FIELD KEY TO THE PLANT COMMUNITIES OF CONGAREE SWAMP NATIONAL MONUMENT

KEY TO KEYS

1. Communities of upland flats and slopes or upland depressional swamps.....Key 1
1. Communities of seepage slopes and active flood plains. .....…2

2. Communities of seepage slopes and levees.....…Key 2
2 Communities of sloughs, alluvial flats, and terraces.....….Key 3

KEY 1

1 Upland depressional swamp dominated by *Quercus phellos*, often with an emergent canopy of *Pinus taeda*.....***Quercus phellos / Carex (intumescens, joorii) / Sphagnum lescurii*** **Forest**

1 Forests and woodlands of dry upland flats or dry-mesic to mesic slopes.....2

2 *Pinus taeda* usually contributing less than 10 percent of canopy coverage.....3
2 *Pinus taeda* contributing more than 10 percent of canopy coverage and usually more than 25 percent.....…...4

3 Mesic slopes and flats dominated by *Fagus grandifolia* and *Quercus alba* (disturbed examples may have significant coverage by *Pinus taeda*)
.....***Fagus grandifolia - Quercus alba*** **Forest**
3 Fagus grandifolia not dominant and usually lacking; dominance shared by *Liquidambar styraciflua* and bottomland species especially *Quercus nigra* and *Quercus phellos; Vaccinium elliottii* prominent in the understory
Liquidambar styraciflua - Quercus (nigra, phellos) - Pinus taeda / Vaccinium elliottii - Myrica cerifera **Forest**

4 *Pinus taeda* strongly dominant in the canopy, understory and herbaceous layers a mixture of bottomland and upland species .....Successional Pine - Mixed Hardwood Upland Forest
4 *Pinus taeda* not dominant, or codominant with *Pinus palustris*, herbaceous stratum dominated by *Schizachyrium scoparium*
.....***Pinus palustris - Pinus taeda / Schizachyrium scoparium*** **Woodland**

KEY 2

1 Forests of floodplain edges; soils organic or with organic matter development; sites rarely flooded but constantly wet from seepage water.....……...2
1 Forests of levees and river fronts occurring on mineral soils.....4

2 Forests on Dorovan muck; *Nyssa biflora* dominant in the canopy; *Carex atlantica* ssp. *capillacea* present in the herbaceous layer
Nyssa biflora - (Acer rubrum) / Ilex opaca /Leucothoe axillaris / Carex atlantica **ssp. *capillacea* Forest**

2 Forests not on Dorovan muck, or *Nyssa biflora* not dominant.....…3

3 Forests dominated by *Quercus michauxii* with *Pinus taeda* occasionally present; *Leucothoe racemosa* present in the shrub layer
.....***Quercus michauxii / Carpinus caroliniana - Ilex opaca / Leucothoe racemosa*** **Forest**
3 Forests dominated by *Liquidambar styraciflua* and *Quercus laurifolia*
Liquidambar styraciflua - Quercus laurifolia / Magnolia virginiana / Carex folliculata **Forest**

4 Forests with *Celtis laevigata* lacking or not dominant.....…5
4 Forests with canopy or subcanopy dominated or codominated by *Celtis laevigata*.....…7

5 Riverfront forests dominated by *Acer saccharinum*
.....***Acer saccharinum / Leersia lenticularis - Commelina virginica*** **Forest**
5 Riverfront and levee forests lacking *Acer saccharinum.*.....6

6 Riverfront and levee forests dominated by *Salix nigra*, often with a scattered overstory of Fraxinus pennsylvanica.....***Salix nigra - Fraxinus pennsylvanica*** **Forest**
6 Riverfront and levee forests dominated by Populus deltoides
.....***Populus deltoides / Acer negundo / Boehmeria cylindrica*** **Forest**

7 Forests of seasonally flooded, wet sloughs strongly dominated by *Fraxinus pennsylvanica* with such wet site species as *Carya aquatica* and *Saururus cernuus* usually present, and very poorly developed shrub and herbaceous strata
.....***Fraxinus pennsylvanica / Leersia lenticularis - Carex lupulina*** **Forest**
7 Forests of alluvial flats, levees, and terraces with more mixed canopy dominance, shrub and herbaceous strata well developed; temporarily flooded sites.....8

8 Forests of terraces and levees with *Platanus occidentalis* dominant or codominant
Platanus occidentalis - Celtis laevigata - Fraxinus pennsylvanica / Lindera benzoin - Ilex decidua / Carex retroflexa **Forest**
8 *Platanus occidentalis* lacking, or present but not dominant or codominant.....9

9 Levees forests with typical levee species present including *Juglans nigra, Lindera benzoin*, and *Elymus virginicus*
Celtis laevigata - Fraxinus pennsylvanica - Acer negundo - (Juglans nigra) / Asimina triloba / Carex grayi **Forest**

9 Forests of varied habitats (alluvial flats, terraces, occasionally on levees) lacking the species listed above, *Carpinus caroliniana* and *Ilex opaca* often present in the subcanopy.....***Celtis laevigata - Liquidambar styraciflua - Quercus laurifolia / Carpinus caroliniana / Arundinaria gigantea - Carex lupulina*** **Forest**

KEY 3

1 Forests of sloughs, terraces, and alluvial flats.....…2
1 Vine-dominated vegetation, scattered emergent trees may be present

***Vitis rotundifolia - Ampelopsis arborea - Campsis radicans* Seasonally Flooded Vine-Shrubland**

2 Short-statured slough forests of *Planera aquatica*, occasionally with a scattered emergent canopy of *Taxodium distichum, Nyssa aquatica*, and *Fraxinus pennsylvanica*
.....***Planera aquatica* Forest**
2 *Planera aquatica* absent, or present but not dominant in the canopy.....…3

3 *Taxodium distichum* dominant or codominant or contributing at least 15 percent canopy coverage.....…..4
3 *Taxodium distichum* contributing less than 15 percent coverage or absent.....7

4 Semipermanently flooded slough forests dominated by *Taxodium distichum* and *Nyssa aquatica* over a subcanopy of *Fraxinus caroliniana*, few other canopy species present, *Nyssa biflora* usually absent, herbaceous layer very sparse and containing *Proserpinaca pectinata, Phanopyrum gymnocarpum, Saururus cernuus* and few other species
.....***Taxodium distichum - Nyssa aquatica / Fraxinus caroliniana* Forest**
4 Forests not of semipermanently flooded sloughs, or *Nyssa biflora* or other species (including *Quercus laurifolia, Fraxinus pennsylvanica*, and *Quercus lyrata*) codominant in the canopy, or canopy and herbaceous layers more species rich.....…5

5 *Nyssa biflora* codominant with *Taxodium distichum* and *Nyssa aquatica*; forests associated with blackwater drainages (Tom's Creek and Cedar Creek), and not transitional zones
***Taxodium distichum - Nyssa aquatica - Nyssa biflora / Fraxinus caroliniana / Itea virginica* Forest**
5 *Nyssa biflora* absent, or present but not dominant or codominant.....…6

6 *Quercus lyrata* dominant or codominant with *Quercus laurifolia, Sabal minor* and *Arundinaria gigantea* usually present in the shrub layer, *Carex joorii, Carex intumescens, Diodia virginiana, Gratiola virginica*, and *Justicia ovata* present in the well-developed herbaceous layer
***Quercus lyrata - Quercus laurifolia - Taxodium distichum / Saururus cernuus* Forest**

6 Forests dominated by *Taxodium distichum* and *Fraxinus pennsylvanica; Nyssa aquatica* absent or present but not dominant or codominant; *Acer rubrum* dominant in the subcanopy; *Itea virginica* and *Cephalanthus occidentalis* typical in the shrub layer
***Taxodium distichum - Fraxinus pennsylvanica - Quercus laurifolia / Acer rubrum / Saururus cernuus* Forest**

7 Forests of ridges dominated by *Liquidambar styraciflua, Quercus nigra*, and *Quercus laurifolia; Pinus taeda* occasionally codominant and contributing up to 60 percent coverage
***Liquidambar styraciflua - Quercus nigra - Quercus laurifolia / Arundinaria gigantea / Carex abscondita* Forest**
7 Forests of alluvial flats or levees; *Pinus taeda* and *Quercus nigra* lacking; forests dominated by *Liquidambar styraciflua, Fraxinus pennsylvanica, Ulmus americana, Quercus laurifolia, Acer rubrum*, and *Celtis laevigata*; subcanopy dominated by *Carpinus caroliniana, Ilex decidua*, and *Asimina triloba*
***Fraxinus pennsylvanica - Ulmus americana - Quercus laurifolia / Carpinus caroliniana / Arundinaria gigantea / Carex lupulina* Forest**