

USGS-NPS Vegetation Mapping Program Congaree Swamp National Monument

Herbaceous *Carex lupulina*, *Boehmeria cylindrica*
Vine/liana *Vitis rotundifolia*, *Smilax tamnoides*

DIAGNOSTIC SPECIES

Globally

The globally diagnostic species are currently the same as the park-specific diagnostic species listed below.

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Quercus laurifolia, *Liquidambar styraciflua*, *Fraxinus pennsylvanica*, *Celtis laevigata*, *Acer rubrum*, *Ulmus americana*, *Carpinus caroliniana*, *Ilex decidua*, *Arundinaria gigantea*, *Carex lupulina*, *Boehmeria cylindrica*

VEGETATION DESCRIPTION

Globally

The global description currently is the same as the park-specific description below.

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This community has well-developed canopy, subcanopy, shrub, vine/liana, and herbaceous strata. The canopy is dominated by various mixtures of *Liquidambar styraciflua*, *Fraxinus pennsylvanica*, *Ulmus americana*, *Quercus laurifolia*, *Acer rubrum*, and *Celtis laevigata*. The subcanopy is dominated by *Carpinus caroliniana*, *Ilex decidua*, and *Asimina triloba*. Other species that occur in these strata are *Populus deltoides*, *Quercus michauxii*, *Ulmus alata*, *Platanus occidentalis*, *Quercus lyrata*, *Quercus michauxii*, *Quercus pagoda*, *Gleditsia aquatica*, *Taxodium distichum*, *Acer negundo*, *Crataegus spathulata*, *Nyssa biflora*, *Nyssa aquatica*, *Carya aquatica*, *Populus heterophylla*, *Ilex opaca*, and others. The shrub layer usually contains a fairly dense cover of *Arundinaria gigantea*, but some occurrences may be lacking this. Other species present in the shrub layer are *Sabal minor*, *Euonymus americana*, and others. The herbaceous layer can be fairly lush and typically is dominated by *Carex lupulina*, *Justicia ovata*, and *Boehmeria cylindrica*. Other common species in the herbaceous layer include *Carex abscondita*, *Carex intumescens*, *Carex grayi*, *Carex retroflexa*, *Carex typhina*, *Commelina virginica*, *Onoclea sensibilis*, *Phanopyrum gymnocarpum*, *Saururus cernuus*, *Senecio glabellus*, *Asclepias perennis*, and *Leersia lenticularis*. *Berchemia scandens*, *Campsis radicans*, *Ampelopsis arborea*, *Toxicodendron radicans*, *Parthenocissus quinquefolia*, *Smilax tamnoides*, *Smilax bona-nox*, and *Bignonia capreolata* are all commonly occurring vines in this community.

This community occurs in two phases within the park - one (hereafter called the sweetgum phase) with somewhat higher importance by species more indicative of drier sites: *Liquidambar styraciflua*, *Quercus michauxii*, *Quercus pagoda*, *Carya ovata*, *Euonymus americana*, *Botrychium dissectum*, *Ilex opaca*, and *Mitchella repens*. The other phase (hereafter called the green ash phase) has somewhat higher importance by species of wetter sites including *Fraxinus pennsylvanica*, *Quercus laurifolia*, *Taxodium distichum*, *Nyssa aquatica*, *Carex typhina*, and *Gleditsia aquatica*. The sweetgum phase has affinities to the *Quercus (michauxii, pagoda, shumardii) - Liquidambar styraciflua* Forest Alliance and likely is related successionaly to associations in that alliance but probably as a result of disturbance, oaks have decreased in importance while other species have increased, thereby blurring the boundaries. Discrimination of the phases may be difficult in the field. Further data collection may lead to these phases being recognized as different associations, but at this time data cannot support that level of recognition although the phases can be discriminated on aerial photography.

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G3G4

RANK JUSTIFICATION

DATABASE CODE CEGL007736

COMMENTS

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There is relatively more variation within occurrences of this community type, in both species composition and stratal density, than in most other community types on the Congaree Swamp National Monument. Field plots assigned to the sweetgum phase are: - 1-03, 1-05, 1-07, 1-11, 1-14, 1-15, 1-17, 1-18, 1-29, 1-33, 1-35, 1-38, 1-56, 1-58, 2-04, 2-29, and 2-34. Field

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plots assigned to the green ash phase are: 1-13, 1-19, 1-20, 1-28, 2-11, 2-27, 2-39, 2-46, 2-47, 2-48, 1-04, 1-08, 1-10, 1-26, 1-31, 1-32, 1-37, 1-60, 2-02, 2-05, 2-10, 2-12, 2-20, 2-21, 2-25, 2-26, 2-35, and 2-42.

REFERENCES