

RARE PLANT RESTORATION ON LONG PINE KEY

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The Long Pine Key area of Everglades National Park (Florida) is critical habitat for a large number of rare plant species including two candidates for federal listing and several dozen listed as endangered or threatened by the state of Florida. In addition, there are nineteen species present in the Long Pine Key area that are critically imperiled in South Florida and six species historically documented from the area that may be extinct in the continental United States (Gann et al., 2002).

Most of the critically imperiled species have been poorly studied, their distributions in Everglades National Park are not adequately documented, and their growth requirements are little known. Historically, water flow through Long Pine Key was concentrated in a series of short hydro-periods that traversed prairies the area in a north-south direction. Artificial drainage is believed to have affected Long

Pine Key habitats by increasing the frequency and intensity of fires which damage hammocks, and by increasing exposures to freezing temperatures through the lowering of water levels and the opening up of hammock canopies. Marie Selby Botanical Gardens is assisting with the reintroduction and augmentation of epiphytes and lithophytic ferns.

Presently MSBG is propagating three ferns and two orchids: *Pecluma plumula* (Humb. & Bonpl. ex Willd.) M.G. Price, the plumed rockcap fern, *Adiantum melanoleucum* Willd., the fragrant maiden-hair fern, *Thelypteris reticulata* (L.) Proctor, the lattice-vein fern, two orchids *Brassia caudata* Lindl., the Spider orchid, and *Oncidium ensatum* Lindl., Florida dancing-lady orchid. Augmentation trials will be initiated, using measures of plant community habitat and environmental variables to help identify favorable reintroduction sites.