

**Natural vegetation of the Carolinas:
Classification and description of
plant communities of the Francis Marion National Forest and vicinity**

A report prepared for the Ecosystem Enhancement Program, North Carolina Department of Environment and Natural Resources in partial fulfillments of contract D07042.

By M. Forbes Boyle, Robert K. Peet, Thomas R. Wentworth, and Michael P. Schafale

Carolina Vegetation Survey
Curriculum in Ecology, CB#3275
University of North Carolina
Chapel Hill, NC 27599-3275

Version 1. October 5, 2007

INTRODUCTION

The Francis Marion National Forest (FMNF) is located along the Atlantic Coast in Berkeley and Charleston Counties, South Carolina. The National Forest is bounded on the north and east by the Santee River. The Santee Coastal Reserve Wildlife Management Area is located to the east of the National Forest, where the Santee River empties into the Atlantic Ocean. To the south and east of the FMNF is Cape Romain National Wildlife Refuge. The Cooper River forms an approximate western boundary to the National Forest.

The geomorphology of the FMNF is a combination of upland sandy ridges, dominated by a diversity of fire-maintained longleaf pine and xeric oak woodlands, and large expanses of inter-ridge swamp forests. Salt and freshwater riverine environments also exist within the property, as well as salt water marshes along the southeastern border. Limestone sinks and clay-based Carolina bays can be found on upland depressions throughout the area. Low-lying maritime forests, dominated by *Quercus virginiana*, *Juniperus virginiana* var. *silicicola*, and *Pinus elliottii*, are located along the coastal fringe of the eastern portion of the FMNF.

In the fall of 1989, Hurricane Hugo passed over the FMNF and left a broad swath of fallen and misshapen trees. The tidal surge caused by the storm shifted estuarine patterns and influenced floodplain forests dynamics. Today, most of the disturbed forests within the FMNF damaged by Hurricane Hugo have been replanted in longleaf pine; a few areas have undergone natural seral transitions.

The Carolina Vegetation Survey conducted an initial inventory of natural communities within the FMNF and surrounding areas in May 2005. The high community diversity found within this area of the Carolinas lends itself to a wide ranging floristic survey, whereby increasing current understanding of Outer Coastal Plain vegetation patterns throughout the Carolinas. The objectives of the study were to define and characterize the southern edge of variation in Coastal Plain vegetation to be expected in 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 2005 plots, and to use the resulting information to develop restoration targets for disturbed ecosystems within North Carolina.

STUDY AREA AND FIELD METHODS

During May 2005, a total of 54 vegetation plots were established in and around the FMNF in Berkeley, Charleston, and Georgetown Counties, South Carolina (Figure 1). Focus locations within the FMNF included Wambaw Creek Wilderness, Hellhole Bay Wilderness, Ocean Bay, Battery Historic (Cedar Hill), and Big Dam Swamp. Other locations outside of the National Forest included the Santee Coastal – Washo Reserve, Cape Romain – Cape Islands, and the Quarterman Branch Reserve.

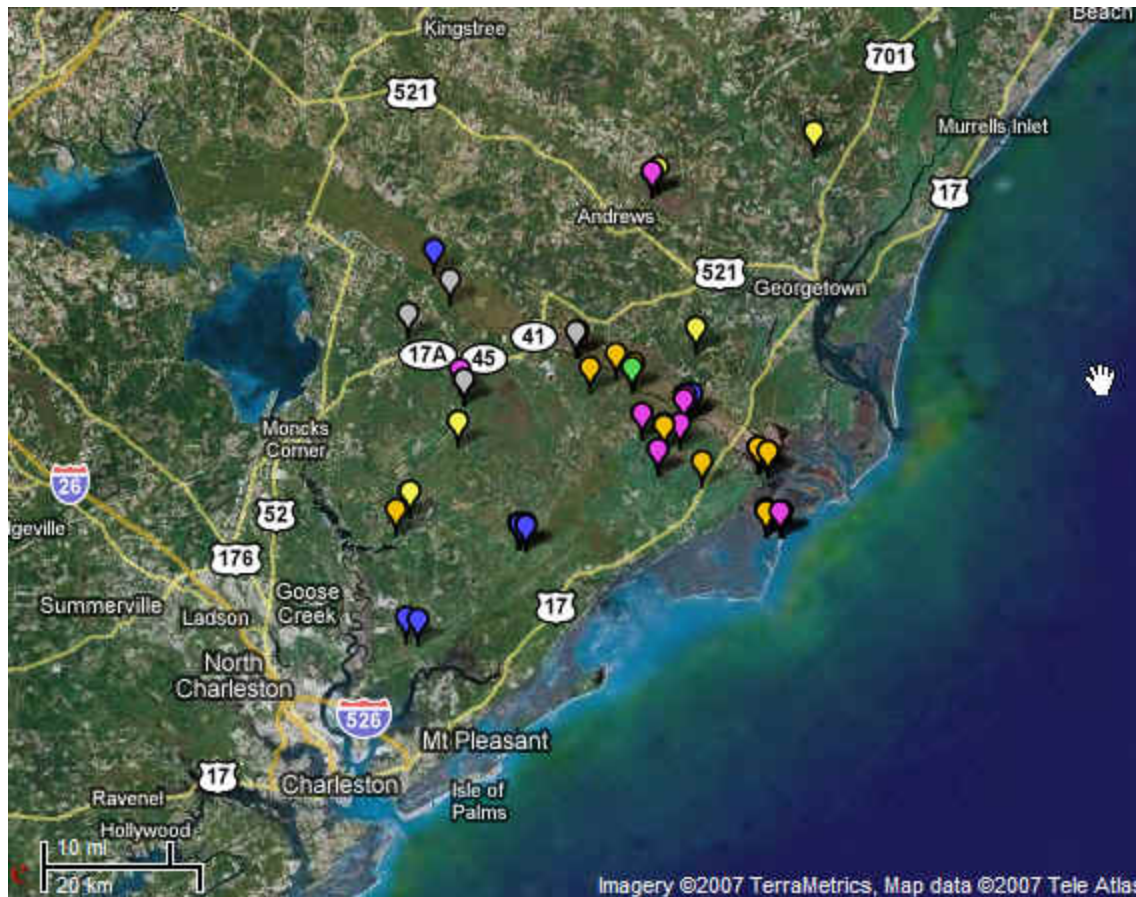


FIGURE 1. Pulse 2005a sample region and established plots: (Map courtesy of VegBank: http://vegbank.org/vegbank/views/map_userplots.jsp?latlongfile=http://www.bio.unc.edu/faculty/peet/lab/ CVS/maps/63-points.csv)

Target natural communities included brownwater and blackwater alluvial hardwood forests, upland hardwood forests, blackwater river cypress and gum swamps, pocosins, bay forests, depression wetlands, small stream systems, freshwater and brackish marshes, coastal dunes and grasslands, maritime forests, and longleaf pine savannas.

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 m² 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 m². 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.

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 Bad (unambiguously wrong). In some cases it was necessary to assign a plot to more than one community because of its intermediate character. In 39 of the 54 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 South 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 m² 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 23 Ecological Groups and 14 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) *Quercus alba* - *Carya glabra* / Mixed Herbs Coastal Plain Forest (CEGL007226)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.685135

NVC Fit = Fair

Plots = 063-09-0925

This mesic forest of the Atlantic and Gulf Coastal Plain has a canopy dominated by *Quercus alba*, *Pinus taeda*, and *Liquidambar styraciflua*. Other canopy and subcanopy associates include *Hamamelis virginiana* var. *virginiana*, *Cercis canadensis* var. *canadensis*, *Quercus nigra*, *Quercus stellata*, and *Quercus michauxii*. The high density of *Rhus copallinum* var. *copallinum* in the subcanopy is a result of significant canopy disturbance by Hurricane Hugo in October 1989. The shrub stratum is moderately dense, and includes such species as *Vaccinium elliotii*, *Arundinaria tecta*, *Aesculus pavia* var. *pavia*, *Crataegus flava*, *Gaylussacia frondosa*, and *Callicarpa americana*. Species richness across all strata is high in this plot (118). Species in the herbaceous stratum found throughout the plot include *Melica mutica*, *Amphicarpaea bracteata* var. *bracteata*, *Agrimonia pubescens*, *Coreopsis auriculata*, *Smallanthus uvedalius*, *Phlox carolina* ssp. *carolina*, *Chasmanthium sessiliflorum* var. *sessiliflorum*, and *Scleria oligantha*. The NVC recognizes *Carya glabra* as an important canopy codominant in this community type; however, this species, nor any *Carya* spp., was located on this plot. Furthermore, the NVC explains that this community type lacks dry-site oaks like *Quercus stellata*. This species was found throughout the plot.

2) *Quercus hemisphaerica* - *Magnolia grandiflora* - *Carya* (*glabra*, *pallida*) / *Vaccinium arboreum* / *Chasmanthium sessiliflorum* Forest (CEGL004788)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.683553

NVC Fit = Poor to Fair

Plots = 063-02-0926, 063-03-0925, 063-04-0936,
063-04-0938, 063-04-0939, 063-07-0929,
063-09-0932

This upland mesic forest is found in the south Atlantic Coastal Plain along slopes of rivers and small streams. The NVC recognizes that this community has a differential tree stratum, with no one species dominating. They acknowledge that *Quercus hemisphaerica* is the only true constant canopy species in this community type. The plots found on the FMNF, however, contain a minor amount of this species. Instead, *Pinus taeda* and *Liquidambar styraciflua* are the only canopy species with high constancy across these plots. Other important diagnostic canopy species include *Quercus nigra*, *Quercus alba*, and *Carya alba*. The subcanopy/shrub stratum is dominated by *Cornus florida*, *Aesculus pavia* var. *pavia*, and *Symplocos tinctoria*. Constant herbs include *Chasmanthium sessiliflorum* var. *sessiliflorum*,

Mitchella repens, and *Dichantheium commutatum* var. *commutatum*, *Elephantopus carolinianus*, *Scleria oligantha*, and *Oxalis dillenii*.



B. Calcareous Forests

1) *Carya cordiformis* - *Quercus pagoda* - *Quercus shumardii* - *Carya myristiciformis* / *Sabal minor* - *Cornus asperifolia* Forest (CEGL007316)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.689950

NVC Fit = Fair

Plots = 063-02-0934

This community is typically found over a limestone substrate and usually experiences seasonal ponding of water. Soil drainage is poor throughout this community. The canopy and subcanopy of this plot are composed of a diversity of species and include *Acer floridanum*, *Nyssa biflora*, *Carpinus caroliniana* var. *caroliniana*, *Fraxinus caroliniana*, *Cornus asperifolia*, *Ilex opaca* var. *opaca*, and *Magnolia grandiflora*. This plot lacks the calcareous canopy species that are used to discriminate this community in the NVC. These species include *Carya myristiciformis*, *Carya cordiformis*, *Quercus pagoda*, and *Quercus shumardii*. The herbaceous stratum of this plot is composed of a dense cover of *Dryopteris ludoviciana*, a rare wood-fern typically found along black-water rivers. Other herbaceous species found more typical of swamp forest include *Boehmeria cylindrica*, *Persicaria virginiana*, and *Rhynchospora miliacea*.

2) *Quercus pagoda* - *Carya cordiformis* / *Chasmanthium sessiliflorum* - *Verbesina virginica* Forest (CEGL004092)

NVC Fit = Good

Plots = 063-04-0942

This mesic, calcareous forest is found along the Coastal Plain of South Carolina. Species diversity is high in this plot, which is located along a small ridge between the Santee River and Echaw Creek in northern Berkeley County, SC. Constant canopy species include *Carya cordiformis*, *Quercus nigra*, and *Quercus hemisphaerica*.

The shrub stratum is dominated by *Callicarpa americana*, *Cornus asperifolia*, *Sideroxylon lycioides*, and *Symplocos tinctoria*. Common herbs found in this plot include *Asplenium platyneuron*, *Chasmanthium sessiliflorum* var. *sessiliflorum*, *Dichanthelium commutatum* var. *commutatum*, *Galium circaezans* var. *circaezans*, *Mitchella repens*, *Oxalis dillenii*, *Phryma leptostachya* var. *leptostachya*, and *Sanicula canadensis* var. *floridana*.



II. Coastal Plain fire-maintained woodlands

A. Dry-Mesic Pine-Oak Woodlands

1) *Pinus palustris* / *Quercus laevis* - *Quercus geminata* / *Vaccinium tenellum* / *Aristida stricta* Woodland (CEGL003589)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.688575

NVC Fit = Fair

Plots = 063-02-0929

This xeric pine-oak dominated woodland occurs on the Outer Coastal Plain of North and South Carolina. The open canopy is dominated by *Pinus palustris*. The low shrub stratum is dominated by low-stature scrub oaks--*Quercus margaretta* and *Quercus virginiana*. Herbs found in this plot include *Pteridium aquilinum*, *Tephrosia virginiana*, and *Andropogon* sp. This plot does not fit completely with the above-listed NVC Association because of the lack of *Aristida stricta*.

III. Coastal Plain brownwater river forests

A. Levee and Floodplain Forests

1) *Liquidambar styraciflua* - *Quercus* (*laurifolia*, *nigra*) - (*Pinus taeda*) / *Arundinaria gigantea* / *Carex abscondita* Forest (CEGL007732)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.683508

NVC Fit = Good

Plots = 063-04-0935

This floodplain forest is found along the Santee River in northern Berkeley County, SC. This community experiences temporary flooding during certain times of the year, but the water level is usually much lower during the growing season. Dominant canopy species include *Liquidambar styraciflua*, *Fraxinus pennsylvanica*, and *Quercus laurifolia*. The subcanopy is composed of *Carpinus caroliniana* var. *caroliniana*, *Ilex opaca* var. *opaca*, *Ulmus americana* var. *americana*, and *Celtis occidentalis*. The shrub stratum is composed of *Arundinaria gigantea*. Herbaceous diversity is high in this plot, and includes *Carex louisianica*, *Chasmanthium latifolium*, *Dichantheium dichotomum*, *Mitchella repens*, and *Toxicodendron radicans* var. *radicans*.



B. Brown-water Swamp Forests

1) *Quercus lyrata* - *Quercus laurifolia* - *Taxodium distichum* / *Saururus cernuus* Forest (CEGL004735)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.689572

NVC Fit = Fair

Plots = 063-04-0934

This plot occurred as on a very low ridge within a backswamp along the Santee River. Canopy dominants include a mixture of bottomland hardwoods and gum – cypress species. These include *Platanus occidentalis* var. *occidentalis*, *Quercus lyrata*, *Quercus laurifolia*, *Taxodium distichum*, *Fraxinus pennsylvanica*, *Ulmus americana* var. *americana*, and *Celtis occidentalis*. The herb stratum is composed

of *Carex intumescens* var. *intumescens*, *Carex crus-corvi*, *Boehmeria cylindrica*, *Dichantheium yadkinense*, and *Woodwardia areolata*. This plot and association (CEGL004735) are typical of the hardwood bottoms adjacent to *Taxodium-Nyssa* aquatic backswamps (CEGL007431). Nonetheless, 4735 is a rather broad and poorly defined community type within NVC and requires further characterization of its range of variation. Flooding on this plot is largely regulated by dams along the river.



2) *Taxodium distichum* – *Nyssa aquatica* / *Fraxinus caroliniana* Forest (CEGL007431)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.686827

NVC Fit = Good

Plots = 063-02-0932, 063-04-0941, 063-07-0926

This backswamp community of high-quality brownwater rivers of the Atlantic Coastal Plain is typically composed of a canopy of *Taxodium distichum*, *Nyssa aquatica*, *Fraxinus caroliniana*, and *Acer rubrum*. This community type is semipermanently flooded, and species found in the herbaceous stratum include *Saururus cernuus*, *Justicia ovata* var. *ovata*, and *Onoclea sensibilis* var. *sensibilis*. Overall, the herbs are sparse in this community type. Soils in this community type are usually saturated due to river flooding.



NVC Fit = Poor

Plots = 063-08-0928

This plot differs from the other plots and the NVC described association due to the high density of *Carpinus caroliniana* var. *caroliniana* in the subcanopy. The canopy dominants are similar to those in the other plots. An abundance of *Aronia arbutifolia* and *Alnus serrulata* is also found on this plot.

IV. Coastal Plain blackwater river forests

A. Black-water Swamp Forests

1) *Nyssa aquatica* - *Nyssa biflora* Forest (CEGL007429)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.684509

NVC Fit = Fair

Plots = 063-08-0929

This blackwater swamp forest is dominated by a short canopy (< 12 meters) of *Nyssa aquatica*, *Taxodium distichum*, and *Fraxinus caroliniana*. Other minor canopy and subcanopy associates include *Acer rubrum*, *Betula nigra*, *Quercus laurifolia*, and *Alnus serrulata*. This community occurs within

intermittently flooded alluvial sites along blackwater rivers in the Atlantic and Gulf Coastal Plain. Herbaceous species richness can be high in this community type. Species found on these plots include *Carex gigantea*, *Orontium aquaticum*, *Hymenocallis crassifolia*, *Proserpinaca palustris* var. *palustris*, *Saururus cernuus*, and *Woodwardia areolata*. The presence of species typifying brown-water river systems sets this plot apart from the NVC described association.

B. Black-water Fringing Hardwood Forests

1) *Taxodium distichum* – *Fraxinus pennsylvanica* – *Quercus laurifolia* / *Acer rubrum* / *Saururus cernuus* Forest (CEGL007719)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.687855

NVC Fit = Fair

Plots = 063-09-0930

This Atlantic and Gulf Coastal Plain swamp –hardwood forest transition occurs in sloughs and other alluvial flats with a large percentage of silt in the soil. The canopy of this community type is composed of *Taxodium distichum*, *Nyssa biflora*, *Quercus laurifolia*, and *Acer rubrum* var. *rubrum*. Subcanopy species found in these plots include *Ulmus americana*, *Ilex verticillata*, *Fraxinus caroliniana*, and *Carpinus caroliniana* var. *caroliniana*. The shrub stratum in these plots is rather sparse, while herb species diversity is moderately high. Vines such as *Bignonia capreolata*, *Toxicodendron radicans* var. *radicans* and *Smilax laurifolia* are abundant in this plot. The herbaceous stratum was diverse on this plot. Species include *Hypoxis wrightii*, *Woodwardia areolata*, *Justicia ovata* var. *ovata*, and *Osmunda regalis* var. *spectabilis*. This community type requires further investigation based on its composition in response to variable inundation frequencies throughout its range.

C. Small Stream Forests

1) *Quercus phellos* - *Quercus laurifolia* - *Nyssa biflora* - *Liquidambar styraciflua* / *Arundinaria gigantea* ssp. *tecta* - *Sabal minor* Forest (CEGL007846)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.685578

NVC Fit = Poor

Plots = 063-08-0935, 063-08-0936

This small stream forest of the Outer Coastal Plain of South Carolina has a variable canopy. Canopy species on these plots include *Quercus laurifolia*, *Acer drummondii*, and *Taxodium distichum*. The NVC does not recognize cypress occurring in these community types. The shrub stratum is dominated by *Arundinaria tecta* in this community type, while the herbaceous stratum is dominated by *Chasmanthium laxum*. Other species found on these plots include *Carex howei*, *Carex intumescens* var. *intumescens*, *Hypericum hypericoides*, *Mitchella repens*, and *Osmunda regalis* var. *spectabilis*.

V. Coastal Plain lowland deciduous forests

A. Coastal Plain Nonriverine Swamp Forests

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

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.683580

NVC Fit = Fair

Plots = 063-02-0930

This community type occurs in wet, peaty depressions throughout the entire southeastern Coastal Plain. The canopy is codominated by *Taxodium ascendens* and *Nyssa biflora*. The shrub stratum is extremely dense and composed of pocosin-like vegetation. Species include *Persea palustris*, *Lyonia lucida*, *Magnolia virginiana* var. *virginiana*, *Ilex glabra*, and *Morella caroliniensis*. The herb stratum is very sparse, but includes *Woodwardia areolata* and *Onoclea sensibilis* var. *sensibilis*. This community will require further investigation due to its extensive described range in the southeastern Outer Coastal Plain.

2) *Quercus laurifolia* - *Nyssa biflora* / *Clethra alnifolia* - *Leucothoe axillaris* Forest (CEGL007447)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.685596

NVC Fit = Fair

Plots = 063-09-0926

This plot was located on the south end of Jericho Swamp within the FMNF. According to the NVC, this community type is found along wet sloughs, or broad flats with a high water table. Flooding in these areas is usually intermittent throughout the year. The canopy here is dominated by *Quercus laurifolia*, *Nyssa biflora*, *Acer rubrum*, and *Fraxinus caroliniana*. The dense shrub stratum is composed of *Arundinaria tecta*, *Morella cerifera*, *Magnolia virginiana* var. *virginiana*, *Persea palustris*, and *Itea virginica*. Vines are also abundant on this plot. They include *Smilax laurifolia*, *Berchemia scandens*, and *Parthenocissus quinquefolia*. The herbaceous stratum is diverse and includes *Scirpus lineatus*, *Rhynchospora miliacea*, *Triadenum walteri*, *Sabal minor*, and *Carex folliculata*. The high species diversity of canopy and subcanopy species in this plot sets it apart from the NVC described association.

VI. Coastal Plain lowland evergreen forests and shrublands

A. Bay Forests

1) *Magnolia virginiana* - *Persea palustris* / *Lyonia lucida* Forest (CEGL007049)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.688884

NVC Fit = Good

Plots = 063-07-0928

This community type occurs on saturated, peaty wetlands of the Outer Coastal Plain. This low forest has a canopy less than 10 meters tall, and includes *Magnolia virginiana*, *Persea palustris*, *Clethra alnifolia*, and *Cyrilla racemiflora*. Other low shrubs include *Vaccinium formosum*, *Vaccinium fuscatum*, and *Ilex coriacea*. The herbaceous stratum is composed of *Thelypteris palustris* var. *pubescens*, *Woodwardia virginica*, *Xyris platylepis*, *Rhynchospora microcephala*, and *Ludwigia pilosa*.

B. Pocosins

1) *Pinus serotina* / *Zenobia pulverulenta* - *Cyrilla racemiflora* - *Lyonia lucida* Wooded Shrubland (CEGL004458)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.684717

NVC Fit = Fair

Plots = 063-07-0927

This typical high pocosin of the Atlantic Coastal Plain is composed of a very dense shrub stratum, up to 5 meters tall. Typical shrub species include *Lyonia lucida*, *Ilex coriacea*, *Persea palustris*, and *Clethra alnifolia*. An open canopy of *Pinus serotina* is also characteristic of this community type. Unlike the described NVC association, this plot also has a fairly rich herbaceous layer. Species include *Woodwardia virginica*, *Eupatorium pilosum*, *Hypericum hypericoides*, *Osmunda cinnamomea* var. *cinnamomea*, and *Xyris ambigua*.

2) *Ilex glabra* - *Lyonia lucida* - *Zenobia pulverulenta* Shrubland (CEGL003944)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.688893

NVC Fit = Fair to Good

Plots = 063-02-0928, 063-08-0930

This community type is found on peat domes of the Outer and Middle Coastal Plain of the Carolinas. The vegetation is described as a low pocosin, and soils are unproductive. The dense shrub stratum is dominated by *Lyonia lucida*, *Zenobia pulverulenta*, *Ilex coriacea*, and *Persea palustris*. Where fire has been taken out of these communities, species richness values remain low due to the high density of woody shrub biomass. Plot 063-08-0930 experienced significant fire disturbance three years prior to sampling. This explains the disparity of herbaceous species diversity values between these two plots (burned versus unburned). Herbaceous species found on plot 063-08-0930 include *Saccharum giganteum*, *Scirpus cyperinus*, *Erechtites hieracifolia*, *Typha latifolia*, *Woodwardia virginica*, *Rhynchospora fascicularis*, and *Xyris iridifolia*.

VII. Coastal Plain ponds and marshes

A. Pond Cypress Depression Forests

1) *Taxodium ascendens* / *Ilex myrtifolia* Depression Forest (CEGL007418)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.688856

NVC Fit = Good

Plots = 063-09-0931

This depression forest has a closed canopy dominated by *Taxodium ascendens*, and a lesser amount of *Nyssa biflora* and *Acer rubrum*. The shrub stratum is composed of *Ilex myrtifolia*, *Lyonia lucida*, *Magnolia virginiana*, and *Litsea aestivalis*. Herbs include *Carex striata*, *Panicum verrucosum*, *Saccharum brevibarbe* var. *contortum*, *Woodwardia virginica*, *Rhynchospora microcephala*, and *Carex glaucescens*.

B. Freshwater Marshes

1) *Saccharum* spp. - *Panicum verrucosum* - (*Rhexia* spp., *Sabatia angularis*) Herbaceous Vegetation (CEGL004752)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.687896

NVC Fit = Fair

Plots = 063-07-0930

According to the NVC, this upland depression community is geomorphologically and floristically distinct from bays and limesinks. Currently, this community has been described for the Coastal Plain of southern Georgia, and acknowledged as potentially occurring on the FMNF. This plot floristically fits the described community type, except for the occurrence of *Liquidambar styraciflua* saplings invading from a clearcut area outside the plot. Otherwise, discriminant herbaceous species found on the plot include *Saccharum baldwinii*, *Sabatia campanulata*, *Rhynchospora fascicularis*, *Rhynchospora microcephala*, and *Hypericum denticulatum*.

2) *Eleocharis baldwinii* - *Hydrocotyle* (*ranunculoides*, *umbellata*) Herbaceous Vegetation (CEGL007893)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.687504

NVC Fit = Fair

Plots = 063-04-0926, 063-04-0927

These plots are located below the boardwalk at the Washo Reserve in the Santee Coastal WMA. Both plots are characterized by a dense cover of both floating and rooted herbaceous vegetation. The herb stratum is characterized by a dense cover of *Hydrocotyle ranunculoides*, while *Lemna minor* is the dominant floating species. Water covers close to 100% of the ground on both of these plots. The plots are being encroached upon by woody species (*Nyssa biflora* and *Taxodium distichum*) from adjacent freshwater swamp communities. The NVC recognizes association 7893 from the Deltaic Plain in southern Louisiana. The plots in the FMNF share dominance by *Hydrocotyle* sp. and geomorphologic characteristics with the described community type. However these plots lack codominance of *Eleocharis baldwinii*, which is a discriminant species in this Louisiana community.



VIII. Coastal Plain seepage and streamhead wetlands

A. Streamhead Pond Pine Woodlands

1) *Pinus serotina* - (*Liriodendron tulipifera*) / *Lyonia lucida* - *Clethra alnifolia* - *Ilex glabra*
Woodland (CEGL004435)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.685104

NVC Fit = Poor to Fair

Plots = 063-02-0933, 063-08-0931

This community type occurs along streams within the Sandhills of both North and South Carolina. Neither of these plots fit well with the NVC described community association, 4435. They consistently exhibit an open canopy of *Pinus serotina* and a moderately dense shrub stratum of *Clethra alnifolia* and *Lyonia lucida*. However, plot 63-08-0931 contains *Taxodium ascendens* and *Liquidambar styraciflua* in the canopy. Also, the herbaceous stratum is highly diverse, further separating the plot from the NVC community type. Species found in this plot include *Dichanthelium lucidum*, *Eupatorium capillifolium*, *Carex albolutescens*, *Rhynchospora microcarpa*, *Rhynchospora cephalantha*, *Woodwardia virginica*, *Carex glaucescens*, and *Sparganium americanum*.

IX. Maritime subxeric forests and shrublands

A. Maritime Oak Forests

1) *Juniperus virginiana* var. *silicicola* - (*Quercus virginiana*, *Sabal palmetto*) Forest (CEGL007813)
http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.686269

NVC Fit = Poor

Plots = 063-04-0933

This community occurs on marsh islands along the Atlantic Coast of the Carolinas and Georgia. The canopy can be relatively open, or closed, and is dominated by *Juniperus virginiana* var. *silicicola*. In this plot, *Morella cerifera* and *Ilex vomitoria* are canopy codominants. The NVC recognizes only *Quercus virginiana*, *Sabal palmetto*, and *Celtis laevigata* as canopy codominants. The herbaceous stratum is diverse in this plot, and includes *Chloris pectinata*, *Cyperus filicinus*, *Dichanthelium aciculare*, *Uniola paniculata*, and *Spartina patens* var. *monogyna*.



2) *Quercus virginiana* - *Quercus hemisphaerica* - *Pinus taeda* - *Quercus falcata* / *Ilex vomitoria* Forest (CEGL007026)
http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.687020

NVC Fit = Fair

Plots = 063-08-0927

This maritime upland community of the Atlantic Coast differs from other such forests by being protected from constant salt spray. The canopy and shrub stratum in these areas is generally more diverse than their sea salt influenced counterparts. The canopy of this plot is comprised of *Pinus taeda*, *Juniperus virginiana*, and *Quercus virginiana*. The well-developed shrub stratum includes *Ilex vomitoria*, *Smilax bona-nox*, *Smilax auriculata*, *Morella cerifera*, and younger individuals of the canopy species. This plot lacks *Quercus*



hemisphaerica, *Quercus falcata*, and *Carya glabra*. The NVC recognizes these species as canopy codominants. Furthermore, this plot is distinguished from the NVC association by its lack of *Persea palustris* in the understory.

3) *Quercus virginiana*-*Pinus taeda* / *Ilex vomitoria* / *Chasmanthium sessiliflorum* Woodland (proposed)

NVC Fit = n/a

Plots = 063-02-0927

This maritime oak forest community is currently not recognized by the NVC. The plot occurs between Wambaw and Chicken Creek within the FMNF in northeastern Berkeley County, SC. The canopy of this plot is dominated by a mixed canopy of *Quercus virginiana*, *Quercus hemisphaerica*, *Pinus taeda*, *Quercus nigra*, and *Carya glabra* var. *megacarpa*. The subcanopy and shrub stratum are well-developed and comprised of *Ilex opaca* var. *opaca*, *Cornus florida*, *Morella cerifera*, *Vaccinium elliotii*, *Liquidambar styraciflua*, *Smilax glauca*, and *Toxicodendron radicans* var. *radicans*. The herbaceous diversity is also high within this plot, and includes *Chasmanthium sessiliflorum* var. *sessiliflorum*, *Galium uniflorum*, *Elephantopus tomentosus*, and *Desmodium glabellum*.

B. Mesic Maritime Hardwood Forests

1) *Quercus hemisphaerica* - *Pinus taeda* - (*Quercus nigra*) / *Osmanthus americanus* var. *americanus* / *Ilex glabra* Forest (CEGL007022)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.685138

NVC Fit = Fair

Plots = 063-07-0925

This community association occurs on islands within swamps of the Outer Coastal Plain of the Carolinas. The canopy of this plot is not well-developed (total cover < 15%), but contains community nominal species like *Quercus hemisphaerica*, *Pinus taeda*, and *Quercus nigra*. *Quercus virginiana* is also a characteristic component of the canopy in this plot. This species is not mentioned in the NVC description of association 7022. The shrub stratum of this plot is also distinct from the association. Important shrubs include *Ilex vomitoria*, *Persea palustris*, and *Vaccinium tenellum*. This plot is located within the Washo Reserve in the Santee Coastal WMA.

X. Maritime grasslands

A. Foredune Dry Grasslands

1) *Uniola paniculata* Herbaceous Vegetation (CEGL004038)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.686506

NVC Fit = Good

Plots = 063-04-0928

This is the typical foredune beach vegetation in the southern Atlantic Coast, outside the range of *Schizachyrium littorale*. The dominating grass is *Uniola paniculata*. Other species include *Hydrocotyle bonariensis*, *Iva imbricata*, *Oenothera fruticosa* var. *fruticosa*, and *Cakile edenula*.



2) *Uniola paniculata* - *Schizachyrium littorale* - *Panicum amarum* Herbaceous Vegetation (CEGL004039)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.687366

NVC Fit = Fair

Plots = 063-08-0926

According to the NVC, this foredune community is dominated by *Uniola paniculata*, but also includes *Schizachyrium littorale* and *Panicum amarum* var. *amarum*. This plot lacks the former species, but includes other diagnostic species such as *Croton punctatus*, *Heterotheca subaxillaris*, and *Oenothera humifusa* var. *humifusa*. Other species found on this plot include *Yucca gloriosa*, *Eustachys petraea*, and *Galactia volubilis* var. *volubilis*.

B. Backdune and interdunal dry grasslands

1) *Spartina patens* - *Schoenoplectus pungens* - *Solidago sempervirens* Herbaceous Vegetation (CEGL004097)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.686121

NVC Fit = Good

Plots = 063-04-0929

This interdunal grassland community can be found throughout the mid and south Atlantic maritime strand of the eastern United States. The dominant grass species of this plot is *Spartina patens* var. *monogyna*. Other species include *Solidago sempervirens* var. *mexicana*, *Iva imbricata*, *Panicum amarum* var. *amarum*, and *Heterotheca subaxillaris*. This community represents a seral transition from interdunal wet grasslands and shrub uplands.



XI. Freshwater tidal woodlands

A. Tidal Hardwood Swamps

1) *Nyssa biflora* - *Nyssa aquatica* - *Taxodium distichum* / *Saururus cernuus* Forest (CEGL004696)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.688712

NVC Fit = Fair to Good

Plots = 063-04-0937, 063-08-0925,
063-08-0933, 063-08-0934

This tidal river swamp forest occurs from southern Virginia to South Carolina. These plots are all located along Santee River drainage of Berkeley and Georgetown Counties, SC, except 063-08-0933, which is located along Mill Branch in the Wambaw Creek National Wilderness. The canopy is codominated by *Taxodium distichum*, *Acer rubrum*, *Nyssa biflora*, and *Quercus laurifolia*. Subcanopy species include *Fraxinus caroliniana*, *Sabal minor*, *Liquidambar styraciflua*, and *Ulmus americana* var. *americana*. The shrub stratum is not very well developed in these plots, but includes *Morella cerifera*.

Constant herb species include *Saururus cernuus*, *Triadenum walteri*, *Osmunda regalis* var. *spectabilis*, *Persicaria punctata*, and *Arundinaria tecta*.



2) *Acer rubrum* - *Nyssa biflora* - (*Liquidambar styraciflua*, *Fraxinus* sp.) Maritime Swamp Forest (CEGL004082)

NVC Fit = Fair

Plots = 063-09-0928

This maritime swamp forest occurs in basins of dune swells along the coast of the Carolinas. The plot occurs on the Quarterman Branch Reserve of the FMNF. Canopy vegetation includes a mixture of *Acer rubrum*, *Nyssa biflora*, and *Liquidambar styraciflua*. Also, the invasive, exotic *Triadenum walteri* is found in the canopy of this plot. Although the NVC reports that this community type is low in herbaceous diversity, this plot is rich in herbaceous strata species. These include *Ludwigia palustris*, *Scirpus atrovirens*, *Galium tinctorium* var. *floridanum*, *Eleocharis microcarpa*, *Carex tribuloides* var. *tribuloides*, and *Pluchea camphorata*.

3) *Quercus laurifolia* - *Fraxinus pennsylvanica* - *Nyssa aquatica* / *Sabal minor* Tidal Forest (CEGL007884)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.686897

NVC Fit = Good

Plots = 063-02-0931

This community occurs in tidal influenced brownwater river systems of the Gulf Coastal Plain. This plot is found along Mill Branch, in the Wambaw Creek National Wilderness of the FMNF. The canopy is dominated by *Acer rubrum*, *Nyssa biflora*, *Quercus laurifolia*, and *Liquidambar styraciflua*. The subcanopy is composed of *Ilex opaca* var. *opaca*, *Cornus foemina*, and *Ulmus rubra*, while the open shrub stratum is composed of *Morella caroliniensis*. The herbaceous stratum is diverse and includes *Carex intumescens* var. *intumescens*, *Fraxinus pennsylvanica*, *Sabal minor*, *Rubus trivialis*, *Hypoxis wrightii*, and *Mitchella repens*.

B. Tidal Cypress Swamps

1) *Taxodium distichum* Tidal Woodland [Placeholder] (CEGL003739)

NVC Fit = Fair

Plots = 063-04-0925

This community has yet to be defined by the NVC. It currently exists as a placeholder within the *Taxodium distichum* Tidal Woodland Alliance (II.B.2.N.f). This plot is located on a tidal swamp within the Washo Reserve of the Santee Coastal Wildlife Management Area. The canopy is dominated by *Taxodium distichum*, *Liquidambar styraciflua*, and *Nyssa biflora*. Minor canopy species include *Acer rubrum* var. *rubrum*, *Quercus virginiana*, and *Pinus taeda*. The shrub stratum is composed of canopy species and *Morella cerifera*, *Triadeca sebifera*, *Cephalanthus occidentalis*, and *Fraxinus caroliniana*. The herbaceous stratum includes *Alternanthera philoxeroides*, *Dulichium arundinaceum*, *Hymenocallis crassifolia*, *Saccharum giganteum*, *Juncus effuses* ssp. *solutus*, and *Pontederia cordata* var. *cordata*. Standing water is usually found on this plot. Aquatic floating and submerged vegetation is found here. Species include *Lemna minor*, *Nymphoides cordata*, and *Potamogeton pulcher*.



2) *Taxodium ascendens* - *Nyssa biflora* / *Carex striata* - *Rhynchospora (careyana, cephalantha, microcephala)* Stringer Woodland (CEGL004089)

NVC Fit = Good

Plots = 063-04-0940

This woodland occurs on seasonally to semipermanently saturated depressional zones along the Outer Coastal Plain of South Carolina and Georgia. The canopy of this plot is dominated by *Taxodium ascendens*, *Nyssa biflora*, and *Acer rubrum* var. *rubrum*. The shrub stratum is relatively open, but includes *Morella cerifera*, *Cephalanthus occidentalis*, *Itea virginica*, and *Clethra acuminata*. The herbaceous stratum is dominated by a dense mat of *Carex striata*. Other herbs include *Dichanthelium ensifolium*, *Woodwardia virginica*, and *Woodwardia areolata*. This plot is located directly off of Collins Creek within the FMNF.



NVC Fit = Poor

Plots = 063-08-0937

This plot does not fit the NVC description of CEGL004089 due to its lack of *Taxodium ascendens* in the canopy. The canopy is dominated by *Nyssa biflora*, and the subcanopy is dominated by *Acer rubrum* and *Persea palustris*. The open shrub stratum is dominated by *Magnolia virginiana*, *Morella cerifera*, and *Gaylussacia frondosa*. The herbaceous stratum is dominated by a thick cover of *Carex striata*. Other herbs include *Woodwardia virginica*, *Andropogon virginicus*, and *Mitchella repens*.

XII. Shrubby tidal vegetation

A. Saline tidal shrublands

1) *Borrichia frutescens* / (*Spartina patens*, *Juncus roemerianus*) Shrubland (CEGL003924)
http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.687750

NVC Fit = Fair

Plots = 063-04-0930

This saline shrubland community is found between drier upland sites and salt marsh flats influenced by daily tide fluctuations. Characteristic species of this plot includes *Borrichia frutescens*, *Distichlis spicata*, and *Salicornia virginica*. Because of its topographic position, this community type does

not experience daily flooding like the *Spartina* marsh below. Rather, this plot incurs irregular or monthly flooding due to storm surge or strong tides.



XIII. Open salt and brackish tidal vegetation

A. Tidal Salt Marshes

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

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.684204

NVC Fit = Poor

Plots = 063-04-0932

This salt marsh community occurs on higher topographic positions than adjacent, regularly flooded low salt marshes. *Spartina patens* var. *patens* is typically the dominant grass, with *Distichlis spicata* forming a minor codominant. This plot is dominated by *Distichlis spicata*, and *Spartina patens* is

completely absent. Other species found include *Spartina alterniflora* and *Salicornia virginica*. This plot is located on Murphy Island, within the Santee Coastal Wildlife Management Area.



2) *Spartina alterniflora* Carolinian Zone Herbaceous Vegetation (CEGL004191)
http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUId=ELEMENT_GLOBAL.2.683265

NVC Fit = Fair

Plots = 063-04-0931

This community represents regularly flooded tidal salt marshes from Cape Hatteras, NC to the Atlantic Coast of the Florida peninsula. This community experiences long exposure to high salinity water, and according to the NVC, can tolerate long submergence. The dominant tall grass found in this community type is *Spartina alterniflora*. Species diversity in this association is usually very low. This plot also includes *Salicornia virginica*.

XIV. Open fresh and oligohaline vegetation

A. Oligohaline Tidal Marshes

1) *Zizaniopsis miliacea* Tidal Herbaceous Vegetation (CEGL004705)

http://www.natureserve.org/explorer/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.685256

NVC Fit = Fair to Good

Plots = 063-04-0943, 063-04-0944

These oligohaline marshes are constantly dominated by *Zizaniopsis miliacea*. The community experiences daily tidal flooding. Other species found throughout these plots includes *Typha domingensis*, *Utricularia* sp., *Azolla caroliniana*, and *Nymphoides aquatica*. None of these species, except for the nominal, match the species described as codominants by the NVC.



CONCLUSIONS AND FUTURE DIRECTIONS

The Francis Marion Pulse documented many poorly known or unknown vegetation types from this part of the state. New to the survey were rich upland hardwood forests from the Outer Coastal Plain of South Carolina, and fire-maintained woodlands over relatively rich silty soils. A large range of brown and blackwater riparian forests were sampled, as well as pocosin, depression pond, coastal marsh, and Coastal Fringe maritime and dune vegetation. Collected plots were assigned to 36 vegetation types. In some cases the plots site well into established types, but for the most part our plots deviate from the previous descriptions suggesting a need for substantial refinement of the NVC. In particular 39 plots only marginally fit within the classification, 9 plots seemed to fit not at all, and 1 plot could not be placed in any classification scheme. Appendix 2 provides a summary table for identified groups that do not fit well into the current NVC schema. As illustrated in the above descriptions, much work is needed to refine our understanding of Maritime and Coastal Plain communities of the Carolinas. Additional plots established in the eastern portion of both states will be needed to increase our understanding of these under-sampled communities. For now, however, these current plots will provide a framework for future classification projects undertaken throughout our broad study area.

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VIII. COASTAL PLAIN SEEPAGE AND STREAMHEAD WETLANDS		pH	Organic Matter	Calcium	Magnesium	Potassium	Maganese	Clay%	Silt%	Sand%
A. Streamhead Pond Pine Woodlands										
1	CEGL004435	4.8	8.4	1070.5	114.9	61.0	6.5	34	35	32
IX. MARITIME SUBXERIC FORESTS AND SHRUBLANDS										
A. Maritime Oak Forests										
1	CEGL007813	5.8	0.7	277.5	218.8	85.0	9.5	2	4	94
2	CEGL007026	6.0	4.0	625.8	272.5	85.5	26.0	7	5	87
3	proposed	4.6	2.6	224.8	48.8	38.8	6.5	6	12	82
B. Mesic Maritime Hardwood Forests										
1	CEGL007022	4.2	2.2	94.3	29.5	18.3	1.5	6	4	90
X. MARITIME GRASSLANDS										
A. Foredune Dry Grasslands										
1	CEGL004038	7.5	0.2	1820.8	100.5	33.0	9.5	2	3	95
2	CEGL004039	7.7	0.1	1878.5	111.0	32.5	14.3	6	4	90
B. Backdune and Interdunal Dry Grasslands										
1	CEGL004097	8.3	0.3	1931.5	229.8	69.3	24.3	4	2	94
XI. FRESHWATER TIDAL WOODLANDS										
A. Tidal Hardwood Swamps										
1	CEGL004696	5.2	42.9	2288.8	206.4	107.2	43.1	--	--	--
2	CEGL004082	4.6	9.8	1022.5	161.8	73.8	3.3	27	44	29
3	CEGL007884	5.0	29.0	1650.3	135.0	68.3	15.8	14	78	8
B. Tidal Cypress Swamps										
1	CEGL003739	4.8	13.0	747.0	128.3	23.5	11.0	9	15	75
2	CEGL004089	4.4	46.9	464.3	102.5	56.4	2.4	--	--	--
XII. SHRUBBY TIDAL VEGETATION										
A. Saline Tidal Shrublands										
1	CEGL003924	6.6	2.0	571.3	901.8	499.8	21.0	16	9	74
XIII. OPEN SALT AND BRACKISH TIDAL VEGETATION										
A. Tidal Salt Marshes										
1	CEGL004197	6.4	11.1	1320.8	1863.5	916.5	26.3	--	--	--
2	CEGL004191	5.9	9.4	1231.0	1910.0	1106.8	16.5	--	--	--
XIV. OPEN FRESH AND OLIGOHALINE VEGETATION										
A. Oligohaline Tidal Marshes										
1	CEGL004705	4.9	21.9	641.5	539.3	96.3	5.5	--	--	--

Appendix 2: Association Groups with Fair or Poor Fit

CEGL	# of Plots	NVC FIT	Reason
<i>Quercus alba</i> - <i>Carya glabra</i> / Mixed Herbs Coastal Plain Forest (CEGL007226)	1	Fair	Vegetation composition is different; specifically, plot's lack of <i>Carya glabra</i> and presence of xeric oak species in the canopy
<i>Quercus hemisphaerica</i> - <i>Magnolia grandiflora</i> - <i>Carya (glabra, pallida)</i> / <i>Vaccinium arboreum</i> / <i>Chasmanthium sessiliflorum</i> Forest (CEGL004788)	7	Poor to Fair	Vegetation composition is different; specifically, plots' lack of <i>Quercus hemisphaerica</i>
<i>Carya cordiformis</i> - <i>Quercus pagoda</i> - <i>Quercus shumardii</i> - <i>Carya myristiciformis</i> / <i>Sabal minor</i> - <i>Cornus asperifolia</i> Forest (CEGL007316)	1	Fair	Vegetation composition is different; specifically, plot's lack of calcareous species in the canopy
<i>Pinus palustris</i> / <i>Quercus laevis</i> - <i>Quercus geminata</i> / <i>Vaccinium tenellum</i> / <i>Aristida stricta</i> Woodland (CEGL003589)	1	Fair	Vegetation composition is different; specifically, plot's lack of <i>Aristida stricta</i> in the herbaceous layer
<i>Quercus lyrata</i> - <i>Quercus laurifolia</i> - <i>Taxodium distichum</i> / <i>Saururus cernuus</i> Forest (CEGL004735)	1	Fair	Poor understanding of composition in response to differentiating hydrologic regimes; broadly defined association
<i>Taxodium distichum</i> – <i>Nyssa aquatica</i> / <i>Fraxinus caroliniana</i> Forest (CEGL007431)	1	Poor	Vegetation composition is different; specifically, dominance of <i>Carpinus caroliniana</i> in the understory
<i>Nyssa aquatica</i> - <i>Nyssa biflora</i> Forest (CEGL007429)	1	Fair	Vegetation composition is different; specifically, plot is codominated by brown-water river species
<i>Taxodium distichum</i> – <i>Fraxinus pennsylvanica</i> – <i>Quercus laurifolia</i> / <i>Acer rubrum</i> / <i>Saururus cernuus</i> Forest (CEGL007719)	1	Fair	Poor understanding of this community type within the NVC
<i>Quercus phellos</i> - <i>Quercus laurifolia</i> - <i>Nyssa biflora</i> - <i>Liquidambar styraciflua</i> / <i>Arundinaria gigantea</i> ssp. <i>tecta</i> - <i>Sabal minor</i> Forest (CEGL007846)	2	Poor	Vegetation composition is different; specifically, plot is codominated by <i>Taxodium distichum</i>
<i>Taxodium ascendens</i> / (<i>Nyssa biflora</i>) / <i>Leucothoe racemosa</i> - <i>Lyonia lucida</i> - <i>Morella cerifera</i> Depression Forest (CEGL007420)	1	Fair	Large range of this community requires further investigation of local floristic composition

CEGL	# of Plots	NVC FIT	Reason
<i>Quercus laurifolia</i> - <i>Nyssa biflora</i> / <i>Clethra alnifolia</i> - <i>Leucothoe axillaris</i> Forest (CEGL007447)	1	Fair	Vegetation composition is different; specifically, high species diversity in the canopy and subcanopy
<i>Pinus serotina</i> / <i>Zenobia pulverulenta</i> - <i>Cyrilla racemiflora</i> - <i>Lyonia lucida</i> Wooded Shrubland (CEGL004458)	1	Fair	Vegetation composition is different; specifically, high herbaceous diversity
<i>Ilex glabra</i> - <i>Lyonia lucida</i> - <i>Zenobia pulverulenta</i> Shrubland (CEGL003944)	1	Fair	Vegetation composition is different; specifically, high herbaceous diversity
<i>Saccharum</i> spp. - <i>Panicum verrucosum</i> - (<i>Rhexia</i> spp., <i>Sabatia angularis</i>) Herbaceous Vegetation (CEGL004752)	1	Fair	Vegetation composition is different; specifically, occurrence of <i>Liquidambar styraciflua</i> saplings
<i>Eleocharis baldwinii</i> - <i>Hydrocotyle</i> (<i>ranunculoides</i> , <i>umbellata</i>) Herbaceous Vegetation (CEGL007893)	2	Fair	Vegetation composition is different; specifically, plots' lack of <i>Eleocharis baldwinii</i> in the herbaceous layer
<i>Pinus serotina</i> - (<i>Liriodendron tulipifera</i>) / <i>Lyonia lucida</i> - <i>Clethra alnifolia</i> - <i>Ilex glabra</i> Woodland (CEGL004435)	2	Poor to Fair	Vegetation composition is different; specifically, high herbaceous diversity
<i>Juniperus virginiana</i> var. <i>silicicola</i> - (<i>Quercus virginiana</i> , <i>Sabal palmetto</i>) Forest (CEGL007813)	1	Poor	Vegetation composition is different; specifically, codominance of <i>Morella cerifera</i> and <i>Ilex vomitoria</i> in the canopy
<i>Quercus virginiana</i> - <i>Quercus hemisphaerica</i> - <i>Pinus taeda</i> - <i>Quercus falcata</i> / <i>Ilex vomitoria</i> Forest (CEGL007026)	1	Fair	Vegetation composition is different; specifically, plot lacks constant canopy species like <i>Quercus hemisphaerica</i>
<i>Quercus hemisphaerica</i> - <i>Pinus taeda</i> - (<i>Quercus nigra</i>) / <i>Osmanthus americanus</i> var. <i>americanus</i> / <i>Ilex glabra</i> Forest (CEGL007022)	1	Fair	Vegetation composition is different; specifically, dominance of <i>Quercus virginiana</i> in the canopy of this plot
<i>Uniola paniculata</i> - <i>Schizachyrium littorale</i> - <i>Panicum amarum</i> Herbaceous Vegetation (CEGL004039)	1	Fair	Vegetation composition is different; specifically, plot lacks <i>Schizachyrium littorale</i>
<i>Nyssa biflora</i> - <i>Nyssa aquatica</i> - <i>Taxodium distichum</i> / <i>Saururus cernuus</i> Forest (CEGL004696)	3	Fair	Poor understanding of this community type within the NVC
<i>Acer rubrum</i> - <i>Nyssa biflora</i> - (<i>Liquidambar styraciflua</i> , <i>Fraxinus</i> sp.) Maritime Swamp Forest (CEGL004082)	1	Fair	Vegetation composition is different; specifically, high herbaceous diversity

CEGL	# of Plots	NVC FIT	Reason
<i>Taxodium distichum</i> Tidal Woodland [Placeholder] (CEGL003739)	1	Fair	Currently, this association is not described by NVC
<i>Taxodium ascendens</i> - <i>Nyssa biflora</i> / <i>Carex striata</i> - <i>Rhynchospora (careyana, cephalantha, microcephala)</i> Stringer Woodland (CEGL004089)	1	Poor	Vegetation composition is different; specifically, the plot lacks <i>Taxodium ascendens</i> in the canopy
<i>Borrichia frutescens</i> / (<i>Spartina patens</i> , <i>Juncus roemerianus</i>) Shrubland (CEGL003924)	1	Fair	Vegetation composition is different;
<i>Spartina patens</i> - <i>Distichlis spicata</i> - <i>Juncus roemerianus</i> Herbaceous Vegetation (CEGL004197)	1	Poor	Vegetation composition is different; specifically, the plot lacks <i>Spartina patens</i>
<i>Spartina alterniflora</i> Carolinian Zone Herbaceous Vegetation (CEGL004191)	1	Fair	Geomorphologically different from described community type
<i>Zizaniopsis miliacea</i> Tidal Herbaceous Vegetation (CEGL004705)	1	Fair	Vegetation composition is different; specifically, high herbaceous diversity

Appendix 3: Floristic tables for Association Groups

Floristic table for Group I.A.1: *Quercus alba*- *Carya glabra* / Mixed Herbs Coastal Plain Forest (CEGL007226); 1 of 3

NUMBER of PLOTS	1		
SPECIES RICHNESS	118		
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Amphicarpaea bracteata</i> var. <i>bracteata</i>	7	<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	4
<i>Liquidambar styraciflua</i>	7	<i>Dioscorea villosa</i>	4
<i>Aesculus pavia</i> var. <i>pavia</i>	6	<i>Diospyros virginiana</i>	4
<i>Arundinaria gigantea</i> /tecta	6	<i>Elephantopus carolinianus</i> /tomentosus	4
<i>Cercis canadensis</i> var. <i>canadensis</i>	6	<i>Gaylussacia frondosa</i>	4
<i>Chasmanthium sessiliflorum</i> var. <i>sessiliflorum</i>	6	<i>Hamamelis virginiana</i> var. <i>virginiana</i>	4
<i>Dichanthelium boscii</i>	6	<i>Heliopsis helianthoides</i> var. <i>gracilis</i>	4
<i>Morella cerifera</i>	6	<i>Hexastylis arifolia</i> var. <i>arifolia</i>	4
<i>Pinus taeda</i>	6	<i>Melica mutica</i>	4
<i>Quercus alba</i>	6	<i>Phlox carolina</i> ssp. <i>carolina</i>	4
<i>Rubus argutus</i> /hispidus/trivialis	6	<i>Quercus stellata</i>	4
<i>Crataegus</i> sp.	5	<i>Quercus virginiana</i>	4
<i>Podophyllum peltatum</i>	5	<i>Smallanthus uvedalius</i>	4
<i>Scleria oligantha</i>	5	<i>Solidago odora</i> /rugosa/sempervirens	4
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	5	<i>Spiranthes vernalis</i>	4
<i>Athyrium asplenoides</i>	4	<i>Symplocos tinctoria</i>	4
<i>Chasmanthium laxum</i>	4	<i>Trachelospermum difforme</i>	4
<i>Coreopsis auriculata</i>	4	<i>Vaccinium elliotii</i>	4
<i>Cornus florida</i>	4	<i>Baptisia albescens</i>	3
<i>Desmodium glabellum</i>	4	<i>Callicarpa americana</i>	3

Floristic table for Group I.A.1: *Quercus alba*- *Carya glabra* / Mixed Herbs Coastal Plain Forest (CEGL007226); 2 of 3

SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Carya alba</i>	3	<i>Desmodium nudiflorum</i>	2
<i>Dichanthelium dichotomum</i>	3	<i>Desmodium paniculatum</i> var. <i>paniculatum</i>	2
<i>Oxalis dillenii</i>	3	<i>Desmodium viridiflorum</i>	2
<i>Scutellaria elliptica</i> var. <i>elliptica</i>	3	Dicot sp.	2
<i>Spigelia marilandica</i>	3	<i>Endodeca serpentaria</i>	2
<i>Vaccinium arboreum</i>	3	<i>Erythrina herbacea</i>	2
<i>Vicia caroliniana</i>	3	<i>Eupatorium rotundifolium</i>	2
<i>Agalinis purpurea</i>	2	<i>Euphorbia corollata</i>	2
<i>Ageratina aromatica</i>	2	<i>Galactia volubilis</i> var. <i>volubilis</i>	2
<i>Agrimonia pubescens</i>	2	<i>Galium pilosum</i> var. <i>pilosum</i>	2
<i>Ampelopsis arborea</i>	2	<i>Galium uniflorum</i>	2
<i>Anemonella thalictroides</i>	2	<i>Hypericum hypericoides</i>	2
<i>Apios americana</i>	2	<i>Hypoxis curtissii/hirsuta/wrightii</i>	2
<i>Asclepias perennis</i>	2	<i>Hyptis alata</i>	2
<i>Bignonia capreolata</i>	2	<i>Ilex opaca</i> var. <i>opaca</i>	2
<i>Chamaecrista nictitans</i>	2	<i>Ilex vomitoria</i>	2
<i>Clitoria mariana</i> var. <i>mariana</i>	2	<i>Ipomoea pandurata</i>	2
<i>Cocculus carolinus</i>	2	<i>Lactuca</i> sp.	2
<i>Datura stramonium</i>	2	<i>Lespedeza cuneata</i>	2
<i>Desmodium laevigatum</i>	2	<i>Lespedeza frutescens</i>	2

Floristic table for Group I.A.1: *Quercus alba*- *Carya glabra* / Mixed Herbs Coastal Plain Forest (CEGL007226); 3 of 3

SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Lespedeza hirta</i>	2	<i>Rhus copallinum</i> var. <i>copallinum</i>	2
<i>Lespedeza virginica</i>	2	<i>Ruellia caroliniensis</i>	2
<i>Lobelia puberula</i> var. <i>puberula</i>	2	<i>Saccharum alopecuroides</i>	2
<i>Lygodium japonicum</i>	2	<i>Sanguinaria canadensis</i>	2
<i>Matelea</i> sp.	2	<i>Sanicula canadensis</i>	2
<i>Mitchella repens</i>	2	<i>Scutellaria integrifolia</i>	2
<i>Osmunda cinnamomea</i> var. <i>cinnamomea</i>	2	<i>Smilax bona-nox</i>	2
<i>Oxalis violacea</i>	2	<i>Smilax pumila</i>	2
<i>Parthenocissus quinquefolia</i>	2	<i>Smilax rotundifolia</i>	2
<i>Physalis virginiana</i> var. <i>virginiana</i>	2	<i>Solidago odora</i> / <i>rugosa</i> / <i>sempervirens</i> var. <i>odora</i>	2
<i>Pityopsis graminifolia</i> var. <i>graminifolia</i>	2	<i>Symphotrichum dumosum</i> var. <i>dumosum</i>	2
<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Prenanthes serpentaria</i>	2	<i>Viola pedata</i>	2
<i>Prunus serotina</i> var. <i>serotina</i>	2	<i>Vitis aestivalis</i> var. <i>aestivalis</i>	2
<i>Pteridium aquilinum</i>	2	<i>Wisteria sinensis</i>	2
<i>Pycnanthemum pycnanthemoides</i> var. <i>pycnanthemoides</i>	2	<i>Woodwardia areolata</i>	2
<i>Quercus falcata</i>	2	<i>Cirsium</i> sp.	1
<i>Quercus michauxii</i>	2	<i>Passiflora lutea</i> var. <i>lutea</i>	1
<i>Quercus nigra</i>	2		
<i>Rhododendron atlanticum</i> / <i>canescens</i>	2		

Floristic table for Group I.A.2: *Quercus hemisphaerica* - *Magnolia grandiflora* - *Carya (glabra, pallida)* / *Vaccinium arboreum* / *Chasmanthium sessiliflorum* Forest (CEGL004788); 1 of 2

NUMBER of PLOTS	7	
AVERAGE RICHNESS	75	
SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Chasmanthium sessiliflorum</i> var. <i>sessiliflorum</i>	100	6
<i>Pinus taeda</i>	100	6
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100	5
<i>Liquidambar styraciflua</i>	100	5
<i>Mitchella repens</i>	100	3
<i>Parthenocissus quinquefolia</i>	100	3
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100	2
<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	100	2
<i>Cornus florida</i>	86	6
<i>Quercus nigra</i>	86	5
<i>Acer rubrum</i>	86	4
<i>Elephantopus carolinianus/tomentosus</i>	86	4
<i>Morella cerifera</i>	86	3
<i>Ilex opaca</i> var. <i>opaca</i>	86	3
<i>Vaccinium elliotii</i>	86	3
<i>Galium uniflorum</i>	86	2
<i>Berchemia scandens</i>	86	2
<i>Scleria oligantha</i>	86	2
<i>Oxalis dillenii</i>	86	2
<i>Smilax rotundifolia</i>	86	2
<i>Smilax bona-nox</i>	86	2
<i>Dioscorea villosa</i>	86	2
<i>Quercus alba</i>	71	5
<i>Crataegus</i> sp.	71	3
<i>Nyssa sylvatica</i>	71	3
<i>Gelsemium sempervirens</i>	71	2
<i>Scutellaria integrifolia</i>	71	2
<i>Campsis radicans</i>	71	2
<i>Hypericum hypericoides</i>	71	2
<i>Callicarpa americana</i>	71	2
<i>Symplocos tinctoria</i>	57	6
<i>Carya alba</i>	57	5
<i>Aesculus pavia</i> var. <i>pavia</i>	57	4
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	57	3
<i>Carya cordiformis</i>	57	3

Floristic table for Group I.A.2: *Quercus hemisphaerica* - *Magnolia grandiflora* - *Carya (glabra, pallida)* / *Vaccinium arboreum* / *Chasmanthium sessiliflorum* Forest (CEGL004788); 2 of 2

<i>Diospyros virginiana</i>	57	2
<i>Spigelia marilandica</i>	57	2
<i>Ruellia caroliniensis</i>	57	2
<i>Desmodium nudiflorum</i>	57	2
<i>Dichanthelium laxiflorum</i>	57	2
<i>Passiflora lutea</i> var. <i>lutea</i>	57	2
<i>Rubus argutus</i> / <i>hispidus</i> / <i>trivialis</i>	57	2
<i>Chionanthus virginicus</i>	57	2
<i>Trachelospermum difforme</i>	57	2
<i>Vaccinium arboreum</i>	57	2
<i>Rhus copallinum</i> var. <i>copallinum</i>	57	2
<i>Woodwardia areolata</i>	57	2
<i>Solidago odora</i> / <i>rugosa</i> / <i>sempervirens</i>	57	2
<i>Quercus velutina</i>	57	2
<i>Endodeca serpentaria</i>	57	1
<i>Prunus serotina</i> var. <i>serotina</i>	57	1
<i>Smilax glauca</i>	57	1
<i>Quercus phellos</i>	43	5
<i>Chasmanthium laxum</i>	43	5
<i>Ulmus alata</i>	43	3
<i>Carex complanata</i>	43	2
<i>Dichanthelium boscii</i>	43	2
<i>Desmodium glabellum</i>	43	2
<i>Arundinaria gigantea</i> / <i>tecta</i>	43	2
<i>Dichanthelium dichotomum</i>	43	2
<i>Hexastylis arifolia</i> var. <i>arifolia</i>	43	2
<i>Vitis cinerea</i> var. <i>floridana</i>	43	2
<i>Sassafras albidum</i>	43	2
<i>Spiranthes praecox</i>	43	1
<i>Tillandsia usneoides</i>	43	1
<i>Hypoxis curtissii</i> / <i>hirsuta</i> / <i>wrightii</i>	43	1
<i>Liriodendron tulipifera</i> var. <i>tulipifera</i>	29	4
<i>Quercus laurifolia</i>	29	4
<i>Quercus shumardii</i> var. <i>shumardii</i>	29	4
<i>Quercus stellata</i>	29	3
<i>Quercus hemisphaerica</i>	29	3
<i>Rhododendron atlanticum</i> / <i>canescens</i>	29	3
<i>Vicia caroliniana</i>	29	2
Bryophyte sp.	29	2
<i>Quercus falcata</i>	29	2

Floristic table for Group I.B.1: *Carya cordiformis* - *Quercus pagoda* - *Quercus shumardii* - *Carya myristiciformis* / *Sabal minor* - *Cornus asperifolia* Forest (CEGL007316)

NUMBER of PLOTS		1	
SPECIES RICHNESS		59	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Acer floridanum</i>	8	<i>Platanthera lacera</i>	2
<i>Dryopteris ludoviciana</i>	7	<i>Polystichum acrostichoides</i>	2
<i>Nyssa biflora</i>	7	<i>Quercus laurifolia</i>	2
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	6	<i>Rhynchospora miliacea</i>	2
<i>Fraxinus caroliniana</i>	6	<i>Sabal minor</i>	2
<i>Cornus asperifolia</i>	4	<i>Smilax bona-nox</i>	2
<i>Ilex opaca</i> var. <i>opaca</i>	4	<i>Smilax rotundifolia</i>	2
<i>Magnolia grandiflora</i>	4	<i>Solidago odora/rugosa/sempervirens</i>	2
<i>Parthenocissus quinquefolia</i>	4	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Boehmeria cylindrica</i>	3	<i>Viola sororia</i>	2
<i>Decumaria barbara</i>	3	<i>Vitis cinerea</i> var. <i>floridana</i>	2
<i>Ulmus rubra</i>	3	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	2
<i>Acer rubrum</i>	2	<i>Anemone americana</i>	1
<i>Ampelopsis arborea</i>	2	<i>Bignonia capreolata</i>	1
<i>Aralia spinosa</i>	2	<i>Centella erecta</i>	1
<i>Cephalanthus occidentalis</i>	2	<i>Eleocharis microcarpa/tuberculosa</i>	1
<i>Cercis canadensis</i> var. <i>canadensis</i>	2	<i>Gentiana saponaria</i>	1
<i>Cornus florida</i>	2	<i>Lactuca</i> sp.	1
Dicot sp.	2	<i>Ligusticum canadense</i>	1
<i>Euonymus americanus</i>	2	<i>Ligustrum sinense</i>	1
<i>Hydrocotyle</i> sp.	2	<i>Lonicera japonica</i>	1
<i>Itea virginica</i>	2	<i>Matelea</i> sp.	1
<i>Lindera benzoin</i> var. <i>pubescens</i>	2	<i>Passiflora lutea</i> var. <i>lutea</i>	1
<i>Liquidambar styraciflua</i>	2	<i>Phlox carolina</i> ssp. <i>carolina</i>	1
<i>Lyonia lucida</i>	2	<i>Rubus argutus/hispidus/trivialis</i>	1
<i>Mitchella repens</i>	2	<i>Sisyrinchium angustifolium</i>	1
<i>Morella cerifera</i>	2	<i>Smilax hispida</i>	1
<i>Orontium aquaticum</i>	2	<i>Tillandsia usneoides</i>	1
<i>Persea palustris</i>	2	<i>Zephyranthes atamasca</i>	1
<i>Persicaria virginiana</i>	2		

Floristic table for Group I.B.2: *Quercus pagoda* - *Carya cordiformis* / *Chasmanthium sessiliflorum* - *Verbesina virginica* Forest (CEGL004092); 1 of 2

NUMBER of PLOTS		1	
SPECIES RICHNESS		84	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Carya cordiformis</i>	7	<i>Ilex glabra</i>	2
<i>Chasmanthium sessiliflorum</i> var. <i>sessiliflorum</i>	7	<i>Matelea flavidula</i>	2
<i>Smallanthus uvedalius</i>	6	<i>Mitchella repens</i>	2
<i>Juglans nigra</i>	5	<i>Morella cerifera</i>	2
<i>Ulmus rubra</i>	5	<i>Nyssa sylvatica</i>	2
<i>Amphicarpaea bracteata</i> var. <i>bracteata</i>	4	<i>Oplismenus hirtellus</i> ssp. <i>setarius</i>	2
<i>Callicarpa americana</i>	4	<i>Oxalis dillenii</i>	2
<i>Cornus asperifolia</i>	4	<i>Persicaria virginiana</i>	2
<i>Cornus florida</i>	4	<i>Phryma leptostachya</i> var. <i>leptostachya</i>	2
<i>Elephantopus carolinianus/tomentosus</i>	4	<i>Physalis heterophylla</i>	2
<i>Ilex opaca</i> var. <i>opaca</i>	4	<i>Pinus taeda</i>	2
<i>Liquidambar styraciflua</i>	4	<i>Ruellia caroliniensis</i>	2
<i>Parthenocissus quinquefolia</i>	4	<i>Sabal minor</i>	2
<i>Quercus nigra</i>	4	<i>Sanicula canadensis</i> var. <i>floridana</i>	2
<i>Sideroxylon lycioides</i>	4	<i>Sassafras albidum</i>	2
<i>Carex cephalophora</i>	3	<i>Scrophularia marilandica</i>	2
<i>Lonicera japonica</i>	3	<i>Sisyrinchium angustifolium</i>	2

Floristic table for Group I.B.2: *Quercus pagoda* - *Carya cordiformis* / *Chasmanthium sessiliflorum* - *Verbesina virginica* Forest (CEGL004092); 2 of 2

<i>Quercus hemisphaerica</i>	3	<i>Smilax bona-nox</i>	2
<i>Ulmus alata</i>	3	<i>Spigelia marilandica</i>	2
<i>Vitis cinerea</i> var. <i>baileyana</i>	3	<i>Stachys tenuifolia</i>	2
<i>Ageratina altissima</i> var. <i>altissima</i>	2	<i>Symplocos tinctoria</i>	2
<i>Agrimonia pubescens</i>	2	<i>Tillandsia usneoides</i>	2
<i>Aralia spinosa</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Arisaema dracontium</i>	2	<i>Vaccinium elliotii</i>	2
<i>Asplenium platyneuron</i>	2	<i>Vaccinium fuscatum</i>	2
<i>Bignonia capreolata</i>	2	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	2
<i>Campsis radicans</i>	2	<i>Ampelopsis arborea</i>	1
<i>Carex crebriflora</i>	2	<i>Botrypus virginianus</i>	1
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	2	<i>Carya aquatica</i>	1
<i>Carya glabra</i> var. <i>megacarpa</i>	2	<i>Crataegus</i> sp.	1
<i>Cocculus carolinus</i>	2	<i>Desmodium glabellum</i>	1
<i>Desmodium nudiflorum</i>	2	<i>Desmodium paniculatum</i> var. <i>paniculatum</i>	1
<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	2	<i>Fagus grandifolia</i> var. <i>caroliniana</i>	1
<i>Dichanthelium laxiflorum</i>	2	<i>Melica mutica</i>	1
<i>Euonymus americanus</i>	2	<i>Melothria pendula</i> var. <i>pendula</i>	1
<i>Festuca subverticillata</i>	2	<i>Passiflora lutea</i> var. <i>lutea</i>	1
<i>Galium circaezans</i> var. <i>circaezans</i>	2	<i>Quercus michauxii</i>	1
<i>Galium hispidulum</i>	2	<i>Quercus phellos</i>	1
<i>Galium triflorum</i>	2	<i>Quercus velutina</i>	1
<i>Galium uniflorum</i>	2	<i>Smilax rotundifolia</i>	1
<i>Hypericum hypericoides</i>	2	<i>Triodanis perfoliata</i>	1
<i>Ilex decidua</i> var. <i>decidua</i>	2	<i>Viola palmata</i> var. <i>palmata</i>	1

Floristic table for Group II.A.1: *Pinus palustris* / *Quercus laevis* - *Quercus geminata* / *Vaccinium tenellum* / *Aristida stricta* Woodland (CEGL003589)

NUMBER of PLOTS		1	
SPECIES RICHNESS		38	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Quercus margaretta</i>	7	<i>Quercus nigra</i>	2
<i>Quercus virginiana</i>	7	<i>Scleria triglomerata</i>	2
<i>Pinus palustris</i>	6	<i>Sorghastrum nutans</i>	2
<i>Andropogon</i> sp.	4	<i>Tephrosia virginiana</i>	2
<i>Pteridium aquilinum</i>	4	<i>Vaccinium tenellum</i>	2
<i>Arundinaria gigantea/tecta</i>	2	<i>Carphephorus paniculatus</i>	1
<i>Castanea pumila</i>	2	<i>Chrysopsis gossypina</i>	1
<i>Clethra alnifolia</i>	2	<i>Cirsium</i> sp.	1
<i>Clitoria mariana</i> var. <i>mariana</i>	2	<i>Commelina virginica</i>	1
<i>Dichanthelium tenue</i>	2	<i>Dichanthelium aciculare</i>	1
<i>Diospyros virginiana</i>	2	Dicot sp.	1
<i>Elephantopus carolinianus/tomentosus</i>	2	<i>Eupatorium album</i> var. <i>album</i>	1
<i>Gaylussacia frondosa</i>	2	<i>Hypericum crux-andreae</i>	1
<i>Ilex glabra</i>	2	<i>Ilex coriacea</i>	1
<i>Magnolia virginiana</i> var. <i>virginiana</i>	2	<i>Rhododendron atlanticum/canescens</i>	1
<i>Morella cerifera</i>	2	<i>Rhus copallinum</i> var. <i>copallinum</i>	1
<i>Persea palustris</i>	2	<i>Scleria oligantha</i>	1
<i>Pityopsis graminifolia</i> var. <i>graminifolia</i>	2	<i>Sericocarpus tortifolius</i>	1
<i>Quercus incana</i>	2	<i>Solidago odora/rugosa/sempervirens</i> var. <i>odora</i>	1

Floristic table for Group III.A.1: *Liquidambar styraciflua* - *Quercus (laurifolia, nigra)* - (*Pinus taeda*) / *Arundinaria gigantea* / *Carex abscondita* Forest (CEGL007732)

NUMBER of PLOTS		1	
SPECIES RICHNESS		44	
SPECIES		COVER CLASS	
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	7	<i>Lygodium palmatum</i>	2
<i>Ilex opaca</i> var. <i>opaca</i>	7	<i>Matelea</i> sp.	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	7	<i>Mitchella repens</i>	2
<i>Arundinaria gigantea/tecta</i>	6	<i>Oplismenus hirtellus</i> ssp. <i>setarius</i>	2
<i>Liquidambar styraciflua</i>	6	<i>Parthenocissus quinquefolia</i>	2
<i>Quercus laurifolia</i>	5	<i>Pinus taeda</i>	2
<i>Chasmanthium latifolium</i>	4	<i>Rubus argutus/hispidus/trivialis</i>	2
<i>Fraxinus pennsylvanica</i>	4	<i>Smilax bona-nox</i>	2
<i>Ulmus americana</i> var. <i>americana</i>	4	<i>Smilax glauca</i>	2
<i>Dichanthelium dichotomum</i>	3	<i>Smilax rotundifolia</i>	2
<i>Quercus velutina</i>	3	<i>Tillandsia usneoides</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	3	<i>Boehmeria cylindrica</i>	1
<i>Acer rubrum</i>	2	<i>Carya aquatica</i>	1
<i>Ampelopsis arborea</i>	2	<i>Clematis crispa</i>	1
<i>Bignonia capreolata</i>	2	<i>Crataegus</i> sp.	1
<i>Carex louisianica</i>	2	<i>Desmodium glabellum</i>	1
<i>Celtis occidentalis</i>	2	<i>Nyssa aquatica</i>	1
<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	2	<i>Nyssa sylvatica</i>	1
<i>Dichanthelium yadkinense</i>	2	<i>Passiflora lutea</i> var. <i>lutea</i>	1
<i>Euonymus americanus</i>	2	<i>Spigelia marilandica</i>	1
<i>Hypericum hypericoides</i>	2	<i>Taxodium distichum</i>	1
<i>Ilex decidua</i> var. <i>decidua</i>	2	<i>Trachelospermum difforme</i>	1

Floristic table for Group III.B.1: *Quercus lyrata* - *Quercus laurifolia* - *Taxodium distichum* / *Saururus cernuus* Forest (CEGL004735)

NUMBER of PLOTS		1	
SPECIES RICHNESS		46	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Platanus occidentalis</i> var. <i>occidentalis</i>	7	<i>Liquidambar styraciflua</i>	2
<i>Taxodium distichum</i>	7	<i>Osmunda regalis</i> var. <i>spectabilis</i>	2
<i>Acer rubrum</i>	6	<i>Packera glabella</i>	2
<i>Carex crus-corvi</i>	5	<i>Parthenocissus quinquefolia</i>	2
<i>Fraxinus pennsylvanica</i>	5	<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	2
<i>Quercus laurifolia</i>	5	<i>Smilax rotundifolia</i>	2
<i>Quercus lyrata</i>	5	<i>Solidago odora/rugosa/sempervirens</i>	2
<i>Ulmus americana</i> var. <i>americana</i>	5	<i>Tillandsia usneoides</i>	2
<i>Carex intumescens</i> var. <i>intumescens</i>	4	<i>Ulmus alata</i>	2
<i>Celtis occidentalis</i>	4	<i>Woodwardia areolata</i>	2
<i>Dichanthelium yadkinense</i>	4	<i>Arisaema dracontium</i>	1
<i>Gleditsia aquatica</i>	4	<i>Arisaema triphyllum</i> ssp. <i>triphyllum</i>	1
<i>Ilex decidua</i> var. <i>decidua</i>	4	<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	1
<i>Planera aquatica</i>	4	<i>Carya aquatica</i>	1
<i>Vitis aestivalis</i> var. <i>aestivalis</i>	4	<i>Crataegus</i> sp.	1
<i>Cornus foemina</i>	3	<i>Gratiola virginiana</i>	1
<i>Toxicodendron radicans</i> var. <i>radicans</i>	3	<i>Hydrocotyle</i> sp.	1
<i>Ampelopsis arborea</i>	2	<i>Itea virginica</i>	1
<i>Bignonia capreolata</i>	2	<i>Mitchella repens</i>	1
<i>Boehmeria cylindrica</i>	2	<i>Ptilimnium capillaceum</i>	1
<i>Campsis radicans</i>	2	<i>Saururus cernuus</i>	1
<i>Carex tribuloides</i> var. <i>tribuloides</i>	2	<i>Viola palmata</i> var. <i>palmata</i>	1
<i>Ilex ambigua</i>	2	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	1

Floristic table for Group III.B.2: *Taxodium distichum* – *Nyssa aquatica* / *Fraxinus caroliniana* Forest (CEGL007431)

NUMBER of PLOTS		4			
AVERAGE RICHNESS		37			
SPECIES	CONSTANCY	AVERAGE COVER CLASS	SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Nyssa aquatica</i>	100	7	<i>Justicia ovata</i> var. <i>ovata</i>	50	4
<i>Taxodium distichum</i>	100	7	<i>Populus heterophylla</i>	50	4
<i>Acer rubrum</i>	100	6	<i>Campsis radicans</i>	50	2
<i>Ulmus americana</i> var. <i>americana</i>	100	5	<i>Styrax americanus</i> var. <i>americanus</i>	50	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100	3	<i>Tillandsia usneoides</i>	50	2
<i>Smilax rotundifolia</i>	100	2	<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	50	2
<i>Ampelopsis arborea</i>	100	2	<i>Alternanthera philoxeroides</i>	50	2
<i>Quercus lyrata</i>	100	2	<i>Carex tribuloides</i> var. <i>tribuloides</i>	50	2
<i>Fraxinus caroliniana</i>	75	4	<i>Crataegus</i> sp.	50	2
<i>Ilex decidua</i> var. <i>decidua</i>	75	3	<i>Gratiola virginiana</i>	50	2
<i>Boehmeria cylindrica</i>	75	2	<i>Smilax walteri</i>	50	2
<i>Hydrocotyle</i> sp.	75	2	<i>Planera aquatica</i>	50	2
<i>Saururus cernuus</i>	75	2	<i>Lycopus virginicus</i>	50	1
<i>Itea virginica</i>	75	2	<i>Echinodorus cordifolius</i> ssp. <i>cordifolius</i>	50	1
<i>Carya aquatica</i>	75	2	<i>Persicaria punctata</i>	50	1
<i>Parthenocissus quinquefolia</i>	75	1	<i>Aronia arbutifolia</i>	25	5
<i>Commelina virginica</i>	75	1	<i>Viburnum obovatum</i>	25	4
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	50	5	<i>Carex crus-corvi</i>	25	3
<i>Quercus laurifolia</i>	50	4			

Floristic table for Group IV.A.1: *Nyssa aquatica* - *Nyssa biflora* Forest (CEGL007429)

NUMBER of PLOTS		1	
SPECIES RICHNESS		55	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Alnus serrulata</i>	7	<i>Carex scoparia</i> var. <i>scoparia</i>	2
<i>Fraxinus caroliniana</i>	6	<i>Cicuta maculata</i> var. <i>maculata</i>	2
<i>Nyssa aquatica</i>	6	<i>Commelina virginica</i>	2
<i>Nyssa biflora</i>	6	<i>Crataegus</i> sp.	2
<i>Quercus laurifolia</i>	6	<i>Decumaria barbara</i>	2
<i>Taxodium distichum</i>	6	<i>Gelsemium sempervirens</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	5	<i>Glyceria</i> sp1	2
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	4	<i>Hydrocotyle</i> sp.	2
<i>Ilex verticillata</i>	4	<i>Hypoxis curtissii/hirsuta/wrightii</i>	2
<i>Itea virginica</i>	4	<i>Ilex decidua</i> var. <i>decidua</i>	2
<i>Orontium aquaticum</i>	4	<i>Liquidambar styraciflua</i>	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	4	<i>Mitchella repens</i>	2
<i>Quercus lyrata</i>	4	<i>Packera glabella</i>	2
<i>Ulmus rubra</i>	4	<i>Persicaria setacea</i>	2
<i>Acer rubrum</i>	3	<i>Pontederia cordata</i> var. <i>cordata</i>	2
<i>Cornus foemina</i>	3	<i>Proserpinaca palustris</i>	2
<i>Hymenocallis crassifolia</i>	3	<i>Sabal minor</i>	2
<i>Smilax rotundifolia</i>	3	<i>Sagittaria graminea/lancifolia/latifolia</i> var. <i>media</i>	2
<i>Vitis aestivalis</i> var. <i>aestivalis</i>	3	<i>Saururus cernuus</i>	2
<i>Achillea millefolium</i>	2	<i>Smilax bona-nox</i>	2
<i>Alternanthera philoxeroides</i>	2	<i>Smilax laurifolia</i>	2
<i>Ampelopsis arborea</i>	2	<i>Smilax walteri</i>	2
<i>Berchemia scandens</i>	2	<i>Solidago odora/rugosa/sempervirens</i>	2
<i>Betula nigra</i>	2	<i>Triadenum walteri</i>	2
<i>Boehmeria cylindrica</i>	2	<i>Vaccinium fuscatum</i>	2
<i>Campsis radicans</i>	2	<i>Wisteria frutescens</i>	2
<i>Carex gigantea</i>	2	<i>Woodwardia areolata</i>	2
<i>Carex intumescens</i> var. <i>intumescens</i>	2		

Floristic table for Group IV.B.1: *Taxodium distichum* – *Fraxinus pennsylvanica* – *Quercus laurifolia* / *Acer rubrum* / *Saururus cernuus* Forest (CEGL007719)

NUMBER of PLOTS	1		
SPECIES RICHNESS	43		
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Taxodium distichum</i>	7	<i>Cornus foemina</i>	2
<i>Fraxinus caroliniana</i>	6	<i>Dichanthelium fusiforme</i>	2
<i>Nyssa biflora</i>	6	<i>Hydrocotyle</i> sp.	2
<i>Acer rubrum</i>	5	<i>Hypoxis curtissii/hirsuta/wrightii</i>	2
<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	5	<i>Itea virginica</i>	2
<i>Ilex verticillata</i>	5	<i>Justicia ovata</i> var. <i>ovata</i>	2
<i>Quercus laurifolia</i>	5	<i>Liquidambar styraciflua</i>	2
<i>Hymenocallis crassifolia</i>	4	<i>Mikania scandens</i>	2
<i>Magnolia virginiana</i> var. <i>virginiana</i>	4	<i>Osmunda regalis</i> var. <i>spectabilis</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	4	<i>Pontederia cordata</i> var. <i>cordata</i>	2
<i>Ulmus americana</i> var. <i>americana</i>	4	<i>Quercus lyrata</i>	2
<i>Betula nigra</i>	3	<i>Robinia hispida</i> var. <i>hispida</i>	2
<i>Juglans nigra</i>	3	<i>Sabal minor</i>	2
<i>Smilax walteri</i>	3	<i>Smilax auriculata</i>	2
<i>Alnus serrulata</i>	2	<i>Smilax laurifolia</i>	2
<i>Alternanthera philoxeroides</i>	2	<i>Smilax rotundifolia</i>	2
<i>Amphicarpaea bracteata</i> var. <i>bracteata</i>	2	<i>Tillandsia usneoides</i>	2
<i>Arundinaria gigantea/tecta</i>	2	<i>Vaccinium elliotii</i>	2
<i>Bignonia capreolata</i>	2	<i>Viburnum dentatum</i>	2
<i>Boehmeria cylindrica</i>	2	<i>Viburnum obovatum</i>	2
<i>Campsis radicans</i>	2	<i>Woodwardia areolata</i>	2
<i>Clematis crispa</i>	2		

Floristic table for Group IV.C.1: *Quercus phellos* - *Quercus laurifolia* - *Nyssa biflora* - *Liquidambar styraciflua* / *Arundinaria gigantea* ssp. *tecta* - *Sabal minor* Forest (CEGL007846); 1 of 2

NUMBER of PLOTS	2	
AVERAGE RICHNESS	51	
SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Chasmanthium laxum</i>	100	7
<i>Arundinaria gigantea/tecta</i>	100	7
<i>Quercus laurifolia</i>	100	6
<i>Acer drummondii</i>	100	6
<i>Taxodium distichum</i>	100	4
<i>Dichanthelium lucidum</i>	100	3
<i>Morella cerifera</i>	100	3
<i>Rubus argutus/hispidus/trivialis</i>	100	3
<i>Parthenocissus quinquefolia</i>	100	2
<i>Smilax glauca</i>	100	2
<i>Carex howei</i>	100	2
<i>Carex intumescens</i> var. <i>intumescens</i>	100	2
<i>Carya glabra</i> var. <i>megacarpa</i>	100	2
<i>Hypericum hypericoides</i>	100	2
<i>Hypoxis curtissii/hirsuta/wrightii</i>	100	2
<i>Iris virginica</i> var. <i>virginica</i>	100	2
<i>Lyonia ligustrina</i> var. <i>foliosiflora</i>	100	2
<i>Magnolia virginiana</i> var. <i>virginiana</i>	100	2
<i>Mitchella repens</i>	100	2
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100	2
<i>Pinus taeda</i>	100	2
<i>Smilax rotundifolia</i>	100	2
<i>Smilax walteri</i>	100	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100	2
<i>Bignonia capreolata</i>	100	2
<i>Nyssa biflora</i>	100	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	100	2
<i>Carex debilis</i>	100	2
<i>Woodwardia areolata</i>	100	2
<i>Ilex opaca</i> var. <i>opaca</i>	50	4
<i>Betula nigra</i>	50	4
<i>Dichanthelium dichotomum</i>	50	3
<i>Asimina triloba</i>	50	2

Floristic table for Group IV.C.1: *Quercus phellos* - *Quercus laurifolia* - *Nyssa biflora* - *Liquidambar styraciflua* / *Arundinaria gigantea* ssp. *tecta* - *Sabal minor* Forest (CEGL007846); 2 of 2

Athyrium asplenioides	50	2
Dichanthelium commutatum ssp. joorii	50	2
Dichanthelium commutatum var. commutatum	50	2
Dulichium arundinaceum var. arundinaceum	50	2
Itea virginica	50	2
Lyonia lucida	50	2
Persea palustris	50	2
Pontederia cordata var. cordata	50	2
Sagittaria graminea/lancifolia/latifolia var. media	50	2
Saururus cernuus	50	2
Thelypteris palustris var. pubescens	50	2
Tillandsia usneoides	50	2
Vaccinium fuscatum	50	2
Vaccinium pallidum	50	2
Vaccinium tenellum	50	2
Viola primulifolia	50	2
Woodwardia virginica	50	2
Andropogon sp.	50	2

Floristic table for Group V.A.1: *Taxodium ascendens* / (*Nyssa biflora*) / *Leucothoe racemosa* - *Lyonia lucida* - *Morella cerifera* Depression Forest (CEGL007420)

NUMBER of PLOTS	1
SPECIES RICHNESS	22
SPECIES	COVER CLASS
<i>Lyonia lucida</i>	9
<i>Taxodium ascendens</i>	7
<i>Nyssa biflora</i>	6
<i>Ilex coriacea</i>	5
<i>Ilex glabra</i>	5
<i>Magnolia virginiana</i> var. <i>virginiana</i>	5
<i>Morella caroliniensis</i>	5
<i>Persea palustris</i>	5
<i>Sphagnum</i> sp.	4
<i>Woodwardia virginica</i>	4
<i>Zenobia pulverulenta</i>	4
<i>Ilex cassine</i> var. <i>cassine</i>	3
<i>Morella cerifera</i>	3
<i>Smilax laurifolia</i>	3
<i>Bryophyte</i> sp.	2
<i>Pinus serotina</i>	2
<i>Sarracenia flava</i>	2
<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	1
<i>Osmunda cinnamomea</i> var. <i>cinnamomea</i>	1
<i>Smilax walteri</i>	1
<i>Tillandsia usneoides</i>	1
<i>Woodwardia areolata</i>	1

Floristic table for Group V.A.2: *Quercus laurifolia* - *Nyssa biflora* / *Clethra alnifolia* - *Leucothoe axillaris* Forest (CEGL007447)

NUMBER of PLOTS		1	
SPECIES RICHNESS		62	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Acer rubrum</i>	6	<i>Vaccinium fuscatum</i>	2
<i>Arundinaria gigantea/tecta</i>	6	<i>Viburnum dentatum</i> var. <i>dentatum</i>	2
<i>Fraxinus caroliniana</i>	6	<i>Vitis aestivalis</i> var. <i>aestivalis</i>	2
<i>Morella cerifera</i>	6	<i>Bignonia capreolata</i>	1
<i>Quercus laurifolia</i>	6	<i>Carex gigantea</i>	1
<i>Rhynchospora miliacea</i>	5	<i>Centella erecta</i>	1
<i>Scirpus lineatus</i>	5	<i>Euonymus americanus</i>	1
<i>Berchemia scandens</i>	4	<i>Eupatorium album</i> var. <i>album</i>	1
<i>Cornus foemina</i>	4	<i>Ilex cassine</i> var. <i>cassine</i>	1
<i>Magnolia virginiana</i> var. <i>virginiana</i>	4	<i>Itea virginica</i>	1
<i>Nyssa biflora</i>	4	<i>Liriodendron tulipifera</i> var. <i>tulipifera</i>	1
<i>Viburnum nudum</i>	4	<i>Lobelia cardinalis</i>	1
<i>Carex leptalea</i> var. <i>harperi</i>	3	<i>Lycopus virginicus</i>	1
<i>Ilex opaca</i> var. <i>opaca</i>	3	<i>Mikania scandens</i>	1
<i>Liquidambar styraciflua</i>	3	<i>Mitchella repens</i>	1
<i>Persea palustris</i>	3	<i>Myriophyllum heterophyllum</i>	1
<i>Pinus serotina</i>	3	<i>Panicum amarum</i> var. <i>amarum</i>	1
<i>Carex folliculata</i>	2	<i>Parthenocissus quinquefolia</i>	1
<i>Clethra alnifolia</i>	2	<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	1
<i>Cyrilla racemiflora</i>	2	<i>Pluchea camphorata</i>	1
<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	2	<i>Quercus michauxii</i>	1
<i>Dichanthelium dichotomum</i>	2	<i>Rubus argutus/hispidus/trivialis</i>	1
<i>Diospyros virginiana</i>	2	<i>Saccharum giganteum</i>	1
<i>Gelsemium sempervirens</i>	2	<i>Saururus cernuus</i>	1
<i>Hypericum galioides</i>	2	<i>Smilax bona-nox</i>	1
<i>Lyonia lucida</i>	2	<i>Tillandsia usneoides</i>	1
<i>Quercus nigra</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	1
<i>Sabal minor</i>	2	<i>Triadenum walteri</i>	1
<i>Smilax laurifolia</i>	2	<i>Vaccinium tenellum</i>	1
<i>Smilax rotundifolia</i>	2	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	1
<i>Ulmus americana</i> var. <i>americana</i>	2	<i>Xyris iridifolia</i>	1

Floristic table for Group VI.A.1: *Magnolia virginiana* - *Persea palustris* / *Lyonia lucida* Forest (CEGL007049)

NUMBER of PLOTS	1
SPECIES RICHNESS	30
SPECIES	COVER CLASS
<i>Dichanthelium lucidum</i>	7
<i>Sphagnum</i> sp.	6
<i>Ilex coriacea</i>	5
<i>Magnolia virginiana</i> var. <i>virginiana</i>	5
<i>Viburnum nudum</i>	5
<i>Clethra alnifolia</i>	4
<i>Lyonia lucida</i>	4
<i>Persea palustris</i>	4
<i>Pinus serotina</i>	4
<i>Smilax laurifolia</i>	4
<i>Vaccinium fuscatum</i>	4
<i>Woodwardia virginica</i>	4
<i>Cyrilla racemiflora</i>	3
<i>Rhus copallinum</i> var. <i>copallinum</i>	3
<i>Rhynchospora microcephala</i>	3
<i>Rubus argutus</i>	3
<i>Thelypteris palustris</i> var. <i>pubescens</i>	3
<i>Acer floridanum</i>	2
<i>Aronia arbutifolia</i>	2
<i>Ilex glabra</i>	2
<i>Ludwigia pilosa</i>	2
<i>Morella cerifera</i>	2
<i>Nyssa biflora</i>	2
<i>Pteridium aquilinum</i>	2
<i>Vaccinium formosum</i>	2
<i>Xyris platylepis</i>	2
<i>Gordonia lasianthus</i>	1
<i>Morella caroliniensis</i>	1
<i>Rhexia petiolata</i>	1
<i>Zenobia pulverulenta</i>	1

Floristic table for Group VI.B.1: *Pinus serotina* / *Zenobia pulverulenta* - *Cyrilla racemiflora* - *Lyonia lucida* Wooded Shrubland (CEGL004458)

NUMBER of PLOTS	1		
SPECIES RICHNESS	30		
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Ilex coriacea</i>	7	<i>Andropogon</i> sp.	1
<i>Lyonia lucida</i>	6	<i>Carex abscondita</i>	1
<i>Arundinaria gigantea/tecta</i>	5	<i>Carex intumescens</i> var. <i>intumescens</i>	1
<i>Persea palustris</i>	5	Dicot sp.	1
<i>Sphagnum</i> sp.	5	<i>Drosera brevifolia</i>	1
<i>Clethra alnifolia</i>	4	<i>Erigeron vernus</i>	1
<i>Morella cerifera</i>	4	<i>Eriocaulon decangulare</i> var. <i>decangulare</i>	1
<i>Osmunda cinnamomea</i> var. <i>cinnamomea</i>	4	<i>Gordonia lasianthus</i>	1
<i>Pinus serotina</i>	4	<i>Ilex glabra</i>	1
<i>Smilax laurifolia</i>	4	<i>Lachnanthes caroliniana</i>	1
<i>Acer drummondii</i>	3	<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	1
<i>Magnolia virginiana</i> var. <i>virginiana</i>	3	<i>Rhododendron atlanticum/canescens</i>	1
<i>Viburnum nudum</i>	3	<i>Rubus argutus/hispidus/trivialis</i>	1
<i>Woodwardia virginica</i>	3	<i>Sarracenia rubra</i>	1
<i>Aronia arbutifolia</i>	2	<i>Scleria triglomerata</i>	1
<i>Eupatorium pilosum</i>	2	<i>Toxicodendron pubescens</i>	1
<i>Hypericum hypericoides</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	1
<i>Ilex myrtifolia</i>	2	<i>Vaccinium hirsutum</i>	1
<i>Polygala lutea</i>	2	<i>Xyris ambigua</i>	1
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	2		

Floristic table for Group VI.B.2: *Ilex glabra* - *Lyonia lucida* - *Zenobia pulverulenta* Shrubland (CEGL003944)

NUMBER of PLOTS	2	
AVERAGE RICHNESS	22	
SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Lyonia lucida</i>	100	8
<i>Zenobia pulverulenta</i>	100	5
<i>Ilex coriacea</i>	100	4
<i>Persea palustris</i>	100	4
<i>Woodwardia virginica</i>	100	4
<i>Pinus serotina</i>	100	3
<i>Scirpus cyperinus</i>	50	5
<i>Typha latifolia</i>	50	5
<i>Gordonia lasianthus</i>	50	3
<i>Smilax laurifolia</i>	50	3
<i>Clethra alnifolia</i>	50	3
<i>Cyrilla racemiflora</i>	50	3
<i>Magnolia virginiana</i> var. <i>virginiana</i>	50	3
<i>Morella cerifera</i>	50	3
<i>Rubus argutus</i> / <i>hispidus</i> / <i>trivialis</i>	50	3
<i>Acer rubrum</i>	50	2
<i>Andropogon</i> sp.	50	2
<i>Aronia arbutifolia</i>	50	2
<i>Cuscuta</i> sp.	50	2
<i>Dichanthelium ensifolium</i>	50	2
<i>Erechtites hieracifolia</i> var. <i>hieracifolia</i>	50	2
<i>Eupatorium capillifolium</i>	50	2

Floristic table for Group VII.A.1: *Taxodium ascendens* / *Ilex myrtifolia* Depression Forest (CEGL007418)

NUMBER of PLOTS	1
SPECIES RICHNESS	32
SPECIES	COVER CLASS
<i>Nyssa biflora</i>	7
<i>Taxodium ascendens</i>	7
<i>Ilex myrtifolia</i>	6
<i>Carex striata</i>	5
<i>Lyonia lucida</i>	5
<i>Woodwardia virginica</i>	5
<i>Acer rubrum</i>	4
<i>Panicum verrucosum</i>	4
<i>Pinus serotina</i>	4
<i>Saccharum brevibarbe</i> var. <i>contortum</i>	4
<i>Magnolia virginiana</i> var. <i>virginiana</i>	3
<i>Andropogon</i> sp.	2
<i>Carex glaucescens</i>	2
<i>Centella erecta</i>	2
<i>Clethra alnifolia</i>	2
<i>Dichanthelium scabriusculum</i>	2
<i>Ilex glabra</i>	2
<i>Iris tridentata</i>	2
<i>Itea virginica</i>	2
<i>Leersia hexandra</i>	2
<i>Liquidambar styraciflua</i>	2
<i>Litsea aestivalis</i>	2
<i>Persea palustris</i>	2
<i>Rhexia mariana</i> var. <i>mariana</i>	2
<i>Rhynchospora microcephala</i>	2
<i>Smilax laurifolia</i>	2
<i>Sphagnum</i> sp.	2
<i>Tillandsia usneoides</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Vaccinium formosum</i>	2
<i>Vaccinium fuscatum</i>	2
<i>Ilex decidua</i> var. <i>decidua</i>	1

Floristic table for Group VII.B.1: *Saccharum spp.* - *Panicum verrucosum* - (*Rhexia spp.*, *Sabatia angularis*)
Herbaceous Vegetation (CEGL004752)

NUMBER of PLOTS	1
SPECIES RICHNESS	27
SPECIES	COVER CLASS
<i>Saccharum baldwinii</i>	9
<i>Carex stricta</i>	6
<i>Eupatorium semiserratum</i>	6
<i>Liquidambar styraciflua</i>	6
<i>Panicum rigidulum</i>	6
<i>Iris tridentata</i>	5
<i>Smilax walteri</i>	5
<i>Acer rubrum</i>	4
<i>Diospyros virginiana</i>	4
<i>Pinus serotina</i>	4
<i>Quercus phellos</i>	4
<i>Andropogon sp.</i>	3
<i>Dichanthelium erectifolium</i>	3
<i>Diodia virginiana</i>	3
<i>Sabatia campanulata</i>	3
<i>Dichanthelium acuminatum</i> var. <i>fasciculatum</i>	2
<i>Hypericum denticulatum</i>	2
<i>Ilex glabra</i>	2
<i>Nyssa biflora</i>	2
<i>Proserpinaca pectinata</i>	2
<i>Rhynchospora fascicularis</i>	2
<i>Rhynchospora microcephala</i>	2
<i>Rubus argutus/hispidus/trivialis</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Vaccinium virgatum</i>	2
<i>Eupatorium mohrii</i>	1
<i>Rhus copallinum</i> var. <i>copallinum</i>	1

Floristic table for Group VII.B.2: *Eleocharis baldwinii* - *Hydrocotyle (ranunculoides, umbellata)* Herbaceous Vegetation (CEGL007893)

	NUMBER of PLOTS	2
	AVERAGE RICHNESS	14
SPECIES	CONSTANCY	AVERAGE COVER CLASS
Hydrocotyle ranunculoides	100	8
Lemna minor	100	7
Taxodium distichum	100	6
Nyssa biflora	100	3
Decodon verticillatus	100	2
Tillandsia usneoides	100	2
Cicuta mexicana	50	6
Acer rubrum	50	4
Alternanthera pungens	50	4
Fraxinus pennsylvanica	50	3
Utricularia sp.	50	3
Zizaniopsis miliacea	50	3
Alternanthera philoxeroides	50	2
Carex lupulina	50	2

Floristic table for Group VIII.A.1: *Pinus serotina* - (*Liriodendron tulipifera*) / *Lyonia lucida* - *Clethra alnifolia* - *Ilex glabra* Woodland (CEGL004435)

NUMBER of PLOTS		2			
AVERAGE RICHNESS		37			
SPECIES	CONSTANCY	AVERAGE COVER CLASS	SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Pinus serotina</i>	100	5	<i>Sparganium americanum</i>	50	3
<i>Clethra alnifolia</i>	100	5	<i>Taxodium ascendens</i>	50	3
<i>Lyonia lucida</i>	100	4	<i>Ilex coriacea</i>	50	2
<i>Pteridium aquilinum</i>	100	4	<i>Osmunda regalis</i> var. <i>spectabilis</i>	50	2
<i>Andropogon</i> sp.	100	3	<i>Vaccinium tenellum</i>	50	2
<i>Nyssa biflora</i>	100	3	<i>Acer rubrum</i>	50	2
<i>Aronia arbutifolia</i>	100	2	<i>Baccharis halimifolia</i>	50	2
<i>Eupatorium mohrii</i>	100	2	<i>Carex albolutescens</i>	50	2
<i>Smilax laurifolia</i>	100	2	<i>Carex glaucescens</i>	50	2
<i>Magnolia virginiana</i> var. <i>virginiana</i>	100	2	<i>Carex stricta</i>	50	2
<i>Ludwigia suffruticosa</i>	50	7	<i>Dichanthelium lucidum</i>	50	2
<i>Osmunda cinnamomea</i> var. <i>cinnamomea</i>	50	4	<i>Erechtites hieracifolia</i> var. <i>hieracifolia</i>	50	2
<i>Persea palustris</i>	50	4	<i>Eriocaulon compressum</i>	50	2
<i>Pinus palustris</i>	50	4	<i>Eupatorium capillifolium</i>	50	2
<i>Vaccinium virgatum</i>	50	4	<i>Hypericum densiflorum</i>	50	2
<i>Ludwigia lanceolata</i>	50	4	<i>Juncus effusus</i> ssp. <i>solutus</i>	50	2
<i>Ilex glabra</i>	50	3	<i>Juncus elliotii</i>	50	2
<i>Lyonia ligustrina</i> var. <i>foliosiflora</i>	50	3	<i>Morella caroliniensis</i>	50	2
<i>Rubus argutus</i> / <i>hispidus</i> / <i>trivialis</i>	50	3			

Floristic table for Group IX.A.1: *Juniperus virginiana* var. *silicicola* - (*Quercus virginiana*, *Sabal palmetto*) Forest (CEGL007813)

NUMBER of PLOTS	1		
SPECIES RICHNESS	42		
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Juniperus virginiana</i> var. <i>silicicola</i>	6	<i>Smilax rotundifolia</i>	2
<i>Spartina patens</i> var. <i>monogyna</i>	6	<i>Solidago odora/rugosa/sempervirens</i> var. <i>mexicana</i>	2
<i>Ilex vomitoria</i>	5	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Morella cerifera</i>	5	<i>Zanthoxylum clava-herculis</i>	2
<i>Dichanthelium aciculare</i>	4	<i>Andropogon</i> sp. var. <i>glomeratus</i>	1
<i>Dichanthelium sphaerocarpon</i>	4	<i>Baccharis halimifolia</i>	1
<i>Smilax auriculata</i>	3	<i>Bulbostylis ciliatifolia</i>	1
<i>Uniola paniculata</i>	3	<i>Cakile edentula</i>	1
<i>Aristida purpurea</i> var. <i>longiseta</i>	2	<i>Eupatorium capillifolium</i>	1
<i>Callicarpa americana</i>	2	<i>Eupatorium torreyanum</i>	1
<i>Chloris pectinata</i>	2	<i>Gnaphalium uliginosum</i>	1
<i>Cyperus filicinus</i>	2	<i>Hydrocotyle</i> sp.	1
<i>Dichanthelium laxiflorum</i>	2	<i>Hypericum hypericoides</i>	1
<i>Heterotheca subaxillaris</i>	2	<i>Lepidium virginicum</i> var. <i>virginicum</i>	1
<i>Iva frutescens</i> var. <i>frutescens</i>	2	<i>Monarda punctata</i> var. <i>punctata</i>	1
<i>Juncus roemerianus</i>	2	<i>Oldenlandia uniflora</i>	1
<i>Nuttallanthus canadensis</i>	2	<i>Opuntia humifusa</i> var. <i>humifusa</i>	1
<i>Oenothera fruticosa</i> var. <i>fruticosa</i>	2	<i>Physalis walteri</i>	1
<i>Opuntia pusilla</i>	2	<i>Silene antirrhina</i>	1
<i>Rubus argutus/hispidus/trivialis</i>	2	<i>Strophostyles helvula</i>	1
<i>Smilax bona-nox</i>	2	<i>Yucca gloriosa</i>	1

Floristic table for Group IX.A.2: *Quercus virginiana* - *Quercus hemisphaerica* - *Pinus taeda* - *Quercus falcata* / *Ilex vomitoria* Forest (CEGL007026)

NUMBER of PLOTS	1
SPECIES RICHNESS	32
SPECIES	COVER CLASS
<i>Pinus taeda</i>	8
<i>Ilex vomitoria</i>	7
<i>Juniperus virginiana</i> var. <i>silicicola</i>	7
<i>Morella cerifera</i>	4
<i>Smilax auriculata</i>	3
<i>Smilax bona-nox</i>	3
<i>Aristida purpurascens</i>	2
<i>Baccharis halimifolia</i>	2
<i>Borrchia frutescens</i>	2
<i>Callicarpa americana</i>	2
<i>Dichantherium aciculare</i>	2
<i>Dichantherium laxiflorum</i>	2
Dicot sp.	2
Dicot sp. #2	2
<i>Euthamia hirtipes</i>	2
<i>Galium hispidulum</i>	2
<i>Gamochaeta purpurea</i>	2
<i>Hypericum hypericoides</i>	2
<i>Melica mutica</i>	2
<i>Opuntia pusilla</i>	2
<i>Panicum virgatum</i>	2
<i>Parthenocissus quinquefolia</i>	2
<i>Quercus virginiana</i>	2
<i>Rubus argutus/hispidus/trivialis</i>	2
<i>Silene antirrhina</i>	2
<i>Solidago odora/rugosa/sempervirens</i> var. <i>mexicana</i>	2
<i>Spartina patens</i> var. <i>monogyna</i>	2
<i>Tillandsia usneoides</i>	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Asplenium platyneuron</i>	1
<i>Heterotheca subaxillaris</i>	1
<i>Iva frutescens</i> var. <i>frutescens</i>	1

Floristic table for Group IX.A.3: *Quercus virginiana*-*Pinus taeda* /*Ilex vomitoria* / *Chasmanthium sessiliflorum* Woodland (proposed)

NUMBER of PLOTS		1	
SPECIES RICHNESS		60	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Chasmanthium sessiliflorum</i> var. <i>sessiliflorum</i>	7	<i>Celtis tenuifolia</i>	2
<i>Cornus florida</i>	7	<i>Chasmanthium laxum</i>	2
<i>Ilex vomitoria</i>	7	<i>Chimaphila maculata</i>	2
<i>Quercus virginiana</i>	7	<i>Crataegus</i> sp.	2
<i>Ilex opaca</i> var. <i>opaca</i>	6	<i>Desmodium glabellum</i>	2
<i>Liquidambar styraciflua</i>	6	<i>Desmodium paniculatum</i> var. <i>paniculatum</i>	2
<i>Mitchella repens</i>	6	<i>Dichantherium commutatum</i> var. <i>commutatum</i>	2
<i>Morella cerifera</i>	6	<i>Diospyros virginiana</i>	2
<i>Pinus taeda</i>	6	<i>Galium uniflorum</i>	2
<i>Vaccinium elliotii</i>	6	<i>Gelsemium sempervirens</i>	2
<i>Carya glabra</i> var. <i>megacarpa</i>	5	<i>Lonicera japonica</i>	2
<i>Quercus hemisphaerica</i>	5	<i>Lonicera sempervirens</i> var. <i>sempervirens</i>	2
<i>Quercus nigra</i>	5	<i>Malaxis unifolia</i>	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	5	<i>Parthenocissus quinquefolia</i>	2
<i>Desmodium nudiflorum</i>	4	<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	2
<i>Elephantopus carolinianus/tomentosus</i>	4	<i>Polystichum acrostichoides</i>	2
<i>Nyssa sylvatica</i>	4	<i>Prenanthes serpentaria</i>	2
<i>Smilax glauca</i>	3	<i>Prunus caroliniana</i>	2
<i>Ampelopsis arborea</i>	2	<i>Rubus argutus/hispidus/trivialis</i>	2
<i>Amphicarpaea bracteata</i> var. <i>bracteata</i>	2	<i>Sanicula canadensis</i> var. <i>floridana</i>	2
<i>Asclepias perennis</i>	2	<i>Scleria oligantha</i>	2
<i>Asplenium platyneuron</i>	2	<i>Smilax bona-nox</i>	2
<i>Berchemia scandens</i>	2	<i>Smilax pumila</i>	2
<i>Botrypus virginianus</i>	2	<i>Spiranthes praecox</i>	2
Bryophyte sp.	2	<i>Tillandsia usneoides</i>	2
<i>Callicarpa americana</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Campsis radicans</i>	2	<i>Trachelospermum difforme</i>	2
<i>Carex complanata</i>	2	<i>Vitis cinerea</i> var. <i>floridana</i>	2
<i>Carya alba</i>	2	<i>Centrosema virginianum</i>	1
<i>Castanea pumila</i>	2	<i>Endodeca serpentaria</i>	1

Floristic table for Group IX.B.1: *Quercus hemisphaerica* - *Pinus taeda* - (*Quercus nigra*) / *Osmanthus americanus* var. *americanus* / *Ilex glabra* Forest (CEGL007022)

NUMBER of PLOTS	1		
SPECIES RICHNESS	36		
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Quercus hemisphaerica</i>	7	<i>Quercus shumardii</i> var. <i>shumardii</i>	2
<i>Vaccinium tenellum</i>	6	<i>Smilax auriculata</i>	2
<i>Ilex opaca</i> var. <i>opaca</i>	5	<i>Smilax bona-nox</i>	2
<i>Quercus nigra</i>	5	<i>Smilax glauca</i>	2
<i>Quercus virginiana</i>	5	<i>Smilax rotundifolia</i>	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	5	<i>Symplocos tinctoria</i>	2
<i>Ilex vomitoria</i>	4	<i>Vaccinium arboreum</i>	2
<i>Pinus taeda</i>	4	<i>Callicarpa americana</i>	1
<i>Smilax pumila</i>	3	<i>Desmodium glabellum</i>	1
<i>Tillandsia usneoides</i>	3	<i>Juniperus virginiana</i> var. <i>silicicola</i>	1
<i>Castanea pumila</i>	2	<i>Lonicera sempervirens</i> var. <i>sempervirens</i>	1
<i>Chasmanthium laxum</i>	2	<i>Magnolia grandiflora</i>	1
<i>Gelsemium sempervirens</i>	2	<i>Magnolia virginiana</i> var. <i>virginiana</i>	1
<i>Liquidambar styraciflua</i>	2	<i>Sabal palmetto</i>	1
<i>Mitchella repens</i>	2	<i>Sassafras albidum</i>	1
<i>Nyssa sylvatica</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	1
<i>Persea borbonia</i>	2	<i>Vaccinium fuscatum</i>	1
<i>Persea palustris</i>	2	<i>Woodwardia areolata</i>	1

Floristic table for Group X.A.1: *Uniola paniculata* Herbaceous Vegetation (CEGL004038)

NUMBER of PLOTS	1
SPECIES RICHNESS	9
SPECIES	COVER CLASS
<i>Uniola paniculata</i>	6
<i>Iva imbricata</i>	4
<i>Cakile edentula</i>	2
<i>Oenothera fruticosa</i> var. <i>fruticosa</i>	2
<i>Panicum amarum</i> var. <i>amarum</i>	2
<i>Spartina patens</i> var. <i>monogyna</i>	2
<i>Strophostyles helvula</i>	2
<i>Hydrocotyle</i> sp.	1
<i>Yucca filamentosa</i>	1

Floristic table for Group X.A.2: *Uniola paniculata* - *Schizachyrium littorale* - *Panicum amarum* Herbaceous Vegetation (CEGL004039)

NUMBER of PLOTS	1
SPECIES RICHNESS	18
SPECIES	COVER CLASS
<i>Uniola paniculata</i>	6
<i>Andropogon</i> sp.	2
<i>Chamaesyce polygonifolia</i>	2
<i>Croton punctatus</i>	2
<i>Eustachys petraea</i>	2
<i>Euthamia hirtipes</i>	2
<i>Galactia volubilis</i> var. <i>volubilis</i>	2
<i>Heterotheca subaxillaris</i>	2
<i>Iva frutescens</i> var. <i>frutescens</i>	2
<i>Lepidium virginicum</i> var. <i>virginicum</i>	2
<i>Oenothera humifusa</i>	2
<i>Opuntia humifusa</i> var. <i>humifusa</i>	2
<i>Panicum amarum</i> var. <i>amarum</i>	2
<i>Silene antirrhina</i>	2
<i>Solidago odora/rugosa/sempervirens</i> var. <i>mexicana</i>	2
<i>Spartina patens</i> var. <i>monogyna</i>	2
<i>Yucca filamentosa</i>	2
<i>Yucca gloriosa</i>	2

Floristic table for Group X.B.1: *Spartina patens* - *Schoenoplectus pungens* - *Solidago sempervirens* Herbaceous Vegetation (CEGL004097)

NUMBER of PLOTS	1
SPECIES RICHNESS	15
SPECIES	COVER CLASS
<i>Spartina patens</i> var. <i>monogyna</i>	6
<i>Solidago odora/rugosa/sempervirens</i> var. <i>mexicana</i>	3
<i>Chloris pectinata</i>	2
<i>Euthamia hirtipes</i>	2
<i>Heterotheca subaxillaris</i>	2
<i>Iva imbricata</i>	2
<i>Oenothera fruticosa</i> var. <i>fruticosa</i>	2
<i>Opuntia humifusa</i> var. <i>humifusa</i>	2
<i>Panicum amarum</i> var. <i>amarum</i>	2
<i>Silene antirrhina</i>	2
<i>Strophostyles helvula</i>	2
<i>Cakile edentula</i>	1
<i>Chamaesyce polygonifolia</i>	1
<i>Lepidium virginicum</i> var. <i>virginicum</i>	1
<i>Uniola paniculata</i>	1

Floristic table for Group XI.A.1: *Nyssa biflora* - *Nyssa aquatica* - *Taxodium distichum* / *Saururus cernuus* Forest (CEGL004696)

NUMBER of PLOTS		4			
AVERAGE RICHNESS		48			
SPECIES	CONSTANCY	AVERAGE COVER CLASS	SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Saururus cernuus</i>	100	6	<i>Carex gigantea</i>	75	2
<i>Acer rubrum</i>	100	6	<i>Ilex opaca</i> var. <i>opaca</i>	75	2
<i>Taxodium distichum</i>	100	6	<i>Steinchisma hians</i>	50	6
<i>Morella cerifera</i>	100	5	<i>Persicaria arifolia</i>	50	4
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100	5	<i>Panicum hemitomom</i>	50	4
<i>Liquidambar styraciflua</i>	100	4	<i>Carpinus caroliniana</i> var. <i>caroliniana</i>	50	3
<i>Quercus laurifolia</i>	100	4	<i>Vaccinium elliotii</i>	50	3
<i>Sabal minor</i>	100	4	<i>Sagittaria graminea/lancifolia/latifolia</i>	50	3
<i>Crataegus</i> sp.	100	3	<i>Cornus foemina</i>	50	3
<i>Osmunda regalis</i> var. <i>spectabilis</i>	100	2	<i>Galium obtusum</i> var. <i>filifolium</i>	50	3
<i>Smilax bona-nox</i>	100	2	<i>Decumaria barbara</i>	50	2
<i>Tillandsia usneoides</i>	100	2	<i>Itea virginica</i>	50	2
<i>Smilax rotundifolia</i>	100	2	<i>Carex scoparia</i> var. <i>scoparia</i>	50	2
<i>Triadenum walteri</i>	100	2	<i>Campsis radicans</i>	50	2
<i>Nyssa biflora</i>	75	6	<i>Smilax laurifolia</i>	50	2
<i>Fraxinus caroliniana</i>	75	5	<i>Mitchella repens</i>	50	2
<i>Ulmus americana</i> var. <i>americana</i>	75	5	<i>Pinus taeda</i>	50	2
<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	75	2	<i>Carex crus-corvi</i>	50	2
<i>Gelsemium sempervirens</i>	75	2	<i>Carex intumescens</i> var. <i>intumescens</i>	50	2
<i>Parthenocissus quinquefolia</i>	75	2	<i>Ilex decidua</i> var. <i>decidua</i>	50	2
<i>Rubus argutus/hispidus/trivialis</i>	75	2	<i>Woodwardia areolata</i>	50	2
<i>Smilax walteri</i>	75	2	<i>Hydrocotyle</i> sp.	50	2
<i>Persicaria punctata</i>	75	2	<i>Hypoxis curtissii/hirsuta/wrightii</i>	50	1
<i>Arundinaria gigantea/tecta</i>	75	2	<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	50	1

Floristic table for Group XI.A.2: *Acer rubrum* - *Nyssa biflora* - (*Liquidambar styraciflua*, *Fraxinus* sp.) Maritime Swamp Forest (CEGL004082)

NUMBER of PLOTS		1	
SPECIES RICHNESS		48	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Acer rubrum</i>	7	<i>Morella cerifera</i>	2
<i>Nyssa biflora</i>	7	<i>Murdannia keisak</i>	2
<i>Triadica sebifera</i>	6	<i>Nymphaea odorata</i> ssp. <i>odorata</i>	2
<i>Liquidambar styraciflua</i>	4	<i>Persicaria hydropiperoides</i>	2
<i>Pinus taeda</i>	4	<i>Pluchea camphorata</i>	2
<i>Arundinaria gigantea/tecta</i>	2	<i>Quercus laurifolia</i>	2
<i>Bidens</i> sp.	2	<i>Saururus cernuus</i>	2
<i>Carex debilis</i>	2	<i>Scirpus atrovirens</i>	2
<i>Carex gigantea</i>	2	<i>Scirpus cyperinus</i>	2
<i>Carex lonchocarpa</i>	2	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Carex tribuloides</i> var. <i>tribuloides</i>	2	<i>Woodwardia virginica</i>	2
<i>Centella erecta</i>	2	<i>Alternanthera philoxeroides</i>	1
<i>Cephalanthus occidentalis</i>	2	<i>Berchemia scandens</i>	1
<i>Eleocharis microcarpa/tuberculosa</i>	2	<i>Callitriche heterophylla</i> var. <i>heterophylla</i>	1
<i>Fraxinus pennsylvanica</i>	2	<i>Commelina virginica</i>	1
<i>Galium tinctorium</i> var. <i>floridanum</i>	2	<i>Eupatorium capillifolium</i>	1
<i>Hydrocotyle</i> sp.	2	<i>Hymenocallis crassifolia</i>	1
<i>Isoetes engelmannii</i>	2	<i>Ilex opaca</i> var. <i>opaca</i>	1
<i>Juncus debilis</i>	2	<i>Lycopus virginicus</i>	1
<i>Juncus effusus</i> ssp. <i>solutus</i>	2	<i>Parthenocissus quinquefolia</i>	1
<i>Leersia virginica</i>	2	<i>Rubus argutus/hispidus/trivialis</i>	1
<i>Ludwigia palustris</i>	2	<i>Sagittaria graminea/lancifolia/latifolia</i> var. <i>latifolia</i>	1
<i>Magnolia virginiana</i> var. <i>virginiana</i>	2	<i>Smilax rotundifolia</i>	1
<i>Mikania scandens</i>	2	<i>Thelypteris palustris</i> var. <i>pubescens</i>	1

Floristic table for Group XI.A.3: *Quercus laurifolia* - *Fraxinus pennsylvanica* - *Nyssa aquatica* / *Sabal minor* Tidal Forest (CEGL007884)

NUMBER of PLOTS		1	
SPECIES RICHNESS		57	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Quercus laurifolia</i>	7	<i>Osmunda regalis</i> var. <i>spectabilis</i>	2
<i>Acer rubrum</i>	6	<i>Panicum hemitomom</i>	2
<i>Carex intumescens</i> var. <i>intumescens</i>	6	<i>Parthenocissus quinquefolia</i>	2
<i>Nyssa biflora</i>	6	<i>Pinus taeda</i>	2
<i>Ulmus alata</i>	6	<i>Rhynchospora inexpansa</i>	2
<i>Cornus foemina</i>	5	<i>Rubus argutus</i> / <i>hispidus</i> / <i>trivialis</i>	2
<i>Morella caroliniensis</i>	5	<i>Smilax bona-nox</i>	2
<i>Sabal minor</i>	5	<i>Tillandsia usneoides</i>	2
<i>Quercus phellos</i>	3	<i>Toxicodendron radicans</i> var. <i>radicans</i>	2
<i>Berchemia scandens</i>	2	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	2
Bryophyte sp.	2	<i>Woodwardia areolata</i>	2
<i>Campsis radicans</i>	2	<i>Ampelopsis arborea</i>	1
<i>Carex complanata</i>	2	<i>Baccharis halimifolia</i>	1
<i>Carex debilis</i>	2	<i>BoSc virginianus</i> / <i>biternatum</i>	1
<i>Carex stipata</i>	2	<i>Carex lonchocarpa</i>	1
<i>Carex styloflexa</i>	2	<i>Clematis crispa</i>	1
<i>Chasmanthium laxum</i>	2	<i>Crataegus</i> sp.	1
<i>Dichanthelium commutatum</i> var. <i>commutatum</i>	2	<i>Eleocharis microcarpa</i> / <i>tuberculosa</i>	1
<i>Dichanthelium yadkinense</i>	2	<i>Ilex decidua</i> var. <i>decidua</i>	1
<i>Diospyros virginiana</i>	2	<i>Ilex opaca</i> var. <i>opaca</i>	1
<i>Fraxinus pennsylvanica</i>	2	<i>Juncus coriaceous</i>	1
<i>Gelsemium sempervirens</i>	2	<i>Physostegia purpurea</i>	1
<i>Hydrocotyle</i> sp.	2	<i>Sabatia calycina</i>	1
<i>Hypoxis curtissii</i> / <i>hirsuta</i> / <i>wrightii</i>	2	<i>Saccharum baldwinii</i>	1
<i>Iris virginica</i> var. <i>virginica</i>	2	<i>Smilax glauca</i>	1
<i>Itea virginica</i>	2	<i>Smilax laurifolia</i>	1
<i>Liquidambar styraciflua</i>	2	<i>Taxodium distichum</i>	1
<i>Mitchella repens</i>	2	<i>Trachelospermum difforme</i>	1
<i>Onoclea sensibilis</i> var. <i>sensibilis</i>	2		

Floristic table for Group XI.B.1: *Taxodium distichum* Tidal Woodland [Placeholder] (CEGL003739)

NUMBER of PLOTS		1	
SPECIES RICHNESS		48	
SPECIES	COVER CLASS	SPECIES	COVER CLASS
<i>Iris virginica</i> var. <i>virginica</i>	6	<i>Eupatorium compositifolium</i>	2
<i>Liquidambar styraciflua</i>	6	<i>Fraxinus caroliniana</i>	2
<i>Taxodium distichum</i>	6	<i>Galium obtusum</i> var. <i>obtusum</i>	2
<i>Hymenocallis crassifolia</i>	5	<i>Morella cerifera</i>	2
<i>Nyssa biflora</i>	5	<i>Osmunda regalis</i> var. <i>spectabilis</i>	2
<i>Acer rubrum</i>	4	<i>Panicum virgatum</i>	2
<i>Pinus taeda</i>	4	<i>Phanopyrum gymnocarpon</i>	2
<i>Pontederia cordata</i> var. <i>cordata</i>	4	<i>Pleopeltis polypodioides</i> ssp. <i>michauxiana</i>	2
<i>Quercus virginiana</i>	4	<i>Potamogeton pulcher</i>	2
<i>Alternanthera philoxeroides</i>	3	<i>Quercus nigra</i>	2
<i>Carex comosa</i>	3	<i>Saccharum giganteum</i>	2
<i>Juncus effusus</i> ssp. <i>solutus</i>	3	<i>Saururus cernuus</i>	2
<i>Lemna minor</i>	3	<i>Smilax rotundifolia</i>	2
<i>Nymphoides cordata</i>	3	<i>Triadica sebifera</i>	2
<i>Smilax walteri</i>	3	<i>Utricularia</i> sp.	2
<i>Tillandsia usneoides</i>	3	<i>Vaccinium fuscatum</i>	2
<i>Agrostis</i> sp.	2	<i>Woodwardia areolata</i>	2
<i>Carex glaucescens</i>	2	<i>Andropogon</i> sp.	1
<i>Carex lurida</i>	2	<i>Campsis radicans</i>	1
<i>Carex ovalis</i>	2	<i>Centella erecta</i>	1
<i>Cephalanthus occidentalis</i>	2	<i>Nyssa sylvatica</i>	1
<i>Chasmanthium laxum</i>	2	<i>Parthenocissus quinquefolia</i>	1
<i>Diospyros virginiana</i>	2	<i>Pluchea camphorata</i>	1
<i>Dulichium arundinaceum</i> var. <i>arundinaceum</i>	2	<i>Rhexia virginica</i>	1

Floristic table for Group XI.B.2: *Taxodium ascendens* - *Nyssa biflora* / *Carex striata* - *Rhynchospora (careyana, cephalantha, microcephala)* Stringer Woodland (CEGL004089)

	NUMBER of PLOTS	2
	AVERAGE RICHNESS	32
SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Carex striata</i>	100	8
<i>Nyssa biflora</i>	100	7
<i>Acer rubrum</i>	100	6
<i>Liquidambar styraciflua</i>	100	6
<i>Woodwardia virginica</i>	100	5
<i>Arundinaria gigantea/tecta</i>	100	4
<i>Diospyros virginiana</i>	100	2
<i>Smilax laurifolia</i>	100	2
<i>Toxicodendron radicans</i> var. <i>radicans</i>	100	2
<i>Woodwardia areolata</i>	100	2
<i>Magnolia virginiana</i> var. <i>virginiana</i>	100	2
<i>Morella cerifera</i>	100	2
<i>Pinus taeda</i>	100	2
<i>Ilex glabra</i>	100	1
<i>Taxodium ascendens</i>	50	6
<i>Andropogon</i> sp.	50	5
<i>Clethra acuminata</i>	50	3
<i>Persea borbonia</i>	50	3
<i>Cephalanthus occidentalis</i>	50	2
<i>Dichantherium ensifolium</i>	50	2
<i>Itea virginica</i>	50	2
<i>Lyonia lucida</i>	50	2
<i>Persea palustris</i>	50	2
<i>Pieris phillyreifolia</i>	50	2
<i>Quercus nigra</i>	50	2
<i>Saccharum giganteum</i>	50	2
<i>Tillandsia usneoides</i>	50	2
<i>Vaccinium formosum</i>	50	2
<i>Clethra alnifolia</i>	50	2
<i>Gelsemium sempervirens</i>	50	2
<i>Hypericum hypericoides</i>	50	2
<i>Ilex opaca</i> var. <i>opaca</i>	50	2

Floristic table for Group XII.A.1: *Borrichia frutescens* / (*Spartina patens*, *Juncus roemerianus*) Shrubland (CEGL003924)

NUMBER of PLOTS	1
SPECIES RICHNESS	3
SPECIES	COVER CLASS
<i>Borrichia frutescens</i>	8
<i>Salicornia virginica</i>	6
<i>Distichlis spicata</i>	1

Floristic table for Group XIII.A.1: *Spartina patens* - *Distichlis spicata* - *Juncus roemerianus* Herbaceous Vegetation (CEGL004197)

NUMBER of PLOTS	1
SPECIES RICHNESS	3
SPECIES	COVER CLASS
<i>Distichlis spicata</i>	9
<i>Salicornia virginica</i>	4
<i>Spartina alterniflora</i>	4

Floristic table for Group XIII.A.2: *Spartina alterniflora* Carolinian Zone Herbaceous Vegetation (CEGL004191)

NUMBER of PLOTS	1
SPECIES RICHNESS	2
SPECIES	COVER CLASS
<i>Spartina alterniflora</i>	8
<i>Salicornia virginica</i>	1

Floristic table for Group XIV.A.1: *Zizaniopsis miliacea* Tidal Herbaceous Vegetation (CEGL004705)

NUMBER of PLOTS	2	
AVERAGE RICHNESS	13	
SPECIES	CONSTANCY	AVERAGE COVER CLASS
<i>Zizaniopsis miliacea</i>	100	7
<i>Typha domingensis</i>	100	6
<i>Utricularia</i> sp.	100	3
<i>Azolla caroliniana</i>	100	2
<i>Nymphoides aquatica</i>	100	2
<i>Taxodium distichum</i>	50	4
<i>Alternanthera philoxeroides</i>	50	2
<i>Glyceria</i> sp1	50	2
<i>Hibiscus moscheutos</i>	50	2
<i>Hydrocotyle</i> sp.	50	2
<i>Juncus effusus</i> ssp. <i>solutus</i>	50	2
<i>Persicaria hydropiperoides</i>	50	2
<i>Proserpinaca palustris</i>	50	2