



Dade Chapter

TILLANDSIA

Newsletter of the Dade Chapter of the Florida Native Plant Society, Inc.
- For Miami-Dade County and the Florida Keys -

SEPTEMBER 2016

MONTHLY MEETING

Tuesday, September 27, 2016, 7:30 p.m.
Pinecrest Gardens, 11000 SW 57 Ave. (Red Road), Miami
Free and open to the public

Refreshments begin at 7:15 pm., merchandise sales before and after the program. The plant raffle follows the program. Contributions of **raffle items** and **refreshments** are always greatly appreciated. *Please label your raffle plant donations with the plant name — mystery plants are fun, but not for this!*

**“Preserving, Restoring and Enhancing
Miami-Dade County’s Urban Forest”
– Joy Klein, Miami-Dade County DERM**

Joy will discuss all the trees of our urban forest, including natural areas (especially pine rocklands), roadsides and gardens. She is a long time Florida Native Plant Society member who has worked for over 29 years at Miami-Dade County's Division of Environmental Resources Management. Her responsibilities have included habitat restoration, environmental education, drafting and regulation of tree and landscape codes. In late 2000, Joy developed the County's Adopt a Tree program and has coordinated the program since, as she strives to increase native plant awareness with emphasis on pine rockland management, restoration, education, and conservation.

- **October 25:** TBA
- **November 22:** “The Trouble with Exotic Mangroves”- Dennis Giardina, Florida Fish and Wildlife Conservation Commission

FIELD TRIPS

Field trips are for the study of plants and enjoyment of nature by FNPS members and their guests. Collecting is not permitted.

Time, address and directions are in the newsletter mailed to members. Please join to enjoy all the activities of the chapter!

- **Sunday, September 25, 2016**
Ned Glenn Pineland Preserve in Cutler Bay.
This 10-acre remnant of pine rockland habitat supports a rich flora containing some plants rare in Miami-Dade County. It is not generally open for walk-in visitors, so take this opportunity to see it!

CHAPTER ACTIVITIES AT A GLANCE

September

- 17 (Sat.): Butterfly & Bird Day** (Castellow Hammock)
- *volunteer for DCFNPS display & book sale*
- 25 (Sun.): Field trip** - Ned Glenn Pineland (Cutler Bay)
- 27 (Tue.): Meeting** at Pinecrest Gardens.

October

- 1-2 (Sat.-Sun.): Bird Festival (FTBG)**
- *volunteer for DCFNPS table*
- 15 (Sat.): Chapter workday**, Everglades National Park
- 22 (Sat.): Miami Shores Green Day ***
- 25 (Tue.): Meeting** at Pinecrest Gardens
- 28-30 (Fri.-Sun.): Field trip** - Archbold Biological Station

November

- 11-13 (Fri.-Sun.): Fairchild Ramble ***
- 22 (Tue.): Meeting** at Pinecrest Gardens.

(Additional activities TBA)

** Save the date to volunteer for DCFNPS!*

Difficulty: Moderate, walking a short distance but there may be optional walking on uneven ground or overgrown paths.
Bring: Drinks, sun protection. Wear closed shoes and long pants (always a chance of poisonwood or getting scratched in an overgrown area).
Leader: Steve Woodmansee. (If you have doubts that morning about the weather, call Steve at 786-488-3101.)

- **October 28-30, 2016. Archbold Biological Station on the Lake Wales Ridge.** Join fellow FNPS members for a weekend (or even just Saturday) at one of the most interesting places in Florida! See page 2 for the announcement.
Registration closes OCTOBER 19 or when the maximum is reached. Don't miss your chance - sign up early!

Also in this issue:

- Volunteers needed for events
- Archbold Biological Station field trip
- Butterfly and Bird Day
- “On a rare plant observed at Camp Owaissa Bauer” by Martin A. Roessler (*Koanophyllon villosum*)
- FNPS research grants for South Florida projects
- Lopsided Indian Grass (*Sorghastrum secundum*)
... plus Dade Chapter news and activities offered by other organizations.

HELP SPREAD THE WORD ABOUT NATIVES: VOLUNTEER FOR EVENTS

You don't need to be a plant, bird or butterfly expert to volunteer at our chapter table at public events. Learn on the job!

• **Butterfly & Bird Day. September 17, 2016, at Castellow Hammock Park.** 9 a.m. – 4:30 p.m. **Help an hour or two at our display or book sale** – you'll still have time to enjoy the day. **Event schedule on page 3.** **Please contact Patty as soon as possible** (pharespl@gmail.com, 305-255-6404, 305-878-5705 c) to volunteer.

• **Bird Festival, Fairchild Tropical Botanic Garden, October 1-2, 2016.** 9:30 a.m. to 4:30 p.m. (Also the annual Member's Day Plant Sale.) The festival begins Sept. 29 with off-site birding tours. On Saturday and Sunday there will be lectures by expert naturalists, conservationists and birders, food, entertainment, guided bird watching. See details at <http://www.fairchildgarden.org/bird-festival>. **Please contact Gita by Sept. 15 if you can help either day** (786-877-7168, gita.ramsay@gmail.com). If you aren't an FTBG member you can be admitted free to volunteer if you reply on time.

More event volunteer opportunities to come – save the date!

- **October 22:** Miami Shores Green Day
- **November 11-13:** Fairchild Ramble

DADE CHAPTER and FNPS NEWS

Welcome new members! Expedition South Florida (Roberto Icaza), Mike and Cindy Fleming, Jane Millman, Alexandria Toothman

Sept./Oct. 2016 Sabal Minor newsletter from FNPS is at http://www.fnps.org/assets/pdf/sabalminor/sabalminor18_5_2_016.pdf. This is no longer sent by postal mail. Please contact the *Tillandsia* editor if you need help finding a way to read it.

“From Ecological Desert to Native Meadow”. See this article in the latest issue of the **FNPS magazine Palmetto** (Vol 33:1 2016) by **Dade Chapter member Dr. Raul Moas**. Dr. Moas turned a portion of his lawn into a beautiful meadow of native grasses. Look for the cover with grasses and pines. Congratulations to Raul for his continued successful efforts to restore his remnant pine rockland!

ARCHBOLD BIOLOGICAL STATION FIELD TRIP

October 28-30, 2016

Can't stay all weekend? No problem! Come for one night or both. Or come only for the day on Saturday. You may arrive early on Friday, stay late on Sunday. Please join us!

Don't miss this special opportunity to join fellow DCFNPS members for a weekend at one of the most interesting places

in Florida -- and only 150 miles from Miami. Archbold Biological Station is a nonprofit facility devoted to ecological research and conservation. It has 5000 acres of globally significant natural preserve northeast of Lake Okeechobee near the southern end of the Lake Wales Ridge, including xeric uplands, prairies and diverse wetlands. The Ridge has one of the highest concentrations of endemic species in the United States. See www.archbold-station.org.

At 10 a.m. Saturday, Dr. Eric Menges will lead a 2-hour tour. This will include seeing recent prescribed burns and plant responses to those burns, and discussion of how land management can benefit plants of the Florida scrub. (Difficulty: moderate, walking may be in sand and sun. After one hour, you may choose to end or continue.)

Other excursions on Saturday and on Sunday morning will be with our own knowledgeable members, or short self-guided nature trails with signage. The weather may be hot, but on any walk you may turn back when you are tired and enjoy nature near the buildings. You are free to explore the station on the days you are registered. Some visitor services are available before 4 p.m. Friday (<http://www.archbold-station.org/html/vinfo/dayvisit.html>)

On Sunday, you are welcome to continue exploring on your own. Mid-morning, we are invited to make a **short detour on the way home to see the beautiful 4.5-acre scrub near Lake Placid now home to former DCFNPS member Jerry Russo.**

Accommodations are in the station's lodge with overflow in cottages (2/room, shared bathrooms). **Meals** are in the dining room except for a bag lunch on Saturday. Vegetarian is available. You can bring a cooler and use ice available in the lodge to store additional food.

- **The trip is open first to Dade Chapter members and one guest until October 4.** After that, others outside our chapter might take your place! **REGISTRATION CLOSES OCTOBER 19, or when the maximum of 30 is reached.**
- **Please register and pay online** at http://www.archbold-station.org/html/temp/fnps_trip_2016.html. There are several options for lodging and meals to fit your needs. **Please email Patty (see below) when you have registered.**
- **Everyone must register in advance,** even to attend only for the daytime on Saturday (no fee if you do not want meals).
- **All attendees will also pay separately for the tour with Dr. Menges when they arrive (\$5 collected by DCFNPS).**

Please contact Patty Phares if you need additional information or to try to arrange carpools. More details will be sent to registrants in October.

pharespl@gmail.com, 305-255-6404, 305-878-5705 c

TREASURER'S REPORT FY 2015

DCFNPS ended its fiscal year on June 30, 2016, with a loss of \$1,226, in part due to a drop in membership and a 50% deposit (\$750) for the redesign of our website. You can help this coming year by increasing your membership level, bringing friends (potential new members) to our activities and telling others about FNPS, and bringing more raffle plants to meetings.

Are there items you would like to see on the merchandise table? Is it time for a new t-shirt? Let me know at walcutts@bellsouth.net. In spite of our assets, our chapter needs more income and participation to increase outreach and other activities in support of our mission.

Our balance sheet remains healthy thanks to the Bob Kelley Memorial Fund (\$46,063 remains from his bequest in 2006, *reserved for special projects*). Total assets of \$57,568 also includes inventory, equipment and prepaid expenses, and checking/savings. We were able to again donate \$1500 to FNPS Conservation Grants in honor of Joyce and Don Gann. Thank you to those of you who also contributed!

Susan Walcutt, Treasurer, walcutts@bellsouth.net

**Dade Chapter FNPS Profit & Loss
July 2015 - June 2016**

Income	
Donations	207.13
Festival Plant Sales	197.00
Monthly Meetings	893.35
Native Plant Day	2,146.80
Newsletter Ads	24.00
Membership	2,577.20
Interest	37.19
Total Income	6,082.67
Expense	
Administration	1,825.23
Event Outreach	151.61
Monthly Meetings	1,750.00
Native Plant Day	2,554.90
Newsletter	321.76
Ramble	20.00
Merchandise for Sale	685.25
Total Expense	7,308.75
Net Income	(1,226.08)

WHAT OUR FRIENDS ARE DOING

International Tropical Botany and Pine Rockland Conference, October 23-28, 2016, Fairchild Tropical Botanic Garden. Presentations about tropical plants are Oct. 25, and **pine rockland on Oct. 26**. Other days offer field trips and tours. **You are invited to attend any of the days**. Registration is free, **deadline Sept. 15** (by mail or email, so don't wait until the last minute!) See <https://sites.google.com/site/itbprconference/home>

Dade Native Plant Workshop: MDC Kendall Campus Landscape Technology Center. 3rd Tuesdays at 7 p.m. See <http://nativeplantworkshop.ning.com> or contact Steve Woodmansee at steve@pronative.com. Bring at least three cuttings (especially in flower/fruit), which need not pertain to the topic. **Novices and experts alike are welcome.** *Join on the website (free) to receive an email reminder or post plant photos.*
Sept. 20 topic: FLEPPC Listed Category II "Potentially Invasive" plants and their Native Plant Look-alikes. See the list at <http://www.fleppc.org/list/list.htm>

Butterfly and Bird Day
Saturday, September 17, 2016, 9 a.m. - 4:30 p.m.
Castellow Hammock Preserve & Nature Center
22301 SW 162 Ave., Miami, Florida, 33170 (305-242-7688)
FREE ADMISSION!

Sponsored by: Miami Blue Chapter, North American Butterfly Association, Tropical Audubon Society and Miami-Dade County Parks, Recreation & Open Spaces
See www.miamiblue.org for all the details.

- ◆ **Walks:** Early birding walk with TAS at 7:30. Bring binoculars! Hammock walks 10:30 a.m. and 1:30 p.m. (path is rough; sturdy shoes advised).
- ◆ **Ongoing activities** include children's activities, information tables, plant vendors (cash or check) and holding area; book sales; butterfly spotting. A food truck will be available.
- ◆ **Programs:**
 - 9:30** - *Miami's Backyard Birds* - Brian Raposa, TAS
 - 11:00** - *Attracting Hummingbirds and Butterflies in Tropical Florida* - Roger Hammer, naturalist, author, botanist, photographer
 - 12:30** - *How Butterflies Work – and How They Survive* - Rick Cech, natural history author and photographer
 - 2:00** - *Birding and Endangered Butterflies of Biscayne National Park* - Elsa Alvear, Biscayne National Park
 - 3:00** - *The History of Natural History: A Participant's Perspective* - Rick Cech. **In memory of Elane Nuehring.**

Adopt-A-Tree 2016. Miami-Dade homeowners may receive two free trees per year from the county, **including some natives**. See <http://www.miamidade.gov/environment/adopt-a-tree.asp>. Check for updates. adoptatree@miamidade.gov, 305-372-6784.
September 17, 9 a.m. – noon: Doral Central Park (formerly JC Bermudez Park), 3000 NW 87th Avenue, Doral. **Natives will be: Simpson Stopper, Paradise Tree** (subject to availability)

Friends of the Gifford Arboretum, Univ. of Miami.
7 p.m., Cox Science Center, Room 166. 305-284-1302, <http://www.bio.miami.edu/arboretum> > visits or 305-284-1302.

- **Sept. 7:** "Climate Change - A Simple Overview of the Science, Seriousness & Solutions" - Carline Lewis, CLEO Inst.
- **Oct. 5:** "Everglades Restoration and Rare Plants - Including a Critical Element of Biodiversity" - George Gann, The Institute for Regional Conservation.

Join the Connect to Protect Network (Fairchild Tropical Botanic Garden). Your garden could serve as a "stepping stones" to connect isolated pine rockland fragments, increasing the probability that seeds and pollen will be carried across developed areas. Miami-Dade residents who join can receive free plants. Or join as an Email-only member. For more information contact ConnectToProtect@fairchildgarden.org or see <http://www.fairchildgarden.org/science-conservation/connect-to-protect-network>. **New members can pick up plants Sept. 10 or Oct. 8 (tentative).** Contact Peter pvrotsos@fairchildgarden.org.

The National Park Service continues its 100th anniversary with entrance fee-free days on September 24, National Public Lands Day, and November 11, Veterans Day.

ON A RARE PLANT OBSERVED AT CAMP OWAISSA BAUER

By Martin A. Roessler

On the June 5, 2016, field trip to Camp Owaissa Bauer, we saw *Koanophyllon villosum* a member of the Eupatorium (Eupatorieae tribe) of the Aster (Asteraceae family). The Florida umbrella thoroughwort is a small shrub characterized by having hairy stems, opposite ovate leaves with dense glands and sparse hairs, white to pinkish white flowers. It flowers mostly in May to September but flowers can be found nearly all year long.

Taxonomy: Olaf Peter Swartz found these plants in Jamaica and named them *Eupatorium villosum* in 1788. Although the genus *Koanophyllon* was named in 1816 by Manoel Arruda de Camara in his “Travels in Brazil” the genus was generally ignored until it was resurrected in 1975 by Robert M. King and Harold Robinson (Phytologia 32: 265).



Photo by Marty Roessler

Common Names: Wunderlin and Hansen (2011) call *K. villosum* “Florida shrub thoroughwort” and the Flora of North America calls it “Florida Keys umbrella thoroughwort.” These are rather pretentious names for a plant that is rare and limited in range in Florida but common in the Bahamas and West Indies. In Jamaica it is called bitter bush, in the Bahamas it is Jackmada or bitter sage, and in Cuba it is called albahaca de sabana or savanna basil.

Distribution: The genus *Koanophyllon* has about 114 species ranging from Texas, New Mexico and Arizona southward through Mexico, Central America and the Andes region of South America. It is also found in the West Indies, Bahamas and extreme south Florida. *K. villosum* is known from Barbados, Jamaica, all the Cayman Islands, Cuba, Bahamas and Florida. Proctor (2012) in the Flora of the Cayman Islands states that it occurs sporadically throughout the West Indies including Swan Island. It commonly occurs in clearings and thickets on limestone soils which may explain its limited range in pine rockland in Dade and Monroe Counties in Florida.

Etymology: Unknown. The name *Koanophyllon* is perhaps from the Greek *choane*, funnel and *phyllon* leaf Dan Austin (2004) in Florida Ethnobotany or possibly an oblique reference to the leaves as a source of dye like indigo Flora of North America (2006) Vol 21: 542. The species name *villosum* means shaggy, pubescent or hairy.

Uses: According to Austin's Florida Ethnobotany, *K. villosum* is used as a folk medicine in the Bahamas and West Indies. In Jamaica it is used as a remedy for cholera and diarrhea. It serves as a diuretic and the leaves and twigs are used to reduce fever. In the Bahamas the leaves are chewed to relieve flatulence. In Cuba the whole plant is used in decoctions against diarrhea and other intestinal problems. In baths it is used to relieve pain of rheumatism and as an astringent. Chemical analysis indicates the presence of diterpenoid lactones.

Status: The State of Florida lists the species as endangered. The U. S. Fish and Wildlife Service does not list the species because of its widespread common (even weedy) occurrence in the Bahamas and West Indies. It is an upland plant.

Martin Roessler is a retired environmental consultant who has spent about 60 years in Florida and worked from Pensacola and Jacksonville to Key West. He is an original member and past president of the Dade Chapter Florida Native Plant Society.

[Editor's note: *Koanophyllon villosum* (Florida shrub thoroughwort, Florida shrub thoroughwort) **is considered a good butterfly nectar plant** and has been sold by Fairchild Tropical Botanic Garden and some nurseries.]

FNPS RESEARCH GRANTS AWARDED FOR SOUTH FLORIDA PROJECTS

Three FNPS Endowment Research Grants were announced at the FNPS annual conference in May, 2016, all pertaining to South Florida (abstracts below). What an honor it is to have outstanding students studying our botanical problems and mysteries. Congratulations to all! We have heard from numerous previous recipients at chapter meetings or in the newsletter as recently as last April. *Please consider supporting future research by donating to the FNPS Endowment when you renew your membership (or anytime).* And you'll help ensure us a supply of speakers.

“Improving analyses of diversity in the imperiled Pine Rockland plant community.” Lauren Trotta, University of Florida, Department of Wildlife Ecology and Conservation South Florida's Pine Rockland ecosystem is one of the most critically imperiled ecosystems on Earth. One of the most biodiverse ecosystems in south Florida, it is home to an incredible number of endemic plant species. Habitat destruction, fire suppression, and invasive species have degraded the Pine Rockland habitat into a highly fragmented system that occupies less than 2% of its historic range. I will use molecular phylogenetic techniques and community ecology approaches to understand the drivers of plant community assembly and disassembly across fragments. In order to improve these analyses of biodiversity I propose to conduct field based plant

abundance surveys across Pine Rockland fragments of different sizes and fire histories. This project will inform conservation and management practices by elucidating the importance of rare, endangered and prolific, invasive species in our accounting of fragment and landscape scale biodiversity.

“Pesticides and pollination of imperiled plants of the Lower Florida Keys.” Brittany Harris, Florida International University, Environmental Studies Program

Degraded pollinator habitat quality may have far-reaching consequences for recovery of imperiled flowering plant populations. A decline in efficient pollinators can reduce reproductive success and constrain genetic diversity, a challenge for rare plants. Studies indicate that broad spectrum insecticides, such as those used in mosquito abatement, negatively affect non-target invertebrates, including pollinators; however, indirect effects on plant reproduction have not been documented in conservation areas. In 2015, we monitored two imperiled plant species on National Key Deer Refuge in the Lower Florida Keys. We observed reduced flower visitor activity following mosquito insecticide applications for both species, but only the species that requires invertebrate agents for pollen transfer had reduced reproductive output (i.e. fruit set). To determine if our results are a trend, we propose to incorporate another focal species that is self-incompatible and to assess the degree of inbreeding depression in the facultative autogamous species in the absence of pollinators.

“Florida's hammocks and the separation of generations in ferns.” Jerald Pinson, University of Florida, Dept. of Biology

Ferns and lycophytes are the only lineages of plants in which both stages of their life-cycle, both the sporophyte (diploid) and gametophyte (haploid) are independent and free-living. In approximately 10% of ferns, the gametophytes can also be long-lived, and in just 21 currently known species, there is a spatial separation of these two generations, the gametophytes never producing sporophytes in parts of their range. In southern Florida, there is one known species with this pattern, *Lomariopsis kunzeana*, which grows solution holes, some of which support sporophytes and some that don't. It is currently unknown what conditions inhibit the production of sporophytes in these species, and it is a possibility that there are other species with this pattern growing in the area, as of yet undocumented. We propose to monitor environmental conditions within these solution holes, both where gametophytes and sporophytes grow together, and where they are separate.

SPLENDOUR OF THE LOPSIDED INDIAN GRASS

*Though nothing can bring back the hour
Of splendour in the grass, of glory in the flower ...*

From William Wordsworth's "Ode: Intimations of Immortality from Recollections of Early Childhood" first published in 1807.

Fortunately for us, summer and fall bring many weeks to enjoy the splendor of this grass - or "splendour in" if you wish - in pinelands or in our own garden. Past *Tillandsia* articles on *Sorghastrum secundum* bear rereading.

DADE CHAPTER FLORIDA NATIVE PLANT SOCIETY

President: Kurt Birchenough (kbirc001@fiu.edu, 202-905-3921)
Vice President: Amy Leonard (aleonar74@yahoo.com, 305-458-0969)
Secretary: Gita Ramsay (gita.ramsay@gmail.com, 786-877-7168)
Treasurer: Susan Walcutt (walcutts@bellsouth.net, 305-297-7757)
At Large: Devon Powell, Surey Rios, Ted Shafer, Jennifer Stine
Eric von Wettberg, Vivian Waddell

Refreshment coordinators: Cheryl & Ben Morgan (ckmorg@bellsouth.net)
Membership: Patty Phares (pharespl@gmail.com, 305-255-6404)
General chapter information: 305-985-3677 (new number)
Facebook: <http://www.facebook.com/dadefnps>
Twitter and Instagram: @dcfnps or Dade Native Plants
DCFNPS Website: <http://dade.fnpschapters.org/>
DCFNPS e-mail: dadefnps@gmail.com
Mailing address: Dade Chapter FNPS, 6619 South Dixie Hwy, #181,
Miami FL 33143-7919
Webmaster: Haniel Pulido (dadefnpsweb@gmail.com)

TILLANDSIA

Editor: Patty Phares (pharespl@gmail.com, 305-255-6404)

Staff needed for general assistance. Please contact the editor.

Articles, announcements and news items are invited for *Tillandsia* from Dade and Keys members. Please submit items for consideration by the 15th of each month. Advertising rates from \$12 per month.

FLORIDA NATIVE PLANT SOCIETY

FNPS office: info@fnps.org, 321-271-6702
FNPS Website: <http://www.fnps.org>
FNPS blog: <http://www.fnpsblog.org>
FNPS is on Facebook and Twitter: FNPSonline
Dade Chapter – FNPS Council of Chapters: vacant – contact the president
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From “Late Summer in a Residential Pine Rockland” by Leon Howell, *Tillandsia*, November 2014

It lies unnoticed until this time of year when its tall, richly gold and brown flowering spikes stand out boldly against surrounding vegetation. A field of this stuff would divert the attention of a gadget dependent teenager. Just exquisite.

From “Lopsided Indian grass (*Sorghastrum secundum*)” by Steven W. Woodmansee, *Tillandsia*, October 2009)

<http://dade.fnpschapters.org/pastnewsletters/2009/10.html>



Both the common name and the species epithet are so named for its characteristic of having flowers present on one side of the blooming stalk (inflorescence). This grass is native to pine rockland and pine flatwoods habitats. ... What I enjoy most about this grass are its splendid inflorescences. The yellow anthers, which are large for a grass, dangle and tremble gently in the wind. Long awns (hairs on the each little grass flower termed “spikelet”) twist slightly, are dark, and contrast

nice with the honey colored flowers and the bright yellow anthers, which all hang on one side. This effect is most notable in areas that have several dozen or so plants, where the “amber waves of grain” are most striking. [Photo: Roger Hammer]