



Sea Rocket



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

April 2016

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

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lois6459@att.net

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armanddf@rcn.com

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Newsletter

David Humphrey

brevcracker@gmail.com

Hospitality

Armand De Filippo

armanddf@rcn.com

Sea Rocket is excited to have Dr. David Hall speaking at our April 27 General meeting at the Enchanted Forest. The program will begin at 6:30 PM.

David W. Hall, Ph.D., currently owns and operates an environmental and forensic consulting firm in Gainesville. He was previously employed at the University of Florida as the Director of the Plant Identification and Information Services. Dr. Hall holds Bachelor's and Master's degrees from Georgia Southern University and a Doctor of Philosophy degree in botany from the University of Florida. He is a recognized expert in forensics and plant identification and has published 13 books and over 150 articles.

Dr Hall will be speaking on "Native Shrubs for Central Florida Landscaping"



April Places To Go, Things To Do!

(Note: All future planning can change presently. If in doubt, verify the date and times are accurate.)

Every Saturday: GUIDED NATURE HIKES - 10:00am - For information call 321-264-5185.

Every Wednesday: FNPS Sea Rocket Chapter Nursery Workday—9am-12noon, email Lois at lois6459@att.net for further info and schedule.

April 6 Hike with FTA to Seminole Ranch/Orlando Wetlands. Meet at West entrance of Lowe's parking lot at I-95 and Hwy 50 in Titusville at 8:30 AM.

April 9 The workday previously scheduled for work on the BBG replanting of the Enchanted Forest berm has been cancelled due to conflicts with activities at the Enchanted Forest.

April 13 Hike with FTA to Ulumay Sanctuary. Meet at Sams Club in Cocoa at I95 and HWY 520 at 8:30 AM.

April 20 Hike with FTA to Enchanted Forest. Meet at West entrance of Lowe's parking lot at I-95 and Hwy 50 in Titusville at 8:30 AM.

April 22 Earth Day celebration at the Kennedy Space Center Visitors Information Center. This is not a plant sale but an outreach to a different group of people than we see normally. The traffic at the VIC is very high and the possibility is good to attract new members and to advertise the Earth Day at Enchanted Forest and Plant sale.

April 23 Earth Day Festival at the Enchanted Forest Sanctuary and Plant Sale. Activities start at 10am and end at 3pm. This festival is always a great success for Sea Rocket as well as the Enchanted Forest.

April 27 Hike with FTA to South beaches. Meet at Sams Discount Club at 4255 West New Haven in Melbourne at 8:30 AM.

April 27 Sea Rocket's Monthly Meeting. Enchanted Forest Sanctuary at 6:30pm. Sea Rocket is excited to present Dr. David Hall who has authored 13 books and written 150 articles. Dr Hall hold certifications in forensics and plant identification. He is well recognized in botanical circles. He will be speaking on "**Native Shrubs for Central Florida Landscaping**".

Planning Ahead

May 19-21 Daytona Beach, FNPS Annual Conference. Details can be found at <http://www.fnps.org/conference>

Please send calendar items to David Humphrey at brevcracker@gmail.com

For a comprehensive view of Sea Rocket activities go to www.FNPS.org; events, "searocket".

Don't forget to check out other EEL Sites and volunteer organizations for more Free Family Fun.

- **Enchanted Forest Facebook:** <https://www.facebook.com/EnchantedForestSanctuary?fref=ts>
- **SAMS HOUSE :** <http://www.brevardcounty.us/EELProgram/Home>
- **Barrier Island Center:** <http://www.brevardcounty.us/eelprogram/areas/barrierislandsanctuary>
- **Keep Brevard Beautiful:** <http://keepbrevardbeautiful.org/>
- **Florida Trail Assn Hike Schedule:** <http://jehikesced.blogspot.com/>

Sea Rocket Chapter General Meeting Agenda 3-23-16

Board Members present: **Lois Harris, Armand De Filippo, David Humphrey**

Welcome and Call to Order 7:05 pm

BUSINESS:

February General Meeting Minutes were Approved without comment.

Treasurer Report:, \$ 2,247.99 checking; \$ 2,500.10 saving, \$ 4,748.09 total

Checks being issued: \$1,000 to FNPS, Conservation and Restoration and \$65 Annual Report

Refreshments Provided by **Armand, Lois, and David**. Thank you for the snacks tonight.

A special thanks to Lois and Armand for the support given at the first annual Great Outdoors Spring Festival.

ANNOUNCEMENTS:

The Executive Board is still in desperate need of a Treasurer. If you have skills in handling numbers we desperately need you. Call or email Lois for all the details.

Newsletter; David Humphrey, Newsletter Chair, is accepting articles, photos, or other member ideas to be published in our newsletter. Deadline for submittal is always the 25th of each month.

REMEMBER to bring in a plant at the general meeting for the plant swap. Bring a Plant, Take a Plant. Next general meeting is on April 27 at 60 pm.

EVENTS:

Volunteer Opportunities

Kennedy Space Center Earth Day Celebration at the Visitors Center on 4/22 from 10 am to 4 pm. This is an outreach event only. We will be promoting the Native Plant sale at the Enchanted Forest for Earth Day on 4-23 from 10 am till 3 pm.

Enchanted Forest Sanctuary - Earth Day celebration and Plant sale on April 23 from 10am till 3pm. This event is a big day for Sea Rocket. We NEED your help in making this a good day for all.

NOTE: If you have native plants in good condition Sea Rocket needs them to help populate the Earth Day sale.

BOD Meeting - April 12 at NYNY in Titusville starting at 5:30 pm. All are welcome to attend
FNPS Annual Awards Nominations due March 31.

OTHER ANNOUNCEMENTS:

Sea Rocket Chapter Meeting was adjourned at 7:24 pm



Guest Speaker: Lisa Roberts Exec Director of the Florida Wildflower Foundation.

Lisa and the Wildflower Foundation are currently educating, promoting, advising, and assisting in planning to limit Counties from mowing certain road sides during the flowering through the re-seeding seasons. That in short form is to not mow until after Thanksgiving. By mowing the State and Counties are damaging the wildflower diversity, which in turn limits the pollinators, which in turn limits the pollination of food crops for you and me. Lisa advises to keep a journal of wildflower blooms. Include where, when, and type of flower, and take pictures. The FWF will use them on their site, found at flawildflowers.org. Brevard County has a resolution to protect roadside wildflowers. Last but not least FWF makes several grants available to organization who want to introduce native wildflowers to an area. The grants are funded by license plate sales.

Minutes submitted by David Humphrey ~

Cage Party at the Enchanted Forest Sanctuary: Saving the Giant Airplant

Teresa M. Cooper PhD

University of Florida

The giant airplant (*Tillandsia utriculata* L.) in (figure 1) was found in the Enchanted Forest, lying on the forest floor. These plants are epiphytic and grow in the canopy. The plant would have rotted and died if it had remained on the forest floor, but instead, it was rescued by the volunteers who found it. An invasive bromeliad-eating weevil, the Mexican bromeliad weevil (*Metamasius callizona* (Chevrolat)); (figure 2), arrived in the Enchanted Forest sometime between 2003 and 2006. Before the weevil arrived, giant airplants dominated the forest canopy, creating a layer of habitat in the treetops. The weevil destroyed the giant airplants, and now the large giant airplants are rare and sparse and, even more alarmingly, seed production has been severely reduced. That is why the giant airplant in the picture was rescued. The plant is very large and it is putting out an inflorescence; next year, the plant will produce seed. BUT – the plant is still susceptible to weevil attack and, after 15 to 20 years of growth (yes, it takes that long!), the plant could be killed just before producing and releasing seed. So, the volunteers rescued the plant from the forest floor, but how could they now protect the plant from the weevil?

Enter Vince and Dave and Martha and Joanie and Donna and Glenn and Lori, a great group of volunteers who came together to build a large cage to house the giant airplant and protect it from the weevil (figures 3 – 7). The cage is made of cedar wood and is 3 ft wide, 6 ft long, and 5 ft high, big enough to hold the giant airplant and to accommodate the plant's growing inflorescence. The cage will be able to hold up to 30 large giant airplants. The cage

is covered with aluminum screen because, at the end of the weevil's long snout are two small, sharp mandibles that can chew through nylon screen. The cage is sturdy, lightweight, extremely weather resistant, and portable. The cage was easily transported into the forest, first by truck (figure 8), then by human power (figure 9). The rescued giant airplant was put in the cage (figure 10), the door was shut (figure 11), and the plant now grows safely in the forest.

The cage is part of a method being developed and implemented in the Enchanted Forest to conserve the giant airplant. The plants are kept in the cage until they produce seed and naturally die. The seeds are put back into the forest. As old plants die and room becomes available, new large giant airplants will be put in the cage and held until they produce seed, which will go back into the forest. The cycle will continue in this manner until we find a way to manage the weevil in the wild. The conservation effort is highly dependent on volunteers. If you are interested in learning more, or volunteering, meet us on Wednesday mornings at the Enchanted Forest; we usually meet between 10:00 am and 2:00 pm. Or contact Teresa Cooper at tmcooper@ufl.edu.

For more information, visit the Save Florida's Bromeliads Web site:

<http://entomology.ifas.ufl.edu/frank/savebromeliads/index.html>

PLEASE BE PATIENT! THIS WEB SITE IS BEING UPDATED!



Fig 1



Fig 2



Fig 3



Fig 4



Fig 5



Fig 6



Fig 7



Fig 8



Fig 9

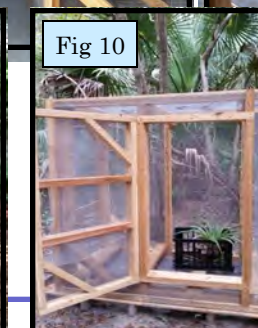


Fig 10



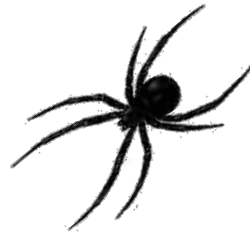
Fig 11

1 rescued Giant airplant

What do drugged spiders have to do with Native Plants? Nothing that I'm aware of! I just thought this was kind of interesting.



Life Sciences



NASA Tech Briefs
Vol. 19, No. 4, Pg. 82
April 1995

Using Spider-Web Patterns To Determine Toxicity

Webs are visibly altered when spun by spiders exposed to chemicals.

Marshall Space Flight Center, Alabama

A method of determining the toxicities of chemicals involves recording and analysis of spider-web patterns. The method is based on the observation that spiders exposed to various chemicals spin webs that differ, in various ways, from their normal webs (see figure). Spider-web toxicity testing has potential as an alternative to toxicity testing on higher animals, which is expensive, time-consuming and becoming increasingly restricted by law.

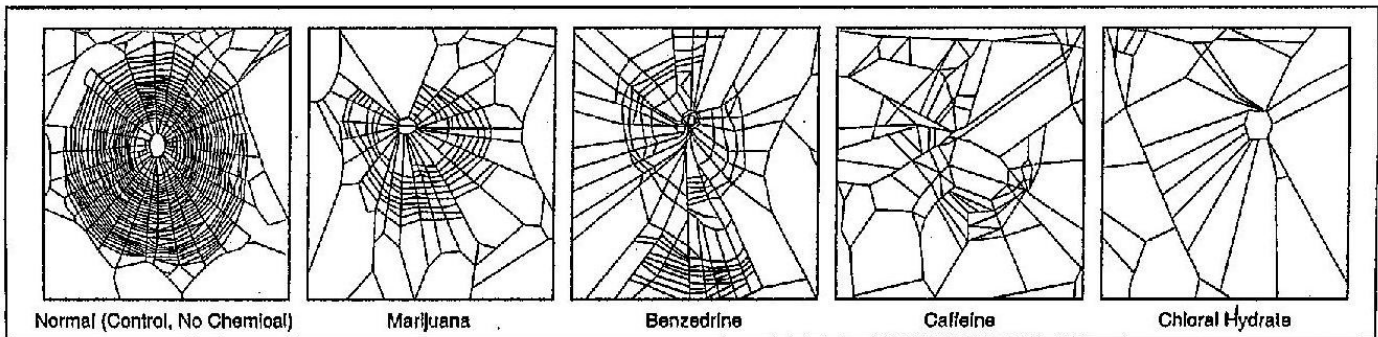
The changes in webs reflect the degree of toxicity of a substance. The more toxic

the chemical, the more deformed a web looks in comparison with a normal web. Inasmuch as the shape of a spider web resembles that of a crystal lattice in some respects, techniques of statistical crystallography are applied to obtain several quantitative measures of toxicity as manifested in the differences between photographs of webs spun under toxic and normal conditions.

The images of the cells are digitized and processed by an image-data-analysis program that computes various measures of the cellular structures of the

webs, including numbers of cells and average areas, perimeters, and radii of cells. It appears that one of the most telling measures of toxicity is a decrease, in comparison with a normal web, of the numbers of completed sides in the cells: the greater the toxicity, the more sides the spider fails to complete.

This work was done by David A. Noever, Raymond J. Cronise, and Rachna A. Relwani of Marshall Space Flight Center. For further information, write in 48 on the TSP Request Card. MFS-28921



The Web Spun by an *Araneus diadematus* (House Spider) is altered when the spider is exposed to chemicals. The alterations can be quantified and used as measures of toxicity.

I found this picture with no explanation while looking over spider webs. I thought it was a hoax, so I went deeper searching for authenticity. I found it in the NASA Tech Brief article written in 1995. By golly, NASA did do a study on toxicity of drugs as a function of the web design. I'm not clear that they proved the toxicity theorem, but looking at the webs, they proved the drugs acted similarly on a spider as on a human. Marijuana is defined as a depressant which means it slows down messages to the brain. Benzedrine is speed, which speeds everything up, in your mind. Caffeine, is classified as a stimulant.

We all know about the effects caffeine has on us. Chloral Hydrate or "date rape drug", is classified as a hypnotic sleep inducing depressant. ~ Dave

To me it looks like fourth or fifth generation webbing. As the web picks up dirt the spider will clean it and rebuild her web. The rebuild is never as perfect as the original build. ~ editor

Trimmin' Trainin' With Sally Scalera



Photo by Diane Stees

On February 27th at the Enchanted Forest Sanctuary, Sea Rocket had the opportunity to hear Sally Scalera speak on trimming trees for the health of the plant and for aesthetics. Sally brings a horticultural degree to the Cocoa Extension Service, and is the teacher and coordinator of the Master Gardener program.

Sally's teaching started out with some class room training. She spoke on how to properly trim a Sabal Palm, and that "hurricane" trimming is a fallacy. Proper trimming of a Sabal palm puts a full crown between 9 o'clock and 3 o'clock. Sally talked about trimming out mistletoe, and to effectively remove it (mistletoe) the whole limb may need removal. Mistletoe roots are more extensive than I had imagined. She then took us from the classroom out into the real world. We went into the nursery and she showed us several options to trim the trees to keep both trees and bushes from looking ratty and oddly branched. One rule for trees is to trim to a single central leader. This will force the tree to grow wider and fill out more. Sally cautioned to never trim more than a 1/4 of the canopy, or else be prepared to lose limbs, or the plant.

Sally had an excellent audience who came prepared to learn. From left to right, **Dave Humphrey, Sally Scalera, Lois Harris, Bill Klein, Matthew Heyden, Lora Losi, Diane Darr, and Penny Drucquer.** Not in the picture, but behind the camera is **Diane Stees.** ~ Dave

Hosting the Sea Rocket Newsletter since 2001;

www.NBBD.com

North Brevard Business & Community Directory

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FREE!

Earth Day Festival

at the
Enchanted Forest Sanctuary

Saturday, April 23, 2016

10:00am - 3:00pm



**Kids Activities, Environmental Exhibitors,
Native Plant Sale, Live Animals, and More!**



444 Columbia Blvd., Titusville, FL 32780 • 321.264.5185

www.eelbrevard.com



The Enchanted Forest Sanctuary Management & Education Center was created and is managed under Brevard County's Environmentally Endangered Lands Program referendum. The referendum was established by voters in 1990 to protect and preserve the rich biological diversity of Brevard County for future generations.

The Enchanted Forest Sanctuary Education Center

444 Columbia Blvd, Titusville, FL 32780 321-264-5185

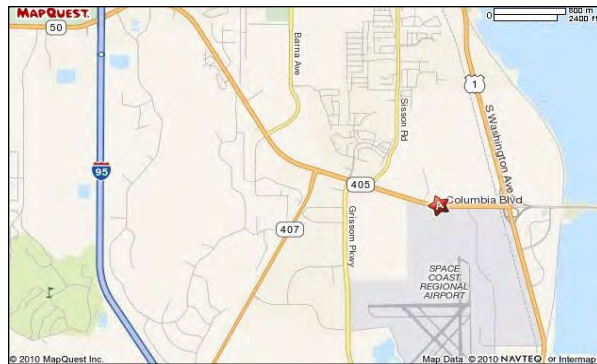


Driving Directions to the Sanctuary:

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)

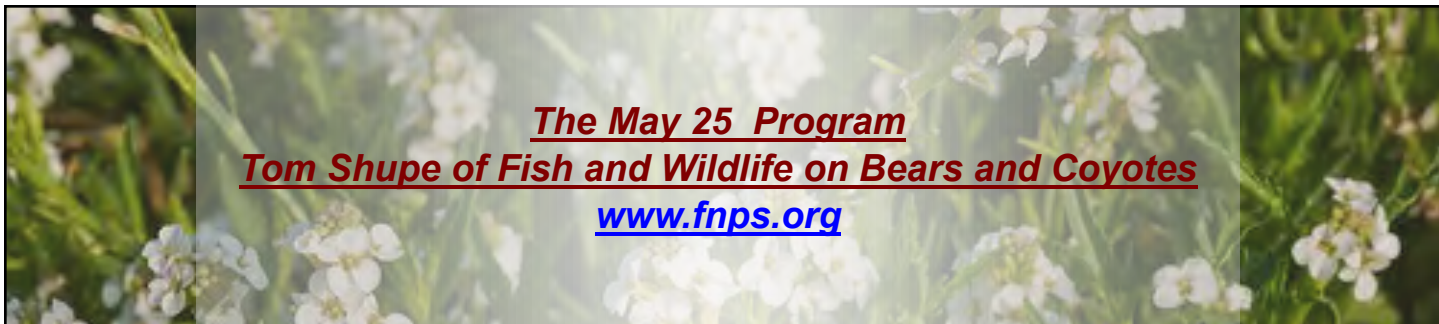
From I-95 Southbound: take SR-50 Exit 215 east. Turn left onto SR 50 and turn right onto SR-405 (2nd light) Travel 3.6 miles (the Sanctuary entrance is on the left 0.4 miles past Sisson Road)

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: 444 Columbia Blvd, Titusville, FL 32780



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Titusville, FL 32780

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