

Virginia Round-leaf Birch

Betula uber

The Virginia round-leaf birch was the first tree given protection under the Endangered Species Act. This rare variant was first described by botanist W.W. Ashe in 1918 as living in a single creek's drainage area. While Ashe considered the birch with the unusual round leaves to be a subspecies of the sweet birch, botanist M.L. Fernald elevated it to species level.

But then the tree apparently vanished. For nearly 60 years, no one could locate the birch with the odd round leaves, and the species was assumed to be extinct. In 1975, naturalist Douglas Ogle rediscovered the round-leaf birch along a different creek only a mile from where Ashe said he had made his discovery. Botanists now believe Ashe erred when he identified the original site.

With the rediscovery of the round-leaf birch in 1975, botanists and field naturalists scoured the woods and creek banks of southwest Virginia, trying to locate more of the trees. One by one, the search parties returned empty handed, and it became clear that this unremarkable stretch of cut-over land along an overlooked creek was in fact quite unique, hosting as it did the world's entire population of 41 round-leaf birch trees.

The realization that this population was distinct carried another message: any natural or human-caused catastrophe, or any combination of misfortunes - vandalism, fire, drought, flooding - could wipe out the single stand of trees and cause the Virginia round-leaf birch's extinction. Complicating the issue, the single population was spread over three different land owners, including the Mount Rogers Recreation Area and two private tracts, making a coordinated recovery effort that much more difficult.

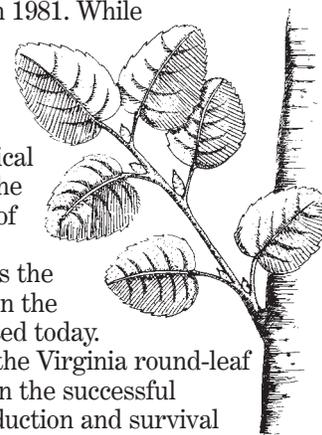
As if to underscore the point, within a year, 12 of the trees were lost to vandalism on the private lands. By 1977 the population was down to 26 trees and appeared to be on its way out. Cattle grazing, illegal plant collecting and competition from other vegetation was pushing the species to the brink. At that point, people from government agencies, academic institutions, the conservation community and the private sector came together to study, manage and protect the round-leaf birch. This committee was the driving force behind the species being protected by the Endangered Species Act in 1978. Prominent among these cooperators were the U.S. Forest Service, the Virginia Department of Agriculture and Consumer Services, and individual researchers.

The birch needed maintenance of its habitat and protection against vandalism, so early efforts focused on working with private landowners to put up fences for protection against grazing, distributing artificially propagated seedlings to reduce the threat of illegal transplanting, removing competing vegetation, and stabilizing the creek banks against erosion and consequent habitat loss.

Botanists collected seeds from mature round-leaf birch, germinated them in greenhouse conditions, and transplanted the birch seedlings to prepared sites in the creek's watershed. Five new populations were established each year over a four-year period, and, with 19 of the 20 populations considered self sufficient, the U.S. Fish and Wildlife Service changed the species' official status from endangered to threatened.

The single natural population of Virginia round-leaf birch has dwindled down to only eight individuals in 2003. Reproduction in the wild was last

documented in 1981. While there are nearly 1,000 artificially propagated trees in botanical gardens and the wild, the lack of natural reproduction is the primary reason the tree is still listed today. Recovery for the Virginia round-leaf birch hinges on the successful natural reproduction and survival of these populations in the wild.



At a height of 40 feet, with its dark bark and distinctive, rounded leaves, the Virginia round-leaf birch is a beautiful and imposing tree. Whether the last survivor of a more widespread species variety or a recent evolutionary split-off, the Virginia round-leaf birch still graces our land, thanks to the cooperative work of people who made sure this tree was not lost forever.

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