

POCOSIN OPENING (CRANBERRY SUBTYPE)

Concept: Pocosin Openings are small patch communities of deep peats, with herbaceous or dwarf shrub dominance, occurring within a Low Pocosin or occasionally High Pocosin matrix. The Cranberry Subtype covers the uncommon openings in which *Vaccinium macrocarpon* is abundant.

Distinguishing Features: The Cranberry Subtype is distinguished by having appreciable cover of *Vaccinium macrocarpon*. It is known only as a well-developed example on in Dare County.

Synonyms: *Chamaedaphne calyculata* - *Vaccinium macrocarpon* / *Carex striata* var. *striata* - *Woodwardia areolata* Dwarf-shrubland (CEGL004165).
Ecological Systems: Atlantic Coastal Plain Peatland Pocosin and Canebrake(CES203.267).

Sites: Pocosin Openings occur in the central, deepest parts of domed peatlands on poorly drained interstream flats, occasionally in peat-filled Carolina bays and deep peat-filled swales. The one well-developed example of this subtype appears to be a Carolina bay that is buried beneath a domed peatland, and therefore has very deep peat. The peat is grounded below present sea level. This community occurs in local patches that are slightly lower and wetter than the surrounding pocosin. Peat deposits tend to be greater than 1 meter deep, sometimes 3-4 meters deep.

Soils: Soils are mapped as Pungo (Typic Haplosaprist). These communities represent inclusions that may or may not fit this soil series, but would still be classified as Typic Haplosapristis.

Hydrology: Soils are saturated all year in all but drought periods. They may hold shallow standing water seasonally, a reflection of the local water table. Conditions are at least somewhat wetter than in surrounding Low Pocosin communities.

Vegetation: Vegetation in the openings is dominated by dwarf shrubs and herbs, though upright shrubs may also be a significant component. *Chamaedaphne calyculata* and *Vaccinium macrocarpon* dominate among shrubs. Other shrubs, particularly *Zenobia pulverulenta*, but also stunted *Lyonia lucida*, *Ilex glabra*, or *Persea palustris* are common. Most other shrubs present in Low Pocosin may be present. *Smilax laurifolia* often forms a layer on top of the shrubs. *Sphagnum* spp. is extensive in the ground cover. *Anchistea virginica* and *Carex striata* are the dominant herbs. *Andropogon glomeratus* may be abundant soon after fires. Other herbs include *Rhynchospora alba*, *Rhynchospora fascicularis* var. *fascicularis*, *Sarracenia flava*, *Sarracenia purpurea*, *Drosera intermedia*, *Xyris ambigua*, *Calopogon barbatus*, *Peltandra virginica*, *Rhynchospora plumose*, and *Utricularia subulata*.

Range and Abundance: Ranked G1. This community is endemic to North Carolina and is known only in Dare County.

Associations and Patterns: This community occurs in the interior of large peatlands. It is embedded in a matrix of Low Pocosin (Gallberry—Fetterbush Subtype), and is associated with the Sedge-Fern Subtype of Pocosin Opening,

Variation: Examples vary in wetness and amounts of the component species. No variants are recognized.

Dynamics: As discussed for the Sedge-Fern Subtype, the dynamic relationship between Low Pocosin and Pocosin Opening communities needs further investigation. The relationship among the subtypes also needs further investigation. Where they cooccur, it is not clear if they are distinguished by different microenvironments, by different successional ages, or by accidents of plant establishment.

Comments: This subtype appears to be associated with a distinctive biogeographic history. The Dare County Pocosin where it occurs appears to have been an open pocosin much longer than most peatlands in the state. It also appears to be wetter and more extensive than Pocosin Openings in other peatlands. However, it is less clear that it is wetter than patches of other subtypes in the same pocosin.

Rare species: *Vaccinium macrocarpon*, *Rhynchospora alba*, *Gaylussacia bigeloviana*.

References: