

August 2025

Vol. 27 No. 08

#### http://www.tgcfernsoc.org

Our meeting this month will be "blended" by meeting in-person at the Judson Robinson, Jr. Community Center (2020 Hermann Dr., Houston, 77004) and/or via *GoToMeeting* – member's choice.

## TGCFS MISSION STATEMENT

Organized in 1998 by a group of fern enthusiasts (a.k.a. fern lovers, fernies, pteridologists), to cultivate, foster, and promote interest in ferns and fern allies, the TGC Fern Society presents educational programs including "how to" sessions, presentations by local, national and internationally known fern experts, and field trips and tours-thus providing a forum for fern enthusiasts to visit, learn, share plants, ideas, information, and have a good time. A very informative monthly newsletter is published for members, and special events include presentations to other groups, fundraiser events, and a year-end holiday season party. Doors open at 1:30pm and regular meetings begin at 2:00pm on the 3rd Sunday of each month at the Judson Robinson Jr. Community Center, 2020 Herman Drive, Houston, TX, 77004. (713) 284-1994.

#### A message from our President:

Hi Everyone,

Thank you everyone for the good turnout for our July meeting on Filmy Ferns. I know I learned new things about growing them from Dan Yansura. Thank you, Dan!!!

Thank you to those that brought refreshments, they were very good. Anne, great job getting everything to the meeting! We were a little light on our raffle plants this monthl but thank you to those couple that brought something and for those that purchased tickets. Remember this is our money to pay for our projects or we will need to have to charge for the projects in the future. So please bring plants or plant-related items for the raffle to the meetings!

I want to thank the contributors to the newsletter. Ceils Dow's minutes are like being there - they are very concise! Bob Swanson's book review makes you want to get the book and read it if you haven't already and read it again if you have read it! Be sure to check out the books with Fred and Betsy Robinson! Text/call them ahead of time to make sure they have the book you're wanting with them. Partrick Hudnall is taking over the Fern Name Changes article for the newsletter. Christopher Goodgame is getting everything loaded into the newsletter and sent out for us. Thank you Everyone for your contribution, it does take an army.

We now have the Program Callendar back in the newsletter. As you can see the remaining talks for the year have all be posted and we now have half of next year we will be adding to the calendar once we determine the exact date! So, everything is moving and running smoothly.

I would like to thank Christopher Goodgame for wearing so many hats this last year or so. He has been taking care of the technology part of GoToMeeting. He's a board at large. He is editor of our Newsletter! He has also been doing the Membership Chair. I'm sure you can all agree this is a lot of duties for any one person to do long term. You have done a great job!!

Now we are looking for a new person to take over the Membership Chair. Duties include getting our new members signed up for the newsletter with their current and correct email address and sent to the Newsletter person, taking the dues for new members and renewals, and turning the funds over to the Treasurer. A spreadsheet makes the process easier and when we do have a new person take it over then that gives the new chair a head start. Please reach out to me if you would like to take this duty over for the society.

Over the years we have put a booklet together with all the members in it, so we can hand it out to everyone that is a member so everyone can get hold of each other. Covid threw this off and with the changing of membership people when we did it caused it not to happen this past year. Moving forward we will be getting this done. We also put everyone's photo next to them, so we get to know each other. We normally have two or three people work on the booklet to get it all done. The next booklet will be due out in April at the meeting. I will bring one to the next meeting for those that have not seen one before.

The talk this month with be part-two of our showing of the Platyceriums we have been discussing in the newsletter. We had covered the Bifurcatum Complex the first four months and then brought them in to compare them in person. Now we are studying the Giant Four. So, we will have P. superbum, P. wandae, P. grande, and P. hotumii so we can see the sizes and what makes them different from each other. We will also have young P. superbum so we can learn by looking at them which way is up for when mounting them. Also, some ideas and suggestions on what to mount them on and why. I will be giving this talk for y'all, and Joe will be helping me with setting up these large staghorns.

The weather has really been good and more like the days of old! The rain has been often but not flooding, the temperatures have been steady but lower than the last two years. My plants are all really enjoying this year. Let's hope we keep this weather pattern going!

I do hope to see everyone at the meeting; we are having about 20 people attend each meeting with about 5 that make different meeting from each other. If we all make the same meeting then we will be up to a more normal attendance of 25 people at the meeting.

All our new members, please come and join the meeting, we have a great group of people that love to talk plants!!

Take care, Darla

July - December 2025 TGCFS Calendar

| Date     | Topic                                | Speaker/Host                 |
|----------|--------------------------------------|------------------------------|
| 8/17/25  | The Giant Four Platyceriums          | Darla Harris                 |
| 9/21/25  | Building a Birdbath (Hands-On)       | Ceil Dow                     |
| 10/19/25 | What Ferns Need Winter<br>Protection | Darla Harris                 |
| 11/16/25 | Fern Terrariums (Hands-On)           | Darla Harris +<br>Ceil Dow   |
| 12/21/25 | Winter Party (1pm)                   | Patrick and<br>Diane Hudnell |
|          |                                      |                              |

#### Dues!

Dues for 2025 and now 2026 are currently being collected. If you have any questions about the status of your dues, please contact Christopher Goodgame at: <a href="mailto:chris.goodgame@protonmail.com">chris.goodgame@protonmail.com</a>.

Your dues may be paid in person at a meeting or sent by mail to: Christopher Goodgame, PO Box 66116, Houston, TX 77266

Checks should be payable to: Texas Gulf Coast Fern Society (TGCFS).

### 2025 Officers and Committees:

President: Darla Harris
Vice President: Carolynne White

Secretary: Ceil Dow
Treasurer: Larry Rucker
Board Members-at-Large: Anne Swanson

Christopher Goodgame

Education Chair: Darla Harris
Hospitality Chair: Anne Swanson
Library: Fred Robinson

Membership Chair: Christopher Goodgame
Newsletter: Christopher Goodgame

Spore Exchange: Patrick Hudnall
Ways and Means: Larry Rucker
Raffle, Store, etc. Rick Dow

Web Master: Malcolm McCorquodale

Welcoming at Door: TBD

## 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 <a href="https://www.amerfernsoc.org/">https://www.amerfernsoc.org/</a>

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#### **Door Prize:**



Rick Dow wins the door prize, a Neoblechnum brasiliense AKA Blechnum brasiliense!

# Name Change:



I call it the Australian Tree fern, because that's what I grew up calling it. It was the first tree fern I grew as a young man. For most of us the Australian Tree Fern is the first "Tree Fern" we ever tried to grow. Common names also include Cooper's tree fern, Coin-spot tree fern, Lacy tree fern, Rough tree fern, and Scaly tree fern. Here in the Houston area, you may have good success with one for some time if properly cared for. It is likely the only tree fern you'll find available in nurseries in our area. Sometimes you'll see cultivars as 'Brentwood' and rarely 'Robusta'. Chances are you will find the name on the tag as one of 3 names. I was surprised to see it currently listed by Monrovia Nursery as Alsophila australis. That name is however was always incorrect and belongs to a seldom cultivated tree fern. For a long time, it had been referred to as Cyathea cooperi.

Most publications you find in stores and online will use this name, sometimes having a note listing the synonym (syn) Sphaeropteris cooperi. Now the name has been properly changed to **Sphaeropteris cooperi**. The species name "cooperi" honors British naturalist Danie Cooper.

This change is referenced in a publication by Ashley R. Field, 2020, in Australian Systematic Botany which details a classification and typification of Australian lycophytes and ferns, aligning with the Pteridophyte Phylogeny Group (PPG I) classification. This specifically notes that Sphaeropteris cooperi is (now) the accepted name for what was previously known as Cyathea cooperi.

From: Cyathea cooperi

To: Sphaeropteris cooperi

#### The July Meeting

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July 20, 2025

Texas Gulf Coast Fern Society

The meeting was held at 2:00pm at the Justin Robinson Community Center in Hermann Park.

Approximately 16 members were present. The "Go to Meeting" was streamed to members who could not make it to the in-person meeting. One person attended the meeting online.

Presentation on "Filmy Ferns", presented by Dan

Southern New Zealand is very wet so filmy ferns grow very well there.

He was friends with Bronwyn Gundogdu, a great fern enthusiast. She suggested to him that he give a presentation on filmy ferns. The photos in the first part of the presentation were hers. Unfortunately, she has since passed away.

New Zealand has 18 species of filmy ferns. **Hymenophyllum nephrophyllum**, commonly known as the Kidney Fern is much sought after. Hymenophyllum australe is an epiphyte which hangs down from tree branches. *H. franklinae* have fronds that look very moist. *H. multifidum* grows on moss. *H. demissum* has very thin fronds that are wet almost all of the time.

There are different types of ferns: Tree Ferns, Woodland Ferns and Filmy Ferns.

General Characteristics of Filmy Ferns: Almost all are epiphytes. All have a waxy stoma. During dry times, the stoma will close to keep moisture inside. They are only one cell deep which means they are very thin. Veins are

dichotomous. Rhizomes are thin and wiry with no rhizome scales. They live only in wet locations.

Filmy ferns have evolved since Cretaceous times, so they are ancient ferns. They do quite well in moist areas. There are 650 species worldwide. They break down into three genera *Hymenophyllum*, *Trichomanes*, and Vandenboschia. The genus Hymenophyllum has 250 species. *Trichomanoideaeis* is a subfamily with approximately 400 species & 8 genera. The genera are Abrodictyum, Cephalomanes, Trichomanes, Callistopteris, Polyphlebium, Didymonglossum, Crepidommanes and Vandenboschia. These are commonly called Bristle Ferns. It is thought that the bristles on these ferns help to distribute water.

Filmy ferns typically grow on clay stream banks. The clay soil helps provide good drainage giving the plants wet but not waterlogged soil. Lithophytes grow on rocks. Most of the water is absorbed by the fronds and the roots help to stabilize the plant onto the rock. Epiphytes grow on trees, logs or in moss. They are also found growing on tree ferns and in the cloudy rain forest. Most are pinnatifid with leaves having a broad base. Located on the ends of the pinnate are the sori.

Unusual forms of filmy ferns.

<u>Hymenophyllum marginatum</u> is a tiny plant that grows on rocks, logs and tree trunks in wet forests.

<u>Crepidomanes minutum</u> have very tiny fronds that are only ½" wide.

**Didymoglossum petersii** looks like a liverwort.

**Didymoglossum membranaceum** grows on the bark of trees.

<u>Trichomanes digitatum</u> have fronds that look like digits of a hand.

**Abrodictyum meifolium** looks like a bristle brush.

<u>Callistoperis apiifolia</u> is a beautiful red color as frond emerges then turns green.

**Polyphlebium venosum** has small leaves that look like a gingko leaf.

<u>Crepidomanes intricatum</u> occurs only as a gametophyte. No one has seen it as a sporophyte. It can only spread in water or rain. Grows on the east coast of the U.S.

<u>Didymoglossum punctatum</u> grows only on a clay slope.

Filmy ferns curl up when dry but resuscitate when rehydrated.

How to obtain filmy ferns: Spore propagation, division of rhizome or purchase a plant from the internet or at fern/orchid shows.

Propagation by spores is hard to obtain. Spores are green and loose viability quickly. To grow from spores,

grow on moss. Filmy fern gametophytes are linear. Gametophytes multiply by means of gemmae. Gemmae are specialized, small, asexual reproductive structures. They are essentially miniature, detached plantlets that can develop into new ferns under favorable conditions. They can be washed away by vigorous watering, but a new one will grow back.

The easiest way to propagate is by rhizome division but you will need a good size rhizome for a better chance of survival. In the 1800's during the Fern Mania (Pteridomania), you could purchase a huge selection of filmy ferns by perusing plant catalogues. Nowadays, you can purchase them in aquarium stores, on Etsy & eBay, or going to a Fern/Orchid show. These specimens are sometimes collected from cloud forests. The cheapest filmy ferns are about \$10 from local aquarium stores. There is a growing market for filmy ferns to grow in terrariums.

If purchased online, the root ball is often wrapped in twine. Carefully, cut away the twine and gently spread out the root ball. Some filmy ferns are sold online in moss for \$45 for a tiny specimen. Some are attached to tree fern fiber. This is a nice way to attach the specimen to an existing tree branch. You can purchase epiphytic filmy fern online and put it on a tree fern fiber. All specimens need strong root growth.

How to grow filmy ferns:

They need to be planted or mounted correctly. Typically, look at how the fern grows in nature and imitate that. Do not plant in potting soil. Turface (clay aggregate) or small lava rock are an acceptable potting medium. Sphagnum moss is okay, but it must be loosely packed. Tree Fern fiber is also acceptable. Check to make sure if in nature, does it grow upright (horizontal mount) or does it hang down (vertical mount). Use moss and fishing line to secure it to the mount. Some filmy ferns like *Crepidomanes javanicum* grow on a vine so this specimen grows upright. The suitable mounting material is redwood, Tree Fern fiber or lava sponge rock.

Filmy ferns need 90% - 100% humidity. It is hard to create this kind of humidity.

They also need low light levels. Dan uses north window exposure. These plants often grow in a cloud forest so light should be diffused.

Dan tried to grow Filmy Ferns in an aquarium. His first attempt was not very successful. The ferns lived but did not thrive. In a 10 gallon aquarium, he added 1" of water on the bottom then an egg crate to lift the plants above the water. He then used a little heater to keep the plant in warm water and used a low-level wattage for light.

His second attempt was more successful. He used a 40-gallon vertical aquarium to increase humidity. Again, there was an inch of water on the bottom but this time he used distilled water only. He used an 8-watt heating pad to heat up the water. This caused the water to evaporate and so humidity increased. The water temperature was 3-4 degrees above ambient temperatures. & situated it on a north facing light. The top of the aquarium was closed by using a Styrofoam "lid".

In his third attempt, he started to hang the filmy ferns a little more than halfway up the side of the vertical 40-gallon aquarium. The ferns started to thrive. His conclusion was that there was more air movement because the humid air was rising. Also, there was more distilled water condensation.

In Dan's fourth attempt, he replaced the Styrofoam lid with a polycarbonate lid. This caused extreme condensation which looked like it was raining in the terrarium. It became too wet.

In a terrarium, hanging filmy ferns will do better than those placed on the bottom. Dan is not sure if it is the humid air movement that makes the fern grow healthier.

To grow filmy ferns outside of a terrarium, keep roots moist not soggy. Filmy ferns can grow on mounts or by a waterfall. He uses cork mounts and hangs them in his moist greenhouse.

There is an excellent resource on filmy ferns on the Exotica Esoterica website. The article is named, "Tropical Ferns in Nature & Cultivation" by Jay Vaninni.

https://www.exoticaesoterica.com/magazine/tropical-ferns-in-nature-amp-cultivation

Darla Harris purchased a \$10 filmy fern at Petco. She demonstrated how to cut the string that held the root ball in place. The specimen showed a lovely dendritic pattern on the leaves. Fronds were almost transparent.

Question & Answer:

Q-What is the easiest filmy fern to grow?

A-Try online ferns. When the specimen arrives, carefully open the root ball and attach it to Tree Fern fiber. You could also try to grow it in an aquarium. He purchased some ferns on Etsy and they are growing just fine.

Q-If the bottom level heat on the terrarium is an 8 watt reptile heater, what is the top level heat?

A-Top level heat is the room temperature. Room temperature is usually 80° during the summer. The bottom heater does not heat the water too much. Most filmy ferns are from the cloud forest so than can take cooler temperatures.

Q-Where on the East Coast do filmy ferns grow?

A-West Virginia and Tennessee. Moure inland in the Appalachian Mountains. If you want to see a lot of them, go to a cloud forest.

Q-Online member asked what type of filmy fern she has in her collection.

A-A species of *Trichomanes* or Bristle Fern.

Q-Do you use fertilizer on them?

A-Occasionally a weak solution is applied onto the roots.

A Society member meeting was held after the raffle.

Elections are held in October and representatives start to serve the following January.

In August, Darla Harris will bring examples of the Platycerum group. She will bring in the four giants. Then follow up with information on planking.

Darla is also finalizing speakers for next year.

We need volunteers for Bulb Mart which is held on October 9-11.

For the November meeting, there will be a discussion on what ferns do well outside in our area without frost protection.

There was a discussion on whether TGCFS could put up a fern display at PlantCon next year. The display would include a variety of ferns from different groups.

Meeting was adjourned at 3:45pm.

Respectfully submitted by Ceil Dow.

#### From the Library:

The Home Gardener's Book of Ferns; by John Mickel with Evelyn Fiore; Ridge Press; 1979; 256 pages; photo illustrations.

#### by Bob Swanson

John Mickel had the title of Curator of Ferns at the New York Botanical Garden. And I think many of us would love to have a title like that. "The Home Gardener's Book of Ferns" would be a splendid introduction to ferns for most people. The book is a gentle, engaging introduction to the world of ferns, written with the kind of warmth and clarity that makes gardening feel accessible to everyone. The author shares his deep love for these plants without overwhelming readers with technical details, making it ideal for both beginners and seasoned green thumbs.

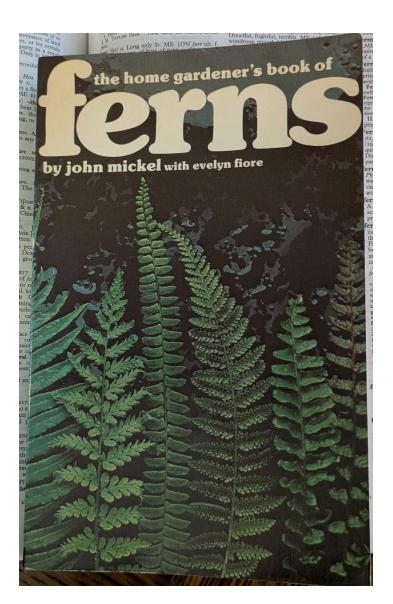
When I look at the illustrations it takes me back to the 1970s. It has those sort of black-and-white photographs, with a few line drawings thrown in.

"...the name itself, traceable back through the Old English 'fearn' to the Sanskrit 'parna' has always meant 'wing' or 'feather'" sent me into my OED to check, but alas the etymology in my abridged copy only went back as far as Western Germanic.

There are practical tips here. From identifying different fern varieties to learning how to care for them indoors or out, the book covers all the essentials in a way that's easy to follow. The advice on placement and propagation is especially handy for anyone looking to add a bit of lush greenery to their home or garden. Some things, of course, are outdated. I wouldn't follow his instructions on how to go to other countries to get ferns in the wild and import them. I'm certain the laws have changed on that process, at both ends, in the last fifty years.

Overall, this is a charming and useful guide that's as enjoyable to read as it is informative. Whether you're looking to start a fern collection or just want to keep your existing plants thriving, The Home Gardener's Book of Ferns is a great companion. It's a lovely blend of inspiration and instruction—perfect for your next gardening adventure.

One last anecdote from the book. When Ben Franklin was printing early money for the United States, he included ferns (Dryopteris intermedia) in his designs to thwart counterfeiters. Dr. Mickel passed away late last year. His obituary can be found here: John T. Mickel (1934-2024) | New York Botanical Garden





# **The Giant Four Platyceriums**

By Darla Harris

Platycerium holtumii

Platycerium holtumii is the smallest of the Giant Four and a pretty fast grower. It is said to be tender as far as cold hardy, but ours has been to nearly freezing with frost protection.

P holtumii resembles the P. grande and the P. wandae but much smaller as a grown plant. It is endemic to southeastern Asia and the Malay Peninsula, which is a seasonally rainy location during these plants growing season and dry during its rest period.

It does not like strong insecticides and can get black fungus pretty easy if the plant is damaged or over watered. It has responded well by treating it with cinnamon for the fungus for me provided you catch it soon.

We feel this is an easy one to grow in our Texas climate. It looks nice all year and does not lose its fertile fronds before the new one's art set. I would recommend growing this giant!



Platycerium holtumii



P. holtumii