

## Statement of Perspectives Concerning the DEM Management Plan for the Manuel F. Correllus State Forest

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We are concerned regarding their understanding of the plan by the Department of Environmental Management (DEM) to harrow extensive areas of the Manuel F. Correllus State Forest (MFCSF) on the Great Plain of Martha's Vineyard. This concern is based on a lengthy history of intensive study of MFCSF, including publication of the only comprehensive ecological study of the area, and extensive familiarity with coastal and inland sand-plain vegetation across the New England and New York region.

The concern addresses two issues:

(1) EOEA is missing a tremendous opportunity to restore MFCSF to its status as an extensive natural landscape that represents the largest and most significant conservation tract on Martha's Vineyard and one of the most important sand plain natural areas on the northeastern coast. This restoration project, which was proposed in the Harvard Forest report, *Historical Influences on the Landscape of Martha's Vineyard: Perspectives on the Management of the Manuel F. Correllus State Forest*, was described by the Boston Globe as the single largest restoration project in New England conservation history and supported by an editorial in the Vineyard Gazette. Restoration of MFCSF would create a unique natural area and would help to promote the Commonwealth's reputation as a leader in national conservation.

(2) MFCSF is a unique sand plain landscape in Massachusetts and the northeast. The activity proposed by DEM: (i) will irreparably damage intact and undisturbed portions of this landscape, reduce the area's habitat value, and jeopardize unique plant and animal communities, including some of the oldest trees in the Commonwealth; (ii) ignores much less intrusive and environmentally sound alternatives; (iii) is not supported by any independent published studies or documentation; and (iv) is not based on a written management plan that incorporates long-term monitoring and evaluation.

In both regards the proposed activity is diametrically opposed to recommendations made in our report and supported publicly by EOEA and the Massachusetts Natural Heritage and Endangered Species Program (MNHESP).

### **Background**

MFCSF is the largest conservation property on Martha's Vineyard and is unique in Massachusetts in supporting extensive areas of sand plain scrubland and woodland that remain intact despite more than three centuries of European land use. In contrast to most

areas of New England and other portions of Martha's Vineyard, MFCSF has experienced remarkably little disturbance to its soil environment or native vegetation by historical land clearance, plowing, and agriculture. Whereas most of the Vineyard was cleared of native vegetation, nearly the entire Plain remained wooded throughout history; we estimate that less than 2% of MFCSF was cleared and plowed intensively for historical agriculture. As a consequence of this unusual history, MFCSF is distinctive in the Commonwealth, and perhaps in New England, in supporting native sand-plain vegetation and soils that are compositionally similar to those that occurred at the time of European settlement. In fact, MFCSF supports one of the largest continuous areas of scrub oak vegetation in the Northeast and unique sprout oak trees that we estimate to be many centuries old and potentially the oldest trees in the Commonwealth. In summary, the conservation and habitat value of this landscape lies in its intact soils and native vegetation. Notably, the most intensive disturbance to this area has come in the last century under DEM management, especially through the establishment of non-native conifers and the harrowing of fire breaks.

### **Restoring an Environmental Gem of the Commonwealth**

The size of MFCSF (~5,200 acres) makes it comparable to the regional Bioreserve projects that EOEa is sponsoring across the Commonwealth; therefore, the restoration of MFCSF into a thriving natural landscape would be consistent with ongoing initiatives and would highlight Massachusetts' leadership in restoration as well as conservation. In our 1999 paper, we provided detailed recommendations for restoring MFCSF to its native condition. The plan would be straightforward for DEM to undertake as it requires the cutting and removal of large areas of new and failed plantations that increase the fire danger and pose a threat to human safety, habitat continuity and quality, and populations of rare and uncommon plants and animals. Basically, the plan calls for reversing the negative impacts of seven decades of ill-advised attempts to grow non-native trees in a severe environment. Since we made this proposal, MNHESP has offered to fund the restoration activity and private contractors have approached us suggesting that the lumber stumpage from such an operation would significantly reduce its cost. Nonetheless, no move has been made to remove even the smallest (10' tall) saplings that threaten the integrity of this remarkable landscape.

We believe that there is a major opportunity for EOEa to take the initiative in leading and completing the single largest restoration project in New England history and returning the Great Plains to a functioning, native landscape.

### **Concern with the Plan for Harrowing**

Our concerns with the DEM plan are that it will destroy the integrity of MFCSF, it fails to consider viable alternatives that are consistent with the maintenance of high habitat quality, and it is not supported by adequate study or an adaptive management plan.

1. Harrowing is a highly destructive and intrusive practice that irreparably alters the soil structure and physical and biological environment and initiates long-term and irreversible changes in the vegetation. Importantly, the native species decline and a weedy flora of herbs, shrubs, and trees increase.
2. Activities by DEM's own crew on MFCSF clearly demonstrate that a suitable alternative to plowing is to cut the larger tree stems and then to mow the remaining vegetation with a large format brushcutter. Although intensive at the first pass, this method has the distinct advantages of : (i) leaving the native vegetation and soils intact, (ii) allowing for rapid recovery of the original vegetation if that is desired in the future, (iii) leaving the soil topography level and easily passed by tractors in subsequent years, and (4) creating an aesthetically pleasing landscape of high conservation value as it retains the native species.
3. To-date the only accessible study published by an independent group on MFCSF is our report. Although mention is made of other studies and professional perspectives, we have been unable to obtain any independent reports to review. One major study of fire behavior on the Plain is in revision by a graduate student at the University of Massachusetts; however, the major conclusions of that study do not seem to have influenced the current plan.

Of equal importance, there has been no independent evaluation of the various methods available to create extensive areas of low fuel accumulation. All such reviews have been undertaken by DEM in unpublished analyses. The appearance is that the availability of one piece of equipment (a large harrow purchased by DEM in the 1990s) is driving all considerations.

4. When dealing with a unique and irreplaceable landscape, it is critical that any major management activity proceed based on a publicly available management plan that provides at minimum: (i) a review of the property, its history and ecological attributes, (ii) a clear statement of management objectives, (iii) an evaluation of management alternatives, and (iv) a long-term plan for monitoring, evaluation, and correction of proposed activities if management objectives are not met. This framework allows for what is currently termed adaptive management and would be partially covered by a MEPA review.

In the current situation there is no such document and there is no evidence that the required steps have been taken.

We have been impressed with Secretary Durand's leadership and EOE's initiative in spearheading major conservation activities in the Commonwealth. Our personal involvement in many of these efforts and our commitment to seeing the best future for the natural resources of the State lead us to suggest that a great opportunity will be missed and a great disservice to a unique landscape will be done if the proposed DEM plan is to proceed.