

Building Capacity for Exotic Pest Plant Species Education

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Master Gardener and Master Naturalist volunteers play a significant role in supporting the educational efforts of the Palm Beach County Cooperative Extension Service. To increase their confidence and capacity to answer exotic pest plant questions, we trained 28 volunteers in exotic pest plant identification, control, and prevention during a one day workshop in December 2007. In exchange for attending the workshop, participants shared their knowledge with the community by staffing an educational exhibit displayed for 17 days at the South Florida Fair in West Palm Beach.

We began the workshop with a plant identification quiz, including live samples and photographs of Palm Beach County's nine prohibited plant species, and a pre-test survey of 10 general exotic pest plant questions. Throughout the morning, formal presentations, videos, and discussion centered around frequently asked questions: "Why should I care about exotic pest plants?" "How are they managed in natural areas?" "What should I do if they're in my yard?" An afternoon field trip emphasized the challenges of managing exotic pest plants and provided an opportunity for participants to work on their identification skills. After returning to the classroom, we discussed the exotic pest plant exhibit to be displayed at the South Florida Fair and workshop volunteers signed up for at least one 3 hour shift. Finally, the post-test survey was administered along with an overall evaluation to document satisfaction and identify areas for improvement.

At the start of the workshop, over 80% of participants identified Air potato (*Dioscorea bulbifera*), Australian pine (*Casuarina equisetifolia*), Brazilian pepper (*Schinus terebinthifolius*), and Queensland umbrella tree (*Schefflera actinophylla*), about 50% identified carrotwood (*Cupaniopsis anacardioides*) and Old-World climbing fern (*Lygodium microphyllum*), and less than 30% identified earleaf acacia (*Acacia auriculiformis*), melaleuca (*Melaleuca quinquenervia*), and kudzu (*Pueraria montana*). The pre- and post-test surveys indicated that participants gained significant knowledge in the number of exotic pest plant species in Florida, the active ingredients in general-use herbicides and application methods effective in controlling exotic pest plants, public dollars spent on control, and local prohibited plant species. Of the 24 participants who completed the overall evaluation, 100% agreed they increased their awareness of why the public should care, they intended to share what they've learned with others, and would recommend the workshop to others. More than 90% agreed they increased their knowledge of how exotic pest plants are managed in natural areas and intended to learn more on the subject. Over than 80% increased their knowledge of what homeowners can do, and increased their identification skills.

All participants shared their knowledge with the community by volunteering a total of 222 hours (a value of \$2,220 based on



[top] Participants identify exotic pest plants and learn about the challenges of managing them in the field with Matthew King, Palm Beach County Environmental Resources Management Department; [bottom] Master Gardener Lynn Neff describes the role of biological controls to a family at our South Florida Fair Exhibit. The fun, interactive exhibit is a matching game with a bell that rings when a correct match is made.



\$10/hour) staffing an exotic pest plant educational exhibit displayed for 17 days at the South Florida Fair in West Palm Beach, January 18 through February 3, 2008. The interactive "Make a Match" exhibit included definitions, invasive exotic plants, replacement plant options, and photographs of biological control insects. Volunteers reached over 2,000 residents at this successful venue and we plan to use the display at the 2009 South Florida Fair, as well.

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