



February 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,

WOW!!! What a February this has turned out to be! I have been to Alaska in February and it was not this cold! I hope everyone is alright and stayed warm, or at least warm enough to not get sick.

I know the verdict is still out on a lot of our plants. I know none of us expected this and to lose electricity for an extended period of time has been unprecedented. Then to lose internet and cell service to where it was getting difficult to even know what was going on. If it has taught Joe and me anything it is to always have multiple backup systems available.

We did pretty well, though. We had propane, diesel and electric heat sources. It worked well with electric when the power was up, our diesel source also needed electric. Our propane was the most reliable and we used six small portable heating units so we could move them around as needed and two indoor units that were vent free for the house and the greenhouse shop. We bought 27 bottles of propane tanks 20 pounds each. We had already refilled 16 of them by Wednesday. We lost power pretty much at the onset and got it back in short spurts on Tuesday. We would switch to the electric sources while we had it, and go back to propane when we had to. So far we've stayed in the mid to upper 30s in our hardy area, 45 and up in our middle area and 55 in our least cold-hardy area. That being said, this is still Wednesday and we have three more cold nights and our propane guy has not been able to get more product. We can talk about how everyone did on Sunday at the meeting. Some of the scenes from our area can be found at the end of this Newsletter.

Sunday's meeting is going to be awesome!! Dr. Robbin Moran will be talking to us on a wide fern topic for us. Dr. Moran has talked to our group three other times over the years, but the last time was in 2006 when he both gave our talk and led our field trip to the Big Thicket. If you have not heard him speak you are in for a special treat. Please read more on the program and about Robbin in the Program notes. I have personally been able to attend two of Robbins

taxonomy classes: one in Maine, and one in Costa Rica. I will say it was a learning opportunity of a life time. This is a must-attend event for us and a very prized booking, we have been trying to get him back to speak to us, but his schedule as the Curator of the New York Botanical Garden took so much of his time and then he used the rest for teaching about ferns.

We have some great speakers booked for the next several months that I think everyone is truly going to enjoy. It's a wide range of topics and styles of speakers, but all amazing. I apologize for not having the list ready to print for this issue, but life as you know the last two weeks getting ready for the storm has been busy.

We will talk more at the meeting,  
Please plan on being there!

*Darla*



**Sunday's Topic:  
Ferntastic!  
By Robbin Moran**

This talk will cover aspects of ferns that will interest all plant lovers. It will discuss the distinctive life cycle of ferns and show how knowledge of the cycle is used to grow ferns from spores. Fern species common in cultivation will be discussed, especially how to identify them. Also, economically important ferns (bracken fern, mosquito fern, and ostrich fern) will be explained. Finally, several extremely unusual ferns will be highlighted, such as those with iridescent leaves and others having symbiotic relationships with ants.

**Biosketch: Robbin Moran**

Robbin Moran, Curator Emeritus at the New York Botanical Garden, has written four books and over 180 scientific articles about ferns. He conducts fieldwork in tropical American and regularly teaches courses about ferns and plant systematics for the Organization for Tropical Studies in Costa Rica. He holds an M.S. in

Botany from Southern Illinois University at Carbondale, and a Ph.D. from the University of Illinois at Urbana-Champaign.



Bio Pic: Robbin Moran

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”  
January 17, 2021**

**Texas Gulf Coast Fern Society**

A *virtual* meeting was held due to COVID-19.

There were approximately 20 members in attendance.

**Presentation: ‘The Ferns of Organ Mountain, NM’  
By Patrick Alexander**

\*Unfortunately, the speaker was declared a “no-show” at 1:25 pm. Darla suggested that the presentation’s photos could be shown but she wasn’t familiar with these ferns. Jere Noerager motioned to postpone any presentation until the speaker could make it. We will reschedule the speaker for some time in the future.

\*Steven Royer was a guest participant from South Florida.

\*It was announced that we will roll over last year dues to this year so no one needs to pay dues for 2021. Beth Ayer says the Dallas Fern Society donated \$3300 to the GCFS last year. Michael Larfing from the Dallas Fern Society coordinated the donation. We currently have \$4424.00 in the account and only incurred \$166.00 of expenses for 2020.

\*Donations are tax deductible. Go thru Amazon Smile and designate The Gulf Coast Fern Society as your charity. It will give a donation to our Fern Society at the end of the year.

\*Jere Noerager gave a book report on “*Platyserium*” by Patra Sangdanuch. The book came out in English and quickly sold out. Jere thought it was an excellent reference book with colorful photos of *Platyserium* in their natural habitat and in cultivation. Ken Warren purchased the Kindle version for \$29.99 at Amazon.com and thought it was well worth the expense. Darla Harris suggested contacting the author on Facebook to get on a waiting list for future English editions.

\*Patrick Hudnall is a frequent volunteer at the Houston Botanic Gardens. He gave an update on its progress. They are starting Phase 2. They have not had a lot of success with ferns but do have a nice collection of cactus. They trucked in loads of varieties from Arizona. They are studying different botanic gardens for creative ideas. Surprisingly, since the onset of Covid 19, no volunteers are permitted over the age of 65. The Director moved to Washington DC with her husband so they are looking for a replacement.

**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/>

**2021 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

\*There was a discussion of a pond fern (*Acrostichum danaeifolium*) that was not doing well. Darla says it gets really big. If you want the fern to show well in a pond, give it a lot of space and protect it in winter.

\*If future speakers do not show as scheduled, then Daniel Yansura says he can give a presentation on the Bali, Indonesia fern trip as a backup. Darla and Joe went on the trip as well. He discussed presentations that he has for backups but the question is how long do you wait for the speaker to show up.

Respectfully submitted,  
Ceil Dow



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AmazonSmile is a way for you to support our society every time you shop with Amazon.

At [smile.amazon.com](http://smile.amazon.com) you will find the same Amazon items that you know and love, with the added bonus that Amazon will donate a portion of the price of eligible purchases to the Texas Gulf Coast Fern Society.

Signing up is easy!

#### Here's how to sign up and shop at AmazonSmile:

1. Visit [smile.amazon.com](http://smile.amazon.com)

2. Sign in with your Amazon username and password.
3. Then either go to "Your Account", and under the box "Shopping programs and rentals", select the option to "Change Your Charity"; or you can also hover your mouse over the small arrow next to the charity you are currently supporting and click Change.

4. Type Texas Gulf Coast Fern Society into the search and the click select.

5. Start shopping! You can add a bookmark for [smile.amazon.com](http://smile.amazon.com) to make it even easier to return and start your shopping at AmazonSmile.



## Angiopteris

By Pat Hudnall

From sources, besides personal cultivation, including Wikipedia, The Fern Grower's Manual by Hoshizaki & Moran.

In the Houston area I have grown 2 of an estimated 150 to 200 species, *A. evecta* and currently *A. palmiformis*. They quickly get too large to be grown in a small greenhouse, so I currently have grown mine outdoors. Since they do not tolerate frost or drying out, they take a bit of extra care. The most commonly available species is *A. evecta*. It is likely that *A. evecta* produces the largest single frond of any fern. It seems that *A. palmiformis* is about 1/2 to 3/4 the size of *A. evecta*.

*Angiopteris* genus are very large ferns found in parts of Southeast Asia and the western Pacific. *A. evecta* is naturalized in Hawaii, Jamaica, Costa Rica and Cuba. Common names in English include King fern, Giant fern, Elephant fern, and Mule's Foot fern.

### Description:

*Angiopteris* is a self-supporting evergreen perennial fern with very large bipinnate fronds. The massive trunk-like rhizome grows vertically up to 3.9 ft. high by 3.3 ft. wide. The arching, glossy green fronds, which emanate from the top of the trunk, may reach up to 8.2 ft. wide and 30 ft. long, with the fleshy green petiole making up 6.6 ft. of that length. Despite their size they have no strengthening tissues, instead they are supported entirely by the turgor pressure of the sap. I have found that if they dry out, even a little, they will substantially wilt and be slow to recover once watered. Perhaps overpotting may help this a bit. Sporangia are borne on the underside of the pinnules, close to the margin, in clusters of 5 to 8 opposite pairs. On either side of the petiole where it arises from the trunk there are flat, rounded, leathery, ear-shaped stipules, known as "auricles", which can measure up to 3.9 to 5.9 in. It was by this method Darla Harris was able to produce the plant I am now growing. Overall dimensions of this fern can be up to 23 ft. high by 52 ft. wide. But it is likely to be about half this size in cultivation.





Rhizome of *A. palmiformis*



Underside of a pinnule of *A. evecta*, showing sporangia

*Angiopteris evecta* is the type species of the genus *Angiopteris*. Fossil records in Paleozoic rocks have been found which are similar to *Angiopteris evecta*, indicating that the species has been in existence for around 300 million years.

The species grows in very rich soils, often of volcanic origin and prefers a very warm wet climate. It is most commonly found as an understory plant in well-developed rainforest, especially along creek banks in deep sheltered gullies where there is good drainage but also a plentiful supply of fresh water. The preferred annual mean temperature range is (66–81<sup>0</sup> F) and annual precipitation between 39.4 – 214.4 in. It may grow at altitudes from sea level to 4,900 ft.

Cultural uses: The starchy rhizomes are eaten after long processing to remove toxins, used to perfume coconut oil, to flavor rice and to produce an intoxicating drink. When introduced to an area with a suitable climate, *Angiopteris* can establish dense stands that inhibit local species. It is listed as invasive in Costa Rica, Cuba, Jamaica and Hawaii, where in each case it has escaped from plantings in botanic gardens. I encourage the reader to give this beautiful fern a try if you have not already.



*Angiopteris palmiformis* in author's back yard





*Angiopteris evecta*. Manoa Valley, Oahu Hawaii



**Darla's Snow Pics:**



**Camping**



**Brrrrr!**



**Brrrrr!**



**UhOh!**