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Tim Boland
Executive Director
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Dear Tim,

As requested, some notes that summarize the significant finds on Nomans Land Island from the field inventory work this summer.

Nomans Land Island
Floristic Inventory
18–20 July 2005

Nomans Land Island is a small, tree-less island that is located south of the western end of Martha's Vineyard. It is approximately 2.5 km east to west and 1.3 km north to south. This island, located in the town of Chilmark, is now designated as a National Wildlife Refuge. It was formerly used by the Navy as an air-to-ground ordinance training site. A preliminary flora was constructed in 1988 by Sorrie et al. As that time, a number of rare tracheophytes (i.e., vascular plants excluding mosses) were identified from the island. As part of work on a New England flora, I spent three days studying the island's plants with the primary interest of locating additional rare species. The results of the surveys are summarized below.

NOTEWORTHY TRACHEOPHYTES

***Juncus ambiguus* Guss. (saltmarsh toad rush)**



Juncus ambiguus is a diminutive, poorly known rush of coastal habitats. This grass-like plant has not been seen in New England since 1932 and hasn't been collected in Massachusetts since 1917 (i.e., it is exceedingly rare within the region). The majority of historical collections for this species are known from downeast Maine and the region of Massachusetts that includes Cape Cod and the islands. A single plant was found in a seasonally saturated depression on the west side of the island growing with *Holcus lanatus*, *Euthamia graminifolia*, *Achillea millefolium*, *Rhus copallinum*, *Morella caroliniensis*, *Sisyrinchium angustifolium*, *Polygala polygama*, *Pseudognaphalium obtusifolium*, *Juncus dichotomus*, and *Sagina procumbens*. Its rediscovery will help botanists locate additional populations by providing habitat and associated species information. UTM coordinates: 4568791 × 0346796. Elevation: ca. 16 meters.

***Hydrocotyle verticillata* Thunb. [whorled marsh-pennywort]**



This small, colonial herb is found on the coastal plain of New England, with the highest concentration of populations from Cape Cod and the islands of Massachusetts. It is considered regionally rare. A single, moderate-sized colony was observed on the east side of the island near the outlet of a small pond and over a steep, springy embankment leading down to the ocean. It was growing with *Holcus lanatus*, *Morella carolinienis*,

Festuca rubra, *Juncus articulatus*, *Juncus bufonius*, *Solidago sempervirens*, *Equisetum arvense*, and *Juncus marginatus*. Most of the observed plants were vegetative, only a small portion of colony had reproductive individuals. UTM coordinates: 4568581 × 0348897. Elevation: ca. 8 meters.

***Cirsium horridulum* Michx. var. *horridulum* [yellow thistle]**



This regionally rare thistle is found in open, well-drained soils of the coastal plain. It is now absent from many areas it was once found due to human disturbance and habitation. Most of New England's population (historical and extant) are from Massachusetts, with the highest concentration from Cape Cod and the islands. Several, small, scattered subpopulations were found over much of Nomans Land Island (together comprising a larger, metapopulation of over 100 individuals). Though not common, any inventory work done during the summer on the Nomans Land Island will certainly encounter multiple colonies of this plant.

***Pityopsis falcata* (Pursh) Nutt. [sickle-leaved golden-aster]**



Pityopsis falcata is a perennial herb of coarse, well-drained soils. It is a coastal plain species, with most of its New England populations found in Massachusetts. It is not tracked by that state due to the number of occurrences, but is considered globally rare by some organizations due, in part; to its limited geographic distribution and occurrence in threatened locations (habitats used by *P. falcata* are coincident with prime development sites). A single population was found on the north side of the island. It grew very new a large colony of *Populus alba*, an invasive woody plant native to Europe. Other associated plants included *Morellia caroliniensis*, *Ammophila breviligulata*, *Rhus copallinum*, *Rumex acetosella*, *Pseudognaphalium obtusifolium*, *Panicum virgatum*, *Rubus jaysmithii*, *Solidago sempervirens*, *Plantago lanceolata*, and *Dichanthelium acuminatum* ssp. *columbianum*. UTM coordinates: 4569282 × 0347887. Elevation: ca. 7 meters.

***Polygonum glaucum* Nutt. [seaside knotweed]**



Polygonum glaucum is low, annual plant of coastal sands. It is considered a Watch List species in Massachusetts. A single plant tentatively identified as this species was found in flower on the north shore of the island (fruits are needed for confident identification). It grew in open sand at the upper end of the beach with *Cakile edentula*, *Atriplex prostrata*, and *Chenopodium* (vegetative). UTM coordinates: 4569391 × 0347930. Elevation: ca. 2 meters.

Next Steps

Information concerning the *Juncus ambiguus* and *Hydocotyle verticillata* has already been submitted to the Massachusetts Natural Heritage and Endangered Species Program. That organization should also be provided the updated plant list and information concerning the remaining species (I suggest you contact Melissa Cullina, who will have genuine interest in the work that is taking place on Nomans Land Island and Martha's Vineyard). Specimens of some of the noteworthy species were collected (those from substantial populations that could tolerate collection). Those specimens are being mounted by the curator of the Delta Institute Herbarium (DINH) and will soon be forwarded to Polly Hill (duplicates retained at DINH). Images are also available on

request for all of the noteworthy species seen during this work. A late summer field survey (mid- to late August) should take place at some point to help flesh out the flora of the island (previous surveys, to my knowledge, have been performed in June and July).

Sincerely,

Arthur Haines