

TROPICAL FERN AND EXOTIC PLANT SOCIETY NEWSLETTER

Volume 17, Issue 36

September 2018

MEETING REMINDER •

Monday, September 24, 2018 at 7:30 pm in the Garden House

Fairchild Tropical Botanic Garden , Corbin A

Refreshments will be served

September 2018 Co-President's Message

I hope everyone had a great summer wherever you were. If you stayed in Miami, you likely enjoyed seeing the impact of the almost daily rain on your plants. Even the extra sunlight as a result of last year's Hurricane Irma has had a positive impact on our gardens. But now it's September and time to get back to more organized plant activity through our monthly TFEPS Meetings and volunteer opportunities.

Do plan to attend the September meeting on the 24th. Plans for the 'Best Rare Plant Auction in South Florida,' the TFEPS annual fund raiser, will be discussed. The Auction will be held on October 22nd. Please consider volunteering for a role in the auction and think about a plant or few that you can donate.

Elections for TFEPS Officers and Directors will be held in November. If you are interested in volunteering for a leadership role, please let me know. Also in November the Fairchild Tropical Botanic Garden will hold its annual Ramble. If you would like to sell plants as a member contact me.

If you would like to volunteer at our Membership Table providing society information to potential members, contact Sherrin Smith (volunteers work for 4 hours and gain free admission to the Garden).

It will be good to see you at the September meeting. I've missed the people part of our society.

Submitted by Marie Nock

Minutes of Meeting of Tropical Fern & Exotic Plant Society

Date: Monday, June 25, 2018

Treasurer's Report: \$14,201.81

Speaker: Dr. Sally Chambers

Position: Research Botanist at Marie Selby Botanical Gardens

Link: <https://selby.org/press-releases/selby-gardens-welcomes-new-research-botanist/>

Presentation Title: Fantastic Ferns and Fascinating Epiphytic Flora of Hawaii, Belize, and Peru

Presentation Outline:

Fern background

- Reproductive biology
- Epiphytism

Hawai'i

- Goals
- Field locations and stories
- Collections

Belize

- Goals
- Field locations and stories
- Collections

Peru

- Goals
- Field locations and stories
- Collections

Cuba

Fern Background:

Reproductive biology

- All plants have what is called the alternation of generations: alternating sporophyte to gametophyte
- In ferns, they are free living and independent of one another and visible to the naked eye

The work done over the past year:

Hawai'i:

Goals:

- Seeing how elevational gradients—temperature, precipitation, and relative humidity—impact filmy fern (family: Hymenophyllaceae) distributions
- Only Gametophytes at lower elevations
- Sporophytes and Gametophytes at higher elevations
- Research Questions:
 - Are environmental factors responsible for this gradient?
 - Are there genetic patterns associated with this distribution?
 - Biogeography: How do these taxa relate to continental taxa
 - Collections (photographs shown)
- Taxa:
 - *Callistopteris baldwinii*
 - *Crepidomanes minutum*
 - *Hymenophyllum lanceolatum*
 - *Hymenophyllum obtusum*
 - *Hymenophyllum recurvum*
 - Unidentified gametophytes

Belize:

Goals:

- My colleagues at Selby have been involved in fieldwork in Belize for a long time; my boss has been going to Belize for over a decade. We've been culminating the information that they've gathered over the past years to create field guides
 - There are about 33 genera of ferns in Belize
- Research on the epiphytes of Belize: <https://selby.org/botany/research-conservation-projects-2/epiphytes-of-belize/>

Research botanists have produced a number of identification guides to some of the epiphytes of Belize

- *Epiphytic Fern Genera of Belize* (15.7 mb)
- *Tillandsia of Belize* (12.5 mb)
- *Smooth-leaved Bromeliaceae of BELIZE (excluding Tillandsia)* (8.4 mb)
- *Spiny Bromeliaceae of Belize* (7.4 mb)
- *Common Bromeliads of Belize, Poster* (4.8 mb)
- *Terrestrial Bromeliads of Belize, Poster* (3.3 mb)
- *Gesneriaceae of Belize* (6 mb)
- Develop these guides to help the staff and people working in conservation in Belize
- Expedition goals: checklist of plants to find to photograph and under-sampled locations
- Field locations and stories (images shown of locations and some of the plants found)
- Las Cuevas research station
 - Scout for plants, find and collect them, and give them a collection number
 - Collecting and then pressing into herbaria specimens
 - Favorite plants at Las Cuevas:
 - *Pleopeltis fallax*
 - *Pleopeltis lindeniana* –both are types of resurrection ferns
- Baldy Beacon (looks abandoned but still utilized as military site)
 - Third highest elevation in Belize
 - Valleys are the jackpot
 - Filmy ferns found here as well
 - *Trichomanes* sp.
 - *Cochlidium serrulatum*—super tiny
 - Observed stunning *Tillandsia* excels

- Collect plants during the day and press them into herbaria specimens at night using the light from headlamps
- they are working to develop a botanical garden

EcoLodge EM Anderson served as basecamp

- Worked with local colleagues
- they are working to develop a botanical garden
- Black Hole cave system
- *Didymoglossum punctatum* subsp. *sphenoides*

Collections

- 118 species: 62 live, 19 seed, 32 spore
- Have to undergo quarantine and receive permits to bring live plants back into the country (after spending 16 days in Belize)

Peru:

Field Locations and stories

- Traveled along the Camino Inca Tradicional
- Plant images:
 - *Epidendrum secundum*
 - *Cyclopeltis semicordata*
 - *Lomariopsis jauperensis*
 - *Polybotrya caudata*
- Forever Young—Winay Wayna—is an archaeological site never discovered by the Spanish. Ferns were growing in the ruins—the name is also the name of a beautiful orchid found all over the site
- After completing the trek along the Inca Trail, worked with another ecolodge and conservation organization, the InkaTerra Asociacion

- InkaTerra Machu Pichu Pueblo Hotel
 - Presentation given to help the staff understand the biodiversity they have
 - Cloud forest, high elevation
 - Helping to develop fern walk—guided tour
- InkaTerra Reserva Amazonica
 - Work with guides, inventory and learn as much as possible, and teach them as much as possible
 - Canopy walkway platform
 - Found *Polytaenium citrifolium*
 - *Polybotrya*: semi-epiphytic, produces other fronds with just spores
- InkaTerra Hacienda Concepcion

Plants observed:

- 94+ species
- 35 genera

Cuba:

Attended conference: Overarching message was about hurricane preparation

Discussed the importance of sharing collections as a way to safeguard biodiversity

Visited Cienfuegos Botanical Garden

Why is this important (understanding, collecting and conserving)?

The biomass distribution on Earth:

Plants make up the majority of Earth's biomass

Over half the biomass has been lost

Since the rise of human civilization 83% of wild mammals have been lost, 80% of marine mammals, 50% of plants, 15% of fish

Documenting, understanding, and conserving biodiversity is critical

Follow-up questions:

Lenny: Do you have future plans to see how climate change effects sites visited?

Answer: Not yet

Frank: Did you get to see the only New World Platycerium? How did it get there, etc.?

Answer: Haven't seen it, but there is a research paper written about it

Lenny: In the image where you were preparing herbarium specimens in Belize, were you wearing long-sleeves for bugs or cold?

Answer: Baldy Beacon got cold at night

Chad: How did ferns from Baldy Beacon adapt to the temperature difference once back in Florida?

Answer: I think they're doing surprisingly well



Enoclydia Paula Gross

David Foster **FIRST PLACE**

TFEPS May 2018 Show & Sale



Miltonia L.La Fearneyhough
David Foster THIRD PLACE



Lc Final Blue Hybrid "Royal Purple"
Frank TastInger SECOND PLACE

TFEPS 2018 SHOW & SALE

Wilsonara Tropic Breeze "Everglades"
Sandy Schultz,
Georgia Tasker SECOND PLACE

Blood Lilly Scadoxus
Emalyll Israel SECOND PLACE



2018 OFFICERS:

Co-Presidents: **Marie Nock (305) 232-2257** Vice President: **Chad Husby (321) 474-2753**
Marni Valent (305) 233-5929
Secretary: **Arielle Simon (305) 588-5026** Treasurer: **Bob Benaim (305) 793-9755**

DIRECTORS at LARGE:

Vivian Waddell (305) 665-5168 [2017-2019] **Leonard Goldstein (305) 667-4609 [2017-2019]**
Ellis Brown (305) 484-7997 [2016-2017] **Paul Marcellini (305) 299-0690**

IMMEDIATE PAST PRESIDENT:

Chad Husby (321) 474-2753

2018 DIRECTORS:

The board consists of TFEPS officers, the immediate past president, and elected directors at large.

2018 COMMITTEES:

Hospitality:

Emaly Israel (305) 235-0886

Newsletter Editor:

Janet Reed (305) 235-9337

Membership:

Sherrin Smith (305) 213-2598

Raffle Table:

Ralph Hernandez (786) 261-4856

Special Sales:

Marie Nock (305) 232-2257

Show & Sales:

Vivian Waddell (305) 665-5168

Webmaster:

Bob Benaim (305) 793-9755



Membership Application - 2018

YEARLY DUES ARE FOR CALENDAR YEAR JANUARY—DECEMBER

We offer 4 different memberships options:

- Yearly: _____ \$ 15.00 for individual
 _____ \$ 17.00 for two members at the same address
Lifetime: _____ \$ 125.00 for individual
 _____ \$ 150.00 for two members at the same address

This is for a New Membership: _____ or for Renewal: _____

Please Print

Name: _____

Phone: H or C: _____

E-mail: _____

Name: _____

Phone: H or C: _____

E-mail: _____

Street Address: _____

City, State _____

Zip Code + 4: _____ + _____

H = Home Phone **C** = Cell Phone

Enclose check payable to: TFEPS

Please mail to: TFEPS – Membership

P.O. Box 902094

Homestead, Florida 33090-2094