IN MEMORY
Julia McHugh Morton
1912–1996

Florida EPPC's only lifetime member - Julia Morton passed away at Jackson Memorial Hospital in Miami on Tuesday, September 10, 1996, as a result of complications from a car accident. She was 84. Julia was a renowned authority on poisonous plants and served as caretaker of the University of Miami's Morton Collectanea, which she and her husband Kendall, began in 1933. The Morton Collectanea consists of voluminous files and cross references on every aspect of poisonous and medicinal plants from around the world. Among her many credits, she received an honorary doctorate from the University of Miami, served as president of the Florida Horticultural Society, she was a member of the Board of Trustees of Fairchild Tropical Garden and was a founding member of both the Rare Fruit Council International and the Florida National Parks & Monuments Association.

Julia was feisty. She went to Thailand and Vietnam in 1968 to write an Army jungle survival manual. She spent a month identifying poisonous and edible plants for our troops. Her book and corresponding wall charts entitled "Plants Poisonous to People", are still considered the best references on the subject. It was this book that earned her the reputation as being "The Poisonous Plant Lady." In addition to warning Floridians about poisonous plants, she was also one of the early voices alerting us about the evils of invasive plant species. Her 1976 listing of invasive plants in South Florida was entitled (in typical Julia Morton lingo) "Pestiferous Spread of Many Ornamental and Fruit Species in South Florida." This list contained information on 241 plants known to escape cultivation in South Florida, with many being reported for the first time.

I first met Julia sometime in the mid 1970s. I was pondering the identity of an odd plant growing on the dunes of Key Biscayne when up walked a five-foot dynamo of a woman who said, "Do you know that plant?" I immediately admitted that I was unfamiliar with it and told her that I was compiling a list of vascular plants for Cape Florida State Park. "That's Morinda citrifolia," I recall her saying, and then she began informing me of its various common names throughout its natural range and how it was used medicinally and as food in various countries. Within three days I received a thick package in the mail that was full of information on Morinda citrifolia. I had a friend for life.

What I liked most about Julia was that you could pick up the phone and call her office and she would answer the phone. No secretary. No answering machine. You got Julia in person. And if you had a question, you could expect not only an informative answer, but also her trademark packet of stuff in the mail that contained more information than you could ever care to have needed.

Julia's life was spent in full bloom. I will never be able to look at Morinda citrifolia without thinking of her, and she will surely be missed by anyone who had the good fortune to have known her..........Roger Hammer.

"We must begin to roll back the exotic plant invasion, strive to restore wherever possible the purity of our native flora, and be alert to the potential of introduced species not presently of major concern but which have the ability to multiply and disperse themselves..."

Julia Morton, 1976
Aquatic Soda Apple - The Wetland “Weed From Hell”

Few vegetation managers in Florida have not heard about tropical soda apple (Solanum viarum) and the problems that this “weed from hell” is causing in pastures and other upland sites. Those of us who deal primarily with aquatic and wetland habitats were relieved to hear that tropical soda apple doesn’t tolerate flooding and so is not a threat to our state’s extensive wetlands. Well, don’t relax too much. One of the most recent weedy immigrants to Florida is a very close relative, aquatic soda apple (Solanum tampicense).

Despite its name, aquatic soda apple is found in wetlands habitats, not necessarily tolerating continuous flooding, and its fruits are pea-sized berries rather than the larger “apples” of species such as S. viarum. Other distinguishing characteristics of aquatic soda apple include:

1. Aquatic soda apple occurs in regularly flooded wetlands such as along rivers and in cypress domes. It does not grow in uplands such as pastures or oak hammocks where tropical soda apple and other weedy Solanum species occur.

2. Leaves are elongate (up to 6 inches long and 1 to 2 inches wide with indented edges and prickles on the veins of both leaf surfaces.

3. The sprawling stems are up to 1/2 inch wide and 6 to 15 feet long and are covered in curved prickles. The leaf and stem prickles snap and interlock so that the relatively insubstantial individual plants bend and tangle together to create a robust and impenetrable thicket. Aquatic soda apple stems can clamber over small trees and bushes up to a height of 15 feet.

4. White and yellow, tomato-like flowers develop into clusters of up to 11 berries, each 1/4 inch in diameter. These turn from a solid green to orange and finally to deep red as they ripen. This fruit size and solid green immature color distinguish this species from most other prickly members of the Solanum genus.

Locations

Aquatic soda apple is believed to originate from Mexico, the West Indies, and Belize. It was first reported in Florida in Charlotte County, in a marsh south of Punta Gorda, in 1983. Property owners at Fisheating Creek Wildlife Refuge (Highlands County) first noticed this species in the cypress swamp along the creek in 1985. This is now one of the largest (possibly up to 150 acres) and densest populations known in Florida. This infestation probably extends eastward towards Lake Okeechobee into Glades County.

Aquatic soda apple was identified along the Peace River near Arcadia (DeSoto County) in 1991 and is now known to infest many of the local tributaries of the Peace River. Most recently, aquatic soda apple was reported in Lee County in a cypress head off Daniels Road, south of Ft. Myers. Confirmation of this site also lead to its discovery in the nearby Six Mile Cypress Slough County Park.

The currently known locations of aquatic soda apple are all within a fairly limited area of adjacent counties in Southwestern Florida: Highlands/Grades; DeSoto; Charlotte; Lee. It is important to determine whether this plant has spread outside this area. If not, a critical management objective should be, at minimum, to contain it within this area.

The Problem

The large number of prickles on aquatic soda apple and its ability to form dense stands make it an unwanted inhabitant of areas in which people require access to water resources. In situations where there was previously little understory vegetation, such as the cypress swamp along Fisheating Creek, the presence of aquatic soda apple has significantly changed the habitat. It is still not certain exactly what impacts this may have on wildlife utilization.

It has yet to be established how competitive this species is with other plants, so its potential for invasion and ecological impacts in vegetated sites is not necessarily known. However, its presence among ferns in parts of the Fisheating Creek site and amongst a variety of wetland species in the cypress head in Lee County indicates aquatic soda apple can invade and survive within existing vegetation.

Being an exotic species, it is important that its potential for invasion and domination in various types of wetland habitat be determined. The identification and description of all sites containing aquatic soda apple is a vital part of this evaluation process. The quicker we can decide how significant a threat this plant will be, the quicker and more cheaply we can take effective action to control it.

Biology

A few isolated plants at Fisheating Creek grow in full sunlight, but most aquatic soda apple appears to grow in the shade of the cypress canopy. Plants in the sun tend to have smaller leaves, more prickles, and greater flower and fruit production. Such plants may produce up to 250 berries a year, with a total of over 8,500 seeds. Under suitable conditions, over 90% of these seeds can germinate, even after several months of storage or freezing. Although the rate of seed production is much reduced for shaded plants (only 350 seeds per year), there is no doubt that aquatic soda apple is very capable of reproducing from seed. These seeds may also survive from year to year in the soil.

Aquatic soda apple appears to be very susceptible to frost damage. Of plants protected by shade cloth,
in large pots or in water-saturated soil, approximately 80% were completely killed by two periods with temperatures below freezing in Gainesville. However, the freezing tolerance of the seeds indicates in North Florida this species would behave as an annual plant. It survives as a perennial plant in areas that do not experience frosts.

In addition to reproduction and dispersal via seed, aquatic soda apple plants can regenerate from stem sections that are placed in soil or water. Sections as short as one inch can produce leaves and roots if the section includes a leaf scar and, hence, a dormant bud. Regrowth from cut stumps is also possible if a stem length of at least two inches protrudes from the ground. Aquatic soda apple does not appear to have rhizomes nor is it capable of regenerating from root sections, as tropical soda apple can.

Control
Mechanical control is unlikely to be effective in the types of wetland habitats affected. Manual removal would require cutting stems to ground level. Small scale herbicide tests have indicated that glyphosate and 2, 4-D are effective at maximum labelled rates, but, further tests are needed to establish lower rates, the least unpleasant application methods (remember the prickles), and to evaluate impacts to non-target plants. Triclopyr also shows promise, but it is not currently registered for aquatic sites. Long-term management also will have to address control of seedlings which soon sprout in cleared areas. Several pathogens and insects have been found damaging aquatic soda apple, and we hope that if long-term management is needed we may benefit from the biological control efforts being directed towards tropical soda apple.

Conclusions
There is a dilemma for researchers and vegetation managers who work with exotic species that are new to our state. If little is known about a plant, it is difficult to predict how much of a problem it might become. Thus, there is an immediate need to gather information about basic biology and management methods. It is also most cost-effective to control, even attempt to eradicate, a species when its distribution is still limited. If a plant is a recognized problem in other countries (as Mimosa pigra is in Australia), there should be no hesitation to immediately give priority to such research and control efforts. If such prior experience does not exist, however, as in the case of aquatic soda apple, there is a hesitation to create panic and potentially "cry wolf". But too much delay can result in unacceptable expansion of an infestation.

There are many research and management questions that we need to address before we can confidently predict what impact aquatic soda apple might have in Florida and before we can determine how to eliminate it. We have made a start in answering these questions, but, for part of our progress, we need help.

Please help us find this plant. If, after reading the description above again you think you have located aquatic soda apple, contact Alison Fox, fax: (352) 392-1840. Be prepared to identify the location and extent of the plants; if possible, try to provide a sample of leaves and flowers or fruits; and be sure not to spread it.

We hope we do not find aquatic soda apple outside Southwest Florida, but we need as many people as possible to be looking for it. Establishing an accurate map of its current distribution will go a long way toward estimating the potential threat aquatic soda apple poses to our precious wetlands.

Acknowledgements
Preliminary studies were funded by a Research Project Enhancement Award from the Office of the Dean at University of Florida/Institute of Food and Agricultural Sciences (IFAS). The Florida Department of Environmental Protection, Bureau of Aquatic Plant Management is currently funding a three year study on growth rates, seed germination and longevity and control options. —Alison Fox and Andrew Wigginton, Center for Aquatic Plant, UF/IFAS.

This Just In: Aquatic soda apple found in the Dry Tortugas.

That's right, a thicket of aquatic soda apple was discovered in one of Ft. Jefferson's old artillery magazines during the last EPPC Board of Directors meeting. The roof had caved in, allowing rain water to collect in the bottom of the structure. The plant was positively identified by several "master botanists." Dr. Fox is having a hard time buying this story, but she's had several board members volunteer to escort her back to the site!
Florida EPPC Newsletter

Exotic Pest Plant Council Minutes
Board Of Directors Meeting
August 20, 1996 - Palm Beach, Florida

Chairman Greg Jubinsky called the meeting to order at 6:45 p.m. The following Board members were present: Dan Thayer, Allen Dray, Brian Nelson, Jackie Smith, Greg Jubinsky, Francois Laroche, Tony Pernas, Richard Mayroud and Amy Ferriter, David Jones, Joe Vissaggio, Roger Hammer and Ken Langeland. Others present included: Julian Rogers, Terry Lewis, Laura Ethridge, Kathy Burks, Jen Taylor, Jim Duquesnel, Sheila O'Dea, Ross Hakes, Dan Clark, Dan Austin, Chris Lockhart, Carol Lippincott, Catherine Johnson, Doug De Vries, Su Jewell, David Black, Steve Smith and Randall Stocker.

Chairman Jubinsky thanked Julian Rogers for providing the meeting room at the Palm Beach Hotel and also, Terry Lewis of the law firm Lewis, Longman and Walker, for providing refreshments.

I. Minutes
A motion to approve the minutes of the May 7,1996 Board Meeting as printed in the Newsletter was approved (Smith, Francois).

II. Correspondence
Received a letter from the Tampa Bay Wholesalers Growers Association requesting that the Council send someone to their next meeting to discuss the Council and the plant list.

Received a letter and a poem from Eleanor Milnor of Naples who requested that the Council reconsider its position on Australian Pine trees.

The Council was invited to join the Florida Federation of Garden Clubs.

There has been numerous references recently to the Council's plant list in magazines, newspapers and trade magazines. Thus, it appears that the Council is having an impact.

III. Treasurer's Report - Alan Dray
Alan reported that the net income of the annual symposium was approximately $7,700 and the cost was $2,500. Thus, we earned approximately $5,200. The Council currently has a total funds available of approximately $28,000. The National EPPC account totals only about $1,600 and additional sources of income are needed for the National EPPC.

The current membership totals 248.

A motion to accept the Treasurer's report (Laroche/Ferriter) was approved by the Board.

IV. Editor's Report - Amy Ferriter
Amy thanked everyone who sent articles for the newsletter and encouraged all members to send her information. She got many comments (mostly positive) on Don Schmitz's article in the last Newsletter.

Four hundred copies of the Newsletter are being printed. This allows for complimentary copies to be sent out. Amy is compiling a complimentary mail list. Please contact her if you would like to add someone to the list.

The ads which have been appearing in the Newsletter are currently covering about 75% of the Newsletter cost. Anyone who would like to put an ad in the Newsletter should call Amy at (561) 687-6097.

A motion to accept the Editor's Report (Langeland/Laroche) was approved.

V. Committee Reports
- National Outreach - Francois Laroche
Francois discussed a proposed National Strategy on Invasive Alien Plant Species which was submitted for consideration by Faith Campbell (National EPPC Executive Secretary). The Draft document was prepared by the U.S. Department of Agriculture and the Department of the Interior. The document discusses three goals; prevention, control and restoration which will be necessary to effectively deal with exotic, invasive species problems.

A motion to support the proposed national strategy (Mayroud/Pernas) was approved by the Board.
- Exotic Pest Plant List - Dan Austin
Dan and his committee are gathering information to update the plant list for 1997. Anyone who feels that the list needs modification should send documentation to Dr. Dan Austin at Florida Atlantic University. Information for the 1997 list should be sent to Dan by the end of October, 1996 or call him at (850) 367-3327.

The field survey sheets which most members have been submitting are providing good documentation and support for the invasive species list. All members should continue to fill out survey sheets to document new infestations. Survey sheets are available from, and should be returned to, Greg Jubinsky, Florida DEP, 2600 Blaine Road, Tallahassee, Florida 32399-2400. You can call him at (904) 487-2600.

The U.S. Department of Agriculture is soliciting input to update their noxious weed list. Chairman Jubinsky asked Dr. Austin to submit information on the appropriate species from the EPPC plant list.
- Publications - Ken Langeland
Ken indicated that work is progressing on the Exotic Plant I.D. Manual for EPPC Plant List Category I plants. Some sections are...
nearing completion. The final draft will be reviewed by a technical advisory committee. The members of this committee are Dr. Richard Wunderlin, Kathy Burks, Dr. Alan Meero and Dr. Dan Austin. All information documenting each species invasiveness will be included. This joint EPPC/IFAS manual will be a “for sale” publication available through IFAS.

The Council did not receive the FACEE grant which was submitted to defray the cost of the I.D. manual.

- **Research Committee - Alan Dray**
  
  Funding for the Ft. Lauderdale quarantine facility was dropped from the final Agriculture appropriation bill so construction of the facility will not begin this year.

  The Melaleuca weevil is still not approved for release. The Endangered Species section of the USFWS has questioned some of the reports and other supporting documentation.

  Bob Pemberton at the Agricultural Research Station in Ft. Lauderdale is beginning to research the feasibility of locating biocontrol agents for *Lygodium*.

  Scientists will be sent to Thailand and Viet Nam this fall to retrieve hydrilla for genetic fingerprinting and to look for hydrilla feeding insects.

  Dan Thayer encouraged all Council members to send any research proposals their agency or non-governmental organization are considering to the research committee for peer review. This is one reason the committee was set up. In addition, it could help reduce unnecessary duplication of efforts given the limited amount of research money available.

- **By Laws - Francois Laroche**
  
  Revised copies of the by-laws are available from Francois (561) 687-6193.

- **Membership/Publicity**
  
  Greg and Doug have discussed the creation of a pamphlet for new residents. A motion was made and approved (De Vries/Thayer) for the expenditure of up to $100 for a mailing to Council members requesting that each member provide the name and address of three people who they think could or should join the EPPC.

  Other suggestions to increase the general public’s awareness of the exotic species problem were discussed such as handouts for realtors and/or retail nurseries.

- **Home Page - Tony Pernas**
  
  The Council now has a temporary web site thanks to Tony. The address is http://members.gnn.com/pemas/exopage.htm. The site explains what the Council is, includes the plant list, a membership application, lists the offices and directors, a copy of the latest Board meeting minutes and also information on the national chapter. Tony is pursuing a permanent address for the Council’s web site.

- **Symposium/Program - Kathy Burks**
  
  Kathy is beginning to consider themes for the annual symposium. She is seeking input on presentations, keynote speaker, etc. Anyone who has a good idea or would like to help Kathy, please call her at (904) 487-2600.

- **Site Arrangements - Laura Ethridge**
  
  The Board decided to have the 1997 annual symposium in South Florida during May. The southwest coast (Ft. Myers) is the likely spot. Laura will get information on potential sites together so that the Board can make a final decision. The Board approved a motion for Laura to look into purchasing pins for distribution at the symposium.

- **Vendors Committee - Joe Vissaggio**
  
  Joe requested suggestions from Council members for additional vendors at the annual symposium.

- **Merchandising - Jackie Jordan**
  
  Jackie is compiling information on hat and shirt design and costs for Board consideration.

- **Brazilian Pepper Task Force - Dan Clarke**
  
  Dan Clarke has assumed leadership of this committee. He expects to have the Brazilian Pepper Management Plan completed soon.

  A motion (Laroche/Smith) to accept the Committee reports was approved by the Board.

- **Old Business**
  
  The Board approved a motion (Dray/Laroche) to establish a small committee (Dan Thayer, Ken Langeland and Amy Ferriter) to advise the Board on publishing a Council magazine.

  Dr. Randall Stocker gave a brief update on the activities of the University of Florida’s Task Force on Invasive Plants. Items they have discussed include the publication of information bulletins, beginning an invasive species data base similar to the aquatic data base and conducting a structured workshop to address some of the recurring questions concerning the invasive plant problem.

  The Council was invited to send a representative to a recent Tampa Bay Wholesaler Growers Association. Brian Nelson attended the meeting for the Council to exchange information and answer questions about the Council.

- **New Business**
  
  The National Association of Garden Clubs sent a membership application to the Council. The Board approved a motion (Laroche/Smith) to join the Association. The Board also approved a motion to join the Australian Pine Growers Association.

  The next Board of Directors meeting will be held October 30 through November 1, 1996 at the Dry Tortugas National Park.

  The August 20, 1996 meeting was adjourned.
From the Chairman...

There has been a considerable upwelling of interest and discussion about invasive exotic climbing ferns and vines in Florida, particularly Lygodium, skunk vine (Paederia foetida), Lather-leaf (Colubrina asiatica), and air potato ( Dioscorea bulbifera). These plants are spreading at an alarming rate; efforts to identify specimens are needed. To address this need, I have asked Mr. Mike Bodle (of the South Florida Water Management District) to chair the newly created Climbing Ferns and Vines Task Force. Mike conducted a one day workshop in April on this suite of plants and has developed a good foundation for developing a booklet that will include all species of invasive exotic climbing ferns and vines in Florida. General categories for each species will include what is currently known about: biology, distribution, environmental, economic and human impacts, management techniques, and operational efforts.

This will also serve as an important tool to access research needs. If you have knowledge of these plants and have an interest in assisting Mike in preparing this document, please contact him at (561) 687-6097.

In the last newsletter, I asked for members to submit a one page, easy to complete form to assist in developing a database that focuses on those who call if you have a problem with plant "X." Tony Pernas, our resident EPPC webpage guru, has agreed to include this information on our website. I think this is an excellent way to further promote the knowledge, diversity, and strengths of Florida EPPC to the resource management community nationwide. Please complete this request now; it won't take 5 minutes!

While reviewing the site locations for plants currently plugged into the plant database, I noticed several plants not showing any site verification data. Those plants are:

- Aristolochia littoralis
- Casuarina cunninghamiana
- Croton sesamoides
- Ficus benghalensis
- Ficus religiosa
- Flueggea virosa
- Hyptis benghalensis
- Jasminium sambac
- Lygodium microphyllum
- Merremia tuberosa
- Pittosporum tobira
- Syzygium jambos
- Triphasis trifoliata

If you are aware of natural areas impacted by these plants... take the time to document their locations so they can be included in the 1997 Most Invasive Species List! Please send the survey forms for these plants to me ASAPI Greg Jubinsky, 3915 Commonwealth Blvd, MS 710, Tallahassee, FL 32399.

Keep the Faith!
A National EPPC Update

A year ago, FLEPPC joined with the EPPCs of California, Tennes­see and the Pacific Northwest to form the National Association of Exotic Pest Plant Councils (NAEPPC). We did so because we have learned the importance of forming alliances across the country and working together to obtain effective national policies and funding for programs. NAEPPC hired Faith Campbell as our "Voice in Washington."

Faith presses for more aggressive programs to control established invasive plants and prevent the introduction of new pest species. As Executive Secretary of NAEPPC, she has been:

- Lobbying Congress to improve the Federal Noxious Weed Act.
- Advising staff in the responsible federal agencies on steps to improve existing programs.
- Expressing EPPC's point of view in planning governmental conferences to advance the awareness of weeds nationally. Faith helped shape the agendas of the eastern "weed summit" held in Florida last November and an inter-agency conference on invasive weeds of the eastern forest to be held in Tennessee in April.

A key element of the NAEPPC's work is raising awareness among policy makers, the media, and the environmentally concerned public. It is essential that they understand the extent of these invasions and their impact on agriculture, transportation, property values, and the environment. This work has included:

- Compiling, evaluating, and disseminating the first comprehensive nationwide list of invasive, alien plant species considered to be serious invaders. Seventy percent of the 310 plants listed are currently sold by the nursery trade.

- Representing the EPPCs to other organizations. Faith spoke at the annual meetings of the Weed Science Society of America and the Aquatic Plant Management Society and at regional conferences in Philadelphia and Baton Rouge. She has written a chapter for the book Assessment and Management of Plant Invasions (in press). Faith and John Randall of the Nature Conservancy represented the EPPCs at the first international conference on invasive alien species held in Norway in July.

- Working with private industry to organize "weed awareness tours" and other educational efforts in Washington for the national media and congressional staff.

- Collaborating with allies to distribute fact sheets and other educational materials.

- Urging media coverage and publishing articles about invasive exotic plants.

- Facilitating an agreement for EPPC to market a CD-ROM on invasive species for the U.S. Army Corps of Engineers.
Unfortunately, Faith's ability to continue to represent us at the national level is in jeopardy. She has essentially worked without compensation while trying to secure grants from various foundations.

Roger Hammer (of the Dade County Natural Areas Management group) offers the following south Florida exotic plant accounts. If you have similar reports (and/or horror stories) you are encouraged to submit them to the editor. Remember, misery loves company.

**New Exotic Orchid Found Naturalized in Florida, Orchid you not.**

Adding to the naturalized exotic flora of Florida, the Asian orchid *Spiranthes sinensis* has been found on a sandy shell island near Naples (Collier county) on March 28, 1996. The population was found in flower by John Beckner of Marie Selby Botanical Gardens and Donna Burch of the Orchid Conservation Committee, Inc. To date, this is the only population known in Florida, but similar habitat abounds along both coasts of Florida.

Beckner reported the find in the North American Orchid Journal (Vol. 2, No. 2, June 1996), a quarterly journal devoted to the orchids of North America published by the North American Native Orchid Alliance. Beckner describes the species as having "5mm-long flowers in a single rank, many long narrow leaves, multiple crowns and inflorescences on older plants, a lip that widens near the apex and unique egg-shaped cells covering the lower surface." The color photo accompanying Beckner's article shows a loosely-spiraling spike of flowers that are white with a conspicuous orange-yellow lip. Beckner will be publishing a more detailed paper describing the species at a later date.

Although the white-flowered *Spiranthes* in Florida are difficult to tell apart, the March flowering period (which it shares in south Florida with the native spring ladies' tresses, *S. vernalis*, a freshwater wetland species), the coastal habitat, and the orange-yellow lip on the flowers, should make this new Asian orchid easy to identify. The native range of *Spiranthes sinensis* includes Indonesia, New Caledonia, New Zealand, eastern Australia, the central Ural Mountains in Russia and Ukraine and Samoa.

Resource managers who oversee coastal areas with sand or sand-shell habitats (Marco island, Sanibel Island, Cape Sable, Key Biscayne, etc.) should mark their calendars for March each year as a reminder to make periodic surveys for this orchid in order to document its range in Florida. Please report any discoveries to Roger Hammer, Dade County Natural Areas Management, 22200 Southwest 137 Avenue, Miami, FL 33170, or phone (305) 257-0933.

**Yamming it up in Big Cypress**

The African yam, *Dioscorea san­sibarensis*, discovered earlier this year in three Dade County locations has now been spotted in Big Cypress National Preserve in Collier County. As if nothing is sacred, the vine was found growing on Florida's state tree, the cabbage palm.

For obvious reasons, she cannot continue to do so. We must respond to this crisis!

If you have fund raising ideas, please share them with Faith directly. She can be reached at the Defenders of Wildlife office in Washington, D.C. at (202)682-9400 x230. We are so fortunate to have her working for us in Washington, any help you can provide will help us "Keep the Faith."

During a trip to the Fakahatchee Swamp, Keith Bradley and the author were traveling west on Tamiami trail when Bradley noticed some odd looking, heart-shaped leaves in the canopy of a cabbage palm. Upon closer inspection, we discovered it was *D. sansibarensis*. Bradley collected a specimen and we drove 1.4 miles west to the Oasis Ranger Station to sound the alarm. Vegetation manager Tony Pernas was eating donuts and slurping coffee in a very important meeting at the time so we left the specimen with one of his employees. A herbarium specimen was collected and will be deposited at the Fairchild Tropical Garden in Miami.

Resource managers should keep a watchful eye out for this newcomer and eradicate it on sight (after taking a voucher specimen) before it gains a permanent foothold like its two relatives, *D. bulbifera* and *D. alata*. The leaves of *D. sansibarensis* are opposite and, especially when young, have pointed projections on the side of the leaf (see illustration). A mature leaf can be as wide as 50 cm. The bulbils (tubers) of this species are small, smooth, purplish in color, and reputedly poisonous. Please report any suspected or confirmed sightings of this species to Roger Hammer, Natural areas Management, 22200 Southwest 137 Ave., Miami, FL 33170, or phone (305) 257-0933.

**The Torture Never Stops**

Dade County's Natural Areas Management staff recently discovered some strange looking trees growing in Matheson Hammock. The plant was (after considerable debate) finally positively identified...
Wake Up and Smell the Coffee!

An EPPC member from north Florida (who shall remain anonymous), was visiting a natural area in southwest Florida when he spied a shrub with glossy green leaves and clusters of bright red berries. His “search image” registered Ardisia crenata, the red-fruited “coral ardisia” busily invading upstate woodlands, but no (and happily), it was one of the wild coffees native to peninsula Florida (Psychotria spp.). Perhaps the difference between the two is easiest to remember for those unfamiliar with one or the other is that Psychotria has opposite leaves with extra tissue at the leaf bases (stipules), like many members of the Rubiaceae (madder or quinine family). Ardisia crenata leaves are alternate and without stipules, which is also true for the native Ardisia escallonoides (marberry) and the south Florida exotic invader Ardisia elliptica (shoebotton ardisia), both of which have black fruit rather than red. -Kathy Burks, DEP Bureau of Aquatic Plant Management.

To hyphen or not to hyphen...what was the question?

In the Summer, 1996 issue of Aquatics magazine, David Girardin of the St. Johns River Water Management District offered some interesting (and humorous) food for thought. The following are excerpts from his article: “So, is it One Word, Two Words, or Hyphenated?”

“It all started like this. I was sitting in my office contemplating my naval, when I came across a memo to me from the senior editor of the grand exalted office of the executive director of the St. Johns River Water Management District. It seems that one of the authors in the Environmental Sciences Division was questioning why waterhyacinth and waterlettuce were being written as one word and not two.”

Well... Here’s what David found:

“Compound common names of plants may be hyphenated, run together, or appear as two words. Many botanists prefer to hyphenate the term or run the two elements together when the second part of the name is not taxonomically correct (for example, "cottongrass"or cottongrass) and to separate the elements when the second part is taxonomically correct (for example, "beach grass" because it is a grass).” Source: Council of Biology Editors (CBE) Style Manual, Fourth Edition.

“If a second word is not taxonomically correct, it is hyphenated to the preceding word. For example, Douglas-fir (not a fir), poison-oak (not an oak of the genus Quercus) and skunk-cabbage (not in the cabbage family)...(Additionally), if a group name consists of words that have 2 or more syllables, or if either element of a pair has 3 or more syllables, the name is hyphenated (evening-primrose, morning-glory, water-hyacinth and water-lettuce).” Source: Council of Biology Editors (CBE) Style Manual, Sixth Edition.

Ken Langeland, Editor of Aquatics magazine offered the following: “For those of you using Word Perfect, I just found out that the spell checker makes waterhyacinth two words, unhyphenated, which is incorrect by anyone’s standards.”

Or is it? Ken received the following comment from David Spener of the USDA Aquatic Weed Control Research Laboratory:

“Two recently published books both use the two-word “water hyacinth” as the common name of this species. In fact this name appears in the caption of the frontispiece of the recent book by Pieterse and Murphy (Aquatic Weeds: The Ecology and Management of Nuisance Aquatic Vegetation, 1993, Oxford University Press). The eminent taxonomist Christopher D.K. Cook in his guide to aquatic plants of the world (The Aquatic Plant Book, 1990, SPB Academic Publishing) also uses the two-word “water hyacinth” as the common name. It appears that well-respected European scientists consider water hyacinth, without a hyphen or not written as one word, to be correct. Maybe Word Perfect’s spell checker isn’t wrong after all.”

Anyone else care to comment?

Have you heard?

On August 9, Governor Lawton Chiles signed a proclamation declaring October 1996 as Invasive Nonnative Plant Eradication Awareness Month. It was developed by the Parks and Natural Resources Interest Section of the Florida Recreation and Park Association to create awareness and provide continuing education on invasive exotic plants that negatively affect Florida’s environment. For more information, contact Rosie Kewe, Operations Management Consultant, DEP Florida Park Service, Bureau of Operational Services at (904) 488-8179.
The Grass Is Always Greener
...on the other side of the canal bank.

Three large grasses are abundant in South Florida and can be confused with each other, especially when not in bloom. Common reed (Phragmites australis) is a native wetland species that occurs throughout Florida and as far north as Canada. Silk reed (Neyraudia reynaudiana) and napier grass (Pennisetum purpureum) are tropical nuisance exotics that invade both damp areas and uplands. Napier grass forms massive stands in South Florida, becoming sporadic and stunted in North Florida. Silk reed is an aggressive invader on limestone habitats in Dade County but has not spread north of Palm Beach County. The three species can be identified when in bloom with standard manuals, but we offer these drawings to help those who need to recognize them throughout the year. - Ray Miller and David Black, South Florida Water Management District.

Florida’s Towering Tallow

Within weeks of Leon County recognizing Chinese tallow as the “melaleuca of north Florida,” Bill Armstrong, owner of Armstrong Tree Service, identified what certainly may be the granddaddy of Florida’s tallow trees. The Leon County tree sported a dbh of 27 3/4”, with a circumference of 79”! The national champion (in Polk County, Texas) has a 139” circumference, and is 51’ tall!

If you think you’ve got an invasive exotic state champ, let’s hear about it! Just be sure to take a photo and record the vital statistics before you kill it!
The Weather is Here, I Wish you Were Beautiful

Okay...we're all getting used to local governments banning the use of certain invasive exotic plants. But in a move that can only be described as bizarre, the City of Sunrise recently discussed banning the planting of Cabbage palms (Sabal palmetto) - Florida's official state tree since 1953. Seems the City's Planning and Zoning department finds their appearance unacceptable. Several Florida manatees are reportedly dieting to improve their girlish figures...what next?

"Cases could be given of introduced plants which have become common throughout whole islands in a period of less than ten years. Several of the plants now most numerous over the wide plains of LaPlata...have been introduced from Europe; and there are plants which now range in India...which have been imported from America since its discovery. In such cases, and endless instances could be given, no one supposes that the fertility of these animals and plants has been suddenly and temporarily increased in any sensible degree. The obvious explanation is that the conditions of life have been very favorable, and there has consequently been less destruction of the old and young, and that nearly all the young have been enabled to breed. In such cases the geometric ratio of increase, the result of which never fails to be surprising, simply explains the extraordinarily rapid increase and wide diffusion of naturalised productions in their new homes."

-The Origin of Species: Charles Darwin, 1859

...Local Motions...

Several counties and local governments are actively pushing for positive changes to their prohibited plant lists. Collier County has decided to expand its prohibited plant list to include other plants such as carrotwood (Cupaniopsis anacaroides) and laurel fig (Ficus microcarpa). Leon County passed a plant prohibition ordinance, listing Chinese tallow as an obvious "menace." County staff are also considering Nandina domestica (excluding non seed-bearing cultivars) and Ligustrum sinense for inclusion. Sarasota County is considering adding Scaevola taccada to their list. Volusia County is considering including several EPPC Category I plants on their list. The City of New Smyrna Beach is modifying their tree ordinance to allow exemptions for the removal of pest-plants. And...the City of Tallahassee has proclaimed March 23 "Chinese Tallow Awareness Day." The city encourages citizens to "not plant, sell, or distribute Chinese tallow trees or other invasive exotic plants, and further that such existing plants be removed and replaced with native, non-invasive plants." For more info, contact Greg Jubinsky at (904) 487-2600.

Graduate Research Assistantships Available

This is your brain on weeds...

The Agronomy Department and the Center for Aquatic Plants at the University of Florida have graduate research assistantships for motivated M.S. or Ph.D students beginning January 1997. Research will involve the biology, ecology and management of invasive non-indigenous plants in aquatic and wetland habitats, and public lands in Florida.

Stipends are $13,337 (M.S.) or $14,799 (Ph.D) with a waiver of out-of-state tuition. Related temporary employment may be possible for students available prior to January 1997. Any questions? Contact Alison Fox, Department of Agronomy, University of Florida, P.O. Box 110500, Gainesville, FL 32611-0500, (352) 392-1806, email: amfox@gnv.ifas.ufl.edu.

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Attention EPPC Members!!

The Florida Exotic Pest Plant Council Annual Meeting will be in Fort Myers the week of May 19, 1997 -- mark your calendars. This is an opportunity to share information and recharge for the next round! Look for more details to come in the next newsletter.

REMITNDER:
Florida EPPC Memberships Expire
January 1, 1997

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If you have questions, call (904) 487-2600, SC 277-2600.

Author(s)__________________________________________________________

Organization _______________________________________________________

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TITLE of paper or poster _____________________________________________

Please send ABSTRACT on disk (to be printed in program for meeting, no more than 100 words)

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Need slide projector? Overhead projector? Video projector? (Circle as needed.)

Need table-top or floor space for poster? (Circle preference.)

SUBMISSION DEADLINE JANUARY 20, 1997

Florida Exotic Pest Plant Council
Attn: Amy Ferriter, Editor
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West Palm Beach, Florida 33416-4680

Interested in submitting an article for the Newsletter?
Submission deadlines:

Winter - January 3
Spring - April 15
Summer - June 23
Fall - Sept. 15

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