



Sea Rocket



Florida Native Plant Society ~ Sea Rocket Chapter ~ Serving North & Central Brevard County

JUNE 2010

The purpose of the Florida Native Plant Society is to promote the preservation, conservation, and restoration of the native plants and native plant communities of Florida.

~Sea Rocket~ Board of Directors

President
Suzanne Meyer

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Vice President
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Secretary
Ginny Blaetz

321-412-5649
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Chapter Representative
Paul Schmalzer, PhD

321-268-5473

~ Committees ~

Membership/Outreach
Shari Blissett Clark

321-454-6849
jclark109@cfl.rr.com

Education

Volunteer Needed!

Nursery
Suzanne Meyer
321-264-4922

Hospitality

Volunteer Needed!

Hike Leader
Paul Schmalzer, PhD
321-268-5473

Newsletter
Shari Blissett Clark
321-454-6849

Wednesday, June 23, 2010 ~ 7:00pm

Hold Your Breath! Ecosystem Responses to Double, Ambient Atmospheric CO₂! with Dr. Ross Hinkle

Dr. Ross Hinkle will present a discussion of the response of natural ecosystems to increasing carbon dioxide concentrations in the atmosphere based upon historical research at Kennedy Space Center and ongoing research at the University of Central Florida.

Dr. C. Ross Hinkle received his BA in Biology from Warren Wilson College, Swannanoa, NC, in 1970 and his MS and Ph.D. in Ecology from the University of Tennessee, Knoxville, in 1975 and 1978. Dr. Hinkle is currently Professor and Chair of the Department of Biology at the University of Central Florida (UCF) in Orlando. Prior to moving to UCF, he served over 24 years in various research and management roles at Kennedy Space Center (KSC). He left KSC in 2007 as Vice President and Chief Scientist for Dynamac Corporation which held the Life Science Services Contract with NASA. He was awarded the NASA Public Service Medal for his efforts in establishing ecological research at Kennedy Space Center.

Dr. Hinkle's primary research interests are in plant ecology, landscape ecology, and applied conservation biology. From 1994 - 2007 he served as co-principal investigator of a multi-discipline team of scientists who experimentally evaluated ecosystem responses to double ambient atmospheric CO₂ including ecosystem carbon dynamics, biomass production, ecosystem water dynamics, ecosystem response to fire, nutrient cycling, and ecosystem structural components. He continues that research at UCF where he directs the Ecosystem Processes and Services Laboratory.

Dr. Hinkle is a member of a team of scientists who are designing and implementing the National Ecological Observatory Network with the National Science Foundation to address national priorities for ecological research. He has been an active member of the Brevard County Environmentally Endangered Lands Selection and Management Committee since 1990 and has held offices in the Society of Wetland Scientists, the Ecological Society of America, and the Association of Southeastern Biologists. He is a member of the American Association for the Advancement of Sciences, Florida Academy of Sciences, The Nature Conservancy, Society of Wetland Scientists, Southern Appalachian Botanical Society, The Society for Conservation Biology, and the Ecological Society of America (ESA.) He has been certified as a Senior Ecologist with ESA since 1984. Dr. Hinkle has published over 80 scientific papers.

For more information about this program, contact Debbie Springer at 321-745-2192.

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UPCOMING EVENTS & THINGS TO DO

Every Thursday	Sea Rocket Nursery Workday, 9:30am, Suzanne Meyer, 321-264-4922
Every Tuesday	Deadheaders Garden Volunteers, The Enchanted Forest Sanctuary, 9:00am, call 321-264-5185 for information
Tuesday, June 1	Indian Mound Sanctuary Plant Survey, 10am, Call 321-264-5185
Thursday, June 3	Make Oyster Mats, Enchanted Forest Sanctuary, 12 ~ 2pm Call 321-264-5185
Saturday, June 5	Sea Rocket Plant Sale, Enchanted Forest Sanctuary, 9am ~ 4pm, Call Suzanne at 321-264-4922
Saturday, June 5	Ace Hardware Pond Tour, Maps available at Ace Hardware on Merritt Island, 1005 N. Courtenay Parkway, Call Kim at 321-452-3484
Saturday, June 5	Florida Trail Association National Trail Days Picnic, Orlando Wetlands Park, 9am ~ 3pm, Call Richard at 321-638-8804
Wednesday, June 9	Sea Rocket Board Meeting, Time and Location TBA, Call Suzanne Meyer, 321-264-4922
Friday, June 18	Make Oyster Mats, Enchanted Forest Sanctuary, 12 ~ 2pm Call 321-264-5185
Sunday, June 20	Father's Day
Monday, June 21	First Day of Summer
Wednesday, June 23	Sea Rocket Meeting, Hold Your Breath! Ecosystem Responses to Double, Ambient Atmospheric CO ₂ , Dr. Ross Hinkle, The Enchanted Forest Sanctuary, 7pm, Call Debbie at 321-745-2192
Thursday, June 24	Friends of the Enchanted Forest Meeting, The Ambrosia Beetle & Laurel Wilt Disease, Linda Seals, The Enchanted Forest Sanctuary, 6pm, Call 321-264-5185

Submit items for future Calendars to Shari Blissett Clark, jclark109@cfl.rr.com



Sea Rocket's Annual Picnic!
Saturday, July 17, 2010
The Enchanted Forest Sanctuary
11:00am ~ 3:00pm
RSVP to Shari at jclark109@cfl.rr.com

Live Music!
Oyster Mats!
Games!

Rain or Shine!
Bring a covered dish to share!

The poster features a yellow background with a blue border. At the top left is a pushpin icon. At the bottom left is a wooden picnic table. At the bottom right is a blue starburst shape. A row of ants is at the very bottom. The text is in various colors and fonts, with the main title in large, stylized letters.

MYSTERY PLANT



DO YOU KNOW THE NAME OF THIS FLORIDA NATIVE ?

Email your best guess to:

jclark109@cfl.rr.com

Winners* will receive a Florida native plant for their garden!

** Must be present at the June meeting to claim prize*

**~ CONGRATULATIONS ~
TO OUR MAY WINNER !**

Jim Escoffier

**Jim correctly identified *Asimina pygmaea*,
Dwarf Paw-Paw**

May Meeting Minutes

Submitted by Shari Blissett Clark for Ginny Blaetz

President Suzanne Meyer called the May meeting to order at 7:05pm. After welcoming everyone, she asked for a motion to approve the March meeting minutes as published in the newsletter. Dr. Schmalzer made the motion and Debbie Springer seconded. The motion passed unanimously.

Betty Page gave the Treasurer's report for the period of 3/24 through 5/26 as follows:

Beginning balance:	\$4,079.52
Receipts:	1,521.54
Expenditures:	<u>1,978.71</u>
Current balance:	\$3,622.36

Debbie Springer made a motion to accept the Treasurer's report and Dr. Schmalzer seconded. Motion passed unanimously.

Suzanne Meyer made some additional announcements, and then turned the meeting over to Vice President Debbie Springer, who introduced Dr. Teresa Cooper.

Dr. Cooper's program, entitled "Controlling the Mexican Bromeliad Weevil," introduced members to the 16 native bromeliad species in Florida and the exotic pest that is attacking them. The Mexican bromeliad weevil has at least one predator in its native range, a parasitic fly named *Lixadmontia franki*. Dr. Cooper led the meeting attendees through the life cycle stages of both the weevil and the fly, and explained the interactions between these two insects and the bromeliads.

Then Debbie Springer introduced the second speaker, Jay Thurrott, who discussed Bromeliad taxonomy and growing techniques. He recommended a recently published book entitled "Native Bromeliads of Florida" by authors Harry Luther and David Benzing. He showed several varieties of bromeliads from his collection, including *T. utriculata*, *T. usneoides*, and *T. fasciculata*.

Several door prizes were given out and the meeting was adjourned at 9:00pm

State Of Florida

RESOLUTION

WHEREAS, Florida enjoys an incredible and distinctive diversity of native plants with more than 1,000 native species identified in the state, and the importance of these plants to the state's natural resources, and the importance of these plants to the state's natural resources, and the importance of these plants to the state's natural resources;

WHEREAS, the Florida Native Plant Society is a non-profit organization dedicated to the study and conservation of Florida's native plants, and the importance of these plants to the state's natural resources, and the importance of these plants to the state's natural resources;

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The Florida Native Plant Society was recognized by Governor Charlie Crist and his Cabinet for 30 years of service to the State of Florida. FNPS is on the leading edge of the efforts to conserve and preserve Florida's native plants, and protect and restore the ecosystems that support them. Congratulations to all Florida Native Plant Society members!

FNPS accepts a Resolution recognizing 30 years of service to Florida

Pictured left to right: Bill McCollum, Attorney General, Charlie Crist, Governor, Alex Sink, Chief Financial Officer, Charles Bronson, Commissioner of Agriculture, Gene Kelly, FNPS President, Nia Wellendorf, FNPS Conference Chair, and Kariena Veaudry, FNPS Executive Director



Redbay and Laurel Wilt Disease

Portions reprinted with permission from University of Florida IFAS Publication HS1137

Laurel wilt is a disease of redbay (*Persea borbonia*), avocado (*Persea americana*), and other trees in the laurel family (Lauraceae). It is caused by a fungus (*Raffaelea* sp.) that stops the flow of water in host trees, causing the leaves to wilt. The fungus is carried into host trees by a non-native insect, the redbay ambrosia beetle (*Xyleborus glabratus*), which was first detected in the United States in 2002 and Florida in 2005. Laurel wilt has caused high levels of redbay tree death in Florida, Georgia, and South Carolina, and avocado has succumbed to this disease in both residential and experimental settings. At this time, the geographic distribution of the redbay ambrosia beetle and laurel wilt disease continues to expand in Florida.

Ambrosia beetles transport spores of fungi with which they have a mutually beneficial relationship. When an ambrosia beetle bores into a host tree, it creates tunnels (galleries) in the sapwood and inoculates the gallery walls with fungal spores that are carried on its body. The fungus grows in the galleries and serves as food for the beetles and their larvae. Thus, ambrosia beetles can be considered "fungus farmers." It is important to note that the redbay ambrosia beetle is unlikely to kill trees unless the fungus is present.

The redbay ambrosia beetle is small (about 2 mm long), dark brown to black, and cylinder-shaped. Female beetles fly and are much more numerous than the smaller, flightless males. It is important to note that the redbay ambrosia beetle would not likely kill trees nor be a pest without the disease-causing fungus it carries.



The beetle is native to India, Japan, Myanmar, and Taiwan, and the origin of the laurel wilt fungus is presumed to have been introduced with the beetle. Neither the beetle nor the fungus is known to be pests in their native range.

Plant Hosts in the U.S.

To date in the U.S., only woody plants in the laurel family (Lauraceae) have been reported as hosts of the redbay ambrosia beetle and the laurel wilt fungus. There are at least 13 species in the laurel family in Florida, including forest species, ornamental and landscape plants, and one major commercial fruit crop tree (avocado). Reported hosts of both the redbay ambrosia beetle and the laurel wilt fungus include redbay (*P. borbonia*), swampbay (*P. palustris*), avocado (*P. americana*), and sassafras (*Sassafras albidum*). The laurel wilt fungus has also been recovered from diseased plants of pondberry (*Lindera melissifolia*), camphor tree (*Cinnamomum camphora*), and pondspice (*Litsea aestivalis*).

Most small redbay seedlings and sprouts do not appear to be affected by the disease, but are likely to become infected as they grow larger. Redbay is an important wildlife food eaten by several species of songbirds, wild turkeys, quail, deer, and black bear. Larvae of the Palamedes swallowtail, (*Papilio palamede*), feed primarily on *Persea*; endangered tree species such as pondberry and pondspice are confirmed hosts of the laurel wilt fungus and are in danger of additional negative pressure on their populations.

Laurel wilt causes the leaves of affected trees to droop and take on a reddish or purplish discoloration. Wilted foliage may occur in part of the crown at first, but typically the entire crown eventually wilts and reddens. In redbay, the leaves eventually turn brown and remain on the tree for up to a year or more.

Initial attacks by the redbay ambrosia beetle on stems or branches are often difficult to detect. However, after the tree is inoculated and has wilted as described above, ambrosia beetles will attack the dying tree in larger numbers and small strings of compacted sawdust (ejected wood fiber) may protrude from bore holes along the tree trunk and limbs. These sawdust tubes may not always be present because they disintegrate easily, and may be produced by other ambrosia beetle species in addition to the redbay ambrosia beetle.

What You Can Do

Strategies which may help reduce laurel wilt impacts: avoid the movement of firewood, tree trimmings, or mulch from redbays (and other laurel family host species) out of counties in which laurel wilt is known to occur. A distribution map is periodically updated on the following website: http://www.fs.fed.us/r8/foresthealth/laurelwilt/dist_map.shtml

Whenever possible, leave dead and dying redbay wood (and wood from other laurel family hosts) on site instead of transporting it. If the wood must be transported, dispose of it as close to the source as possible.

Chipping infested host tree material, either at its original site or a disposal site, is preferable to leaving infested wood intact in the open environment. Chipping wood from an infested tree might not destroy all of the ambrosia beetles but should reduce the suitability of the wood as breeding material and hinder beetle colonization and dispersal.

Although the pathogen has not yet been documented to spread by any means other than the beetle vector, consider cleaning saws and pruning blades after cutting an infected tree and before using them on uninfected host tree species.

Urban and rural residents should be on the look-out for redbay and other host trees (including avocado) showing signs of rapid wilting. Report new finds to the Florida Division of Plant Industry (<http://www.doacs.state.fl.us/pi/>) or Division of Forestry (<http://www.fl-dof.com/>). This will help regulatory agencies and scientists track the movement of this pest.

By participating in the Redbay Seed Collection Program, you can help conserve genetic material from *Persea* bay species, should populations become threatened by laurel wilt. See "Seed Collection" at <http://www.fs.fed.us/r8/foresthealth/laurelwilt/>



Florida Native Plant Society ~ Sea Rocket Chapter



NATIVE PLANT SALE

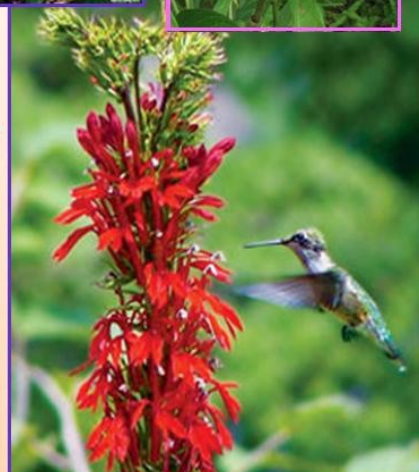
at the ENCHANTED FOREST SANCTUARY

SATURDAY, JUNE 5, 2010

9 am to 4 pm

Many species to choose from, including:

- | | | |
|------------------------|---------------------|--------------------|
| ✂ Cardinal Flower | ✂ Dune Sunflower | ✂ Swamp Milkweed |
| ✂ Scarlet Hibiscus | ✂ Coral Honeysuckle | ✂ Beautyberry |
| ✂ Horsetail | ✂ Blanket Flower | ✂ Dotted Horsemint |
| ✂ Florida Blue Violets | ✂ Loblolly Bay | ✂ Sunshine Mimosa |
| ✂ Virginia Willow | ✂ Coreopsis | ✂ Muhly Grass |
| ✂ Lizard's Tail | ✂ Passionvine | ✂ & Much More! |
| ✂ Florida Canna | ✂ Beargrass | |
| ✂ String Lily | ✂ Firebush | |



For information about this sale: 321-264-4922
To learn more about Florida's native plants: www.fnps.org

MEET~A~MEMBER:

John Clark

Interview by Shari Blissett Clark

SBC: Why did you decide to join FNPS?

JC: I figured it was the only way I'd get to spend some time with my wife! (Smiles)

SBC: But what about the plants?

JC: Oh I like those, too. Our property is full of butterflies and bees and birds ~ everywhere I look there's something blooming ~ it's crazy out there!

SBC: Has using native plants in your yard changed your life?

JC: Oh yeah...we only mow half as often as we used to when there was more grass, and we virtually never irrigate. I've forgotten what fertilizer even looks like!

SBC: Do you have a favorite plant?

JC: Not really...I rely on my wife to research what should be planted where, and so far I've not been disappointed! I'm a visual guy, and I like lots of color.

SBC: If you could change something in your yard, what would it be?

JC: I'd put in a pond. We have a wet area with several mature bald cypress, but it's not the same as having open water. It would be nice to hear a water-fall and attract more wildlife to our property.

If you'd like to be featured in this article, contact Shari!



TEN GOOD THINGS

Submitted by Debbie Springer

Why attend the Florida Native Plant Society's Annual Conference?

Maybe your neighbors question some of the plants in your yard.

Maybe you want to learn more about Florida's unique environment

Maybe you want to meet people with similar interests.

Maybe the history of Florida's capital is important to you.

Or maybe you want to tag-up with old friends.

Whatever your reasons, these conferences speak to all of us; here are 10 good things I got from the Annual Conference this year:

1. FNPS is a national leader in fostering legislation that protects native plants and supports research on native plant communities. At this conference I got to meet and converse with some of the leaders in this effort.
2. I got to see parts of Florida that I might otherwise never have seen. Even a simple field trip was unique, showing off pitcher bogs that contain more carnivorous plant species than any where else in the United States.
3. Sharing a passion for native plants with others who share your view and don't think you are crazy!
4. The conference provided access to the BOD process; members can see their officers in action.
5. A source of inspiration to plant a rain garden, change your landscape plan, or learn about sustainable gardening.
6. I'm more aware of the war on invasive plant species, on who's doing the fighting, where they're fighting, and who's winning.
7. I've been inspired anew by simple projects that are making a long term difference in Florida, from reclaiming islands overrun by invasive species to neighborhood preservation efforts.
8. Information on selecting the right tree for your yard.
9. The scenic drive to Tallahassee, complete with roadside wild flowers which are being preserved and propagated with the help of FNPS.
10. Celebrating the Florida Forever funding with people who really care about conserving and preserving Florida!

What about you ... will I see YOU next year?

Maple Street Natives



Sharon & Brent Dolan

7619 Henry Ave.

West Melbourne, FL 32904

ph: 321-729-6857

e: info@maplestreetnatives.com

www.maplestreetnatives.com

RETAIL
M-Sat 8-5

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Christmas, Florida 32709

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KBB Xeriscape Garden

Chain of Lakes Park



Before ...



After !

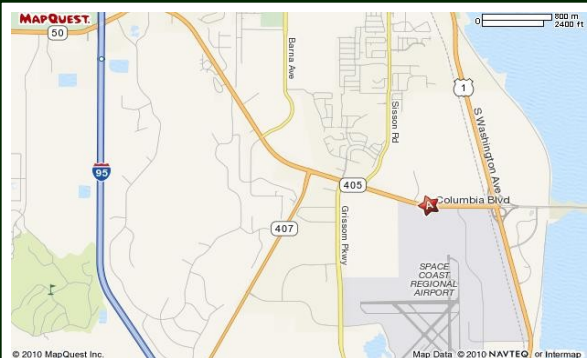


Seen Around the Conference...



All photographs submitted by Jim Escoffier

The Enchanted Forest Sanctuary Education Center
444 Columbia Blvd, Titusville, FL 32780 321-264-5185



Driving Directions to the Sanctuary:

From I-95 Northbound: take SR-407 Exit 212 east 2.7 miles to SR-405 intersection. Turn right onto SR-405 and go east 1.9 miles (the Sanctuary entrance is on the left 0.4 miles past Sisson Road)

From I-95 Southbound: take SR-50 Exit 215 east. Turn left onto SR 50 and turn right onto SR-405 (2nd light) Travel 3.6 miles (the Sanctuary entrance is on the left 0.4 miles past Sisson Road)

From U.S. HWY 1: go west 0.5 miles on SR-405 in south Titusville. Sanctuary entrance is on the right.



Florida Native Plant Society

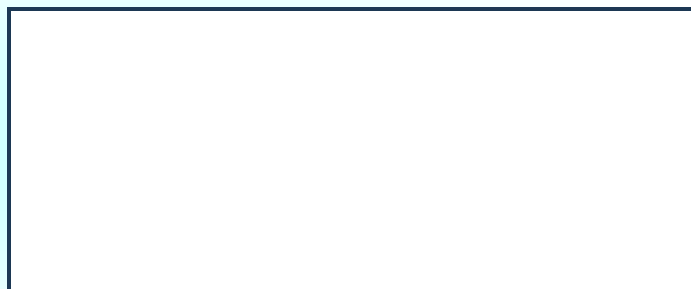
For membership information, address change: P. O. Box 278, Melbourne, FL 32902-0278
Phone: 321-271-6702; Fax: 321-951-1941; Email: Info@fnps.org/www.fnps.org
Sea Rocket Chapter mailing address: P. O. Box 236341, Cocoa, FL 32923-6341



DON'T MISS THE JUNE MEETING!
WEDNESDAY, JUNE 23, 2010 ~ 7:00PM
HOLD YOUR BREATH!
WITH DR. ROSS HINKLE



SEA ROCKET CHAPTER
PO Box 236341
Cocoa, FL 32923-6341



GO GREEN! RECEIVE YOUR NEWSLETTER VIA EMAIL AND SAVE SOME GREEN! GO GREEN!