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## ALABAMA

The US Forest Service (USFS) is in the process of revising the management plan for the National Forests in Alabama. The agency expects to adopt a revision by 2004. In connection with the revision USFS is identifying old growth in certain portions of the forests. Furthermore, an effort to identify old growth independent of USFS is underway. In the summer of 2003, Wild Alabama and Wild South are sponsoring inventories of the Bankhead and Talladega National Forests, which will be conducted by interns from Duke University. The Bankhead has about 400 miles of canyons. The canyons have never been investigated systematically for old growth although a variety of sites have been identified (Marshall 2003).

Small old-growth sites include **Tuskegee National Forest\*** (Macon County): three riparian old-growth pockets of ten acres or less each dominated by Cherrybark Oak, Southern Magnolia, and Swamp White Oak (Stewart 2003); **DeSoto Woods Preserve\*** (DeKalb County): old-growth Tulip Tree-White Oak forest on terrace flats and old-growth oak-hickory on adjoining slopes within a 54-acre preserve owned by The Nature Conservancy (Wills 1999); **Rock Bridge Canyon\*** (Franklin County): a privately owned box canyon with up to 30 acres of old-growth hemlock and hardwoods (Schotz 2003); **Salt Mountain\*** (Clarke County): 6 or 7 privately owned acres of old-growth oaks, basswood, beech, and spruce-pine on mesic soils on a steep limestone slope (Schotz 2003); **Oak Mountain State Park** (Shelby County): the 5-acre Peavine Area of old-growth oak and pine on top of Double Oak Mountain (Ogletree 1993).

**Grand Bay National Wildlife Refuge**, southeastern Mississippi (Jackson County) and southwestern Alabama (Mobile County)

Probably old-growth Slash Pine savanna within the 1400-acre Refuge (Schotz 2003). For further information, see under Mississippi. The refuge straddles the line between the states. \*\*According to the web site of the Alabama Chapter of The Nature Conservancy's web site, Hurricane Katrina "wreaked havoc" on the Grand Bay Area. [Updated 1/17/06]

**CONECUH NATIONAL FOREST**, on the border with the Florida Panhandle (Escambia and Covington Counties)

--**Bear Bay Thicket.\*** A 750-acre swamp community dominated by cypress and tupelo. The 750 acres have not been logged, because they are inaccessible. Around the swamp is a bay thicket similar in composition to the Big Thicket in Texas. Fingers of the thicket reach into the swamp.

--**Yellow River.\*** Along the Yellow River are 10-20-acre strips of old-growth riparian communities. Tree species include Sweetgum, tupelo, sycamore, Titi, and Swamp Chestnut Oak. Palmetto hummocks are found under the trees (Stewart 2003).

**BANKHEAD NATIONAL FOREST**, northwestern Alabama (Winston and Lawrence Counties)

Many scattered areas of old growth. The Bankhead is a dissected plateau that includes deep ravines that have not been logged heavily, Jim Huntley told us in 1993. Mary Burks noted that loggers would not always go all the way up the streams in the little canyons that end in waterfalls (1990). More recently Ken Wills wrote that “Many steep narrow canyons and heads of many large canyons throughout the [Sipsey] wilderness and forest contain small patches of old growth with tulip poplar, hemlock, and beech. . . . A few dry coves and ridge tops scattered across the forest support old-growth oak-hickory forest” (Wills 1999). Rhonda Stewart of USFS speaks of three types of old growth: hemlock-dominated forest, hardwoods-dominated slope forest, and a few calcareous riparian drains (Stewart 2003). Specific areas identified by researchers include:

--**Bee Branch Gorge**, in the 25,000-acre Sipsey Wilderness (Lawrence County). Stands of unlogged or very lightly logged forest on 150 acres along the upper portion of the 2-kilometer creek. A Research Natural Area embraces 128 acres of the old growth. The dominant trees are Eastern Hemlock and American Beech. The population of Eastern Hemlock is disjunct, as is a population of Sweet Birch. Tulip Tree is also important. The dominant shrub species are catbriers, Muscadine Grape, and Mountain Laurel. The rare Diana Fritillary Butterfly is present (Bailey 1990, Graham 1990, Hardin and Lewis 1980, US Forest Service [n.d.], Devall and Ramp 1992, Federal 1977).

--**Buck Rough Canyon**,\* adjacent to Bee Branch Canyon. Easily 120 acres of old growth. The exact acreage is difficult to calculate, because it is not continuous (Stewart 2003). Ken Wills reports that Buck Rough contains as “impressive virgin or near virgin old growth forest” as Bee Branch. Trees in Buck Rough include Tulip Tree, White Oak, and Eastern Hemlock (Wills 1999). Jim Manasco believes that Bee Branch Gorge and Buck Rough Canyon have the only “virgin old growth of any size” (2003).

--**Flint Creek**.\* Probably at least 100 acres of old-growth calcareous, riparian forest along the creek. The old growth is dominated by beech and butternut. Trilium carpet the area (Stewart 2003).

--**Indian Tomb Hollow**.\* Some 50 or 60 acres of old growth, occupying roughly one-quarter of the canyon. The other three-fourths of the canyon have been farmed (Stewart 2003). The old growth is mainly oak-hickory, but the canyon also supports a small area of mixed mesophytic cove hardwood forest on rich soils derived from sandstone (Wills 1999). Manasco notes that the old growth would have been selectively logged, because the area has been settled a long time (2003).

--**Brushy Creek Canyon**.\* Pockets of old growth, each 20 or fewer acres in extent. Hemlock dominates. Tulip Tree and Bigleaf Magnolia are also present. Conditions are very mesic (Stewart 2003).

--**Rush Creek Canyon**.\* Patches of old growth similar to those in Brushy Creek Canyon (above) (Stewart 2003).

--**Turkey Creek Canyon**,\* in the Sipsey wilderness. Likely old growth. Ken Wills reports “an impressive old-growth hemlock-beech forest” (Wills 1999). Two other researchers to whom we talked have not visited the Canyon.

## TALLADEGA NATIONAL FOREST

--**Shoal Creek District**, eastern Alabama (Clay and Cleburne Counties). Pockets of old growth scattered through the district east and north of Cheaha State Park. Old-

growth montane Longleaf Pine grows in stands averaging 10 to 40 acres in size. Pockets of dry hardwoods, with Chestnut Oak and Scarlet Oak, generally less than 20 acres in size, are found. The district also supports pockets of American Beech, Bigleaf Magnolia, and Loblolly Pine on mesic north- and east-facing slopes, and never-logged pockets of huge native Loblolly Pine. On Rattlesnake Mountain are relict montane Longleaf Pine and relict Shortleaf Pine up to 300 years old. The areas of pine, one of which is well over 40 acres in extent, have a shrubby underlayer of Mountain Laurel. (Stewart 2003).

--**Talladega District**, east-central Alabama (Clay and Talladega Counties). Pockets of old-growth hardwoods. The pine was much more heavily logged on the Talladega District than on the Shoal Creek District. The 9000-acre Dugger Mountain Wilderness has, along with old-growth hardwoods, only two or three pockets of old-growth pines; those are a mixture of Longleaf and Shortleaf Pine. The land in the Wilderness was largely cut over in 1932 and 1936 just before USFS acquired it (Stewart 2003). Wills describes the north side of Dugger Mountain as supporting "fine examples" of old-growth Shortleaf Pine forest and stands of stunted old-growth White Oak forest (1999).

--**Oakmulgee District**,\* central Alabama (Bibb, Chilton, Hale, Perry and Tuscaloosa Counties). Old growth of several types: cane, mesic hardwoods, longleaf, and possibly cypress-tupelo. Wills reported that the forest contains thousands of acres of Longleaf Pine with significant patches of old growth Longleaf (1999). Stewart, basically in agreement, indicates that Longleaf Pines of the coastal plain type are scattered throughout the district. Most Longleaf has been logged, but a few patches escaped logging. The mid-story has been cut out to manage for the Red-cockaded Woodpecker (2003). Wills also notes that the only tract bordering the Cahaba River contains an oxbow lake with old-growth cypress-tupelo swamp (1999).

-----**Reed Brake Research Natural Area**.\* Within the 598-acre Natural Area, pockets of old-growth cane 40-50 acres in extent (Stewart 2003). Some ravines support classic mesic hardwoods, including American Beech, Bigleaf Magnolia, and water oaks, with occasional Longleaf and Shortleaf Pine (Stewart 2003).

### **Gulf State Park, on the Gulf of Mexico** (Baldwin County)

Apparently unlogged coastal vegetation. Park Naturalist Annette Salvatore describes 300 acres of Sand Pine, Slash Pine, and oaks on a sand dune ridge 1 to 2.5 miles inland. Shrubs include Seaside Balm and Sandhill Rosemary. She does not believe that the area was logged, because the trees are "short and scrubby and stubby" from lack of nutrients (1993). Scott Gunn describes the more-than-6000-acre park, with its woody coastal scrub, as "mostly still intact," although it contains some evidence of past human use (1993). Al Schotz of Alabama Natural Heritage characterizes the park as having some old-growth dune systems (2003).

### **Coon Gulf TVA Small Wild Area**,\* northeastern Alabama (Jackson County)

Old growth on the steeper slopes of the 2366-acre area. Wills writes of 30+ acres of old-growth Chestnut Oak forest just below the cliff line of the mountain (1999). Fraley gives what she terms a "conservative estimate" of 200 acres for the steeper slopes as a whole (2003).

**Redstone Arsenal,\*** northern Alabama (Madison County)

Possible old-growth floodplain forest a couple of hundred acres in extent within the 38,000-acre arsenal owned by the US Army. The forest shows no signs of cutting but its history is not known. Trees include huge Red Maples and Eastern Cottonwoods. The Army protects all hardwood areas on the base. Also, it does no logging in floodplains (Schotz 2003, Weber 2003).

**Solon Dixon Forestry Center,\*** southern Alabama (Escambia and Covington Counties)

Possible old-growth bottomland hardwoods within the 5300-acre Center owned by Auburn University. The Center, which is located within the purchase boundaries of the Conecuh National Forest, includes a variety of forest types (Wills 1999). Along the Conecuh River are 350-400 acres of bottomland hardwoods. They have been logged sporadically over the past 100 years but may include scattered, undisturbed areas, perhaps 100 acres in total (Johnson 2003). Among the many species of trees are “champion-size” oaks, Spruce Pine, and Planertree (Wills 1999). The likely old growth is not formally protected, but Red Johnson, Director of the Center, says that the Center intends to protect it (2003).

**Fort McClellan,** northeastern Alabama (Calhoun County)

Twelve stands of old-growth montane Longleaf Pine totaling 101 acres, delineated by researchers from Auburn University (Kush 2001), and examples of old-growth Chestnut Oak forest (Wills 1999). Fort McClellan is an inactive 18,000-acre US Department of Defense Army base. The Longleaf stands vary in size from one acre to more than 40 acres. (Old-growth Longleaf is here defined as Longleaf containing age classes that predate settlement of the area, ie about 1840) (Kush 2001). The montane Longleaf Pine is the same species as the Longleaf Pine that grows in the Atlantic and Gulf Coastal Plain. However, because of different growing conditions, the montane Longleaf acts differently, seeding each year.

A montane Longleaf Pine ecosystem is a mosaic of forest types. The Longleaf itself grows for the most part on south and southwest facing slopes and low ridge tops. Other components include Virginia Pine, Shortleaf Pine, Blackjack Oak, and Chestnut Oak. Most of the old-growth Longleaf stands are on ridges in the mountains where logging did not take place because of their physical inaccessibility or because they were in the line of military fire. Varner et al. estimate that the 40,000-acre fort currently supports 2000 acres of pure Longleaf Pine. Burning is infrequent and erratic. Thus, much previous Longleaf has succeeded to hardwoods. The Fort could perhaps support as much as 12,000 acres of pure Longleaf, given “aggressive fire management, harvesting, and planting” (2000).

Fort McClellan has been demilitarized. The military is conveying to the US Fish and Wildlife Service 7646 acres to create the Mountain Longleaf National Wildlife Refuge, which will be established no later than June 2003. As of January 2003, USFWS was seeking partners to acquire an additional 5000 acres of the military base (Viker 2003). The initial 7646 acres include 79 acres of the delineated old growth. Another 19 acres of the old growth are just outside the current Refuge boundary, and USFWS hopes to be able to acquire them in the future. Nevertheless, significant natural stands of high-

quality old growth will be lost, as a four-lane highway will cut through the southwest portion of the Fort. The highway will obliterate some stands and maroon others between the highway and the city of Aniston (Garland 2001, 2003).

**Bon Secour National Wildlife Refuge**, Fort Morgan Peninsula in southern Alabama (Baldwin County)

Possibly old-growth barrier island vegetation of uncertain extent within the 6700-acre Refuge's Perdue and Little Point Clear Units. A long-timer in the area told the Refuge's director that pines in all units of the Refuge were logged more than 60-90 years ago. The Live Oaks and magnolias, on the other hand, are very old and have never been cut. A hurricane in 1906 sent salt water over the entire island and caused almost every pine living at the time to die. Many other trees, including cypress, were uprooted (Askins 2003). Swamps with Swamp Bay, Black Titi, and other wetland species, are scattered through the island's upland (Carroll 1993). We have not been able to learn their history.

**Alabama River between Selma and Montgomery\*** (Autauga County)

Potential old growth on mesic, very steep slopes, along the Alabama River, in particular between Jones Bluff and House Bluff. Vegetation includes oaks, beech, and three-foot-in diameter Tulip Trees. Very big Loblolly Pines grow at the bottom of the slopes (Schotz 2003).

**Big Woods/Brasher Woods,\*** northeastern Alabama (Etowah County)

Some fifty acres of hardwood forest owned and protected by the Brasher Family since 1866. The property is located on Red Mountain and is crossed by Clear Creek. The only known logging of living trees was the cutting of some Tulip Trees on a small section of the property on the lower slope a hundred years ago, when that land was temporarily out of the hands of the Brashers. Some downed chestnut wood was used for fence posts in the 1940s.

Hickory is the most abundant group of trees with four species present. Oaks, represented by at least ten species, form the second most abundant group. Other tree species present include Tulip Tree, American Beech, White Basswood, and Eastern Hophornbeam. The rich herbaceous layer includes eleven species of orchids and twenty of ferns, plus a rare herb in the *Stemona* family. The Bottlebrush Buckeye (*Aesculus parviflora*) is the most common shrub.

Fitzhugh Woods, a smaller area near Brasher Woods once owned by the Fitzhugh Family, is more disrupted and less remarkable than Brasher Woods, although with some striking trees (Blozan and Riddle 2005).

Sixty or seventy acres of privately owned old-growth Appalachian hardwoods, divided into two parcels. The only logging in the 40-acre parcel was removal of Tulip Trees, which were cut a hundred years ago. The Nature Conservancy holds a conservation easement (Schotz 2003).

**Cheaha State Park**, east-central Alabama (Cleburne County)

Pockets of old growth, usually dominated by hardwoods, in inaccessible areas. Of particular interest are old-growth hardwood-dominated boulder fields. Trees in the boulder fields include White Oak, Northern Red Oak, Chestnut Oak, and relict montane

Longleaf Pine. Virginia Pine may dominate at the edges. The boulder fields may be as much as 50-60 acres in size and are moving slowly, if at all (Stewart 2003). The state park is in the middle of Talladega National Forest and adjoins the National Forest's Cheaha Wilderness.

**Tensaw Delta**, southwestern Alabama (Baldwin County)

Possibly small areas of old growth (Robert Burks 1993, Mary Burks 1993, Bailey 1990, Lyons 1993, Gunn 1993). However, Al Schotz points out that the trees grow back quickly here so it is not always easy to tell where logging occurred. Baldcypress trees were high graded (Schotz 2003).

[[**Flomaton Natural Area**, central-southern Alabama (Escambia County)—clearcut, January 2008. For a site summary, go to <[www.primalnature.org/updates\\_Flomaton082908.htm](http://www.primalnature.org/updates_Flomaton082908.htm)>]]

**Perry Lakes Park and Wildlife Sanctuary,\*** central Alabama (Perry County)

In a 600-acre park and sanctuary, approximately 50 acres of old growth with very big oaks and Loblolly Pine. The stand surrounds three oxbow lakes formed when the Cahaba River changed its channel. Perry County owns the site. The Nature Conservancy owns the adjoining 125-acre Barton's Beach Preserve (Schotz 2003).

**Dismal Wonder Gardens,\*** northwestern Alabama (Franklin County)

Old-growth hemlock and hardwoods within a private park of approximately 300 acres. The old growth, which includes Bigleaf Magnolia, is in a 100-200 foot deep canyon bounded by high sandstone bluffs or cliffs. The park is open to the public (Schotz 2003, Wills 1999, Dalrymple 2001).

**Monte Sano Mountain,\*** near Huntsville in northern Alabama (Madison County)

Small areas of old growth within the 2140-acre Monte Sano State Park and 540 adjacent acres owned by the city of Huntsville but managed by the Huntsville Land Trust. Limestone slopes with rich soils support scattered patches of old-growth mixed mesophytic cove hardwoods (Wills 1999). The best example of old growth, however, is the city's 20-acre Cold Springs Natural Area, where old-growth Northern Red Oak-Black Oak forest and mixed mesophytic cove hardwoods grow. Here are found the national champion White Basswood and the state champion Cucumber Tree, Yellow Buckeye, and Spicebush (Wills 1999, Gardner 1999, Weber 2003).

**Tennessee Valley Authority (TVA) Land on the Tennessee River,\*** northeastern Alabama (Jackson County)

Possible old growth on the opposite side of the Tennessee River from TVA's Bellefonte Power Plant. Wills reports that on the lower slopes of the limestone mountain is a patch of old growth containing cedar barrens with examples of the rare Smoke Tree. The narrow floodplain/terrace between the cliffs and the river, and the toe of the slope, support old-growth mixed mesophytic cove hardwoods and big examples of bottomland trees, including the sycamore and Green Ash (Wills 1999). TVA's Nancy Fraley does not know of old growth in this location (2003).

**Pisgah Gorge,\*** northeastern Alabama (Jackson County)

Old growth in the bottom of a gorge on TVA land, southwest of the Bellefonte Power Plant. The bottom of the gorge was not accessible to loggers. TVA's Nancy Fraley cannot confirm the old growth but believes that it may be present (2003).

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