

Exotic or Alien – Either Defines ‘Pest’

By Robert F. Doren

Environmental threats posed by exotic pest plants have been seriously recognized and addressed in southern Florida only in the last 20 years or so. This may well be due to the fact that alien (exotic) plants haven't been around much longer than that. Of those that have, few have had the opportunity to spread. Other factors such as population dynamics and desirable invasion sites also have a large impact on the rate of spread from initial introduction.

Most of southern Florida's alien pest plants were brought here, ostensibly, to "do good things" for the environment. Many were brought to help "reclaim" the wetlands, to dry up the "swamp," and to allow people to live and farm these otherwise "useless" places. This is often the case of such imported pests. Such plants are almost never conceived of as potential problems, but as assets. Still today, though the numbers are fewer, there remain some who argue against control of these pests because of special interests.

Most of the problems first noted with alien pest plants were related to difficulties encountered by people, such as canals or lakes that became "choked" with aquatic weeds. Eventually environmental problems became evident as loss of native habitat, through alteration of plant and animal communities, was seen in natural preserves. People responded to these early problems, but usually as individuals. Sometimes a single State or county park, one agency or even one person in an agency reacted, but usually without any other participation or communication. Most of the work was isolated and done virtually alone. Occasionally individuals within an agency might share information, but coordinated efforts on a broader scale were essentially non-existent. Additionally, the size of the alien problem and the fact that alien pest plants did not recognize political boundaries made the whole issue (at least as far as woody weeds were concerned) unmanageable on the scale at which they had become problems. A concerted effort was called for.

No coordinated effort to begin such a program existed until the formation of the Exotic Pest Plant Council. It began at first through information contacts, the sharing of information and ideas about the issues, and eventually meetings among people involved with the management, control and research of exotics. After several attempts and some hard work, the Council was formed. Its purposes are outlined in the bylaws:

- a) to facilitate communication and exchange of information regarding all aspects of exotic pest plant control and management;
- b) to provide a forum where all interested parties may participate in and share in the meetings and benefits from the information generated and promulgated by this Council;
- c) to promote an understanding regarding exotic pest plants and their control;
- d) to serve as an advisory council for the continued needs for funding, research, management and control of exotic pest plants;
- e) to serve as an advisory panel for various interests concerned with exotic pest plants and suggest possible management actions to meet specific management needs;
- f) to provide a focus for the issues and concerns



John Gifford proudly stands in front of the first Melaleuca introductions in south Florida. Planting located at the Gifford home. Photo 1906, Courtesy of The Historical Museum of Southern Florida.

regarding exotic pest plants;

g) to promote dissemination of pertinent information regarding exotic pest plant management;

h) to review exotic pest plant management problems and activities and provide updated information to interested parties.

Some of the ways the Council has been effective in pursuing these goals include:

- development of a model county ordinance as a guide for local governments in writing exotic pest plant control legislation;
- support for an interagency agreement for a biological control program for *Melaleuca*;
- a complete, prioritized listing of exotic pest species for Florida;
- production of a management handbook for control of exotics;
- provision of news information to the media regarding exotic pest plant problems;
- aid in the development of an integrated management plan for interagency funding and control of *Melaleuca* on natural lands outside Everglades NP Boundary, that has procured over \$300,000.00 of outside funds to help protect the park;
- aid in the coordination of a mitigation plan for control of *Schinus* in Everglades NP that has procured over \$500,000.00 of outside funding for the study.

On November 2-4, 1988 the Exotic Pest Plant Council, National Park Service, University of Miami, Florida Division of Forestry, Fairchild Tropical Garden, The Nature Conservancy and the USDA Agricultural

Research Service sponsored a symposium on the worldwide problems of exotic pest plants. The symposium was organized to discuss the biological, ecological, and socio-political problems that occur when exotic plant species become pests in natural areas.

A proceedings will be available sometime this summer for persons interested in the specifics on the biological implications and management strategies and initiatives regarding exotic pest plants.

Nat Reed, former Assistant Secretary of the Department of Interior, led off the symposium, labeling this action "a last ditch effort," and calling for "an all-out initiative to fund these programs." Said Reed: "I remember water hyacinth as the once dreaded plant ... it palls when compared to *Melaleuca* or Brazilian Pepper ... and, excepting Agent Orange, we should be bold in our experiments." His implications are clear, that if action isn't taken now, we may well have lost our last opportunity.

Case studies from Hawaii, California, Florida and Australia presented the scope of the problem. Dr. Ron Myers, an ecologist with The Nature Conservancy, and long involved with exotic plant research, summarized the symposium with these observations: alien plants like *Melaleuca*, significantly and permanently alter community structure and ecosystem properties; "if species like *Melaleuca*, *Schinus*, *Casuarina*, and *Mimosa pigra* are allowed to go unchecked ... the Everglades will be no more ... we know it will happen, but I wonder if we have the resolve to prevent it."

Dr. Myers first asked, "Is there a solution?" and went on to say, "I contend there is." The State of Florida, he pointed out, successfully controls aquatic weed species on Florida's waterways by spending \$13 million annually. "The ultimate cause for lack of success with things like *Melaleuca*," Dr. Myers said, "is insufficient, inconsistent and poorly directed funding, not only to proceed but also to monitor past efforts. It would take consistent funding and direction to provide a long-term control strategy."

Do we commit to Nat's last ditch effort, or do we simply allow much of our natural heritage to be lost – there will be no options after-the-fact; it will have gone too far. Many people fail to see the seriousness of the alien weed problem because "a plant is a plant" and exotic plant problems develop slowly and do not have the dramatic impact of a fire in Yellowstone. It seems ironic that so much effort and money was spent on one such issue as the Yellowstone fires of 1988, even though scientists consider it a natural and positive thing for Yellowstone's ecology, while a real threat so great as to someday mean the literal end of places like Everglades NP continues almost unchallenged.

I, for one, vote with Nat Reed, but the final effort requires something new. We need not just the Exotic Pest Plant Council, or another symposium, but a coalition to undertake the political action necessary to fund a coordinated control program. Without taking this new direction, we can't be serious about our efforts, and we will only fail for the final time.

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