeting at 10pm. Goodnight!)

10/23/2012 4:14 PM

Involve as many field-oriented botanists as you can.

10/22/2012 11:39 AM

Try to get the most knowledgeable field botanist you can to serve on the committee.

10/19/2012 10:44 AM

I do think that providing guidelines for scoring and the plant list to participants in advance of the meeting is useful.

10/17/2012 3:49 PM

Invite good field botanists, preferably from different regions of state (or those who botanize the state). Break up gatherings over time, not a blitz over a short period of days.

10/17/2012 2:37 PM

Provide botanical "team" with species list to assign "draft" coefficients. All those with consensus are taken off-the-table. Remaining taxa are hashed out in a face to face meeting. Make sure members understand the rating system and definitions. Possibly hold a teleconference/meeting to go over objectives, coefficient ratings, definitions, expected time line, and etc. at the start.

10/17/2012 1:05 PM

9. What would you do differently next time, if anything?

Group consensus: allocate more time, e.g. 3-4 minutes per species

10/24/2012 10:09 AM

maybe plan for an extra day, if needed

10/24/2012 7:51 AM

Perhaps two meetings to split up this daunting task, not just a single long meeting.

10/24/2012 6:21 AM

I think we had a good process. There's not a lot I would change.

10/23/2012 6:17 PM

Provide for ability to make adjustments to C-values as field experience dictates. Keep the committee intact for purposes of evaluating requests to make those adjustments. This could all be done through electronic communications and obtaining a consensus of the committee.

10/22/2012 11:39 AM

The only thing I would state is that there should be an avenue where certain species can be revisited and reassigned numbers in the future as more is learned about the species. There are a few species in our region that should be revisited and a new edition of our C-values published.

9. What would you do differently next time, if anything? (cont'd)

10/19/2012 10:44 AM

Nothing.

10/17/2012 3:49 PM

Perhaps have CC scores assigned individually before meeting, then hash out differences.

10/17/2012 2:37 PM

The one group I worked with did things quite efficiently.

10/17/2012 1:05 PM

Survey A-2: Southeast Wetland Plant Coefficient of Conservatism Assignment: Botanist Questionnaire

Name and Contact Email

Who is your employer (or associated organization)?

In what geographical region(s) do you have wetland plant experience? (see Ecoregion map attached to email or name state/s)

How many years of experience do you have working with wetland plants?

What percentage of this time has been spent in the field?

Has your work been in a combination of quality and disturbed habitats, or mainly one or the other?

Are you willing to participate in a 4 day collaborative meeting? The purpose of the meeting is to assign quality scores to a large number of wetland plant species occurring in the Southeast. *

What (if any) special conditions should we be aware of in contracting you for this work? (eg. University overhead, dual employment, etc.) Please specify overhead percentage required.

What days would work best for you for a 4 day meeting? (Select all that apply)

Are there any weeks during March through September 2013 when you would NOT be available?
(Natural Heritage Conference is April 14-18)
(American Society of Plant Biologists 2013 meeting is July 20-24)
(Botanical Society of America 2013 meeting is July 24 - Aug 1)

Do you have any questions or comments?

Survey A-3: Southeast Wetland Plant Coefficient of Conservatism Assignment: Post-Meeting Survey

Sent to all participating botanists; administered through SurveyMonkey.com

1. How would you rate your general experience at the Southeast CofC meeting?

Terrible, I hated it	Bad, I didn't enjoy it	Okay, neither good nor bad	Good, I had a nice time	Great, I loved it	Rating Average	Rating Count
0.0% (0)	0.0% (0)	0.0% (0)	28.6% (2)	71.4% (5)	4.71	7

2. How would you rate your accommodations?

Terrible, I hated it	Bad, I didn't enjoy it	Okay, neither good nor bad	Good, I enjoyed the hotel	Great, I loved it	Rating Average	Rating Count
0.0% (0)	0.0% (0)	16.7% (1)	16.7% (1)	66.7% (4)	4.50	6

3. How would you rate the food that was provided at the meeting?

Terrible, I hated it	Bad, I didn't enjoy it	Okay, neither good nor bad	Good, I enjoyed it	Great, I loved it	Rating Average	Rating Count
0.0% (0)	0.0% (0)	14.3% (1)	28.6% (2)	57.1% (4)	4.43	7

4. How did you feel about the selection of botanists who were chosen to participate?

The attending botanists were extremely qualified to deal with the task with the interaction between individuals being much better than anticipated.

7/7/2013 10:08 PM

The best in the Southeast!

7/6/2013 4:56 PM

The botanists chosen represented an excellent suite of expertise across the Southeast. Too bad some states could not participate (e.g., Mississippi) but those present were able to fill in the gaps quite well. An excellent selection of botanists!

7/1/2013 12:59 AM

A great group; weak on the lower coastal plain.

7/1/2013 10:36 AM

about right; but needed MS and VA for breadth

6/27/2013 10:11 AM

excellent, everyone contributed and had a few key people that could resolve obscure confusing species

6/27/2013 7:53 AM

a great group of folks, great coverage across the region. maybe needed more mountain folks?

6/26/2013 2:57 PM

5. How do you feel about the time that was allocated for the meeting (4 days), given the amount of work?

	Response Percent	Response Count
Not enough time	0.0%	0
Just the right amount of time	100.0%	7
Too much time	0.0%	0
Don't know	0.0%	0

6. How do you feel about the general scoring plan that was used (ie. prescoring then consensus discussion; rules about score ranges, etc. for score acceptance)?

Prescoring was necessary considering the limited 4-day consensus discussion. This provided time to research unfamiliar species thus reducing the likelihood of 'guessing'.

7/7/2013 10:08 PM

I think it worked well.

7/6/2013 4:56 PM

I thought the protocol was very good. The webinar was a big help, allowing participants to better understand their responsibilities and having the opportunity to voice their viewpoints on various aspects of the entire process.

7/1/2013 12:59 AM

About as good as any for C of Cs. It seemed like not enough research was done -- just a bunch of guys talking off the top of their heads!

7/1/2013 10:36 AM

good

6/27/2013 10:11 AM

Well thought and seemed to work to cut down on the workload, I don't see how you could do it w/o the prescoring

6/27/2013 7:53 AM

i think it went well.

6/26/2013 2:57 PM

7. Do you have any recommendations to other groups considering doing this?

The process appeared to proceed as smooth as one could expect for such a difficult task. It was apparent that a lot of thought went into task coordination and I believe that other groups could use this as a template.

7/7/2013 10:08 PM

Bring reference material on your computer. We used Kartesz & Weakley a lot.

7/6/2013 4:56 PM

Perhaps the primary key for success of a project of similar caliber is to be certain a strong level of expertise is represented for a given region. I think this was critical to the success of the meeting and the preparatory assignments.

7/1/2013 12:59 AM

Give all participants coauthorship on any websites and papers for the list. Much more required prescoring.

7/1/2013 10:36 AM

form a continually interacting group to deal with COC , global ranking, review of wetland occurrence etc

6/27/2013 10:11 AM

Maybe resolve some of the obscure species with single or very few occurrences, especially those that are historic, since they can skew the rank and really very little is known about them. If they could be flagged somehow....

6/27/2013 7:53 AM

be very clear that we are rating 'conservativeness' not rarity. i thought that some people are fixated on rarity...

6/26/2013 2:57 PM

8. What, if anything, would you have changed or done differently?

Personally, I would probably use a 1-5 scoring system instead of the 0-10. Additionally, it would be useful to know the end use of the scoring and how it would be specifically applied. For instance, will additional calculations be applied for areal cover of each species when evaluating a habitat? Will this be used for natural habitats or mitigation or both? How will this affect weedy, but perhaps very desirable plant species and the resultant 'perceived' negative score?

7/7/2013 10:08 PM

Nothing

7/6/2013 4:56 PM

Well done...can't think of anything I would have done differently.

7/1/2013 12:59 AM

Go out for dinner and lunches. We felt a bit trapped in the same bldg. for 24 hrs!

7/1/2013 10:36 AM

develop more quantifiable criteria for COC etc to use in the future; discuss in future what we mean by artificial, natural, disturbance etc.

6/27/2013 10:11 AM

Was very well thought out - not a thing.

6/27/2013 7:53 AM

i thought the meeting was well run

6/26/2013 2:57 PM

9. Any other comments?

Our host, Kristie Gianopulos was wonderful! She did a tremendous amount of work and made the meeting a success!

7/6/2013 4:56 PM

I applaud Kristie for putting together such a rewarding and valuable project. It was obvious that she put an inordinate amount of time and resources to ensure a well-received and beneficial final product.

7/1/2013 12:59 AM

Give all participants coauthorship on any websites and papers for the list. It's the least you can do for all our work.

7/1/2013 10:36 AM

see 7

6/27/2013 10:11 AM

thanks

6/26/2013 2:57 PM

APPENDIX B

Table B-1. Coefficient of Conservatism Values for Wetland Plants Occurring in the Southeastern United States.

USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
Abildgaardia ovata	flatspike sedge	ABOV	Non-upland		FACW		7	2								
Acalypha deamii	Deam's threeseed mercury	ACDE4	Added; Absent from NWPL												6	3
Acalypha gracilis	slender threeseed mercury	ACGR2	Non-upland	FAC	FAC		4	4	3	8	3	7	4	3	4	7
Acalypha rhomboidea	common threeseed mercury	ACRH	Non-upland	FACU	FAC		2	6	2	8	2	7	3	1	2	7
Acanthocercus tetragonus	triangle cactus	ACTE4	Non-upland		FAC		8	3								
Acer negundo	boxelder	ACNE2	Non-upland	FAC	FAC		4	5	3	6	4	6	4	3	3	6
Acer rubrum	red maple	ACRU	Non-upland	FAC	FAC		4	5	3	9	3	8	4	3	4	6
Acer rubrum var. drummondii	Drummond's maple	ACRUD	Present 1988 WPL				6	2	6	5			6	1	6	3
Acer saccharinum	silver maple	ACSA2	Non-upland	FACW	FAC		4	4	5	8	5	6	4	3	4	6
Acmella oppositifolia var. repens	oppositeleaf spotflower	ACOPR	Non-upland	FACW	FACW		4	4	5	5	4	4	5	1	5	3
Aconitum reclinatum	trailing white monkshood	ACRE	Non-upland	FAC		Unscored; 2013 NWPL addition	UND									
Aconitum uncinatum	southern blue monkshood	ACUN	Non-upland	FAC		Unscored; 2013 NWPL addition			0		UND		9	1	UND	
Acorus calamus	Single-Vein Sweetflag	ACCA4	Non-upland	OBL	OBL	Non-native					0		0		0	
Acrostichum aureum	golden leatherfern	ACAU3	Non-upland		OBL		7	3								
Acrostichum danaeifolium	inland leatherfern	ACDA	Non-upland		OBL		7	3								
Actinostachys pennula	ray fern	ACPE2	Non-upland		FAC		10	1								
Adiantum pedatum	northern maidenhair	ADPE	Non-upland	FAC	FACU		8	4	8	8	8	8	7	2	7	7
Adiantum tenerum	fan maidenhair	ADTE	Non-upland		FAC		9	2								
Aegopodium podagraria	Bishop's Goutweed	AEPO	Non-upland	FACU	FACW	Non-native					0		0			
Aeschynomene americana	shyleaf	AEAM	Non-upland		FAC		3	2	5	2						
Aesculus glabra	Ohio buckeye	AEGL	Non-upland	FACU	FACU	found in floodplain forests			6	3			7	2	7	3
Aeschynomene indica	Indian jointvetch	AEIN	Non-upland	FACW	FACW	Non-native to FL	1*	4	3*	4						
Aeschynomene virginica	Virginia jointvetch	AEV3	Non-upland	OBL	FACW				7	2						
Aesculus flava	yellow buckeye	AEFL	Added; Absent from NWPL	FACU	FACU								7	1	7	2
Aesculus pavia	red buckeye	AEPA	Non-upland	FAC	FACU		5	6	5	8	6	5	7	5	6	6
Aesculus sylvatica	painted buckeye	AESE	Non-upland	FAC	FAC				6	4	6	6	6	1		
Agalinis aphylla	scaeleaf false foxglove	AGAP3	Non-upland	FACW	FACW		8	4	8	4						
Agalinis fasciculata	beach false foxglove	AGFA2	Non-upland	FAC	FAC		4	5	4	8	4	5	4	2	5	7
Agalinis filicaulis	Jackson false foxglove	AGFI	Non-upland		FAC		8	4	8	3						
Agalinis harperi	coastal plain false foxglove	AGHA3	Non-upland	FAC	FAC				7	3						
Agalinis linifolia	flaxleaf false foxglove	AGLI2	Non-upland	FACW	OBL		6	4	7	4	UND					
Agalinis maritima	saltmarsh false foxglove	AGMA3	Non-upland	FACW	OBL		7	4	8	3						
Agalinis heterophylla	prairie false foxglove	AGHE4	Non-upland	FACU	FACU	can be found in wetlands			6	2						
Agalinis obtusifolia	tenlobe false foxglove	AGOB	Non-upland	FACU	FAC		6	4	6	5	6	6	7	3	7	3
Agalinis oligophylla	ridgester false foxglove	AGOL	Non-upland	FAC	FAC		8	3	7	3					9	2
Agalinis pulchella	St. Mark's false foxglove	AGPU4	Non-upland		FACW		7	3	8	2						
Agalinis purpurea	purple false foxglove	AGPU5	Non-upland	FACW	FACW		5	4	5	5	5	6	6	2	6	6
Agalinis tenuifolia	slenderleaf false foxglove	AGTE3	Non-upland	FAC	FACU		5	4	4	5	5	7	5	4	5	7
Agarista populifolia	Florida hobblebush	AGPO2	Non-upland	OBL	FACW		7	4	6	3						
Agastache nepetoides	yellow giant hyssop	AGNE2	Non-upland	FACU	FAC				6	3	7	3	6	1	6	6
Agrimonia parviflora	harvestlice	AGPA6	Non-upland	FACW	FAC		4	3	4	6	5	6	5	3	5	7
Agrimonia pubescens	soft agrimony	AGPU	Added; Absent from NWPL										4	2	4	2
Agrimonia rostellata	beaked agrimony	AGRO3	Non-upland	FACU	FAC		5	4	6	6	6	8	6	2	6	7
Agrostis exarata	spike bentgrass	AGEX	Non-upland	FACW		Non-native (Adventive)							0			
Agrostis gigantea	Black Bent	AGGI2	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
Agrostis hymenalis	winter bentgrass	AGHY	Non-upland	FAC	FAC		4	4	4	6	4	7	4	2	4	6
Agrostis perennans	upland bentgrass	AGPE	Added; Absent from NWPL	FACU	FACU		UND		6	1	UND		6	2	6	3
Agrostis scabra	rough bentgrass	AGSC5	Non-upland	FAC	FAC		3	4	4	4			4	0		
Agrostis stolonifera	Spreading Bent	AGST2	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
Aletris aurea	golden colicroot	ALAU	Non-upland	FACW	FACW		8	4	8	5						
Aletris farinosa	white colicroot	ALFA2	Non-upland	FAC	FAC		8	4	7	6	7	6	7	3	8	5
Aletris lutea	yellow colicroot	ALLU	Non-upland	FACW	FACW		7	4	8	4						
Aletris obovata	southern colicroot	ALOB3	Non-upland		FAC		8	4	8	5						
Alisma subcordatum	American water plantain	ALSU	Non-upland	OBL	OBL				5	6	4	6	5	4	4	6
Alnus glutinosa	European Alder	ALGL2	Non-upland	FACW	FACW	Non-native									0	
Alnus maritima	seaside alder	ALMA7	Non-upland	OBL	OBL								10	0		
Alnus serrulata	hazel alder	ALSE2	Non-upland	OBL	FACW		5	5	5	9	5	8	5	3	6	7
Alnus viridis	green alder	ALVI5	Non-upland	FAC									10	1		
Alnus viridis ssp. crispa	mountain alder	ALVIC	Present 1988 WPL										10	1		
Alopecurus aequalis	shortawn foxtail	ALAE	Non-upland	OBL	OBL								8	1		
Alopecurus carolinianus	Carolina foxtail	ALCA4	Non-upland	FACW	FACW		2	3	2	6	2	6	2	3	2	6
Alopecurus myosuroides	Slender Meadow-Foxtail	ALMY	Non-upland	FACW	FACW	Hybrid between non-native and native					0				0	
Alopecurus pratensis	Field Meadow-Foxtail	ALPR3	Non-upland	FACW	FAC	Non-native							0		0	
Alternanthera maritima	seaside joyweed	ALMA10	Non-upland		FACW		5	2								
Alternanthera paronychioides	smooth joyweed	ALPA17	Non-upland	OBL	OBL	Non-native (Adventive)	0									
Alternanthera philoxeroides	Alligator-Weed	ALPH	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Alternanthera sessilis	Sessile Joyweed	ALSE4	Non-upland	FACU	OBL	Nuisance native	1	2	1	2						
Amaranthus australis	southern amaranth	AMAU	Non-upland	OBL	OBL	Non-native (Adventive) in Mountains	2	2	4	3			0			
Amaranthus blitoides	Mat Amaranth	AMBL	Non-upland	FAC	FAC	Non-native (Adventive)			0		0				0	
Amaranthus cannabinus	tidalmarsh amaranth	AMCA2	Non-upland	OBL	OBL		7	3	7	3						
Amaranthus crassipes	spreading amaranth	AMCR	Non-upland	FAC	FAC	Non-native	0		0							

Table B-1. Coefficient of Conservatism Values for Wetland Plants Occurring in the Southeastern United States.

USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Amaranthus floridanus</i>	Florida amaranth	AMFL3	Non-upland		OBL		4	2								
<i>Amaranthus pumilus</i>	seaside amaranth	AMPU2	Non-upland	FACW	FACW				9	4						
<i>Amaranthus retroflexus</i>	redroot amaranth	AMRE	Non-upland	FACU	FAC	Non-native in Mountains and ILP, and Florida	2*	4	2*	4			0		0	
<i>Amaranthus tuberculatus</i>	roughfruit amaranth	AMTU	Non-upland	FACW	FACW	Non-native in CP			0				2	3	2	5
<i>Amaranthus viridis</i>	slender amaranth	AMVI	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
<i>Ambrosia psilostachya</i>	Cuman ragweed	AMPS	Non-upland	FAC	FAC		4	3	5	7	2	3	2	1	4	2
<i>Ambrosia trifida</i>	great ragweed	AMTR	Non-upland	FAC	FAC		2	4	2	6	2	7	2	2	2	7
<i>Amelanchier arborea</i>	common serviceberry	AMAR3	Non-upland	FAC	FACU		6	4	6	8	6	8	6	2	6	7
<i>Amelanchier canadensis</i>	Canadian serviceberry	AMCA4	Non-upland	FAC	FAC		6	3	6	5	6	5	6	2	6	2
<i>Amelanchier obovatis</i>	coastal serviceberry	AMOB2	Present 1988 WPL						7	2						
<i>Amianthium muscivomicum</i>	flypoison	AMMU	Non-upland	FAC	FAC		8	3	7	5	8	6	8	3	8	5
<i>Ammannia coccinea</i>	valley redstem	AMCO	Non-upland	OBL	OBL		4	3	3	6	3	6	3	3	4	6
<i>Ammannia latifolia</i>	pink redstem	AMLA3	Non-upland	OBL	OBL		4	3	4	4						
<i>Ammoselinum butleri</i>	Butler's sandparsley	AMBU	Non-upland	FAC	FAC	Non-native in Mountains and ILP			2	4			0		0	
<i>Amorpha fruticosa</i>	false indigo bush	AMFR	Non-upland	FACW	FACW		5	4	5	6	5	7	6	2	5	7
<i>Amorpha georgiana</i>	Georgia false indigo	AMGE	Non-upland	FACW	FACW		9	1	7	3						
<i>Amorpha glabra</i>	mountain false indigo	AMGL2	Added; Absent from NWPL						UND		UND		7	0		
<i>Amorpha herbacea</i>	clusterspike false indigo	AMHE	Non-upland	FAC	FAC		6	3	6	6	6	4	8	1		
<i>Amorpha nitens</i>	shining false indigo	AMNI	Non-upland	FAC	FAC						7	5	7	0	7	3
<i>Ampelaster carolinianus</i>	climbing aster	AMCA14	Non-upland		OBL		7	4	7	4						
<i>Ampelopsis arborea</i>	peppervine	AMAR5	Non-upland	FACW	FAC		3	5	4	9	4	6	4	4	4	7
<i>Ampelopsis cordata</i>	heartleaf peppervine	AMCO2	Non-upland	FAC	FAC		4	3	5	5	4	5	4	4	4	5
<i>Amphianthus pusillus</i>	little amphianthus	AMPU7	Non-upland	OBL	OBL						10	6				
<i>Amphicarpaea bracteata</i>	American hogpeanut	AMBR2	Non-upland	FAC	FAC		5	4	5	8	5	8	5	4	5	7
<i>Amphicarpum muehlenbergianum</i>	Muhlenberg maidencane	AMMU2	Non-upland	FACW	FACW		5	4	7	4						
<i>Amphicarpum purshii</i>	blue maidencane	AMPU6	Non-upland	FACW	FACW		9	1	9	3						
<i>Amsonia ludoviciana</i>	Louisiana bluestar	AMLU2	Non-upland	FAC	FAC				7	2						
<i>Amsonia rigida</i>	stiff bluestar	AMRI	Non-upland		FACW		6	4	6	2						
<i>Amsonia tabernaemontana</i>	eastern bluestar	AMTA2	Non-upland	FAC	FACW		6	6	6	7	6	6	6	4	6	7
<i>Amsonia tabernaemontana</i> var. <i>gattereri</i>	eastern bluestar	AMTAG	Added; Absent from NWPL												8	2
<i>Amsonia tabernaemontana</i> var. <i>tabernaemontana</i>	eastern bluestar	AMTAT	Present 1988 WPL				7	2	6	5	6	4	7	1	7	4
<i>Amyris elemifera</i>	sea torchwood	AMEL	Non-upland		FAC		7	2								
<i>Anagallis minima</i>	chaffweed	ANMI4	Present 1988 WPL			Nativity questionable	4	4	1	3	1	3	5	1	4	3
<i>Anagallis pumila</i>	Florida pimpernel	ANPU4	Present 1988 WPL				4	1								
<i>Andropogon arctatus</i>	pinewoods bluestem	ANAR2	Non-upland		FAC		8	3	8	4						
<i>Andropogon brachystachyus</i>	shortspike bluestem	ANBR2	Non-upland		FAC		6	2								
<i>Andropogon capillipes</i>	chalky bluestem	ANCA4	Non-upland	FACU	FAC		5	3	5	3						
<i>Andropogon gerardii</i>	big bluestem	ANGE	Non-upland	FAC	FAC		7	4	6	8	6	7	7	2	7	7
<i>Andropogon glaucopsis</i>	purple bluestem	ANGL10	Non-upland		FACW		5	4	6	4						
<i>Andropogon glomeratus</i>	bushy bluestem	ANGL2	Non-upland	FACW	FACW	Taxonomically complex	4	4	3	5	3	5	5	4	4	4
<i>Andropogon gyrans</i>	Elliott's bluestem	ANGY2	Non-upland	OBL	FAC		5	3	5	7	5	4	6	0	5	5
<i>Andropogon gyrans</i> var. <i>stenophyllus</i>	Elliott's bluestem	ANGY5	Present 1988 WPL				6	2	8	3						
<i>Andropogon longiberbis</i>	hairy bluestem	ANLO2	Non-upland		FAC		5	3	7	3						
<i>Andropogon mohrii</i>	Mohr's bluestem	ANMO3	Non-upland	FACU	FACW		7	3	8	3						
<i>Andropogon virginicus</i>	broomsedge bluestem	ANVI2	Non-upland	FACU	FAC		3	4	3	8	2	7	2	3	2	5
<i>Anemone canadensis</i>	Canadian anemone	ANCA8	Non-upland	FACW	FAC								8	4	10	2
<i>Anemone quinquefolia</i>	wood anemone	ANQU	Added; Absent from NWPL	FACU	FACU				6	4	6	3	7	3	7	3
<i>Anemone virginiana</i>	tall thimbleweed	ANVI3	Added; Absent from NWPL	FACU	FACU				UND		6	1	5	2	5	3
<i>Angelica atropurpurea</i>	purplestem angelica	ANAT	Non-upland	OBL	OBL	Syn. <i>Amaranthus gracilis</i> is non-native							9*	2	9*	3
<i>Annona glabra</i>	pond apple	ANGL4	Non-upland		OBL		7	4								
<i>Anoda cristata</i>	crested anoda	ANCR2	Non-upland	UPL	FAC	Non-native	0		0		0		0		0	
<i>Apios americana</i>	groundnut	APAM	Non-upland	FACW	FACW		5	4	5	8	5	7	5	3	5	7
<i>Aplectrum hymemale</i>	Adam and Eve	APHY	Non-upland	FAC	FAC				8	5	7	7	7	2	7	5
<i>Apocynum cannabinum</i>	Indianhemp	APCA	Non-upland	FACU	FACU		3	4	2	5	2	4	3	3	3	5
<i>Apteria aphylla</i>	nodding nixie	APAP	Non-upland		FACW		9	4	9	4						
<i>Aquilegia canadensis</i>	red columbine	AQCA	Non-upland	FAC	FACU		8	5	8	6	8	7	7	3	7	6
<i>Arabis alpina</i>	alpine rockcress	ARAL8	Non-upland	FAC	FAC	Non-native							0		0	
<i>Aralia spinosa</i>	devil's walkingstick	ARSP2	Non-upland	FAC	FAC		4	5	4	9	4	8	5	1	5	7
<i>Arenaria lanuginosa</i>	spreading sandwort	ARLA4	Non-upland	FAC	FAC		6	4	7	2	7	2	7	1	7	2
<i>Arenaria serpyllifolia</i>	Thyme-Leaf Sandwort	ARSE2	Non-upland	FAC	UPL	Non-native	0		0		0		0		0	
<i>Arethusa bulbosa</i>	dragon's mouth	ARBU	Non-upland	OBL	OBL								10	0		
<i>Argentina anserina</i>	silverweed cinquefoil	ARAN7	Non-upland	OBL	OBL	Non-native							0			
<i>Arisaema dracontium</i>	green dragon	ARDR3	Non-upland	FACW	FACW		6	4	6	9	7	8	6	3	6	7
<i>Arisaema triphyllum</i>	Jack in the pulpit	ARTR	Non-upland	FACW	FACW		6	7	6	9	6	8	6	3	6	7
<i>Arisaema triphyllum</i> ssp. <i>quinatum</i>	Jack in the pulpit	ARTRQ	Present 1988 WPL				7	2					7	2		
<i>Arisaema triphyllum</i> ssp. <i>stewardsonii</i>	Jack in the pulpit	ARTRS	Added; Absent from NWPL										9	1	UND	
<i>Aristida beyrichiana</i>	Beyrich threeawn	ARBE7	Non-upland		FAC	Unscored; 2013 NWPL addition	UND		UND							
<i>Aristida palustris</i>	longleaf threeawn	ARPA26	Present 1988 WPL				6	4	7	4						
<i>Aristida patula</i>	tall threeawn	ARPA11	Non-upland		FAC		4	3	5	3						
<i>Aristida purpurascens</i>	arrowfeather threeawn	ARPU8	Non-upland	FAC	FACW		6	4	6	8	5	7	7	3	6	7

Table B-1. Coefficient of Conservatism Values for Wetland Plants Occurring in the Southeastern United States.

USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
Aristida purpurascens var. tenuispica	arrowfeather threeawn	ARPUT	Present 1988 WPL				6	3	7	2						
Aristida purpurascens var. virgata	arrowfeather threeawn	ARPUV	Present 1988 WPL				4	4	8	2	8	2	6	2	5	2
Aristida rhizophora	Florida threeawn	ARRH	Non-upland		FACW		8	4								
Aristida simpliciflora	southern threeawn	ARSI3	Non-upland		FAC		8	4	9	4						
Aristida spiciformis	bottlebrush threeawn	ARSP3	Non-upland	FAC	FAC		5	4	7	3						
Aristida stricta	pineland threeawn	ARST5	Non-upland	FAC	FAC		8	5	8	5	8	2				
Aristolochia tomentosa	woolly dutchman's pipe	ARTO3	Non-upland	FAC	FAC		6	3	6	4	7	4	7	3	7	5
Arnoglossum diversifolium	variableleaf Indian plantain	ARDI9	Non-upland		FACW		7	3	9	4						
Arnoglossum ovatum	ovateleaf cacalia	AROV	Non-upland	FAC	FACW		8	4	9	4						
Arnoglossum plantagineum	groovestem Indian plantain	ARPL4	Non-upland	FACW	FACU		8	1	8	4					9	3
Arnoglossum sulcatum	Georgia Indian plantain	ARSU5	Non-upland		OBL		8	3	8	3						
Arthraxon hispidus	Small Carp Grass	ARHI3	Non-upland	FAC	FAC	Non-native			0		0		0		0	
Arundinaria gigantea	giant cane	ARGI	Non-upland	FACW	FACW		5	5	5	8	6	8	6	3	5	7
Arundinaria gigantea ssp. tecta	switchcane	ARGIT8	Non-upland	FACW	FACW				8	7			8	2		
Arundo donax	Giant-Reed	ARDO4	Non-upland	FACU	FAC	Non-native	0		0		0				0	
Asclepias connivens	largeflower milkweed	ASCO19	Non-upland		OBL		8	3	9	3						
Asclepias curassavica	Bloodflower	ASCU	Non-upland	FAC	FAC	Non-native (Adventive)	0									
Asclepias hirtella	green milkweed	ASHI	Non-upland	FAC	FAC	Unscored; 2013 NWPL addition	UND		UND						8	1
Asclepias incarnata	swamp milkweed	ASIN	Non-upland	OBL	OBL		5	4	5	6	5	4	5	2	5	6
Asclepias lanceolata	fewflower milkweed	ASLA2	Non-upland	OBL	OBL		6	4	6	5						
Asclepias longifolia	longleaf milkweed	ASLO	Non-upland	OBL	FACW		8	5	8	3	UND					
Asclepias michauxii	Michaux's milkweed	ASMI12	Non-upland	FAC	FAC		8	4	8	3						
Asclepias pedicellata	savannah milkweed	ASPE8	Non-upland		FACW		6	4	8	4						
Asclepias perennis	aquatic milkweed	ASPE	Non-upland	OBL	OBL		7	6	7	6					8	5
Asclepias rubra	red milkweed	ASRU	Non-upland	OBL	OBL		7	4	7	3	UND					
Asclepias viridula	southern milkweed	ASVI9	Non-upland		FACW		9	4	9	3						
Asimina triloba	pawpaw	ASTR	Non-upland	FAC	FAC		7	4	7	8	7	7	6	2	6	7
Asplenium abscessum	cutleaf spleenwort	ASAB2	Non-upland	FACW	FACW		9	3								
Asplenium cristatum	parsley spleenwort	ASCR6	Non-upland		FAC		8	3								
Asplenium heterochromum	bicolored spleenwort	ASHE3	Non-upland		FAC		9	2	10	2						
Asplenium montanum	mountain spleenwort	ASMO2	Added; Absent from NWPL										9	0	9	2
Asplenium pumilum	dwarf spleenwort	ASPU10	Non-upland		FAC		7	3								
Asplenium trichomanes	maidenhair spleenwort	ASTR2	Non-upland	FAC	FAC		9	3	9	4	9	5	9	2	9	5
Asplenium trichomanes-dentatum	toothed spleenwort	ASTR9	Non-upland		FACW		9	4								
Astragalus canadensis	Canadian milkvetch	ASCA11	Non-upland	FAC	FAC				8	3	8	3	8	2	8	7
Athyrium filix-femina	common ladyfern	ATFI	Non-upland	FAC	FAC		6	5	6	9	6	8	6	2	6	7
Atriplex cristata	crested saltbush	ATCR2	Non-upland	FAC	FAC		5	1	5	2						
Atriplex prostrata	triangle orache	ATPR	Non-upland	FACW	FACW	Non-native									0	
Avicennia germinans	black mangrove	AVGE	Non-upland		OBL		8	3								
Axonopus compressus	broadleaf carpetgrass	AXCO	Non-upland	FACW	FAC	May be non-native in CP, PMDNT	4	3	2	4	2	3				
Axonopus fissifolius	common carpetgrass	AXFI	Non-upland	FACW	FACW		3	3	2	4	1	3	2	1		
Axonopus furcatus	big carpetgrass	AXFU	Non-upland	FACW	OBL		3	5	3	6	2	2	2	2		
Azolla caroliniana	Carolina mosquitofern	AZCA	Non-upland	OBL	OBL		2	3	3	8	3	4	3	3	4	7
Baccharis angustifolia	saltwater false willow	BAAAN	Non-upland		FACW		5	3	6	4						
Baccharis glomeruliflora	silverling	BAGL	Non-upland		FACW		5	4	6	3						
Baccharis halimifolia	eastern baccharis	BAHA	Non-upland	FACW	FAC	Non-native in Mtns and ILP	2	5	3	7	1	6	0		0	
Bacopa caroliniana	blue waterhyssop	BACA	Non-upland	OBL	OBL	Non-native in Mtns	4	4	5	6			0			
Bacopa innominata	tropical waterhyssop	BAIN2	Non-upland		OBL		5	3	9	1						
Bacopa monnieri	herb of grace	BAMO	Non-upland	OBL	OBL		4	3	3	4						
Bacopa repens	creeping waterhyssop	BARE	Non-upland		OBL	Non-native	0									
Bacopa rotundifolia	disk waterhyssop	BARO	Non-upland	OBL	OBL				5	3					6	4
Balduina atropurpurea	purpledisk honeycombhead	BAAT	Non-upland	FACW	FACW		8	5	8	3						
Balduina uniflora	oneflower honeycombhead	BAUN	Non-upland	FACW	FACW		6	5	8	4						
Baptisia alba var. macrophylla	largeleaf wild indigo	BAALM	Present 1988 WPL				7	1	7	5					8	4
Baptisia megacarpa	Apalachicola wild indigo	BAME	Non-upland	FAC	FAC		7	3	7	3						
Barbarea vulgaris	Garden Yellow-Rocket	BAVU	Non-upland	FACU	FAC	Non-native			0		0		0		0	
Bartonia paniculata	twining screwstem	BAPA2	Non-upland	OBL	OBL		8	3	8	5	8	4	8	1	8	4
Bartonia verna	white screwstem	BAVE2	Non-upland		OBL		5	3	7	4						
Bartonia virginica	yellow screwstem	BAVI3	Non-upland	FACW	FACW		7	4	7	5	7	4	8	3	8	4
Batis maritima	turtleweed	BAMA5	Non-upland		OBL		6	3	7	4						
Bejaria racemosa	flyweed	BERA3	Non-upland		FAC		7	2	7	3						
Berchemia scandens	Alabama supplejack	BESC	Non-upland	FACW	FAC		5	5	6	9	6	8	5	1	6	6
Betula alleghaniensis	yellow birch	BEAL2	Non-upland	FAC	FACU				7	3	7	3	7	2	8	4
Betula nigra	river birch	BENI	Non-upland	FACW	FACW		4	3	4	8	4	8	5	3	5	6
Betula populifolia	gray birch	BEPO	Non-upland	FAC	FAC	Non-native							0			
Bidens aristosa	bearded beggarticks	BIAR	Non-upland	FACW	FACW				3	7	2	7	3	2	3	5
Bidens bipinnata	Spanish needles	BIBI7	Non-upland	FACU	FAC		3	3	2	8	2	7	2	2	3	5
Bidens cernua	nodding beggartick	BICE	Non-upland	OBL	OBL						5	3	5	3	4	4
Bidens coronata	crowned beggarticks	BICO	Non-upland	OBL	OBL		5	2	6	4			4	2	4	3
Bidens discordea	small beggarticks	BIDI	Non-upland	FACW	FACW		4	4	5	5	5	4	5	3	5	4
Bidens frondosa	devil's beggartick	BIFR	Non-upland	FACW	FACW		2	3	2	9	2	8	2	2	2	6

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<i>Bidens laevis</i>	smooth beggartick	BILA	Non-upland	OBL	OBL		5	3	6	4						
<i>Bidens mitis</i>	smallfruit beggarticks	BIMI	Non-upland	OBL	OBL		5	3	6	4						
<i>Bidens pilosa</i>	Hairy Beggarticks	BIPI	Non-upland	FACW	FAC	Non-native (Adventive)	0		0							
<i>Bidens tripartita</i>	three-lobed beggarticks	BITR	Non-upland	FACW	FACW						5	5	3	4	3	5
<i>Bidens vulgata</i>	big devil beggartick	BIVU	Non-upland	FAC	OBL				3	1	4	3	3	3	3	3
<i>Bigelovia nudata</i>	pineland rayless goldenrod	BINU	Non-upland	FACW	FACW		7	4	7	5	UND					
<i>Bignonia capreolata</i>	crossvine	BICA	Non-upland	FAC	FAC		4	5	4	9	5	8	5	3	5	6
<i>Blechnum occidentale</i>	hammock fern	BLOC	Non-upland		FAC		6	3								
<i>Blechnum serrulatum</i>	toothed midsorus fern	BLSE	Non-upland		FACW		6	3	5	3						
<i>Blechnum pyramidatum</i>	Yerba-de-Papagayo	BLPY	Non-upland		FACW	Non-native (Adventive)	0									
<i>Bletia purpurea</i>	pinepink	BLPU	Non-upland		FAC		7	3								
<i>Blutaparon vermiculare</i>	silverhead	BLVE	Non-upland		FACW		6	3								
<i>Boehmeria cylindrica</i>	smallspike false nettle	BOCY	Non-upland	FACW	FACW		5	4	4	9	4	8	5	3	5	7
<i>Boltonia asteroides</i>	white doll's daisy	BOAS	Non-upland	FACW	FACW		5	4	5	2	5	2	5	2	6	3
<i>Boltonia caroliniana</i>	Carolina doll's daisy	BOCA2	Non-upland	FACW	FACW				6	3						
<i>Boltonia diffusa</i>	smallhead doll's daisy	BODI	Non-upland	FAC	FACW		4	5	4	4	2	2	5	1	5	2
<i>Borrichia frutescens</i>	bushy seaside tansy	BOFR	Non-upland		OBL		8	4	8	6						
<i>Botrychium biternatum</i>	sparselobe grapefern	BOBI	Present 1988 WPL				5	4	5	5	5	4	6	1	6	3
<i>Botrychium dissectum</i>	cutleaf grapefern	BODI2	Present 1988 WPL				5	4	5	4	5	3	5	3	6	4
<i>Botrychium lanceolatum</i>	lanceleaf grapefern	BOLA	Non-upland	FACW	FAC								UND		5	1
<i>Botrychium oneidense</i>	bluntlobe grapefern	BOON	Non-upland	FAC		2013 NWPL addition							7	1		
<i>Bowlesia incana</i>	hoary bowlesia	BOIN3	Non-upland	FAC	FAC	Non-native to FL	1*	4	1*	3						
<i>Boykinia aconitifolia</i>	Allegheny brookfoam	BOAC	Non-upland	FACW	FACW						9	3	9	2		
<i>Brasenia schreberi</i>	watershield	BRSC	Non-upland	OBL	OBL		6	3	5	6	5	5	6	3	6	4
<i>Briza minor</i>	Lesser Quaking Grass	BRMI2	Non-upland	FACW	FAC	Non-native	0		0							
<i>Bromus ciliatus</i>	fringed brome	BRCI2	Non-upland	FACW	FACW								9	2		
<i>Bromus latiglumis</i>	earlyleaf brome	BRLA4	Non-upland	FACW	FACW						7	2	9	1	8	1
<i>Brugmansia suaveolens</i>	Angel's-Tears	BRSU3	Non-upland		FACW	Non-native (Adventive)	0									
<i>Brunnichia ovata</i>	American buckwheat vine	BRUV4	Non-upland	FACW	FACW		5	5	5	7	4	4	5	2	5	5
<i>Buchnera americana</i>	American bluehearts	BUAM	Non-upland	FACU	FAC		5	4	8	6	8	4	8	2	9	4
<i>Bulbostylis barbata</i>	Water-Grass	BUBA	Non-upland	FAC	FAC	Non-native	0		0		0		0			
<i>Bulbostylis capillaris</i>	densetuft hairsedge	BUCA2	Non-upland	FACU	FAC		4	4	4	7	4	5	5	3	5	4
<i>Bulbostylis ciliatifolia</i>	capillary hairsedge	BUCI	Non-upland	FACU	FAC		4	4	4	4	4	2				
<i>Burmammia biflora</i>	northern bluethread	BUBI	Non-upland	OBL	OBL		8	2	8	4	UND					
<i>Burmammia capitata</i>	southern bluethread	BUCA3	Non-upland	OBL	OBL		7	4	6	4	UND					
<i>Burmammia flava</i>	Fahkhatchee bluethread	BUFL2	Non-upland		OBL		5	2								
<i>Cabomba caroliniana</i>	Carolina fanwort	CACA	Non-upland	OBL	OBL		4	3	5	6	4	3	2	0	7	2
<i>Caesalpinia bonduc</i>	yellow nicker	CABO6	Non-upland		FAC		4	3								
<i>Cakile lanceolata</i>	coastal searocket	CALA2	Non-upland		FAC		6	2								
<i>Calamagrostis cainii</i>	Cain's reedgrass	CACA2	Non-upland										10	0		
<i>Calamagrostis canadensis</i>	bluejoint	CACA4	Non-upland	FACW	OBL								9	3		
<i>Calamagrostis coarctata</i>	arctic reedgrass	CACO71	Non-upland	OBL	OBL				6	4	7	4	8	3	8	4
<i>Calamovilfa arcuata</i>	Cumberland sandreed	CAAR12	Non-upland	FACW	FACW								10	0		
<i>Calamovilfa brevifolia</i>	pine barren sandreed	CABR2	Non-upland	OBL	OBL		10	1	10	3	9	4				
<i>Calamovilfa curtisii</i>	Florida sandreed	CACU	Non-upland		FACW		7	4	9	3						
<i>Calibrachoa parviflora</i>	seaside petunia	CAPA47	Non-upland	FACW	FAC	Non-native	0									
<i>Calliandra dichotoma</i>	Chinese Beauty-Berry	CADI	Non-upland	OBL	OBL	Non-native			0		0					
<i>Callirhoe alcaeoides</i>	light poppymallow	CAAL	Present 1988 WPL			In the Mtns and ILP, only native is habitats associated with rocky barrens, glades, or remnant prairies; other habitats are non-native and score is zero					8	2	9*	2	9*	3
<i>Callitriche heterophylla</i>	twoheaded water-starwort	CAHE3	Non-upland	OBL	OBL		4	1	4	6	4	7	5	2	5	5
<i>Callitriche pedunculosa</i>	Nuttall's water-starwort	CAPE44	Non-upland	FACW	FACW		7	1	1	1			1	0		
<i>Callitriche peploides</i>	matted water-starwort	CAPE16	Non-upland	OBL	OBL		3	3	3	3						
<i>Callitriche terrestris</i>	terrestrial water-starwort	CATE19	Non-upland	FACW	FACW				3	4	3	4	3	2	3	5
<i>Calophyllum antillanum</i>	Antilles calophyllum	CAAN22	Non-upland		FACW	Non-native	0									
<i>Calopogon barbatus</i>	bearded grasspink	CABA	Non-upland	FACW	FACW		9	4	9	5						
<i>Calopogon multiflorus</i>	manyflower grasspink	CAMU10	Non-upland		FACW		9	4	10	4						
<i>Calopogon pallidus</i>	pale grasspink	CAPA4	Non-upland	OBL	OBL		9	4	8	5						
<i>Calopogon tuberosus</i>	tuberosus grasspink	CATU5	Non-upland	FACW	OBL		9	7	9	8	9	6	9	2	9	5
<i>Caltha palustris</i>	yellow marsh marigold	CAPA5	Non-upland	OBL	OBL								9	2	9	4
<i>Calycocarpum lyonii</i>	cupseed	CALY2	Non-upland	FACW	FACW		6	4	7	5	7	4	6	1	7	5
<i>Calydorea coelestina</i>	Bartram's ixia	CACO72	Non-upland		FACW		9	4								
<i>Calyptocarpus vialis</i>	Straggler Daisy	CAVI2	Non-upland	FAC	FAC	Non-native (Adventive)	0		0							
<i>Calystegia sepium</i>	hedge false bindweed	CASC13	Non-upland	FAC	FAC	Native	2	4	2	4	2	4	2	3	2	4
<i>Camassia scilloides</i>	Atlantic camas	CASC5	Non-upland	FAC	FACW		7	1	8	3	8	4	8	2	8	6
<i>Campanula aparinoides</i>	marsh bellflower	CAAP2	Non-upland	OBL	OBL						7	2	8	2	8	3
<i>Campanula floridana</i>	Florida bellflower	CAFL18	Non-upland		OBL		5	3								
<i>Campanula robiniae</i>	Robins' bellflower	CARO15	Non-upland		FACW		8	2								
<i>Campanulastrum americanum</i>	American bellflower	CAAM18	Non-upland	FACU	FAC		5	4	5	3	6	7	6	3	5	5
<i>Campsis radicans</i>	trumpet creeper	CARA2	Non-upland	FAC	FAC		2	4	2	9	2	8	2	2	2	6
<i>Canavalia rosea</i>	baybean	CARO26	Non-upland		FAC		4	3								

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Canna flaccida</i>	bandanna of the Everglades	CAFL11	Non-upland		OBL		5	3	7	2						
<i>Canna glauca</i>	maraca amarilla	CAGL13	Non-upland		OBL	Non-native	0									
<i>Canna indica</i>	Indian-Shot	CAIN19	Non-upland		OBL	Non-native	0		0		0					
<i>Caperonia palustris</i>	Sacatrapo	CAPA11	Non-upland		FACW	Non-native (Adventive)	0									
<i>Capparis cynophallophora</i>	Jamaican caper	CACY	Non-upland		FAC		7	2								
<i>Capparis flexuosa</i>	false-teeth	CAFL2	Non-upland		FACW		7	2								
<i>Capriaria biflora</i>	goatweed	CABI13	Non-upland		FACW		3	3								
<i>Cardamine angustata</i>	slender toothwort	CAAN11	Non-upland	FACU	FAC		7	1	8	4	7	7	7	2	7	6
<i>Cardamine bulbosa</i>	bulbous bittercress	CABU3	Non-upland	OBL	OBL		7	4	6	6	6	8	6	3	6	6
<i>Cardamine clematitis</i>	small mountain bittercress	CACL2	Non-upland	OBL							9	3	9	2		
<i>Cardamine douglasii</i>	limestone bittercress	CADO	Non-upland	FACW	OBL				7	6	7	4	7	1	7	6
<i>Cardamine flexuosa</i>	Woodland Bittercress	CAFL14	Non-upland	OBL	FACU	Non-native	0		0		0		0			
<i>Cardamine longii</i>	Long's bittercress	CALO11	Non-upland	OBL	OBL				8	2						
<i>Cardamine micranthera</i>	streambank bittercress	CAMI19	Non-upland	OBL							9	2				
<i>Cardamine parviflora</i>	sand bittercress	CAPA12	Added; Absent from NWPL	FACU	FACU		4	3	4	2	4	1	3	3	3	5
<i>Cardamine pensylvanica</i>	Pennsylvania bittercress	CAPE3	Non-upland	OBL	FACW		3	3	5	6	5	5	5	3	4	7
<i>Cardamine rotundifolia</i>	American bittercress	CARO3	Non-upland	OBL	OBL								8	2	8	4
<i>Cardiospermum halicacabum</i>	Love-in-a-Puff	CAHA13	Non-upland	FACU	FAC	Nuisance native	1	2	1	2	1	2				
<i>Carex abscondita</i>	thicket sedge	CAAB5	Non-upland	FAC	FACW		6	3	8	4	8	4	7	3	7	4
<i>Carex alata</i>	broadwing sedge	CAAL3	Non-upland	OBL	OBL		6	5	6	6	6	6	7	3	7	6
<i>Carex albicans</i>	whitetinge sedge	CAAL25	Non-upland	UPL	FAC		6	4	5	5	6	4	6	2	6	4
<i>Carex albolutescens</i>	greenwhite sedge	CAAL5	Non-upland	FACW	FACW		4	7	5	6	5	5	5	3	5	6
<i>Carex alopecoidea</i>	foxtail sedge	CAAL8	Non-upland	FACW	FACW								9	1		
<i>Carex amphibola</i>	eastern narrowleaf sedge	CAAM8	Non-upland	FAC	FACW		6	5	6	5	6	4	5	4	5	6
<i>Carex annectens</i>	yellowfruit sedge	CAAN6	Non-upland	FACW	FACW		4	5	4	4	4	5	4	2	4	6
<i>Carex atlantica</i>	prickly bog sedge	CAAT4	Non-upland	FACW	FACW		7	4	7	7	7	6	7	4	7	6
<i>Carex atlantica ssp. capillacea</i>	prickly bog sedge	CAATC	Present 1988 WPL				7	3	8	4	7	3	8	2	8	3
<i>Carex baileyi</i>	Bailey's sedge	CABA7	Non-upland	OBL	FACW								7	1	7	3
<i>Carex barrattii</i>	Barratt's sedge	CABA9	Non-upland	OBL	OBL				8	3			9	1	9	3
<i>Carex basiantha</i>	Willdenow's sedge	CABA24	Non-upland	FACW	FACW		8	3	8	4	UND		8	2	8	3
<i>Carex bicknellii</i>	Bicknell's sedge	CABI3	Non-upland	FAC	FAC						10	2				
<i>Carex blanda</i>	eastern woodland sedge	CABL	Non-upland	FAC	FAC		4	4	4	6	4	7	4	2	4	6
<i>Carex brevior</i>	shortbeak sedge	CABR10	Non-upland	UPL	OBL				5	1			4	0	4	4
<i>Carex bromoides</i>	brome-like sedge	CABR14	Non-upland	FACW	FACW		8	4	8	5	8	6	8	1	8	4
<i>Carex brunnescens</i>	brownish sedge	CABR15	Non-upland	FACW	FAC								9	1		
<i>Carex bullata</i>	button sedge	CABU7	Non-upland	OBL	OBL		7	2	8	4	8	4	8	1	7	3
<i>Carex bushii</i>	Bush's sedge	CABU5	Non-upland	FACW	FACW				6	2	6	3	6	2	6	5
<i>Carex buxbaumii</i>	Buxbaum's sedge	CABU6	Non-upland	OBL	OBL						7	2	9	1	9	5
<i>Carex canescens</i>	silvery sedge	CACA11	Non-upland	OBL	OBL				8	3			7	0		
<i>Carex caroliniana</i>	Carolina sedge	CACA15	Non-upland	FACU	FACW		5	5	5	6	5	6	5	2	5	5
<i>Carex cephalophora</i>	oval-leaf sedge	CACE	Non-upland	FACU	FAC		4	5	4	4	5	4	5	4	5	6
<i>Carex chapmanii</i>	Chapman's sedge	CACH9	Non-upland	FACW	FACW		8	2	7	3						
<i>Carex cherokeensis</i>	Cherokee sedge	CACH3	Non-upland	FACW	FACW		5	4	6	8	6	5	4	4	4	5
<i>Carex collinsii</i>	Collins' sedge	CACO21	Non-upland	OBL	OBL				9	4			10	1	10	1
<i>Carex comosa</i>	longhair sedge	CAC08	Non-upland	OBL	OBL		6	5	6	4	6	4	8	3	9	4
<i>Carex complanata</i>	hirsute sedge	CACO9	Non-upland	FACU	FAC		5	4	5	6	5	5	6	4	6	5
<i>Carex conjuncta</i>	soft fox sedge	CACO13	Non-upland	FACW	FAC								5	1	6	4
<i>Carex conoidea</i>	openfield sedge	CACO14	Non-upland	FACU	FACW						8	2	9	0		
<i>Carex corrugata</i>	prune-fruit sedge	CACO22	Non-upland	FACW	FACW		7	4	7	5			6	3	6	5
<i>Carex crawei</i>	Crawe's sedge	CACR3	Non-upland	FACW	OBL								9	1	8	7
<i>Carex crebriflora</i>	coastal plain sedge	CACR5	Non-upland	FACW	FACW		6	5	7	5	7	5	7	4	7	5
<i>Carex crinita</i>	fringed sedge	CACR6	Non-upland	OBL	FACW		6	4	6	7	6	6	6	3	6	5
<i>Carex cristatella</i>	crested sedge	CACR7	Non-upland	FACW	FAC								6	2	6	4
<i>Carex crus-corvi</i>	ravenfoot sedge	CACR8	Non-upland	OBL	OBL		6	5	5	7			6	3	6	5
<i>Carex davisii</i>	Davis' sedge	CADA	Non-upland	FAC	FAC										7	5
<i>Carex debilis</i>	white edge sedge	CADE5	Non-upland	FAC	FACW		7	4	6	7	6	7	6	3	7	5
<i>Carex decomposita</i>	cypressknee sedge	CADE6	Non-upland	OBL	OBL		9	5	9	6			9	3	9	6
<i>Carex divisa</i>	Separated Sedge	CADI8	Non-upland		OBL	Non-native			0							
<i>Carex echinata</i>	star sedge	CAEC	Non-upland	OBL	OBL								9	2		
<i>Carex elliotii</i>	Elliott's sedge	CAEL9	Non-upland	OBL	OBL		8	4	8	3						
<i>Carex emoryi</i>	Emory's sedge	CAEM2	Non-upland	OBL	OBL								9	1	9	3
<i>Carex exilis</i>	coastal sedge	CAEX7	Non-upland	OBL	OBL		9	3	9	4						
<i>Carex festucacea</i>	fescue sedge	CAFE3	Non-upland	FAC	FACW		5	5	5	4	5	5	5	2	5	5
<i>Carex fissa</i>	hammock sedge	CAFI5	Non-upland	FACW	FACW		4	4	4	5						
<i>Carex flaccosperma</i>	thinfruit sedge	C AFL3	Non-upland	FAC	FACW		7	4	7	5	7	4	7	3	7	4
<i>Carex folliculata</i>	northern long sedge	CAFO6	Non-upland	OBL	OBL	Now called <i>Carex longicarpa</i> in ILP			7	6	7	7	8	1	9	2
<i>Carex frankii</i>	Frank's sedge	CAFR3	Non-upland	OBL	OBL		3	4	4	5	4	7	4	5	3	7
<i>Carex gigantea</i>	giant sedge	CAGI4	Non-upland	OBL	OBL		8	4	7	7	7	6	8	1	8	6
<i>Carex glaucescens</i>	southern waxy sedge	CAGL5	Non-upland	OBL	OBL		7	5	7	8	7	7	7	2	8	4
<i>Carex glaucoidea</i>	blue sedge	CAGL6	Non-upland	FAC	FACW				4	1			6	3	5	5
<i>Carex godfreyi</i>	Godfrey's sedge	CAGO3	Added; Absent from NWPL				UND		9	1						

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Carex granularis	limestone meadow sedge	CAGR3	Non-upland	FACW	FACW		4	3	5	5	4	3	5	2	5	6
Carex gravida	heavy sedge	CAGR4	Non-upland	FACW	FACW	Non-native; presumed alien in the East	0		0		0		0		5	5
Carex grayi	Gray's sedge	CAGR5	Non-upland	FACW	FACW		6	4	7	6	8	4	7	3	6	5
Carex grisea	inflated narrow-leaf sedge	CAGR24	Non-upland	FACU	FACW				6	4	6	3	6	1	6	3
Carex gynandra	nodding sedge	CAGY4	Non-upland	OBL	FACW						6	4	6	3	7	5
Carex hormathodes	marsh straw sedge	CAHO8	Non-upland	OBL	OBL				8	2						
Carex hyalinolepis	shoreline sedge	CAHY3	Non-upland	OBL	OBL		7	4	6	6	9	2	6	3	6	4
Carex hystericina	bottlebrush sedge	CAHY4	Non-upland	OBL	OBL						7	3	8	2	8	3
Carex interior	inland sedge	CAIN11	Non-upland	OBL	OBL								10	1		
Carex intumescens	greater bladder sedge	CAIN12	Non-upland	FACW	FACW		7	4	6	9	6	8	6	3	7	6
Carex jorii	cypress swamp sedge	CAJO2	Non-upland	OBL	OBL		8	4	8	5	8	4	8	2	8	4
Carex lacustris	hairy sedge	CALA16	Non-upland	OBL	OBL				7	3						
Carex laevivaginata	smoothsheath sedge	CALA14	Non-upland	OBL	OBL		6	5	7	4	7	4	7	2	7	5
Carex lasiocarpa	woollyfruit sedge	CALA11	Non-upland	OBL	OBL								10	1		
Carex leptalea	bristlystalked sedge	CALE10	Non-upland	OBL	OBL		8	4	8	8	8	7	8	2	8	6
Carex leptonevia	nerveless woodland sedge	CALE11	Non-upland	FACW	FACW								7	3		
Carex lonchocarpa	southern long sedge	CALO9	Non-upland	OBL	OBL		8	4	8	4						
Carex longii	Long's sedge	CALO5	Non-upland	OBL	OBL		4	3	3	6	3	1	3	2	4	5
Carex louisianica	Louisiana sedge	CALO6	Non-upland	OBL	OBL		7	4	7	5	7	5	8	1	7	6
Carex lupuliformis	false hop sedge	CALU3	Non-upland	FACW	OBL		7	5	8	4	8	3	8	1	8	6
Carex lupulina	hop sedge	CALU4	Non-upland	OBL	OBL		5	5	5	7	5	6	5	2	6	6
Carex lurida	shallow sedge	CALU5	Non-upland	OBL	OBL		4	4	4	9	4	8	5	4	5	7
Carex meadii	Mead's sedge	CAME2	Non-upland	FAC	FAC				3	1	7	4	8	2	8	7
Carex microdonta	littletooth sedge	CAMI5	Non-upland	FACW	FACW		9	1	7	3						
Carex mitchelliana	Mitchell's sedge	CAMI18	Non-upland	OBL	FACW		8	5	7	5	7	6	8	2		
Carex molesta	troublesome sedge	CAMO11	Non-upland	FAC	FAC				5	3					5	4
Carex muskingumensis	Muskingum sedge	CAMU9	Non-upland	OBL	OBL										8	4
Carex normalis	greater straw sedge	CANO	Non-upland	FACU	FACW				6	2	6	5	6	1	6	5
Carex oklahomensis	Oklahoma sedge	CAOK	Non-upland	OBL	OBL	Species appears to be spreading eastward. Some populations non-native and should be scored 0. Non-native in NC.			4*	4			4*	2	4	2
Carex oligosperma	fewseed sedge	CAOL3	Non-upland	OBL									9	0		
Carex opaca	Bicknell's sedge	CAOP5	Non-upland	FACW	FACW				UND							
Carex ovalis	eggbract sedge	CAOV8	Non-upland	FAC	FAC	Non-native							0			
Carex oxylepis	sharpscale sedge	CAOX	Non-upland	FACW	FACW		7	4	7	7	7	5	7	1	7	5
Carex pallescens	pale sedge	CAPA17	Non-upland	FACW	FACW								8	0		
Carex pedunculata	longstalk sedge	CAPE4	Non-upland	OBL	OBL								9	1	8	2
Carex pellita	woolly sedge	CAPE42	Non-upland	OBL	OBL				8	3						
Carex pigra	Tarheel sedge	CAPI21	Non-upland	FACW	FACW				6	4			6	1		
Carex prasina	drooping sedge	CAPR12	Non-upland	OBL	OBL				7	1	7	5	7	1	7	5
Carex projecta	necklace sedge	CAPR9	Non-upland	FACW	FACW								7	1		
Carex radiata	eastern star sedge	CARA8	Non-upland	FAC		Unscored; 2013 NWPL addition			UND		UND		8	1	8	1
Carex reniformis	kidneyshape sedge	CARE17	Non-upland	FACW	FACW		5	4	8	3	6	4	6	4	7	3
Carex scabrata	eastern rough sedge	CASC13	Non-upland	OBL	OBL						9	2	8	2	9	2
Carex scoparia	broom sedge	CASC11	Non-upland	FACW	FACW				6	4	6	4	6	3	6	5
Carex seorsa	weak stellate sedge	CASE6	Non-upland	FACW	FACW		8	3	8	5	8	4	9	2	8	5
Carex shortiana	Short's sedge	CASH2	Non-upland	FAC	FACW								6	3	6	4
Carex sparganioides	bur-reed sedge	CASP3	Non-upland	FACU	FAC						5	3	5	2	5	5
Carex squarrosa	squarrose sedge	CASQ2	Non-upland	FACW	FACW		5	3	5	6	5	6	6	2	6	6
Carex sterilis	dioecious sedge	CAST16	Non-upland	OBL	OBL								10	1		
Carex stipata	awlfuit sedge	CAST5	Non-upland	OBL	OBL		4	5	5	5	5	5	6	3	6	4
Carex stipata var. maxima	stalkgrain sedge	CASM	Added; Absent from NWPL				5	1	3	1	4	2	7	0	8	1
Carex straminea	eastern straw sedge	CAST6	Non-upland	OBL	OBL										9	3
Carex striata	Walter's sedge	CAST41	Non-upland	OBL	OBL		7	4	7	6	UND					
Carex striata var. striata	Walter's sedge	CASTS4	Present 1988 WPL				6	3								
Carex stricta	upright sedge	CAST8	Non-upland	OBL	OBL				8	3	7	4	8	1	8	4
Carex styloflexa	bent sedge	CAST9	Non-upland	FACW	FACW		7	3	7	5	7	5	7	3	7	5
Carex superata	Willdenow's sedge	CASU67	Non-upland	FAC	FAC				7	3	7	3	7	0	7	5
Carex tenera	quill sedge	CATE3	Non-upland	FAC	FACW				6	1	7	2	6	0	6	3
Carex tetanica	rigid sedge	CATE6	Non-upland	FACW	FACW				9	1	8	4	9	2	8	3
Carex torta	twisted sedge	CATO4	Non-upland	FACW	OBL				8	1	8	5	8	2	8	6
Carex triangularis	eastern fox sedge	CATR6	Non-upland	FACW	FACW		6	3	7	3			8	2	8	4
Carex tribuloides	blunt broom sedge	CATR7	Non-upland	FACW	FACW	Taxonomically complex	4	4	5	6	4	5	4	2	4	5
Carex trichocarpa	hairyfruit sedge	CATR8	Non-upland	OBL	OBL								8	1		
Carex trisperma	three-seeded sedge	CATR10	Non-upland	OBL	OBL								10	0		
Carex turgescens	pine barren sedge	CATU4	Non-upland	OBL	OBL		7	4	7	3	UND					
Carex typhina	cattail sedge	CATY	Non-upland	FACW	OBL		6	3	7	7	7	6	7	2	7	6
Carex utriculata	Northwest Territory sedge	CAUT	Non-upland	OBL	OBL								8	2		
Carex venusta	darkgreen sedge	CAVE7	Non-upland	OBL	FACW		8	2	8	5	8	4	8	3	8	5
Carex verrucosa	warty sedge	CAVE8	Non-upland	OBL	OBL		7	5	7	6	8	1	8	0		
Carex vexans	Florida hammock sedge	CAVE10	Non-upland		FACW		6	4								

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Carex vulpinoidea	fox sedge	CAVU2	Non-upland	OBL	FACW		3	5	3	7	3	6	3	1	3	7
Carex willdenowii	Willdenow's sedge	CAWI2	Non-upland	UPL	FACW				8	1	7	5	7	2	7	4
Carphephorus carnosus	pineland chaffhead	CACA59	Non-upland		FACW		9	4								
Carphephorus odoratissimus	vanillaleaf	CAOD3	Non-upland	FACW	FACW		7	5	7	7						
Carphephorus paniculatus	hairy chaffhead	CAPA53	Non-upland	FACW	FACW		8	5	8	4						
Carphephorus pseudoliatris	bristleleaf chaffhead	CAPS5	Non-upland		OBL		9	5	9	3						
Carphephorus tomentosus	woolly chaffhead	CAT05	Non-upland	FACW	FACW		6	4	8	4						
Carpinus caroliniana	American hornbeam	CACA18	Non-upland	FAC	FAC		6	6	5	9	5	8	5	1	6	6
Carya aquatica	water hickory	CAAQ2	Non-upland	OBL	OBL		7	5	7	8	8	5	8	2	8	5
Carya cordiformis	bitternut hickory	CACO15	Non-upland	FACU	FAC		6	4	6	8	6	7	6	3	6	6
Carya illinoensis	pecan	CAIL2	Added; Absent from NWPL	FACU	FACU	Non-native in Mtns and ILP	2	1	4	2	2	1	0		0	
Carya laciniosa	shellbark hickory	CALA21	Non-upland	FAC	FACU		8	6	8	6	8	5	6	2	6	5
Carya myristiciformis	nutmeg hickory	CAMY	Non-upland	FACW	FACW		9	1	6	7			8	0		
Casasia clusiifolia	sevenyear apple	CACL3	Non-upland		FAC		6	3								
Cassya filiformis	devil's gut	CAFI4	Non-upland		FAC		3	3								
Castilleja coccinea	scarlet Indian paintbrush	CACO17	Non-upland	FAC	FAC				8	3	8	5	9	2	8	5
Casuarina glauca	Gray She-Oak	CAGL11	Non-upland		FAC	Non-native	0									
Catalpa speciosa	northern catalpa	CASP8	Non-upland	FAC	FACU		1	4	2	6	1	6	2	3	2	5
Cayaponia quinqueloba	five-lobed cucumber	CAQU3	Non-upland	FAC	FAC		6	2	6	3	6	3				
Celtis laevigata	sugarberry	CELA	Non-upland	FACW	FACW		4	4	4	9	4	8	4	2	4	7
Celtis occidentalis	common hackberry	CEOC	Added; Absent from NWPL	FACU	FACU		4	4					5	1	5	4
Cenchrus myosuroides	big sandbur	CEMY	Non-upland		FAC		4	2	3	1						
Centaurium pulchellum	Branched Centaury	CEPU3	Non-upland	FAC	FACU	Non-native			0							
Centella erecta	erect centella	CEER2	Non-upland	FACW	FACW		3	5	4	6	UND					
Cephalanthus occidentalis	common buttonbush	CEOC2	Non-upland	OBL	OBL		5	7	5	9	5	8	6	2	6	7
Cerastium nutans	nodding chickweed	CENU2	Non-upland	FAC	FACU				5	3	5	3	5	4	5	5
Ceratophyllum demersum	coon's tail	CEDE4	Non-upland	OBL	OBL		4	2	5	3	6	1	5	5	5	5
Ceratophyllum echinatum	spineless hornwort	CEEC2	Non-upland	OBL	OBL		7	3	5	3			9	3	9	5
Ceratophyllum muricatum	prickly hornwort	CEMU3	Non-upland	OBL	OBL	Non-native	0		0							
Ceratopteris pteridoides	floating antlerfern	CEPT	Non-upland		OBL		4	3								
Ceratopteris thalictroides	watersprite	CETH2	Non-upland		OBL	Non-native	0									
Chaerophyllum procumbens	spreading chervil	CHPR	Non-upland	FACW	FACW		4	3	5	4	5	4	5	2	5	7
Chaerophyllum tainturieri	hairfruit chervil	CHTA	Non-upland	FACW	FAC		2	4	2	8	2	8	2	2	2	7
Chamaecyparis thyoides	Atlantic white cedar	CHTH2	Non-upland	OBL	OBL	Non-native in Pdmnt	8	5	9	5	0					
Chamaedaphne calyculata	leatherleaf	CHCA2	Non-upland	OBL	OBL				8	4			10	0		
Chamaelirium luteum	fairlywand	CHLU	Non-upland	FAC	FACU		8	6	8	5	8	7	8	2	8	4
Chamaesyce humistrata	spreading sandmat	CHHU3	Non-upland	FAC	FACW		3	4	4	5	4	4			2	4
Chamaesyce hyssopifolia	hyssopleaf sandmat	CHHY3	Non-upland	FAC	FAC		3	2	2	2						
Chamaesyce mesembrianthemifolia	coastal beach sandmat	CHME7	Non-upland		FAC		6	2								
Chamaesyce serpens	matted sandmat	CHSE4	Non-upland	FACW	FAC	Non-native to Southeast	0		0						0	
Chamaesyce thymifolia	gulf sandmat	CHTH4	Non-upland		FAC		4	2								
Chamerion angustifolium	fireweed	CHAN9	Non-upland	FAC	FACU								6	1		
Chaptalia tomentosa	woolly sunbonnets	CHTO	Non-upland	FACW	FACW		7	5	8	5	UND					
Chasmanthium latifolium	Indian woodoats	CHLA5	Non-upland	FACU	FAC		6	6	6	9	6	8	6	3	6	7
Chasmanthium laxum	slender woodoats	CHLA6	Non-upland	FAC	FACW		6	7	5	9	6	8	6	3	6	6
Chasmanthium nitidum	shiny woodoats	CHNI	Non-upland		FACW		7	3	8	3						
Chasmanthium ornithorhynchum	birdbill woodoats	CHOR3	Non-upland		FACW		8	4	8	3						
Chasmanthium sessiliflorum	longleaf woodoats	CHSE2	Non-upland	FAC	FAC		6	5	6	9	6	8	6	1	6	5
Chelone cuthbertii	Cuthbert's turtlehead	CHCU5	Non-upland	OBL	OBL				8	3	8	4	9	2		
Chelone glabra	white turtlehead	CHGL2	Non-upland	OBL	OBL		7	4	7	5	7	7	7	3	7	6
Chelone lyonii	pink turtlehead	CHLY2	Non-upland	FACW	FACW						8	4	8	3		
Chelone obliqua	red turtlehead	CHOB3	Non-upland	OBL	OBL				9	2	8	5	9	2	9	4
Chenopodium glaucum	Oak-Leaf Goosefoot	CHGL3	Non-upland	FACW	FAC	Non-native	0									
Chiococca alba	West Indian milkberry	CHAL8	Non-upland		FAC		7	3								
Chionanthus virginicus	white fringetree	CHV3	Non-upland	FAC	FACU		7	4	7	7	6	8	7	3	7	7
Chromolaena odorata	Jack in the bush	CHOD	Non-upland		FAC		3	2								
Chrysobalanus icaco	coco plum	CHIC	Non-upland		FACW		6	4								
Chrysoma pauciflosculosa	woody goldenrod	CHPA18	Non-upland	FAC	FAC		7	3	7	4						
Chrysosplenium americanum	American golden saxifrage	CHAM2	Non-upland	OBL	OBL						9	3	9	2	9	3
Cicuta bulbifera	bulblet-bearing water hemlock	CIBU	Non-upland	OBL	OBL	Non-native (Adventive)	0									
Cicuta maculata	spotted water hemlock	CIMA2	Non-upland	OBL	OBL		6	5	5	6	5	6	6	3	6	5
Cinna arundinacea	sweet woodreed	CIAR2	Non-upland	FACW	FACW		5	3	6	6	6	5	6	2	5	5
Cinna latifolia	drooping woodreed	CILA2	Non-upland	FACW	FACW								8	3		
Circaea alpina	small enchanter's nightshade	CIAL	Non-upland	FACW	FACW						UND		9	2	9	4
Cirsium horridulum	yellow thistle	CIHO2	Non-upland	FACU	FAC		3	4	2	8	3	6	2	3	2	4
Cirsium lecontei	Le Conte's thistle	CILE2	Non-upland		FACW		7	3	8	5						
Cirsium muticum	swamp thistle	CIMU	Non-upland	OBL	OBL		6	3	6	1	7	2	7	2	7	3
Cirsium nuttallii	Nuttall's thistle	CINU	Non-upland	FAC	FAC		3	3	5	3	UND					
Cirsium virginianum	Virginia thistle	CIVI	Non-upland	FACW	FACW		7	2	6	3	UND					
Cissus verticillata	seasonvine	CIVE3	Non-upland		FAC		4	3								
Cladium mariscoides	smooth sawgrass	CLMA	Non-upland	OBL	OBL		8	4	8	5	8	3	10	1		

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<i>Cladium mariscus</i>	swamp sawgrass	CLMA10	Non-upland		OBL		7	4	8	4						
<i>Cladium mariscus</i> ssp. <i>jamaicense</i>	Jamaica swamp sawgrass	CLMAJ	Present 1988 WPL				7	4	7	2						
<i>Claytonia virginica</i>	Virginia springbeauty	CLV13	Non-upland	FAC	FACU		6	3	6	7	5	8	4	3	4	6
<i>Cleistes divaricata</i>	rosebud orchid	CLDI	Non-upland	FAC	FAC		8	5	8	5			8	3		
<i>Clematis baldwinii</i>	pine hyacinth	CLBA	Non-upland		FACW		6	3								
<i>Clematis catesbyana</i>	satincurls	CLCA3	Non-upland	FAC	FAC		5	4	6	4			8	2	7	5
<i>Clematis crispa</i>	swamp leather flower	CLCR	Non-upland	FACW	FACW		6	4	6	8	6	4	7	1	7	4
<i>Clematis glaucophylla</i>	whiteleaf leather flower	CLGL	Non-upland	FAC	FAC		7	4	8	2	8	3	8	0	8	3
<i>Clematis virginiana</i>	devil's darning needles	CLVI5	Non-upland	FAC	FAC		4	6	4	6	4	5	4	2	4	6
<i>Cleome aculeata</i>	prickly spiderflower	CLAC4	Non-upland		FAC	Non-native	0									
<i>Clethra alnifolia</i>	coastal sweetpepperbush	CLAL3	Non-upland	FAC	FACW		6	5	6	8	7	6			8	3
<i>Cliftonia monophylla</i>	buckwheat tree	CLMO2	Non-upland	OBL	OBL		6	5	6	4						
<i>Clinopodium arkansanum</i>	limestone calamint	CLAR5	Non-upland	FACU	FACW										8	1
<i>Clinopodium brownei</i>	Browne's savory	CLBR7	Non-upland		OBL		5	3								
<i>Clinopodium glabellum</i>	Ozark calamint	CLGL4	Added; Absent from NWPL												9	2
<i>Clintonia borealis</i>	bluebead	CLBO3	Non-upland	FAC									8	1		
<i>Cocculus carolinus</i>	Carolina coralbead	COCA	Non-upland	FAC	FAC		3	3	3	7	3	6	4	4	3	6
<i>Coelorachis cylindrica</i>	cylinder jointtail grass	COCY	Non-upland	FAC	FAC		7	4	7	3	UND					
<i>Coelorachis rugosa</i>	wrinkled jointtail grass	CORU3	Non-upland	OBL	OBL		7	4	7	6			9	0	9	2
<i>Coelorachis tessellata</i>	checkered jointtail grass	COTE5	Non-upland		FACW		8	4	8	3						
<i>Coelorachis tuberculosa</i>	bumpy jointtail grass	COTU	Non-upland		OBL		7	3	8	3						
<i>Collinsia verna</i>	spring blue eyed Mary	COVE2	Non-upland	FAC	FAC								8	2	8	6
<i>Collinsonia canadensis</i>	richweed	COCA4	Non-upland	FAC	FAC		7	5	7	6	7	6	7	2	7	6
<i>Colocasia esculenta</i>	Coco-Yam	COES	Non-upland	FACW	FACW	Non-native	0	0	0	0	0		0			
<i>Colubrina asiatica</i>	Asian Nakedwood	COAS3	Non-upland		FACW	Non-native	0									
<i>Commelina caroliniana</i>	Carolina Dayflower	COCA17	Non-upland	FAC	FAC	Non-native	0	0	0	0	0					
<i>Commelina communis</i>	Asiatic Dayflower	COCO3	Non-upland	FAC	FAC	Non-native	0	0	0	0	0		0		0	
<i>Commelina diffusa</i>	climbing dayflower	CODI5	Non-upland	FACW	FACW	Non-native in the SCP	0	0	1	5	1	5	1	1	1	3
<i>Commelina diffusa</i> var. <i>gigas</i>	climbing dayflower	CODIG	Present 1988 WPL				2	2								
<i>Commelina erecta</i>	whitemouth dayflower	COER	Non-upland	FAC	FACU		6	5	6	6	6	7	6	2	6	4
<i>Commelina virginica</i>	Virginia dayflower	COV13	Non-upland	FACW	FACW		5	4	5	9	5	8	6	3	5	6
<i>Conioselinum chinense</i>	eastern hemlockparsley	COCH2	Non-upland	FACW	FACW								9	2		
<i>Conium maculatum</i>	Poison-Hemlock	COMA2	Non-upland	FACW	FACW	Non-native			0		0		0		0	
<i>Conocarpus erectus</i>	button mangrove	COER2	Non-upland		FACW		7	2								
<i>Conoclinium coelestinum</i>	blue mistflower	COCO13	Non-upland	FAC	FAC		3	5	4	8	4	7	3	1	3	7
<i>Conradina verticillata</i>	Cumberland false rosemary	COVE4	Non-upland	FACW									10	0		
<i>Cooperia drummondii</i>	evening rainlily	CODR2	Present 1988 WPL			Non-native	0									
<i>Coptis trifolia</i>	threeleaf goldthread	COTR2	Non-upland	FACW	FACW								10	1		
<i>Corallorhiza wisteriana</i>	spring coralroot	COWI5	Non-upland	FAC	UPL		7	3	6	3	6	3	7	3	7	5
<i>Corchorus siliquosus</i>	slippery burr	COSI3	Non-upland		FAC	Adventive outside Central and South FL	3*	2								
<i>Coreopsis falcata</i>	sickle tickseed	COFA	Non-upland	FACW	FACW		6	2	6	3	UND					
<i>Coreopsis floridana</i>	Florida tickseed	COFL6	Non-upland		OBL		5	4	9	2						
<i>Coreopsis gladiata</i>	coastal plain tickseed	COGL2	Non-upland	FACW	FACW		6	5	7	7			8	1		
<i>Coreopsis integrifolia</i>	fringeleaf tickseed	COIN4	Non-upland		FACW		7	4	8	3						
<i>Coreopsis leavenworthii</i>	Leavenworth's tickseed	COLE3	Non-upland		FACW		4	3	6	2						
<i>Coreopsis linifolia</i>	Texas tickseed	COLI5	Non-upland	FACW	FACW		7	4	8	4						
<i>Coreopsis nudata</i>	Georgia tickseed	CONU5	Non-upland		OBL		7	4	8	3						
<i>Coreopsis pubescens</i>	star tickseed	COPU2	Non-upland	FACU	FAC		7	4	7	3	7	5	7	4	8	6
<i>Coreopsis rosea</i>	pink tickseed	CORO	Non-upland	FACW	FACW								9	0		
<i>Coreopsis tinctoria</i>	golden tickseed	COTI3	Non-upland	FAC	FAC	Adventive outside TN and MS (score of 0)	0		2*	4	0		2*	3	2*	3
<i>Coreopsis tripteris</i>	tall tickseed	COTR4	Non-upland	FAC	FAC		6	3	6	3	6	3	7	2	6	5
<i>Cornus alternifolia</i>	alternateleaf dogwood	COAL2	Non-upland	FAC	FAC		8	6	7	4	7	6	7	3	7	5
<i>Cornus amomum</i>	silky dogwood	COAM2	Non-upland	FACW	FACW		6	4	5	8	5	8	5	3	6	6
<i>Cornus asperifolia</i>	toughleaf dogwood	COAS2	Non-upland	FACW	FACW		6	4	8	4						
<i>Cornus drummondii</i>	roughleaf dogwood	CODR	Non-upland	FAC	FAC		6	4	5	5			5	2	5	4
<i>Cornus foemina</i>	stiff dogwood	COFO	Non-upland	FACW	FACW		6	3	6	6	5	5	7	4	7	5
<i>Cornus obliqua</i>	silky dogwood	COOB9	Non-upland	FACW	FACW								7	0	8	3
<i>Cornus racemosa</i>	gray dogwood	CORA6	Non-upland	FAC	FAC						5	2	6	2	6	2
<i>Cosmos bipinnatus</i>	Garden Cosmos	COBI2	Non-upland	FACU	FAC	Non-native	0		0		0		0		0	
<i>Crassula aquatica</i>	water pygmyweed	CRAQ	Non-upland	OBL	OBL				6	2						
<i>Crataegus aestivalis</i>	may hawthorn	CRAE	Non-upland		OBL		8	2	7	3						
<i>Crataegus berberifolia</i>	barberry hawthorn	CRBE2	Non-upland		FAC				7	1	UND					
<i>Crataegus brachyacantha</i>	blueberry hawthorn	CRBR	Non-upland	OBL	OBL				7	2						
<i>Crataegus crus-galli</i>	cockspur hawthorn	CRCR2	Non-upland	FACU	FAC		5	4	4	6	4	5	4	2	4	5
<i>Crataegus engelmannii</i>	Engelmann's hawthorn	CREN	Non-upland		FAC								6	0	6	4
<i>Crataegus marshallii</i>	parsley hawthorn	CRMA5	Non-upland	FAC	FAC		8	3	7	9	7	7	7	2	7	4
<i>Crataegus mollis</i>	downy hawthorn	CRMO2	Non-upland	FACU	FAC								5	3	5	4
<i>Crataegus opaca</i>	riverflat hawthorn	CROP	Non-upland		OBL				6	3						
<i>Crataegus phaenopyrum</i>	Washington hawthorn	CRPH	Non-upland	FAC	FAC		7	3	5	2	5	4	5	0	6	3
<i>Crataegus pulcherrima</i>	beautiful hawthorn	CRPU9	Non-upland	FAC	FAC				5	2			5	0		
<i>Crataegus spathulata</i>	littlehip hawthorn	CRSP	Non-upland	FAC	FAC		6	4	6	4	6	5	7	6	7	6

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<i>Crataegus viridis</i>	green hawthorn	CRVI2	Non-upland	FACW	FACW		7	4	6	4	6	3	7	2	7	5
<i>Crinum americanum</i>	seven sisters	CRAM2	Non-upland		OBL		7	4	7	3						
<i>Crossopetalum rhacoma</i>	maidenberry	CRRH	Non-upland		FACW		7	2								
<i>Croton eliottii</i>	Elliott's croton	CREL3	Non-upland	FACW	FACW				8	4						
<i>Cryptotaenia canadensis</i>	Canadian honewort	CRCA9	Non-upland	FAC	FAC		5	3	6	6	6	6	6	3	6	6
<i>Ctenitis submarginalis</i>	brownhair lacefern	CTSU2	Non-upland		FACW		8	1								
<i>Ctenium aromaticum</i>	toothache grass	CTAR	Non-upland	FACW	FACW		8	4	8	6						
<i>Ctenium floridanum</i>	Florida orangegrass	CTFL	Non-upland		FACW		8	4	8	3						
<i>Cucurbita okeechobeensis</i>	Okeechobee gourd	CUOK	Non-upland		OBL		4	2								
<i>Cuphea aspera</i>	tropical waxweed	CUAS	Non-upland		FACW		8	3	9	2						
<i>Cuphea carthagenensis</i>	Colombian Waxweed	CUCA4	Non-upland	FACW	FACW	Non-native (Adventive)	0		0		0					
<i>Cuphea viscosissima</i>	blue waxweed	CUVI	Non-upland	FAC	FAC		4	2	4	5	5	3	5	2	5	5
<i>Cyclachaena xanthifolia</i>	giant sumpweed	CYXA	Non-upland	FAC	FAC	Non-native									0	
<i>Cyclopogon cranchioides</i>	cranchis-like ladies'-tresses	CYCR10	Non-upland		FACW		7	2								
<i>Cyclosporum leptophyllum</i>	Marsh-Parsley	CYLE7	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
<i>Cymodocea filiformis</i>	manatee grass	CYFI3	Non-upland		OBL		8	3	8	3						
<i>Cymophyllum fraserianus</i>	Fraser's cymophyllum	CYFR4	Non-upland	FAC									9	2		
<i>Cynanchum angustifolium</i>	gulf coast swallow-wort	CYAN5	Non-upland	FACW	FACW		6	4	7	5						
<i>Cynanchum laeve</i>	honeysuckle	CYLA	Non-upland	FAC	FAC				2	5			2	2	3	5
<i>Cynoscadium digitatum</i>	finger dogshade	CYDI2	Non-upland	FACW	FACW				3	2						
<i>Cyperus acuminatus</i>	tapertip flatsedge	CYAC2	Non-upland	OBL	OBL				4	2			4	2	5	4
<i>Cyperus aggregatus</i>	inflatedscale flatsedge	CYAG	Non-upland	FAC	FAC	Non-native	0		0							
<i>Cyperus articulatus</i>	jointed flatsedge	CYAR4	Non-upland	OBL	OBL		6	3								
<i>Cyperus bipartitus</i>	slender flatsedge	CYBI6	Non-upland	FACW	FACW								4	2	4	3
<i>Cyperus compressus</i>	poorland flatsedge	CYCO	Non-upland	FAC	FACW		2	3	1	5	1	3	1	1	2	2
<i>Cyperus croceus</i>	Baldwin's flatsedge	CYCR6	Non-upland	FACU	FAC		2	4	2	6	2	5	1	1	1	3
<i>Cyperus cuspidatus</i>	coastal plain flatsedge	CYCU	Non-upland	FACW	FACW		5	2	4	2						
<i>Cyperus dentatus</i>	toothed flatsedge	CYDE2	Non-upland	FACW	OBL				8	2			10	0		
<i>Cyperus diandrus</i>	umbrella flatsedge	CYDI3	Non-upland	FACW	FACW								7	5		
<i>Cyperus difformis</i>	Variable Flat Sedge	CYDI4	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
<i>Cyperus distans</i>	Piedmont flatsedge	CYDI7	Non-upland		OBL	Non-native (Adventive) outside FL	4*	2	0							
<i>Cyperus distinctus</i>	swamp flatsedge	CYDI8	Non-upland		FACW		4	2	5	2						
<i>Cyperus drummondii</i>	Drummond's sedge	CYDR4	Non-upland		OBL		5	2	6	2						
<i>Cyperus echinatus</i>	globe flatsedge	CYEC2	Non-upland	FACU	FAC		4	4	4	8	4	6	4	3	4	6
<i>Cyperus elegans</i>	royal flatsedge	CYEL	Non-upland		FACW		4	2	1	2						
<i>Cyperus eragrostis</i>	tall flatsedge	CYER	Non-upland		FACW	Non-native	0		0							
<i>Cyperus erythrorhizos</i>	redroot flatsedge	CYER2	Non-upland	FACW	OBL		3	3	4	6	4	4	3	3	4	4
<i>Cyperus esculentus</i>	yellow nutedge	CYES	Non-upland	FACW	FAC	Native but noxious in many SE states	0		1	6	1	5	1	2	1	6
<i>Cyperus filicinus</i>	fern flatsedge	CYFI	Non-upland	OBL	OBL		3	2	5	4	UND					
<i>Cyperus flavescens</i>	yellow flatsedge	CYFL	Non-upland	OBL	OBL		2	3	4	3	4	3	3	1	3	4
<i>Cyperus flavicomus</i>	whiteedge flatsedge	CYFL5	Non-upland	FAC	FACW		2	3	2	3	2	2	3	2	3	3
<i>Cyperus grantophilus</i>	granite flatsedge	CYGR10	Non-upland	FACW	FACW						9	6	9	1		
<i>Cyperus haspan</i>	haspan flatsedge	CYHA	Non-upland	OBL	OBL		5	4	5	3	5	3	6	0	6	1
<i>Cyperus involucratu</i>	Alternate-Leaf Flat Sedge	CYIN6	Non-upland		OBL	Non-native	0									
<i>Cyperus iria</i>	Ricefield Flat Sedge	CYIR	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
<i>Cyperus lancastricensis</i>	manyflower flatsedge	CYLA3	Non-upland	FAC	FAC				5	3	5	2	5	3	5	5
<i>Cyperus lanceolatus</i>	epiphytic flatsedge	CYLA5	Non-upland		FACW		4	2	3	2						
<i>Cyperus lecontei</i>	Le Conte's flatsedge	CYLE2	Non-upland	FACW	FACW		4	4	5	4						
<i>Cyperus ligularis</i>	Alabama swamp flatsedge	CYLI	Non-upland		FACW		5	2								
<i>Cyperus lupulinus ssp. lupulinus</i>	Great Plains flatsedge	CYLUL	Non-upland		FAC		UND		6	2	6	2	5	1	5	3
<i>Cyperus ochraceus</i>	pond flatsedge	CYOC2	Non-upland	FACW	FACW		3	2								
<i>Cyperus odoratus</i>	fragrant flatsedge	CYOD	Non-upland	FACW	FACW		3	4	3	5	3	4	2	2	2	4
<i>Cyperus oxylepis</i>	sharpscale flatsedge	CYOX	Non-upland		FACW	Non-native	0		0							
<i>Cyperus papyrus</i>	Papyrus Flat Sedge	CYP8	Non-upland		OBL	Non-native	0									
<i>Cyperus pilosus</i>	Fuzzy Flat Sedge	CYPI	Non-upland	FACW	FACW	Non-native	0									
<i>Cyperus planifolius</i>	flatleaf flatsedge	CYPL4	Non-upland		FAC		7	3								
<i>Cyperus polystachyos</i>	manyspike flatsedge	CYPO	Non-upland	FACW	FACW		3	5	4	5	4	3	3	0	3	4
<i>Cyperus pseudovegetus</i>	marsh flatsedge	CYPS	Non-upland	FACW	FACW		4	3	3	5	3	5	3	3	4	4
<i>Cyperus pumilus</i>	Low Flat Sedge	CYPU3	Non-upland		FACW	Non-native	0									
<i>Cyperus reflexus</i>	bentawn flatsedge	CYRE2	Non-upland		FAC	Non-native	0		0							
<i>Cyperus refractus</i>	reflexed flatsedge	CYRE3	Non-upland	FACU	FAC						5	2	5	1	6	3
<i>Cyperus retrorsus</i>	pine barren flatsedge	CYRE5	Non-upland	FAC	FACU		2	3	2	4	2	3	4	4	4	3
<i>Cyperus rotundus</i>	Purple Flat Sedge	CYRO	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
<i>Cyperus sphaclatus</i>	roadside flatsedge	CYSP3	Non-upland		FAC	Non-native	0									
<i>Cyperus squarrosus</i>	bearded flatsedge	CYSQ	Non-upland	FACW	OBL		3	3	3	3	2	3	2	2	2	4
<i>Cyperus strigosus</i>	strawcolored flatsedge	CYST	Non-upland	FACW	FACW		3	3	3	7	2	6	2	2	3	6
<i>Cyperus surinamensis</i>	tropical flatsedge	CYSU	Non-upland	FACW	FACW		2	4	2	2						
<i>Cyperus tetragonus</i>	fourangle flatsedge	CYTE5	Non-upland		FAC		5	2	9	2						
<i>Cyperus thyrsiflorus</i>	southern flatsedge	CYTH	Non-upland		FAC		5	2								
<i>Cyperus virens</i>	green flatsedge	CYVI2	Non-upland	FACW	FACW		5	2	4	3	5	2	4	0		
<i>Cypripedium acaule</i>	moccasin flower	CYAC3	Added; Absent from NWPL	FACU	FACU						6	3	6	2	7	4

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Cypripedium candidum	white lady's slipper	CYCA5	Non-upland	OBL	OBL								9	1	10	6
Cypripedium kentuckiense	Kentucky lady's slipper	CYKE2	Added; Absent from NWPL													
Cypripedium parviflorum	lesser yellow lady's slipper	CYPA19	Non-upland	FACW	FAC	Taxonomically complex: has been split into 2 species					8	5	9	2	9	3
Cypripedium reginae	showy lady's slipper	CYRE6	Non-upland	FACW									10	0		
Cypselea humifusa	Panel	CYHU3	Non-upland		FACW	Non-native (Adventive)	0									
Cyrella parvifolia	littleleaf titi	CYPA6	Non-upland		FACW		5	4	9	3	UND					
Cyrella racemiflora	swamp titi	CYRA	Non-upland	FACW	FACW		6	5	6	7	7	5	8	0		
Cystopteris bulbifera	bulblet bladderfern	CYBU3	Non-upland	FAC	FAC		8	3	9	4	8	2	8	2	8	5
Cystopteris proturusa	lowland bladderfern	CYPR4	Non-upland	FAC	FAC		7	4	7	6	7	3	7	3	6	6
Dactylorhiza viridis	longbract frog orchid	DAV16	Non-upland	FACU	FAC						UND		10	1		
Dalbergia ecastaphyllum	coinvine	DAEC	Non-upland		FACW		7	2								
Dalea carnea	whitetassels	DACA8	Non-upland	FACW	FACW		7	3	8	3	UND					
Dalibarda repens	robin runaway	DARE	Non-upland	FAC	FACW								10	2		
Danthonia epilis	Carolina oatgrass	DAEP2	Non-upland	OBL	OBL				8	4			8	2		
Dasistoma macrophylla	mullein foxglove	DAMA	Non-upland	FACU	FAC				7	2	8	3	7	2	7	5
Decodon verticillatus	swamp loostrife	DEVE	Non-upland	OBL	OBL		7	5	7	9	7	6	8	3	7	5
Decumaria barbara	woodvamp	DEBA4	Non-upland	OBL	FACW		7	6	6	8	7	6	8	3	7	4
Deeringothamnus pulchellus	royal false pawpaw	DEPU6	Non-upland		FAC		7	4								
Deeringothamnus rugelii	Rugel's false pawpaw	DERU	Non-upland		FACW		7	4								
Dennstaedtia bipinnata	cuplet fern	DEBI3	Non-upland		OBL		7	2								
Deparia acrostichoides	silver false spleenwort	DEAC4	Non-upland	FAC	FAC		7	2	7	4	8	4	8	2	8	6
Deschampsia cespitosa	tufted hairgrass	DECE	Non-upland	FACW	FACW								10	0	10	3
Deschampsia elongata	slender hairgrass	DEEL	Non-upland		FACW	Non-native	0									
Desmanthus illinoensis	Illinois bundleflower	DEIL	Non-upland	FAC	FAC	Non-native (Adventive) in KY, SC, GA, and FL	4*	4	4*	5	3*	3	4*	3	4*	6
Desmodium tenuifolium	slimleaf ticktrefoil	DETE3	Non-upland	FAC	FACU		4	2	8	4	8	2				
Desmodium tortuosum	dixie ticktrefoil	DETO	Non-upland	FACU	FAC	Non-native to SE	0		0							
Diamorpha smallii	elf orpine	DISM3	Non-upland	FACW	FACW						9	7	9	2	9	3
Dichanthelium acuminatum	tapered rosette grass	DIAC2	Non-upland	FAC	FAC	Taxonomically complex	4	3	4	6	4	5	5	4	5	6
Dichanthelium acuminatum var. fasciculatum	western panicgrass	DIACF	Present 1988 WPL				3	1	4	3	5	2	4	3	4	4
Dichanthelium clandestinum	deertongue	DICL	Non-upland	FAC	FACW		4	3	4	5	4	6	4	3	4	6
Dichanthelium commutatum	variable panicgrass	DICO2	Non-upland	FACU	FAC		6	3	6	9	6	8	5	3	5	5
Dichanthelium dichotomum	cypress panicgrass	DIDI6	Non-upland	FAC	FAC		4	4	5	8	5	7	5	3	5	6
Dichanthelium erectifolium	erectleaf panicgrass	DIER4	Non-upland	OBL	OBL		6	2	6	4						
Dichanthelium hirstii	Hirst's panicgrass	DIHI13	Non-upland		OBL				10	4						
Dichanthelium laxiflorum	openflower rosette grass	DILA9	Non-upland	FACU	FAC		5	3	5	7	5	7	5	3	5	6
Dichanthelium ravenelii	Ravenel's rosette grass	DIRA	Added; Absent from NWPL	FACU	FACU		6	4	6		7	1	7	1	7	3
Dichanthelium scabriusculum	woolly rosette grass	DISC2	Non-upland	OBL	OBL		5	4	4	6			6	0		
Dichanthelium scoparium	velvet panicum	DISC3	Non-upland	FACW	FACW		5	5	5	8	5	7	5	3	5	6
Dichanthelium strigosum	roughhair rosette grass	DIST5	Non-upland	FAC	FAC		5	2	6	3	5	2	7	0		
Dichanthelium strigosum var. leucoblepharis	roughhair rosette grass	DISTL	Present 1988 WPL				UND		5	3	8	2				
Dichondra carolinensis	Carolina pony'sfoot	DICA3	Non-upland	FACW	FAC		2	7	2	6	2	6	2	2	2	5
Dichondra micrantha	Asian Pony's-Foot	DIMI	Non-upland		FAC	Non-native (Adventive)	0									
Dicliptera brachiata	branched foldingwing	DIBR2	Non-upland	FACW	FACW		7	6	7	6	7	5	7	0	7	4
Dicliptera sexangularis	sixangle foldingwing	DISE9	Non-upland		FAC		5	2								
Dicranopteris flexuosa	drooping forkedfern	DIFL2	Non-upland		FAC		4	2								
Didiplis diandra	waterpurslane	DIDI	Non-upland	OBL	OBL				8	3	8	2	9	2	9	2
Digitaria ciliaris	southern crabgrass	DICI	Non-upland	FAC	FACU		2	6	1	7	1	6	1	2	1	4
Digitaria insularis	sourgrass	DIIN2	Non-upland	FAC	FAC		5	3								
Digitaria serotina	dwarf crabgrass	DISE3	Non-upland	FAC	FAC		2	2	1	2						
Dioclea multiflora	Boykin's clusterpea	DIMU	Present 1988 WPL						7	5					7	3
Diodia virginiana	Virginia buttonweed	DIVI3	Non-upland	FACW	FACW		3	6	3	9	3	8	3	3	3	6
Dionaea muscipula	Venus flytrap	DIMU4	Non-upland	FACW	FACW	Non-native to SCP; native to CP	0		8	4						
Dioscorea quaternata	fourleaf yam	DIQU	Present 1988 WPL				6	4	6	3	6	3	6	3	6	4
Dioscorea villosa	wild yam	DIVI4	Non-upland	FAC	FACW		6	7	6	8	6	6	6	3	6	7
Diospyros virginiana	common persimmon	DIVI5	Non-upland	FAC	FAC		4	7	4	9	4	8	4	2	4	7
Diplazium pycnocarpon	glade fern	DIPY	Non-upland	FAC	FAC				8	4	8	6	8	2	8	6
Dirca palustris	eastern leatherwood	DIPA9	Non-upland	FAC	FACU		8	6	8	5	8	7	8	2	8	6
Distichlis spicata	saltgrass	DISP	Non-upland	FACW	OBL		7	5	8	4						
Ditrysinia fruticosa	Gulf Sebastian-bush	DIFR6	Non-upland	FACW	FAC		6	4	6	6						
Doellingeria sericocarpoides	southern whitetop	DOSE	Non-upland	FACW	FACW		8	2	9	3						
Doellingeria umbellata	parasol whitetop	DOUM2	Non-upland	FACW	FACW		7	2	6	6	7	3	7	3	8	3
Dracopis amplexicaulis	clasping coneflower	DRAM	Non-upland	FAC	FAC	May not be native to Mtns	4	1	3	3			2*	1		
Drosera brevifolia	dwarf sundew	DRBR3	Non-upland	OBL	OBL		6	6	7	7	7	5	8	1	8	4
Drosera capillaris	pink sundew	DRCA2	Non-upland	OBL	OBL		6	7	7	7	7	4	7	2	7	2
Drosera filiformis	threadleaf sundew	DRFI	Non-upland	OBL	OBL		8	3	8	4						
Drosera intermedia	spoonleaf sundew	DRIN3	Non-upland	OBL	OBL		7	6	7	7	7	5	8	3	8	4
Drosera rotundifolia	roundleaf sundew	DRRO	Non-upland	OBL	OBL				9	5	8	4	9	2	9	2
Drosera tracyi	Tracy's sundew	DRTR4	Non-upland		OBL		7	4	8	3						
Drymaria cordata	whitesnow	DRCO2	Non-upland	FAC	FAC		2	3	2	4						
Dryopteris carthusiana	spinulose woodfern	DRCA11	Non-upland	FAC	FACW				7	4	7	6	7	3	7	5

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<i>Dryopteris celsa</i>	log fern	DRCE	Non-upland	OBL	FAC				8	7	8	4	8	1	8	4
<i>Dryopteris cristata</i>	crested woodfern	DRCR4	Non-upland	FACW	OBL						9	4	8	1		
<i>Dryopteris goldiana</i>	Goldie's woodfern	DRGO	Non-upland	FAC	FAC						8	4	9	1	9	4
<i>Dryopteris intermedia</i>	intermediate woodfern	DRIN5	Added; Absent from NWPL	FACU	FACU						7	4	8	2	8	4
<i>Dryopteris ludoviciana</i>	southern woodfern	DRLU	Non-upland	FACW	FACW		8	3	8	3					10	0
<i>Dulichium arundinaceum</i>	threeway sedge	DUAR3	Non-upland	OBL	OBL		7	4	6	9	7	7	7	4	7	6
<i>Dyschoriste angusta</i>	pineland snakeherb	DYAN	Non-upland		FAC		6	3								
<i>Dyschoriste humistrata</i>	swamp snakeherb	DYHU	Non-upland		FACW		8	3	7	3						
<i>Echinochloa colona</i>	Jungle-Rice	ECCO2	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
<i>Echinochloa crus-galli</i>	Large Barnyard Grass	ECCR	Non-upland	FAC	FACW	Non-native	0		0		0		0		0	
<i>Echinochloa crus-pavonis</i>	gulf cocksbur grass	ECCR2	Non-upland		OBL	Non-native east of Mississippi River	0		0							
<i>Echinochloa muricata</i>	rough barnyardgrass	ECCMU2	Non-upland	FACW	FACW		2	5	2	7	2	3	2	2	2	5
<i>Echinochloa paludigena</i>	Florida cocksbur grass	ECPA5	Non-upland		OBL		4	3								
<i>Echinochloa walteri</i>	coast cocksbur grass	ECWA	Non-upland	FACW	OBL		3	4	4	5	4	3			5	3
<i>Echinocystis lobata</i>	wild cucumber	ECL0	Non-upland	FAC	FACW								4	1	5	4
<i>Echinodorus berteroi</i>	upright burhead	ECBE2	Non-upland	OBL	OBL	Nativity uncertain in ILP	7	2	4	3					8*	2
<i>Echinodorus cordifolius</i>	creeping burhead	ECCO3	Non-upland	OBL	OBL		7	4	6	7	7	5	6	3	7	4
<i>Echinodorus floridanus</i>	Florida burhead	ECFL4	Non-upland		OBL	Non-native outside FL	7*	3	0						6	4
<i>Echinodorus tenellus</i>	mudbabies	ECTE2	Non-upland	OBL	OBL		8	4	9	4					7	3
<i>Eclipta prostrata</i>	false daisy	ECPR	Non-upland	FAC	FACW		2	4	2	7	2	7	2	3	2	6
<i>Egeria densa</i>	Brazilian-Waterweed	EGDE	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
<i>Eichhornia azurea</i>	Anchored Water-Hyacinth	EIAZ2	Non-upland		OBL	Non-native	0		0		0					
<i>Eichhornia crassipes</i>	Common Water-Hyacinth	EICR	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
<i>Eichhornia paniculata</i>	Brazilian water hyacinth	EIPA	Non-upland		OBL	Non-native	0									
<i>Elatine americana</i>	American waterwort	ELAM3	Non-upland	OBL	OBL								2	0		
<i>Elatine brachysperma</i>	shortseed waterwort	ELBR5	Non-upland	OBL	OBL			2	3	2	3					
<i>Elatine minima</i>	small waterwort	ELMI	Non-upland	OBL	OBL			2	3	2	3					
<i>Eleocharis acicularis</i>	needle spikerush	ELAC	Non-upland	OBL	OBL		3	4	3	4	3	3	4	3	4	5
<i>Eleocharis albida</i>	white spikerush	ELAL	Non-upland	OBL	OBL		4	3	6	3						
<i>Eleocharis atropurpurea</i>	purple spikerush	ELAT	Non-upland	FACW	FACW		4	4	6	3						
<i>Eleocharis baldwinii</i>	Baldwin's spikerush	ELBA2	Non-upland	OBL	OBL		3	4	4	5			7	0		
<i>Eleocharis bifida</i>	Glades spikerush	ELBI4	Non-upland	FACW	FACW								8	1	8	4
<i>Eleocharis cellulosa</i>	Gulf Coast spikerush	ELCE	Non-upland		OBL		7	3	6	4						
<i>Eleocharis compressa</i>	flatstem spikerush	ELCO2	Non-upland	OBL	FACW								8	1	8	5
<i>Eleocharis elongata</i>	slim spikerush	ELEL2	Non-upland		OBL		6	4	7	4						
<i>Eleocharis engelmannii</i>	Engelmann's spikerush	ELEN	Non-upland	FACW	FACW			4	3	4	2	5	2	5	4	
<i>Eleocharis equisetoides</i>	jointed spikesedge	ELEQ	Non-upland	OBL	OBL		7	5	6	5	6	3	7	0	6	3
<i>Eleocharis erythropoda</i>	bald spikerush	ELER	Present 1988 WPL								8	2	6	4	7	3
<i>Eleocharis fallax</i>	creeping spikerush	ELFA	Non-upland	OBL	OBL		6	3	7	3						
<i>Eleocharis flavescens</i>	yellow spikerush	ELFL	Non-upland	OBL	OBL		4	2	5	3	UND					
<i>Eleocharis geniculata</i>	Canada spikesedge	ELGE	Non-upland		FACW		4	3	7	2						
<i>Eleocharis halophila</i>	saltmarsh spikerush	ELHA2	Non-upland	OBL	OBL				9	3						
<i>Eleocharis intermedia</i>	matted spikerush	ELIN	Non-upland	FACW	FACW								9	0		
<i>Eleocharis interstincta</i>	knotted spikerush	ELIN2	Non-upland		OBL		6	3	7	4						
<i>Eleocharis lanceolata</i>	daggerleaf spikerush	ELLA	Non-upland	FACW	FACW										8	1
<i>Eleocharis melanocarpa</i>	blackfruit spikerush	ELME	Non-upland	FACW	FACW		7	3	7	3	UND					
<i>Eleocharis microcarpa</i>	smallfruit spikerush	ELMI2	Non-upland	OBL	OBL		5	3	5	3	5	2	6	3	7	2
<i>Eleocharis minima</i>	small spikerush	ELMI3	Non-upland		OBL		4	3	7	3						
<i>Eleocharis montana</i>	mountain spikerush	ELMO	Non-upland		OBL		5	3								
<i>Eleocharis montevidensis</i>	sand spikerush	ELMO2	Non-upland	FACW	FACW		5	3	6	4						
<i>Eleocharis nana</i>	hair-like spikerush	ELNA	Non-upland		OBL		5	2								
<i>Eleocharis nigrescens</i>	black spikerush	ELN2	Non-upland		FACW	Non-native	0									
<i>Eleocharis obtusa</i>	blunt spikerush	ELOB2	Non-upland	OBL	OBL		4	3	3	7	4	6	3	3	3	5
<i>Eleocharis olivacea</i>	bright green spikerush	ELOL	Non-upland	OBL	OBL		6	3	7	5						
<i>Eleocharis ovata</i>	ovate spikerush	ELOV	Present 1988 WPL										3	3	5	2
<i>Eleocharis palustris</i>	common spikerush	ELPA3	Non-upland	OBL	OBL				4	3			5	5	5	3
<i>Eleocharis palustris</i> var. <i>palustris</i>	common spikerush	ELPAP	Present 1988 WPL						6	2			7	3	7	2
<i>Eleocharis parvula</i>	dwarf spikerush	ELPA5	Non-upland	OBL	OBL		7	3	6	4			2	0	2	1
<i>Eleocharis quadrangulata</i>	squarestem spikerush	ELQU	Non-upland	OBL	OBL		6	4	6	6	6	4	6	3	6	6
<i>Eleocharis radicans</i>	rooted spikerush	ELRA	Non-upland	OBL	OBL		6	3								
<i>Eleocharis robbinsii</i>	Robbins' spikerush	ELRO	Non-upland	OBL	OBL		6	4	8	3						
<i>Eleocharis rostellata</i>	beaked spikerush	ELRO2	Non-upland	OBL	OBL		4	5	8	4						
<i>Eleocharis tenuis</i>	slender spikerush	ELTE	Non-upland	FACW	FACW				6	4	6	3	5	3	6	4
<i>Eleocharis tortilis</i>	twisted spikerush	ELTO	Non-upland	FACW	FACW		6	4	7	4	UND					
<i>Eleocharis tricostata</i>	three-angle spikerush	ELTR5	Non-upland	OBL	OBL		7	3	8	4	UND					
<i>Eleocharis tuberculosa</i>	cone-cup spikerush	ELTU	Non-upland	OBL	OBL		5	5	5	6	7	2	6	3	7	3
<i>Eleocharis vivipara</i>	viviparous spikerush	ELVI4	Non-upland	OBL	OBL		4	3	6	3	UND					
<i>Eleocharis woffii</i>	Wolf's spikerush	ELWO	Non-upland	OBL	OBL										8	3
<i>Elephantopus carolinianus</i>	Carolina elephantsfoot	ELCA3	Added; Absent from NWPL	FACU	FACU		4	4			3	1	4	2	4	4
<i>Elephantopus nudatus</i>	smooth elephantsfoot	ELNU	Non-upland	FAC	FAC		5	2	5	6	5	3	8	0		
<i>Elionurus tripsacoides</i>	Pan American balsamscale	ELTR4	Non-upland		FACW		5	3	6	2						

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Ellisia nyctelea</i>	Aunt Lucy	ELNY	Non-upland	FACU	FAC										6	3
<i>Elodea canadensis</i>	Canadian waterweed	ELCA7	Non-upland	OBL	OBL			6	3	6	2	6	2	6	4	4
<i>Elodea nuttallii</i>	western waterweed	ELNU2	Non-upland	OBL	OBL			6	3	6	3	7	2	8		
<i>Eltroplectris calcarata</i>	longclaw orchid	ELCA18	Non-upland		OBL		8	2								
<i>Elymus canadensis</i>	Canada wildrye	ELCA4	Non-upland	FACU	FAC	Non-native in Mtns							0		6	3
<i>Elymus macgregorii</i>		ELMA	Non-upland					7	4	6	3	6	0	6	3	3
<i>Elymus riparius</i>	riverbank wildrye	ELRI	Non-upland	FACW	FACW					5	4	6	3	6	4	4
<i>Elymus submuticus</i>	Virginia wildrye	ELSU	Non-upland	FAC	FAC									4	3	3
<i>Elymus trachycaulus</i>	slender wheatgrass	ELTR7	Non-upland	FACU	FAC	Non-native in KY; Native in NC						10*	1			
<i>Elymus virginicus</i>	Virginia wildrye	ELV13	Non-upland	FACW	FAC		4	4	5	9	5	8	5	3	5	6
<i>Elytraria carolinensis</i>	Carolina scalystem	ELCA6	Non-upland		FACW		7	4	7	3						
<i>Enemion biternatum</i>	eastern false rue anemone	ENBI	Non-upland	FACU	FACW		9	2	9	4	8	6	8	1	8	5
<i>Epilobium ciliatum</i>	fringed willowherb	EPCI	Non-upland	FAC	FACW								7	3		
<i>Epilobium coloratum</i>	purpleleaf willowherb	EPCO	Non-upland	FACW	OBL						6	4	5	3	6	4
<i>Epilobium leptophyllum</i>	bog willowherb	EPL2	Non-upland	OBL	OBL								8	3		
<i>Equisetum arvense</i>		EQAR	Non-upland	FAC	FAC			4	6	3	5	4	3	3	5	5
<i>Equisetum hyemale</i>		EQHY	Non-upland	FACW	FACW		4	4	5	7	5	6	5	3	4	5
<i>Equisetum laevigatum</i>		EQLA	Non-upland	FACW	FAC										3	3
<i>Eragrostis atrovirens</i>	Thalia Love Grass	ERAT3	Non-upland		FAC	Non-native	0									
<i>Eragrostis bahiensis</i>	Bahia Love Grass	ERBA	Non-upland		FAC	Non-native	0									
<i>Eragrostis Elliottii</i>	field lovegrass	EREL	Non-upland	FACW	FACW		4	2	4	3	UND					
<i>Eragrostis frankii</i>	sandbar lovegrass	ERFR	Non-upland	FACW	FACW						4	5	3	2	4	4
<i>Eragrostis hypnoides</i>	teal lovegrass	ERHY	Non-upland	OBL	OBL		3	3	4	5	4	4	4	4	4	5
<i>Eragrostis japonica</i>	Japanese Love Grass	ERJA4	Non-upland	OBL	FAC	Non-native	0		0							
<i>Eragrostis lugens</i>	mourning lovegrass	ERLU	Non-upland	FAC	FAC	Non-native	0									
<i>Eragrostis pectinacea</i>	tufted lovegrass	ERPE	Non-upland	FAC	FAC		2	3	2	6			2	2	2	6
<i>Eragrostis refracta</i>	coastal lovegrass	ERRE	Non-upland	FACW	FACW		4	2	5	3	UND					
<i>Eragrostis unioloides</i>	Chinese Love Grass	ERUN	Non-upland		FAC	Non-native	0		0							
<i>Erechtites hieracifolia</i>	American burnweed	ERH12	Present 1988 WPL				2	4	2	5	2	4	3	3	3	4
<i>Erigeron philadelphicus</i>	Philadelphia fleabane	ERPH	Non-upland	FACU	FAC		3	4	3	8	3	6	3	1	3	6
<i>Erigeron procumbens</i>	Corpus Christi fleabane	ERPR16	Non-upland		FAC	Non-native (Adventive)	0									
<i>Erigeron quercifolius</i>	oakleaf fleabane	ERQU	Non-upland	FACW	FAC		3	4	3	3	UND					
<i>Erigeron strigosus</i>	prairie fleabane	ERST3	Non-upland	FACU	FAC		2	4	3	8	2	7	3	3	3	6
<i>Erigeron vernus</i>	early whitetop fleabane	ERVE	Non-upland	OBL	OBL		5	3	7	5						
<i>Eriocaulon aquaticum</i>	sevenangle pipewort	ERAQ2	Non-upland	OBL	OBL				9	2						
<i>Eriocaulon compressum</i>	flattened pipewort	ERCO7	Non-upland	OBL	OBL		7	4	6	6			10	0		
<i>Eriocaulon decangulare</i>	tenangle pipewort	ERDE5	Non-upland	OBL	OBL		6	4	6	7	7	3	7	1	8	2
<i>Eriocaulon koernickianum</i>	gulf pipewort	ERKO	Non-upland	OBL	OBL						9	3				
<i>Eriocaulon lineare</i>	narrow pipewort	ERL13	Non-upland	OBL	OBL		7	3	8	2	UND					
<i>Eriocaulon nigrobracteatum</i>	blackbract pipewort	ERN17	Non-upland		OBL		9	3								
<i>Eriocaulon ravenelii</i>	Ravenel's pipewort	ERRA7	Non-upland		OBL		7	3								
<i>Eriocaulon texense</i>	Texas pipewort	ERTE8	Non-upland	OBL	OBL		8	4	9	3						
<i>Eriochloa acuminata</i>	tapertip cupgrass	ERAC4	Non-upland	FAC	FAC	Non-native			0		0		0			
<i>Eriochloa contracta</i>	prairie cupgrass	ERCO8	Non-upland	FACU	FAC	Non-native	0						0			
<i>Eriochloa michauxii</i>	longleaf cupgrass	ERMI3	Non-upland		FACW		4	2	8	2						
<i>Eriochloa polystachya</i>	Caribgrass	ERPO3	Non-upland		FACW	Non-native	0									
<i>Eriophorum virginicum</i>	tawny cottongrass	ERVI8	Non-upland	OBL	OBL				9	3	9	3	9	2		
<i>Ernodea littoralis</i>	coughbush	ERL15	Non-upland		FAC		7	3								
<i>Eryngium aquaticum</i>	rattlesnakemaster	ERAQ	Non-upland	OBL	OBL		7	5	8	5						
<i>Eryngium aromaticum</i>	fragrant eryngo	ERAR13	Non-upland		FACW		6	3								
<i>Eryngium baldwinii</i>	Baldwin's eryngo	ERBA6	Non-upland		FACW		4	3	4	2						
<i>Eryngium integrifolium</i>	blueflower eryngo	ERIN6	Non-upland	FACW	FACW		8	5	8	9	8	5	8	3	9	3
<i>Eryngium prostratum</i>	creeping eryngo	ERPR5	Non-upland	OBL	FACW		4	7	4	5	4	4	6	3	7	4
<i>Eryngium yuccifolium</i>	button eryngo	ERYU	Non-upland	FAC	FAC		8	6	7	7	7	6	8	2	8	5
<i>Erysimum cheiranthoides</i>	Worm-Seed Wallflower	ERCH9	Non-upland	FAC	UPL	Non-native							0			
<i>Erythronium umbilicatum</i>	dimpled troutily	ERUM2	Non-upland	FAC	FAC		8	5	8	6	8	7	8	4	8	4
<i>Eubotrys racemosa</i>	swamp doghobble	EURA5	Non-upland	FACW	FACW		7	5	7	7	8	6	9	2	8	3
<i>Eulophia alta</i>	wild coco	EUAL6	Non-upland		FACW		5	3								
<i>Euonymus americanus</i>	bursting-heart	EUAM9	Non-upland	FAC	FAC		6	7	5	7	5	7	5	2	6	6
<i>Euonymus atropurpureus</i>	burningbush	EUA75	Non-upland	FACU	FAC		8	6	7	5	7	7	7	1	7	6
<i>Euonymus obovatus</i>	running strawberry bush	EUOB8	Non-upland	FAC	FACU								8	2	8	4
<i>Eupatorium compositifolium</i>	yankeeweed	EUCO7	Non-upland	FAC	FAC		3	5	2	7	2	6	2	0		
<i>Eupatorium leptophyllum</i>	false fennel	EULE3	Non-upland		FACW		5	4	6	4						
<i>Eupatorium leucolepis</i>	justiceweed	EULE	Non-upland	FACW	FACW		7	6	7	8					9	2
<i>Eupatorium mikioides</i>	semaphore thoroughwort	EUMI7	Non-upland		FACW		6	5								
<i>Eupatorium mohrii</i>	Mohr's thoroughwort	EUMO4	Non-upland	FAC	FACW		6	5	7	6	UND					
<i>Eupatorium perfoliatum</i>	common boneset	EUEP3	Non-upland	FACW	FACW		4	7	4	8	4	7	4	3	5	5
<i>Eupatorium pilosum</i>	rough boneset	EUPI2	Non-upland	FACW	FACW		6	3	6	6	6	4	7	2	7	4
<i>Eupatorium resinolum</i>	pine barren thoroughwort	EURE8	Non-upland	OBL	OBL				8	3						
<i>Eupatorium rotundifolium</i>	roundleaf thoroughwort	EURO4	Non-upland	FAC	FAC		4	7	5	9	4	7	5	4	5	7
<i>Eupatorium semiserratum</i>	smallflower thoroughwort	EUSE	Non-upland	FACW	FACW		7	4	7	6	7	4	8	4	8	3

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Eupatorium serotinum	lateflowering thoroughwort	EUSE2	Non-upland	FAC	FAC		3	5	3	8	2	7	3	3	3	7
Euphorbia curtisii	Curtis' spurge	EUCU3	Non-upland	FAC	FAC		6	4	8	5						
Euphorbia heterophylla	Mexican fireplant	EUHE4	Non-upland	FACU	FAC		3	2	1	4	1	4				
Euphorbia inundata	Florida pineland spurge	EUIN5	Non-upland		FACW		7	4	8	4						
Euphorbia purpurea	Darlington's glade spurge	EUPU4	Non-upland	FAC	FACW								8	0		
Eurybia chapmanii	savannah aster	EUCH11	Present 1988 WPL				9	2	9	3						
Eurybia eryngiifolia	thistleleaf aster	EUER7	Non-upland		FACW		8	5	9	4						
Eurybia paludosa	southern swamp aster	EUPA23	Non-upland	FACW	FACW		7	5	8	5						
Eurybia radula	low rough aster	EUARA10	Non-upland	OBL	OBL								9	2		
Eurybia spinulosa	Apalachicola aster	EUSP4	Non-upland		FACW		9	4								
Eustachys glauca	saltmarsh fingergrass	EUGL5	Non-upland		FACW		4	4	6	4						
Eustoma exaltatum	catchfly prairie gentian	EUEX5	Non-upland	FACW	FACW		6	3	3	3						
Euthamia caroliniana	slender goldentop	EUCA26	Non-upland	FAC	FAC		4	3	4	6	4	2				
Euthamia graminifolia	flat-top goldentop	EUGR5	Non-upland	FAC	FAC		5	5	5	6			5	3	5	5
Euthamia gymnospermoides	Texas goldentop	EUGY	Non-upland	FAC	FAC									8	1	
Euthamia leptoccephala	bushy goldentop	EULE4	Non-upland	FACW	FACW		6	3	5	4			7	3	8	3
Eutrochium dubium	coastal plain joe pye weed	EUDU6	Non-upland	FACW	FACW		7	2	6	4			8	0		
Eutrochium fistulosum	trumpetweed	EUF114	Non-upland	FACW	FACW		6	6	6	8	6	6	6	1	6	5
Eutrochium maculatum	spotted joe pye weed	EUMA9	Non-upland	FACW	FACW						7	2	7	3	9	2
Eutrochium purpureum	sweetscented joe pye weed	EUPU21	Non-upland	FAC	FAC		7	3	6	3	6	5	6	3	6	4
Eutrochium purpureum var. purpureum	sweetscented joe pye weed	EUPUP4	Present 1988 WPL				5	3	6	1	7	2	6	3	6	3
Evolvulus sericeus	silver dwarf morning-glory	EVSE	Non-upland		FACW		4	3	7	3						
Festuca paradoxa	clustered fescue	FEP2	Non-upland	FAC	FAC				7	4	7	3	7	3	7	4
Ficus aurea	Florida strangler fig	FIAU	Non-upland		FAC		3	3								
Filipendula rubra	queen of the prairie	FIRU2	Non-upland	FACW	OBL								10	0		
Fimbristylis annua	annual fimbry	FIAN	Non-upland	FACW	FACW		3	3	2	7	3	2	4	2	5	2
Fimbristylis autumnalis	slender fimbry	FIAU2	Non-upland	FACW	OBL		3	3	3	7	3	6	4	3	4	5
Fimbristylis caroliniana	Carolina fimbry	FICA3	Non-upland		OBL		4	5	7	4						
Fimbristylis castanea	marsh fimbry	FICA4	Non-upland	OBL	OBL		7	5	7	7						
Fimbristylis cymosa	tropical fimbry	FICY	Non-upland		FAC		4	3								
Fimbristylis decipiens	southern fimbry	FIDE3	Non-upland	FACW	FACW		4	3	3	3						
Fimbristylis dichotoma	forked fimbry	FIDI	Non-upland	OBL	OBL		3	2	4	4	UND					
Fimbristylis perpusilla	Harper's fimbry	FIPE	Non-upland	OBL	OBL				9	4			10	0	3	2
Fimbristylis puberula	hairy fimbry	FIPU	Non-upland	OBL	OBL		8	3	8	5			9	2	9	4
Fimbristylis schoenoides	Ditch Fimbry	FISC	Non-upland		FACW	Non-native	0		0							
Fimbristylis tomentosa	woolly fimbry	FIPO	Non-upland	FACW	FACW	Non-native	0		0				0			
Fimbristylis vahlii	Vahl's fimbry	FIVA	Non-upland	OBL	OBL		4	3	3	3			4	4	4	4
Flaveria floridana	Florida yellowtops	FLFL	Non-upland		FACW		4	4								
Flaveria linearis	narrowleaf yellowtops	FLLI	Non-upland		FACW		3	3								
Flaveria trinervia	clustered yellowtops	FLTR	Non-upland	FAC	FAC		3	3								
Fleischmannia incarnata	pink thoroughwort	FLIN2	Non-upland	FAC	FACU		6	5	6	5	7	5	7	3	6	5
Floerkea proserpinacoides	false mermaidweed	FLPR	Non-upland	FAC	FACW										7	4
Forestiera acuminata	eastern swampprivet	FOAC	Non-upland	OBL	OBL		7	5	7	8	7	3	7	3	7	5
Forestiera ligustrina	upland swampprivet	FOLI	Non-upland	FAC	FAC		7	6	8	4	8	2	8	2	7	5
Fothergilla gardenii	dwarf witchhazel	FOGA	Non-upland	FACW	FACW		8	4	9	8						
Fothergilla major	mountain witchhazel	FOMA	Added; Absent from NWPL										9	1		
Frangula caroliniana	Carolina buckthorn	FRCA13	Non-upland	FAC	FACU		5	5	5	6	5	6	5	3	5	6
Fraxinus berlandieriana	Mexican ash	FRBE	Non-upland		FAC	Non-native (Adventive)	0		0							
Fraxinus caroliniana	Carolina ash	FRCA3	Non-upland	OBL	OBL		7	5	7	8						
Fraxinus nigra	black ash	FRNI	Non-upland	FACW	FACW										9	4
Fraxinus pennsylvanica	green ash	FRPE	Non-upland	FACW	FACW		5	5	5	9	5	8	5	2	5	6
Fraxinus profunda	pumpkin ash	FRPR	Non-upland	OBL	OBL		8	5	8	8	8	3	8	2	8	3
Fuirena breviseta	saltmarsh umbrella-sedge	FUBR	Non-upland	OBL	OBL		5	4	6	4						
Fuirena longa	coastal plain umbrella-sedge	FULO	Non-upland		OBL		4	4	8	1						
Fuirena pumila	dwarf umbrella-sedge	FUPU	Non-upland	OBL	OBL		5	4	5	5	UND					
Fuirena scirpoidea	southern umbrella-sedge	FUSC	Non-upland		OBL		4	5	6	3						
Fuirena squarrosa	hairy umbrella-sedge	FUSQ	Non-upland	OBL	OBL		5	5	5	6			6	4	7	1
Funastrum clausum	white twinevine	FUCL	Non-upland		FACW		4	2								
Galactia mollis	soft milkpea	GAMO2	Non-upland	FAC	FAC		6	4	9	3						
Galactia volubilis	downy milkpea	GAVO	Added; Absent from NWPL	FACU	FACU		5	4	6	3	6	2	6	0	6	4
Galium asprellum	rough bedstraw	GAA52	Non-upland	OBL	OBL								7	2		
Galium circaeazans var. circaeazans	licorice bedstraw	GACIC	Non-upland	FACU	FAC				6	6	6	6	6	3	6	4
Galium obtusum	bluntleaf bedstraw	GAOB	Non-upland	FACW	FACW		5	2	6	7	6	5	5	3	6	5
Galium tinctorium	stiff marsh bedstraw	GATI	Non-upland	OBL	FACW		4	4	5	7	5	6	6	3	6	5
Gaylussacia dumosa	dwarf huckleberry	GADU	Non-upland	FAC	FAC	G. dumosa var. bigeloviana - score 10 in CP	7	5	7*	7	7	4	8	3	8	2
Gaylussacia frondosa	blue huckleberry	GAFR2	Non-upland	FAC	FAC		6	5	6	7	7	5	8	0		
Gaylussacia mosieri	woolly huckleberry	GAMO3	Non-upland		FACW		8	4	8	3						
Gelsemium rankinii	Rankin's trumpetflower	GERA4	Non-upland		FACW		6	4	7	4						
Gelsemium sempervirens	evening trumpetflower	GESE	Non-upland	FAC	FAC		4	5	4	8	4	8	5	3		
Gentiana andrewsii	closed bottle gentian	GEAN	Non-upland	FACW	FACW										8	3
Gentiana autumnalis	pine barren gentian	GEAU4	Non-upland	FACW	FACW				9	4						

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<i>Gentiana catesbaei</i>	Elliott's gentian	GECA10	Non-upland	OBL	OBL		8	4	7	5						
<i>Gentiana clausa</i>	bottle gentian	GECL	Non-upland	FACW	FAC								7	3		
<i>Gentiana linearis</i>	narrowleaf gentian	GELI3	Non-upland	OBL	OBL								10	0		
<i>Gentiana pennelliana</i>	wiregrass gentian	GEPE3	Non-upland		FACW		9	4	9	3						
<i>Gentiana saponaria</i>	harvestbells	GESA	Non-upland	FACW	FACW		8	5	7	6	7	5	7	3	7	4
<i>Gentiana saponaria</i> var. <i>latidens</i>	harvestbells	GESAL2	Non-upland	FACW		Unscored; 2013 NWPL addition							UND			
<i>Gentianella quinquefolia</i>	agueweed	GEQU2	Non-upland	FAC	FACW				7	3	6	3	6	4	7	4
<i>Gentianopsis crinita</i>	greater fringed gentian	GECR2	Non-upland	OBL	FACW								9	2		
<i>Geum aleppicum</i>	yellow avens	GEAL3	Non-upland	FAC	FACW								8	1		
<i>Geum canadense</i>	white avens	GECA7	Non-upland	FACU	FAC				5	7	5	7	4	3	4	5
<i>Geum laciniatum</i>	rough avens	GEAL	Non-upland	FAC	FACW								7	2	7	2
<i>Geum vernum</i>	spring avens	GEVE	Non-upland	FACU	FAC								4	2	4	4
<i>Geum virginianum</i>	cream avens	GEVI4	Non-upland	FAC	FACW				6	4	5	5	6	2	6	5
<i>Glandularia tampensis</i>	Tampa mock vervain	GLTA	Non-upland		FACW		6	3								
<i>Gleditsia aquatica</i>	water locust	GLAQ	Non-upland	OBL	OBL		8	5	8	4					8	3
<i>Gleditsia triacanthos</i>	honeylocust	GLTR	Non-upland	FAC	FAC		3	6	4	4	4	5	4	2	3	7
<i>Glyceria acutiflora</i>	creeping mannagrass	GLAC	Non-upland	OBL	OBL								8	1	9	4
<i>Glyceria arkansana</i>	Arkansas mannagrass	GLAR	Non-upland	OBL	FACW										8	3
<i>Glyceria canadensis</i>	rattlesnake mannagrass	GLCA	Non-upland	OBL	OBL								UND			
<i>Glyceria grandis</i>	American mannagrass	GLGR	Non-upland	OBL	OBL								7	2		
<i>Glyceria laxa</i>	limp mannagrass	GLLA	Non-upland	FACW		Unscored; 2013 NWPL addition							UND			
<i>Glyceria melicaria</i>	melic mannagrass	GLME2	Non-upland	OBL	OBL								9	1		
<i>Glyceria nubigena</i>	Great Smoky Mountain mannagrass	GLNU	Non-upland	OBL									9	1		
<i>Glyceria obtusa</i>	Atlantic mannagrass	GLOB	Non-upland	OBL	OBL				7	2						
<i>Glyceria septentrionalis</i>	floating mannagrass	GLSE3	Non-upland	OBL	OBL				6	3	6	3	7	1	7	4
<i>Glyceria striata</i>	fowl mannagrass	GLST	Non-upland	OBL	OBL				5	5	5	5	5	3	5	5
<i>Goodyera pubescens</i>	downy rattlesnake plantain	GOPU	Added; Absent from NWPL	FACU	UPL		6	3	7	2	6	2	6	2	6	4
<i>Gordonia lasianthus</i>	loblolly bay	GOLA	Non-upland	FACW	FACW		7	5	8	5						
<i>Gouania lupuloides</i>	whiteroot	GOLU2	Non-upland		FAC		7	2								
<i>Gratiola aurea</i>	golden hedgeyssop	GRAU	Non-upland	OBL	OBL		6	3	8	3						
<i>Gratiola brevifolia</i>	sticky hedgeyssop	GRBR	Non-upland	FACW	FACW		6	4	7	3			8	1	8	3
<i>Gratiola floridana</i>	Florida hedgeyssop	GRFL2	Non-upland	OBL	OBL		6	3	7	5	7	4	7	1	7	2
<i>Gratiola hispida</i>	rough hedgeyssop	GRHI2	Non-upland		FAC		6	3	6	4						
<i>Gratiola neglecta</i>	clammy hedgeyssop	GRNE	Non-upland	OBL	OBL				5	4	5	4	4	1	4	5
<i>Gratiola pilosa</i>	shaggy hedgeyssop	GRPI	Non-upland	FACU	FACW		6	3	6	6	6	3	7	3	8	3
<i>Gratiola quartermaniae</i>		GRQU2	Non-upland	FAC	FAC								8	1	6	2
<i>Gratiola ramosa</i>	branched hedgeyssop	GRRA	Non-upland	FACW	FACW		5	3	7	3						
<i>Gratiola virginiana</i>	roundfruit hedgeyssop	GRVI	Non-upland	OBL	OBL		5	3	5	5	5	5	5	3	5	5
<i>Gratiola viscidula</i>	Short's hedgeyssop	GRVI2	Non-upland	OBL	OBL		8	2	8	3	8	3	8	1	8	3
<i>Guapira discolor</i>	beefree	GU DI	Non-upland		FAC		7	3								
<i>Guettarda scabra</i>	wild guave	GUSC	Non-upland		FAC		7	3								
<i>Habenaria distans</i>	hammock bog orchid	HADI6	Non-upland		FACW		8	2								
<i>Habenaria quinqueseta</i>	longhorn bog orchid	HAQU	Non-upland	FACW	FACW		8	3	8	2						
<i>Habenaria repens</i>	waterspider bog orchid	HARE	Non-upland	OBL	OBL		4	3	5	4						
<i>Habranthus tubispathus</i>	Rio Grande copperlily	HATU	Non-upland		FACW	Non-native	0									
<i>Hackelia virginiana</i>	beggarslice	HAVI2	Non-upland	FACU	FAC						6	4	5	3	5	5
<i>Halesia carolina</i>	Carolina silverbell	HACA3	Non-upland	FAC	FACU		8	2	7	3	7	3	6	2		
<i>Halesia diptera</i>	two-wing silverbell	HADI3	Non-upland	FAC	FAC		7	4	7	4	7	2				
<i>Halesia tetraptera</i>	mountain silverbell	HATE3	Non-upland	FAC	FACU								9	0		
<i>Halodule wrightii</i>	shoalweed	HAWR	Non-upland		OBL		8	3	UND							
<i>Halophila decipiens</i>	Caribbean seagrass	HADE5	Non-upland		OBL		8	3								
<i>Halophila engelmannii</i>	Engelmann's seagrass	HAEN2	Non-upland		OBL		8	3								
<i>Halophila johnsonii</i>	Johnson's seagrass	HAJO	Non-upland		OBL		8	3								
<i>Harperocalis flava</i>	Harper's beauty	HAFI3	Non-upland		OBL		8	5								
<i>Hartwrightia floridana</i>	Florida hartwrightia	HAFL4	Non-upland		OBL		8	3								
<i>Hasteola suaveolens</i>	false Indian plantain	HASU3	Non-upland	FACW	FACW				8	2			9	2	8	4
<i>Hedychium coronarium</i>	White Ginger-Lily	HECO11	Non-upland		OBL	Non-native	0									
<i>Helenium autumnale</i>	common sneezeweed	HEAU	Non-upland	FACW	FACW		3	3	4	8	6	7	4	3	4	6
<i>Helenium brevifolium</i>	shortleaf sneezeweed	HEBR	Non-upland	OBL	OBL		9	4	7	6	6	3	9	2		
<i>Helenium flexuosum</i>	purplehead sneezeweed	HEFL	Non-upland	FAC	FACW		4	6	4	7	4	6	4	3	4	6
<i>Helenium microcephalum</i>	smallhead sneezeweed	HEMI	Non-upland		FACW	Non-native (Adventive)			0		0					
<i>Helenium pinnatifidum</i>	southeastern sneezeweed	HEPI	Non-upland	OBL	OBL		7	5	7	4						
<i>Helenium vernale</i>	savannah sneezeweed	HEVE	Non-upland		FACW		7	5	8	4						
<i>Helianthus agrestis</i>	southeastern sunflower	HEAG	Non-upland		FACW		5	2								
<i>Helianthus angustifolius</i>	swamp sunflower	HEAN2	Non-upland	FACW	FACW		5	3	5	7	5	6	5	3	5	6
<i>Helianthus annuus</i>	common sunflower	HEAN3	Non-upland	FAC	FAC	Non-native (Adventive) east of Mississippi River	0		0				0		0	
<i>Helianthus carnosus</i>	lakeside sunflower	HECA14	Non-upland		FACW		7	4								
<i>Helianthus debilis</i>	cucumberleaf sunflower	HEDE4	Non-upland	UPL	FAC		5	2	4	3						
<i>Helianthus floridanus</i>	Florida sunflower	HEFL2	Non-upland		FACW		5	3	7	2						
<i>Helianthus giganteus</i>	giant sunflower	HEGI	Non-upland	FACW	FACW								7	3	7	3

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<i>Helianthus grosseserratus</i>	sawtooth sunflower	HEGR4	Non-upland	FACW	FAC	Non-native (Adventive) in Mtns and CP			0				0		4	3
<i>Helianthus heterophyllus</i>	variableleaf sunflower	HEHE4	Non-upland	OBL	OBL		7	4	7	6						
<i>Helianthus longifolius</i>	longleaf sunflower	HELO3	Non-upland	FAC	FAC				8	4	9	2	7	3		
<i>Helianthus radula</i>	rayless sunflower	HERA	Non-upland		FAC		7	3	7	4						
<i>Helianthus simulans</i>	muck sunflower	HESI2	Non-upland	FACW	FACW		5	2	UND							
<i>Helianthus tuberosus</i>	Jerusalem artichoke	HETU	Non-upland	FACU	FACU	Non-native outside KY and TN; can be found in wetlands	0		3*	2	0		4*	3	4*	4
<i>Heliotropium curassavicum</i>	salt heliotrope	HECU3	Non-upland	OBL	OBL		5	4	6	4						
<i>Heliotropium indicum</i>	Indian Heliotrope	HEIN	Non-upland	FAC	FAC	Adventive	0		0		0		0		0	
<i>Heliotropium polyphyllum</i>	pineland heliotrope	HEPO	Non-upland		FAC		7	3								
<i>Heliotropium procumbens</i>	fourspike heliotrope	HEPR3	Non-upland	FACW	FACW	Non-native	0									
<i>Helonias bullata</i>	swamppink	HEBU	Non-upland	OBL	OBL								10	0		
<i>Heraclium maximum</i>	common cowparsnip	HEMA80	Non-upland	FAC	FAC								7	4	8	3
<i>Heteranthera dubia</i>	grassleaf mudplantain	HEDU2	Non-upland	OBL	OBL		5	3	6	3	6	3	6	3	7	5
<i>Heteranthera limosa</i>	blue mudplantain	HEL12	Non-upland	OBL	OBL	Non-native in SCP	0		6	2			6	2	6	4
<i>Heteranthera reniformis</i>	kidneyleaf mudplantain	HERE	Non-upland	OBL	OBL		6	2	5	3	6	2	6	3	6	5
<i>Hexastylis arifolia</i>	littlebrownjug	HEAR6	Non-upland	FAC	FAC		7	6	7	9	7	8	7	3	8	4
<i>Hexastylis shuttleworthii</i>	largeflower heartleaf	HESH2	Non-upland	FACU	FACU				8	4	UND		8	0		
<i>Hexastylis shuttleworthii</i> var. <i>harperi</i>	largeflower heartleaf	HESHH	Non-upland						8	3			8	0		
<i>Hexastylis speciosa</i>	Harper's heartleaf	HESPA	Non-upland	FACW	FACW				9	1						
<i>Hibiscus aculeatus</i>	comfroot	HIAC	Non-upland	FACW	FACW		6	5	6	4						
<i>Hibiscus coccineus</i>	scarlet rosemallow	HICO2	Non-upland	OBL	OBL		6	4	6	3						
<i>Hibiscus furcellatus</i>	lindenleaf rosemallow	HIFU	Non-upland		FAC		5	2								
<i>Hibiscus grandiflorus</i>	swamp rosemallow	HIGR4	Non-upland		OBL		6	4	6	3						
<i>Hibiscus laevis</i>	halberdleaf rosemallow	HILA2	Non-upland	OBL	OBL		5	4	5	7	6	5	5	3	5	5
<i>Hibiscus lasiocarpus</i>	rosemallow	HILA6	Added; Absent from NWPL						6	2	UND				4	2
<i>Hibiscus moscheutos</i>	crimsoneyed rosemallow	HIMO	Non-upland	OBL	OBL		4	3	5	8	5	8	5	3	5	6
<i>Hierochloa hirta</i> ssp. <i>arctica</i>	northern sweetgrass	HIHA	Non-upland	FACW		Unscored; 2013 NWPL addition							UND			
<i>Hippocratea volubilis</i>	medicine vine	HIVO	Non-upland		FACW		7	3								
<i>Holcus lanatus</i>	Common Velvet Grass	HOLA	Non-upland	FAC	FACU	Non-native			0		0		0		0	
<i>Hordeum jubatum</i>	foxtail barley	HOJU	Non-upland	FAC	FAC	Non-native			0						0	
<i>Hordeum pusillum</i>	little barley	HOPU	Non-upland	FAC	FACU		2	4	1	5	1	5	2	1	1	5
<i>Hottonia inflata</i>	American featherfoil	HOIN	Non-upland	OBL	OBL				8	6			9	2	8	4
<i>Houstonia caerulea</i>	azure bluet	HOCA4	Non-upland	FACU	FAC		3	3	4	8	4	8	4	3	4	6
<i>Houstonia pusilla</i>	tiny bluet	HOPU3	Non-upland	FAC	FACU		3	7	2	9	2	8	2	2	2	6
<i>Houstonia serpyllifolia</i>	thymeleaf bluet	HOSE2	Non-upland	FAC	FACW								8	3		
<i>Humulus japonicus</i>	Japanese Hop	HUJA	Non-upland	FACU	FAC	Non-native					0		0		0	
<i>Huperzia lucidula</i>	shining clubmoss	HULU2	Non-upland	FACW	FACW						7	4	7	3	7	4
<i>Hydrilla verticillata</i>	Water-Thyme	HYVE3	Non-upland	OBL	OBL	Non-native	0		0		0		0			
<i>Hydrocotyle americana</i>	American marshpennywort	HYAM	Non-upland	OBL	OBL								8	3	9	4
<i>Hydrocotyle bonariensis</i>	largeleaf pennywort	HYBO	Non-upland	FACW	FACW	Non-native in PDMNT	5	4	4	6	0					
<i>Hydrocotyle prolifera</i>	whorled marshpennywort	HYPR10	Non-upland	OBL	OBL		5	3	5	3						
<i>Hydrocotyle ranunculoides</i>	floating marshpennywort	HYRA	Non-upland	OBL	OBL		5	3	4	6	4	5	5	2	6	3
<i>Hydrocotyle umbellata</i>	manyflower marshpennywort	HYUM	Non-upland	OBL	OBL		3	5	4	7	4	5	4	3	5	2
<i>Hydrocotyle verticillata</i>	whorled marshpennywort	HYVE2	Non-upland	OBL	OBL		5	5	4	6	4	4	4	1		
<i>Hydrolea corymbosa</i>	skyflower	HYCO7	Non-upland		OBL		5	3	6	2						
<i>Hydrolea ovata</i>	ovate false fiddleleaf	HYOV	Non-upland	OBL	OBL		7	3	6	3	6	4	7	3	8	4
<i>Hydrolea quadrivalvis</i>	waterpod	HYQU	Non-upland	OBL	OBL		5	5	6	6	6	5	6	0	7	3
<i>Hydrolea uniflora</i>	oneflower false fiddleleaf	HYUN	Non-upland	OBL	OBL		6	3	6	3					7	3
<i>Hydrophyllum canadense</i>	bluntleaf waterleaf	HYCA3	Non-upland	FACU	FACW						8	2	7	3	7	4
<i>Hydrophyllum virginianum</i>	eastern waterleaf	HYVI	Non-upland	FAC	FACW								8	3	7	3
<i>Hygrophila lacustris</i>	gulf swampweed	HYLA	Non-upland		OBL				6	2						
<i>Hygrophila polysperma</i>	Miramar-Weed	HYPO3	Non-upland		OBL	Non-native	0									
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	HYAM2	Non-upland		OBL	Non-native	0									
<i>Hymenocallis caroliniana</i>	Carolina spiderlily	HYCA9	Non-upland	OBL	OBL			4	8	3	9	3	7	1	7	5
<i>Hymenocallis choctawensis</i>	Choctaw spiderlily	HYCH	Non-upland		OBL		8	3								
<i>Hymenocallis floridana</i>	Florida spiderlily	HYFL3	Non-upland		OBL		7	3								
<i>Hymenocallis latifolia</i>	perfumed spiderlily	HYLA5	Non-upland		OBL		5	3								
<i>Hymenocallis liriosme</i>	spring spiderlily	HYLI	Non-upland	OBL	OBL				5	4						
<i>Hymenocallis palmeri</i>	alligatorlily	HYPA4	Non-upland		OBL		7	4								
<i>Hymenocallis punta-gordensis</i>	Punta Gordo spiderlily	HYPU3	Non-upland		OBL		7	2								
<i>Hymenocallis rotata</i>	streambank spiderlily	HYRO2	Non-upland		OBL		7	3								
<i>Hypericum adpressum</i>	creeping St. Johnswort	HYAD	Non-upland	OBL	OBL				9	3					10	3
<i>Hypericum brachyphyllum</i>	coastal plain St. Johnswort	HYBR3	Non-upland	FACW	FACW		7	5	8	4						
<i>Hypericum buckleii</i>	Buckle's St. Johnswort	HYBU	Non-upland		FAC								10	2		
<i>Hypericum canadense</i>	lesser Canadian St. Johnswort	HYCA7	Non-upland	FACW	FACW		7	3	6	3	7	4	7	3	7	4
<i>Hypericum chapmanii</i>	Apalachicola St. Johnswort	HYCH2	Non-upland		OBL		9	4	10	4						
<i>Hypericum cistifolium</i>	roundpod St. Johnswort	HYCI	Non-upland	FACW	FACW		5	3	5	4						
<i>Hypericum crux-andreae</i>	St. Peterswort	HYCR3	Non-upland	FACU	FACW		6	5	6	6	6	6	7	3	8	4
<i>Hypericum densiflorum</i>	bushy St. Johnswort	HYDE	Non-upland	FACU	FACW				6	3			7	3	3	
<i>Hypericum denticulatum</i>	coppery St. Johnswort	HYDE2	Non-upland	FACW	FACW		7	5	8	4	7	3	7	2	8	3

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<i>Hypericum edisonianum</i>	Arcadian St. Johnswort	HYED	Non-upland		OBL		7	3								
<i>Hypericum ellipticum</i>	pale St. Johnswort	HYEL	Non-upland	OBL	OBL								8	0		
<i>Hypericum exile</i>	Florida Sands St. Johnswort	HYEX	Non-upland		FACW		5	5	10	1						
<i>Hypericum fasciculatum</i>	peelbark St. Johnswort	HYFA	Non-upland	FACW	FACW		6	3	7	4						
<i>Hypericum galioides</i>	bedstraw St. Johnswort	HYGA	Non-upland	OBL	OBL		5	3	5	3						
<i>Hypericum graveolens</i>	mountain St. Johnswort	HYGR3	Non-upland	FAC									8	2		
<i>Hypericum gymnanthum</i>	claspingleaf St. Johnswort	HYGY	Non-upland	OBL	FACW		6	5	7	4	7	3	6	3	7	3
<i>Hypericum hypericoides</i>	St. Andrew's cross	HYHY	Non-upland	FACU	FAC		5	7	5	8	5	7	5	3	5	5
<i>Hypericum hypericoides ssp. hypericoides</i>	St. Andrew's cross	HYHYH	Present 1988 WPL				4	4	6	2	4	1	6	3	5	3
<i>Hypericum lissochloos</i>	smoothbark St. Johnswort	HYLI4	Non-upland		OBL		9	4	10	3						
<i>Hypericum lobocarpum</i>	fivelobe St. Johnswort	HYLO2	Added; Absent from NWPL						8	1					7	3
<i>Hypericum microsepalum</i>	flatwoods St. Johnswort	HYMI4	Non-upland		FAC		6	4	6	3						
<i>Hypericum mutilum</i>	dwarf St. Johnswort	HYMU	Non-upland	FACW	FACW		4	6	3	8	3	7	4	3	4	6
<i>Hypericum myrtifolium</i>	myrtleleaf St. Johnswort	HYMY	Non-upland		FACW		6	4	7	4						
<i>Hypericum nitidum</i>	Carolina St. Johnswort	HYNI3	Non-upland	OBL	OBL		7	3	8	4	0					
<i>Hypericum nudiflorum</i>	early St. Johnswort	HYNU	Non-upland	FACW	FACW		7	3	7	4	7	6	8	2		
<i>Hypericum prolificum</i>	shrubby St. Johnswort	HYPR	Non-upland	FACU	FAC		5	3	5	5	5	4	5	3	5	4
<i>Hypericum punctatum</i>	spotted St. Johnswort	HYPU	Non-upland	FAC	FAC		4	5	4	7	4	6	3	2	3	6
<i>Hypericum setosum</i>	hairy St. Johnswort	HYSE	Non-upland	OBL	FACW		7	3	7	4						
<i>Hypericum sphaerocarpum</i>	roundseed St. Johnswort	HYSP2	Non-upland	FAC	FACU				6	2			6	0	7	6
<i>Hypericum tetrapetalum</i>	fourpetal St. Johnswort	HYTE4	Non-upland		OBL		5	3	7	2						
<i>Hypericum virgatum</i>	sharpleaf St. Johnswort	HYVI6	Added; Absent from NWPL	FACU					8	3	7	3	8	3	7	3
<i>Hypolepis repens</i>	bramblefern	HYRE2	Non-upland		FACW		5	1								
<i>Hypoxis curtisii</i>	Curtis' star-grass	HYCU5	Non-upland	FACW	FACW		6	3	7	3						
<i>Hypoxis hirsuta</i>	common goldstar	HYHI2	Non-upland	FAC	FACW		6	7	5	9	5	8	6	3	6	6
<i>Hypoxis juncea</i>	fringed yellow star-grass	HYJU	Non-upland		FACW		6	5	8	3						
<i>Hypoxis rigida</i>	stiff star-grass	HYRI2	Non-upland	FACW	FACW		6	4	8	3						
<i>Hypoxis sessilis</i>	glossyseed yellow star-grass	HYSE2	Non-upland	FACU	FACW		7	3	8	3						
<i>Hypoxis wrightii</i>	Wright's star-grass	HYWR3	Non-upland	FAC	FACW		6	3	6	4	7	2				
<i>Hyptis alata</i>	clustered bushmint	HYAL	Non-upland	OBL	OBL		4	6	5	4						
<i>Hyptis mutabilis</i>	Tropical Bush-Mint	HYMU2	Non-upland	FAC	FAC	Non-native	0		0							
<i>Ilex amelanchier</i>	sarvis holly	ILAM2	Non-upland	OBL	OBL		8	4	9	5						
<i>Ilex cassine</i>	dahoon	ILCA	Non-upland	FACW	FACW		6	5	7	4	0					
<i>Ilex collina</i>	longstalk holly	ILCO2	Non-upland	FACW		Unscored; 2013 NWPL addition							UND			
<i>Ilex coriacea</i>	large gallberry	ILCO	Non-upland	FACW	FACW		7	5	7	5	8	2				
<i>Ilex cuthbertii</i>	Cuthbert's holly	ILCU3	Non-upland	FACW	FACW		8	3	7	2						
<i>Ilex decidua</i>	possumhaw	ILDE	Non-upland	FACW	FACW		6	7	6	9	6	8	6	3	6	6
<i>Ilex glabra</i>	inkberry	ILGL	Non-upland	FAC	FACW		5	5	5	7	6	6	8	0		
<i>Ilex laevigata</i>	smooth winterberry	ILLA	Non-upland	OBL	FACW				8	3	UND					
<i>Ilex longipes</i>	Georgia holly	ILLO	Non-upland	FAC	FAC		7	4	7	5	7	6	7	2	7	3
<i>Ilex myrtifolia</i>	myrtle dahoon	ILMY	Non-upland	FACW	FACW		8	5	8	7	0					
<i>Ilex opaca</i>	American holly	ILOP	Non-upland	FACU	FAC		5	7	5	9	5	8	6	2	6	6
<i>Ilex verticillata</i>	common winterberry	ILVE	Non-upland	FACW	FACW		7	6	7	9	7	8	7	2	7	6
<i>Ilex vomitoria</i>	yaupon	ILVO	Non-upland	FAC	FAC		6	5	5	7			6	2		
<i>Illicium floridanum</i>	Florida anisetree	ILFL	Non-upland	FACW	FACW		8	4	7	7			7	1		
<i>Illicium parviflorum</i>	yellow anisetree	ILPA	Non-upland		OBL		8	4	8	1						
<i>Impatiens capensis</i>	jewelweed	IMCA	Non-upland	FACW	FACW		4	4	4	7	4	7	4	3	4	6
<i>Impatiens pallida</i>	pale touch-me-not	IMPA	Non-upland	FACW	FACW								6	3	6	5
<i>Iodanthus pinnatifidus</i>	purplerocket	IOPI	Non-upland	FACW	FACW								6	2	7	4
<i>Ipomoea alba</i>	tropical white morning-glory	IPAL	Non-upland	FAC	FAC		2	3								
<i>Ipomoea coccinea</i>	Redstar	IPCO3	Non-upland	FACU	FAC	Non-native			0		0		0		0	
<i>Ipomoea cordatotriloba var. cordatotriloba</i>	tievine	IPCO2	Present 1988 WPL			Non-native in TN	3	4	3*	4	4	2	1*	1		
<i>Ipomoea hederifolia</i>	scarletcreeper	IPHE2	Non-upland		FACW		3	3	0							
<i>Ipomoea indica</i>	Ocean-Blue Morning-Glory	IPIN	Non-upland		FAC	Nativity unknown; considered possibly native by Weakley	3	5	3	3						
<i>Ipomoea lacunosa</i>	whitestar	IPLA	Non-upland	FACW	FAC		3	5	3	7	3	5	3	1	3	6
<i>Ipomoea pes-caprae</i>	bayhops	IPPE	Non-upland	FAC	FAC		6	3	6	3						
<i>Ipomoea sagittata</i>	saltmarsh morning-glory	IPSA	Non-upland	FACW	FACW		5	4	5	3						
<i>Ipomoea violacea</i>	beach moonflower	IPVI	Non-upland		FACW		3	3								
<i>Ipomoea wrightii</i>	Wright's Morning-Glory	IPWR	Non-upland	FACW	FACW	Non-native (Adventive)			0						0	
<i>Iresine diffusa</i>	Juba's bush	IRDI	Non-upland		FAC		4	3								
<i>Iresine rhizomatosa</i>	Juda's bush	IRRH	Non-upland	FACW	FACW		6	2	7	2			6	0	7	4
<i>Iris brevicaulis</i>	zigzag iris	IRBR2	Non-upland	OBL	OBL		7	3	7	4					8	4
<i>Iris fulva</i>	copper iris	IRFU	Non-upland	OBL	OBL		5	3	7	2						
<i>Iris hexagona</i>	Dixie iris	IRHE2	Non-upland	OBL	OBL		6	4	UND							
<i>Iris hexagona var. hexagona</i>	Dixie iris	IRHEH	Present 1988 WPL				5	3								
<i>Iris hexagona var. savannarum</i>	savanna iris	IRHES	Non-upland	OBL	OBL	Unscored; 2013 NWPL addition	UND		UND							
<i>Iris prismatica</i>	slender blue iris	IRPR	Non-upland	OBL	OBL				8	5	8	2	8	1	9	2
<i>Iris pseudacorus</i>	Pale-Yellow Iris	IRPS	Non-upland	OBL	OBL	Non-native			0		0		0		0	
<i>Iris tridentata</i>	savannah iris	IRTR	Non-upland	OBL	OBL		7	3	7	3						
<i>Iris virginica</i>	Virginia iris	IRVI	Non-upland	OBL	OBL		7	4	7	6	7	5	7	3	7	5

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Isoetes appalachiana</i>		ISAP	Non-upland	OBL	OBL		8	3	8	2	8	2				
<i>Isoetes boomii</i>		ISBO2	Non-upland		OBL		8	3	8	1						
<i>Isoetes butleri</i>		ISBU	Non-upland	FACW	OBL								8	0	8	5
<i>Isoetes engelmannii</i>		ISEN	Non-upland	OBL	OBL				6	4			8	4	7	5
<i>Isoetes flaccida</i>		ISFL	Non-upland		OBL		5	3	8	2	8	3				
<i>Isoetes georgiana</i>		ISGE	Non-upland		OBL				10	1						
<i>Isoetes hymalis</i>		ISHY	Non-upland	OBL	OBL				8	3						
<i>Isoetes junciformis</i>		ISJU2	Non-upland		OBL	Not enough expertise			UND							
<i>Isoetes louisianensis</i>		ISLO	Non-upland		OBL		7	1	8	3						
<i>Isoetes melanopoda</i>		ISME	Non-upland	OBL	OBL				7	2	7	2	7	2	7	5
<i>Isoetes melanospora</i>		ISME3	Non-upland	OBL	OBL						9	2				
<i>Isoetes microvela</i>		ISMI3	Non-upland		OBL				8	2						
<i>Isoetes piedmontana</i>		ISPI	Non-upland	OBL	OBL				8	3	9	2				
<i>Isoetes riparia</i>		ISRI	Non-upland	OBL	OBL				9	2						
<i>Isoetes riparia</i> var. <i>riparia</i>		ISRI1	Non-upland						9	1						
<i>Isoetes tetragyniformans</i>		ISTE	Non-upland	OBL	OBL						10	3				
<i>Isoetes tennesseensis</i>		ISTE6	Non-upland	OBL									UND			
<i>Isoetes valida</i>		ISVA2	Non-upland	OBL	OBL				7	1			6	2		
<i>Isolepis carinata</i>	keeled bulrush	ISCA6	Non-upland	FACW	FACW		4	3	3	5	4	4	4	1	4	4
<i>Isotria verticillata</i>	large whorled pogonia	ISVE	Added; Absent from NWPL	FACU	FACU				7	4	7	3	7	1	7	4
<i>Itea virginica</i>	Virginia sweetspire	ITVI	Non-upland	OBL	FACW		7	7	7	9	7	8	7	3	7	6
<i>Iva annua</i>	annual marsh elder	IVAN2	Non-upland	FAC	FAC		2	4	1	5			1	3	2	6
<i>Iva frutescens</i>	Jesuit's bark	IVFR	Non-upland	FACW	FACW		5	3	6	4						
<i>Iva imbricata</i>	seacoast marsh elder	IVIM	Non-upland		FACW		5	3	7	4						
<i>Iva microcephala</i>	pedmont marsh elder	IVMI	Non-upland	FACW	FACW		4	4	5	3						
<i>Jacquinia keyensis</i>	joewood	JAKE	Non-upland		FAC		7	2								
<i>Jamesianthus alabamensis</i>	Alabama warbonnet	JAAL	Non-upland	OBL	OBL								8	0	8	2
<i>Juncus abortivus</i>	annual rush	JUAB	Non-upland	OBL	OBL		5	4	5	3						
<i>Juncus acuminatus</i>	tapertip rush	JUAC	Non-upland	OBL	OBL		4	4	4	7	4	6	4	2	4	6
<i>Juncus anhelatus</i>	greater poverty rush	JUAN3	Added; Absent from NWPL										5	0	5	1
<i>Juncus articulatus</i>	jointleaf rush	JUAR4	Non-upland	OBL	OBL								6	3	6	3
<i>Juncus biflorus</i>	bog rush	JUBI	Non-upland	FACW	FACW		4	4	5	7	5	6	5	1	5	5
<i>Juncus brachycarpus</i>	whiteroot rush	JUBR	Non-upland	FACW	FACW		6	2	5	4	5	3	5	3	5	5
<i>Juncus brachycephalus</i>	smallhead rush	JUBR2	Non-upland	OBL	OBL								9	1	9	2
<i>Juncus brachyphyllus</i>	tuftedstem rush	JUBR3	Non-upland	FAC	FAC				7	1						
<i>Juncus brevicaudatus</i>	narrowpanicle rush	JUBR4	Non-upland	OBL	OBL								8	4		
<i>Juncus bufonius</i>	toad rush	JUBU	Non-upland	FACW	FACW		2	3	3	6	2	4	3	0	2	4
<i>Juncus caesariensis</i>	New Jersey rush	JUCA2	Non-upland	OBL	OBL								10	1		
<i>Juncus canadensis</i>	Canadian rush	JUCA3	Non-upland	OBL	OBL		5	3	5	6	5	4	7	3	7	5
<i>Juncus coriaceus</i>	leathery rush	JUCO4	Non-upland	FACW	FACW		5	3	5	9	5	7	6	3	6	5
<i>Juncus debilis</i>	weak rush	JUDE	Non-upland	OBL	OBL		5	4	5	6	4	3	5	2	5	6
<i>Juncus dichotomus</i>	forked rush	JUDI1	Non-upland	FACW	FACW		3	2	4	7	4	6	4	2	4	3
<i>Juncus diffusissimus</i>	slimpod rush	JUDI2	Non-upland	FACW	FACW		5	3	4	7	4	5	4	2	4	6
<i>Juncus dudleyi</i>	Dudley's rush	JUDU2	Non-upland	FACW	FACW				4	1			3	1	3	3
<i>Juncus effusus</i>	common rush	JUEF	Non-upland	FACW	OBL		3	6	3	9	3	8	3	3	4	6
<i>Juncus effusus</i> var. <i>pyllei</i>	common rush	JUEFP2	Non-upland	OBL	OBL	This variety scored separately for Mtns							7	1		
<i>Juncus elliotii</i>	Elliott's rush	JUEL	Non-upland	FACW	OBL		3	3	6	3	4	1	8	2	8	4
<i>Juncus filipendulus</i>	ringseed rush	JUF12	Non-upland	FAC	FAC				6	4			8	3	8	4
<i>Juncus gymnocarpus</i>	Pennsylvania rush	JUGY	Non-upland	OBL	OBL		8	4	8	5			8	1		
<i>Juncus interior</i>	inland rush	JUIN2	Added; Absent from NWPL	FACU	FACU				5	3			4	2	4	4
<i>Juncus longii</i>	Long's rush	JULO2	Non-upland	OBL	OBL		3	2	7	3	8	2	8	0	8	2
<i>Juncus marginatus</i>	grassleaf rush	JUMA4	Non-upland	FACW	FACW		5	6	5	8	5	7	4	3	5	5
<i>Juncus megacephalus</i>	bighead rush	JUME	Non-upland	OBL	OBL		4	3	5	5						
<i>Juncus nodatus</i>	stout rush	JUNO	Non-upland	OBL	OBL		5	2	7	3			6	3	6	4
<i>Juncus pelocarpus</i>	brownfruit rush	JUPE	Non-upland	OBL	OBL		6	2	7	3						
<i>Juncus polycephalus</i>	manyhead rush	JUPO	Non-upland	OBL	OBL		5	4	4	5						
<i>Juncus repens</i>	lesser creeping rush	JURE2	Non-upland	OBL	OBL		6	4	5	8	5	7	6	3	7	2
<i>Juncus roemerianus</i>	needlegrass rush	JURO	Non-upland	OBL	OBL		8	6	7	5						
<i>Juncus scirpoides</i>	needlepod rush	JUSC	Non-upland	FACW	FACW		5	4	5	8	5	6	6	5	6	5
<i>Juncus secundus</i>	lopsided rush	JUSE	Non-upland	FACU	FAC						7	4	6	2	5	3
<i>Juncus subcaudatus</i>	woodland rush	JUSU	Non-upland	OBL	FAC								7	3		
<i>Juncus tenuis</i>	poverty rush	JUTE	Non-upland	FAC	FAC		2	3	2	8	2	7	2	3	2	6
<i>Juncus torreyi</i>	Torrey's rush	JUTO	Non-upland	FACW	FACW				5	3			6	0	6	3
<i>Juncus trigonocarpus</i>	redpod rush	JUTR5	Non-upland	OBL	OBL		7	3	6	6						
<i>Juncus validus</i>	roundhead rush	JUVA2	Non-upland	FACW	FACW	May be adventive in Mtns of KY and TN	5	2	5	5	5	4	6	2	5	3
<i>Juniperus virginiana</i> var. <i>silicicola</i>	southern redcedar	JUVIS	Present 1988 WPL				5	2	6	3						
<i>Justicia americana</i>	American water-willow	JUAM	Non-upland	OBL	OBL		5	2	5	5	6	5	5	3	5	6
<i>Justicia cooleyi</i>	Cooley's water-willow	JUCO8	Non-upland		FACW		7	3								
<i>Justicia crassifolia</i>	thickleaf water-willow	JUCR	Non-upland		OBL		8	3								
<i>Justicia ovata</i>	looseflower water-willow	JUOV	Non-upland	OBL	OBL		6	3	6	7	6	4	6	2	7	5
<i>Justicia ovata</i> var. <i>lanceolata</i>	looseflower water-willow	JUOVL	Non-upland	OBL	OBL	Unscored; 2013 NWPL addition			UND						UND	

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<i>Kalmia carolina</i>	Carolina laurel	KACA2	Non-upland	FAC	FACW				7	5			9	0		
<i>Kalmia cuneata</i>	whitewicky	KACU	Non-upland	FACW	FACW				9	4	10	1				
<i>Kalmia hirsuta</i>	hairy laurel	KAH2	Non-upland		FACW		8	4	8	4						
<i>Kickxia elatine</i>	Sharp-Leaf Cancerwort	KIEL	Non-upland	FAC	FACU	Non-native			0		0		0		0	
<i>Kosteletzkya virginica</i>	Virginia saltmarsh mallow	KOVI	Present 1988 WPL				6	3	6	5						
<i>Krigia caespitosa</i>	weedy dwarfdandelion	KRCA	Non-upland	FAC	FAC		2	3	2	7	2	6	2	2	2	5
<i>Krigia dandelion</i>	potato dwarfdandelion	KRDA	Non-upland	FAC	FACU				5	5	5	5	5	2	6	4
<i>Krigia montana</i>	mountain dwarfdandelion	KRMO	Added; Absent from NWPL										9	0		
<i>Kyllinga brevifolia</i>	shortleaf spikeseedge	KYBR	Non-upland	FACW	FACW		1	3	2	4			1	0		
<i>Kyllinga gracillima</i>	pasture spikeseedge	KYGR	Non-upland	FACU	FACU	Non-native	0						0			
<i>Kyllinga odorata</i>	fragrant spikeseedge	KYOD	Non-upland	FACW	FACW		2	3	2	4	2	4				
<i>Kyllinga pumila</i>	low spikeseedge	KYPU	Non-upland	FACW	FACW		3	3	3	7	3	6	4	3	4	5
<i>Lachnanthes carollana</i>	Carolina redroot	LACA5	Non-upland	OBL	OBL		4	6	5	8					9	2
<i>Lachnocaulon anceps</i>	whitehead bogbutton	LAAN	Non-upland	OBL	FACW		6	5	6	6			8	2		
<i>Lachnocaulon beyrichianum</i>	southern bogbutton	LABE	Non-upland		OBL		7	5	8	4						
<i>Lachnocaulon digynum</i>	pineland bogbutton	LADI5	Non-upland		FACW		9	3	9	3						
<i>Lachnocaulon engleri</i>	Engler's bogbutton	LAEN	Non-upland		FACW		8	3								
<i>Lachnocaulon minus</i>	Small's bogbutton	LAMI3	Non-upland	OBL	OBL		6	4	8	3						
<i>Lactuca biennis</i>	tall blue lettuce	LABI	Added; Absent from NWPL	FACU	FACU								5	2	5	3
<i>Lactuca serriola</i>	Prickly Lettuce	LASE	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
<i>Lactuca tatarica</i>	blue lettuce	LATA	Non-upland	FAC	FAC	Non-native (Adventive)	0									
<i>Laguncularia racemosa</i>	white mangrove	LARA2	Non-upland		OBL		7	5								
<i>Landoltia punctata</i>	dotted duckmeat	LAPU12	Non-upland	OBL	OBL	Non-native (Adventive)	0		0		0		0		0	
<i>Laportea canadensis</i>	Canadian woodnettle	LACA3	Non-upland	FAC	FACW		5	2	6	7	6	7	6	3	6	5
<i>Lathyrus palustris</i>	marsh pea	LAPA4	Non-upland	FACW	OBL				6	3	6	3	9	2	9	3
<i>Lathyrus pusillus</i>	tiny pea	LAPU3	Non-upland	FAC	FAC		4	3	3	1						
<i>Lathyrus venosus</i>	veiny pea	LAVE	Non-upland	FACW	FAC						7	4	7	1	8	3
<i>Leavenworthia alabamica</i>	Alabama gladeceess	LEAL2	Added; Absent from NWPL												6	3
<i>Leavenworthia crassa</i>	fleshyfruit gladeceess	LECR	Added; Absent from NWPL												6	3
<i>Leavenworthia exigua</i>	Tennessee gladeceess	LEEX	Added; Absent from NWPL												7	5
<i>Leavenworthia stylosa</i>	cedar gladeceess	LEST7	Added; Absent from NWPL												6	1
<i>Leavenworthia torulosa</i>	necklace gladeceess	LETO	Non-upland	OBL									8	1	8	4
<i>Leavenworthia uniflora</i>	Michaux's gladeceess	LEUN	Non-upland	FAC	FAC								7	2	6	6
<i>Leersia hexandra</i>	southern cutgrass	LEHE	Non-upland	OBL	OBL		6	4	7	7	6	3			8	2
<i>Leersia lenticularis</i>	catchfly grass	LELE2	Non-upland	OBL	OBL		6	3	6	4					7	4
<i>Leersia oryzoides</i>	rice cutgrass	LEOR	Non-upland	OBL	OBL		4	5	4	6	4	7	5	5	5	6
<i>Leersia virginica</i>	whitegrass	LEVI2	Non-upland	FACW	FACW		5	3	5	9	5	8	4	3	4	6
<i>Leitneria floridana</i>	corkwood	LEFL	Non-upland	OBL	OBL		8	3	8	3						
<i>Lemna aquinoctialis</i>	lesser duckweed	LEAE2	Non-upland	OBL	OBL		4	2	4	3			3	1	4	2
<i>Lemna minor</i>	common duckweed	LEMI3	Non-upland	OBL	OBL		3	5	3	6			3	2	3	5
<i>Lemna minuta</i>	least duckweed	LEMI6	Non-upland	OBL	OBL		4	2	5	3			2	0	6	2
<i>Lemna obscura</i>	little duckweed	LEOB2	Non-upland	OBL	OBL		3	2	4	4			3	1	3	5
<i>Lemna perpusilla</i>	minute duckweed	LEPE	Non-upland	OBL	OBL		3	3	4	3					4	4
<i>Lemna trisulca</i>	star duckweed	LETR	Non-upland	OBL	OBL										2	1
<i>Lemna turionifera</i>	turion duckweed	LETU2	Non-upland	OBL	OBL										6	3
<i>Lemna valdiviana</i>	valdivia duckweed	LEVA	Non-upland	OBL	OBL		4	3	4	3	6	3	5	4	5	6
<i>Lepidium densiflorum</i>	common pepperweed	LEDE	Non-upland	FAC	FACU	Non-native (Adventive)			0		0		0		0	
<i>Leptochloa fusca</i>	Malabar sprangletop	LEFU21	Non-upland	FACW	FACW		3	3	5	2			2	1	2	2
<i>Leptochloa fusca ssp. fascicularis</i>	bearded sprangletop	LEFUJ	Present 1988 WPL				4	2							2	2
<i>Leptochloa fusca ssp. uninervia</i>	Mexican sprangletop	LEFUU	Present 1988 WPL			Non-native (Adventive) outside of SCP	4	2							0	
<i>Leptochloa panicea</i>	mucronate sprangletop	LEPA6	Non-upland	FACW	FACW	Non-native (Adventive) in SCP	0		2	2	UND		2	2	2	3
<i>Leptochloa panicea ssp. brachiata</i>	mucronate sprangletop	LEPAB	Present 1988 WPL				UND						2	2	2	3
<i>Leptochloa panicoides</i>	Amazon sprangletop	LEPA3	Non-upland	FACW	FACW	Non-native	5	2	4	2	6	1	0		0	
<i>Leptochloa scabra</i>	rough sprangletop	LESC	Non-upland		FACW	Non-native (Adventive)			0							
<i>Lepuropetalon spathulatum</i>	petiteplant	LESP	Non-upland	FACW	FACW		5	2	5	2	8	2				
<i>Lespedeza angustifolia</i>	narrowleaf lespedeza	LEAN	Non-upland	FAC	FAC		7	4	6	6	6	2			9	2
<i>Leucospora multifida</i>	narrowleaf paleseed	LEMU	Non-upland	OBL	OBL		1	3	4	2			3	1	3	6
<i>Leucothoe axillaris</i>	coastal doghobble	LEAX	Non-upland	FACW	FACW		8	4	7	7			7	0		
<i>Leucothoe fontanesiana</i>	highland doghobble	LEFO	Non-upland	FACW	FACW						8	5	7	2		
<i>Liatris garberi</i>	Garber's blazing star	LIGA	Non-upland		FACW		7	4								
<i>Liatris microcephala</i>	smallhead blazing star	LIMI7	Added; Absent from NWPL								8	2	8	1	8	2
<i>Liatris pycnostachya</i>	prairie blazing star	LIPY	Added; Absent from NWPL	FACU	FACU				6	3						
<i>Liatris spicata</i>	dense blazing star	LISP	Non-upland	FAC	FAC		8	6	7	7	7	6	7	3	8	4
<i>Ligusticum canadense</i>	Canadian licorice-root	LICA16	Non-upland	FAC	FAC				7	3	8	3	7	3	7	3
<i>Ligustrum sinense</i>	Chinese Privet	LISI	Non-upland	FACU	FAC	Non-native	0		0		0		0		0	
<i>Lilaeopsis carolinensis</i>	Carolina grasswort	LICA31	Non-upland	OBL	OBL		7	5	7	3						
<i>Lilaeopsis chinensis</i>	eastern grasswort	LICH	Non-upland	OBL	OBL		7	6	7	3						
<i>Lilium canadense</i>	Canada lily	LICA3	Non-upland	FAC	FAC						8	3	8	2	8	5
<i>Lilium catesbaei</i>	pine lily	LICA4	Non-upland	FACW	FACW		9	4	9	3						
<i>Lilium michauxii</i>	Carolina lily	LIMI	Non-upland	FAC	FAC		7	3	6	7	6	7	7	2	7	1
<i>Lilium michiganense</i>	Michigan lily	LIMI9	Non-upland	FACW	FACW								7	2	8	4

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Lilium philadelphicum</i>	wood lily	LIPH	Added; Absent from NWPL	FACU	FACU								9	3	9	2
<i>Lilium superbum</i>	turk's-cap lily	LISU	Non-upland	FACW	FACW		8	3	8	5	8	5	8	2	8	4
<i>Limnobiium spongia</i>	American spongeplant	LISP2	Non-upland	OBL	OBL		5	4	6	5			6	3	7	4
<i>Limnophila indica</i>	Indian Marshweed	LIN5	Non-upland		OBL	Non-native	0									
<i>Limnophila sessiliflora</i>	Asian Marshweed	LISE3	Non-upland		OBL	Non-native	0									
<i>Limonium carolinianum</i>	lavender thrift	LICA17	Non-upland	OBL	OBL		8	5	8	3						
<i>Limosella australis</i>	Welsh thurdwort	LUA6	Non-upland	OBL	OBL				9	2						
<i>Lindera benzoin</i>	northern spicebush	LIBE3	Non-upland	FAC	FACW		7	5	6	9	6	8	6	3	6	7
<i>Lindera melissifolia</i>	southern spicebush	LIME7	Non-upland	OBL	FACW				9	4						
<i>Lindera subcoriacea</i>	bog spicebush	LISU8	Non-upland	OBL	OBL		8	4	9	4						
<i>Lindernia dubia</i>	yellowseed false pimpernel	LIDU	Non-upland	OBL	OBL		4	5	4	5	4	6	5	2	5	5
<i>Lindernia dubia var. dubia</i>	yellowseed false pimpernel	LIDUD	Non-upland	FACW	FACW		4	5	4	3	5	4	5	1	5	4
<i>Lindernia grandiflora</i>	savannah false pimpernel	LIGR8	Non-upland		OBL		4	3								
<i>Lindernia monticola</i>	pedmont false pimpernel	LIMO3	Non-upland	OBL	OBL		4	2	6	3	7	5	9	1		
<i>Linnaea borealis</i>	twinflower	LIBO3	Non-upland	FAC									10	0		
<i>Linum carteri</i>	Carter's flax	LICA14	Non-upland		FACW		4	4								
<i>Linum floridanum</i>	Florida yellow flax	LIFL	Non-upland	FAC	FAC		5	3	6	5						
<i>Linum medium</i>	stiff yellow flax	LIME2	Non-upland	FACU	FAC		3	3	4	7	4	4	6	2	5	5
<i>Linum striatum</i>	ridged yellow flax	LIST	Non-upland	FACW	FACW		6	4	6	5	5	5	6	3	5	6
<i>Linum virginianum</i>	woodland flax	LIVI	Non-upland	FACU	FAC				5	4	5	4	6	2	6	5
<i>Linum westii</i>	West's flax	LWIE	Non-upland		OBL		8	3								
<i>Liparis elata</i>	pantropical widelip orchid	LIEL2	Non-upland		OBL		8	3								
<i>Liparis loeselii</i>	yellow widelip orchid	LILO	Non-upland	FACW	FACW	KY records may all be adventive and should be scored with 3 max			9	2			7*	6	6*	4
<i>Lipocarpha aristulata</i>	awned halfchaff sedge	LIAR6	Non-upland	FACW	FACW	Non-native (Adventive)	0									
<i>Lipocarpha maculata</i>	American halfchaff sedge	LIMA4	Non-upland	OBL	FACW		5	2	5	3	UND					
<i>Lipocarpha micrantha</i>	smallflower halfchaff sedge	LIMI12	Non-upland	FACW	FACW		3	3	3	3			4	2	4	3
<i>Liquidambar styraciflua</i>	sweetgum	LIS2	Non-upland	FAC	FAC		4	7	3	9	3	8	4	4	4	7
<i>Listera australis</i>	southern twayblade	LIAU3	Non-upland	FACW	FACW		8	6	8	7	8	6	8	3	9	5
<i>Listera cordata</i>	heartleaf twayblade	LICO6	Non-upland	FACW	FACW								10	0		
<i>Listera smallii</i>	kidneyleaf twayblade	LISM	Non-upland	FACW									9	3		
<i>Litsea aestivalis</i>	pondspice	LIAE	Non-upland	OBL	OBL		8	4	9	4						
<i>Lobelia amoena</i>	southern lobelia	LOAM4	Non-upland	OBL	OBL		8	4	7	5	7	5	6	1		
<i>Lobelia amoena var. glandulifera</i>	southern lobelia	LOAMG	Present 1988 WPL				7	2	6	3						
<i>Lobelia appendiculata</i>	pale lobelia	LOAP	Non-upland	FAC	FAC				7	2					9	3
<i>Lobelia appendiculata var. gattingeri</i>	Gattinger's lobelia	LOAPG	Non-upland	FAC		Unscored; 2013 NWPL addition									UND	
<i>Lobelia boykinii</i>	Boykin's lobelia	LOBO	Non-upland	OBL	OBL		7	3	9	4						
<i>Lobelia brevifolia</i>	shortleaf lobelia	LOBR3	Non-upland	FAC	FAC		8	3	7	3						
<i>Lobelia canbyi</i>	Canby's lobelia	LOCA	Non-upland	OBL	OBL								8	2	8	2
<i>Lobelia cardinalis</i>	cardinalflower	LOCA2	Non-upland	FACW	FACW		5	4	5	9	5	7	6	3	6	6
<i>Lobelia elongata</i>	longleaf lobelia	LOEL	Non-upland	OBL	OBL		7	2	7	3	UND					
<i>Lobelia feayana</i>	bay lobelia	LOFE2	Non-upland		FACW		4	2								
<i>Lobelia flaccidifolia</i>	foldear lobelia	LOFL2	Non-upland	OBL	OBL		6	3	7	3						
<i>Lobelia floridana</i>	Florida lobelia	LOFL3	Non-upland	OBL	OBL		7	3	6	3						
<i>Lobelia glandulosa</i>	glade lobelia	LOGL	Non-upland	OBL	OBL		5	3	6	3						
<i>Lobelia homophylla</i>	pineland lobelia	LOHO2	Non-upland		FAC		5	2								
<i>Lobelia inflata</i>	Indian-tobacco	LOIN	Non-upland	FACU	FAC		3	2	3	7	3	6	3	3	3	5
<i>Lobelia nuttallii</i>	Nuttall's lobelia	LONU	Non-upland	FACW	FACW		7	4	7	4			8	2	8	3
<i>Lobelia paludosa</i>	white lobelia	LOPA3	Non-upland		OBL		7	3	8	1						
<i>Lobelia puberula</i>	downy lobelia	LOPU	Non-upland	FACW	FACW		5	5	5	7	5	6	5	3	6	6
<i>Lobelia siphilitica</i>	great blue lobelia	LOSI	Non-upland	FACW	OBL				6	4	5	4	6	3	5	5
<i>Lobelia spicata</i>	palespike lobelia	LOSP	Non-upland	FAC	FAC		6	2	6	5	6	6	6	4	6	6
<i>Lonicera japonica</i>	Japanese Honeysuckle	LOJA	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
<i>Lophiola aurea</i>	goldencrest	LOAU	Non-upland		OBL		7	5	8	4						
<i>Ludwigia alata</i>	winged primrose-willow	LUAL	Non-upland		OBL		6	3	6	3						
<i>Ludwigia alternifolia</i>	seedbox	LUAL2	Non-upland	FACW	OBL		4	4	4	8	4	7	4	3	5	6
<i>Ludwigia arcuata</i>	pedmont primrose-willow	LUAR8	Non-upland	OBL	OBL		5	3	6	3	UND					
<i>Ludwigia bonariensis</i>	Carolina primrose-willow	LUBO	Non-upland		OBL	Non-native (Adventive)	0									
<i>Ludwigia brevipes</i>	Long Beach primrose-willow	LUBR	Non-upland	OBL	OBL				7	2						
<i>Ludwigia curtisii</i>	Curtis' primrose-willow	LUCU4	Non-upland		OBL		5	3								
<i>Ludwigia decurrens</i>	wingleaf primrose-willow	LUDE4	Non-upland	OBL	OBL				5	7	4	6	4	3	4	6
<i>Ludwigia erecta</i>	yerba de jicotea	LUER	Non-upland		OBL		5	2								
<i>Ludwigia glandulosa</i>	cylindricfruit primrose-willow	LUGL	Non-upland	OBL	OBL		4	2	5	5	5	4	5	1	5	6
<i>Ludwigia hirtella</i>	spindleroot	LUHI	Non-upland	OBL	FACW		6	3	8	5	8	3	8	2	8	5
<i>Ludwigia lanceolata</i>	lancheaf primrose-willow	LULA6	Non-upland		OBL		5	3	6	3						
<i>Ludwigia leptocarpa</i>	anglestem primrose-willow	LULE4	Non-upland	OBL	OBL		4	2	5	6	5	4	5	4	5	6
<i>Ludwigia linearis</i>	narrowleaf primrose-willow	LULI	Non-upland	OBL	OBL		5	3	6	6	6	3	7	2	7	2
<i>Ludwigia linifolia</i>	southeastern primrose-willow	LULI3	Non-upland		OBL		5	3	7	3						
<i>Ludwigia maritima</i>	seaside primrose-willow	LUMA4	Non-upland	FACW	FACW		5	3	6	4						
<i>Ludwigia microcarpa</i>	smallfruit primrose-willow	LUMI4	Non-upland	OBL	OBL		5	4	5	6	5	4	6	3	6	3
<i>Ludwigia octovalvis</i>	Mexican primrose-willow	LUOC	Non-upland		OBL		3	3	2	4						

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Ludwigia palustris	marsh seedbox	LUPA	Non-upland	OBL	OBL		4	4	4	8	4	7	4	3	4	6
Ludwigia peploides	floating primrose-willow	LUPE5	Non-upland	OBL	OBL	Non-native (Adventive) in KY, NC, SC, and GA	2	3	2*	5	2*	2	4*	3	4*	5
Ludwigia peruviana	Peruvian Primrose-Willow	LUPE6	Non-upland	OBL	OBL	Non-native (Adventive)	0		0							
Ludwigia pilosa	hairy primrose-willow	LUPI	Non-upland	OBL	OBL		4	4	4	3	UND					
Ludwigia polycarpa	manyfruit primrose-willow	LUPO	Non-upland	OBL	OBL										7	2
Ludwigia ravenii	Raven's primrose-willow	LURA	Non-upland		OBL	Unscored; 2013 NWPL addition	UND		UND							
Ludwigia repens	creeping primrose-willow	LURE2	Non-upland	OBL	OBL		4	3	4	4						
Ludwigia spathulata	spoon primrose-willow	LUSP5	Non-upland	OBL	OBL		6	3	6	2	8	2				
Ludwigia sphaerocarpa	globefruit primrose-willow	LUSP	Non-upland	OBL	OBL		7	4	8	5	7	2			10	2
Ludwigia suffruticosa	shrubby primrose-willow	LUSU11	Non-upland	OBL	OBL		5	3	7	3						
Ludwigia virginata	savannah primrose-willow	LUVI2	Non-upland	OBL	OBL		6	3	6	3						
Luziola bahiensis	Brazilian watergrass	LUBA2	Non-upland	OBL	OBL		6	2	8	2						
Luziola fluitans	southern watergrass	LULF2	Non-upland	OBL	OBL		3	3	5	5			5	0		
Luziola peruviana	Peruvian Water Grass	LUPE4	Non-upland		FACW	Non-native	0									
Luzula acuminata	hairy woodrush	LUAC	Non-upland	FAC	FACU				6	5	6	7	6	4	7	5
Luzula echinata	hedgerow woodrush	LUAC	Non-upland	FACU	FAC		5	2	6	8	6	7	5	3	5	7
Lycium carolinianum	Carolina desert-thorn	LYCA2	Non-upland		FACW		7	4	7	5						
Lycopodiella alopecuroides	foxtail clubmoss	LYAL5	Non-upland	FACW	OBL		7	6	7	8	7	4	8	1	8	3
Lycopodiella appressa	southern bog clubmoss	LYAP4	Non-upland	FACW	OBL		7	4	7	7	7	5	8	1	9	4
Lycopodiella caroliniana var. caroliniana	slender clubmoss	LYCAC	Non-upland	FACW	OBL		8	4	8	4						
Lycopodiella cernua var. cernua	staghorn clubmoss	LYCEC	Non-upland		FACW		5	4	6	3						
Lycopodiella inundata	inundated clubmoss	LYIN2	Non-upland	OBL	OBL								9	4		
Lycopodiella prostrata	featherstem clubmoss	LYPR3	Non-upland	OBL	OBL		7	3	7	5			8	0		
Lycopodium clavatum	running clubmoss	LYCL	Non-upland	FAC	FAC								7	3		
Lycopus americanus	American water horehound	LYAM	Non-upland	OBL	OBL		5	5	5	5			5	3	5	5
Lycopus amplexens	clasping water horehound	LYAM2	Non-upland	OBL	OBL		7	3	8	2						
Lycopus cokeri	Carolina water horehound	LYCO7	Non-upland	OBL	OBL				9	2	UND					
Lycopus rubellus	taperleaf water horehound	LYRU	Non-upland	OBL	OBL		5	5	6	6			6	2	6	5
Lycopus uniflorus	northern bugleweed	LYUN	Non-upland	OBL	OBL										7	3
Lycopus virginicus	Virginia water horehound	LYVI4	Non-upland	OBL	OBL		5	4	5	8	5	8	5	3	5	6
Lygodium japonicum	Japanese Climbing Fern	LYJA	Non-upland	FAC	FAC	Non-native	0		0		0					
Lygodium palmatum	American climbing fern	LYPA3	Non-upland	FACW	FACW				6	4	6	3	6	3	6	4
Lyonia fruticosa	coastal plain staggerbush	LYFR3	Non-upland		FACW		7	6	8	3						
Lyonia ligustrina	maleberry	LYLI	Non-upland	FACW	FACW		7	3	7	8	7	7	7	3	7	4
Lyonia lucida	fetterbush lyonia	LYLU3	Non-upland	FACW	FACW		6	5	7	6			0			
Lyonia mariana	pedmont staggerbush	LYMA2	Non-upland	FAC	FAC		7	3	7	4	9	1				
Lysimachia asperulifolia	roughleaf yellow loosestrife	LYAS2	Non-upland	OBL	OBL				9	4						
Lysimachia ciliata	fringed loosestrife	LYCI	Non-upland	FACW	FACW		5	3	6	7	6	6	6	4	6	5
Lysimachia fraseri	Fraser's yellow loosestrife	LYFR2	Non-upland	FAC	FAC						8	2	8	3	9	3
Lysimachia hybrida	lowland yellow loosestrife	LYHY	Non-upland	OBL	OBL		7	2	6	3			8	2	8	2
Lysimachia lanceolata	lanceleaf loosestrife	LYLA	Non-upland	FAC	FAC		6	5	6	5	6	5	6	2	6	5
Lysimachia loomisii	Loomis' yellow loosestrife	LYLO	Non-upland	OBL	OBL	Non-native in Pdmnt			8	3	0					
Lysimachia nummularia	Creeping-Jenny	LYNU	Non-upland	FACW	FACW	Non-native			0		0				0	
Lysimachia quadriflora	fourflower yellow loosestrife	LYQU	Non-upland	FACW	OBL						UND		8	3	9	3
Lysimachia radicans	trailing yellow loosestrife	LYRA3	Non-upland	OBL	OBL				7	3						
Lysimachia terrestris	earth loosestrife	LYTE2	Non-upland	OBL	OBL								9	1	8	4
Lythrum alatum	winged lythrum	LYAL4	Non-upland	FACW	OBL		4	3	5	5	4	4	5	1	6	6
Lythrum alatum var. lanceolatum	winged lythrum	LYALL	Added; Absent from NWPL				5	3	6	3			6	0	8	1
Lythrum curtissii	Curtiss' loosestrife	LYCU2	Non-upland		OBL		7	4	7	2						
Lythrum flagellare	Florida loosestrife	LYFL4	Non-upland		OBL		5	4								
Lythrum lineare	wand lythrum	LYLI2	Non-upland	OBL	OBL		5	3	7	3						
Lythrum salicaria	Purple Loosestrife	LYSA2	Non-upland	FACW	OBL	Non-native			0		0		0		0	
Macbridea alba	white birds-in-a-nest	MAAL7	Non-upland		FACW		9	4	10	1						
Macbridea caroliniana	Carolina birds-in-a-nest	MACA	Non-upland	OBL	OBL		9	2	8	5						
Macranthera flammea	flameflower	MAFL4	Non-upland	OBL	OBL		8	5	9	4						
Macrothypteris torresiana	False Maiden Fern	MATO3	Non-upland	OBL	FACW	Non-native	0		0		0		0		0	
Magnolia grandiflora	southern magnolia	MAGR4	Non-upland	FACU	FAC	Non-native in Mtns	5	5	4	7			0			
Magnolia virginiana	sweetbay	MAVI2	Non-upland	FACW	FACW		7	5	6	8	7	8	7	3		
Maianthemum canadense	Canada mayflower	MACA4	Non-upland	FAC	FAC								8	2	8	3
Maianthemum racemosum ssp. Racemosum	feathery false lily of the valley	MARAR	Present 1988 WPL				6	3	7	4	6	3	7	3	7	4
Maianthemum stellatum	starry false lily of the valley	MAST4	Non-upland	FACW	FACU								9	1	8	4
Malaxis spicata	Florida adder's-mouth orchid	MASP2	Non-upland		OBL		8	3	8	4						
Malaxis unifolia	green adder's-mouth orchid	MAUN	Non-upland	FAC	FAC		8	6	8	7	8	6	8	2	8	5
Malvastrum arborescens	wax mallow	MAAR14	Non-upland	UPL	FAC	Non-native	0									
Marshallia graminifolia	grassleaf Barbara's buttons	MAGR6	Non-upland	OBL	OBL		7	5	8	4						
Marshallia graminifolia var. cyananthera	grassleaf Barbara's buttons	MAGRC2	Present 1988 WPL				7	3	7	4						
Marshallia grandiflora	Monongahela Barbara's buttons	MAGR7	Non-upland	FAC									10	1		
Marshallia mohrii	Mohr's Barbara's buttons	MAMO3	Non-upland	FACW	FACW								8	3		
Marsilea macropoda	bigfoot waterclover	MAMA9	Non-upland		OBL	Non-native (Adventive)	0									
Marsilea vestita	hairy waterclover	MAVE2	Non-upland	OBL	OBL	Non-native (Adventive)	0									
Matelea gonocarpus	angularfruit milkvine	MAGO	Non-upland	FACW	FACW		5	4	6	6	6	5	6	1	5	4

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Mayaca fluviatilis	stream bogmoss	MAFL2	Non-upland	OBL	OBL		7	3	6	4	UND					
Maytenus phyllanthoides	Florida mayten	MAPH	Non-upland		FAC		8	2								
Mazus pumilus	Japanese Mazus	MAPU7	Non-upland	FACU	FAC	Non-native	0		0		0		0		0	
Mecardonia acuminata	axilflower	MEAC	Non-upland	OBL	FACW		4	3	4	8	4	7	5	2	6	6
Mecardonia procumbens	baby jump-up	MEPR2	Non-upland		OBL		4	3								
Melaleuca quinquenervia	Punktree	MEQU	Non-upland		FAC	Non-native	0									
Melampyrum lineare	narrowleaf cowwheat	MELI2	Added; Absent from NWPL	FACU	FACU								7	2	7	3
Melochia corchorifolia	Chocolate-Weed	MECO4	Non-upland	FAC	FAC	Non-native	0		0							
Melochia spicata	bretonica peluda	MESP6	Non-upland		FAC		4	3	0							
Melothria pendula	Guadeloupe cucumber	MEPE3	Non-upland	FAC	FAC		3	7	3	9	3	7	3	2	3	6
Menispermum canadense	common moonseed	MECA3	Added; Absent from NWPL	FACU	FACU		6	3	5	2	4	1	6	5	6	4
Mentha aquatica	Water Mint	MEAQ	Non-upland	FACW	OBL	Non-native					0				0	
Mentha arvensis	wild mint	MEAR4	Non-upland	FACW	FACW								2	2	3	2
Mentha spicata	Spearmint	MESP3	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
Mentha suaveolens	Apple Mint	MESU5	Non-upland	FACW	FACW	Non-native	0		0				0		0	
Menyanthes trifoliata	buckbean	METR3	Non-upland	OBL	OBL								10	1		
Menziesia pilosa	minniebush	MEPI2	Non-upland	FAC	FACU								8	1		
Mertensia virginica	Virginia bluebells	MEVI3	Non-upland	FACW	FAC				7	3			7	2	7	5
Metopium toxiferum	Florida poisontree	METO3	Non-upland		FAC		5	5								
Micranthemum glomeratum	manatee mudflower	MIGL6	Non-upland		OBL		4	3								
Micranthemum umbrosum	shade mudflower	MIMUM	Non-upland	OBL	OBL		4	3	3	5						
Microstegium vimineum	Japanese Stilt Grass	MIVI	Non-upland	FAC	FAC	Non-native			0		0		0		0	
Mikania cordifolia	Florida Keys hempvine	MICO9	Non-upland		FACW		5	3	6	4						
Mikania scandens	climbing hempvine	MISC	Non-upland	FACW	FACW		4	6	4	9	4	8	5	2	5	7
Mimosa pellita	lollipop mimosa	MIME2	Non-upland		FAC	Non-native	0									
Mimosa strigilosa	powderpuff	MIST2	Non-upland		FAC		3	3	2	3						
Mimulus alatus	sharpwing monkeyflower	MIAL2	Non-upland	OBL	OBL		5	5	5	8	5	7	5	2	5	7
Mimulus moschatus	musklflower	MIMO3	Non-upland	OBL	OBL						7	3				
Mimulus ringens	Allegheny monkeyflower	MIRI	Non-upland	OBL	OBL				6	3	6	3	6	2	6	6
Minuartia glabra	Appalachian stitchwort	MIGL5	Non-upland	UPL	FACW						8	4	9	2	8	3
Minuartia godfreyi	Godfrey's stitchwort	MIGO	Non-upland	FACW	FACW		7	3	8	2			9	1		
Minuartia muscorum	Dixie stitchwort	MIMU6	Non-upland	FACU	FACU										8	3
Minuartia patula	pitcher's stitchwort	MIPA6	Non-upland	UPL	FAC		6	1					6	4	6	6
Minuartia uniflora	oneflower stitchwort	MIUU	Non-upland	FACW	FACW						8	5				
Mitreola petiolata	lax hornpod	MIME3	Non-upland	FACW	FACW		5	5	6	5	6	5	6	1	7	3
Mitreola sessilifolia	swamp hornpod	MISE3	Non-upland	FACW	FACW		5	4	5	4	UND					
Mollugo verticillata	green carpetweed	MOVE	Non-upland	FAC	FAC	Non-native	0		0				0		0	
Monanthochloe littoralis	shoregrass	MOLI	Non-upland		OBL		7	3								
Monarda didyma	scarlet beebalm	MODI	Non-upland	FAC	FAC								7	3		
Montia linearis	narrowleaf minerslettuce	MOLI4	Non-upland	FAC	FAC	Non-native (Adventive)									0	
Morella carolinensis	southern bayberry	MOCA7	Non-upland	FAC	FACW		7	4	7	7			7	0		
Morella cerifera	wax myrtle	MOCE2	Non-upland	FAC	FAC	Non-native in NC; disjunct in AL; Georgia SCP - separate score of 7 for Myrica cerifera var. pumila	4*	5	4*	8	5*	4	4*	1		
Morella inodora	scentless bayberry	MOIN	Non-upland		OBL		8	4	8	4						
Morella pensylvanica	northern bayberry	MOPE6	Non-upland	FAC	FAC				8	4						
Muhlenbergia capillaris	hairawn muhly	MUCA2	Non-upland	FACU	FAC		7	7	7	8	8	6	8	2	8	3
Muhlenbergia expansa	cutover muhly	MUEX	Non-upland	FACW	FACW		8	4	8	4						
Muhlenbergia filipes	gulfbairawn muhly	MUFJ3	Present 1988 WPL				6	3	7	3						
Muhlenbergia frondosa	wirestem muhly	MUFR2	Non-upland	FAC	FAC						6	3	6	4	6	3
Muhlenbergia glomerata	spiked muhly	MUGL3	Non-upland	FACW	FACW								10	2		
Muhlenbergia mexicana	Mexican muhly	MUME2	Non-upland	FACW	FAC										7	4
Muhlenbergia schreberi	nimblewill	MUSC	Non-upland	FAC	FAC		3	4	3	3	3	5	2	2	3	5
Muhlenbergia sylvatica	woodland muhly	MUSY	Non-upland	FAC	FACW						6	2	7	3	7	4
Muhlenbergia torreyana	New Jersey muhly	MUTO	Non-upland	FACW	FACW				10	2					8	2
Murdannia keiskak	Wart-Removing-Herb	MUKE	Non-upland	OBL	OBL	Non-native	0		0		0		0			
Murdannia nudiflora	Naked-Stem Dewflower	MUNU	Non-upland	FAC	FAC	Non-native	0		0							
Musa acuminata	Edible Banana	MUAC	Non-upland		FACW	Non-native	0									
Myosotis arvensis	Rough Forget-Me-Not	MYAR	Non-upland	UPL	FAC	Non-native			0		0		0		0	
Myosotis discolor	Yellow Scorpion-Grass	MYDI	Non-upland	UPL	FAC	Non-native			0		0					
Myosotis laxa	bay forget-me-not	MYLA	Non-upland	OBL	OBL								6	3		
Myosotis macroserma	largeseed forget-me-not	MYMA	Non-upland	FAC	FAC		4	2	4	7	5	7	4	3	4	6
Myosotis scorpioides	True Forget-Me-Not	MYSC	Non-upland	OBL	OBL	Non-native							0			
Myosotis verna	spring forget-me-not	MYVE	Non-upland	FAC	FACU		4	4	5	4	4	5	4	2	4	5
Myosoton aquaticum	Giant-Chickweed	MYAQ	Non-upland	FACW	FACW	Non-native							0			
Myosurus minimus	tiny mousetail	MYMI2	Non-upland	FACW	FACW		1	3	1	4			1	1	1	6
Myrica gale	sweetgale	MYGA	Non-upland	OBL	OBL								10	0		
Myriophyllum aquaticum	Parrot's-Feather	MYAQ2	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Myriophyllum heterophyllum	twoleaf watermilfoil	MYHE2	Non-upland	OBL	OBL		6	3	5	3	5	3	8	1	8	4
Myriophyllum laxum	loose watermilfoil	MYLA2	Non-upland	OBL	OBL		5	4	5	3	UND					
Myriophyllum pinnatum	cutleaf watermilfoil	MYPI	Non-upland	OBL	OBL		6	4	8	3	7	3	9	0	9	4

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Myriophyllum spicatum	Eurasian Water-Milfoil	MYS2	Non-upland	OBL	OBL	Non-native	0		0	2	0		0		0	
Myriophyllum tenellum	slender watermilfoil	MYTE	Non-upland	OBL	OBL				9	2						
Myrsine cubana	Guianese colicwood	MYCU2	Non-upland		FAC		6	2								
Najas filifolia	needleleaf waternymph	NAF2	Non-upland		OBL		7	3	8	2						
Najas gracillima	slender waternymph	NAGR	Non-upland	OBL	OBL				7	3	7	3	7	0	8	3
Najas guadalupensis	southern waternymph	NAGU	Non-upland	OBL	OBL		4	3	4	4	4	4	5	4	5	5
Najas marina	spiny naiad	NAMA	Non-upland	OBL	OBL		6	3								
Najas minor	Brittle Waternymph	NAMI	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Narthecium americanum	yellow asphodel	NAAM	Non-upland	FACW	FACW								10	0		
Nasturtium microphyllum	One-Row Watercress	NAMI2	Non-upland	OBL	OBL	Non-native							0			
Nasturtium officinale	Watercress	NAOF	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Navarretia intertexta	needleleaf navarretia	NAIN2	Non-upland	FACW	FACW	Non-native (Adventive)									0	
Neeragrostis reptans	creeping lovegrass	NERE3	Non-upland	FACW	FAC				5	3					9	2
Nelumbo lutea	American lotus	NELU	Non-upland	OBL	OBL	Some populations are non-native	6*	6	5*	8			6*	4	6*	7
Nelumbo nucifera	Sacred Lotus	NENU2	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Nemastylis floridana	fallflowering pleatleaf	NEFL	Non-upland		OBL		9	4								
Nemophila aphylla	smallflower baby blue eyes	NEAP	Non-upland	FACW	FACW		5	3	5	5	5	6	5	3	5	6
Neobekia aquatica	lakecress	NEAQ2	Non-upland	OBL	OBL		5	3	8	4					9	3
Neprolepis biserrata	giant swordfern	NEBI	Present 1988 WPL				7	1								
Neprolepis exaltata	Boston swordfern	NEEX	Non-upland		FAC		5	3								
Neptunia pubescens	tropical puff	NEPU3	Non-upland	FAC	FAC		3	2	5	2						
Neyraudia reynaudiana	Silk-Reed	NERE	Non-upland		FAC	Non-native	0									
Nicotiana glauca	Tree Tobacco	NIGL	Non-upland	FAC	FAC	Non-native	0									
Nicotiana repanda	fiddleleaf tobacco	NIRE	Non-upland		FAC	Non-native (Adventive)			0							
Nolina atopocarpa	Florida beargrass	NOAT	Non-upland		FAC		9	4								
Nuphar lutea	yellow pond-lily	NULU	Non-upland	OBL	OBL		5	4	5	8	5	6	6	3	6	5
Nymphaea ampla	dotleaf waterlily	NYAM2	Non-upland		OBL	Non-native	0									
Nymphaea capensis	Cape Blue Water-Lily	NYCA2	Non-upland		OBL	Non-native	0									
Nymphaea elegans	tropical royalblue waterlily	NYEL	Non-upland		OBL		5	3								
Nymphaea jamesoniana	James' Water-Lily	NYJA	Non-upland		OBL	Native	4	1								
Nymphaea lotus	White Egyptian-Lotus	NYLO	Non-upland		OBL	Non-native	0									
Nymphaea mexicana	yellow waterlily	NYME	Non-upland	OBL	OBL		5	3	5	3						
Nymphaea odorata	American white waterlily	NYOD	Non-upland	OBL	OBL	Some populations in Mtns and ILP may be non-native	6	5	5	8	4	6	6*	9	6*	6
Nymphoides aquatica	big floatingheart	NYAQ	Non-upland	OBL	OBL		6	4	6	5						
Nymphoides cordata	little floatingheart	NYCO	Non-upland	OBL	OBL		6	4	6	3						
Nymphoides peltata	Yellow Floatingheart	NYPE	Non-upland	OBL	OBL	Non-native			0		0				0	
Nyssa aquatica	water tupelo	NYAQ2	Non-upland	OBL	OBL		7	6	7	9	7	6	8	3	8	4
Nyssa biflora	swamp tupelo	NYBI	Non-upland	FACW	OBL		7	7	7	9	7	8	7	2	7	5
Nyssa ogechee	Ogechee tupelo	NYOG	Non-upland		OBL		7	4	7	3						
Nyssa sylvatica	blackgum	NYSY	Non-upland	FAC	FAC		6	6	6	9	6	8	6	3	6	7
Oclemena reticulata	pine barren whitetop aster	OCRE2	Non-upland		FAC		7	3	7	3						
Oenothera fruticosa	narrowleaf evening primrose	OEFR	Non-upland	FAC	FACU		5	5	5	7	5	6	6	3	6	5
Oenothera perennis	little evening primrose	OEP2	Non-upland	FAC	FAC								7	3	8	4
Oenothera pilosella	meadow evening primrose	OEP12	Non-upland	FAC	FACU										6	4
Oenothera villosa	hairy evening primrose	OEVI	Non-upland	FAC	FACU				2	2			0		3	2
Oldenlandia boscii	Bosc's mille grains	OLBO	Non-upland	FACW	FACW		5	4	5	6			4	2	4	3
Oldenlandia corymbosa	flat-top mille grains	OLCO	Non-upland	FAC	FAC	Non-native	0		0							
Oldenlandia uniflora	clustered mille grains	OLUN	Non-upland	FACW	FACW		3	4	4	7	5	4	4	3	5	4
Onclea sensibilis	sensitive fern	ONSE	Non-upland	FACW	FACW		4	4	5	9	5	8	5	4	5	7
Ophioglossum crotalophoroides	bulbous adderstongue	OPCR	Non-upland	FAC	FAC		2	4	2	6			2	0		
Ophioglossum nudicaule	least adderstongue	OPNU	Non-upland	FAC	FAC		5	2	7	3	7	3				
Ophioglossum petiolatum	longstem adderstongue	OPPE2	Non-upland	FAC	FAC		4	3	4	3						
Ophioglossum vulgatum	southern adderstongue	OPVU	Non-upland	FACW	FACW		6	4	6	4	6	4	6	2	6	5
Opismenus hirtellus	basketgrass	OPHI	Non-upland	FACU	FAC		5	4	5	6	5	3				
Orbexilum simplex	singlestem leather-root	ORSI	Non-upland	FAC	FAC				6	2						
Orontium aquaticum	goldenclub	ORAQ	Non-upland	OBL	OBL		8	7	7	8	7	7	8	3	8	5
Oryza sativa	Cultivated Rice	ORS5	Non-upland	OBL	OBL	Non-native			0							
Osmanthus americanus	devilwood	OSAM	Non-upland	FAC	FAC		7	5	7	5	UND					
Osmorhiza longistylis	longstyle sweetroot	OSLO	Non-upland	FACU	FAC				7	6	7	5	6	3	6	6
Osmunda cinnamomea	cinnamon fern	OSCI	Non-upland	FACW	FACW		6	5	7	9	6	8	7	3	7	7
Osmunda claytoniana	interrupted fern	OSCL2	Non-upland	FAC	FAC						7	3	8	2	8	5
Osmunda regalis	royal fern	OSRE	Non-upland	OBL	OBL		7	5	7	9	7	8	7	3	7	7
Oxalis montana	mountain woodsorrel	OXMO	Non-upland	FAC									8	2	7	2
Oxycaryum cubense	Cuban bulrush	OXCU2	Non-upland		OBL	Non-native	0									
Oxypolis canbyi	Canby's cowbane	OXCA2	Non-upland	OBL	OBL				10	4						
Oxypolis filiformis	water cowbane	OXFI	Non-upland	FACW	OBL		6	5	7	3						
Oxypolis greenmanii	giant cowbane	OXGR5	Non-upland		OBL		7	5								
Oxypolis rigidior	stiff cowbane	OXRI	Non-upland	OBL	OBL		7	6	7	8	7	8	7	2	7	7
Oxypolis ternata	pedmont cowbane	OXTE	Present 1988 WPL				7	2	9	4						
Packera aurea	golden ragwort	PAAU3	Non-upland	FACW	FACW		6	2	6	3	6	3	6	3	7	4

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Packera glabella	butterweed	PAGL17	Non-upland	OBL	OBL		3	4	3	7	3	6	3	2	3	6
Packera paupercula	balsam groundsel	PAPA20	Non-upland	FAC	FACW		7	4	7	6	7	4	8	3	7	2
Packera schweinitziana	Schweinitz's ragwort	PASC19	Non-upland		FACW								9	0		
Panicum abscessum	cutthroat grass	PAAB	Non-upland		FACW		8	4								
Panicum amarum	bitter panicgrass	PAAM2	Non-upland	FACU	FAC		6	4	6	4						
Panicum anceps	beaked panicgrass	PAAN	Non-upland	FAC	FAC		4	5	4	8	4	8	4	3	4	6
Panicum arachanthum	prairie panicgrass	PABR2	Non-upland	FAC	FAC				UND							
Panicum capillare	witchgrass	PACA6	Non-upland	FAC	FAC		2	4	1	6	1	4	2	2	2	5
Panicum dichotomiflorum	fall panicgrass	PADI	Non-upland	FACW	FACW		4	4	3	7	3	6	2	2	2	6
Panicum dichotomiflorum var. bartowense	fall panicgrass	PADIB	Present 1988 WPL				4	3								
Panicum flexile	wiry panicgrass	PAFL2	Non-upland	FACU	FAC		5	2	6	3	6	4	5	1	5	5
Panicum gattingeri	Gattinger's panicgrass	PAGA	Non-upland	FAC	FAC								4	6	4	5
Panicum hematomon	maidencane	PAHE2	Non-upland	FACW	OBL		5	6	6	8	6	4			8	3
Panicum philadelphicum	Philadelphia panicgrass	PAPH	Non-upland	FAC	FAC	Panicum lithophilum: Score of 10 in PDMNT	5	2	4	6	4*	5	3	3	3	6
Panicum repens	Torpedo Grass	PARE3	Non-upland	FACW	FACW	Non-native	0		0							
Panicum rigidulum	redtop panicgrass	PARI4	Non-upland	FACW	FACW		4	7	4	8	4	7	5	3	5	6
Panicum rigidulum var. pubescens	redtop panicgrass	PARIP	Present 1988 WPL				5	3	7	2			7	5	8	2
Panicum tenerum	bluejoint panicgrass	PATE3	Non-upland	FACW	FACW		7	4	8	4						
Panicum verrucosum	warty panicgrass	PAVE2	Non-upland	FACW	FACW		5	6	5	8	5	7	6	2	6	7
Panicum virgatum	switchgrass	PAVI2	Non-upland	FAC	FAC	Some Mtn populations can be non-native	5	5	5	8	5	8	6*	4	6	7
Parentucella viscosa	Yellow Glandweed	PAV13	Non-upland	FAC	FAC	Non-native			0							
Parietaria floridana	Florida pellitory	PAFL3	Non-upland	FAC	FAC	Non-native (Adventive) in the ILP	4	3	4	3					0	
Parietaria praetermissa	clustered pellitory	PAPR6	Non-upland	FAC	FACU		5	3	6	2						
Parkinsonia aculeata	Jerusalem thorn	PAAC3	Non-upland		FAC	Non-native (Adventive)	0									
Parnassia asarifolia	kidneyleaf grass of Parnassus	PAAS2	Non-upland	OBL	OBL						9	5	9	3	9	2
Parnassia caroliniana	Carolina grass of Parnassus	PACA13	Non-upland	OBL	OBL		9	4	9	5						
Parnassia grandifolia	largeleaf grass of Parnassus	PAGR	Non-upland	OBL	OBL		9	5	9	5			9	2	9	4
Paspalidium geminatum	Egyptian panicgrass	PAGE2	Non-upland	OBL	OBL		4	2								
Paspalum acuminatum	brook crowngrass	PAAC4	Non-upland	OBL	OBL	Non-native (Adventive)	0									
Paspalum bifidum	pitchfork crowngrass	PABI3	Non-upland	FACW	FACW		7	2	8	4	UND					
Paspalum blodgettii	Blodgett's crowngrass	PABL	Non-upland		FAC		5	4								
Paspalum boscianum	bull crowngrass	PABO3	Non-upland	FACW	FACW		3	2	4	3	4	3	5	3	5	5
Paspalum caespitosum	blue crowngrass	PACA12	Non-upland		FAC		5	2								
Paspalum conjugatum	hilograss	PACO14	Non-upland		FAC		3	3	4	3						
Paspalum denticulatum	longtom	PADE24	Non-upland		OBL	Non-native (Adventive)	0									
Paspalum dilatatum	Golden Crown Grass	PADI3	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
Paspalum dissectum	mudbank crowngrass	PADI5	Non-upland	OBL	OBL		6	2	5	3	5	1	5	0	7	2
Paspalum distichum	knotgrass	PADI6	Non-upland	FACW	OBL		4	3	4	4	5	3	4	1	4	4
Paspalum floridanum	Florida paspalum	PAFL4	Non-upland	FACW	FACW		4	4	4	7	4	5	5	2	5	6
Paspalum fluitans	horsetail paspalum	PAFL5	Non-upland	OBL	OBL		5	3	5	5			6	4	6	3
Paspalum laeve	field paspalum	PALA10	Non-upland	FAC	FACW		4	5	4	6	4	5	3	3	3	6
Paspalum monostachyum	gulfdune paspalum	PAMO4	Non-upland		FACW		7	3								
Paspalum plicatulum	brownseed paspalum	PAPL3	Non-upland	FAC	FAC		4	2	3	3						
Paspalum praecox	early paspalum	PAPR4	Non-upland	FAC	OBL		5	3	6	2						
Paspalum pubiflorum	hairyseed paspalum	PAPU5	Non-upland	FAC	FACW		4	3	3	5	2	3	2	1	2	5
Paspalum scrobiculatum	Indian Crown Grass	PASC6	Non-upland	FACW	FACW	Non-native			0							
Paspalum setaceum	thin paspalum	PASE5	Non-upland	FACU	FAC		4	4	5	6	5	4	5	2	5	4
Paspalum urvillei	Vasey's Grass	PAUR2	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
Paspalum vaginatum	seashore paspalum	PAVA	Non-upland	OBL	OBL		5	3	7	3						
Pecluma ptilodon	palmleaf rockcap fern	PEPT2	Non-upland		FACW		9	3								
Pedicularis lanceolata	swamp lousewort	PELA2	Non-upland	FACW	FACW								9	2	9	4
Peltandra sagittifolia	white arrow arum	PESA7	Non-upland	OBL	OBL		8	5	8	4						
Peltandra virginica	green arrow arum	PEVI	Non-upland	OBL	OBL		8	4	7	8	7	8	7	3	7	6
Pennisetum purpureum	Elephant Grass	PEPU2	Non-upland		FAC	Non-native	0		0							
Penstemon alluviorum	lowland beardtongue	PEAL4	Non-upland	FACW	FACW				6	1					5	4
Penstemon calycosus	longsepal beardtongue	PECA7	Non-upland	UPL	FACU								5	3	6	3
Penstemon digitalis	foxglove beardtongue	PEDI	Non-upland	FAC	FAC	Some populations introduced; possibly not native to the Southeast			4*	2			4*	3	5*	3
Penstemon laevigatus	eastern smooth beardtongue	PELA8	Non-upland	FACU	FAC		6	3	6	5	6	4	6	1	5	3
Penstemon laxiflorus	nodding beardtongue	PELA10	Non-upland	FAC	FAC		6	2	5	2			7	0		
Penstemon tenuis	sharpsepal beardtongue	PETE3	Non-upland	FACW	FACW				8	2						
Pentalinon luteum	hammock viper's-tail	PELU3	Non-upland		OBL		4	3								
Penthorum sedoides	ditch stonewort	PESE6	Non-upland	OBL	OBL		5	4	4	8	4	7	4	3	4	7
Pentodon pentandrus	Hale's pentodon	PEPE14	Non-upland	OBL	OBL		5	2								
Persea borbonia	redbay	PEBO	Non-upland	FACW	FACW	Non-native in Mtns	6	5	6	5	7	1	0			
Persea palustris	swamp bay	PEPA37	Non-upland	FACW	FACW		7	5	7	5						
Phacelia covillei	Coville's phacelia	PHCO30	Non-upland	FACW	FACW				7	3	8	3				
Phacelia ranunculacea	oceanblue phacelia	PHRA3	Non-upland	FACW	FACW										7	4
Phalaris angusta	timothy canarygrass	PHAN2	Non-upland	FACW	FACW	Non-native (Adventive)	0									
Phalaris arundinacea	reed canarygrass	PHAR3	Non-upland	FACW	OBL	Possibly not native to the Southeast			0				2	2	2	4
Phalaris caroliniana	Carolina canarygrass	PHCA6	Non-upland	FACW	FACW		2	3	3	5	2	3	3	4	5	4

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Phanopyrum gymnocarpon	savannah-panicgrass	PHGY2	Non-upland	OBL	OBL		6	3	5	6			7	0		
Pharus lappulaeus	Cape Francois stalkgrass	PHLA21	Non-upland		FAC		7	2								
Phegopteris connectilis	long beechfern	PHCO24	Non-upland	FACU	FAC								9	2		
Phegopteris hexagonoptera	broad beechfern	PHHE11	Non-upland	FAC	FACU		7	4	7	8	7	7	7	3	7	6
Phlox glaberrima	smooth phlox	PHGL4	Non-upland	FAC	FACW		6	4	6	4	6	4	6	3	7	5
Phlox maculata	wild sweetwilliam	PHMA4	Non-upland	FACW	FAC				7	2			7	2	7	4
Photinia floribunda	purple chokeberry	PHFL9	Non-upland	FACW	FACW				7	1						
Photinia melanocarpa	black chokeberry	PHME13	Non-upland	FAC	FAC				7	4	7	4	7	2	7	4
Photinia pyrifolia	red chokeberry	PHPY4	Non-upland	FACW	FACW		6	4	7	7	7	6	7	3	7	4
Phragmites australis	common reed	PHAU7	Non-upland	FACW	FACW	Non-native (Adventive) in interior SE; noxious along coast of SC, AL, MS; cannot differentiate between native and non-native	0		0				0		0	
Phyla lanceolata	lancheaf fogfruit	PHLA3	Non-upland	OBL	OBL		3	3	4	6			3	3	3	6
Phyla nodiflora	turkey tangle fogfruit	PHNO2	Non-upland	FACW	FAC		3	5	3	6			2	0		
Phyllanthus carolinensis	Carolina leaf-flower	PHCA9	Non-upland	FAC	FAC		5	4	4	5	4	4	4	2	4	5
Phyllanthus liebmannianus	Florida leaf-flower	PHLI13	Non-upland		FACW		7	2								
Phyllanthus urinaria	Chamber-Bitter	PHUR	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
Physalis angulata	cutleaf groundcherry	PHAN5	Non-upland	FAC	FACU		3	4	3	7	3	6	2	3	2	7
Physocarpus opulifolius	common ninebark	PHOP	Non-upland	FACW	FAC		7	4	7	5	7	6	7	3	7	6
Physocarpus opulifolius var. intermedius		PHOPI	Non-upland												9	1
Physostegia angustifolia	narrowleaf false dragonhead	PHAN6	Non-upland	FACW	FACW				5	3						
Physostegia godfreyi	Godfrey's false dragonhead	PHGO2	Non-upland		OBL		7	3								
Physostegia intermedia	slender false dragonhead	PHIN8	Non-upland	FACW	FACW	Extirpated									10	3
Physostegia leptophylla	slenderleaf false dragonhead	PHLE9	Non-upland		OBL		7	3	7	3						
Physostegia purpurea	eastern false dragonhead	PHPU10	Non-upland	FACW	FACW		7	4	7	2						
Physostegia virginiana	obedient plant	PHV18	Non-upland	FAC	FACW		6	3	5	5	5	5	8	4	8	5
Physostegia virginiana ssp. praemorsa	obedient plant	PHVIP2	Present 1988 WPL				7	3	6	5			7	3	7	6
Phytolacca americana var. rigida	American pokeweed	PHAMR	Present 1988 WPL				3	2	6	2						
Pieris phillyreifolia	climbing fetterbush	PIPH	Non-upland		FACW		8	4	8	5						
Pilea fontana	lesser clearweed	PIFO	Non-upland	FACW	FACW		6	4								
Pilea microphylla	rockweed	PIMI2	Non-upland	FAC	FACU	Non-native (Adventive) outside of SCP	3	3	0				0			
Pilea nummularifolia	creeping charlie	PINU	Non-upland		FAC	Non-native (Adventive)	0									
Pilea pumila	Canadian clearweed	PIPU2	Non-upland	FACW	FACW		4	6	4	8	4	7	4	4	4	7
Pilularia americana	American pillwort	PIAM	Non-upland	OBL	OBL				3	2	6	2	4	3	4	2
Pinckneya bracteata	fevertree	PIBR6	Non-upland		OBL		8	3	8	5						
Pinguicula caerulea	blueflower butterwort	PICA7	Non-upland	OBL	OBL		6	5	8	6						
Pinguicula ionantha	violet butterwort	PIIO	Non-upland		OBL		9	4	10	4						
Pinguicula lutea	yellow butterwort	PILU2	Non-upland	FACW	OBL		8	6	8	3						
Pinguicula planifolia	Chapman's butterwort	PIPL	Non-upland		OBL		8	5	9	4						
Pinguicula primuliflora	southern butterwort	PIPR	Non-upland	OBL	OBL		9	4	10	3						
Pinguicula pumila	small butterwort	PIPU4	Non-upland	OBL	OBL		7	5	8	4						
Pinus elliotii	slash pine	PIEL	Non-upland	FACW	FACW	Non-native in Mtns and ILP	3	5	5	6			0		0	
Pinus glabra	spruce pine	PIGL2	Non-upland	FACW	FACW		7	4	7	6						
Pinus palustris	longleaf pine	PIPA2	Non-upland	FAC	FAC		7	5	7	8	8	7	8	1		
Pinus rigida	pitch pine	PIRI	Non-upland	FACU	FACU				7	2	7	1	7	2		
Pinus serotina	pond pine	PISE	Non-upland	OBL	FACW		8	5	8	4	9	3				
Pinus strobus	eastern white pine	PIST	Non-upland	FACU	FACU	ILP: Cheatman and Dixon County TN are the only native populations, found along Turnbull Creek. Probably native in the Shaunee Hills of Kentucky. All other populations in the ILP are non-native.					3	3	5	2	6*	2
Pinus taeda	loblolly pine	PITA	Non-upland	FAC	FAC	Some populations introduced and should be rated zero.	3*	6	2*	7	2*	7	2*	3	2*	5
Piriqueta cistoides	pitted stripeeed	PICI	Non-upland	FAC	FAC		4	3	4	3						
Pistia stratiotes	water lettuce	PIST2	Non-upland	OBL	OBL	Non-native	0		0							
Pityopsis oligantha	grassleaf goldaster	PIOL	Non-upland	FAC	FACW		7	3	7	4						
Pityrogramma trifoliata	threeleaf goldback fern	PITR2	Non-upland		FAC		4	2								
Planera aquatica	planertree	PLAQ	Non-upland	OBL	OBL		7	6	7	7			8	2	8	5
Plantago cordata	heartleaf plantain	PLCO2	Non-upland	OBL	OBL				9	5			9	2	9	4
Plantago heterophylla	slender plantain	PLHE2	Non-upland	FAC	FACW		3	2	2	2	2	2	4	2	5	2
Plantago major	Great Plantain	PLMA2	Non-upland	FACU	FAC	Non-native	0		0		0		0			
Plantago rugelii	blackseed plantain	PLRU	Added; Absent from NWPL	FACU	FACU		2	1	2	3	2	2	2	4	2	4
Plantago sparsiflora	pineland plantain	PLSP	Non-upland		FACW		6	3	5	4						
Platanthera blephariglotis	white fringed orchid	PLBL	Non-upland	OBL	OBL		8	4	8	5			10	1		
Platanthera chapmanii	Chapman's fringed orchid	PLCH2	Non-upland		FACW		8	3	9	2						
Platanthera ciliaris	yellow fringed orchid	PLCI2	Non-upland	FACW	FACW		7	5	5	7	5	6	8	4	8	5
Platanthera clavellata	small green wood orchid	PLCL	Non-upland	FACW	OBL		8	6	8	7	8	6	8	2	8	6
Platanthera cristata	crested yellow orchid	PLCR	Non-upland	FACW	OBL		8	5	8	6	8	4	9	2	9	5
Platanthera flava	palegreen orchid	PLFL	Non-upland	FACW	FACW		7	5	7	7	7	7	7	2	7	6
Platanthera grandiflora	greater purple fringed orchid	PLGR2	Non-upland	FACW	FACW								9	1		
Platanthera integra	yellow fringeless orchid	PLIN5	Non-upland	OBL	OBL		9	5	10	5			9	0	9	2
Platanthera integrilabia	white fringeless orchid	PLIN6	Non-upland	OBL	OBL				10	3			9	3	10	3

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<i>Platanthera lacera</i>	green fringed orchid	PLLA2	Non-upland	FACW	FACW		7	3	7	4	7	5	8	3	7	7
<i>Platanthera nivea</i>	snowy orchid	PLNI	Non-upland	FACW	FACW		9	6	9	8					9	2
<i>Platanthera orbiculata</i>	lesser roundleaved orchid	PLOR4	Non-upland	FAC									9	1		
<i>Platanthera peramoena</i>	purple fringeless orchid	PLPE	Present 1988 WPL						7	4	7	3	7	3	7	4
<i>Platanthera psycodes</i>	lesser purple fringed orchid	PLPS2	Non-upland	FACW	FACW								8	3		
<i>Platanus occidentalis</i>	American sycamore	PLOC	Non-upland	FACW	FACW		4	6	5	9	5	8	4	2	4	7
<i>Platythelys querceticola</i>	jug orchid	PLQU	Present 1988 WPL				7	2								
<i>Pilea tenuifolia</i>	rush featherling	PLTE3	Non-upland		OBL		8	4	9	6						
<i>Pleopeltis polyodioides</i>	resurrection fern	PLPO2	Non-upland	FACU	FAC		6	5	6	8	6	7	7	3	7	6
<i>Pluchea camphorata</i>	camphor pluchea	PLCA7	Non-upland	FACW	FACW		5	4	5	9	4	8	5	2	5	7
<i>Pluchea carolinensis</i>	cure for all	PLCA10	Non-upland		FACW		5	2								
<i>Pluchea foetida</i>	stinking camphorweed	PLFO	Non-upland	OBL	OBL		5	4	5	4						
<i>Pluchea longifolia</i>	longleaf camphorweed	PLLO2	Non-upland		OBL		5	4								
<i>Pluchea odorata</i>	sweetscent	PLOD	Non-upland	FACW	FACW		5	6	5	8			6	1		
<i>Pluchea rosea</i>	rosy camphorweed	PLRO	Present 1988 WPL				5	3	5	5						
<i>Pluchea sagittalis</i>	wingstem camphorweed	PLSA5	Non-upland		OBL	Non-native	0									
<i>Poa alsodes</i>	grove bluegrass	POAL3	Non-upland	FACW	UPL								7	2		
<i>Poa autumnalis</i>	autumn bluegrass	POAU	Non-upland	FAC	FAC		4	2	6	5	6	7	6	3	6	3
<i>Poa chapmaniana</i>	Chapman's bluegrass	POCH2	Non-upland	UPL	FAC		2	3	5	5			2	3	2	4
<i>Poa nemoralis</i>	wood bluegrass	PONE	Non-upland	FAC	FAC	Non-native (Adventive)							0			
<i>Poa paludigena</i>	bog bluegrass	POPA	Non-upland	FACW	FACW								9	0		
<i>Poa palustris</i>	fowl bluegrass	POPA2	Non-upland	FACW	FAC								8	0		
<i>Poa pratensis</i>	Kentucky bluegrass	POPR	Added; Absent from NWPL	FACU	FACU	Non-native (Adventive)	0		0		0		0		0	
<i>Poa sylvestris</i>	woodland bluegrass	POSY	Non-upland	FACW	FACW		5	2	5	2	5	3	6	3	6	6
<i>Poa trivialis</i>	Rough-Stalk Blue Grass	POTR2	Non-upland	FACW	FACW	Non-native					0		0		0	
<i>Podostemum ceratophyllum</i>	hornleaf riverweed	POCE3	Non-upland	OBL	OBL				7	3	7	3	8	3	7	4
<i>Pogonia ophioglossoides</i>	snakemouth orchid	POOP	Non-upland	OBL	OBL		9	5	9	7	9	6	9	1	9	4
<i>Polemonium reptans</i>	Greek valerian	PORE2	Non-upland	FACU	FAC				8	4	7	3	7	3	7	6
<i>Polygala baldwinii</i>	Baldwin's milkwort	POBA4	Non-upland		OBL		6	5	8	4						
<i>Polygala brevifolia</i>	littleleaf milkwort	POBR2	Non-upland		FACW		7	4	8	3						
<i>Polygala chapmanii</i>	Chapman's milkwort	POCH5	Non-upland		OBL		8	3	8	3						
<i>Polygala crenata</i>	scalloped milkwort	POCR11	Non-upland		FACW		8	3	8	4						
<i>Polygala cruciata</i>	drumheads	POCR	Non-upland	FACW	OBL		8	6	7	7	8	4	8	4	9	4
<i>Polygala cymosa</i>	tall pinebarren milkwort	POCY	Non-upland	OBL	OBL		8	4	8	6						
<i>Polygala hookeri</i>	Hooker's milkwort	POHO3	Non-upland		FACW		8	3	9	5						
<i>Polygala incarnata</i>	procession flower	POIN4	Non-upland	FACU	FAC		6	4	6	6	6	3	6	1	7	4
<i>Polygala leptocaulis</i>	swamp milkwort	POLE4	Present 1988 WPL				7	2	8	3						
<i>Polygala lutea</i>	orange milkwort	POLU	Non-upland	FACW	FACW		5	5	5	8			8	0		
<i>Polygala mariana</i>	Maryland milkwort	POMAB	Non-upland	FACW	FACW		7	4	7	4					8	4
<i>Polygala nana</i>	candyroot	PONA2	Non-upland	FAC	FACW		6	5	6	8	7	3	8	3	9	2
<i>Polygala nuttallii</i>	Nuttall's milkwort	PONU2	Non-upland	FAC	FACW		7	3	7	4					9	4
<i>Polygala ramosa</i>	low pinebarren milkwort	PORA2	Non-upland	FACW	OBL		6	5	7	4						
<i>Polygala rugelii</i>	yellow milkwort	PORU5	Non-upland		FACW		7	4								
<i>Polygala sanguinea</i>	purple milkwort	POSA3	Non-upland	FAC	FAC				5	4			6	3	6	4
<i>Polygala setacea</i>	coastal plain milkwort	POSE7	Non-upland		FACW		5	3	7	3						
<i>Polygonatum biflorum</i> var. <i>commutatum</i>	smooth Solomon's seal	POBIC	Present 1988 WPL								7	4	7	1	7	2
<i>Polygonum amphibium</i>	water knotweed	POAM8	Present 1988 WPL				5	2	6	3	5	2	7	3	7	4
<i>Polygonum amphibium</i> var. <i>emersum</i>	longroot smartweed	POAME	Non-upland	OBL	OBL				6	3	6	2	7	3	6	5
<i>Polygonum argyrocoleon</i>	Silver-Sheath Knotweed	POAR5	Non-upland		OBL	Non-native	0									
<i>Polygonum arifolium</i>	halberdleaf tearthumb	POAR6	Non-upland	OBL	OBL		7	3	7	7	7	4	7	4	7	4
<i>Polygonum aviculare</i>	Yard Knotweed	POAV	Non-upland	FACU	FAC	Non-native	0		0		0		0		0	
<i>Polygonum careyi</i>	Carey's smartweed	POCA8	Non-upland	FACW	FACW										6	2
<i>Polygonum glabrum</i>	denseflower knotweed	POGL10	Non-upland	OBL	OBL	Non-native in the ILP of KY	5	2	5	3			5	1	5*	1
<i>Polygonum hirsutum</i>	hairy smartweed	POHI3	Non-upland	OBL	OBL		6	5	6	5						
<i>Polygonum hydropiperoides</i>	swamp smartweed	POHY2	Non-upland	OBL	OBL		4	5	4	9	4	8	5	5	6	6
<i>Polygonum lapathifolium</i>	curlytop knotweed	POLA4	Non-upland	FACW	FACW		4	2	3	4	4	3	2	2	3	4
<i>Polygonum meisnerianum</i>	branched tearthumb	POME4	Present 1988 WPL				6	2	5	2						
<i>Polygonum pensylvanicum</i>	Pennsylvania smartweed	POPE2	Non-upland	FACW	FACW		4	4	3	8	3	7	2	3	2	7
<i>Polygonum punctatum</i>	dotted smartweed	POPUS	Present 1988 WPL				4	4	4	7	4	4	4	3	3	4
<i>Polygonum punctatum</i> var. <i>punctatum</i>	dotted smartweed	POPUP4	Non-upland	OBL	OBL		5	4	4	7	5	5	5	3	5	6
<i>Polygonum ramosissimum</i>	bushy knotweed	PORA3	Non-upland	FAC	FACU								1	0	2	2
<i>Polygonum robustius</i>	stout smartweed	PORO	Non-upland	OBL	OBL				7	1	7	1			8	3
<i>Polygonum sagittatum</i>	arrowleaf tearthumb	POSA5	Non-upland	OBL	OBL		5	5	5	8	4	7	5	3	5	7
<i>Polygonum scandens</i>	climbing false buckwheat	POSC3	Present 1988 WPL				3	4	4	5	4	6	5	3	5	7
<i>Polygonum setaceum</i>	bog smartweed	POSE6	Non-upland	OBL	OBL		5	3	5	6	5	6	6	3	6	4
<i>Polygonum virginianum</i>	jumpseed	POVI2	Non-upland	FAC	FAC		6	6	5	8	5	7	5	3	4	7
<i>Polypogon maritimus</i>	Maritime Rabbit's-Foot Grass	POMA10	Non-upland		OBL	Non-native	0									
<i>Polypogon monspeliensis</i>	Annual Rabbit's-Foot Grass	POMOS	Non-upland	FACW	FACW	Non-native	0		0							
<i>Pontederia cordata</i>	pickerelweed	POCO14	Non-upland	OBL	OBL		5	6	6	8	5	7	7	3	7	5
<i>Ponthieva racemosa</i>	hairy shadow witch	PORA4	Non-upland	OBL	FACW		9	6	9	7			9	1		
<i>Populus deltoides</i>	eastern cottonwood	PODE3	Non-upland	FAC	FAC		3	4	4	7	5	7	4	2	4	6

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
Populus heterophylla	swamp cottonwood	POHE4	Non-upland	OBL	OBL		7	5	7	4			8	2	8	4
Portulaca oleracea	Little-Hogweed	POOL	Non-upland	FAC	FACU	Non-native (Adventive)	0		0		0		0		0	
Portulaca umbraticola	wingpod purslane	POUM	Non-upland	FAC	FAC				UND		UND					
Potamogeton amplifolius	largeleaf pondweed	POAM5	Non-upland	OBL	OBL								9	2	8	2
Potamogeton confervoides	Tuckerman's pondweed	POCO12	Non-upland	OBL	OBL			8	2							
Potamogeton crispus	Curly Pondweed	POCR3	Non-upland	OBL	OBL	Non-native	0		0		0		0		0	
Potamogeton diversifolius	waterthread pondweed	PODI	Non-upland	OBL	OBL		5	3	5	6	5	5	6	3	6	6
Potamogeton ephydrius	ribbonleaf pondweed	POEP2	Non-upland	OBL	OBL		8	2	8	3	8	3	8	1		
Potamogeton floridanus	Florida pondweed	POFL5	Non-upland		OBL		7	2	10	2						
Potamogeton foliosus	leafy pondweed	POFO3	Non-upland	OBL	OBL		5	3	6	5	6	3	6	3	6	6
Potamogeton illinoensis	Illinois pondweed	POIL	Non-upland	OBL	OBL		6	3	7	4			7	1	8	4
Potamogeton natans	floating pondweed	PONA4	Non-upland	OBL	OBL	Extirpated										
Potamogeton nodosus	longleaf pondweed	PONO2	Non-upland	OBL	OBL		6	3	6	5	6	3	6	3	6	5
Potamogeton perfoliatus	clasingleaf pondweed	POPE7	Non-upland	OBL	OBL		7	2	6	3						
Potamogeton pulcher	spotted pondweed	POPU6	Non-upland	OBL	OBL		7	3	7	5	7	4	8	1	8	5
Potamogeton pusillus	small pondweed	POPU7	Non-upland	OBL	OBL		5	3	5	5	5	5	5	2	6	4
Potamogeton pusillus ssp. tenuissimus	small pondweed	POPUT3	Non-upland	OBL	OBL	Unscored; 2013 NWPL addition			UND		UND		UND		UND	
Potamogeton robbinsii	Robbins' pondweed	PORO2	Non-upland	OBL	OBL				UND							
Potamogeton tennesseensis	Tennessee pondweed	POTE4	Non-upland	OBL									10	0		
Potentilla norvegica	Norwegian cinquefoil	PONO3	Non-upland	FACU	FAC						3	5	1	3	2	4
Prenanthes autumnalis	slender rattlesnakeroot	PRAU	Non-upland	FAC	FAC		6	3	8	3						
Prenanthes barbata	barbed rattlesnakeroot	PRBA	Added; Absent from NWPL										9	2	9	2
Prenanthes crepidinea	nodding rattlesnakeroot	PRCR	Added; Absent from NWPL	FACU	LPL								9	2	7	4
Prenanthes racemosa	purple rattlesnakeroot	PRRA	Non-upland	FACW	FACW										10	2
Proboscoidea louisianica	ram's horn	PRLO	Added; Absent from NWPL	FACU	FACU				1	1	UND		1	0	2	2
Proserpinaca intermedia	intermediate mermaidweed	PRIN2	Non-upland	OBL	OBL		5	3	4	4			9	0	9	1
Proserpinaca palustris	marsh mermaidweed	PRPA3	Non-upland	OBL	OBL		5	5	5	8	5	6	7	3	7	6
Proserpinaca pectinata	combleaf mermaidweed	PRPE	Non-upland	OBL	OBL		5	5	6	6	5	3	7	3	7	4
Prunella vulgaris	common selfheal	PRVU	Non-upland	FACU	FAC	Some populations are non-native	2*	5	2*	9	1*	8	2*	2	2*	7
Pseudognaphalium luteoalbum	Jersey Rabbit-Tobacco	PSLU6	Non-upland	FAC	FAC	Non-native	0									
Pseudognaphalium stramineum	cottonbatting plant	PSST7	Non-upland	FAC	FAC	Non-native (Adventive)			0		0					
Psidium guajava	Guava	PSGU	Non-upland		FAC	Non-native	0									
Psilotum nudum		PSNU	Non-upland	FACU	FAC		5	5	3	4						
Psychotria nervosa	Seminole balsamo	PSNE	Non-upland		FAC		6	5								
Psychotria tenuifolia	shortleaf wild coffee	PSTE4	Non-upland		FACW		7	4								
Ptelea trifoliata	common hoptree	PTRR	Non-upland	FAC	FACU		7	5	7	7	7	8	7	3	6	5
Pteris tripartita	Giant Brake	PTR2	Non-upland		FACW	Non-native	0									
Ptilimnium ahlesii	coastal mock bishopweed	PTAH	Non-upland		OBL		8	2	7	2						
Ptilimnium capillaceum	herbwilliam	PTCA	Non-upland	OBL	OBL		4	5	4	8	4	6	5	1	5	6
Ptilimnium costatum	ribbed mock bishopweed	PTCO	Non-upland	FACW	FACW				8	3	7	2	8	2	8	3
Ptilimnium nodosum	pedmont mock bishopweed	PTNO	Non-upland	OBL	OBL				9	2	9	3	9	1		
Ptilimnium nuttallii	laceflower	PTNU	Non-upland	FACW	FAC				5	2			7	3	7	4
Puccinellia distans	weeping alkaligrass	PUDI	Non-upland	OBL	OBL	Non-native									0	
Pycnanthemum albescens	whiteleaf mountainmint	PYAL	Non-upland	UPL	FAC		4	3	5	4	UND					
Pycnanthemum flexuosum	Appalachian mountainmint	PYFL	Non-upland	FACW	FACW		5	4	6	5	7	2				
Pycnanthemum floridanum	Florida mountainmint	PYFL2	Non-upland		FAC		6	4	7	2						
Pycnanthemum muticum	clustered mountainmint	PYMU	Non-upland	FACW	FAC				5	5	5	5	8	1	7	4
Pycnanthemum nudum	coastal plain mountainmint	PYNU	Non-upland		FACW		6	2	7	3						
Pycnanthemum tenuifolium	narrowleaf mountainmint	PYTE	Non-upland	FACW	FACW		6	4	4	7	4	6	5	3	5	6
Pycnanthemum verticillatum	whorled mountainmint	PYVE	Non-upland	FAC	UPL				8	4	7	5	7	4	8	4
Pycnanthemum virginianum	Virginia mountainmint	PYVI	Non-upland	FAC	FAC								8	4	7	4
Pyrola americana	American wintergreen	PYAM	Non-upland	FAC	FACU								9	3		
Pyxidantha barbulate	flowering pixiemoos	PYBA	Non-upland	FACU	FAC				8	4						
Quercus bicolor	swamp white oak	QUBI	Non-upland	FACW	FACW						9	2	8	1	7	5
Quercus imbricaria	shingle oak	QUIM	Non-upland	FAC	FAC				5	2			6	4	5	4
Quercus laurifolia	laurel oak	QULA3	Non-upland	FACW	FACW		6	7	6	8	6	4	7	1		
Quercus lyrata	overcup oak	QULY	Non-upland	OBL	OBL		7	6	7	9	7	6	7	3	7	5
Quercus macrocarpa	bur oak	QUMA2	Non-upland	FAC	FACU				7	3					6	5
Quercus michauxii	swamp chestnut oak	QUMI	Non-upland	FACW	FACW		7	5	7	9	7	8	7	2	7	6
Quercus minima	dwarf live oak	QUMI2	Non-upland	FAC	FAC		7	5	7	5						
Quercus nigra	water oak	QUNI	Non-upland	FAC	FAC		4	6	3	9	3	8	4	3	5	5
Quercus oglethorpensis	Oglethorpe oak	QUOG	Non-upland	FAC	FAC				8	2	9	3				
Quercus pagoda	cherrybark oak	QUPA5	Non-upland	FACW	FACW		6	6	7	9	7	8	7	2	7	7
Quercus palustris	pin oak	QUPA2	Non-upland	FACW	FACW				UND		7	3	7	2	6	4
Quercus phellos	willow oak	QUPH	Non-upland	FAC	FACW		5	6	5	9	5	8	5	5	5	5
Quercus shumardii	Shumard's oak	QUSH	Non-upland	FAC	FAC		6	4	7	9	7	7	7	2	6	7
Quercus similis	bottomland post oak	QUSI2	Non-upland		FACW				8	3						
Quercus texana	Texas red oak	QUTE	Non-upland	OBL	FACW				7	4					8	2
Randia aculeata	white indigoberry	RAAC	Non-upland		FAC		6	2								
Ranunculus abortivus	littleleaf buttercup	RAAB	Non-upland	FACW	FACW		4	4	3	8	3	8	3	3	2	7
Ranunculus acris	tail buttercup	RAAC3	Non-upland	FAC	FACW	Non-native					0		0		0	

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Ranunculus allegheniensis	Allegheny Mountain buttercup	RAAL2	Non-upland	FAC	FACU				6	5			7	2	8	3
Ranunculus ambigens	waterplantain spearwort	RAAM	Non-upland	OBL	OBL								8	1	8	
Ranunculus arvensis	Hungerweed	RAAR3	Non-upland	FAC	FAC	Non-native			0		0					
Ranunculus bulbosus	St. Anthony's-Turnip	RABU	Non-upland	UPL	FAC	Non-native			0		0		0		0	
Ranunculus fascicularis	early buttercup	RAFA	Non-upland	FACU	FAC		6	3	6	4	7	6	7	3	7	5
Ranunculus flabellaris	yellow water buttercup	RAFL	Non-upland	OBL	OBL				8	4			7	1	8	5
Ranunculus hederaceus	ivy buttercup	RAHE2	Non-upland	OBL	OBL	Non-native (Adventive)			0							
Ranunculus hispidus	bristly buttercup	RAHI	Non-upland	FAC	FAC		5	4	5	3	6	4	6	2	6	6
Ranunculus hispidus var. nitidus	bristly buttercup	RAHIN	Present 1988 WPL				5	3	5	4	5	4	6	4	6	3
Ranunculus laxicaulis	Mississippi buttercup	RALA2	Non-upland	OBL	OBL				6	4			6	1	6	4
Ranunculus longirostris	longbeak buttercup	RALO2	Non-upland	OBL	OBL										8	3
Ranunculus muricatus	Spiny-Fruit Buttercup	RAMU2	Non-upland	FACW	FACW	Non-native	0		0		0					
Ranunculus parviflorus	Small-Flower Buttercup	RAPA3	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
Ranunculus platensis	Prairie Buttercup	RAPL	Non-upland	FAC	FAC	Non-native	0		0							
Ranunculus pusillus	low spearwort	RAPU	Non-upland	OBL	FACW		5	3	5	7	5	6	6	3	5	6
Ranunculus recurvatus	blisterwort	RARE2	Non-upland	FAC	FACW		5	3	5	7	5	8	6	3	6	7
Ranunculus repens	Creeping Buttercup	RARE3	Non-upland	FAC	FAC	Non-native			0		0		0		0	
Ranunculus sardous	Hairy Buttercup	RASA	Non-upland	UPL	FAC	Non-native	0		0		0		0		0	
Ranunculus sceleratus	cursed buttercup	RASC3	Non-upland	OBL	OBL		3	5	4	4	4	3	3	1	2	3
Ranunculus trilobus	Three-Lobe Buttercup	RATR2	Non-upland		FACW	Non-native	0		0		0					
Reimarochloa oligostachya	Florida reimar grass	REOL	Non-upland		OBL		4	3								
Rhabdadenia biflora	mangrovevine	RHBI	Non-upland		FACW		7	2								
Rhamnus alnifolia	alderleaf buckthorn	RHAL	Non-upland	OBL									10	1		
Rhamnus lanceolata	lanleaf buckthorn	RHLA	Non-upland	FAC	FAC				6	3			6	3	7	5
Rhapidophyllum hystrix	needle palm	RHHY	Non-upland	FACW	FACW		9	4	9	5			9	0		
Rhexia alifanus	savannah meadowbeauty	RHAL4	Non-upland	FACW	FACW		8	5	8	5						
Rhexia aristosa	awnpetal meadowbeauty	RHAR	Non-upland	OBL	OBL				9	4						
Rhexia cubensis	West Indian meadowbeauty	RHCU4	Non-upland	FACW	FACW		6	4	7	3						
Rhexia lutea	yellow meadowbeauty	RHLU	Non-upland	FACW	FACW		7	4	7	5						
Rhexia mariana	Maryland meadowbeauty	RHMA	Non-upland	OBL	FACW		4	6	4	8	4	7	5	4	6	7
Rhexia mariana var. interior	Maryland meadowbeauty	RHMAI	Added; Absent from NWPL						8	3					8	2
Rhexia nashii	maid Marian	RHNA	Non-upland	OBL	FACW		7	4	7	4	UND					
Rhexia nuttallii	Nuttall's meadowbeauty	RHNU2	Non-upland		FACW		6	4	8	4						
Rhexia parviflora	white meadowbeauty	RHPA3	Non-upland		OBL		8	4	9	3						
Rhexia petiolata	fringed meadowbeauty	RHPE	Non-upland	OBL	FACW		7	4	7	7	UND					
Rhexia salicifolia	panhandle meadowbeauty	RHSA3	Non-upland		OBL		8	4	9	3						
Rhexia virginica	handsome Harry	RHVI	Non-upland	OBL	FACW		5	6	5	7	5	5	6	3	6	7
Rhizophora mangle	red mangrove	RHMA2	Non-upland		OBL		8	4								
Rhododendron alabamense	Alabama azalea	RHAL5	Added; Absent from NWPL						8	2	8	2			8	2
Rhododendron arboreoscens	smooth azalea	RHAR3	Non-upland	FAC	FACW		7	2	8	5	7	6	8	2	7	2
Rhododendron atlanticum	dwarf azalea	RHAT	Non-upland	FAC	FAC		6	3	6	5						
Rhododendron austrinum	orange azalea	RHAU	Non-upland	FAC	FAC		7	3	8	4	UND					
Rhododendron canescens	mountain azalea	RHCA7	Non-upland	FACW	FACW		7	5	6	8	6	6	7	3	7	4
Rhododendron chapmanii	Chapman's rhododendron	RHCH5	Non-upland		FACW		9	4	9	3						
Rhododendron maximum	great laurel	RHMA4	Non-upland	FAC	FAC		7	2	6	3	7	7	7	3	7	5
Rhododendron periclymenoides	pink azalea	RHPE4	Non-upland	FAC	FAC				6	5	6	6	7	2	7	4
Rhododendron prinophyllum	early azalea	RHPR	Non-upland	FAC	FAC						UND		8	2	8	2
Rhododendron viscosum	swamp azalea	RHVI2	Non-upland	FACW	OBL		7	3	7	5	7	5	8	2		
Rhynchospora alba	white beaksedge	RHAL3	Non-upland	OBL	OBL				10	4			10	2		
Rhynchospora baldwinii	Baldwin's beaksedge	RHBA	Non-upland		FACW		6	5	8	4						
Rhynchospora brachychaeta	West Indian beaksedge	RHBR	Non-upland		FACW		4	2								
Rhynchospora breviflora	shortbristle beaksedge	RHBR2	Non-upland	OBL	OBL	Name change: R. galeana	6	4	9	3						
Rhynchospora caduca	anglestem beaksedge	RHCA9	Non-upland	OBL	OBL		6	5	6	7	6	4	8	1	8	2
Rhynchospora capillacea	needle beaksedge	RHCA11	Non-upland	OBL	OBL								10	0		
Rhynchospora capitellata	brownish beaksedge	RHCA12	Non-upland	OBL	OBL				6	2	6	5	7	1	7	4
Rhynchospora careyana	broadfruit horned beaksedge	RHCA13	Non-upland	OBL	OBL		6	3	8	5						
Rhynchospora cephalantha	bunched beaksedge	RHCE	Non-upland	OBL	OBL		5	3	6	4						
Rhynchospora chalarocephala	loosehead beaksedge	RHCH2	Non-upland	OBL	OBL		6	4	6	4			7	1	8	2
Rhynchospora chapmanii	Chapman's beaksedge	RHCH3	Non-upland	OBL	OBL		6	5	5	5						
Rhynchospora ciliaris	fringed beaksedge	RHCI	Non-upland	OBL	OBL		6	3	7	3						
Rhynchospora colorata	starrush whitetop	RHCO7	Non-upland	FACW	FACW		6	4	6	6			7	1		
Rhynchospora compressa	flatfruit beaksedge	RHCO3	Non-upland		OBL		6	3	8	3						
Rhynchospora corniculata	shortbristle horned beaksedge	RHCO2	Non-upland	OBL	OBL		5	5	5	8	5	6	5	4	6	6
Rhynchospora crinipes	mosquito beaksedge	RHCR3	Non-upland	OBL	OBL		8	5	9	4						
Rhynchospora curtisii	Curtis' beaksedge	RHCU3	Non-upland	OBL	OBL		5	3	7	4						
Rhynchospora debilis	savannah beaksedge	RHDE2	Non-upland	OBL	OBL		5	3	5	4			9	1	7	1
Rhynchospora decurrens	swampforest beaksedge	RHDE	Non-upland	OBL	OBL		5	2	7	3						
Rhynchospora divergens	spreading beaksedge	RHDI3	Non-upland	OBL	OBL		5	3	5	3						
Rhynchospora elliottii	Elliott's beaksedge	RHEL	Non-upland	FACW	FACW		5	2	6	5						
Rhynchospora eximia	Florida beaksedge	RHEX	Non-upland		OBL		5	3								
Rhynchospora fascicularis	fasciated beaksedge	RHFA	Non-upland	OBL	FACW		5	3	6	4						

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Rhynchospora fernaldii	Fernald's beaksedge	RHFE	Non-upland		FAC		4	3	4	1						
Rhynchospora filifolia	threadleaf beaksedge	RHFI	Non-upland	FAC	FACW		6	4	7	4			7	0		
Rhynchospora floridensis	Florida whitetop	RHFL2	Non-upland		FACW		5	2								
Rhynchospora globularis	globe beaksedge	RHGL2	Non-upland	FACW	FACW		6	4	5	7						
Rhynchospora globularis var. saxicola	Stone Mountain beaksedge	RHGL5	Present 1988 WPL								7	6	7	3	7	3
Rhynchospora glomerata	clustered beaksedge	RHGL3	Non-upland	OBL	OBL		5	5	5	8	5	5	6	3	6	5
Rhynchospora gracilenta	slender beaksedge	RHGR	Non-upland	OBL	OBL		6	5	6	7	6	3	8	1	8	2
Rhynchospora grayi	Gray's beaksedge	RHGR2	Non-upland	FAC	UPL		5	3	6	3						
Rhynchospora harperi	Harper's beaksedge	RHHA2	Non-upland	OBL	OBL		7	3	9	3						
Rhynchospora harveyi	Harvey's beaksedge	RHHA	Non-upland	FAC	FACW		7	4	6	5			8	0	8	2
Rhynchospora harveyi var. culixa	Georgia beaksedge	RHHAC	Present 1988 WPL				7	2								
Rhynchospora inexpansa	noddling beaksedge	RHIN4	Non-upland	FACW	FACW		4	5	4	7			4	2		
Rhynchospora inundata	narrowfruit horned beaksedge	RHIN7	Non-upland	OBL	OBL		6	4	7	4						
Rhynchospora latifolia	sandswamp whitetop	RHLA7	Non-upland		FACW		6	4	8	3						
Rhynchospora leptocarpa	slender-fruit beaksedge	RHLE2	Non-upland	OBL	OBL		7	3	8	2						
Rhynchospora macra	large beaksedge	RHMA5	Non-upland	OBL	OBL		8	4	9	5						
Rhynchospora macrostachya	tall horned beaksedge	RHMA6	Non-upland	OBL	OBL		8	3	6	3			9	2	9	5
Rhynchospora megaplumosa	Manatee beaksedge	RHME3	Non-upland		FACW		8	4								
Rhynchospora microcarpa	southern beaksedge	RHMI7	Non-upland	FACW	OBL		5	3	6	4	UND					
Rhynchospora microcephala	smallhead beaksedge	RHMI8	Non-upland	FACW	FACW		6	4	6	4						
Rhynchospora miliacea	millet beaksedge	RHMI5	Non-upland	OBL	OBL		6	4	6	4						
Rhynchospora mixta	mingled beaksedge	RHMI9	Non-upland	OBL	OBL		6	3	7	6						
Rhynchospora nitens	shortbeak beaksedge	RHNI	Non-upland	OBL	OBL		4	3	6	4						
Rhynchospora odorata	fragrant beaksedge	RHOD	Non-upland	OBL	OBL		4	3	8	3						
Rhynchospora oligantha	featherbristle beaksedge	RHOL	Non-upland	OBL	OBL		6	3	8	6						
Rhynchospora pallida	pale beaksedge	RHPA	Non-upland	OBL	OBL				9	3						
Rhynchospora perplexa	pineland beaksedge	RHPE2	Non-upland	FACW	OBL		6	5	6	4			8	1	8	2
Rhynchospora pineticola	pine barren beaksedge	RHP15	Non-upland		FAC		6	2								
Rhynchospora pleiantha	coastal beaksedge	RHPL6	Non-upland	OBL	OBL		8	4	9	4						
Rhynchospora plumosa	plumed beaksedge	RHPL3	Non-upland	FACW	FACW		8	4	8	3						
Rhynchospora punctata	dotted beaksedge	RHPU4	Non-upland		OBL		7	2	9	2						
Rhynchospora pusilla	fairy beaksedge	RHPU3	Non-upland	FACW	FACW		6	4	5	5						
Rhynchospora rariflora	fewflower beaksedge	RHRA2	Non-upland	OBL	OBL		7	5	7	5	9	2	8	0	8	2
Rhynchospora recognita	globe beaksedge	RHRE8	Non-upland	FACW		Unscored; 2013 NWPL addition	UND		UND		UND		UND		UND	
Rhynchospora scirpoides	longbeak beaksedge	RHSC5	Non-upland	OBL	OBL		7	2	7	3						
Rhynchospora solitaria	onespike beaksedge	RHSO	Non-upland		OBL				10	3						
Rhynchospora stenophylla	coastal plain beaksedge	RHST2	Non-upland	FACW	OBL		8	4	8	3						
Rhynchospora torreyana	Torrey's beaksedge	RHTO4	Non-upland	FACW	OBL		6	4	7	2						
Rhynchospora tracyi	Tracy's beaksedge	RHTR2	Non-upland		OBL		7	4	8	5						
Rhynchospora wrightiana	Wright's beaksedge	RHWR	Non-upland	OBL	OBL		6	3	6	2						
Ribes americanum	American black currant	RIAM2	Non-upland	FACW	FACW								9	0	7	3
Ribes aureum	golden currant	RIAU	Non-upland	FACW	FAC										10	1
Ribes aureum var. villosum	golden currant	RIAUV	Present 1988 WPL												10	1
Ribes echinellum	Miccosukee gooseberry	RIEC	Non-upland	FAC	FAC		9	3		4	9	4				
Ribes glandulosum	skunk currant	RIGL	Non-upland	FACW									9	1		
Rorippa palustris	bog yellowcress	ROPA2	Non-upland	OBL	OBL		3	3	4	5	4	4	4	3	4	4
Rorippa sessiliflora	stalkless yellowcress	ROSE	Non-upland	OBL	OBL		4	2	4	3			4	4	4	5
Rorippa sinuata	spreading yellowcress	ROSI2	Non-upland	FACW	FACW										2	3
Rorippa sylvestris	Creeping Yellowcress	ROSY	Non-upland	FACW	OBL	Non-native			0				0		0	
Rorippa teres	southern marsh yellowcress	ROTE2	Non-upland	FACW	OBL		4	3	1	1						
Rosa palustris	swamp rose	ROPA	Non-upland	OBL	OBL		6	4	6	7	6	7	6	3	6	6
Rosa virginiana	Virginia rose	ROV12	Non-upland	FAC	FAC	Probably adventive (non-native) in Southeast									0	
Rotala ramosior	lowland rotala	RORA	Non-upland	OBL	OBL		4	2	4	7	4	6	4	4	4	5
Roystonea elata	Florida Royal Palm	ROEL	Non-upland		FACW		8	3								
Rubus argutus	sawtooth blackberry	RUAR2	Non-upland	FACU	FAC		3	5	2	9	2	8	3	2	3	7
Rubus hispidus	bristly dewberry	RUHI	Non-upland	FACW	FACW								6	3	6	5
Rubus idaeus	American red raspberry	RUID	Non-upland	FAC	FACU	"Rubus idaeus ssp. idaeus" should be zero for Mtns							7*	3		
Rubus idaeus ssp. strigosus	grayleaf red raspberry	RUIDS2	Present 1988 WPL										9	1		
Rubus longii	Long's blackberry	RULO4	Non-upland	FAC	FAC	Non-native			0				0		0	
Rudbeckia auriculata	eared coneflower	RUAU2	Non-upland	FACW	FACW		6	3	7	4						
Rudbeckia fulgida	orange coneflower	RUFU2	Non-upland	FAC	FAC		5	4	4	7	4	6	5	2	5	6
Rudbeckia fulgida var. palustris	prairie coneflower	RUFUP	Non-upland												9	2
Rudbeckia graminifolia	grassleaf coneflower	RUGR7	Non-upland		FACW		9	5	9	2						
Rudbeckia laciniata	cutleaf coneflower	RULA3	Non-upland	FACW	FACW		6	4	5	6	5	7	6	4	6	6
Rudbeckia laciniata var. digitata	cutleaf coneflower	RULAD	Added; Absent from NWPL										8	3		
Rudbeckia mohrii	Mohr's coneflower	RUMO6	Non-upland		OBL		7	3	8	3						
Rudbeckia nitida	shiny coneflower	RUN13	Non-upland		FACW		4	3	6	2						
Ruellia caerulea	Linear-Leaf Wild Petunia	RUCA19	Non-upland	FAC	FAC	Non-native	0		0							
Ruellia noctiflora	nightflowering wild petunia	RUNO	Non-upland	FACW	FACW		8	3	8	4						
Ruellia strepens	limestone wild petunia	RUST2	Non-upland	FAC	FAC		6	2	6	2			5	1	5	5

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Rumex altissimus	pale dock	RUAL4	Non-upland	FACW	FACW		5	2	3	6	2	5	5	3	5	5
Rumex chrysocarpus	amamastla	RUCH3	Non-upland		FACW	Non-native	0									
Rumex conglomeratus	Sharp Dock	RUCO2	Non-upland	FAC	FACW	Non-native	0		0		0		0		0	
Rumex crispus	Curly Dock	RUCR	Non-upland	FAC	FAC	Non-native	0		0		0		0		0	
Rumex obovatus	Tropical Dock	RUOB3	Non-upland		OBL	Non-native	0									
Rumex obtusifolius	Bitter Dock	RUOB	Non-upland	FACU	FACW	Non-native	0		0		0		0		0	
Rumex paraguayensis	Paraguayan Dock	RUPA24	Non-upland		FACW	Non-native	0									
Rumex pulcher	Fiddle Dock	RUPU3	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
Rumex verticillatus	swamp dock	RUVE3	Non-upland	OBL	FACW		5	3	6	4			6	3	7	4
Ruppia maritima	widgeongrass	RUMA5	Non-upland	OBL	OBL		5	3	7	4						
Sabal minor	dwarf palmetto	SAMI8	Non-upland	FACW	FACW		7	5	7	8			8	1		
Sabal palmetto	cabbage palmetto	SAPA	Non-upland		FAC		5	6	7	5						
Sabatia angularis	rosepink	SAAN	Non-upland	FAC	FACW		5	4	5	7	4	6	5	2	5	6
Sabatia bartramii	Bartram's rose gentian	SABA8	Non-upland		OBL		6	3	7	4						
Sabatia brachiata	narrowleaf rose gentian	SABR9	Non-upland	FACU	FAC		8	2	7	5	6	3	8	2	7	3
Sabatia brevifolia	shortleaf rose gentian	SABR10	Non-upland		FACW		5	4	8	3						
Sabatia calycina	coastal rose gentian	SACA2	Non-upland	OBL	OBL		7	3	8	4			8	0		
Sabatia campanulata	slender rose gentian	SACA26	Non-upland	FACW	FACW		8	3	8	6	8	4	9	2	9	3
Sabatia difformis	lancheaf rose gentian	SADI2	Non-upland	OBL	OBL		7	3	6	5						
Sabatia dodecandra	marsh rose gentian	SADO	Non-upland	OBL	OBL		7	3	8	5						
Sabatia gentianoides	pinewoods rose gentian	SAGE	Non-upland	OBL	OBL		6	3	7	4						
Sabatia grandiflora	largeflower rose gentian	SAGR8	Non-upland		FACW		6	3	8	2						
Sabatia kennedyana	Plymouth rose gentian	SAKE	Non-upland		OBL				8	4						
Sabatia macrophylla	largeleaf rose gentian	SAMA8	Non-upland	FACW	FACW		8	3	8	4						
Sabatia quadrangula	fourangle rose gentian	SAQU	Non-upland	FAC	FACW		6	2	7	3	6	3				
Sabatia stellaris	rose of Plymouth	SAST5	Non-upland	FACW	OBL		6	3	7	5						
Saccharum alopecuroides	silver plumegrass	SAAAL21	Non-upland	FAC	FAC		4	3	4	7	4	6	4	2	4	5
Saccharum baldwinii	narrow plumegrass	SABA10	Non-upland	OBL	OBL		6	4	6	5	6	4	7	2	7	2
Saccharum brevibarbe	shortbeard plumegrass	SABR18	Non-upland	OBL	FACW	Only S. brevibarbe var. contortum is found in Mtns and ILP; Mtn and ILP scores are for this variety.	5	6	5	6	5	3	6*	1	6*	3
Saccharum brevibarbe var. brevibarbe	shortbeard plumegrass	SABRB5	Present 1988 WPL				5	3	UND							
Saccharum giganteum	sugarcane plumegrass	SAGI	Non-upland	FACW	FACW		5	6	4	9	4	8	4	3	4	6
Saccharum ravennae	Ranenna Grass	SARA3	Non-upland	UPL	FAC	Non-native	0		0							
Sacciolepis indica	Glenwood Grass	SAIN	Non-upland		FAC	Non-native	0		0							
Sacciolepis striata	American cupscale	SAST	Non-upland	OBL	OBL		4	4	4	7	4	5	5	2	5	1
Sageretia minutiflora	smallflower mock buckthorn	SAMI10	Non-upland		FAC		6	5	8	6						
Sagina decumbens	trailing pearlwort	SADE	Non-upland	FAC	FACU		1	3	1	6	1	5	1	1	1	5
Sagittaria australis	longbeak arrowhead	SAAU2	Non-upland	OBL	OBL		6	2	6	5	6	4	6	3	6	4
Sagittaria brevirostra	shortbeak arrowhead	SABR8	Non-upland	OBL	OBL										7	4
Sagittaria calycina	hooded arrowhead	SACA21	Non-upland	OBL	OBL				4	4			6	5	6	5
Sagittaria engelmanniana	Engelmann's arrowhead	SAEN	Non-upland	OBL	OBL				5	2						
Sagittaria fasciculata	bunched arrowhead	SAFA5	Non-upland	OBL	OBL								9	2		
Sagittaria filiformis	threadleaf arrowhead	SAFI2	Non-upland	OBL	OBL		5	3	9	2						
Sagittaria graminea	grassy arrowhead	SAGR	Non-upland	OBL	OBL		5	4	6	6	6	3	8	3	8	4
Sagittaria graminea var. chapmanii	Chapman's arrowhead	SAGRC2	Non-upland		OBL		6	4	7	3						
Sagittaria graminea var. weatherbiana	Weatherby's arrowhead	SAGRW	Non-upland	OBL	OBL				8	3						
Sagittaria isoetiformis	quillwort arrowhead	SAIS	Non-upland	OBL	OBL		6	5	8	5						
Sagittaria kurziana	springtape	SAKU	Non-upland		OBL		8	5								
Sagittaria lancifolia	bulltongue arrowhead	SALA	Non-upland	OBL	OBL		4	4	5	5						
Sagittaria lancifolia ssp. media	bulltongue arrowhead	SALAM2	Present 1988 WPL				5	4	5	1						
Sagittaria latifolia	broadleaf arrowhead	SALA2	Non-upland	OBL	OBL		4	5	5	9	4	7	5	3	5	7
Sagittaria montevidensis	Giant Arrowhead	SAMO	Non-upland	OBL	OBL	Non-native			0							
Sagittaria papillosa	nipplebract arrowhead	SAPA2	Non-upland	OBL	OBL				6	2						
Sagittaria platyphylla	delta arrowhead	SAPL	Non-upland	OBL	OBL		6	4	6	6			7	1	8	3
Sagittaria rigida	sessilefruit arrowhead	SARI	Non-upland	OBL	OBL								9	2	9	3
Sagittaria secundifolia	Little River arrowhead	SASE9	Non-upland	OBL	OBL								10	0		
Sagittaria subulata	awl-leaf arrowhead	SASU	Non-upland	OBL	OBL		6	2	7	3						
Salicornia bigelovii	dwarf saltwort	SABI	Non-upland	OBL	OBL		6	4	8	5						
Salicornia depressa	Virginia glasswort	SADE10	Non-upland	OBL	OBL		6	4	8	3						
Salix alba	White Willow	SAAL2	Non-upland	FACW	FACW	Non-native					0		0		0	
Salix babylonica		SABA	Non-upland	FACW	FACW	Non-native	0		0		0		0		0	
Salix caroliniana	coastal plain willow	SACA5	Non-upland	OBL	OBL		4	5	4	7	4	6	6	3	6	6
Salix eriocephala	Missouri River willow	SAER	Non-upland	FACW	FACW		5	2	5	2	5	2	6	2	7	3
Salix floridana	Florida willow	SAFL	Non-upland		FACW		8	3	8	3						
Salix fragilis	Crack Willow	SAFR	Non-upland	FAC	FAC	Non-native							0		0	
Salix interior	sandbar willow	SAIN3	Non-upland	FACW	OBL				4	4			3	3	3	4
Salix nigra	black willow	SANI	Non-upland	OBL	OBL		4	6	3	9	3	8	4	2	4	7
Salix pendulina	Wisconsin weeping willow	SAPE12	Non-upland	FACW	FACW	Non-native			0				0		0	
Salix sericea	silky willow	SASE	Non-upland	OBL	OBL						6	5	6	2	7	3
Salvia lyrata	lyreleaf sage	SALY2	Present 1988 WPL	FACU	FACU		4	5	3	6	3	5	3	0	3	4

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Salvinia minima	Water-Spangles	SAMI7	Non-upland	OBL	OBL	Non-native	0		0							
Sambucus nigra	black elderberry	SANI4	Non-upland	FAC	FACW		3	5	3	6	3	5	4	2	4	5
Sambucus nigra ssp. canadensis	American black elderberry	SANIC4	Non-upland	FAC	FACW		3	5	3	6	3	5	4	2	4	5
Sambucus racemosa var. racemosa	red elderberry	SARAR3	Added; Absent from NWPL										8	1		
Samolus ebracteatus	limewater brookweed	SAEB2	Non-upland		OBL		6	3								
Samolus valerandi	seaside brookweed	SAVA3	Non-upland	OBL	OBL		5	3	5	5	5	5	6	3	5	6
Samolus valerandi ssp. parviflorus	seaside brookweed	SAVAP	Non-upland	OBL	OBL		5	4	6	5	6	5	5	1	5	5
Sanguisorba canadensis	Canadian burnet	SACA14	Non-upland	FACW	FACW								9	2	9	4
Sanguisorba minor	Salad Burnet	SAMI3	Non-upland	FAC	FAC	Name change; Poterium sanguisorba ssp. muricatum			0		0					
Sanicula odorata	clustered blacksnakeroot	SAOD	Added; Absent from NWPL	FACU	FACU		5	2	6	5	6	4	6	4	6	3
Sarcocornia perennis	chickenclaws	SAPE11	Present 1988 WPL				7	2	7	3						
Sarracenia alata	yellow trumpets	SAAL4	Non-upland		OBL		8	4	8	4						
Sarracenia flava	yellow pitcherplant	SAFL4	Non-upland	OBL	OBL		8	5	9	5	9	4				
Sarracenia leucophylla	crimson pitcherplant	SALE4	Non-upland		OBL		8	4	8	4						
Sarracenia minor	hooded pitcherplant	SAMI9	Non-upland		OBL		8	5	7	5						
Sarracenia oreophila	green pitcherplant	SAOR3	Non-upland	OBL	OBL								10	1		
Sarracenia psittacina	parrot pitcherplant	SAPS2	Non-upland		OBL		7	6	8	4						
Sarracenia purpurea	purple pitcherplant	SAPU4	Non-upland	OBL	OBL		8	2	8	5			10	1		
Sarracenia rosea	purple pitcherplant	SARO14	Non-upland		OBL		8	4	8	3						
Sarracenia rubra	sweet pitcherplant	SARU4	Non-upland	OBL	OBL		8	4	9	6	10	2				
Sarracenia rubra ssp. alabamensis	Alabama pitcherplant	SARUA	Non-upland	OBL	OBL	Unscored; 2013 NWPL addition			UND							
Sarracenia rubra ssp. jonesii	Jones' pitcherplant	SARUJ	Non-upland	OBL	OBL	Unscored; 2013 NWPL addition							UND			
Saururus cernuus	lizard's tail	SACE	Non-upland	OBL	OBL		6	6	6	9	6	8	6	3	6	7
Saxifraga careyana	golden eye saxifrage	SACA19	Non-upland	FAC									8	3		
Saxifraga caroliniana	Carolina saxifrage	SACA20	Non-upland	FACW									10	1		
Saxifraga micranthidifolia	lettuceleaf saxifrage	SAMI6	Non-upland	OBL							8	3	9	1		
Saxifraga pensylvanica	eastern swamp saxifrage	SAPE8	Non-upland	OBL	OBL								10	1		
Saxifraga texana	Texas saxifrage	SATE4	Non-upland	FAC	FAC						9	2				
Saxifraga virginensis	early saxifrage	SAVI5	Non-upland	FAC	FAC		7	3	7	7	7	6	7	3	7	5
Schedonorus arundinaceus		SCAR7	Non-upland	FACU	FAC	Non-native	0		0		0		0		0	
Schinus terebinthifolius	Brazilian Peppertree	SCTE	Non-upland		FAC	Non-native	0									
Schizachyrium littorale	shore little bluestem	SCLI11	Non-upland	FACW	FAC		7	3								
Schizachyrium maritimum	gulf bluestem	SCMA3	Non-upland		FAC		7	3	8	5						
Schoenolirion albiflorum	white sunnysbell	SCAL5	Non-upland		OBL		8	3								
Schoenolirion croceum	yellow sunnysbell	SCCR	Non-upland	OBL	OBL		8	4	8	5	8	5	8	2	8	3
Schoenolirion wrightii	Texas sunnysbell	SCWR3	Non-upland	OBL	OBL								9	1		
Schoenoplectus acutus	hardstem bulrush	SCAC3	Non-upland	OBL	OBL				9	2						
Schoenoplectus americanus	chairmaker's bulrush	SCAM6	Non-upland	OBL	OBL		7	3	7	4						
Schoenoplectus californicus	California bulrush	SCCA11	Non-upland	OBL	OBL	Non-native in Mtns	4	4	3	3			0		0	
Schoenoplectus deltarum	delta bulrush	SCDE6	Non-upland	FACW	FACW		6	2	8	2						
Schoenoplectus erectus	sharpscale bulrush	SCER5	Non-upland		OBL		5	3	6	2						
Schoenoplectus erectus ssp. raynallii	sharpscale bulrush	SCERR	Present 1988 WPL				4	2	7	2						
Schoenoplectus etuberculatus	Canby's bulrush	SCET2	Non-upland	OBL	OBL		8	3	8	4						
Schoenoplectus fluviatilis	river bulrush	SCFL11	Non-upland	OBL	OBL								7	1	6	4
Schoenoplectus hallii	Hall's bulrush	SCHA9	Non-upland	OBL	OBL				8	2					5	3
Schoenoplectus heterochaetus	slender bulrush	SCH5E	Non-upland	OBL											6	2
Schoenoplectus novae-angliae	New England bulrush	SCNO5	Non-upland	OBL	OBL				8	3						
Schoenoplectus pungens	common threesquare	SCPU10	Non-upland	OBL	OBL		5	6	4	4			6	1	6	3
Schoenoplectus purshianus	weakstalk bulrush	SCPU13	Non-upland	OBL	OBL						6	3	6	3	6	3
Schoenoplectus robustus	sturdy bulrush	SCRO5	Non-upland	OBL	OBL		6	3	6	4						
Schoenoplectus subterminalis	swaying bulrush	SCSU10	Non-upland	OBL	OBL				9	2			10	1		
Schoenoplectus tabernaemontani	softstem bulrush	SCTA2	Non-upland	OBL	OBL		6	3	5	7	5	5	5	1	5	5
Schoenus nigricans	black bogrush	SCNI	Non-upland		OBL		7	4	8	3						
Schwalbea americana	chaffseed	SCAM	Non-upland	FACU	FAC		10	5	10	8	9	3	10	0	10	3
Scirpus atrovirens	green bulrush	SCAT2	Non-upland	OBL	OBL				5	3			5	2	5	5
Scirpus cyperinus	woolgrass	SCCY	Non-upland	FACW	OBL		4	5	3	9	3	8	4	3	4	7
Scirpus divaricatus	spreading bulrush	SCDI2	Non-upland	OBL	OBL		6	3	7	3			7	2		
Scirpus expansus	woodland bulrush	SCEX	Non-upland	OBL	OBL						7	2	5	3	6	3
Scirpus flaccidifolius	reclining bulrush	SCFL2	Non-upland	OBL	OBL				7	2						
Scirpus georgianus	Georgia bulrush	SCGE2	Non-upland	OBL	OBL				4	3	5	3	5	2	5	5
Scirpus hattorianus	mosquito bulrush	SCHA3	Non-upland	OBL	OBL								6	1	6	3
Scirpus microcarpus	panicked bulrush	SCMI2	Non-upland	OBL	OBL										6	3
Scirpus pendulus	rufous bulrush	SCPE4	Non-upland	OBL	OBL		5	4	4	5			4	3	5	5
Scirpus polyphyllus	leafy bulrush	SCPO2	Non-upland	OBL	OBL						6	6	6	3	7	5
Scleria baldwinii	Baldwin's nutrush	SCBA2	Non-upland		FACW		7	3	7	4						
Scleria ciliata	fringed nutrush	SCCI	Non-upland	FAC	FAC		7	5	7	7	7	4	8	2	8	4
Scleria ciliata var. glabra	fringed nutrush	SCCI6	Non-upland	OBL	FACW		7	4	7	4						
Scleria georgiana	slenderfruit nutrush	SCGE	Non-upland	FACW	FACW		7	4	8	5						
Scleria hirtella	riverswamp nutrush	SCHI3	Non-upland	OBL	OBL		6	3	7	3						
Scleria minor	slender nutrush	SCMI4	Non-upland	FACW	FACW				9	4	UND		9	0		

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Scleria muehlenbergii</i>	Muehlenberg's nutrush	SCMU8	Non-upland	FAC	OBL		6	3	7	4						
<i>Scleria oligantha</i>	littlehead nutrush	SCOL2	Non-upland	FACU	FAC		7	4	7	8	7	7	7	2	7	6
<i>Scleria pauciflora</i>	fewflower nutrush	SCPA5	Non-upland	FACU	FAC		6	6	6	6	5	4	6	4	6	4
<i>Scleria pauciflora</i> var. <i>curtissii</i>	Curtiss' nutrush	SCPAC2	Present 1988 WPL				6	3								
<i>Scleria reticularis</i>	netted nutrush	SCRE	Non-upland	OBL	FACW		6	5	7	7	6	2	7	0	8	2
<i>Scleria triglomerata</i>	whip nutrush	SCTR	Non-upland	FAC	FACW		5	5	6	8	6	7	7	4	7	6
<i>Scleria verticillata</i>	low nutrush	SCVE2	Non-upland	OBL	OBL		6	5	7	6					9	2
<i>Scierolepis uniflora</i>	pink bogbutton	SCUN3	Non-upland	OBL	OBL		8	5	9	4						
<i>Scoparia dulcis</i>	licorice weed	SCDU3	Non-upland		FAC		2	3	3	3						
<i>Scrophularia lanceolata</i>	lanceleaf figwort	SCLA	Non-upland	FACU	FAC								7	1		
<i>Scutellaria arenicola</i>	Florida scrub skullcap	SCAR3	Non-upland		FAC		6	4								
<i>Scutellaria floridana</i>	Florida skullcap	SCFL4	Non-upland		OBL		9	3	9	2						
<i>Scutellaria galericulata</i>	marsh skullcap	SCGA	Non-upland	OBL	OBL								10	0	10	1
<i>Scutellaria integrifolia</i>	helmet flower	SCIN2	Non-upland	FACW	FAC		5	6	5	8	5	7	6	3	6	6
<i>Scutellaria lateriflora</i>	blue skullcap	SCLA2	Non-upland	FACW	OBL		6	2	6	6	5	5	6	3	6	6
<i>Scutellaria nervosa</i>	veiny skullcap	SCNE2	Non-upland	FAC	FAC		6		6	2			6	3	7	4
<i>Scutellaria ocmulgee</i>	Ocmulgee skullcap	SCOC2	Non-upland	FACW	FACW				8	2						
<i>Scutellaria racemosa</i>	South American Skullcap	SCRA	Non-upland	OBL	OBL	Non-native	0		0		0					
<i>Sedum pusillum</i>	granite stonecrop	SEPU6	Non-upland	FAC	FAC						9	5				
<i>Selaginella apoda</i>	meadow spikemoss	SEAP	Non-upland	FACW	FACW		6	4	6	5	5	4	6	3	6	5
<i>Selaginella ludoviciana</i>	gulf spikemoss	SELU3	Non-upland		FACW		7	3	7	3						
<i>Selaginella uncinata</i>	Blue Spike-Moss	SEUN2	Non-upland		OBL	Non-native	0		0							
<i>Senna hebecarpa</i>	American senna	SEHE3	Non-upland	FAC	FAC						6	3	7	4	7	3
<i>Senna marilandica</i>	Maryland senna	SEMA11	Non-upland	FAC	FAC		4	4	5	4	5	4	5	2	5	6
<i>Senna pendula</i>	valamuerto	SEPE4	Non-upland		FAC	Non-native	0									
<i>Sesbania drummondii</i>	poisonbean	SEDR	Non-upland	FACW	FACW		4	4	2	4						
<i>Sesbania herbaea</i>	bigpod sesbania	SEHE8	Non-upland	FAC	FACW	Non-native (Adventive) in KY	2	4	2	4					1*	2
<i>Sesbania punicea</i>	Purple River-Hemp	SEPU7	Non-upland	FAC	FAC	Non-native	0		0							
<i>Sesbania vesicaria</i>	bagpod	SEVE	Non-upland	FAC	FAC		2	4	2	4	1	5				
<i>Sesuvium maritimum</i>	slender seapurslane	SEMA3	Non-upland	FACW	FACW		7	4								
<i>Sesuvium portulacastrum</i>	shoreline seapurslane	SEPO2	Non-upland	FACW	FACW		6	3	6	4						
<i>Setaria macrosperma</i>	coral bristlegrass	SEMA4	Non-upland		FAC		6	2								
<i>Setaria magna</i>	giant bristlegrass	SEMA6	Non-upland	FACW	FACW		5	3	6	5						
<i>Setaria parviflora</i>	marsh bristlegrass	SEPA10	Non-upland	FAC	FACW		3	6	3	9	3	8	3	2	3	7
<i>Setaria sphacelata</i>	African Bristle Grass	SESP5	Non-upland	FAC	FAC	Non-native	0		0							
<i>Seymeria cassioides</i>	yaupon blackenna	SECA4	Non-upland	FAC	FAC		8	5	7	7	8	3	7	2		
<i>Sicyos angulatus</i>	oneseed bur cucumber	SIAN	Non-upland	FACU	FACW		4	4	4	6	4	6	4	3	4	6
<i>Sida hermaphrodita</i>	Virginia fanpetals	SIHE3	Non-upland	FAC	UPL								6	3	6	3
<i>Sideroxylon celastrinum</i>	saffron plum	SICE2	Non-upland		FAC		7	2								
<i>Sideroxylon lycioides</i>	buckthorn bully	SILY	Non-upland	FACW	FAC		7	4	6	7	6	6	5	1	6	5
<i>Sideroxylon reclinatum</i>	Florida bully	SIRE8	Non-upland		FAC		7	4	8	2						
<i>Sideroxylon reclinatum</i> ssp. <i>reclinatum</i>	Florida bully	SIRER2	Present 1988 WPL				6	3	7	2						
<i>Silene nivea</i>	evening campion	SINI	Non-upland	FAC	FAC								6	0	8	2
<i>Silphium perfoliatum</i>	cup plant	SIPE2	Non-upland	FAC	FAC				5	3			6	3	6	5
<i>Sisyrinchium albidum</i>	white blue-eyed grass	SIAL3	Non-upland	FAC	FAC		5	3	6	5	5	4	7	3	7	6
<i>Sisyrinchium angustifolium</i>	narrowleaf blue-eyed grass	SIAN3	Non-upland	FACW	FACW		4	3	4	7	4	5	4	2	4	6
<i>Sisyrinchium atlanticum</i>	eastern blue-eyed grass	SIAT	Non-upland	FACW	FACW		5	3	5	5	5	4	6	3	6	6
<i>Sisyrinchium calciphilum</i>		SICA22	Non-upland												9	2
<i>Sisyrinchium capillare</i>	needle blue-eyed grass	SICA11	Non-upland	FACW	FACW		6	4	8	1						
<i>Sisyrinchium mucronatum</i>	needletip blue-eyed grass	SIMU3	Non-upland	FAC	FACW		4	3	5	3	5	4	6	2		
<i>Sisyrinchium nashii</i>	Nash's blue-eyed grass	SINA	Non-upland	FAC	FAC		5	2	5	2	5	3	6	1		
<i>Sisyrinchium rosulatum</i>	annual blue-eyed grass	SIRO5	Non-upland	FAC	FAC	Non-native in SCP	0		1	4	1	1	1	1		
<i>Sium suave</i>	hemlock waterparsnip	SISU2	Non-upland	OBL	OBL		6	4	7	4			7	2	7	5
<i>Smilax bona-nox</i>	saw greenbrier	SMBO2	Non-upland	OBL	FAC		4	6	4	8	4	8	4	2	4	7
<i>Smilax glauca</i>	cat greenbrier	SMGL	Non-upland	FACU	FAC		4	6	4	9	4	8	4	2	4	7
<i>Smilax herbaea</i>	smooth carrionflower	SMHE	Non-upland	FAC	FAC				6	5	6	5	6	2	6	4
<i>Smilax lasioneura</i>	Blue Ridge carrionflower	SMLA3	Added; Absent from NWPL						9	2	UND				6	3
<i>Smilax laurifolia</i>	laurel greenbrier	SMLA	Non-upland	OBL	FACW		6	5	5	8	7	5	8	3		
<i>Smilax pseudochina</i>	bamboo vine	SMPS	Non-upland	FAC	FAC		7	1	7	4	8	2				
<i>Smilax pulverulenta</i>	downy carrionflower	SMPU2	Non-upland	FACU	FAC				7	4	7	4	7	2	7	4
<i>Smilax rotundifolia</i>	roundleaf greenbrier	SMRO	Non-upland	FAC	FAC		4	5	4	9	4	8	4	2	4	7
<i>Smilax tamnoides</i>	bristly greenbrier	SMTA2	Non-upland	FAC	FAC		5	5	5	6	5	6	5	2	5	7
<i>Smilax walteri</i>	coral greenbrier	SMWA	Non-upland	OBL	OBL		6	3	7	6	7	4				
<i>Solanum bahamense</i>	Bahama nightshade	SOBA	Non-upland		FAC		4	3								
<i>Solanum dulcamara</i>	Climbing Nightshade	SODU	Non-upland	FAC	FAC	Non-native							0		0	
<i>Solanum erianthum</i>	potatotree	SOER2	Non-upland		FAC		4	3								
<i>Solidago fistulosa</i>	pine barren goldenrod	SOFI	Non-upland	FACW	FAC		4	3	6	3						
<i>Solidago gigantea</i>	giant goldenrod	SOGI	Non-upland	FACW	FACW		4	3	4	6	3	6	4	2	4	6
<i>Solidago glomerata</i>	clustered goldenrod	SOGL2	Non-upland	FAC	FAC								9	1		
<i>Solidago gracillima</i>	Virginia goldenrod	SOGR4	Non-upland	OBL	OBL		6	3	9	4	8	3	9	1		
<i>Solidago latissimifolia</i>	Elliott's goldenrod	SOLA4	Non-upland	OBL	OBL		6	3	7	2						

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<i>Solidago leavenworthii</i>	Leavenworth's goldenrod	SOLE5	Non-upland	FAC	FAC		3	3	7	2						
<i>Solidago patula</i>	roundleaf goldenrod	SOPA2	Non-upland	OBL	OBL		7	5	8	5	8	6	9	2	8	3
<i>Solidago patula</i> var. <i>strictula</i>	roundleaf goldenrod	SOPAS	Present 1988 WPL				7	3	8	3						
<i>Solidago rugosa</i>	wrinkleleaf goldenrod	SORU2	Non-upland	FAC	FAC		4	3	4	9	3	8	4	3	4	6
<i>Solidago sempervirens</i>	seaside goldenrod	SOSE	Non-upland	FACW	FACW		6	6	6	7						
<i>Solidago stricta</i>	wand goldenrod	SOST	Non-upland	FACW	OBL	Called <i>Solidago austriaca</i> in KY	6	5	7	5			8	1		
<i>Solidago uliginosa</i>	bog goldenrod	SOUL	Non-upland	OBL	OBL								9	3		
<i>Solidago verna</i>	springflowering goldenrod	SOVE2	Non-upland	OBL	OBL				7	3						
<i>Sonchus asper</i>	Spiny-Leaf Sow-Thistle	SOAS	Non-upland	FAC	FACU	Non-native	0		0		0		0		0	
<i>Sophora tomentosa</i>	yellow necklacedpod	SOTO3	Non-upland		FAC		7	2								
<i>Sorbus americana</i>	American mountain ash	SOAM3	Added; Absent from NWPL	FACU	FACU								8	1		
<i>Sparganium americanum</i>	American bur-reed	SPAM	Non-upland	OBL	OBL		7	5	6	8	6	8	7	3	7	6
<i>Sparganium androcladum</i>	branched bur-reed	SPAN	Non-upland	OBL	OBL				9	2			8	3	8	2
<i>Sparganium eurycarpum</i>	broadfruit bur-reed	SPEU	Non-upland	OBL	OBL										7	4
<i>Spartina alterniflora</i>	smooth cordgrass	SPAL	Non-upland	OBL	OBL		7	3	7	4						
<i>Spartina bakeri</i>	sand cordgrass	SPBA	Non-upland		FACW		6	4								
<i>Spartina cynosuroides</i>	big cordgrass	SPCY	Non-upland	OBL	OBL		7	3	7	6						
<i>Spartina patens</i>	saltmeadow cordgrass	SPPA	Non-upland	FACW	FACW		7	4	7	4						
<i>Spartina pectinata</i>	prairie cordgrass	SPPE	Non-upland	OBL	OBL				8	4			8	3	8	4
<i>Spartina spartinae</i>	gulf cordgrass	SPSP	Non-upland		OBL		6	3	8	3						
<i>Spergularia echinosperma</i>	Bristle-Seed Sandspur	SPEC	Non-upland		OBL	Non-native	0									
<i>Spergularia salina</i>	salt sandspur	SPSA5	Non-upland	OBL	OBL		5	3								
<i>Spermacoce glabra</i>	smooth false buttonweed	SPGL2	Non-upland	FACW	FACW		5	3	3	4					6	4
<i>Spermacoce prostrata</i>	prostrate false buttonweed	SPPR4	Non-upland		FACW		4	3	2	3						
<i>Spermolepis divaricata</i>	roughfruit scaleseed	SPD12	Non-upland	FACU	FAC		3	4	3	4	UND					
<i>Sphagnetola trilobata</i>	Bay Biscayne Creeping-Oxeye	SPTR6	Non-upland		FAC	Non-native	0									
<i>Sphenoclea zeylanica</i>	Chickenspike	SPZE	Non-upland	OBL	FACW	Non-native	0		0							
<i>Sphenopholis obtusata</i>	prairie wedgescale	SPOB	Non-upland	FAC	FAC		3	3	4	7	4	7	5	2	4	4
<i>Sphenopholis pensylvanica</i>	swamp wedgescale	SPPE3	Non-upland	OBL	OBL		6	2	7	4	7	4	8	1	8	3
<i>Spigelia loganioides</i>	Florida pinkroot	SPLO3	Non-upland		FACW		7	5								
<i>Spiraea alba</i>	white meadowsweet	SPAL2	Non-upland	FACW	FACW								8	5		
<i>Spiraea alba</i> var. <i>latifolia</i>	white meadowsweet	SPALL	Non-upland	FACW	FACW	Unscored; 2013 NWPL addition							UND			
<i>Spiraea betulifolia</i>	white spirea	SPBE2	Non-upland	FAC	FAC						8	4				
<i>Spiraea salicifolia</i>	Willow-Leaf Meadowsweet	SPSA2	Non-upland	FACW	FACW	Non-native							0			
<i>Spiraea tomentosa</i>	steeplesbush	SPTO2	Non-upland	FACW	FACW				7	3			7	3	6	5
<i>Spiraea virginiana</i>	Virginia meadowsweet	SPVI2	Non-upland	FACU	FACW								9	2	9	2
<i>Spiranthes brevilabris</i>	Texas lady's tresses	SPBR	Non-upland		FACW		7	3	9	3						
<i>Spiranthes cernua</i>	nodding lady's tresses	SPCE	Non-upland	FACW	FACW		5	4	6	5	6	7	6	4	6	6
<i>Spiranthes floridana</i>	Florida lady's tresses	SPFL10	Non-upland	FAC	FACW		8	3	8	3						
<i>Spiranthes lacera</i>	northern slender lady's tresses	SPLA4	Non-upland	FACU	FAC		5	2	5	2	5	3	5	3	6	3
<i>Spiranthes laciniata</i>	lancelip lady's tresses	SPLA3	Non-upland	OBL	FACW		6	3	8	4						
<i>Spiranthes longilabris</i>	giant spiral lady's tresses	SPLO2	Non-upland	OBL	FACW		8	4	9	3						
<i>Spiranthes lucida</i>	shining lady's tresses	SPLU2	Non-upland	FACW	FACW								9	1	9	4
<i>Spiranthes magnicamporum</i>	Great Plains lady's tresses	SPMA5	Added; Absent from NWPL	FACU	FACU				9	3					10	4
<i>Spiranthes odorata</i>	marsh lady's tresses	SPOD	Non-upland	OBL	OBL		6	4	7	4			8	3	9	4
<i>Spiranthes ovalis</i>	October lady's tresses	SPOV	Non-upland	FAC	FAC		6	3	7	2			7	2	7	4
<i>Spiranthes praecox</i>	greenvein lady's tresses	SPPR2	Non-upland	OBL	FACW		6	3	6	4			8	0		
<i>Spiranthes vernalis</i>	spring lady's tresses	SPVE	Non-upland	FAC	FACW		5	5	5	5	5	5	6	2	6	5
<i>Spirodela polyrrhiza</i>	common duckmeat	SPPO	Non-upland	OBL	OBL		4	4	4	7	4	6	4	4	4	4
<i>Sporobolus airoides</i>	alkali sacaton	SPAI	Non-upland	FAC	FAC	Non-native (Adventive)			0							
<i>Sporobolus floridanus</i>	Florida dropseed	SPFL3	Non-upland	FAC	FACW		9	4	9	4						
<i>Sporobolus indicus</i> var. <i>pyramidalis</i>	West Indian dropseed	SPIN2	Present 1988 WPL			Non-native	0									
<i>Sporobolus pinetorum</i>	Carolina dropseed	SPPI3	Non-upland	FACW	FACW		7	1	9	4						
<i>Sporobolus teretifolius</i>	wireleaf dropseed	SPTE4	Non-upland	FACW	FACW		9	3	8	6						
<i>Sporobolus virginicus</i>	seashore dropseed	SPVI3	Non-upland		FACW		6	3	7	4						
<i>Stachydeoma graveolens</i>	mock pennyroyal	STGR6	Non-upland		FACW		9	2	9	2						
<i>Stachys appalachiana</i>		STAP5	Non-upland										9	1		
<i>Stachys aspera</i>	hyssopleaf hedgenettle	STAS	Non-upland	FACW	FAC				UND							
<i>Stachys clingmanii</i>	Clingman's hedgenettle	STCL	Non-upland	FAC	UPL								8	3		
<i>Stachys cordata</i>	heartleaf hedgenettle	STCO9	Non-upland	FAC	FAC								7	1	8	3
<i>Stachys floridana</i>	Florida hedgenettle	STFL4	Non-upland	FAC	FAC	Mtn score is for southern mountains only; non-native (score of 0) in northern mountains.	4	4	2	6	2	3	1*	1		
<i>Stachys hyssopifolia</i>	hyssopleaf hedgenettle	STHY3	Non-upland	FACW	OBL		6	2	7	2	UND					
<i>Stachys latidens</i>	broadtooth hedgenettle	STLA5	Non-upland	FAC	FAC								7	1		
<i>Stachys tenuifolia</i>	smooth hedgenettle	STTE	Non-upland	FACW	FACW		4	2	6	3	6	3	6	5	7	4
<i>Staphylea trifolia</i>	American bladdernut	STTR	Non-upland	FAC	FAC		7	4	7	6	7	6	7	3	7	6
<i>Steinchisma hians</i>	gaping grass	STHI3	Non-upland	FACW	OBL		3	4	3	6	3	4	4	2	4	3
<i>Stellaria alsine</i>	bog chickweed	STAL4	Non-upland	OBL	OBL								8	2		
<i>Stellaria fontinalis</i>	American water starwort	STFO	Non-upland	FACW											8	5
<i>Stellaria graminea</i>	Grass-Leaf Starwort	STGR	Non-upland	FACU	FAC	Non-native			0		0		0		0	

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USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Stellaria longifolia</i>	longleaf starwort	STLO	Non-upland	FACW	FACW								6	3	7	3
<i>Stenandrium dulce</i>	sweet shaggytuft	STDU2	Non-upland		OBL		7	2								
<i>Stenanthium gramineum</i>	eastern featherbells	STGR2	Non-upland	FACW	FAC		8	5	8	5	8	6	8	2	8	4
<i>Stenorrhynchus lanceolatum</i>	leafless beaked lady orchid	STLA11	Non-upland		FAC		5	3								
<i>Stenorrhynchus lanceolatum</i> var. <i>lanceolatum</i>	leafless beaked lady orchid	STLAL5	Present 1988 WPL				5	2								
<i>Stenotaphrum secundatum</i>	St. Augustine grass	STSE	Non-upland	FAC	FAC	Non-native (Adventive)	0		0				0			
<i>Stillingia aquatica</i>	water toothleaf	STAQ2	Non-upland		OBL		7	5	7	3						
<i>Stokesia laevis</i>	Stokes' aster	STLA6	Non-upland	FAC	FAC		6	4	6	3						
<i>Streptopus amplexifolius</i>	claspleaf twistedstalk	STAM2	Non-upland	FAC									9	1		
<i>Streptopus lanceolatus</i>	twistedstalk	STLA16	Non-upland	FAC							9	1	9	1		
<i>Strophostyles helvola</i>	amberique-bean	STHE9	Non-upland	FACU	FAC		4	4	4	8	4	4	4	2	4	7
<i>Strophostyles umbellata</i>	pink fuzzybean	STUM2	Non-upland	FACU	FAC		4	5	4	6	4	6	4	3	4	7
<i>Stuckenia pectinata</i>	sago pondweed	STPE15	Non-upland	OBL	OBL		6	2	6	3			4	4	5	2
<i>Stylisma aquatica</i>	water dawnflower	STAQ3	Non-upland	FACW	FACW		7	4	8	4						
<i>Stylisma pickeringii</i>	Pickering's dawnflower	STPI3	Non-upland	FAC	FAC				8	5						
<i>Styrax americanus</i>	American snowbell	STAM4	Non-upland	OBL	FACW		7	6	7	9	7	8	8	1	8	7
<i>Suaeda calceoliformis</i>	Pursh seepweed	SUCA2	Non-upland	FACW	FACW	Non-native (Adventive)									0	
<i>Suaeda linearis</i>	annual seepweed	SULI	Non-upland	OBL	OBL		6	3	6	4						
<i>Suaeda maritima</i>	herbaceous seepweed	SUMA	Non-upland	OBL	OBL	Non-native	0								0	
<i>Suriana maritima</i>	bay cedar	SUMA2	Non-upland		FAC		6	4								
<i>Symphotrichum adnatum</i>	scalear leaf aster	SYAD	Non-upland		FACW		8	5	7	5						
<i>Symphotrichum dumosum</i>	rice button aster	SYDU2	Non-upland	FAC	FAC		4	6	4	8	4	6	4	2	5	6
<i>Symphotrichum dumosum</i> var. <i>dumosum</i>	rice button aster	SYDUD2	Present 1988 WPL				3	4	3	4	7	1	4	2	5	2
<i>Symphotrichum elliotii</i>	Elliott's aster	SYEL	Non-upland	OBL	OBL		5	3	7	2			8	0		
<i>Symphotrichum lanceolatum</i>	white panicle aster	SYLA6	Non-upland	FACW	FACW		5	3	5	4	4	3	5	3	5	5
<i>Symphotrichum lateriflorum</i>	calico aster	SYLA4	Non-upland	FACW	FAC		5	4	5	8	4	7	5	2	5	5
<i>Symphotrichum novae-angliae</i>	New England aster	SYNO2	Non-upland	FACW	FACW				6	7			5	1	5	5
<i>Symphotrichum novi-belgii</i>	New York aster	SYNO3	Non-upland	FACW	OBL				5	3	UND					
<i>Symphotrichum ontarionis</i>	bottomland aster	SYON2	Non-upland	FAC	FAC		6	2	6	3			5	2	5	3
<i>Symphotrichum pilosum</i>	hairy white oldfield aster	SYPI2	Non-upland	FAC	FACW		3	5	3	7	3	7	3	3	3	6
<i>Symphotrichum pilosum</i> var. <i>pilosum</i>	hairy white oldfield aster	SYPIP3	Present 1988 WPL				3	4	2	5	3	5	1	3	2	2
<i>Symphotrichum pilosum</i> var. <i>pringlei</i>	Pringle's aster	SYPIP2	Added; Absent from NWPL						UND		UND		UND		9	2
<i>Symphotrichum praealtum</i>	willowleaf aster	SYPR5	Non-upland	FACW	FACW		6	2	6	3	6	2	7	2	7	3
<i>Symphotrichum prenanthoides</i>	crookedstem aster	SYPR6	Non-upland	FAC	FAC								7	2	8	3
<i>Symphotrichum priceae</i>	lavender oldfield aster	SYPR4	Non-upland	FACU	FACU								7	0	8	3
<i>Symphotrichum puniceum</i>	purplestem aster	SYPU	Non-upland	OBL	OBL				5	4	5	4	6	3	9	1
<i>Symphotrichum racemosum</i>	smooth white oldfield aster	SYRA5	Non-upland	FACW	FACW		4	2	5	3	5	3	5	2	5	3
<i>Symphotrichum simmondsii</i>	Simmonds' aster	SYSI3	Non-upland	FAC	FAC		5	2	7	2						
<i>Symphotrichum squamatum</i>	southeastern annual saltmarsh aster	SYSQ	Non-upland	OBL	OBL	Non-native	0		0							
<i>Symphotrichum subulatum</i>	eastern annual saltmarsh aster	SYSU5	Non-upland	OBL	OBL		4	4	6	4						
<i>Symphotrichum tenuifolium</i>	perennial saltmarsh aster	SYTE6	Non-upland	OBL	OBL		7	3	7	4						
<i>Symphotrichum walteri</i>	Walter's aster	SYWA	Non-upland	FAC	FAC		7	3	8	4						
<i>Symplocarpus foetidus</i>	skunk cabbage	SYFO	Non-upland	OBL	OBL								8	2		
<i>Symplocos tinctoria</i>	common sweetleaf	SYTI	Non-upland	FAC	FAC		7	6	6	8	6	8	7	3		
<i>Synandra hispidula</i>	Guyandotte beauty	SYHI	Non-upland	FAC	FACU								8	2	8	4
<i>Syngonanthus flavidulus</i>	yellow hatpins	SYFL	Non-upland	FACW	FACW		5	5	6	3						
<i>Tamarix gallica</i>	French Tamarisk	TAGA	Non-upland		FACW	Non-native			0							
<i>Tamarix parviflora</i>	Small-Flower Tamarisk	TAPA4	Non-upland	UPL	FACW	Non-native			0				0			
<i>Taxodium ascendens</i>	pond cypress	TAA5	Non-upland	OBL	OBL	Non-native in Mtns	7	3	8	6			0			
<i>Taxodium distichum</i>	bald cypress	TADI2	Non-upland	OBL	OBL	Non-native in Mtns; scores for ILP are only for native areas along big rivers in the ILP. Elsewhere in the ILP this species is non-native (score of 0).	6	6	6	9			0		7*	5
<i>Taxus canadensis</i>	Canada yew	TACA7	Non-upland	FAC	FAC								9	1		
<i>Tectaria heracleifolia</i>	broad halberd fern	TEHE	Non-upland		FACW		8	2								
<i>Teucrium canadense</i>	Canada germander	TECA3	Non-upland	FACW	FACW		5	5	5	7	4	7	4	2	4	7
<i>Thalassia testudinum</i>	turtlegrass	THTE6	Non-upland		OBL		8	3								
<i>Thalia dealbata</i>	powdery alligator-flag	THDE	Non-upland	OBL	OBL		4	3	5	4						
<i>Thalia geniculata</i>	bent alligator-flag	THGE2	Non-upland	OBL	OBL		5	3								
<i>Thalictrum clavatum</i>	mountain meadow-rue	THCL	Non-upland	FACW	FACW						7	4	8	2	8	4
<i>Thalictrum cooleyi</i>	Cooley's meadow-rue	THCO5	Non-upland		FACW		8	4	9	4						
<i>Thalictrum dasycarpum</i>	purple meadow-rue	THDA	Non-upland	FACW	FAC				2	2						
<i>Thalictrum debile</i>		THDE5	Non-upland	FAC	FAC				9	2			10	1	8	1
<i>Thalictrum dioicum</i>	early meadow-rue	THDI	Non-upland	FAC	FAC				7	4	7	4	7	3	7	5
<i>Thalictrum macrostylum</i>	pieadmont meadow-rue	THMA4	Non-upland	FACW	FACW		7	3	5	4	5	4	8	2		
<i>Thalictrum mirabile</i>	little mountain meadow-rue	THMI4	Non-upland	FAC	OBL								9	2	9	3
<i>Thalictrum pubescens</i>	king of the meadow	THPU2	Non-upland	FACW	FACW				5	4	6	2	6	3	7	3
<i>Thalictrum revolutum</i>	waxyleaf meadow-rue	THRE	Non-upland	UPL	FAC		7	3	6	3	6	7	6	2	6	4
<i>Thelypteris dentata</i>	downy maiden fern	THDE4	Non-upland	FAC	FACW	Non-native	0		0							
<i>Thelypteris hispidula</i>	roughhaired maiden fern	THHI	Non-upland	FACU	FACW		6	2								
<i>Thelypteris interrupta</i>	Willdenow's maiden fern	THIN2	Present 1988 WPL				5	3								
<i>Thelypteris kunthii</i>	Kunth's maiden fern	THKU	Non-upland	FACW	FACW		6	5	4	5						

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<i>Thelypteris noveboracensis</i>	New York fern	THNO	Non-upland				5	2	6	5	6	4	6	3	6	4
<i>Thelypteris palustris</i>	eastern marsh fern	THPA	Non-upland	FACW	OBL		7	4	7	6	7	4	7	3	7	4
<i>Thelypteris resinifera</i>	resinous maiden fern	THRE4	Non-upland		FACW		7	2								
<i>Thelypteris reticulata</i>	latticevein fern	THRE5	Non-upland		FACW		6	2								
<i>Thelypteris serrata</i>	toothed latticevein fern	THSE3	Non-upland		FACW		6	3								
<i>Thelypteris simulata</i>	bog fern	THSI2	Present 1988 WPL										10	0		
<i>Thespesia populnea</i>	Portia-Tree	THPO3	Non-upland		FAC	Non-native (Adventive)	0									
<i>Tiarella cordifolia</i>	heartleaf foamflower	TICO	Non-upland	FAC	FAC		7	2	7	7	7	8	7	3	7	7
<i>Tofieldia glabra</i>	smooth tofieldia	TOGL	Non-upland	FACW	FACW				9	4						
<i>Torreyochloa pallida</i>	pale false mannagrass	TOPA6	Non-upland	OBL	OBL				8	4			9	1	9	6
<i>Toxicodendron radicans</i>	eastern poison ivy	TORA2	Non-upland	FAC	FAC		3	6	3	9	3	8	3	3	3	7
<i>Toxicodendron vernix</i>	poison sumac	TOVE	Non-upland	OBL	OBL		8	5	7	8	8	6	8	2	9	4
<i>Trachelospermum difforme</i>	climbing dogbane	TRDI	Non-upland	FACW	FACW		6	6	6	8	6	7	6	2	6	6
<i>Tradescantia fluminensis</i>	Small-Leaf Wandering-Jew	TRFL	Non-upland	FAC	FAC	Non-native	0		0							
<i>Tradescantia ohienis</i>	bluejacket	TROH	Non-upland	FAC	FAC		5	5	4	8	4	7	6	4	5	6
<i>Tradescantia virginiana</i>	Virginia spiderwort	TRVI	Non-upland	FACU	FAC		5	3	6	5	6	5	7	1	6	5
<i>Trautvetteria carolinensis</i>	Carolina bugbane	TRCA	Non-upland	FACW	FACW				8	4	8	5	8	3	8	5
<i>Trema micrantha</i>	Jamaican nettle tree	TRMI2	Non-upland		FAC		5	3								
<i>Trepocarpus aethusae</i>	whitenymph	TRAE2	Non-upland	FACW	FACW		6	3	6	4	6	3	6	3	6	6
<i>Triadenum fraseri</i>	Fraser's marsh St. Johnswort	TRFR	Non-upland	OBL	OBL								9	1		
<i>Triadenum tubulosum</i>	lesser marsh St. Johnswort	TRTU	Non-upland	OBL	OBL		7	4	7	6	7	4	7	2	7	5
<i>Triadenum virginicum</i>	Virginia marsh St. Johnswort	TRVI2	Non-upland	OBL	OBL		6	6	5	7			7	2	7	2
<i>Triadenum walteri</i>	greater marsh St. Johnswort	TRWA	Non-upland	OBL	OBL		6	6	7	9	7	8	7	2	7	7
<i>Triadica sebifera</i>	Chinese Tallowtree	TRSE6	Non-upland	FAC	FAC	Non-native	0		0		0				0	
<i>Triantha glutinosa</i>	sticky tofieldia	TRGL5	Non-upland	OBL									10	0		
<i>Triantha racemosa</i>	coastal false asphodel	TRRA6	Non-upland	OBL	OBL		8	5	8	8					9	2
<i>Trianthema portulacastrum</i>	desert horsepurslane	TRPO2	Non-upland	UPL	FACW	Non-native (Adventive) outside of SCP	1	1	0				0			
<i>Trichomanes boschianum</i>	Appalachian bristle fern	TRBO	Non-upland	FACW	OBL								10	1	10	4
<i>Trichomanes petersii</i>	dwarf bristle fern	TRPE2	Non-upland	FAC	FAC		9	3	9	3			10	1		
<i>Trichophorum cespitosum</i>	tufted bulrush	TRCE3	Non-upland	OBL									10	0		
<i>Tridens ambiguus</i>	pine barren fluffgrass	TRAM	Non-upland	FACW	FACW		4	3	7	4						
<i>Tridens flavus</i> var. <i>chapmanii</i>	Chapman's tridens	TRFLC	Added; Absent from NWPL				6	1	UND		UND					
<i>Tridens strictus</i>	longspike tridens	TRST2	Non-upland	FACW	FACW		3	3	4	6	3	4	4	1	4	3
<i>Trientalis borealis</i>	starflower	TRBO2	Non-upland	FAC	FAC								9	2		
<i>Triglochin striata</i>	three-rib arrowgrass	TRST16	Non-upland		OBL		7	4	7	5						
<i>Trillium erectum</i>	red trillium	TRER3	Non-upland	FACU	FAC						7	3	7	2	8	3
<i>Trillium flexipes</i>	nodding wakerobin	TRFL6	Non-upland	FAC	FAC								8	2	8	4
<i>Trillium pusillum</i>	dwarf wakerobin	TRPU3	Non-upland	FACW	FACW				8	4			9	2	8	5
<i>Triodanis biflora</i>	small Venus' looking-glass	TRBI2	Added; Absent from NWPL				4	2	3	1	2	2	3	0	2	3
<i>Triodanis perfoliata</i>	clasping Venus' looking-glass	TRPE4	Non-upland	FAC	FACU		2	3	2	3			2	2	3	5
<i>Triosteum angustifolium</i>	yellowfruit horse-gentian	TRAN3	Non-upland	FAC	UPL						7	4	7	2	7	6
<i>Tripodanthus trianthophora</i>	threebirds	TRTR3	Non-upland	UPL	FACW		8	4	9	4	8	5	8	2	8	5
<i>Tripsacum dactyloides</i>	eastern gamagrass	TRDA3	Non-upland	FACW	FAC		4	6	4	8	3	7	5	5	5	5
<i>Typha angustifolia</i>	narrowleaf cattail	TYAN	Non-upland	OBL	OBL	Non-native			0				0		0	
<i>Typha domingensis</i>	southern cattail	TYDO	Non-upland	OBL	OBL	Non-native (Adventive) in ILP	2	4	3	5					0	
<i>Typha latifolia</i>	broadleaf cattail	TYLA	Non-upland	OBL	OBL		2	6	2	9	2	8	2	3	2	7
<i>Ulmus americana</i>	American elm	ULAM	Non-upland	FACW	FAC		6	6	6	9	6	8	5	3	5	7
<i>Ulmus crassifolia</i>	cedar elm	ULCR	Non-upland	FAC	FAC		7	4	7	3						
<i>Ulmus rubra</i>	slippery elm	ULRU	Non-upland	FAC	FAC		6	5	6	9	6	7	6	4	6	7
<i>Ulmus serotina</i>	September elm	ULSE	Non-upland	FAC	UPL				6	3			7	2	7	5
<i>Ulmus thomasii</i>	rock elm	ULTH	Non-upland	FACU	FAC										9	4
<i>Urena lobata</i>	Caesarweed	URLO	Non-upland		FAC	Non-native	0									
<i>Urochloa mutica</i>	Para Liverseed Grass	URMU	Non-upland	FACW	FACW	Non-native	0		0							
<i>Urochloa plantaginea</i>	Plantain Liverseed Grass	URPL	Non-upland	FAC	FAC	Non-native	0		0				0			
<i>Urochloa platyphylla</i>	broadleaf signalgrass	URPL2	Non-upland	FAC	FAC	Non-native (Adventive) in KY, NC, SC, GA, AL, and middle to eastern TN	2*	2	1*	3	0		0		0	
<i>Urtica chamaedryoides</i>	heartleaf nettle	URCH3	Non-upland	FACU	FAC		4	5	6	5					5	6
<i>Urtica dioica</i>	stinging nettle	URDI	Non-upland	FACU	FAC	Non-native or adventive throughout SE	0		0		0		0		0	
<i>Utricularia amethystina</i>	Florida purple bladderwort	UTAM	Non-upland		OBL		5	3								
<i>Utricularia cornuta</i>	horned bladderwort	UTCO	Non-upland	OBL	OBL		7	4	7	5	7	4	10	0	9	2
<i>Utricularia floridana</i>	Florida yellow bladderwort	UTFL	Non-upland	OBL	OBL		5	3	7	2						
<i>Utricularia foliosa</i>	leafy bladderwort	UTFO	Non-upland		OBL		5	3	6	3						
<i>Utricularia geminiscapa</i>	hiddenfruit bladderwort	UTGE	Non-upland	OBL	OBL				9	2						
<i>Utricularia gibba</i>	humped bladderwort	UTGI	Non-upland	OBL	OBL		6	4	6	6	6	3	7	4	7	5
<i>Utricularia inflata</i>	swollen bladderwort	UTIN	Non-upland	OBL	OBL		6	5	6	4			2	0		
<i>Utricularia juncea</i>	southern bladderwort	UTJU	Non-upland	OBL	OBL		5	3	6	4						
<i>Utricularia macrorhiza</i>	common bladderwort	UTMA	Non-upland	OBL	OBL				8	3						
<i>Utricularia minor</i>	lesser bladderwort	UTMI	Non-upland	OBL	OBL								10	0		
<i>Utricularia olivacea</i>	pedmont bladderwort	UTOL	Non-upland	OBL	OBL		7	3	8	4						
<i>Utricularia purpurea</i>	eastern purple bladderwort	UTPU	Non-upland	OBL	OBL		6	4	6	5	UND					
<i>Utricularia radiata</i>	littie floating bladderwort	UTRA	Non-upland	OBL	OBL		6	5	6	5						

Table B-1. Coefficient of Conservatism Values for Wetland Plants Occurring in the Southeastern United States.

USDA Scientific Name	USDA Common Name	USDA Accepted Symbol	NWPL status	NWPL E Mtns	NWPL Cstl Plain	Botanist Notes	AVE. C VALUE SOUTHERN COASTAL PLAIN	No. of Botanists Assigning Value	AVE. C VALUE COASTAL PLAINS	No. of Botanists Assigning Value	AVE. C VALUE PIEDMONT	No. of Botanists Assigning Value	AVE. C VALUE MOUNTAINS	No. of Botanists Assigning Value	AVE. C VALUE INTERIOR PLATEAU	No. of Botanists Assigning Value
<i>Utricularia resupinata</i>	lavender bladderwort	UTRE	Non-upland	OBL	OBL		7	3	8	3			2	0		
<i>Utricularia simulans</i>	fringed bladderwort	UTSI	Non-upland		OBL		5	3								
<i>Utricularia striata</i>	striped bladderwort	UTST	Non-upland	OBL	OBL		6	3	6	2						
<i>Utricularia subulata</i>	zigzag bladderwort	UTSU	Non-upland	OBL	OBL		6	6	6	7	6	4	8	2	8	3
<i>Uvularia floridana</i>	Florida bellwort	UVFL	Non-upland		FACW		8	3	8	3						
<i>Uvularia puberula</i>	mountain bellwort	UVPU2	Non-upland	FACU	FAC				7	4	7	4	7	2		
<i>Uvularia sessilifolia</i>	sessileleaf bellwort	UVSE	Non-upland	FAC	FAC		7	6	7	9	7	8	7	3	7	7
<i>Vaccinium caesariense</i>	New Jersey blueberry	VACA6	Non-upland	OBL	OBL		7	5	6	7						
<i>Vaccinium corymbosum</i>	highbush blueberry	VACO	Non-upland	FACW	FACW		7	5	6	8	6	8	7	3	7	6
<i>Vaccinium crassifolium</i>	creeping blueberry	VACR	Non-upland	FAC	FAC				7	4	8	4				
<i>Vaccinium ellipti</i>	Elliott's blueberry	VAEL	Non-upland	FACW	FACW		7	6	7	8	7	7	7	1	7	5
<i>Vaccinium erythrocarpum</i>	southern mountain cranberry	VAER	Non-upland	FAC									8	1		
<i>Vaccinium formosum</i>	southern blueberry	VAFO	Non-upland	OBL	FAC		6	4	7	4	7	4				
<i>Vaccinium fuscatum</i>	black highbush blueberry	VAFU	Non-upland	FAC	FACW		7	5	7	6	7	6	8	1	8	3
<i>Vaccinium macrocarpon</i>	cranberry	VAMA	Non-upland	OBL	OBL				9	3			8	1	8	2
<i>Vaccinium myrtilloides</i>	velvetleaf huckleberry	VAMY	Non-upland	FACW	FAC								8	0		
<i>Vaccinium virgatum</i>	smallflower blueberry	VAVI2	Non-upland	FACW	FACU		6	3	6	4						
<i>Valeriana pauciflora</i>	largeflower valerian	VAPA2	Non-upland	FACW	FAC								8	1	8	4
<i>Valeriana scandens</i>	Florida valerian	VASC3	Non-upland		FAC		6	3								
<i>Valerianella radiata</i>	beaked cornsalad	VARA	Non-upland	FAC	FAC		2	5	2	7	2	6	2	3	3	6
<i>Valerianella umbilicata</i>	navel cornsalad	VAUM	Non-upland	FAC	FAC								4	4	4	4
<i>Vallisneria americana</i>	American eelgrass	VAAAM3	Non-upland	OBL	OBL		8	4	7	5	7	4	8	1	8	5
<i>Veratrum virginicum</i>	Virginia bunchflower	VEVI5	Non-upland	FACW	OBL		8	4	8	4	8	4	8	2	8	3
<i>Veratrum viride</i>	green false hellebore	VEVI	Non-upland	FACW	FAC								8	2		
<i>Verbena bonariensis</i>	Purple-Top Vervain	VEBO	Non-upland	FAC	FAC	Non-native	0		0		0		0			
<i>Verbena hastata</i>	swamp verbena	VEHA2	Non-upland	FACW	FAC						6	2	5	3	6	3
<i>Verbena riparia</i>	riverbank vervain	VERI3	Non-upland	FACU		Non-native							0			
<i>Verbena scabra</i>	sandpaper vervain	VESE	Non-upland	FACW	FACW		5	2	4	3						
<i>Verbena urticifolia</i>	white vervain	VEUR	Non-upland	FAC	FAC		3	5	3	7	3	6	3	3	3	6
<i>Verbesina alternifolia</i>	wingstem	VEAL	Non-upland	FAC	FAC		4	3	4	8	4	7	4	3	4	6
<i>Verbesina chapmanii</i>	Chapman's crownbeard	VECH2	Non-upland		FACW		9	4	9	3						
<i>Verbesina encelioides</i>	golden crownbeard	VEEN	Non-upland	FACU	FAC	Non-native	0		0							
<i>Verbesina heterophylla</i>	diverseleaf crownbeard	VEHE3	Non-upland		FACW		5	2								
<i>Verbesina walteri</i>	Carolina crownbeard	VEWA	Non-upland	FAC	FAC				7	4			6	0		
<i>Vernonia blodgettii</i>	Florida ironweed	VEBL3	Non-upland		FACW		7	2								
<i>Vernonia gigantea</i>	giant ironweed	VEGI	Non-upland	FAC	FAC		4	3	3	6	3	6	3	3	3	6
<i>Vernonia missurica</i>	Missouri ironweed	VEMI2	Non-upland	FACU	FAC		7	2	6	3					6	4
<i>Vernonia noveboracensis</i>	New York ironweed	VENO	Non-upland	FACW	FACW		5	3	5	6	5	7	5	3	6	3
<i>Veronica americana</i>	American speedwell	VEAM2	Non-upland	OBL	OBL								8	1	9	3
<i>Veronica anagallis-aquatica</i>	water speedwell	VEAN2	Non-upland	OBL	OBL	Non-native	0						0		0	
<i>Veronica peregrina</i>	neckweed	VEPE2	Non-upland	FAC	FAC		2	4	2	7	1	7	1	1	2	6
<i>Veronica scutellata</i>	skullcap speedwell	VESE2	Non-upland	OBL	OBL								10	0		
<i>Veronica serpyllifolia</i>	thymeleaf speedwell	VESE	Non-upland	FAC	FAC	Non-native (Adventive)	0		0		0		0		0	
<i>Veronicastrum virginicum</i>	Culver's root	VEVI4	Non-upland	FACU	FACW		8	2	8	4	8	4	8	2	8	6
<i>Viburnum alabamense</i>		VIAL	Non-upland										8	1		
<i>Viburnum dentatum</i>	southern arrowwood	VIDE	Non-upland	FAC	FAC		6	5	6	6	6	6	6	2	6	4
<i>Viburnum dentatum var. dentatum</i>	southern arrowwood	VIDED4	Present 1988 WPL				6	4	6	2	6	2	7	1	6	3
<i>Viburnum lantanoides</i>	hobblebush	VILA11	Non-upland	FACU	FAC								8	2		
<i>Viburnum nudum</i>	possumhaw	VINU	Non-upland	OBL	FACW		7	5	7	9	7	8	8	2	8	4
<i>Viburnum nudum var. cassinoides</i>	withe-rod	VINUC	Present 1988 WPL								7	5	7	1		
<i>Viburnum obovatum</i>	small-leaf arrowwood	VI0B	Non-upland	FACW	FACW		7	4	8	4						
<i>Viburnum opulus</i>	European cranberrybush	VIOP	Non-upland	FACW	FACW	Non-native to SE									0	
<i>Viburnum recognitum</i>	southern arrowwood	VIRE7	Non-upland	FAC	FAC	V. recognitum var. alabamense score of 8 in Mtns; separate species			7	2	7	2	7*	2	7	2
<i>Vicia acutifolia</i>	fourleaf vetch	VIAC3	Non-upland		FACW		4	4	3	3						
<i>Vicia floridana</i>	Florida vetch	VIFL2	Non-upland		FACW		5	3								
<i>Vicia minutiflora</i>	pygmyflower vetch	VIMI	Non-upland	FAC	FAC		5	2	5	2					5	1
<i>Vicia ocalensis</i>	Ocala vetch	VI0C80	Non-upland		OBL		9	3								
<i>Vigna luteola</i>	hairypod cowpea	VILU3	Non-upland	FACW	FACW		3	5	2	3						
<i>Viola bicolor</i>	field pansy	VIBI	Non-upland	FACU	FAC		3	4	2	8						
<i>Viola blanda</i>	sweet white violet	VIBL	Non-upland	FACW	FACW						6	3	7	3	7	4
<i>Viola brittoniana</i>	northern coastal violet	VIBR	Non-upland	FAC	FAC				8	2						
<i>Viola canadensis</i>	Canadian white violet	VICA4	Non-upland	FAC	FAC						7	5	7	3	7	6
<i>Viola cucullata</i>	marsh blue violet	VICU	Non-upland	FACW	OBL		6	4	7	4	7	4	7	3	6	6
<i>Viola labradorica</i>	alpine violet	VILA10	Non-upland	FAC	FAC		8	3	8	2	7	3	8	2		
<i>Viola lanceolata</i>	bog white violet	VILA4	Non-upland	OBL	OBL		6	6	6	7	6	5	7	2	7	5
<i>Viola langloisii</i>	Langlois' violet	VILA5	Non-upland		FACW		5	1	4	1						
<i>Viola macloskeyi</i>	small white violet	VIMA2	Non-upland	FACW	FACW						8	3	9	1		
<i>Viola missouriensis</i>	Missouri violet	VIMI3	Non-upland	FACU	FAC						7	3	7	3	5	3
<i>Viola pubescens var. pubescens</i>	round yellow violet	VIPUP2	Present 1988 WPL										7	2	8	2
<i>Viola rotundifolia</i>	downleaf yellow violet	VIRO2	Non-upland	FAC	FAC						7	3	7	3	8	4

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<i>Viola sagittata</i>	arrowleaf violet	VISA2	Non-upland	FAC	FACW				5	5	5	5	6	2	6	4
<i>Viola septemloba</i>	southern coastal violet	VISE4	Non-upland	FACW	FAC		7	4	7	6			7	1		
<i>Viola sororia</i>	common blue violet	VISO	Non-upland	FAC	FAC		4	5	3	8	3	7	3	4	3	6
<i>Viola striata</i>	striped cream violet	VIST3	Non-upland	FACW	FACW				4	4	5	4	6	3	6	5
<i>Vitis cinerea</i>	graybark grape	VICI2	Non-upland	FACW	FAC		4	3	5	5	5	5	5	3	5	5
<i>Vitis labrusca</i>	fox grape	VILA8	Non-upland	FACU	FAC				5	4	5	4	6	3	6	4
<i>Vitis palmata</i>	catbird grape	VIPA7	Non-upland	FACU	FACW		5	3	6	2			6	2	6	4
<i>Vitis riparia</i>	riverbank grape	VIRI	Non-upland	FACW	FACW				5	2					5	4
<i>Vitis rotundifolia</i>	muscadine	VIRO3	Non-upland	FAC	FAC		3	6	4	9	4	8	5	3	5	6
<i>Vitis rupestris</i>	sand grape	VIRU2	Non-upland	FACU	UPL								10	0	10	3
<i>Vitis shuttleworthii</i>	callose grape	VISH2	Non-upland		FAC		4	3								
<i>Vitis vulpina</i>	frost grape	VIVU	Non-upland	FAC	FAC		4	5	4	7	5	5	4	1	4	7
<i>Vulpia bromoides</i>	Brome Six-Weeks Grass	VUBR	Non-upland	FACW	UPL	Non-native	0		0				0		0	
<i>Websteria confervoides</i>	algal bulrush	WECO	Non-upland		OBL		6	3	7	2						
<i>Wisteria frutescens</i>	American wisteria	WIFR	Non-upland	FACW	FACW		5	5	6	9	5	6	5	3	6	6
<i>Wolffia borealis</i>	northern watermeal	WOBO	Non-upland	OBL	OBL										4	3
<i>Wolffia brasiliensis</i>	Brazilian watermeal	WOBR	Non-upland	OBL	OBL		5	4	4	5	4	3	4	3	4	4
<i>Wolffia columbiana</i>	Columbian watermeal	WOCO	Non-upland	OBL	OBL		4	3	4	5	4	4	4	3	4	5
<i>Wolffia globosa</i>	Asian watermeal	WOGI3	Non-upland	OBL	OBL	Non-native	0									
<i>Wolffiella gladiata</i>	Florida mudmidget	WOGI2	Non-upland	OBL	OBL		5	2	5	3					6	3
<i>Wolffiella lingulata</i>	tongueshape bogmat	WOLI	Non-upland		OBL		5	2								
<i>Wolffiella oblonga</i>	saber bogmat	WOOB	Non-upland		OBL		5	2								
<i>Woodwardia areolata</i>	netted chainfern	WOAR	Non-upland	FACW	OBL		6	6	6	9	6	8	7	3	7	7
<i>Woodwardia virginica</i>	Virginia chainfern	WOVI	Non-upland	OBL	OBL		7	6	7	8	7	7	8	2	9	3
<i>Xanthium strumarium</i>	rough cocklebur	XAST	Non-upland	FAC	FAC	Nativity unknown	1	6	1	8	1	6	1	3	1	7
<i>Xanthorhiza simplicissima</i>	yellowroot	XAST	Non-upland	FACW	FACW		7	5	7	7	7	7	7	2	8	5
<i>Xyris ambigua</i>	coastal plain yelloweyed grass	XYAM	Non-upland	OBL	OBL		7	5	8	6	7	2	8	2	8	2
<i>Xyris baldwiniana</i>	Baldwin's yelloweyed grass	XYBA	Non-upland	OBL	OBL		5	3	7	3						
<i>Xyris brevifolia</i>	shortleaf yelloweyed grass	XYBR	Non-upland	OBL	OBL		5	5	8	5						
<i>Xyris caroliniana</i>	Carolina yelloweyed grass	XYCA	Non-upland	FACW	FACW		6	4	7	4						
<i>Xyris difformis</i>	bog yelloweyed grass	XYDI	Non-upland	OBL	OBL		7	4	7	5	7	3	8	2	8	2
<i>Xyris drummondii</i>	Drummond's yelloweyed grass	XYDR	Non-upland		OBL		7	3	7	4						
<i>Xyris elliptica</i>	Elliott's yelloweyed grass	XYEL2	Non-upland	OBL	OBL		5	3	7	2						
<i>Xyris fimbriata</i>	fringed yelloweyed grass	XYFI	Non-upland	OBL	OBL		6	4	6	5					9	2
<i>Xyris flabelliformis</i>	savannah yelloweyed grass	XYFL2	Non-upland	OBL	OBL		6	4	8	3						
<i>Xyris isoetifolia</i>	quillwort yelloweyed grass	XYIS	Non-upland		OBL		8	5	9	3						
<i>Xyris jupicai</i>	Richard's yelloweyed grass	XYJU	Non-upland	OBL	OBL		4	4	4	5	5	3	6	1	6	2
<i>Xyris laxifolia</i>	laxleaf yelloweyed grass	XYLA	Non-upland	OBL	OBL		7	5	7	5			8	1	8	2
<i>Xyris longisepala</i>	Kral's yelloweyed grass	XYLO	Non-upland		OBL		8	3	10	2						
<i>Xyris louisiana</i>	Louisiana yelloweyed grass	XYLO2	Non-upland		OBL		8	2	7	2						
<i>Xyris platylepis</i>	tall yelloweyed grass	XYPL	Non-upland	OBL	OBL		5	4	6	3						
<i>Xyris scabrifolia</i>	Harper's yelloweyed grass	XYSC	Non-upland	OBL	OBL		9	4	9	4						
<i>Xyris serotina</i>	acidswamp yelloweyed grass	XYSE	Non-upland		OBL		6	3	8	2						
<i>Xyris smaliana</i>	Small's yelloweyed grass	XYSM	Non-upland	OBL	OBL		7	4	7	3						
<i>Xyris stricta</i>	pineland yelloweyed grass	XYST	Non-upland		OBL		7	4	7	3						
<i>Xyris tennesseensis</i>	Tennessee yelloweyed grass	XYTE	Non-upland	OBL	OBL				9	3			10	1	10	2
<i>Xyris torta</i>	slender yelloweyed grass	XYTO	Non-upland	OBL	OBL				6	7	6	6	8	3	7	3
<i>Yeatsea viridiflora</i>	yellow bractspike	YEVI	Non-upland	FACW	FACW		7	3	7	4						
<i>Yucca gloriosa</i>	moundlily yucca	YUGL2	Non-upland	FAC	FAC	Non-native to Mtns and Pdmnt	7	4	8	6	0		0			
<i>Zannichellia palustris</i>	horned pondweed	ZAPA	Non-upland	OBL	OBL		6	2	7	2			6	2	5	3
<i>Zanthoxylum americanum</i>	common pricklyash	ZAAM	Non-upland	FACU	FAC	Non-native (Adventive) in Mtns	8	3	7	3	7	3	0		7	4
<i>Zanthoxylum clava-herculis</i>	Hercules' club	ZACL	Non-upland	FAC	FAC		5	6	7	8						
<i>Zenobia pulverulenta</i>	honeycup	ZEPU3	Non-upland	FACW	OBL		9	2	8	4						
<i>Zephyranthes atamasca</i>	Atamasco lily	ZEAT	Non-upland	FACW	FACW		7	4	6	7	7	8	7	0		
<i>Zephyranthes simpsonii</i>	redmargin zephyrily	ZESI	Non-upland	FAC	FAC		6	5	8	4						
<i>Zephyranthes treatiae</i>		ZETR	Non-upland		FACW		5	3								
<i>Zeuxine strateumatica</i>	Soldier's Orchid	ZEST	Non-upland		FAC	Non-native	0									
<i>Zigadenus densus</i>	Osceola's plume	ZIDE	Present 1988 WPL				8	3	7	4						
<i>Zigadenus elegans</i>	mountain deathcamas	ZIEL2	Present 1988 WPL										10	0		
<i>Zigadenus glaberrimus</i>	sandbog deathcamas	ZIGL	Non-upland	OBL	FACW		7	4	8	6						
<i>Zigadenus leimanthoides</i>	pine barren deathcamas	ZILE	Present 1988 WPL				8	5	9	4			9	1	9	2
<i>Zizania aquatica</i>	annual wildrice	ZIAQ	Non-upland	OBL	OBL		8	3	8	4						
<i>Zizania palustris</i>	northern wildrice	ZIPA3	Non-upland	OBL	OBL										10	3
<i>Zizaniopsis millicea</i>	giant cutgrass	ZIMI	Non-upland	OBL	OBL		4	5	6	8	6	4	6	2	7	4
<i>Zizia aptera</i>	meadow zizia	ZIAP	Non-upland	FAC	FAC				7	4	7	4	7	2	7	6
<i>Zizia aurea</i>	golden zizia	ZIAU	Non-upland	FAC	FAC		7	4	7	7	7	8	6	3	7	6
<i>Zizia trifoliata</i>	meadow alexanders	ZITR	Non-upland	FACU	FAC		7	5	7	5	7	7	7	2		
<i>Zostera marina</i>	seawrack	ZOMA	Non-upland		OBL				9	3						