

**Natural vegetation of the Carolinas:  
Classification and Description of  
Plant Communities of the Pamlico Peninsula**

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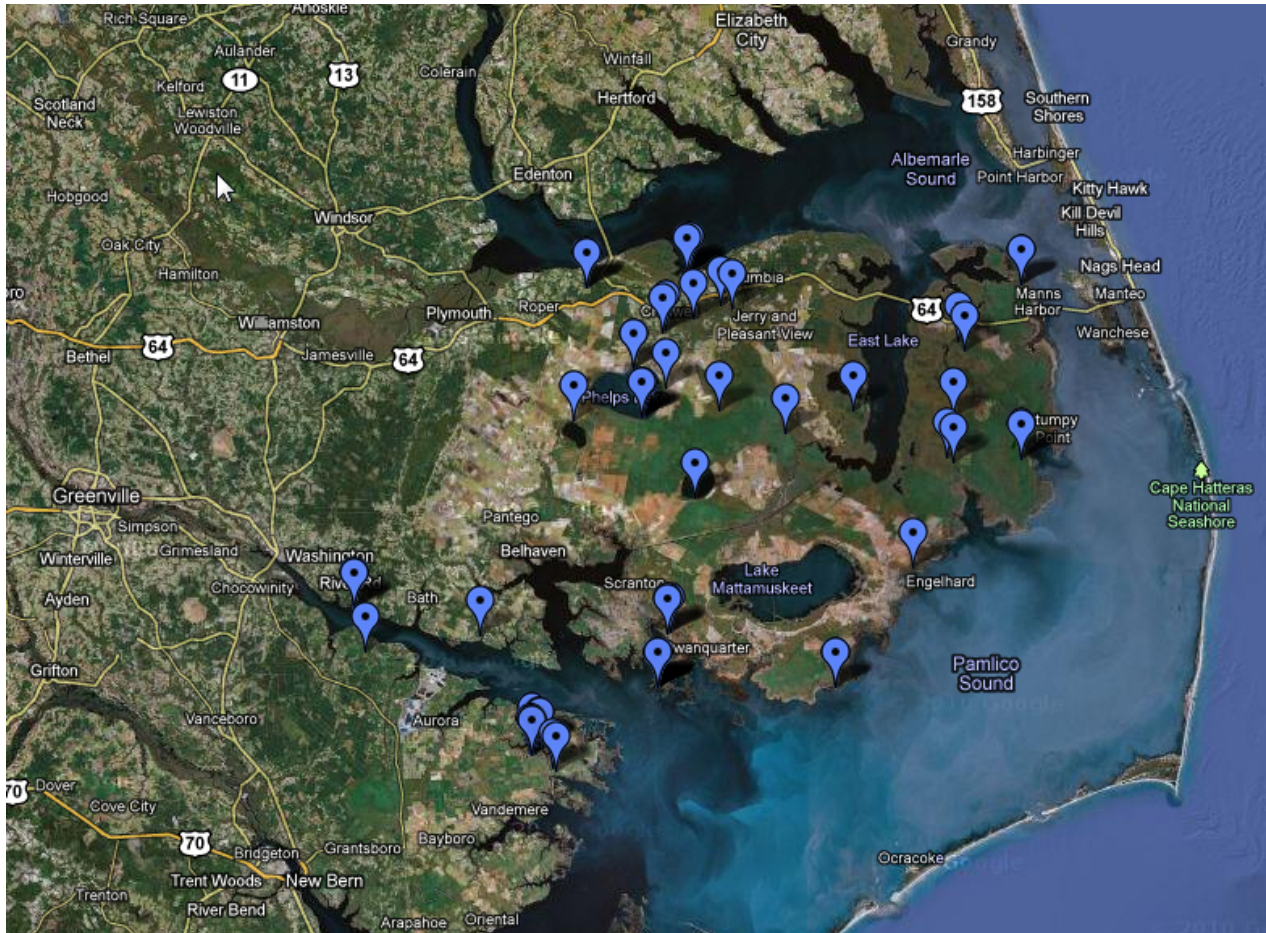
## INTRODUCTION

In early May 2009, the Carolina Vegetation Survey conducted an initial inventory of natural communities along the Pamlico River in eastern NC. In spite of numerous floristic inventories, there had never been a project designed to classify the diversity of natural wetland communities throughout this portion of North Carolina. Furthermore, the data captured from these plots will enable us to refine the community classification within the broader region. The goal of this report is to determine a classification structure based on the synthesis of vegetation data obtained from the May 2009 sampling event, and to use the resulting information to develop restoration targets for disturbed ecosystems location in this general region of North Carolina.

## STUDY AREA AND FIELD METHODS

From May 3-10 2009, a total of 62 vegetation plots were established along the Pamlico River in eastern North Carolina (Figure 1). Focus locations within the study area included Pocosin Lakes, Alligator River, and Swan Quarter National Wildlife Refuges (NWR), Goose Creek Game Land, Pettigrew State Park, and the Dare County Bomb Range. Target natural communities throughout the week included Coastal Plain mesic mixed hardwood forests, nonriverine swamp forests, tidal cypress-gum swamps, wet pine flatwoods, Atlantic white cedar forests, estuarine pine woodlands, and brackish marshes.

Vegetation was sampled following the North Carolina Vegetation Survey protocol described in Peet et al. (1998), and data collected conformed to established and proposed federal standards (see: Jennings et al. 2007, and Federal Geographic Data Committee 2007) (<http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/index.html>). Plots were subjectively located to best capture the composition of the target plant community. Each plot contained from 1 to 10 100 m<sup>2</sup> modules, the number reflecting the area of visually homogeneous vegetation available to sample. Species presence was recorded across a logarithmic sequence of subplot sizes including 0.01, 0.1, 1, 10, 100, and where sufficient modules were sampled 400 and 1000 m<sup>2</sup>. Species cover was recorded individually for up to 4 intensively sampled modules (those containing the nested subplots), and overall cover for the plot was also recorded for species not found in intensively sampled modules. Soil samples were collected and sent to Brookside Laboratories for analysis. Soil nutrients were extracted by the Mehlich III technique. Mean soil nutrient and texture values are summarized by community in Appendix 1. Tree stems were recorded for each plot by diameter.



**FIGURE 1. Pulse 2009A sample region and established plots. Map courtesy of GoogleMaps:**  
<http://maps.google.com/maps?q=http://cvs.bio.unc.edu/maps/110-pointsA.kml.xml>

## VEGETATION CLASSIFICATION

Plots were classified to association following the US National Vegetation Classification (NVC) standard (Grossman et al. 1998, Jennings et al. 2006) and the Carolina Vegetation Survey's "Vegetation of the Carolinas" project (<http://cvs.bio.unc.edu/vegetation.htm>). The 'association' is defined as a group of plots having similar species composition, structure, and habitat. Plot assignment was accomplished through a qualitative assessment of vegetation composition, landscape position, hydrologic regime, and soil characteristics. The associations were grouped into higher categories following the classification hierarchy developed by the "Vegetation of the Carolinas" project and include the Formation (e.g., Coastal Plain lowland evergreen forests and shrublands) and Ecological Group (e.g., White cedar forests) levels. The lowest, finest level of the classification scheme used was the NVC association.

Where possible, plots were assigned to an NVC association, identified by association name and unique CEGL identifier. Also, a degree of fit was applied to the classification scheme based on the plot's correspondence with its assigned association. The 5-level scale of fit we employ conforms to that the standards employed by the VegBank archive and the proposed US Federal standards (see Jennings et al. 2007): Excellent, Good, Fair, Poor (similar but wrong), and Incorrect (unambiguously wrong). In some cases it was necessary to assign a plot to more than one community because of its intermediate character. In 49 of the 76 cases (see Appendix 2), the fit was either fair or poor, suggesting a need for numerous revisions of the NVC to better represent the vegetation of this part of North Carolina.

For each community type to which we assigned plots, we provide a brief summary. We also provide hotlinks (with the CEGL codes) to the formal descriptions of these types in the National Vegetation Classification. Where the fit is weak or poor, we briefly explain the problem. Composition is shown in detail in Appendix 3 where the prevalent species (most frequent species with the number equal to the average number of species per 100 m<sup>2</sup> plot) are listed by constancy among plots, and mean percent cover where present. Average cover class was calculated using the geometric mean of the true cover range for each cover class. Vegetation that was novel or failed to fit well in established associations of the National Vegetation Classification are summarized in Appendix 2. Botanical nomenclature follows Weakley 2006.

Our classification yielded assignments to 36 high-order community associations, from 22 Ecological Groups and 15 Formations. A community characterization is presented for each association below. Names are based on the naming system used in the U.S. National Vegetation Classification (NatureServe 2007). Names reflect species with high constancy and high cover; a “-” separates species within the same vertical strata, while a “/” separates species of different strata.



## ASSOCIATIONS

### I. Coastal Plain Mixed Mesic Forests

#### A. Mesotrophic Mesic Forests

##### 1) [\*Fagus grandifolia\* - \*Quercus nigra\* Forest](#) (CEGL007211)

NVC Fit = Good

Plots = 110-02-1304

This plot is located on an interfluvium within the upper Scuppernon River drainage in northern Tyrell County, NC. The NVC describes this community association as a mixed hardwood forest type dominated by *Fagus grandifolia* and occurring on acidic bluffs, or other acidic, fire-sheltered sites in the Piedmont and Mid-Atlantic Coastal Plain. Besides *Fagus grandifolia*, other canopy and subcanopy species found within this plot include *Ilex opaca* var. *opaca*, *Pinus taeda*, *Oxydenrum arboreum*, and *Quercus alba*. Ericaceous shrubs are important in the shrub stratum, and include *Gaylussacia frondosa*, *Vaccinium corymbosum*, and *Lyonia lucida*. The herbaceous stratum also includes acidic-tolerant species, such as *Mitchella repens*, *Gaultheria procumbens*, and *Chimaphila maculata*.



## II. Coastal Plain Subxeric Forests

### A. Acid Oak Forests

- 1) [Quercus falcata - Quercus stellata - Carya alba / Vaccinium spp. Coastal Plain Forest](#)  
(CEGL007246)

NVC Fit = Fair

Plots = 110-06-1307

This plot is located on a west-facing bluff of Nevil Creek in southern Beaufort County, NC, south of the Pamlico River. The NVC describes this community association as an upland hardwood forest of the Atlantic and Gulf Coastal Plain, occurring naturally on acidic soils and fire-protected landscapes. These forests typically lack species restricted to higher pH soils or wetter, riparian slope positions. The canopy of this plot is dominated by *Quercus falcata*, and *Quercus alba*, while the subcanopy is composed of these species, as well as *Liquidambar styraciflua*, *Cornus florida*, *Oxydendrum arboreum*, and *Nyssa sylvatica*. The shrub stratum is dominated by *Vaccinium tenellum*, *Gaylussacia frondosa*, and *Vaccinium formosum*. Herbaceous species diversity and abundance values are both low in this plot. Species include *Arundinaria tecta*, *Chasmanthium spp.*, *Hypericum hypericoides*, and *Mitchella repens*. The occurrence of species from the nearby stream zone (e.g. *Liquidambar styraciflua*, *Clethra alnifolia*) justify labeling this plot a fair fit to the NVC-described association.

## III. Coastal Plain Fire-maintained Woodlands

### A. Pine Flatwoods

- 1) [Pinus palustris - \(Pinus serotina\) / Ilex glabra - Gaylussacia frondosa - \(Kalmia carolina\) Woodland](#) (CEGL003647)

NVC Fit = Fair to Good

Plots = 110-01-1300, 110-04-1300, 110-04-1301

This wet pine flatwood community type occurs north of the range of *Aristida stricta*, and is characterized by an open canopy of *Pinus palustris* (with *Pinus taeda* or *Pinus serotina*), and a dense shrub stratum of *Ilex glabra* and *Gaylussacia frondosa*. The three plots sampled during this study occur on Goose Creek Game Lands, in southeastern Beaufort County, NC. Along with the community nominal species, these plots are dominated by *Persea palustris*, *Acer rubrum* var. *trilobum*, *Clethra alnifolia*, and *Morella caroliniensis*. The herbaceous stratum is dominated *Arundinaria tecta* and *Pteridium aquilinum*. Two of the three plots sampled are floristically similar to the NVC-described association; the high diversity of shrub and understory species found within plot 04-1301 explain its 'fair' fit assignment to the NVC-described association.



#### IV. Coastal Plain Blackwater River Forests

##### A. Blackwater Swamp Forests

- 1) [\*Taxodium distichum\* - \*Nyssa aquatica\* - \*Nyssa biflora\* / \*Fraxinus caroliniana\* / \*Itea virginica\* Forest](#) (CEGL007432)

NVC Fit = Fair

Plots = 110-04-1303

This Coastal Plain swamp forest occurs on fine-textured mineral soils of Coastal Plain blackwater rivers, and experiences long periods of river overbank flow. This plot occurs along the upper Scuppernon River in eastern Washington County, NC; the canopy and subcanopy of this stand is composed of *Nyssa aquatica*, *Fraxinus caroliniana*, *Fraxinus pennsylvanica*, *Taxodium distichum*, and *Acer rubrum* var. *rubrum*. The shrub stratum is open in this example, and the herbaceous stratum is composed of *Boehmeria cylindrica*, *Woodwardia areolata*, *Glyceria septentrionalis*, and *Saururus cernuus*. This association is typically co-dominated by both *Nyssa biflora* and *Nyssa aquatica*; however, this plot does not contain the former. This plot also does not correspond well with the NVC-described association due to the abundance of both *Fraxinus* spp. in the canopy and understory.

- 2) [\*Nyssa biflora\* - \*Liquidambar styraciflua\* / \*Glyceria septentrionalis\* - \*Hydrocotyle ranunculoides\* Forest](#) (CEGL007743)

NVC Fit = Fair

Plots = 110-02-1305

This bottomland hardwood forest of the Atlantic Coastal Plain is dominated by a canopy of *Nyssa biflora*, *Liquidambar styraciflua*, and *Acer rubrum*. It has been described for Virginia, while its presence in North



Carolina is questionable. The herbaceous stratum of this community is characterized by extensive colonies of *Glyceria septentrionalis* and *Hydrocotyle ranunculoides*. This type is known to occur along small stream backwater swamps or along upland blackwater swamp edges. This plot is located along the upper Scuppernong River in western Tyrell County, NC. The canopy and subcanopy of this stand is dominated by a variable mixture of *Nyssa aquatica*, *Acer rubrum*, *Taxodium distichum*, *Fraxinus pennsylvanica*, *Nyssa biflora*, and *Quercus laurifolia*. The small tree and shrub strata are relatively open, but composed of *Fraxinus caroliniana* and *Cornus foemina*. The herbaceous stratum is fairly diverse for a wet blackwater swamp forest, and includes *Glyceria septentrionalis*, *Saururus cernuus*, *Carex stipata* var. *maxima*, and *Viola esculenta*. The NVC describes this community type as completely lacking *Taxodium distichum*, *Nyssa aquatica*, and *Fraxinus pennsylvanica*.



## V. Coastal Plain Lowland Deciduous Forests

### A. Coastal Plain Hardwood Flats

- 1) [\*Quercus michauxii\* - \*Quercus pagoda\* / \*Clethra alnifolia\* - \*Leucothoe axillaris\* Forest](#)  
(CEGL007449)

NVC Fit = Poor to Good

Plots = 110-04-1306, 110-04-1307, 110-06-1300,  
110-09-1304

This wetland forest type occurs on nonalluvial flats, is typically underlain by limestone, and is prone to seasonal saturation. It is found in association with large peatlands of the Atlantic Coastal Plain of North





Carolina and Virginia. The stands sampled during this study that are representative of this community type are dominated by a canopy of *Quercus pagoda* and *Quercus michauxii*, as well as other hardwood species such as *Liriodendron tulipifera* and *Liquidambar styraciflua*. The subcanopy of these stands is comprised of *Ilex opaca* var. *opaca*, *Asimina triloba*, *Carpinus caroliniana* var. *caroliniana*, *Fagus grandifolia*, and *Quercus nigra*. The shrub stratum is relatively sparse in these stands, and community nominal shrubs are completely absent. Plot 06-1300 is described as having a ‘poor’ fit to the association because of the dominance of *Quercus phellos* and successional *Pinus taeda* in the canopy.

#### **B. Coastal Plain Nonriverine Swamp Forests**

- 1) [\*Taxodium distichum\* - \*Nyssa biflora\* / \*Berchemia scandens\* - \*Toxicodendron radicans\* / \*Woodwardia areolata\* Forest](#) (CEGL004429)

NVC Fit = Good

Plots = 110-01-1307

This nonriverine forest, codominated by *Taxodium distichum* and *Nyssa biflora*, occurs over saturated wetland soils of the Atlantic Coastal Plain of North Carolina and Virginia. The stand sampled during this study is located in the Pocosin Lakes National Wildlife Refuge, in western Tyrell County. The canopy is dominated by *Nyssa biflora* and *Acer rubrum* var. *trilobum*, with lesser amounts of *Taxodium distichum*, and *Magnolia virginiana*. The subcanopy contains canopy species, along with *Ilex opaca* var. *opaca*, and *Persea palustris*; woody vines are characteristic of this stand, and include *Vitis rotundifolia* var. *rotundifolia*, *Toxicodendron radicans* var. *radicans*, *Gelsemium sempervirens*, and several species of *Smilax*. The shrub and herbaceous strata are sparse in this example. Some species in the herbaceous layer include *Athyrium asplenoides*, *Mitchella repens*, *Woodwardia areolata*, and *Asplenium platyneuron*.

2) [Nyssa biflora - Liquidambar styraciflua - Acer rubrum var. trilobum / Clethra alnifolia Forest](#)  
(CEGL004679)

NVC Fit = Good

Plots = 110-01-1310

This nonriverine forest, codominated by *Liquidambar styraciflua*, *Nyssa biflora*, and *Acer rubrum* var. *trilobum*, occurs over saturated wetlands soils of the North Carolina (and potentially Virginia) Coastal Plain. The soil is characteristically more mineral than organic in this nonriverine type. The stand of this type sampled during this study is located in the southern portion of the Alligator River National Wildlife Refuge, in Dare County, NC. The canopy and subcanopy are dominated by *Acer rubrum* var. *trilobum*, *Liquidambar styraciflua*, *Persea palustris*, *Nyssa biflora*, and *Magnolia virginiana*. The vine and shrub strata are well-developed, and include *Vaccinium fuscum*, *Arundinaria tecta*, *Decumaria barbara*, *Smilax laurifolia*, and *Gelsemium sempervirens*. The herbaceous layer is not well-developed, but does include *Osmunda cinnamomea*, *Woodwardia virginica*, and *Osmunda regalis* var. *spectabilis*.

3) [Taxodium ascendens / \(Nyssa biflora\) / Leucothoe racemosa - Lyonia lucida - Morella cerifera Depression Forest](#) (CEGL007420)

NVC Fit = Poor to Good

Plots = 110-03-1301, 110-04-1304

This Coastal Plain swamp forest occurs in permanently wet depressions and is characterized by a closed canopy of *Taxodium ascendens* or *Nyssa biflora* and a poorly developed graminoid strata. This forested wetland is differentiated from other nonriverine swamp forests by occurring in closed basins and experiencing profoundly deeper flooding events. The two plots of this type sampled during this study occur within the Alligator River National Wildlife Refuge of Dare County, NC. The canopy of these two plots are dominated by *Taxodium ascendens*, *Persea palustris*, *Nyssa biflora*, and, in the case of the 'poor' fit plot 03-1301, *Taxodium distichum*. The shrub stratum is composed of pocosin species, such as *Lyonia lucida*, *Ilex coriacea*, and *Ilex glabra*, as well as *Clethra alnifolia*. The herbaceous layer is not well-developed in these stands.

## VI. Coastal Plain Lowland Evergreen Forests and Shrublands

### A. White Cedar Forests

1) [Chamaecyparis thyoides / Persea palustris / Lyonia lucida - Ilex coriacea Forest](#)  
(CEGL006146)

NVC Fit = Good to Excellent

Plots = 110-01-1309, 110-06-1306

This community is found on flat, permanently saturated peatlands of nonriverine bottomlands of the Atlantic Coastal Plain and adjacent Sandhills. The canopy is dominated by *Chamaecyparis thyoides*, with lesser amounts of *Nyssa biflora* and *Acer rubrum* var. *rubrum*. Subcanopy species include *Persea palustris*, *Magnolia virginiana* var. *virginiana* and *Ilex opaca* var. *opaca*. A moderately dense shrub





stratum is composed of *Ilex coriacea*, *Lyonia lucida*, and *Leucothoe axillaris*. A sparse herbaceous stratum includes *Woodwardia areolata*, *Woodwardia virginica*, and *Osmunda cinnamomea* var. *cinnamomea*. The two plots inventoried during this study are located in northern Tyrell and Dare Counties, NC.

## B. Pocosins

### 1) [\*Ilex glabra\* - \*Lyonia lucida\* - \*Zenobia pulverulenta\* Shrubland](#) (CEGL003944)

NVC Fit = Fair to Good

Plots = 110-02-1308, 110-05-1300

This low pocosin occurs on deep peat domes of the Outer and Middle Atlantic Coastal Plain of North and South Carolina. This pocosin type is differentiated from others by the low stature of shrubs (typically less than 1.5 meters tall) and pines (when present). Like most pocosin and peatland communities of the Coastal Plain, this type is maintained by extremely poor soil nutrient status and occasional fire events. The only constant dominant shrub in these plots is *Ilex glabra*. Other shrubs include *Zenobia pulverulenta*, *Cyrilla racemiflora*, and *Lyonia lucida*. In one plot, there is a patchy tree stratum of *Pinus serotina*. Plot 02-1308 is characterized as a 'fair' fit to the NVS-described association because of the co-dominance of *Cyrilla racemiflora* and *Zenobia pulverulenta* in the shrub stratum and the abundance of herbs (e.g. *Sarracenia flava*, *Chamaedaphne calyculata*).



2) [\*Chamaedaphne calyculata\* - \*Vaccinium macrocarpon\* / \*Carex striata\* var. \*striata\* - \*Woodwardia areolata\* Dwarf-shrubland](#) (CEGL004165)

NVC Fit = Fair

Plots = 110-01-1306, 110-05-1301

These dwarf shrub/herbaceous vegetation types occur in openings within the shrub-dominated pocosin landscape. These communities are patchy in distribution, and may be very small. Because of their small size and occurrence within a larger vegetation matrix, they often contain typical low/high pocosin shrub species mixed in with association nominals. The two plots sampled during this study occur within Mashoes Pocosin, in Dare County, NC. The dwarf shrub stratum is dominated by *Vaccinium macrocarpon*, while the shrub stratum contains a mixture of low pocosin species--*Ilex glabra*, *Morella cerifera*, and *Lyonia lucida*. The herbaceous layer is rich for occurring on a nutrient-limited geomorphic position. Herbaceous and graminoid vegetation include *Woodwardia virginica*, *Rhynchospora plumosa*, *Chamaedaphne calyculata*, *Carex striata*, and *Xyris ambigua*. Plots are characterized as a 'fair' fit to the NVC-described association because *Vaccinium macrocarpon* does not occur with great abundance (< 5% cover in each) in either of these two plots.

**C. Pond Pine Forests and Woodlands**

1) [\*Pinus serotina\* / \*Ilex glabra\* / \*Woodwardia virginica\* Woodland](#) (CEGL004652)

NVC Fit = Good

Plots = 110-01-1305

This community type contains typical pocosin shrub species underneath a well-developed tree canopy (typically >25% cover), although coverage may decrease depending on the fire history (frequency, severity) of a particular site. This plot occurs on the Dare Bombing Range in southern Dare County, NC, and may represent a subset of this association, due to the absence of *Ilex glabra*. Otherwise, the plot is structurally and compositionally similar to the NVC-described association. The canopy is dominated by well-developed *Pinus serotina*, while the shrub and herbaceous strata include *Smilax laurifolia*, *Vaccinium formosum*, *Persea palustris*, and *Rhus copallinum*.

**VII. Coastal Plain Ponds and Marshes**

**A. Wooded Lake and Pond Shores**

1) [\*Taxodium distichum\* - \*Liquidambar styraciflua\* - \*Platanus occidentalis\* / \*Asimina triloba\* Forest](#) (CEGL004424)

NVC Fit = Fair to Good

Plots = 110-01-1311, 110-07-1300, 110-07-1301  
110-08-1300

This association describes forest vegetation along the shores of medium to large blackwater lakes in northeastern North Carolina (e.g. Lake Phelps, Pungo Lake, and New Lake). These sites are influenced by



lake hydrology, brought on by high rainfall and/or strong wind events. Compared with other natural lakeshore vegetation types, this type occurs on rich mineral soils and is consequently high in species diversity throughout all vertical strata. The plots sampled during this study representing this association are found along Phelps Lake (3) and Pungo Lake (1). The canopy is composed of *Liquidambar styraciflua*, *Liriodendron tulipifera*, and *Taxodium distichum*. In one example (07-1301), the canopy is co-dominated by *Fagus grandifolia*, *Ilex opaca* var. *opaca*, *Quercus pagoda*, and *Carya glabra*. This plot is assigned a 'fair' fit to the NVC-described association. The shrub stratum in these stands is dominated by *Asimina triloba*, while the herbaceous layer is composed of a diversity of species. Some constant herbs include *Boehmeria cylindrica*, *Athyrium asplenoides*, *Eupatorium capillifolium*, and *Juncus effuses* ssp. *solutus*.

2) [\*Taxodium distichum\* - \*Taxodium ascendens\* / \*Panicum hemitomon\* Woodland](#) (CEGL004466)

NVC Fit = Fair

Plots = 110-06-1305

This association describes wooded shorelines of medium to large blackwater lakes in the Mid-Atlantic Coastal Plain. Characteristic vegetation features include an open canopy of stunted *Taxodium distichum* and *Taxodium ascendens*, and a sparse, low diversity shrub and herb layer. These sites are influenced by lake hydrology, brought on by high rainfall and/or strong wind events. The plot sampled during this study and belonging to this association occurs on the southern end of New Lake, in Hyde County, NC. It is characterized as having a 'fair' fit to the NVC-described association due to its diversity of herbaceous and



graminoid species. These include *Juncus repens*, *Triadenum walteri*, *Eupatorium perfoliatum*, *Lycopodiella prostrata*, and *Solidago* spp.

## B. Freshwater Marshes

### 1) [\*Panicum hemitomon\* - \*Juncus\* spp. Coastal Plain Lake Shore Herbaceous Vegetation](#) (CEGL004307)

NVC Fit = Excellent

Plots = 110-01-1303, 110-01-1304, 110-01-1308,  
110-09-1305

This herbaceous vegetation association occurs on the shorelines of blackwater lakes in the Coastal Plain of northeastern North Carolina. It is distinguished from other natural lakeshore vegetation types by herbaceous species dominance and having only a few scattered *Taxodium* stems. The four plots sampled during this study occur along the shore of Lake Phelps, within the Pocosin Lakes National Wildlife Refuge. The plots are dominated by *Juncus militaris* and *Panicum hemitomon*. Other species include *Eupatorium capillifolium*, *Eriocaulon aquaticum*, *Hydrocotyle umbellata*, and *Eleocharis equisetoides*.



## VIII. Maritime Forests

### A. Mesic Maritime Hardwood Forests

- 1) [Quercus falcata - Pinus taeda - \(Fagus grandifolia, Quercus nigra\) / Persea palustris Maritime Forest](#) (CEGL007540)

NVC Fit = Fair

Plots = 110-02-1306, 110-08-1301

This deciduous-dominated maritime forest occurs on sheltered sites of barrier islands and similar coastal areas where it is protected from storm surges and salt spray. The plots sampled during this study occur on private land in northern Tyrell County, NC, just south of the Albemarle Sound and technically outside the boundary of the maritime fringe. The canopy of these plots is dominated by a mixture of hardwood species, including *Quercus nigra*, *Fagus grandifolia*, *Liriodendron tulipifera*, *Quercus falcata*, and *Liquidambar styraciflua*; *Pinus taeda* is also abundant in the canopy. The shrub and vine strata are well-developed and highly diverse. Species include *Symplocos tinctoria*, *Castanea pumilla*, *Vitis rotundifolia* var. *rotundifolia*, *Smilax rotundifolia*, *Stryax grandifolius*, and *Clethra alnifolia*. Herbaceous diversity is extremely low in both of these plots.

## IX. Freshwater Tidal Woodlands

### A. Tidal Hardwood Swamps

- 1) [Nyssa biflora - \(Taxodium distichum, Nyssa aquatica\) / Morella cerifera - Rosa palustris Tidal Forest](#) (CEGL004484)

NVC Fit = Good

Plots = 110-02-1307, 110-06-1302, 110-08-1306

This is a broadly described NVC association which is used for tidally influenced swamp forests of both brownwater and blackwater rivers of the Atlantic and Gulf Coastal Plains. Flooding events can be driven by wind or lunar tides, and species present are typically resilient to permanent saturation. Composition within these stands is a variable mixture of blackwater and brownwater species, along with species typical of tidal influence (e.g. *Morella cerifera*). The three plots sampled during this survey occur along the southern Albemarle Sound and the lower Scuppernong River in Tyrell County, NC. The canopy is codominated by *Taxodium distichum*, *Nyssa biflora*, *Nyssa aquatica*, and *Liquidambar styraciflua*. The shrub stratum is dominated by *Morella cerifera*. The herbaceous layer is well-developed in these stands, due to the nutrient input from tidal events. Constant species include *Osmunda regalis* var. *spectabilis*, *Hydrocotyle* spp., *Saururus cernuus*, and *Cicuta maculata* var. *maculata*.



## B. Tidal Conifer Swamps

1) [\*Juniperus virginiana\* var. \*silicicola\* / \*Morella cerifera\* / \*Kosteletzkya virginica\* - \*Bacopa monnieri\* Woodland](#) (CEGL007166)

NVC Fit = Poor to Fair

Plots = 110-02-1303, 110-03-1300, 110-04-1310

This flooded brackish woodland occurs along tidal creeks of coastal North Carolina and Georgia. The canopy of these sites is usually open, and dominated by *Juniperus virginiana* var. *silicicola*; marsh species are typically found in the shrub and herbaceous strata. The three plots sampled during this survey occur along Goose Creek in Beaufort/Pamlico County, NC and along Pamlico Sound in Hyde County, NC. Like the NVC community describes, the canopy within these plots is dominated by *Juniperus virginiana*, with a *Pinus taeda* serving as a codominant or subordinate. Both *Morella cerifera* and *Toxicodendron radicans* var. *radicans* are constant species occurring in the shrub and woody vine strata. Brackish marsh species are found within the herbaceous stratum of these sites, and include *Distichlis spicata*, *Juncus roemerianus*, and *Typha angustifolia*. There is a need to examine the species composition of these marsh woodlands as it relates to





salinity and soil characteristics (e.g., silt versus organic muck concentration). The current NVC association for these *Juniperus* woodlands may be too broad.

### C. Oligohaline Tidal Woodlands

- 1) [\*Pinus serotina\* / \*Morella cerifera\* / \*Osmunda regalis\* var. \*spectabilis\* Woodland](#) (CEGL003669)

NVC Fit = Fair

Plots = 110-04-1302

This community type encompasses *Pinus serotina*-dominated woodlands adjacent to estuarine wetlands with some form of tidal influence. This type is found along the Atlantic Coastal Plain of Virginia and North Carolina. This plot is located within Goose Creek Game Land, in Pamlico County, NC. The canopy is dominated by a combination of *Nyssa biflora*, *Pinus serotina*, *Persea palustris*, and *Acer rubrum* var. *trilobum*. *Morella cerifera* is the dominant shrub, while the herbaceous stratum is composed of such species as *Osmunda regalis* var. *spectabilis*, *Osmunda cinnamomea*, and *Berchemia scandens*. Except for the co-dominance of hardwood species in the canopy, this plot resembles the NVC-described association.

- 2) [\*Pinus taeda\* / \*Morella cerifera\* / \*Osmunda regalis\* var. \*spectabilis\* Forest](#) (CEGL006137)

NVC Fit = Fair to Good

Plots = 110-02-1302, 110-06-1301, 110-06-1304

This community type encompasses *Pinus taeda*-dominated woodlands adjacent to estuarine sounds or marshes with some form of tidal influence during high water events. The plots linked to this community sampled during this survey occur along Pamlico Sound or its tributaries. They are dominated by a canopy of *Pinus taeda*, with lesser amounts of *Persea palustris*. The shrub stratum is dominated by *Morella cerifera*, *Baccharis halimifolia*, and in one example, *Arundinaria tecta*. The herbaceous stratum is dominated by *Osmunda regalis* var. *spectabilis* in two of the three plots sampled. Plot 06-1304 is characterized as having a fair fit to the NVC-described association due to the co-dominance of hardwood species (e.g., *Acer rubrum* var. *trilobum*, *Magnolia virginiana*, *Quercus nigra*, and *Liquidambar styraciflua* in the canopy.





## X. Shrubby Tidal Vegetation

### A. Saline Tidal Shrublands

- 1) [\*Borrichia frutescens\* / \(\*Spartina patens\*, \*Juncus roemerianus\*\) Shrubland](#) (CEGL003924)

NVC Fit = Fair to Good

Plots = 110-01-1301, 110-09-1300

This shrubby vegetation community type occurs on upper marsh edges that are infrequently flooded with salt water. Salt tolerant shrubs and herbs dominate these patches, as well as brackish grasses. These stands are typically dominated by *Borrichia frutescens*, although this species is absent in both plots sampled during this study. Species composition within these two plots is quite distinct; neither shares the same species. Low shrubs and herbs/graminoids encountered include *Cladium jamaicense*, *Juncus roemerianus*, *Baccharis halimifolia*, *Spartina patens*, and *Osmunda cinnamomea*.

- 2) [\*Iva frutescens\* / \*Spartina patens\* Shrubland](#) (CEGL006848)

NVC Fit = Fair

Plots = 110-10-1301

This shrubby vegetation type of the Atlantic Coastal Plain occurs along ecotonal sites between salt marshes and upland vegetation, and is typically dominated by *Iva frutescens*. This plot is dominated by *Spartina patens* in the herbaceous stratum, along with *Juncus roemerianus* and *Distichlis spicata*. Although the association nominal shrub is found in this plot, its low cover value (5-10%) could more likely represent this plot as an ecotone between a saline shrub and graminoid-dominated wetland.

## XI. Open Salt and Brackish Tidal Vegetation

### A. Tidal Salt Marshes

- 1) [\*Spartina patens\* - \*Distichlis spicata\* - \(\*Juncus roemerianus\*\) Herbaceous Vegetation](#) (CEGL004197)

NVC Fit = Fair to Good

Plots = 110-08-1302, 110-08-1303, 110-08-1305,  
110-09-1302, 110-09-1306, 110-10-1300  
110-02-1300

This graminoid-dominated wetland occurs on irregularly flooded tidal marshes of the Atlantic Coastal Plain. This type is often dominated, or co-dominated by *Spartina patens*, occurring with *Distichlis spicata*, *Juncus roemerianus*, and species from adjacent salt marshes, e.g., *Spartina alterniflora*. These six plots occur on the southern end of the Pamlico River and south of the Pamlico River on the Goose Creek Game Land. All are dominated by *Spartina patens*, with varying degrees of importance from the aforementioned species. Plots that had high importance of more salt-tolerant *Spartina alterniflora* perhaps represent an ecotone along the saline gradient, and correspond as a 'fair' fit to the NVC-described association.



2) [\*Schoenoplectus americanus\* - \*Spartina patens\* Herbaceous Vegetation](#) (CEGL006612)

NVC Fit = Fair

Plots = 110-04-1309

This graminoid-dominated tidal wetland occurs between low and high salt marsh zones and is irregularly flooded. It is dominated by extensive colonies of *Schoenoplectus americanus*, occurring with other salt-brackish marsh graminoid species, including *Spartina patens*, *Spartina alterniflora*, and *Distichlis spicata*. This plot is located on the southeastern corner of the Pamlico Peninsula, within Gull Rock Game Land. Although it occurs on the same geomorphic gradient as the NVC-association, the dominant graminoid is *Schoenoplectus pungens* var. *pungens*. This community type has not been described for North Carolina.

## B. Brackish Marshes

### 1) [\*Cladium mariscus\* ssp. \*jamaicense\* Tidal Herbaceous Vegetation](#) (CEGL004178)

NVC Fit = Fair to Good

Plots = 110-06-1303, 110-09-1303

This brackish to oligohaline tidal marsh community is distinguished from other marshes by the dominance of *Cladium mariscus* ssp. *jamaicense*. Other species associated with tidal wetlands may be found within the dense stands of *Cladium*. One of the plots sampled during this inventory occurs on the northern edge of the Pamlico River, in Beaufort County, N.C.; the other plot occurs at



the mouth of the Pamlico River in southern Hyde County, N.C. Besides *Cladium mariscus* ssp. *jamaicense*, the other constant species found in these two plots is *Toxicodendron radicans* var. *radicans*. Plot 09-1303 is characterized as having a 'fair' fit to the NVC-described association because of the short stature of plants within the stand, due to its recent (< 3 month) fire disturbance.

### 2) [\*Juncus roemerianus\* Herbaceous Vegetation](#) (CEGL004186)

NVC Fit = Fair to Good

Plots = 110-02-1301, 110-04-1308, 110-08-1304

This brackish tidal marsh community is characterized by dense stands of *Juncus roemerianus*, occurring with other species associated with tidal wetlands. These species may include *Distichlis spicata*, *Spartina alterniflora*, and *Spartina patens*. It can occur in upper topographic positions of salt marshes, at the headwaters of tidal creeks, or in expansive brackish zones. These three plots are scattered across the sampling region of this study, and all are dominated by *Juncus roemerianus*. Plot 04-1308 is characterized as having a 'fair' fit to the NVC-described association because of the codominance of *Distichlis spicata* within the stand.



## XII. Open Fresh and Oligohaline Vegetation

### A. Oligohaline Tidal Marshes

- 1) [Juncus roemerianus - Pontederia cordata Herbaceous Vegetation](#) (CEGL004660)

NVC Fit = Fair

Plots = 110-01-1302

This freshwater tidal marsh community is characterized by dense stands of *Juncus roemerianus*, occurring with species of low salt tolerance, including *Osmunda regalis* var. *spectabilis*, *Thelyperis palustris* var. *palustris*, and *Pontederia cordata*. This plot occurs within Goose Creek Game Land, in Beaufort County, NC. It is dominated by a dense stand of *Juncus roemerianus*. Other species within this plot include *Hibiscus mascheutos*, *Cladium jamaicense*, and *Osmunda regalis* var. *spectabilis*. The range of variation in species composition found within these *Juncus*-dominated freshwater tidal wetlands is the reason why this plot was assigned a 'fair' fit to the NVC-described community type.

## XIII. Marine Aquatic Herb Vegetation

### A. Open Aquatic Marine Vegetation

- 1) [Ceratophyllum demersum - Utricularia macrorhiza - Nymphaea odorata Herbaceous Vegetation](#) (CEGL004661)

NVC Fit = Poor

Plots = 110-04-1305

This community represents a floating or submergent aquatic zone of wind-tidally flooded freshwater rivers of the Atlantic Coastal Plain. The NVC describes this association as having a dominance or codominance of *Ceratophyllum demersum*. However, this species is not found within the plot sampled during this study. The plot is dominated by a submersed stratum of *Utricularia inflata*, with overhanging woody species from the adjacent river bank (*Acer rubrum* var. *trilobum* and *Persea palustris*). This plot occurs on a wind-tidally influenced Coastal Plain small stream, and floristically bears little resemblance to the NVC-described association.

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**Appendix 1: Soil Nutrient and Texture Values Summarized by Association. Specific soil variables include pH, Organic Matter (%), exchangeable cations (Ca, Mg, K, Na, Mn; ppm), texture class (clay, silt, sand; %).**

Community Type	pH	Organic	Calcium	Magnesium	Potassium	Sodium	Manganese	Sand %	Silt %	Clay %
I.A.1: <i>Fagus grandifolia</i> - <i>Quercus nigra</i> Forest (CEGL007211)	3.9	4	74	23	23	34	1	75	22	4
II.A.1: <i>Quercus falcata</i> - <i>Quercus stellata</i> - <i>Carya alba</i> / <i>Vaccinium</i> spp. Coastal Plain Forest (CEGL007246)	4.0	5	87	21	30	22	1	68	28	4
III.A.1: <i>Pinus palustris</i> - ( <i>Pinus serotina</i> ) / <i>Ilex glabra</i> - <i>Gaylussacia frondosa</i> - ( <i>Kalmia carolina</i> ) Woodland (CEGL003647)	3.9	16	251	130	46	151	1	69	28	3
IV.A.1: <i>Taxodium distichum</i> - <i>Nyssa aquatica</i> - <i>Nyssa biflora</i> / <i>Fraxinus caroliniana</i> / <i>Itea virginica</i> Forest (CEGL007432)	5.3	49	2021	542	178	505	11	71	22	7
IV.A.2: <i>Nyssa biflora</i> - <i>Liquidambar styraciflua</i> / <i>Glyceria septentrionalis</i> - <i>Hydrocotyle ranunculoides</i> Forest (CEGL007743)	5.4	56	2077	619	162	483	10	77	20	3
IX.A.1: <i>Nyssa biflora</i> - ( <i>Taxodium distichum</i> , <i>Nyssa aquatica</i> ) / <i>Morella cerifera</i> - <i>Rosa palustris</i> Tidal Forest (CEGL004484)	5.4	29	916	703	152	874	6	75	23	3
IX.B.1: <i>Juniperus virginiana</i> var. <i>silicicola</i> / <i>Morella cerifera</i> / <i>Kosteletzkya virginica</i> - <i>Bacopa monnieri</i> Woodland (CEGL007166)	5.4	25	898	1028	283	3439	10	62	32	6
IX.C.1: <i>Pinus serotina</i> / <i>Morella cerifera</i> / <i>Osmunda regalis</i> var. <i>spectabilis</i> Woodland (CEGL003669)	4.8	12	317	302	112	532	1	69	27	4
IX.C.2: <i>Pinus taeda</i> / <i>Morella cerifera</i> / <i>Osmunda regalis</i> var. <i>spectabilis</i> Forest (CEGL006137)	4.9	18	396	383	131	977	1	67	29	4
V.A.1: <i>Quercus michauxii</i> - <i>Quercus pagoda</i> / <i>Clethra alnifolia</i> - <i>Leucothoe axillaris</i> Forest (CEGL007449)	4.1	9	546	89	63	33	7	32	61	7
V.B.1: <i>Taxodium distichum</i> - <i>Nyssa biflora</i> / <i>Berchemia scandens</i> - <i>Toxicodendron radicans</i> / <i>Woodwardia areolata</i> Forest (CEGL004429)	3.4	89	304	74	52	41	1	77	20	3
V.B.2: <i>Nyssa biflora</i> - <i>Liquidambar styraciflua</i> - <i>Acer rubrum</i> var. <i>trilobum</i> / <i>Clethra alnifolia</i> Forest (CEGL004679)	3.9	19	320	41	48	51	1	40	55	5
V.B.3: <i>Taxodium ascendens</i> / ( <i>Nyssa biflora</i> ) / <i>Leucothoe racemosa</i> - <i>Lyonia lucida</i> - <i>Morella cerifera</i> Depression Forest (CEGL007420)	3.5	93	319	209	89	278	3	83	14	3
VI.A.1: <i>Chamaecyparis thyoides</i> / <i>Persea palustris</i> / <i>Lyonia lucida</i> - <i>Ilex coriacea</i> Forest (CEGL006146)	3.5	95	175	107	41	156	1	83	12	5
VI.B.1: <i>Ilex glabra</i> - <i>Lyonia lucida</i> - <i>Zenobia pulverulenta</i> Shrubland (CEGL003944)	3.7	89	206	89	58	53	1	77	18	5
VI.B.2: <i>Chamaedaphne calyculata</i> - <i>Vaccinium macrocarpon</i> / <i>Carex striata</i> var. <i>striata</i> - <i>Woodwardia areolata</i> Dwarf-shrubland (CEGL004165)	4.1	84	216	206	73	270	1	83	10	7
VI.C.1: <i>Pinus serotina</i> / <i>Ilex glabra</i> / <i>Woodwardia virginica</i> Woodland (CEGL004652)	4.0	93	198	71	15	43	2	79	1	19



Community Type	PH	Organic	Calcium	Magnesium	Potassium	Sodium	Manganese	Sand %	Silt %	Clay %
VII.A.1: <i>Taxodium distichum</i> - <i>Liquidambar styraciflua</i> - <i>Platanus occidentalis</i> / <i>Asimina triloba</i> Forest (CEGL004424)	4.4	10	653	81	64	39	6	55	43	2
VII.A.2: <i>Taxodium distichum</i> - <i>Taxodium ascendens</i> / <i>Panicum hemitomom</i> Woodland (CEGL004466)	5.2	1	99	22	7	32	1	92	6	2
VII.B.1: <i>Panicum hemitomom</i> - <i>Juncus</i> spp. Coastal Plain Lake Shore Herbaceous Vegetation (CEGL004307)	4.9	10	413	348	108	1474	1	77	18	4
VIII.A.1: <i>Quercus falcata</i> - <i>Pinus taeda</i> - ( <i>Fagus grandifolia</i> , <i>Quercus nigra</i> ) / <i>Persea palustris</i> Maritime Forest (CEGL007540)	4.0	5	141	43	41	70	5	84	13	3
X.A.1: <i>Borrichia frutescens</i> / ( <i>Spartina patens</i> , <i>Juncus roemerianus</i> ) Shrubland (CEGL003924)	4.6	33	474	543	175	2443	1	68	23	9
X.A.2: <i>Iva frutescens</i> / <i>Spartina patens</i> Shrubland (CEGL006848)	4.4	8	582	707	258	3131	2	68	22	10
XI.A.1: <i>Spartina patens</i> - <i>Distichlis spicata</i> - ( <i>Juncus roemerianus</i> ) Herbaceous Vegetation (CEGL004197)	5.3	15	530	857	296	5327	6	77	18	5
XI.A.2: <i>Schoenoplectus americanus</i> - <i>Spartina patens</i> Herbaceous Vegetation (CEGL006612)	5.2	43	975	1437	420	8948	4	58	27	14
XI.B.1: <i>Cladium mariscus</i> ssp. <i>jamaicense</i> Tidal Herbaceous Vegetation (CEGL004178)	4.7	57	764	863	246	3741	73	70	24	6
XI.B.2: <i>Juncus roemerianus</i> Herbaceous Vegetation (CEGL004186)	5.1	40	823	1280	402	6640	6	54	37	9
XII.A.1: <i>Juncus roemerianus</i> - <i>Pontederia cordata</i> Herbaceous Vegetation (CEGL004660)	5.3	62	762	749	310	3893	1	56	37	7

## Appendix 2: Association Groups with Poor or Fair Fit

CEGL	# of Plots	NVC Fit	Reason
<i>Quercus falcata</i> - <i>Quercus stellata</i> - <i>Carya alba</i> / <i>Vaccinium</i> spp. Coastal Plain Forest (CEGL007246)	1	Fair	Occurrence of species from lower slope, mesic topographic positions
<i>Pinus palustris</i> - ( <i>Pinus serotina</i> ) / <i>Ilex glabra</i> - <i>Gaylussacia frondosa</i> - ( <i>Kalmia carolina</i> ) Woodland (CEGL003647)	3	Fair to Good	High species diversity of one plot in the shrub and understory strata
<i>Taxodium distichum</i> - <i>Nyssa aquatica</i> - <i>Nyssa biflora</i> / <i>Fraxinus caroliniana</i> / <i>Itea virginica</i> Forest (CEGL007432)	1	Fair	Absence of <i>Nyssa biflora</i> and dominance of <i>Fraxinus</i> spp. in plot canopy/subcanopy
<i>Nyssa biflora</i> - <i>Liquidambar styraciflua</i> / <i>Glyceria septentrionalis</i> - <i>Hydrocotyle ranunculoides</i> Forest (CEGL007743)	1	Fair	Occurrence of <i>Nyssa aquatica</i> , <i>Taxodium distichum</i> , and <i>Fraxinus pennsylvanica</i> in the plot's canopy
<i>Quercus michauxii</i> - <i>Quercus pagoda</i> / <i>Clethra alnifolia</i> - <i>Leucothoe axillaris</i> Forest (CEGL007449)	4	Poor to Good	Absence of association nominal shrub species in all of these stands; occurrence of <i>Quercus phellos</i> as a canopy co-dominant in 'poor' fit plot
<i>Taxodium ascendens</i> / ( <i>Nyssa biflora</i> ) / <i>Leucothoe racemosa</i> - <i>Lyonia lucida</i> - <i>Morella cerifera</i> Depression Forest (CEGL007420)	2	Poor to Good	Occurrence of <i>Taxodium distichum</i> in the canopy of the 'poor' fit plot
<i>Ilex glabra</i> - <i>Lyonia lucida</i> - <i>Zenobia pulverulenta</i> Shrubland (CEGL003944)	2	Fair to Good	Occurrence of <i>Cyrilla racemiflora</i> and other co-dominating shrubs along with a relatively rich herbaceous layer ( <i>Sarracenia flava</i> , <i>Chamaedaphne calyculata</i> ) in 'fair' fit plot
<i>Chamaedaphne calyculata</i> - <i>Vaccinium macrocarpon</i> / <i>Carex striata</i> var. <i>striata</i> - <i>Woodwardia areolata</i> Dwarf-shrubland (CEGL004165)	2	Fair	Low abundance of the dwarf shrub, <i>Vaccinium macrocarpon</i> , in both plots
<i>Taxodium distichum</i> - <i>Liquidambar styraciflua</i> - <i>Platanus occidentalis</i> / <i>Asimina triloba</i> Forest (CEGL004424)	4	Fair to Good	High diversity of upland hardwood canopy species in 'fair' fit plot
<i>Taxodium distichum</i> - <i>Taxodium ascendens</i> / <i>Panicum hemitomon</i> Woodland (CEGL004466)	1	Fair	High diversity of herbaceous species found in plot
<i>Quercus falcata</i> - <i>Pinus taeda</i> - ( <i>Fagus grandifolia</i> , <i>Quercus nigra</i> ) / <i>Persea palustris</i> Maritime Forest (CEGL007540)	2	Fair	Plot falls outside the range of maritime fringe region
<i>Juniperus virginiana</i> var. <i>silicicola</i> / <i>Morella cerifera</i> / <i>Kosteletzkya virginica</i> - <i>Bacopa monnieri</i> Woodland (CEGL007166)	3	Poor to Fair	NVC Association for these community types is too broadly defined
<i>Pinus serotina</i> / <i>Morella cerifera</i> / <i>Osmunda regalis</i> var. <i>spectabilis</i> Woodland (CEGL003669)	1	Fair	Canopy of this plot is co-dominated by hardwood species
<i>Pinus taeda</i> / <i>Morella cerifera</i> / <i>Osmunda regalis</i> var. <i>spectabilis</i> Forest (CEGL006137)	3	Fair to Good	Canopy of one of these plots is co-dominated by hardwood species

CEGL	# of Plots	NVC Fit	Reason
<i>Borrichia frutescens</i> / ( <i>Spartina patens</i> , <i>Juncus roemerianus</i> ) Shrubland (CEGL003924)	2	Fair to Good	Absence of <i>Borrichia frutescens</i> in the plot
<i>Iva frutescens</i> / <i>Spartina patens</i> Shrubland (CEGL006848)	1	Fair	The plot may best represent an ecotone between shrub and graminod dominated saline tidal wetlands
<i>Spartina patens</i> - <i>Distichlis spicata</i> - ( <i>Juncus roemerianus</i> ) Herbaceous Vegetation (CEGL004197)	6	Fair to Good	Three of these plots contained high importance of <i>Spartina alterniflora</i> ; perhaps these are ecotonal between brackish and high saline tidal grasslands
<i>Schoenoplectus americanus</i> - <i>Spartina patens</i> Herbaceous Vegetation (CEGL006612)	1	Fair	Plot is dominated by a species of <i>Schoenoplectus</i> different from the community nominal
<i>Juncus roemerianus</i> Herbaceous Vegetation (CEGL004186)	2	Fair to Good	One plot is codominated by <i>Distichlis spicata</i>
<i>Juncus roemerianus</i> - <i>Pontederia cordata</i> Herbaceous Vegetation (CEGL004660)	1	Fair	Species composition of the plot does not resemble that of the association
<i>Ceratophyllum demersum</i> - <i>Utricularia macrorhiza</i> - <i>Nymphaea odorata</i> Herbaceous Vegetation (CEGL004661)	1	Poor	Species composition of the plot does not resemble that of the association



### Appendix 3: Floristic tables for Association Groups

#### Floristic table for Group I.A.1 :

##### CEGL007211 - *Fagus grandifolia* - *Quercus nigra* Forest

Number of Plots: 1  
Average Species Richness: 36 Species listed: 36  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Constancy	Avg Cover
		Class
<i>Fagus grandifolia</i> var. <i>caroliniana</i>	100%	7
<i>Ilex opaca</i> var. <i>opaca</i>	100%	6
<i>Pinus taeda</i>	100%	6
<i>Oxydendrum arboreum</i>	100%	5
<i>Quercus alba</i>	100%	5
<i>Gaylussacia frondosa</i>	100%	4
<i>Persea palustris</i>	100%	4
<i>Vaccinium corymbosum</i>	100%	4
<i>Acer rubrum</i> var. <i>rubrum</i>	100%	4
<i>Clethra alnifolia</i>	100%	4
<i>Symplocos tinctoria</i>	100%	3
<i>Nyssa sylvatica</i>	100%	3
<i>Mitchella repens</i>	100%	2
<i>Hamamelis virginiana</i> var. <i>virginiana</i>	100%	2
<i>Smilax glauca</i>	100%	2
Unknown	100%	2
<i>Magnolia virginiana</i>	100%	2
<i>Lyonia lucida</i>	100%	2
<i>Liquidambar styraciflua</i>	100%	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	2
<i>Gaultheria procumbens</i>	100%	2
<i>Amelanchier</i>	100%	2
<i>Smilax</i>	100%	1
<i>Quercus nigra</i>	100%	1
<i>Woodwardia areolata</i>	100%	1
<i>Smilax rotundifolia</i>	100%	1
<i>Vaccinium stamineum</i>	100%	1
<i>Hexastylis arifolia</i>	100%	1
<i>Arundinaria tecta</i>	100%	1
<i>Sassafras albidum</i>	100%	1
<i>Chimaphila maculata</i>	100%	1
<i>Ilex coriacea</i>	100%	1
<i>Ilex glabra</i>	100%	1
<i>Osmunda cinnamomea</i>	100%	1
<i>Pteridium aquilinum</i>	100%	1
<i>Quercus phellos</i>	100%	1

**Floristic table for Group II.A.1:**

**CEGL007246 - *Quercus falcata* - *Quercus stellata* - *Carya alba* / *Vaccinium* spp.  
Coastal Plain Forest**

Number of Plots: 1  
Average Species Richness: 47 Species listed: 47  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Quercus falcata</i>	100%	8
<i>Cornus florida</i>	100%	6
<i>Quercus alba</i>	100%	6
<i>Liquidambar styraciflua</i>	100%	6
<i>Oxydendrum arboreum</i>	100%	6
<i>Vaccinium tenellum</i>	100%	5
<i>Gaylussacia frondosa</i>	100%	5
<i>Vaccinium formosum</i>	100%	4
<i>Nyssa sylvatica</i>	100%	4
<i>Acer rubrum</i> var. <i>rubrum</i>	100%	4
<i>Ilex opaca</i> var. <i>opaca</i>	100%	3
<i>Hamamelis virginiana</i> var. <i>virginiana</i>	100%	3
<i>Vaccinium</i>	100%	3
<i>Parthenocissus quinquefolia</i>	100%	2
<i>Persea palustris</i>	100%	2
<i>Pinus taeda</i>	100%	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Tillandsia usneoides</i>	100%	2
<i>Morella cerifera</i>	100%	2
Unknown	100%	2
<i>Symplocos tinctoria</i>	100%	2
<i>Carya alba</i>	100%	2
<i>Arundinaria tecta</i>	100%	2
<i>Desmodium nudiflorum</i>	100%	2
<i>Carex</i>	100%	2
<i>Mitchella repens</i>	100%	2
<i>Chasmanthium</i>	100%	2
<i>Clethra alnifolia</i>	100%	2
<i>Diospyros virginiana</i>	100%	2
<i>Gelsemium sempervirens</i>	100%	2
<i>Malaxis unifolia</i>	100%	2
<i>Magnolia tripetala</i>	100%	2
<i>Lamiaceae</i>	100%	2
<i>Ilex glabra</i>	100%	2
<i>Monotropa uniflora</i>	100%	1
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	1
<i>Amelanchier</i>	100%	1
<i>Prunus serotina</i> var. <i>serotina</i>	100%	1
<i>Asteraceae</i>	100%	1
<i>Spiranthes praecox</i>	100%	1
<i>Smilax rotundifolia</i>	100%	1
<i>Hypericum hypericoides</i>	100%	1

Species	Avg Cover	
	Constancy	Class
<i>Sassafras albidum</i>	100%	1
<i>Quercus phellos</i>	100%	1
<i>Quercus laurifolia</i>	100%	1
<i>Dichantheium</i>	100%	1

**Floristic table for Group III.A.1:**

**Avg Cover**

**CEGL003647 - *Pinus palustris* - (*Pinus serotina*) / *Ilex glabra* - *Gaylussacia frondosa*  
(*Kalmia carolina*) Woodland**

Number of Plots: 3  
Average Species Richness: 40 Species listed: 49  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 73 due to ties

Species	Constancy	Class
<i>Sphagnum</i>	33%	2
<i>Nyssa biflora</i>	33%	2
<i>Nyssa sylvatica</i>	33%	2
<i>Rubus</i>	33%	2
<i>Rhododendron viscosum</i>	33%	2
<i>Dichanthelium tenue</i>	33%	2

Species	Avg Cover	
	Constancy	Class
<i>Arundinaria tecta</i>	100%	7
<i>Ilex glabra</i>	100%	6
<i>Pinus palustris</i>	100%	6
<i>Gaylussacia frondosa</i>	100%	5
<i>Liquidambar styraciflua</i>	100%	5
<i>Pinus serotina</i>	100%	5
<i>Persea palustris</i>	100%	4
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	4
<i>Osmunda cinnamomea</i>	100%	4
<i>Clethra alnifolia</i>	100%	3
<i>Morella cerifera</i>	100%	3
<i>Smilax laurifolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Aronia arbutifolia</i>	100%	2
<i>Dichanthelium</i>	100%	2
<i>Rhus copallinum</i> var. <i>copallinum</i>	100%	2
<i>Magnolia virginiana</i>	100%	2
<i>Pteridium aquilinum</i> var. <i>pseudocaudatum</i>	67%	6
<i>Morella caroliniensis</i>	67%	5
<i>Andropogon</i>	67%	4
<i>Woodwardia virginica</i>	67%	3
<i>Vaccinium formosum</i>	67%	2
<i>Vaccinium fuscum</i>	67%	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	67%	2
<i>Vaccinium tenellum</i>	67%	2
<i>Gaylussacia dumosa</i>	67%	2
<i>Symplocos tinctoria</i>	67%	2
<i>Asteraceae</i>	67%	2
<i>Tillandsia usneoides</i>	67%	1
<i>Eupatorium</i>	67%	1
<i>Pteridium aquilinum</i>	33%	4
<i>Rhododendron</i>	33%	2
<i>Rhododendron atlanticum</i>	33%	2
<i>Pinus taeda</i>	33%	2
<i>Carex striata</i>	33%	2
<i>Lyonia lucida</i>	33%	2
<i>Quercus nigra</i>	33%	2
<i>Aristida virgata</i>	33%	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	33%	2
<i>Calamagrostis cinnoides</i>	33%	2
<i>Eupatorium rotundifolium</i>	33%	2
<i>Andropogon</i> [ <i>capillipes</i> + <i>glomeratus</i> ]	33%	2
<i>Symphyotrichum dumosum</i>	33%	2



**Floristic table for Group IV.A.1 :**

**CEGL007432 - *Taxodium distichum* - *Nyssa aquatica* - *Nyssa biflora* / *Fraxinus caroliniana* / *Itea virginica* Forest**

Number of Plots: 1  
Average Species Richness: 31 Species listed: 31  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Nyssa aquatica</i>	100%	8
<i>Fraxinus caroliniana</i>	100%	6
<i>Fraxinus pennsylvanica</i>	100%	6
<i>Glyceria septentrionalis</i>	100%	5
<i>Saururus cernuus</i>	100%	5
<i>Taxodium distichum</i>	100%	5
<i>Acer rubrum</i> var. <i>rubrum</i>	100%	5
<i>Sagittaria lancifolia</i> var. <i>media</i>	100%	4
<i>Ulmus americana</i>	100%	3
<i>Solidago</i>	100%	2
<i>Triadenum walteri</i>	100%	2
<i>Peltandra virginica</i>	100%	2
<i>Quercus lyrata</i>	100%	2
<i>Polygonum</i>	100%	2
<i>Viola</i>	100%	2
<i>Woodwardia areolata</i>	100%	2
<i>Boehmeria cylindrica</i>	100%	2
<i>Orchidaceae</i>	100%	2
<i>Itea virginica</i>	100%	2
<i>Iris virginica</i>	100%	2
<i>Hydrocotyle</i>	100%	2
<i>Cornus foemina</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	1
<i>Carex striata</i> var. <i>striata</i>	100%	1
<i>Cicuta maculata</i> var. <i>maculata</i>	100%	1
<i>Clematis viorna</i>	100%	1
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	1
<i>Clethra alnifolia</i>	100%	1
<i>Galium obtusum</i> var. <i>obtusum</i>	100%	1
<i>Potentilla indica</i>	100%	1
<i>Polygonaceae</i>	100%	1

**Floristic table for Group IV.A.2 :**

**CEGL007743 - *Nyssa biflora* - *Liquidambar styraciflua* / *Glyceria septentrionalis* - *Hydrocotyle ranunculoides* Forest**

Number of Plots: 1  
 Average Species Richness: 46 Species listed: 46  
 Average Plot Size: 1000 May be > avg. spp. richness  
 Homoteneity: 100 due to ties

Species	Constancy	Avg Cover Class
<i>Galium</i>	100%	1
<i>Impatiens</i>	100%	1
<i>Ptilimnium</i>	100%	1

Species	Constancy	Avg Cover Class
<i>Nyssa aquatica</i>	100%	8
<i>Acer rubrum</i>	100%	7
<i>Taxodium distichum</i>	100%	7
<i>Fraxinus pennsylvanica</i>	100%	6
<i>Fraxinus caroliniana</i>	100%	6
<i>Glyceria septentrionalis</i>	100%	5
<i>Nyssa biflora</i>	100%	5
<i>Quercus laurifolia</i>	100%	4
<i>Cornus foemina</i>	100%	4
<i>Saururus cernuus</i>	100%	4
<i>Unknown</i>	100%	3
<i>Polygonum</i>	100%	2
<i>Symphotrichum</i>	100%	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	2
<i>Ulmus americana</i>	100%	2
<i>Liquidambar styraciflua</i>	100%	2
<i>Itea virginica</i>	100%	2
<i>Carex stipata</i> var. <i>maxima</i>	100%	2
<i>Cicuta maculata</i> var. <i>maculata</i>	100%	2
<i>Viola esculenta</i>	100%	2
<i>Hydrocotyle</i>	100%	2
<i>Arundinaria tecta</i>	100%	2
<i>Bidens</i>	100%	2
<i>Ilex laevigata</i>	100%	2
<i>Triadenum walteri</i>	100%	1
<i>Baccharis halimifolia</i>	100%	1
<i>Cardamine</i>	100%	1
<i>Smilax walteri</i>	100%	1
<i>Smilax smallii</i>	100%	1
<i>Smilax rotundifolia</i>	100%	1
<i>Carex</i>	100%	1
<i>Sagittaria lancifolia</i>	100%	1
<i>Clematis crispa</i>	100%	1
<i>Pontederia cordata</i> var. <i>cordata</i>	100%	1
<i>Decumaria barbara</i>	100%	1
<i>Pilea</i>	100%	1
<i>Persea palustris</i>	100%	1
<i>Peltandra virginica</i>	100%	1
<i>Parthenocissus quinquefolia</i>	100%	1
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100%	1
<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	100%	1
<i>Eubotrys racemosa</i>	100%	1
<i>Fraxinus</i>	100%	1

**Floristic table for Group V.A.1:**

**CEGL007449 - *Quercus michauxii* - *Quercus pagoda* / *Clethra alnifolia* - *Leucothoe axillaris* Forest**

Number of Plots: 4  
 Average Species Richness: 43 Species listed: 46  
 Average Plot Size: 1000 May be > avg. spp. richness  
 Homoteneity: 74 due to ties

Species	Constancy	Avg Cover Class
<i>Hypericum</i>	50%	1
<i>Ligustrum sinense</i>	50%	1
<i>Microstegium vimineum</i>	50%	1

Species	Constancy	Avg Cover Class
<i>Ilex opaca</i> var. <i>opaca</i>	100%	7
<i>Quercus pagoda</i>	100%	6
<i>Quercus michauxii</i>	100%	6
<i>Liriodendron tulipifera</i>	100%	6
<i>Arundinaria tecta</i>	100%	6
<i>Liquidambar styraciflua</i>	100%	5
<i>Parthenocissus quinquefolia</i>	100%	4
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	3
<i>Woodwardia areolata</i>	100%	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	2
<i>Bignonia capreolata</i>	100%	2
<i>Smilax rotundifolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Mitchella repens</i>	100%	2
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	75%	6
<i>Lonicera japonica</i>	75%	4
<i>Asimina triloba</i>	75%	4
<i>Fagus grandifolia</i> var. <i>caroliniana</i>	75%	4
<i>Quercus nigra</i>	75%	4
<i>Magnolia virginiana</i>	75%	2
<i>Euonymus americanus</i>	75%	2
<i>Carex</i>	75%	2
<i>Poaceae</i>	75%	2
<i>Rubus</i>	75%	2
<i>Dichanthelium</i>	75%	2
<i>Osmunda cinnamomea</i>	75%	2
<i>Juncus</i>	75%	1
<i>Prunus caroliniana</i>	75%	1
<i>Fraxinus pennsylvanica</i>	50%	3
<i>Nyssa sylvatica</i>	50%	3
<i>Vaccinium fuscum</i>	50%	3
<i>Nyssa biflora</i>	50%	3
<i>Pinus taeda</i>	50%	2
<i>Callicarpa americana</i>	50%	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	50%	2
<i>Arisaema triphyllum</i>	50%	2
<i>Athyrium asplenoides</i>	50%	2
<i>Solidago</i>	50%	2
<i>Persea palustris</i>	50%	2
<i>Symplocos tinctoria</i>	50%	2
<i>Crataegus</i>	50%	2
<i>Gelsemium sempervirens</i>	50%	1
<i>Morus rubra</i>	50%	1



**Floristic table for Group V.B.1:**

**CEGL004429 - *Taxodium distichum* - *Nyssa biflora* / *Berchemia scandens* - *Toxicodendron radicans* / *Woodwardia areolata* Forest**

Number of Plots: 1  
Average Species Richness: 24 Species listed: 24  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Constancy	Avg Cover
		Class
<i>Nyssa biflora</i>	100%	8
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	7
<i>Ilex opaca</i> var. <i>opaca</i>	100%	7
<i>Persea palustris</i>	100%	6
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	6
<i>Magnolia virginiana</i>	100%	6
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	5
<i>Taxodium distichum</i>	100%	4
<i>Gelsemium sempervirens</i>	100%	4
<i>Smilax glauca</i>	100%	3
<i>Liriodendron tulipifera</i>	100%	3
<i>Asplenium platyneuron</i>	100%	3
<i>Smilax rotundifolia</i>	100%	2
<i>Smilax laurifolia</i>	100%	2
<i>Mitchella repens</i>	100%	2
<i>Decumaria barbara</i>	100%	2
<i>Athyrium asplenoides</i>	100%	2
<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	100%	2
<i>Woodwardia areolata</i>	100%	1
<i>Rubus</i>	100%	1
<i>Euonymus americanus</i>	100%	1
<i>Bignonia capreolata</i>	100%	1
<i>Aralia spinosa</i>	100%	1
<i>Parthenocissus quinquefolia</i>	100%	1

**Floristic table for Group V.B.2:**

**CEGL004679 - *Nyssa biflora* - *Liquidambar styraciflua* - *Acer rubrum* var. *trilobum* / *Clethra alnifolia* Forest**

Number of Plots: 1  
Average Species Richness: 34 Species listed: 34  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	8
<i>Liquidambar styraciflua</i>	100%	7
<i>Persea palustris</i>	100%	7
<i>Nyssa biflora</i>	100%	7
<i>Vaccinium fuscatum</i>	100%	6
<i>Woodwardia areolata</i>	100%	6
<i>Arundinaria tecta</i>	100%	6
<i>Magnolia virginiana</i>	100%	5
<i>Ilex opaca</i> var. <i>opaca</i>	100%	4
<i>Rubus</i>	100%	4
<i>Decumaria barbara</i>	100%	3
<i>Morella caroliniensis</i>	100%	3
<i>Vaccinium formosum</i>	100%	3
<i>Smilax laurifolia</i>	100%	3
<i>Gelsemium sempervirens</i>	100%	3
<i>Sphagnum</i>	100%	2
<i>Carex</i>	100%	2
<i>Carex striata</i>	100%	2
<i>Dichanthelium</i>	100%	2
<i>Osmunda cinnamomea</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	2
<i>Pinus taeda</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	2
<i>Amelanchier</i>	100%	1
<i>Woodwardia virginica</i>	100%	1
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	1
<i>Viburnum nudum</i>	100%	1
<i>Smilax walteri</i>	100%	1
<i>Quercus nigra</i>	100%	1
<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	100%	1
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100%	1
<i>Ilex glabra</i>	100%	1
<i>Symplocos tinctoria</i>	100%	1

**Floristic table for Group V.B.3:**

**CEGL007420 - *Taxodium ascendens* / (*Nyssa biflora*) / *Leucothoe racemosa* - *Lyonia lucida* - *Morella cerifera* Depression Forest**

Number of Plots: 2  
 Average Species Richness: 24 Species listed: 27  
 Average Plot Size: 1000 May be > avg. spp. richness  
 Homoteneity: 83 due to ties

Species	Constancy	Avg Cover
		Class
<i>Lyonia lucida</i>	100%	7
<i>Persea palustris</i>	100%	7
<i>Taxodium ascendens</i>	100%	6
<i>Nyssa biflora</i>	100%	6
<i>Ilex coriacea</i>	100%	5
<i>Ilex opaca</i> var. <i>opaca</i>	100%	5
<i>Ilex glabra</i>	100%	4
<i>Clethra alnifolia</i>	100%	4
<i>Magnolia virginiana</i>	100%	4
<i>Smilax laurifolia</i>	100%	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	2
<i>Woodwardia areolata</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Osmunda cinnamomea</i>	100%	2
<i>Gelsemium sempervirens</i>	100%	2
<i>Acer rubrum</i> var. <i>rubrum</i>	50%	6
<i>Acer rubrum</i> var. <i>trilobum</i>	50%	6
<i>Taxodium distichum</i>	50%	5
<i>Sphagnum</i>	50%	3
<i>Gordonia lasianthus</i>	50%	3
<i>Vaccinium formosum</i>	50%	3
<i>Vaccinium fuscatum</i>	50%	2
<i>Eubotrys racemosa</i>	50%	2
<i>Decumaria barbara</i>	50%	2
<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	50%	2
<i>Pinus serotina</i>	50%	2

**Floristic table for Group VI.A.1:**

**CEGL006146 - *Chamaecyparis thyoides* / *Persea palustris* / *Lyonia lucida* - *Ilex coriacea* Forest**

Number of Plots:	2	
Average Species Richness:	22	Species listed: 27
Average Plot Size:	700	May be > avg. spp. richness
Homoteneity:	82	due to ties

Species	Avg Cover	
	Constancy	Class
<i>Chamaecyparis thyoides</i>	100%	8
<i>Lyonia lucida</i>	100%	7
<i>Sphagnum</i>	100%	6
<i>Persea palustris</i>	100%	6
<i>Nyssa biflora</i>	100%	6
<i>Gordonia lasianthus</i>	100%	5
<i>Smilax laurifolia</i>	100%	4
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	4
<i>Ilex glabra</i>	100%	4
<i>Magnolia virginiana</i>	100%	4
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	3
<i>Vaccinium formosum</i>	100%	3
<i>Woodwardia virginica</i>	100%	2
<i>Woodwardia areolata</i>	100%	2
<i>Ilex coriacea</i>	50%	7
<i>Pinus taeda</i>	50%	4
<i>Gaylussacia frondosa</i>	50%	3
<i>Peltandra virginica</i>	50%	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	50%	2
<i>Ilex opaca</i> var. <i>opaca</i>	50%	2
<i>Vaccinium fuscum</i>	50%	2
<i>Parthenocissus quinquefolia</i>	50%	2
Moss	50%	2
<i>Morella cerifera</i>	50%	2
<i>Clethra alnifolia</i>	50%	2
<i>Quercus nigra</i>	50%	2
<i>Gelsemium sempervirens</i>	50%	2



**Floristic table for Group VI.B.1:**

**CEGL003944 - *Ilex glabra* - *Lyonia lucida* - *Zenobia pulverulenta* Shrubland**

Number of Plots:	2	
Average Species Richness:	14	Species listed: 18
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	57	due to ties

Species	Avg Cover	
	Constancy	Class
<i>Ilex glabra</i>	100%	7
<i>Persea palustris</i>	100%	2
<i>Sphagnum</i>	50%	7
<i>Zenobia pulverulenta</i>	50%	6
<i>Cyrilla racemiflora</i>	50%	5
<i>Carex</i>	50%	4
<i>Pinus serotina</i>	50%	3
<i>Lyonia lucida</i>	50%	3
<i>Nyssa biflora</i>	50%	2
<i>Chamaedaphne calyculata</i>	50%	2
<i>Osmunda cinnamomea</i>	50%	2
<i>Rhus copallinum</i> var. <i>copallinum</i>	50%	2
<i>Sarracenia flava</i>	50%	2
<i>Sarracenia purpurea</i>	50%	2
<i>Smilax laurifolia</i>	50%	2
<i>Gaylussacia dumosa</i> var. <i>bigeloviana</i>	50%	2
<i>Vaccinium fuscatum</i>	50%	2
<i>Morella cerifera</i>	50%	2

**Floristic table for Group VI.B.2:**

**CEGL004165 - *Chamaedaphne calyculata* - *Vaccinium macrocarpon* / *Carex striata* var. *striata* - *Woodwardia areolata* Dwarf-shrubland**

Number of Plots: 2  
Average Species Richness: 26 Species listed: 32  
Average Plot Size: 100 May be > avg. spp. richness  
Homoteneity: 87 due to ties

Species	Constancy	Avg Cover
		Class
<i>Sphagnum</i>	100%	8
<i>Woodwardia virginica</i>	100%	7
<i>Ilex glabra</i>	100%	6
<i>Morella cerifera</i>	100%	5
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	4
<i>Rhynchospora plumosa</i>	100%	4
<i>Chamaedaphne calyculata</i>	100%	4
<i>Smilax laurifolia</i>	100%	4
<i>Vaccinium macrocarpon</i>	100%	4
<i>Persea palustris</i>	100%	4
<i>Peltandra virginica</i>	100%	3
<i>Osmunda cinnamomea</i>	100%	3
<i>Lyonia lucida</i>	100%	3
<i>Carex striata</i>	100%	3
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	2
<i>Nyssa biflora</i>	100%	2
<i>Utricularia subulata</i>	100%	2
<i>Pinus serotina</i>	100%	2
<i>Xyris ambigua</i>	100%	1
<i>Sphagnum cuspidatum</i>	50%	5
<i>Andropogon glomeratus</i>	50%	3
<i>Cyrilla racemiflora</i>	50%	2
<i>Magnolia virginiana</i>	50%	2
<i>Poaceae</i>	50%	2
<i>Drosera capillaris</i>	50%	2
<i>Drosera intermedia</i>	50%	2
<i>Triadenum tubulosum</i>	50%	2
<i>Triadenum virginicum</i>	50%	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	50%	2
<i>Vaccinium formosum</i>	50%	2
<i>Andropogon glaucopsis</i>	50%	2
<i>Gaylussacia dumosa</i> var. <i>bigeloviana</i>	50%	2

**Floristic table for Group VI.C.1:**

**CEGL004652 - *Pinus serotina* / *Ilex glabra* / *Woodwardia virginica* Woodland**

Number of Plots:	1	
Average Species Richness:	10	Species listed: 10
Average Plot Size:	200	May be > avg. spp. richness
Homoteneity:	100	due to ties

Species	Avg Cover	
	Constancy	Class
<i>Pinus serotina</i>	100%	6
<i>Smilax laurifolia</i>	100%	5
<i>Vaccinium formosum</i>	100%	3
<i>Persea palustris</i>	100%	3
<i>Rhus copallinum</i> var. <i>copallinum</i>	100%	3
<i>Smilax glauca</i>	100%	2
<i>Morella cerifera</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	2
<i>Aralia spinosa</i>	100%	2
<i>Lyonia lucida</i>	100%	2

**Floristic table for Group VII.A.1:**

**CEGL004424 - *Taxodium distichum* - *Liquidambar styraciflua* - *Platanus occidentalis* / *Asimina triloba* Forest**

Number of Plots:	5	
Average Species Richness:	39	Species listed: 43
Average Plot Size:	740	May be > avg. spp. richness
Homoteneity:	55	due to ties

Species	Avg Cover	
	Constancy	Class
<i>Liquidambar styraciflua</i>	80%	6
<i>Liriodendron tulipifera</i>	80%	6
<i>Asimina triloba</i>	80%	6
<i>Acer rubrum</i>	80%	4
<i>Toxicodendron radicans</i> var. <i>radicans</i>	80%	2
<i>Parthenocissus quinquefolia</i>	80%	2
<i>Smilax rotundifolia</i>	80%	1
<i>Taxodium distichum</i>	60%	6
Poaceae	60%	4
<i>Boehmeria cylindrica</i>	60%	2
<i>Athyrium asplenoides</i>	60%	2
<i>Ulmus rubra</i>	60%	2
<i>Eupatorium capillifolium</i>	60%	2
<i>Phytolacca americana</i>	60%	2
<i>Juncus effusus</i> ssp. <i>solutus</i>	60%	2
<i>Carex</i>	60%	2
<i>Lactuca</i>	60%	2
<i>Persicaria virginiana</i>	60%	1
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	60%	1
<i>Prunus serotina</i> var. <i>serotina</i>	60%	1
<i>Eupatorium perfoliatum</i>	60%	1
<i>Campsis radicans</i>	60%	1
<i>Woodwardia areolata</i>	40%	3
<i>Microstegium vimineum</i>	40%	3
<i>Tillandsia usneoides</i>	40%	3
<i>Nyssa biflora</i>	40%	2
<i>Glyceria septentrionalis</i>	40%	2
<i>Erechtites hieracifolia</i>	40%	2
<i>Cornus foemina</i>	40%	2
<i>Viola</i>	40%	2
Unknown	40%	2
<i>Woodwardia virginica</i>	40%	2
<i>Sphenopholis obtusata</i>	40%	2
<i>Decodon verticillatus</i>	40%	2
<i>Melothria pendula</i>	40%	2
<i>Rubus</i>	40%	2
<i>Populus heterophylla</i>	40%	2
<i>Callicarpa americana</i>	40%	2
<i>Sambucus canadensis</i>	40%	1
<i>Smilax glauca</i>	40%	1
Cyperaceae	40%	1
<i>Osmunda regalis</i> var. <i>spectabilis</i>	40%	1
<i>Potentilla indica</i>	40%	1



**Floristic table for Group VII.A.2:**

**CEGL004466 - *Taxodium distichum* - *Taxodium ascendens* / *Panicum hemitomom* Woodland**

Number of Plots: 1  
Average Species Richness: 39 Species listed: 39  
Average Plot Size: 1000 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Taxodium distichum</i>	100%	5
<i>Juncus</i>	100%	4
<i>Taxodium ascendens</i>	100%	4
<i>Scrophularia</i>	100%	2
<i>Juncus repens</i>	100%	2
<i>Morella cerifera</i>	100%	2
<i>Juncus coriaceus</i>	100%	2
<i>Solidago</i>	100%	2
<i>Triadenum walteri</i>	100%	2
<i>Xyris</i>	100%	2
<i>Andropogon</i>	100%	2
<i>Hypericum</i>	100%	2
<i>Unknown</i>	100%	2
<i>Asteraceae</i>	100%	2
<i>Acer rubrum</i> var. <i>rubrum</i>	100%	2
<i>Cyperaceae</i>	100%	2
<i>Carex</i>	100%	2
<i>Dichanthelium</i>	100%	2
<i>Cyrilla racemiflora</i>	100%	2
<i>Drosera intermedia</i>	100%	2
<i>Eleocharis</i>	100%	2
<i>Eupatorium</i>	100%	2
<i>Eupatorium perfoliatum</i>	100%	2
<i>Galium</i>	100%	1
<i>Rubus</i>	100%	1
<i>Campsis radicans</i>	100%	1
<i>Smilax laurifolia</i>	100%	1
<i>Baccharis halimifolia</i>	100%	1
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	1
<i>Lycopodiella prostrata</i>	100%	1
<i>Pseudognaphalium</i>	100%	1
<i>Prunus serotina</i> var. <i>serotina</i>	100%	1
<i>Poaceae</i>	100%	1
<i>Parthenocissus quinquefolia</i>	100%	1
<i>Murdannia keisak</i>	100%	1
<i>Moss</i>	100%	1
<i>Smilax glauca</i>	100%	1
<i>Liriodendron tulipifera</i>	100%	1
<i>Hydrocotyle</i>	100%	1

**Floristic table for Group VII.B.1:**

**CEGL004307 - *Panicum hemitomom* - *Juncus* spp. Coastal Plain Lake Shore Herbaceous Vegetation**

Number of Plots: 3  
Average Species Richness: 28 Species listed: 30  
Average Plot Size: 100 May be > avg. spp. richness  
Homoteneity: 68 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Juncus militaris</i>	100%	6
<i>Panicum hemitomom</i>	100%	5
<i>Taxodium distichum</i>	100%	4
<i>Poaceae</i>	67%	4
<i>Eupatorium capillifolium</i>	67%	3
<i>Utricularia subulata</i>	67%	3
<i>Eriocaulon aquaticum</i>	67%	2
<i>Xyris</i>	67%	2
<i>Hydrocotyle umbellata</i>	67%	2
<i>Panicum</i>	67%	2
<i>Eleocharis equisetoides</i>	67%	2
<i>Andropogon glaucopsis</i>	67%	2
<i>Centella erecta</i>	67%	2
<i>Rhexia</i>	67%	2
<i>Cephalanthus occidentalis</i>	67%	2
<i>Nymphaea odorata</i>	67%	2
<i>Eupatorium</i>	67%	2
<i>Juncus</i>	67%	2
<i>Drosera intermedia</i>	67%	2
<i>Acer rubrum</i>	67%	2
<i>Ludwigia linifolia</i>	67%	2
<i>Sagittaria isoetiformis</i>	67%	2
Unknown	67%	2
<i>Eupatorium perfoliatum</i>	67%	2
<i>Smilax laurifolia</i>	67%	2
<i>Morella cerifera</i>	67%	2
<i>Algae</i>	33%	6
<i>Cyrilla racemiflora</i>	33%	4
<i>Eleocharis</i>	33%	4
<i>Sphagnum</i>	33%	4

**Floristic table for Group VIII.A.1:**

**CEGL007540 - *Quercus falcata* - *Pinus taeda* - (*Fagus grandifolia*, *Quercus nigra*) / *Persea palustris* Maritime Forest**

Number of Plots: 2  
Average Species Richness: 39 Species listed: 42  
Average Plot Size: 900 May be > avg. spp. richness  
Homoteneity: 78 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Quercus nigra</i>	100%	7
<i>Symplocos tinctoria</i>	100%	6
<i>Pinus taeda</i>	100%	6
<i>Fagus grandifolia</i> var. <i>caroliniana</i>	100%	6
<i>Quercus falcata</i>	100%	6
<i>Liquidambar styraciflua</i>	100%	6
<i>Cornus florida</i>	100%	4
<i>Persea palustris</i>	100%	4
<i>Quercus velutina</i>	100%	3
<i>Castanea pumila</i>	100%	3
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100%	3
<i>Ilex opaca</i> var. <i>opaca</i>	100%	3
<i>Nyssa sylvatica</i>	100%	2
<i>Sassafras albidum</i>	100%	2
<i>Smilax rotundifolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Asimina parviflora</i>	100%	2
<i>Gelsemium sempervirens</i>	100%	2
<i>Carex</i>	100%	2
<i>Morus rubra</i>	100%	2
<i>Callicarpa americana</i>	100%	2
<i>Hamamelis virginiana</i> var. <i>virginiana</i>	100%	1
<i>Liriodendron tulipifera</i>	50%	5
<i>Acer rubrum</i> var. <i>rubrum</i>	50%	4
<i>Carya pallida</i>	50%	4
<i>Styrax grandifolius</i>	50%	3
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	50%	3
<i>Quercus laurifolia</i>	50%	3
<i>Clethra alnifolia</i>	50%	2
<i>Oxydendrum arboreum</i>	50%	2
<i>Hexastylis arifolia</i>	50%	2
<i>Smilax bona-nox</i>	50%	2
<i>Vaccinium formosum</i>	50%	2
<i>Quercus phellos</i>	50%	2
<i>Mitchella repens</i>	50%	2
<i>Aralia spinosa</i>	50%	2
<i>Parthenocissus quinquefolia</i>	50%	2
<i>Gaylussacia frondosa</i>	50%	2
<i>Prunus serotina</i> var. <i>serotina</i>	50%	2
<i>Vitis</i>	50%	2
<i>Quercus alba</i>	50%	2
<i>Vaccinium corymbosum</i>	50%	2

Floristic table for Group IX.A.1:

CEGL004484 - *Nyssa biflora* - (*Taxodium distichum*, *Nyssa aquatica*)  
/ *Morella cerifera* - *Rosa palustris* Tidal Forest

Number of Plots: 3  
Average Species Richness: 48 Species listed: 78  
Average Plot Size: 500 May be > avg. spp. richness  
Homoteneity: 68 due to ties

Species	Constancy	Avg Cover	
		Class	
<i>Nyssa biflora</i>	100%	6	
<i>Taxodium distichum</i>	100%	5	
<i>Morella cerifera</i>	100%	5	
<i>Nyssa aquatica</i>	100%	5	
<i>Liquidambar styraciflua</i>	100%	5	
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100%	4	
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	3	
Unknown	100%	3	
<i>Hydrocotyle</i>	100%	3	
<i>Baccharis halimifolia</i>	100%	2	
<i>Poaceae</i>	100%	2	
<i>Rosa palustris</i>	100%	2	
<i>Saururus cernuus</i>	100%	2	
<i>Itea virginica</i>	100%	2	
<i>Lonicera japonica</i>	100%	2	
<i>Cicuta maculata</i> var. <i>maculata</i>	100%	2	
<i>Fraxinus caroliniana</i>	67%	6	
<i>Acer rubrum</i> var. <i>trilobum</i>	67%	5	
<i>Alternanthera philoxeroides</i>	67%	3	
<i>Peltandra virginica</i>	67%	2	
<i>Juncus</i>	67%	2	
<i>Parthenocissus quinquefolia</i>	67%	2	
<i>Pinus taeda</i>	67%	2	
<i>Persea palustris</i>	67%	2	
<i>Clematis</i>	67%	2	
<i>Persicaria sagittata</i>	67%	2	
<i>Cyrilla racemiflora</i>	67%	2	
<i>Persicaria</i>	67%	2	
<i>Phoradendron serotinum</i> ssp. <i>serotinum</i>	67%	2	
<i>Carex</i>	67%	2	
<i>Clethra alnifolia</i>	67%	2	
<i>Ptilimnium</i>	67%	1	
<i>Galium</i>	67%	1	
<i>Mikania scandens</i>	67%	1	
<i>Panicum</i>	33%	6	
<i>Taxodium ascendens</i>	33%	6	
<i>Spartina patens</i>	33%	5	
<i>Smilax</i>	33%	2	
<i>Carex</i> sect. <i>Ovales</i>	33%	2	
<i>Acer rubrum</i>	33%	2	
<i>Eubotrys racemosa</i>	33%	2	
<i>Sphenopholis pensylvanica</i>	33%	2	
<i>Acer rubrum</i> var. <i>rubrum</i>	33%	2	

Species	Constancy	Avg Cover	
		Class	
<i>Sisyrinchium</i>	33%	2	
<i>Iris virginica</i>	33%	2	
<i>Woodwardia virginica</i>	33%	2	
<i>Smilax auriculata</i>	33%	2	
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	33%	2	
<i>Solidago sempervirens</i>	33%	2	
<i>Smilax walteri</i>	33%	2	
<i>Smilax walteri</i>	33%	2	
[ <i>Peltandra</i> + <i>Pontederia</i> + <i>Sagittaria</i> ]	33%	2	
<i>Viburnum nudum</i>	33%	2	
<i>Viola</i>	33%	2	
<i>Salix caroliniana</i>	33%	2	
<i>Boehmeria cylindrica</i>	33%	2	
<i>Vaccinium fuscum</i>	33%	2	
<i>Typha latifolia</i>	33%	2	
<i>Smilax rotundifolia</i>	33%	2	
<i>Elymus virginicus</i>	33%	2	
<i>Ipomoea sagittata</i>	33%	2	
<i>Juncus effusus</i> ssp. <i>solutus</i>	33%	2	
<i>Ilex decidua</i> var. <i>decidua</i>	33%	2	
<i>Galium tinctorium</i> var. <i>floridanum</i>	33%	2	
<i>Magnolia virginiana</i>	33%	2	
<i>Fraxinus profunda</i>	33%	2	
<i>Amelanchier stolonifera</i>	33%	2	
<i>Osmunda cinnamomea</i>	33%	2	
<i>Cyperaceae</i>	33%	2	
<i>Cornus foemina</i>	33%	2	
<i>Carex seorsa</i>	33%	2	
<i>Carex lurida</i>	33%	2	
<i>Carex gynandra</i>	33%	2	
<i>Poa</i>	33%	2	
<i>Pontederia cordata</i> var. <i>cordata</i>	33%	2	
<i>Ptilimnium ahlesii</i>	33%	2	
<i>Ranunculus</i>	33%	2	
<i>Rhododendron viscosum</i>	33%	2	
<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	33%	2	



**Floristic table for Group IX.B.1:**

**CEGL007166 - *Juniperus virginiana* var. *silicicola* / *Morella cerifera* / *Kosteletzkya virginica* - *Bacopa monnieri* Woodland**

Number of Plots:	3	
Average Species Richness:	20	Species listed: 20
Average Plot Size:	533	May be > avg. spp. richness
Homoteneity:	57	due to ties

Species	Avg Cover	
	Constancy	Class
<i>Morella cerifera</i>	100%	5
<i>Pinus taeda</i>	100%	3
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	3
<i>Distichlis spicata</i>	67%	7
<i>Juniperus virginiana</i> var. <i>silicicola</i>	67%	6
<i>Juncus roemerianus</i>	67%	6
<i>Iva frutescens</i>	67%	4
<i>Baccharis halimifolia</i>	67%	3
<i>Carex</i>	67%	2
<i>Solidago sempervirens</i>	67%	2
<i>Sabal minor</i>	67%	2
<i>Typha angustifolia</i>	33%	6
<i>Juniperus virginiana</i>	33%	6
<i>Spartina patens</i>	33%	5
<i>Bolboschoenus robustus</i>	33%	5
<i>Fimbristylis castanea</i>	33%	5
<i>Spartina cynosuroides</i>	33%	3
<i>Persea palustris</i>	33%	3
<i>Tillandsia usneoides</i>	33%	2
<i>Typha latifolia</i>	33%	2

Floristic table for Group IX.C.1:

CEGL003669 - *Pinus serotina* / *Morella cerifera* / *Osmunda regalis* var. *spectabilis* Woodland

Species  
*Carex*

Avg Cover  
Constancy Class  
100% 1

Number of Plots: 1  
Average Species Richness: 44 Species listed: 44  
Average Plot Size: 800 May be > avg. spp. richness  
Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Morella cerifera</i>	100%	7
<i>Nyssa biflora</i>	100%	6
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100%	6
<i>Pinus serotina</i>	100%	4
<i>Persea palustris</i>	100%	4
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	4
<i>Quercus laurifolia</i>	100%	3
<i>Smilax glauca</i>	100%	2
<i>Rubus</i>	100%	2
<i>Poaceae</i>	100%	2
<i>Smilax walteri</i>	100%	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	2
<i>Osmunda cinnamomea</i>	100%	2
<i>Cyperaceae</i>	100%	2
<i>Magnolia virginiana</i>	100%	2
<i>Mikania scandens</i>	100%	2
<i>Viola primulifolia</i>	100%	2
<i>Dichanthelium</i>	100%	2
<i>Lonicera japonica</i>	100%	2
<i>Juniperus virginiana</i> var. <i>silicicola</i>	100%	2
<i>Ilex opaca</i> var. <i>opaca</i>	100%	2
<i>Gelsemium sempervirens</i>	100%	2
<i>Berchemia scandens</i>	100%	2
<i>Carex striata</i>	100%	2
<i>Bignonia capreolata</i>	100%	1
<i>Solidago</i>	100%	1
<i>Sphagnum</i>	100%	1
<i>Symphyotrichum</i>	100%	1
<i>Tillandsia usneoides</i>	100%	1
<i>Smilax laurifolia</i>	100%	1
<i>Viburnum nudum</i>	100%	1
<i>Erigeron vernus</i>	100%	1
<i>Andropogon tenuispathus</i>	100%	1
<i>Lyonia lucida</i>	100%	1
<i>Smilax bona-nox</i>	100%	1
<i>Carex elliotii</i>	100%	1
<i>Pteridium aquilinum</i>	100%	1
<i>Pluchea odorata</i>	100%	1
<i>Asplenium platyneuron</i>	100%	1
<i>Eupatorium serotinum</i>	100%	1
<i>Hydrocotyle</i>	100%	1
<i>Mitchella repens</i>	100%	1

**Floristic table for Group IX.C.2:**

**CEGL006137 - *Pinus taeda* / *Morella cerifera* / *Osmunda regalis* var. *spectabilis* Forest**

Number of Plots: 3  
Average Species Richness: 23 Species listed: 24  
Average Plot Size: 467 May be > avg. spp. richness  
Homoteneity: 64 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Morella cerifera</i>	100%	7
<i>Pinus taeda</i>	100%	6
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100%	5
<i>Poaceae</i>	100%	2
<i>Persea palustris</i>	67%	5
<i>Baccharis halimifolia</i>	67%	3
<i>Smilax glauca</i>	67%	2
<i>Panicum</i>	67%	2
<i>Liquidambar styraciflua</i>	67%	2
<i>Diospyros virginiana</i>	67%	2
<i>Solidago sempervirens</i>	67%	2
<i>Rubus</i>	67%	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	67%	2
<i>Ipomoea</i>	67%	2
<i>Smilax bona-nox</i>	67%	2
<i>Hydrocotyle</i>	67%	2
<i>Campsis radicans</i>	67%	1
<i>Arundinaria tecta</i>	33%	7
<i>Spartina patens</i>	33%	6
<i>Morella cerifera</i> (dead)	33%	5
<i>Smilax rotundifolia</i>	33%	5
<i>Acer rubrum</i> var. <i>trilobum</i>	33%	3
<i>Nyssa biflora</i>	33%	3
<i>Juniperus virginiana</i> var. <i>silicicola</i>	33%	3

**Floristic table for Group X.A.1:**

**CEGL003924 - *Borrchia frutescens* / (*Spartina patens*, *Juncus roemerianus*) Shrubland**

Number of Plots: 2  
 Average Species Richness: 26 Species listed: 42  
 Average Plot Size: 150 May be > avg. spp. richness  
 Homoteneity: 50 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Cladium jamaicense</i>	50%	6
<i>Juncus roemerianus</i>	50%	6
<i>Spartina patens</i>	50%	6
<i>Pinus palustris</i>	50%	4
<i>Distichlis spicata</i>	50%	4
<i>Solidago</i>	50%	4
<i>Thelypteris palustris</i> var. <i>pubescens</i>	50%	3
<i>Osmunda regalis</i> var. <i>spectabilis</i>	50%	3
<i>Baccharis halimifolia</i>	50%	3
<i>Rosa palustris</i>	50%	3
<i>Osmunda cinnamomea</i>	50%	2
<i>Pteridium aquilinum</i>	50%	2
<i>Rubus</i>	50%	2
<i>Smilax bona-nox</i>	50%	2
<i>Nyssa biflora</i>	50%	2
<i>Phragmites australis</i>	50%	2
<i>Persea palustris</i>	50%	2
<i>Parthenocissus quinquefolia</i>	50%	2
<i>Panicum</i>	50%	2
<i>Zizaniopsis miliacea</i>	50%	2
<i>Viola</i>	50%	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	50%	2
<i>Rhus copallinum</i> var. <i>copallinum</i>	50%	2
<i>Dichanthelium</i>	50%	2
<i>Ambrosia artemisiifolia</i>	50%	2
<i>Baccharis angustifolia</i>	50%	2
<i>Campsis radicans</i>	50%	2
<i>Centella erecta</i>	50%	2
<i>Eupatorium serotinum</i>	50%	2
Cyperaceae	50%	2
<i>Diospyros virginiana</i>	50%	2
<i>Morella cerifera</i>	50%	2
<i>Iris</i>	50%	2
<i>Cuscuta</i>	50%	2
<i>Iva frutescens</i>	50%	2
<i>Erigeron vernus</i>	50%	2
<i>Ipomoea sagittata</i>	50%	2
<i>Ilex glabra</i>	50%	2
<i>Hydrocotyle</i>	50%	2
<i>Hibiscus moscheutos</i>	50%	2
<i>Acer rubrum</i> var. <i>trilobum</i>	50%	2
<i>Mikania scandens</i>	50%	2

**Floristic table for Group X.A.2:**

**CEGL006848 - *Iva frutescens* / *Spartina patens* Shrubland**

Number of Plots:	2	
Average Species Richness:	6	Species listed: 7
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	83	due to ties

Species	Constancy	Avg Cover
		Class
<i>Spartina patens</i>	100%	8
<i>Iva frutescens</i>	100%	5
<i>Juncus roemerianus</i>	100%	4
<i>Distichlis spicata</i>	100%	3
<i>Spartina alterniflora</i>	50%	2
<i>Scirpus</i>	50%	2
<i>Solidago sempervirens</i>	50%	2

**Floristic table for Group XI.A.1:**

**CEGL004197 - *Spartina patens* - *Distichlis spicata* - (*Juncus roemerianus*) Herbaceous Vegetation**

Number of Plots:	6	
Average Species Richness:	7	Species listed: 7
Average Plot Size:	117	May be > avg. spp. richness
Homoteneity:	69	due to ties

Species	Constancy	Avg Cover
		Class
<i>Spartina patens</i>	100%	7
<i>Solidago sempervirens</i>	83%	2
<i>Spartina alterniflora</i>	67%	6
<i>Distichlis spicata</i>	67%	6
<i>Juncus roemerianus</i>	67%	2
<i>Iva frutescens</i>	67%	2
<i>Fimbristylis castanea</i>	33%	2

**Floristic table for Group XI.A.2:**

**CEGL006612 - *Schoenoplectus americanus* - *Spartina patens* Herbaceous Vegetation**

Number of Plots:	1	
Average Species Richness:	4	Species listed: 4
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	100	due to ties

Species	Constancy	Avg Cover
		Class
<i>Distichlis spicata</i>	100%	7
<i>Schoenoplectus pungens</i> var. <i>pungens</i>	100%	7
<i>Juncus roemerianus</i>	100%	3
<i>Spartina alterniflora</i>	100%	2



**Floristic table for Group XI.B.1:**

**CEGL004178 - *Cladium mariscus ssp. jamaicense* Tidal Herbaceous Vegetation**

Number of Plots:	2	
Average Species Richness:	5	Species listed: 4
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	75	due to ties

Species	Constancy	Avg Cover
		Class
<i>Cladium jamaicense</i>	100%	8
<i>Toxicodendron radicans var. radicans</i>	100%	2
<i>Hibiscus moscheutos</i>	50%	3
<i>Baccharis halimifolia</i>	50%	2

**Floristic table for Group XI.B.2:**

**CEGL004186 - *Juncus roemerianus* Herbaceous Vegetation**

Number of Plots:	3	
Average Species Richness:	4	Species listed: 5
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	58	due to ties

Species	Constancy	Avg Cover
		Class
<i>Juncus roemerianus</i>	100%	7
<i>Distichlis spicata</i>	67%	6
<i>Spartina alterniflora</i>	33%	4
<i>Iva frutescens</i>	33%	2
<i>Symphyotrichum tenuifolium</i>	33%	2

**Floristic table for Group XI.C.1:**

**CEGL007694 - *Distichlis spicata* - (*Sporobolus virginicus*) Herbaceous Vegetation**

Number of Plots:	1	
Average Species Richness:	6	Species listed: 6
Average Plot Size:	100	May be > avg. spp. richness
Homoteneity:	100	due to ties

Species	Constancy	Avg Cover
		Class
<i>Distichlis spicata</i>	100%	8
<i>Iva frutescens</i>	100%	3
<i>Juncus roemerianus</i>	100%	3
<i>Symphyotrichum tenuifolium</i>	100%	2
[ <i>Scirpus</i> + <i>Schoenoplectus</i> ]	100%	2
<i>Borrichia frutescens</i>	100%	1

**Floristic table for Group XII.A.1:**

**CEGL004660 - *Juncus roemerianus* - *Pontederia cordata* Herbaceous Vegetation**

Number of Plots: 1  
 Average Species Richness: 12 Species listed: 12  
 Average Plot Size: 100 May be > avg. spp. richness  
 Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Juncus roemerianus</i>	100%	9
<i>Hibiscus moscheutos</i>	100%	4
<i>Panicum</i>	100%	3
<i>Cladium jamaicense</i>	100%	2
<i>Erigeron vernus</i>	100%	2
<i>Hydrocotyle</i>	100%	2
<i>Solidago sempervirens</i>	100%	2
<i>Poaceae</i>	100%	2
<i>Baccharis halimifolia</i>	100%	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100%	2
<i>Kosteletzkya virginica</i>	100%	2
<i>Samolus parviflorus</i>	100%	2

**Floristic table for Group XIII.A.1:**

**CEGL004661 - *Ceratophyllum demersum* - *Utricularia macrorhiza* - *Nymphaea odorata* Herbaceous Vegetation**

Number of Plots: 1  
 Average Species Richness: 3 Species listed: 3  
 Average Plot Size: 100 May be > avg. spp. richness  
 Homoteneity: 100 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Utricularia inflata</i>	100%	7
<i>Persea palustris</i>	100%	6
<i>Acer rubrum</i> var. <i>trilobum</i>	100%	5