

Bottomland Hardwood Forest Ecosystems



Bottomland hardwood forests located in Tennessee's Mississippi coastal plain are a prominent ecosystem in the Southeast. In Tennessee, this ecosystem supports a unique forest community of bald cypress, water tupelo, black gum, and numerous species of oak. Scientists often consider a bottomland hardwood forest ecosystem as an extension of a river. Regular flooding is an integral part of a river's cycle, so these areas are flooded often and the trees that grow in this ecosystem must be tolerant of standing water. One of the most important functions of bottomlands is providing refuge for wildlife, including river otter, many species of waterfowl, neotropical migratory bird species like the prothonotary warbler, and a healthy aquatic community of game and nongame fish, crayfish, freshwater mussels and more. Bottomland hardwood ecosystems are also critical to recharging the ground water, filtering impurities from water draining from the land, and helping to control flood waters and erosion.

Unfortunately, this ecosystem has been reduced by as much as 85 percent from forest clearing, conversion to farmland, and ditching and draining the wetlands associated with the bottomland hardwood forest ecosystem. Today, this ecosystem is considered one of the 21 most endangered ecosystems in the United States based on a recent report by the Defenders of Wildlife. Restoration efforts are currently underway along the entire lower Mississippi River bottomland forest that involves the U.S. Fish and Wildlife Service, the Tennessee Wildlife Resources Agency, Partners In Flight (migratory bird conservation program), Ducks Unlimited, and numerous other cooperators. Remnants of this beautiful and unique ecosystem can be seen at Tennessee's Ghost River State Natural Area and Big Cypress Tree State Natural Area and the following U.S. Fish and Wildlife Service National Wildlife Refuges (NWR): Tennessee NWR, Reelfoot NWR, Lake Isom NWR, Chickasaw NWR, Hatchie NWR, and Lower Hatchie NWR.

This ecosystem is not one of the focus ecosystems in this guide only because there are no federally endangered and threatened species directly reliant on bottomland hardwood forests. That does not mean it is any less important. This ecosystem is ranked by the Tennessee Natural Heritage Program as in critical need of protection.