

Comments on Mount Everett Summit Report
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The opinions I express here are based on the information carefully presented in the reports relative to my nearly three decades of reading about natural plant communities in the eastern U.S.; my review of pertinent literature as past editor and editorial board member of *the Natural Areas Journal* for many years, and currently the Forest Ecology subject matter editor for the *Journal of Forestry*; visiting plant communities throughout the U.S., including many days spent in the pine barrens of Albany, Long Island, and central and southern New Jersey over the past 25 years; and training over 30 graduate students in the fields of forest ecology and conservation.

I am impressed by the qualifications and number of scientists involved in making a preliminary evaluation of the biology and ecology of Mount Everett. Their various reports objectively portray these and other unique aspects of the Mount Everett dwarf pitch pine community.

The summit of Mount Everett is a highly significant ecological and historical site, which also has extraordinary aesthetic, cultural, and spiritual value. The dwarf pitch pine community that occupies the summit is very rare in the U.S. Mt. Everett appears to be quite unique among natural communities in North America, in terms of being an old-growth, dwarf pitch pine community that apparently does not have a substantial fire history for its maintenance. More broadly, such climatically stressed communities provide an outstanding natural scientific laboratory to understand how plants and animals tolerate extreme climatic conditions, and how species may respond to changes in our global environment. I absolutely agree with the statement on page 34 in the report by Motzkin et al. (“Historical development and vegetation dynamics...”) that “...Mt. Everett [is] to be an exemplary site worthy of the most stringent conservation measures”. I have personally not visited, nor read about, any similar natural community.

I believe that “old growth” is appropriate, based on: (1) the uneven age structure of pitch pine and range of ages from 12 – 170 years; (2) lack of tree cutting (beyond that required for fire tower or trail construction, and minimizing view obstructions); (3) area of sufficient size to allow ecological processes to function; and, (4) the severe climatic conditions under which this community has developed. Additionally, at least one red maple is near the age I understand to be the maximum longevity for this species (i.e., 150 years). I am intrigued, though by the apparent absence of northern red oak prior to 1860 here, and whether the age distribution reported accurately reflects the ages of red oak not cored and aged, the maximum age of northern red oak under these growing conditions, or lack of red oak prior to 1860 due to a

severe weather event (like ice storm that would affect mature trees or drought which would affect regeneration) or anthropogenic causes.

Additionally, I concur with the authors of each report who state that further work on each component is necessary to more fully describe the biological richness and ecological processes on Mt. Everett. I suggest the following projects be undertaken as soon as feasible:

- Determine the genetic similarity between pitch pines here, on other peaks in the Northeast, and in other structurally similar communities (e.g., the pygmy pitch pines of the New Jersey pine barrens), and to other pitch pine-dominated communities in the Northeast.
- Determine how long this community has occupied the Mount Everett summit (i.e., prior to the arrival of European settlers).
- More thoroughly document the vascular and non-vascular (i.e., bryophyte and lichen) plant species.
- More thoroughly document the insect species and their behavior, and examine the genetic similarities of barren species that occur here and on other bald communities of the Taconic Highlands.
- More thoroughly document the bird species and their behavior, especially nesting habits.
- Determine the status of the timber rattlesnake.

These suggestions are not meant to in any way minimize the work that has already been accomplished but are stated to reiterate a common concern expressed by most authors, i.e., that their studies were indeed preliminary. Additional work will only increase the significance of Mt. Everett as a natural community.