



January 2021

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<http://www.tgcfersoc.org>

Due to COVID-19 restrictions our meeting this month will be another “virtual” one. See below.

A message from our President:

Hi Everyone,

Well I think it is safe to say everyone is glad the year 2020 is over. It has been a tough year for everyone, and it looks like as much as we are ready to get back to normal we are just not there yet. There has been so much to process this year with all the new rules of staying well! With so many having issues with staying employed, and even keeping a roof over their heads. Learning how to order all our needs online, learning how to go to meetings and religious services even going to the doctor online. Hardest of all, just not being able to be with friends and family the way we always have. These changes in our lives this past year and this year as we move forward has been such an adjustment for each of us. The word Covid19 is a word that is forever etched on our brains.

What we have learned is we can learn new things and new ways. Wearing the mask is not that bad especially now that its winter it feels pretty good. Staying our 6 foot apart has become easier and people have been pretty good to adapt to these necessities. I was hopeful last year when we did our first online *GoToMeeting* fern meeting that it would only be a few meetings, here we are starting on another year of them. I know I miss seeing you guys in person, but I would rather know that our Fern Society Meetings are not a super spreader for our friends. So for now we will continue with the *GoToMeeting* format. It's given us an opportunity to have speakers from other countries talk to us, and that would not have happened in our meeting together world. So we can take advantage of this time to welcome our members that are out of town to join us, and to hear people speak to us that live half way around the world. So in our isolation we have been able to make the world a smaller place.

The board has discussed this year and the impact it has had on our group and we have decided that everyone that had paid their dues for the year 2020 will not need to pay their dues in 2021. We know that many of you have not been able to attend the online meetings, and other that just have had other hardships, so we wanted to just make this easier on everyone going into this new year. There were a

few that have already sent in their membership dues and to you they are being moved to cover 2022 unless you need your funds back and if so get with Beth Ayer and she will take care of you.

I know everyone is missing the raffle table and the food. I know I am; maybe we can find a way this year to get together and practice our social distancing but be able to see each other even if we can't hug. We will see what we can do on that as we move into the second half of this year.

I would like to welcome in our new board for this year, and thank our outgoing board for all that they did to help with this society. We have the best group! Always stepping up and helping each other and our club.

Patrick is working on our speakers for the year and we hope to continue to bring new people into our group to talk about ferns. He has a great speaker planed for us this month: Patrick Alexander. Mr. Alexander will talk about ferns growing in the mountains of New Mexico! We don't always think about New Mexico being fern rich, but he is going to introduce us to these awesome ferns that call it home. Please read the programs note for more information on our speaker.

If any of you have outstanding library books we can try to get together and you can turn them into me if you like and I will make sure they get back to Ruth. I'm often in Houston so we might be able to meet up or you are welcome to bring them to me and I can still get them on to Ruth.

I would like to request everyone to share with us what you have been doing since you have been staying at home and gardening. We got some really nice photos when we did this last year. Please let's try to do this again. Show us your ferns! We can try to have a show and tell before/after some of our meeting too. We want to keep those fern thoughts alive and well!

I will be sending out the Meeting email on Friday! We have several people that have not joined us even once. If I can help you please just call me 281-733-5564. I'm more than willing to help walk you through the steps to get started, once you have done that it really is not that difficult. I promise.

To everyone: I sure miss you! Take care of yourselves and stay in touch! Call me to say hello!

Talk care everyone!! And stay safe!

Darla



Patrick Alexander is a botanist with the Bureau of Land Management in Las Cruces, New Mexico, speaking in an unofficial capacity. He is originally from southern Indiana, where he once wanted to be a herpetologist but was seduced by undergraduate courses in botany. At Indiana University he also became familiar with arid ferns in the greenhouse of Dr. Gerald Gastony. He came to Las Cruces in 2004 for graduate school and studied the taxonomy of two genera in the mustard family, *Boechera* and *Thysanocarpus*. After graduating, he did not want to leave New Mexico, so he didn't. When not at work, Patrick can often be found on iNaturalist or walking in straight lines across the desert.

**Sunday's Topic:
The Ferns of Organ Mountain, NM
By Patrick Alexander**

We will be learning all about the ferns that grow on the mountains in New Mexico. The Organ Mountains are a rugged mountain range in southern New Mexico in the Southwestern United States. Organ Mountains–Desert Peaks National Monument was declared a national monument on May 21, 2014. They lie 10 miles east of the city of Las Cruces.



Bio Pic: Patrick Alexander



The American Fern Society (AFS)

The American Fern Society is over 120 years old. With over 900 members worldwide, it is one of the largest international fern clubs in the world. It was established in 1893 with the objective of fostering interest in ferns and fern allies. It exchanges information and specimens between members via their publications and spore exchange.

AFS non-professional membership (\$20) includes access to the Spore Exchange and subscription to the Fiddlehead Forum.

Professional membership (\$40) includes the benefits above plus access to the American Fern Journal.

Please note that donations to the AFS are not tax deductible.

To find out more about the Society and/or join, visit <https://www.amerfernsoc.org/>



2020 Officers and Committees:

President:	Darla Harris
Vice President:	Patrick Hudnall
Secretary:	Ceil Dow
Treasurer:	Beth Ayer
Board Members-at-Large:	Cherie Lee (Past Pres), Outgoing Board Member at Large
	Jere Noerager
	Ken Warren
Education Chair:	Darla Harris
Hospitality Chair:	Larry Rucker
Library:	Ruth McDonald
Membership Co-chairs:	Beth Ayer and Marcia Livingston
Newsletter:	Paul Geiger
Spore Exchange:	Patrick Hudnall
Ways and Means:	Larry Rucker
Raffle, Store, etc.	Biruta Claunch
Web Master:	Malcolm McCorquodale
Welcoming at Door:	Faye Stansberry



**Minutes of Virtual Meeting via "GoToMeeting"
November 15, 2020**

Texas Gulf Coast Fern Society

A virtual meeting was held due to COVID-19.

Darla called the meeting to order at 2:00.

There were approximately 30 members in attendance.

Presentation: 'Ferns of New Caladonia part 2'

The speaker was horticulturist, Adam Black, a self-described "Plant Nerd".

Return to Caledonia, Ferns and relatives in a primeval World. This was his 3rd trip to New Caledonia & Loyalty Islands which is north of New Zealand. They became a French Colony in 1853 and voted to remain under French protection in April 2020. The islands have pristine beaches and a text book example of plant diversity. Strata consists of heavy metals known as ultramafic rocks and causes toxic soil. Plants had to adapt to this hostile environment. Nickel strip mining is the problem that destroys a lot of the plant habitat. A plant that has adapted is *Pycnandra acuminata* which has sap that is blue from the uptake of nickel

Living on the islands are a predominance of 'Living Fossils' like fern relatives, conifers and basal flowering plants. There are also mountain top conifers, *Agathis*

montana and *Araucaria humboldtensis*, that are declining due to disease.

The dry coastal forest margins have open rocky soil. Plants grow in the cracks of rocks. Plants look alien here. Some plants of this region are *Grevillea spp.*, *Cyathopsis albicans*, *Psilotum nudum* - a primitive fern relative, the red stemmed *Odontosoria deltoidea*, a lot of different species of *Microsorium*, *Xanthostemon spp.*, and the carnivorous plant *Nepenthes vieillardii*.

Mt. Humboldt is the second highest peak in New Caledonia. Some of the plants that grow here are *Grevillea spp.*, *Exocarpos neocaledonicus*, and *Stenocarpus gracilis*. Mr. Black and his colleagues visited a native of the island, Georgette, a plant collector and grower. Her property has serpentine rock strata and unfortunately, not much can be grown on it. As they climbed the mountain, they saw *Blechnum obtusum* which is a little tree fern grown in moist areas around a small creek, *Odontosoria alutacea*, and *Agathis ovata* – a native conifer to the island. They also viewed *Dacrydium* - the Dr. Seuss type trees, *Pseudolycopodium*, *Stromatopteris moniliformis* – with small beautiful fronds, *Schizaea dichotoma* which looks like a folded up umbrella and *Bruguiera gymnorhiza*. Due to the dry conditions of the area, the group had to head back to the base camp because no water was available to refill their canteens.

On another day, they hiked up Mt. Mou. It is a few hours hike that starts out as a low forest filled with *Ficus*. Along the way, they encountered *Asplenium*, *Dracophyllum sp.* which looks like bromeliads stuck on a stick and *Dicranopteris linearis*, commonly called Forked Fern. Walking thru a field of these Forked Ferns is uncomfortable because of the rough broken fronds end up in your shoes or between your sock and shoe. Other plants like *Tmesipteris vieillardii* looks like they are straight out of the Devonian Period on New Caledonia. *Trichomanes dentatum* grows in a cool, high humidity environment. *Blechnum chaulidontum* have fertile fronds that stay red even when unfurled. *Schizaea fistulosa* looks like a tooth brush with fertile tips. *Selaginella firmuloides* can also be found here.

Later, the group traveled to Montagne des Sources which is a protected preserve. Some of the plants found here are *Araucaria bernieri*, *Blechnum spp.*, *Melaleuca dawsonii* – a showy plant with lime green flowers, *Pleioluma*, *Melanopsidium nigrum* (syn. *Pleurocarpus pancheri*), *Nothofagus codonandra* which are relatives of Oaks. These have pretty reddish pink new growth. Also found here are *Exocarpos spp.*, *Araucaria muelleri* another Dr. Seuss-like tree, lots of tiny orchids, *Schizaea dichotoma* – the eyelash fern, *Araucaria humboldtensis*, *Xeronema moorei* – which looks like a red toothbrush, *Selaginella neocaledonica*, and *Adiantum fournieri*. The Australian Tree Ferns, *Dicksonia baudouinii*, are found everywhere here.

In the Central part of the island, the plants noted were *Angiopteris evecta* – the Giant Fern or King Fern, *Gleichenia brackenridgei* – which grows on cliffs, *Sticherus flabellatus* – it presents as a whorl of fronds, *Ptisana attenuata* – stems feel like rebar. *Amborella trichopoda* – the last surviving basal representative of angiosperms (flowering plants) and orchids like *Geodorum densiflorum* – The Shepard's Crook Orchid. There is so much diversity here that some plants are not named or described.

On Mt. Koghi, tree ferns and climbing ferns were everywhere. The *Chambeyronia* has gorgeous red fronds. *Schizaea dichotoma* is covered in lichens and algae. *Parasitaxus usta* is a rare purple parasitic conifer. The host plant, *Falcatifolium taxoides*, is also a conifer with lavender cones. *Pteropus vetulus* are flying foxes that are found here. A Banded Sea Krait Snake was found and even though it is venomous, he could pick it up because it is considered a calm, laid back snake.

At the end of his trip, he had to process samples to fly back. While at the airport, he noticed a nice sampling native plants.

Adam Black contact information:

info@botanicconserve.com

Question & Answers:

*He took photos with his cell phone. He has found that a camera was cumbersome on his hikes.

*He rented a car and hiked all over the island.

*When ferns are found living on other ferns, it is really epiphytic.

*It is difficult to collect spores to grow in Botanic Gardens. Dampness causes the spores to mildew before getting a chance to grow them.

*New Caledonia officials did not like botanists to collect spores or plants for research. They only allowed them to collect for their disease research. Officials have found that plants show up for sale from New Caledonia but this is not legal. Even when Nickel Strip Mines encroach on rare flora, government officials will not allow any collection or cultivation even to protect and save that species.

*To identify fern species from New Caledonia is difficult because there are so many species that are not described.

The website endemia.nc - Search helps for visual aid.

Respectfully submitted,

Ceil Dow



4th Quarter 2020 Treasurer's Report

Income: Dues \$155.00

Interest: \$0.36

Expenses: None

Balance on 12-31-2019: \$10,657.63

Balance on 10-01-2020: \$14,927.17

Balance on 12-31-2020: \$15,082.53

Net gain for 4th Quarter: \$155.36

Net gain for 2020: \$4,424.90



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Aglaomorpha 'Santa Rosa'

By: Darla Harris

Genus: [Aglaomorpha](#) (ag-lay-oh-MOR-fuh)

Aglaomorpha is a genus of large epiphytic ferns. The Santa Rosa is a hybrid fern thus it does not produce spore and can only be cultivated from division or tissue culture. This fern got its name from the Santa Rosa Tropical Fern Nursery. They put it into production several years ago now.

I have been growing this fern myself for several years, it is a little slow off the start if you are only starting with a 4" pot size, but it grow up to be a beautiful fern with fronds getting 2 to 3 foot, at least that is as large as mine has gotten so far.

The Aglaomorpha is a footed fern (rizhome) that grows in a circular motion and can create a nest of fronds doing well if plaqued on something round or even a palm tree. Even though this is a epiphytic fern it can be grown here in the Houston area. I have found it will take pretty bright light and can be quite drought tolerant. During our freeze of two years ago, mine did fine outside in a clay pot. However, last winter I had not watered it before the freeze and lost it. So it seems to need hydration well before a freeze in order to do well.

I have these ferns planted in wire baskets, cedar plaques, and in pots, it seems to do equally well under all these conditions.

The fronds are coarsely cut and are wide at the bottom and will turn brown with age. They will turn papery and will serve to help catch leaf debris. The Aglaomorpha does well indoors until it gets too large. It does not need high humidity and irregularly watering.

All round I give this a big thumbs up for our growing area. Happy Growing...



All photos by Darla Harris