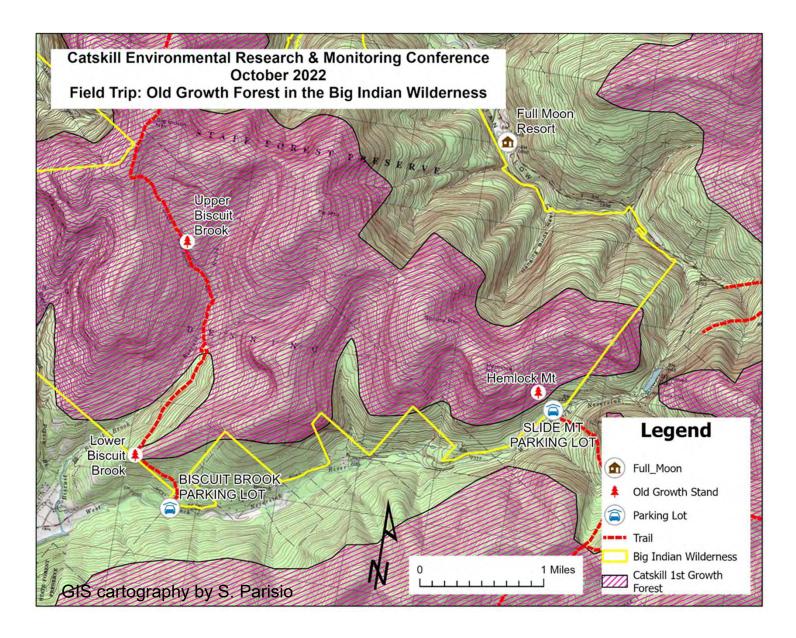
CERM 2022

Guide to Catskill Old Growth Forest Field Trip

October 28, 2022

Leaders: Michael Kudish, Steven Parisio, John Franklin, Joan Maloof, Neil Pederson & Nicole Davi



An overview map of the field trip showing the three old growth forest stands to be visited in relation to first growth forest as mapped by Michael Kudish

Photo Gallery: Growth Forms Indicative of Old Trees (Photos taken at sites in the Catskills)

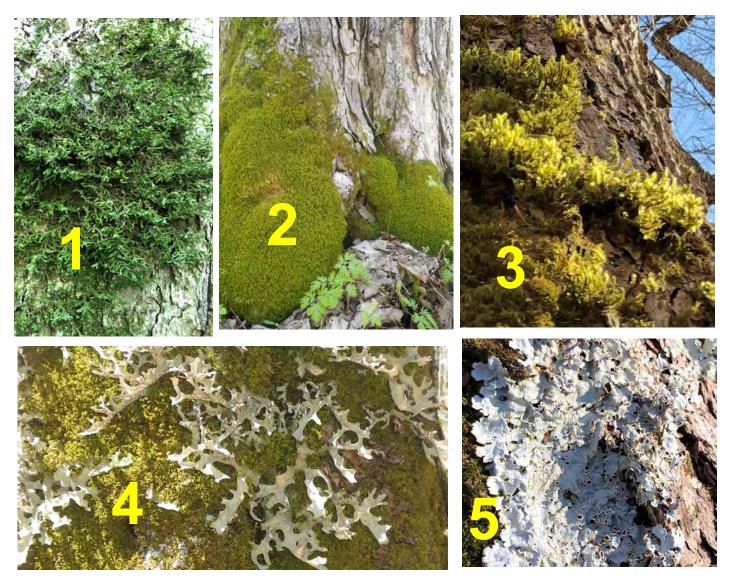


To recognize old growth forest, one must consider the growth form of the trees and not just the size. As described by Neil Pederson of the Harvard Forest, truly old trees are characterized by low stem taper, sinuosity, and reduced crowns with few, short, thick, and/or contorted limbs.

Reference: Pederson, Neil (2010) External characteristics of Old Trees in the Eastern Deciduous Forest. Natural Areas Journal 30 (4):396-707

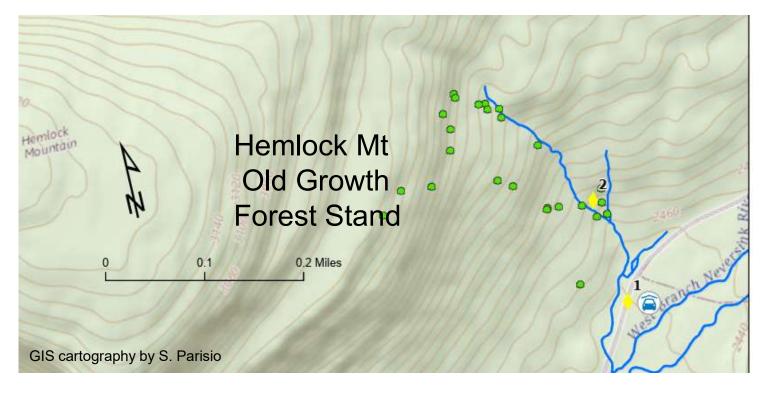


Photo Gallery: Epiphytes which are strongly associated with old growth forest in the Catskills





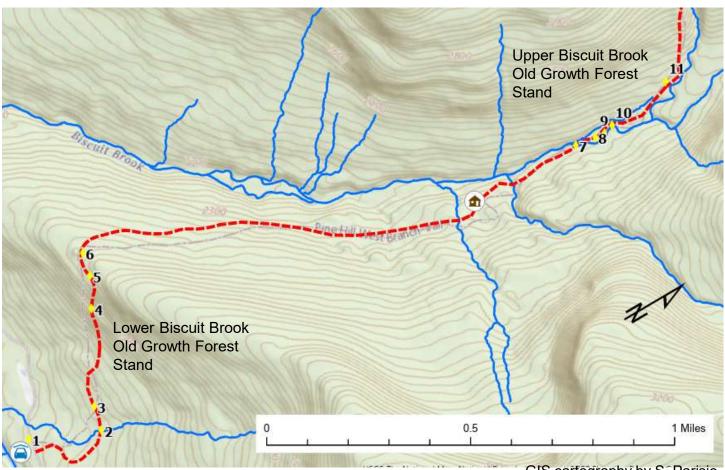
- 1. The leafy liverwort, Porella platyphylloidea
- 2. The moss, Anomodon attenuatus
- 3. The moss, Neckera pennata
- 4. The lichen, *Lobaria pulmonaria* (growing with *Anomodon attenuatus*)
- 5. The lichen Ricasolia quercizans
- 6. Various types of vascular plant not normally considered epiphytes, in this case wood nettle (*Laportea canadensis*)





We will park at the Slide Mt trailhead parking lot (1) and cross the road to enter the forest on the southeast slope of Hemlock Mt. following a small stream up the slope and into the old growth forest stand. The Old Growth Forest Network induction ceremony will be held in a cluster of big sugar maples including the 44inch moss-clad giant (2) in the photo to the left.

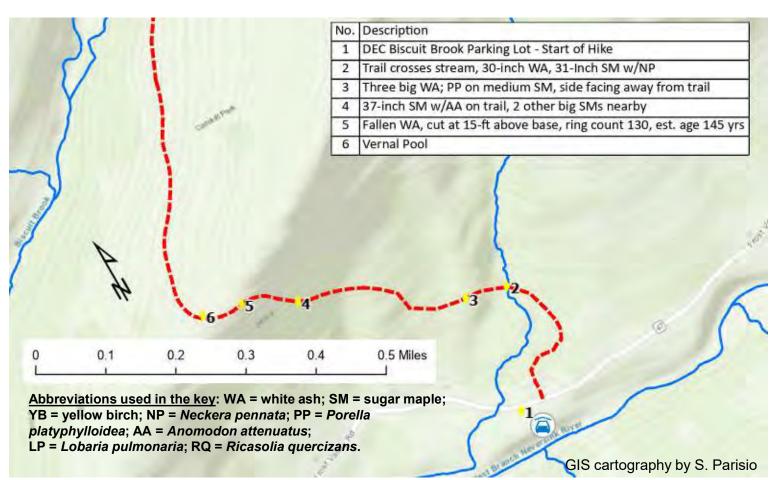
Lower & Upper Biscuit Brook Old Growth Forest Stands Overview of the Route



GIS cartography by S. Parisio

The hiking route (red dashed line) follows the blue-blazed Pine Hill West Branch Trail starting at the DEC parking area on Frost Valley Rd (1), going through the lower Biscuit Brook old growth stand (2 thru 6), past the Biscuit Brook Lean-to, fording Biscuit Brook at (7) and going through part of the upper Biscuit Brook old growth stand (8 thru 11). The total distance (one way) up to and including stop 11, is approximately 2.25 miles with an elevation gain of 390 feet. Details regarding features observed along the route are provided in the next two slides.

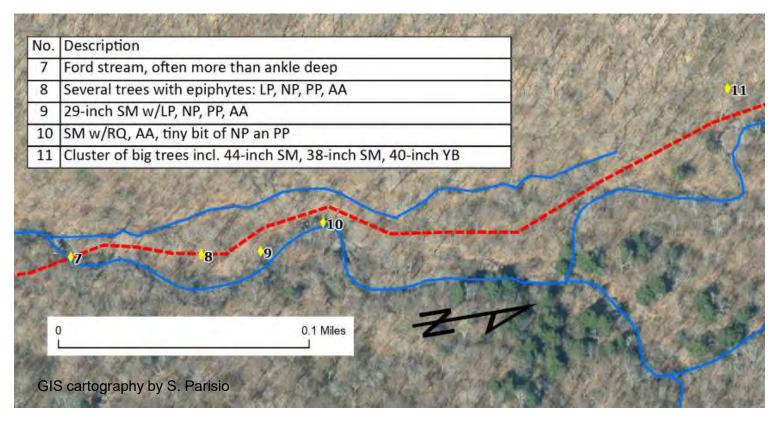
Lower Biscuit Brook Old Growth Forest Stand



A quarter of a mile from the parking lot (1), the trail crosses a small stream (2) with big trees including a 30-inch white ash and a 31-inch sugar maple with the moss *Neckera pennata*. Continuing up the trail there are more big trees (3, 4) and epiphytes such as the liverwort *Porella platyphylloidea*. A ring count of 130 on a cut surface at 15 ft above the base of a fallen white ash tree yields an estimated age of 145 years which supports the old growth status of this stand.



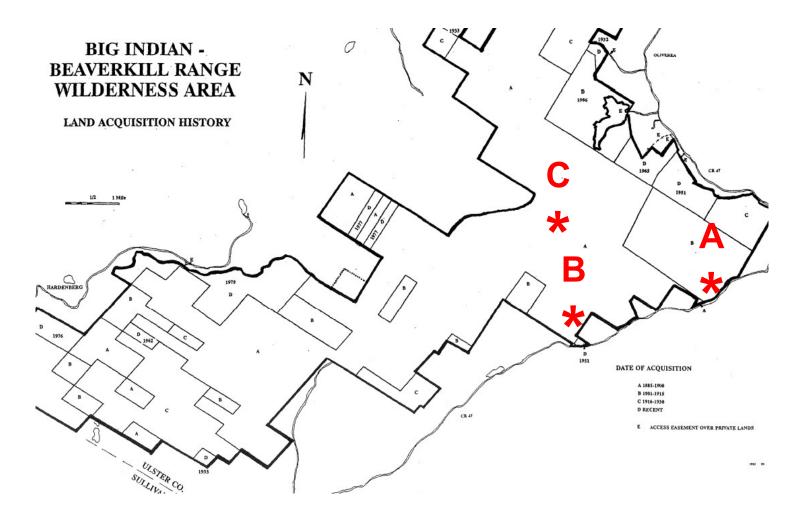
Upper Biscuit Brook Old Growth Forest Stand



<u>Abbreviations used in the key</u>: WA = white ash; SM = sugar maple; YB = yellow birch; NP = Neckera pennata; PP = Porella platyphylloidea; AA = Anomodon attenuatus; LP = Lobaria pulmonaria; RQ = Ricasolia quercizans.

Two miles from the parking lot, it is necessary to ford the main branch of Biscuit Brook. After the crossing, the stream splits into two parallel branches with the main channel on the right of the trail. In this area, there are an abundance of large diameter sugar maples and yellow birches. (One yellow birch, upstream of stop 11 and beyond the limits of this hike, measured 49-inches dbh, which is the biggest we have seen in the Catskills). Many of the trees here have multiple types of old growth indicator epiphytes growing together.



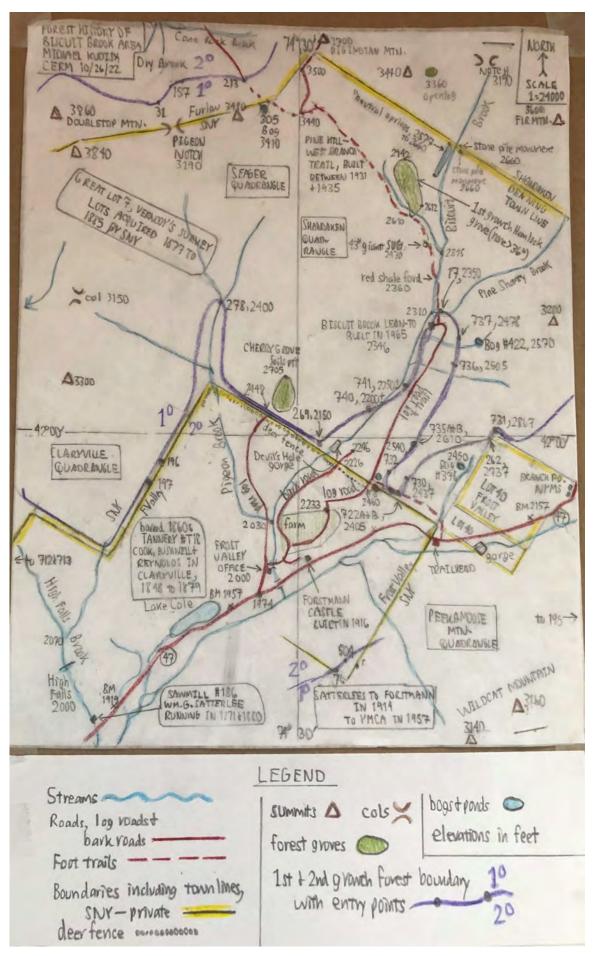


Forest history is a key factor for mapping the first growth forest and a determining factor in where old growth stands can be found. A land acquisition history map in the Appendix of DEC's Unit Management Plan for the Big Indian-Beaverkill Range Wilderness Area. issued in June 1993, shows that portions of the management unit containing the Hemlock Mt (A), Lower Biscuit Brook (B) and Upper Biscuit Brook (C) old growth forest stands were acquired in the periods of 1885 to 1900 or 1901 to 1915 and have thus been protected as part of the State Forest Preserve for more than a century.

Those interested in learning more about forest history in the Catskills should consult the standard reference on this subject:

Kudish, Michael (2000) The Catskill Forest – A History. Purple Mountain Press. Fleischmanns, NY. 217 p.

A forest history map drawn by Michael Kudish. The area covered includes **Biscuit** Brook, Pigeon Brook and a portion of the West **Branch** Neversink valley.



Spiritual Aspects of Old Growth Forest

No discussion of old growth forest would be complete unless we acknowledge the unique spiritual aspect of these places, a special feeling which cannot be experienced in younger forests bearing the mark of human disturbance.

Writer/naturalist John Burroughs¹ wrote these words about an old growth hemlock grove in the Catskills

"Nature loves such woods, and places her own seal upon them. Here she shows me what can be done with ferns and mosses and lichens. The soil is marrowy and full of innumerable forests. Standing in these fragrant aisles, I feel the strength of the vegetable kingdom, and am awed by the deep and inscrutable processes of life going on silently about me."

 In the Catskills: Selections from the Writings of John Burroughs. 1988.
West Park, N.Y. Riverby Books.
Reprint of 1910 Houghton Mifflin edition, copyright by Elizabeth Burroughs Kelley.

