

### **Bent Creek Experimental Forest (BEN) [USFS]**

The 2,550-ha BEN is the oldest experimental forest in the eastern U.S., dating to 1916 when the USDA Forest Service acquired much of the Pisgah Forest (<http://www.srs.fs.usda.gov/bentcreek/>). Located in the southern Appalachian Mountains, BEN is found on two land type associations: the intermountain valley (Asheville Basin) and the upper-elevation mountain highlands. Asheville Basin soils are Ultisols, and the vegetation is subxeric oak and hickory stands (Fig. A1-7). Dry-site ericaceous shrubs, such as mountain laurel, dominate many forest understories. Mountain highlands soils are Inceptisols that are usually low in fertility. The highlands are forested with oaks and hickories on slopes and ridges. Cove hardwoods, including yellow-poplar and northern red oak, are found on more mesic sites. Rhododendron thickets are common on gently sloping aspects and in drainages. White, shortleaf, Virginia, and pitch pine are common associates.



Fig. A1-7. The Bent Creek Experimental Forest (BEN USFS) contains stands of yellow-poplar and mixed

oaks that dominate most forests in the southern Appalachians. Photo: BEN photo gallery.

**Research focus.** Much of what is known about regeneration and management of southern Appalachian hardwoods stems from research by the Bent Creek staff. Investigations at BEN focus on problems of ecological classification of upland forest ecosystems, forest dynamics, response to silvicultural treatments, and wildlife-habitat relationships. The BEN has an active outreach program that includes a wide array of silvicultural demonstrations and technical training programs.