

publications

From the Southeast Region come the following abstracts of recently published research reports/documents.

Exotic Plant Species Management Strategies and List of Exotic Species in Prioritized Categories for Everglades NP. Whiteaker, Louis D. and Robert F. Doren. 1989. NPS Research/Resource Management Report SER-89/04, SERO, Atlanta, GA 30303. 21 pp.

Everglades NP presently contains an excellent example of southern Florida's original flora and vegetation. About 950 vascular plant species have been

recorded, including about half the species endemic to southern Florida and numerous other rare plant species (Avery and Loope 1980, Avery and Loope 1983, Loope and Avery 1979). However, the plant communities and individual taxa of southern Florida have proved extremely vulnerable to disturbance from human activities. Deterioration began in the early 1900s and has continued, through agricultural development, urbanization, drainage, deliberate and accidental burning, and introduction of exotic species. Exotic plants have posed one of the greatest threats to

Everglades ecosystem integrity. This report lists 221 species of introduced plants that occur within the park and was created primarily by referring to the Everglades NP plants listed by Avery and Loope (1983), and further collections and identifications by the authors. The listed exotic plant species have been classified into 5 categories based on current distribution, potential to spread and invade native vegetation, and the corresponding management approaches for each group of species. This species list is intended for use by resource managers as a guide for exotic plant management strategy in Everglades NP and adjacent areas. It will be updated as necessary in conjunction with mapping and site information that are part of the park's ongoing monitoring program.

Comparison of Economic Feasibility of Chemical Control Strategies on Differing Age and Density Classes of Schinus terebinthifolius. Doren, F. and Louis D. Whiteaker. 1990. *Natural Areas Journal* 10(1):28-34.

Schinus terebinthifolius (Brazilian pepper), which is native to Brazil, has become an aggressive, woody weed in southern Florida, displacing native vegetation and rapidly invading disturbed sites. Studies on the effective use of herbicides to control the plant began in 1982. Concurrent studies of the labor, time, and costs of control, using herbicides, were begun to determine the cost criteria for future implementation of *S. terebinthifolius* programs. Comparisons were made between different age and density classes and between matricide (killing female trees only) and complete control strategies. Stand structure also was evaluated. The numbers of trees and stems and amount of herbaceous cover varied according to age and stand density. The young successional sites average 1453 stems/ha and less than 14 cm understory height. Costs were directly related to numbers of trees and stems per unit area. Principal costs were labor, not herbicide, and did not vary significantly between matricide or complete control strategies.