

Atlantic Coastal Plain Blackwater/Brownwater Stream Floodplain Forest



Macrogroup: Southern Bottomland Forest

This map is a modeled distribution based on current data and is not a substitute for field based inventory. Contact your State Natural Heritage Ecologist for more information about this habitat.



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Description:

A complex of wetland and upland vegetation on floodplains of coastal plain streams south of the James river in southeast Virginia. These are narrow but sometimes long dendritic patches of wetland forest dominated by bald cypress and tupelo with oaks and other bottomland hardwoods found in drier areas. Small shrubby sloughs may be present, and shrub and herb layers are generally well-developed. Two variants are recognized. "Blackwater" floodplains originate in sandy soils; their waters are strongly stained by tannins and carry little suspended clay sediment. Depositional landforms are limited. Streams in more nutrient-rich and diverse "brownwater" floodplains carry substantial amounts of silt and clay. Natural levees are often distinctly present.

Ecological Setting and Natural Processes:

Soils in blackwater systems tend to be strongly acidic; finer textured brownwater soils are generally more fertile. Flooding period is more variable than for larger rivers, ranging from short duration to semipermanent, and vegetation is more uniform and less landform-differentiated. Wind throw is the primary disturbance agent; fire less important. Often in very human-altered landscapes.

Similar Habitat Types:

Blackwater and brownwater streams are smaller and usually slower-moving than waterways in Piedmont-Coastal Plain Large River Floodplains, and wet bottomland forests in these floodplains are more commonly dominated by bald cypress and water tupelo than in floodplain systems to the west and north.

Crosswalk to State Wildlife Action Plans:

Wetland Habitat - Forested (VA)

State Distribution: VA

Total Habitat Acreage: 163,607

Percent Conserved: 6.2%

State	State Habitat %	State Acreage	GAP 1&2 (acres)	GAP 3 (acres)	Unsecured (acres)
VA	100%	163,607	8,510	1,556	153,541

Crosswalk to State Name Examples:

Bald Cypress - Water Tupelo Brownwater Swamp (VA)

Places to Visit this Habitat:

Back Bay National Wildlife Refuge | VA
 Big Woods State Forest | VA
 Great Dismal Swamp National Wildlife Refuge | VA
 North Landing River Preserve | VA
 Piney Grove Preserve | VA

Associated Species: *Appendix lists scientific names*

BIRDS: acadian flycatcher, bald eagle, prothonotary warbler, swainson's warbler, wood duck, yellow-throated warbler

MAMMALS: rafinesque's big-eared bat

HERPTILES: canebrake rattlesnake

INSECTS: burgundy bluet, fine-lined emerald, southern sprite

PLANTS: bay-gail holly (*Ilex coriacea*), bog-buttons (*Lachnocaulon anceps*), hairy seedbox (*Ludwigia pilosa*), maidencane (*Panicum hemitomon*), mississippi buttercup (*Ranunculus laxicaulis*), miterwort (*Mitreola petiolata*), plukenet's cyperus (*Cyperus plukenetii*), ravenfoot sedge (*Carex cruscovi*), shaded mudflower (*Micranthemum umbrosum*), small-flower throughwort (*Eupatorium glaucescens*), tall yellow-eye-grass (*Xyris platylepis*), water-purslane (*Didiplis diandra*), yellow pitcherplant (*Sarracenia flava*)

Species of Concern (G1-G4): *Appendix lists scientific names*

BIRDS: red-cockaded woodpecker

MAMMALS: dismal swamp southeastern shrew

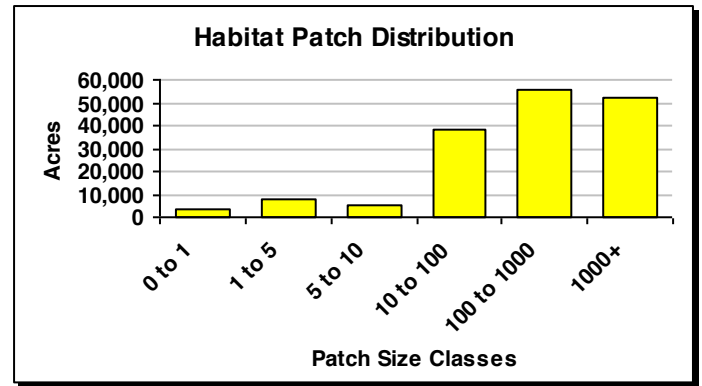
HERPTILES: dwarf waterdog, timber rattlesnake - coastal plain population

INSECTS: Chowanoke crayfish, Dukes' skipper, swamp forestfly, sweetbay silkmoth, southeastern cane borer moth

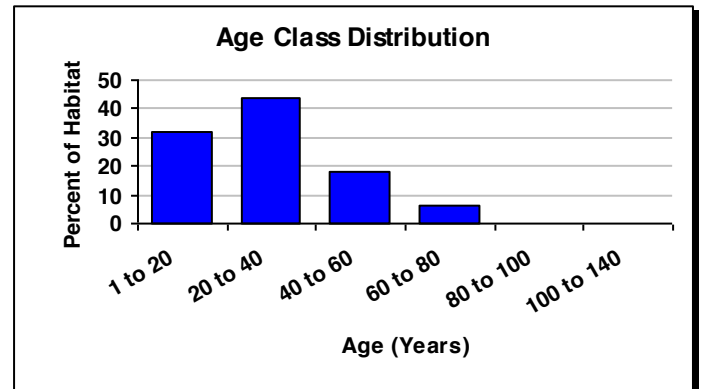
PLANTS: chapman's beakrush (*Rhynchospora stenophylla*), creeping blueberry (*Vaccinium crassifolium*), dusty zenobia (*Zenobia pulverulenta*), flowering pixie-moss (*Pyxidantha barbulata*), giant peatmoss (*Sphagnum torreyanum*), hairy st. john's-wort (*Hypericum setosum*), longleaf wedgescale (*Sphenopholis filiformis*), pinebarren rush (*Juncus abortivus*), slender rattlesnake-root (*Prenanthes autumnalis*), winter quillwort (*Isoetes hyemalis*)



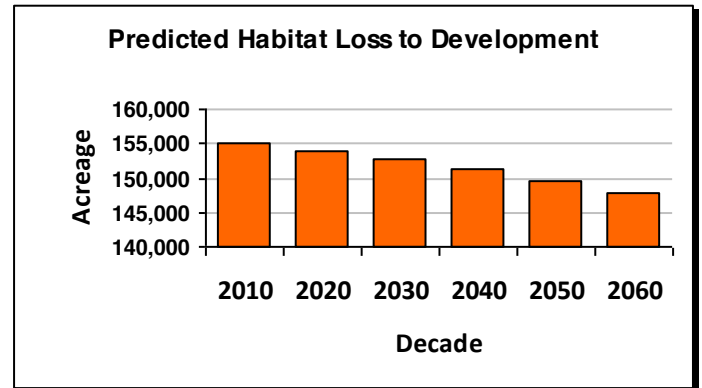
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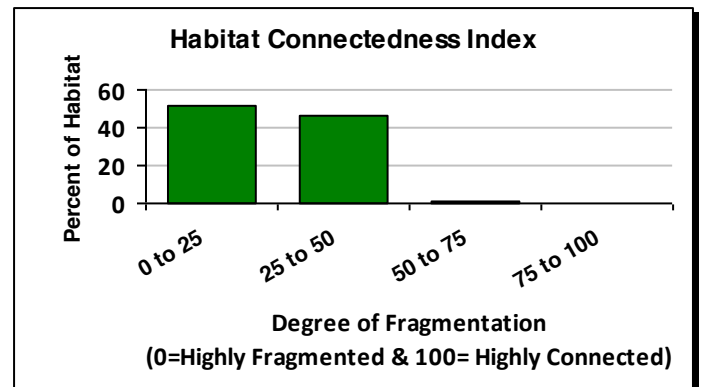
The average patch size for this habitat is 9 acres and the largest single patch is 3,841 acres. This chart shows the proportion of the habitat that is in each patch-size class.



This chart shows the average age of trees associated with this habitat based on forest inventory data. For non-forested systems or small habitats the average age is influenced by the surroundings.



This chart shows the predicted loss of habitat over the next five decades (7,137 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 143 acres per year.



This metric measures how connected or fragmented the land directly surrounding (18 square miles) the habitat is, this the chart shows the proportion of the habitat in each connectedness class.