

WEST GULF COASTAL PLAIN HERBACEOUS SEEP AND BOG

Nature Serve ID: CES203.194

Geology: Often associated with Eocene sand formations such as Queen City, Sparta, and particularly Carrizo Sands.

Landform: Generally found on slopes, as well as on valley floors and toe slopes where seepage from upslope occurs through the deep sands on site.

Soils: Deep Sand, Very Deep Sand, or Wet Sandy Draw Ecological Sites are typical of this system and surrounding areas.

Description: This small patch system typically presents as an herbaceous wetland, though sometimes significant shrub cover by *Morella cerifera* (wax-myrtle) and/or other species may be conspicuous. The herbaceous layer is dominated by a dense, species-rich, graminoid-forb layer less than 1 m tall with continuous to nearly continuous cover, typically 80-90%. Seepage results from the percolation of water through a porous sand layer until it encounters a more impermeable layer and flows to the surface. Grass species present may include species such as *Andropogon glomeratus* (bushy bluestem), *Dichanthelium scoparium* (velvet panicum), *Panicum anceps* (beaked panicum), *Panicum brachyanthum* (pimple panicgrass), *Panicum virgatum* (switchgrass), *Paspalum laeve* (smooth paspalum), *Saccharum giganteum* (sugarcane plumegrass), and *Steinchisma hians* (gaping panicum) [= *Panicum hians*]. Sedges and rushes are well-represented and may include *Cyperus strigosus* (false nutgrass), *Eleocharis acicularis* (needle spikesedge), *Fuirena squarrosa* (hairy umbrellasedge), *Juncus dichotomus* (forked rush), *Juncus diffusissimus* (slimpod rush), *Juncus effusus* (common rush), and *Rhynchospora* spp. (beakrushes, including *R. gracilentia*, *R. oligantha*, and/or *R. rariflora*). A diverse forb assemblage is typically present, and may include *Eryngium integrifolium* (simpleleaf eryngo), *Eupatorium perfoliatum* (common boneset), *Habenaria repens* (waterspider false reinorchid), *Hypericum mutilum* (dwarf St. John's-wort), *Ludwigia alternifolia* (bushy seedbox), *Lycopodiella* spp. (clubmoss), *Osmunda cinnamomea* (cinnamon fern), *Osmunda regalis* (royal fern), *Pogonia ophioglossoides* (rose pogonia), *Polygala cruciata* (drumheads), *Rhexia mariana* (Maryland meadowbeauty), *Sarracenia alata* (pitcher-plant), *Symphotrichum dumosum* var. *dumosum* (bushy aster), *Woodwardia* spp. (chainfern), and/or *Xyris* spp. (yellow-eyed grass, *X. ambigua*, *X. baldwiniana*, *X. difformis*, *X. jupicai*, *X. laxifolia*, and/or *X. torta*). Seeps may feed downslope depressional wetlands which may be overtaken by shrub species such as *Morella cerifera* (wax-myrtle), or may be dominated by *Eleocharis* spp. (spikerush), *Juncus* spp. (rush), *Panicum hemitomon* (maidencane), and/or *Rhynchospora* spp. (beakrush). The bogs of portions of the East-Central Texas Plains Post Oak Savanna, commonly referred to as "muck bogs," differ from similar bogs within the West Gulf Coastal Plain by a decrease in species richness towards the west. These bogs can become dominated by woody species such as *Morella cerifera* (wax-myrtle), *Ilex vomitoria* (yaupon), and *Smilax laurifolia* (bamboo-vine). East of the Post Oak Savanna, other woody species such as *Toxicodendron vernix* (poison sumac), *Magnolia virginiana* (sweetbay), *Persea borbonia* (redbay), and *Pinus palustris* (longleaf pine) may form a sparse emergent canopy. Sites east of the Post Oak Savanna may contain broadleaved evergreen woody species such as *Magnolia virginiana* (sweetbay), *Cyrilla racemiflora* (leatherwood), *Morella caroliniensis* (evergreen bayberry), *Persea palustris* (swamp redbay), and *Ilex coriacea* (bay-gall bush). Herbaceous species more characteristic of eastern occurrences include *Gelsemium sempervirens* (Carolina jessamine), *Hypericum galioides* (bedstraw St. John's -wort), *Lachnocaulon anceps* (whitehead bogbutton), *Ludwigia hirtella* (spindleroot), *Marshallia graminifolia* (grassleaf Barbara's buttons), *Rhexia petiolata* (ciliate meadowbeauty), *Rhynchospora inexpansa* (nodding beaksedge), *Rhynchospora plumosa* (plumed beaksedge), *Rudbeckia scabrifolia* (bog coneflower), and *Xyris drummondii* (Drummond's yellow-eyed grass).

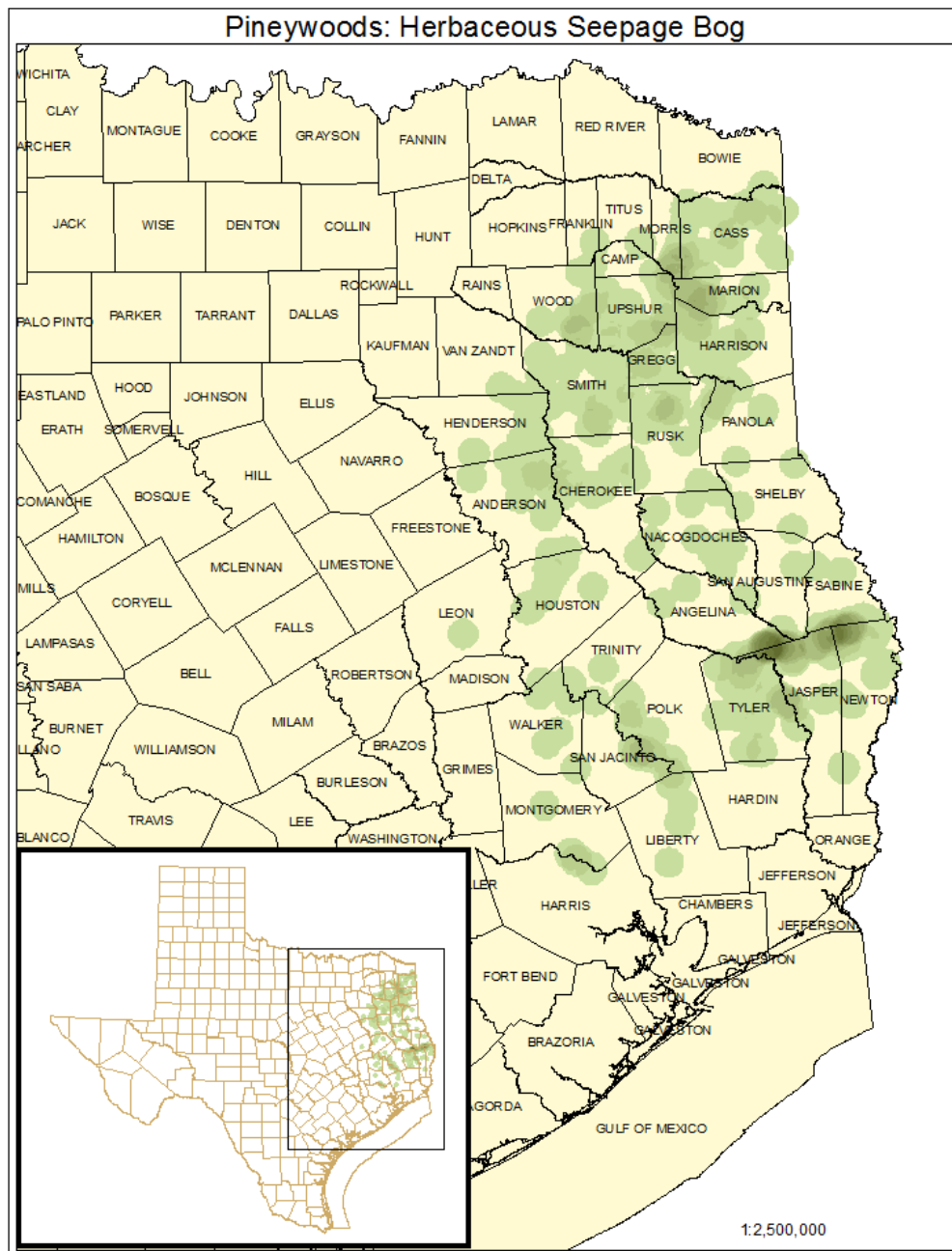
ECOLOGICAL MAPPING SYSTEMS:

PINEYWOODS: HERBACEOUS SEEPAGE BOG

Mapping System ID: 2307

EMS Description: As described above. Some mapped sites are based directly on field collected locations.

Distribution Map:



Example:



Public Land Occurrence:

Angelina National Forest: US Forest Service