

Pocosin Indicator Species

Jean Everett, PhD, College of Charleston

Last edited 27 December 2013

Nomenclature from Radford, Ahles and Bell, Manual to the vascular flora of the Carolinas; modern nomenclature can be found at the USDA Plants Database, or the UNC herbarium (Weakley). I've translated some that have come into more common usage.

NatureServe Ecological systems are tentative. The parenthetical key references are to the "Key to Ecological Systems (and selected Alliances) of the Francis Marion National Forest – 15 Nov 2012".

NATURESERVE ECOLOGICAL SYSTEMS:

2468; CES??? (10a and 20a in key) – Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall

2452; CES203.267 (10b and 21a in key) – Atlantic Coastal Plain Peatland Pocosin and Canebreak

GENERAL NOTES on pocosin systems: I am referring to pocosin as a vegetation type, and not as a geomorphological or ecosystem feature. In this sense, pocosin is an evergreen shrub bog that will form on any acidic, wet, sandy or silty soil. Pocosin will form in the absence of appropriate fire regimes on sites that would otherwise be maintained as wet savannas, shallow ponds or depression meadows. Typically a deep (meter +) layer of peat will develop over time, especially in depressions. The vegetation type is fire adapted, and will become self-maintained over time as peat depth increases. Areas where pocosin vegetation is encroaching into wet savannas might be restorable, but there is no known methodology to ensure a return to herbaceous conditions.

Canopy Trees:

Diagnostic indicators

Pond pine – *Pinus serotina* (also found occasionally in wet cypress or pine systems)

Usually present, but also found in other ecosystems

Pond cypress – *Taxodium ascendens* – only in deeper sloughs or depressions

Rare, but usually diagnostic

None in particular

Sub-canopy Trees:

Diagnostic indicators

Loblolly bay – *Gordonia lasianthus*

Usually present, but also found in other ecosystems

Sweet bay – *Magnolia virginiana*

Red bay – *Persea borbonia*

Shrubs and Lianas:

Diagnostic indicators

- Fetterbush – *Lyonia lucida* (also invades wet savannas)
- Sweet gallberry – *Ilex coriacea*
- Honeycups – *Zenobia pulverulenta*
- Bamboo vine – *Smilax laurifolia*

Usually present, but also found in other ecosystems

- Titi – *Cyrilla racemiflora* – also found in wet ditches and other wet areas

Uncommon, found elsewhere very uncommonly

- Witch alder – *Fothergilla gardenii* (rare)
- Swamp honeysuckle – *Rhododendron viscosum* (uncommon)
- Poison sumac – *Rhus vernix* (uncommon)

Herbaceous:

Diagnostic Indicators

- White arum – *Peltandra sagittaeifolia* (very rare)

Usually present, but also found in other ecosystems

- Virginia chain fern – *Woodwardia virginica*
- Walter's sedge – *Carex walteriana* (I think this is the common pocosin and pond sedge, but have never seen it in flower to be certain)
- Water lily – *Nymphaea odorata* (deeper pools only)
- Trumpet pitcher plant – *Sarracenia flava* (massive in some; absent in most)
- Purple bladderwort – *Utricularia purpurea* (rare, blooms mostly when flooded, found also in wet ditches)

Along edges if there is a seep

- Sweet pitcher plant – *Sarracenia rubra* (rare)
- Creeping blueberry – *Vaccinium crassifolium*
- Rose pogonia – *Pogonia ophioglossoides* (rare)
- Grass pinks – *Calopogon barbatus* (rare), *C. multiflorus* (very rare)

Non-vascular:

- Peat moss – *Sphagnum* spp.