## HARVARD UNIVERSITY

## HARVARD FOREST

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To: Tom Dunlop

I will speak with Glenn Motzkin later today regarding our paper and the proposed restoration activity but below I have written down a few of the main points that I see.

- You might mention that our paper will be easily available for people to access on our web page <a href="http://harvardforest.fas.harvard.edu/index.html">http://harvardforest.fas.harvard.edu/index.html</a>. We also have a couple of boxes of the hard copy version that we could ship out to the Vineyard for free distribution. Any suggestions of where we have thought of: the State Forest, Dukes County Historical Society, Vineyard Conservation Society, and perhaps the bookstore in Vineyard Haven?
- Although we have not spoken to state officials and have little more information than what was printed in the Gazette we (DF and GM) are extremely excited about the prospects for this long-awaited restoration effort. By eliminating the plantations and encouraging native species and communities to thrive there is the potential to develop a thriving natural landscape of sandplain vegetation. This will certainly be one of the greatest global examples of this uncommon ecosystem type.

## Main Points from the Paper

Historical Influences on the Landscape of Martha's Vineyard - Perspectives on the Management of the Manuel F. Correllus State Forest. 1999. D.R. Foster and G. Motzkin

- The long-term intention of restoration should be to create a landscape mosaic comprised of native plant and animal communities. Specifically there would be a mixture of oak forests, pine and oak forests, and scrub oak dominated hollows (bottoms). Note that sandplain grasslands occur primarily in areas of intense human management (e.g., along firebreaks, roads and trails; on the airport). While it may be desirable to maintain these for their uncommon species, the bulk of the state forest should be managed for the historic and native vegetation -- forest and scrub communities.
- This restoration, which the Boston Globe termed the largest restoration project in New England history when we proposed it, involves the removal of predominantly non-native conifer plantations, including red pine, white pine (a native), scots pine, white spruce and Norway spruce. (Note: the Gazette articles do not mention the spruce and yet these are some of the densest and most damaging plantations, they are high fire hazards, and they contain much valuable wood). Also note: this is not a "clearing of the forest" as many thousands of acres of native forest and scrub vegetation will not be treated.

- It is important that restoration include the removal of **both** old plantations of large trees and the younger (1960s and 1970s) plantations. Though the latter may not appear to be a threat today, as they grow they will result in a future condition equally as unattractive and as damaging as the old plantations are today. It is not clear from anything that we have read that there remains a focus on the young plantations.
- The ability to restore this landscape is a result of its history: the plantations of non-native
  conifers were established in areas of native vegetation, not on old farm fields.
   Consequently, in many places the native species occur abundantly in the understory of
  these plantations
- Proper restoration involves assessing impacts and gauging success. Thus there needs to be sampling and monitoring of all activity and plans to continue assessment into the future.
- The most problematical areas are the densest plantations where there is little native understory. These might become focal places for the invasion of weeds and invasive plants. We suggested that these areas be treated in a limited initial way to test effects. However, if there is a single large harvest they could be cut and then monitored closely.
- Fire the least flammable and dangerous vegetation out there are the mature oak forests. Thus there should be an attempt in all harvests to retain all saplings and trees of the native species in order to speed the development of forests. The scrub oak bottoms are highly flammable and the most dangerous vegetation, but if these are contained in the landscape mosaic of oak and pine forests this should reduce their potential as catalysts for future problems.
- Long-term conservation. In the future the state, with assistance from conservation groups should continue to document the biodiversity and ecological characteristics of the sandplain landscape and communities. There is great potential for the area to become a focal point for research, natural history appreciation and appropriate recreation.