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Fiddlehead Forum

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Editors: Joan Nester-Hudson and David Schwartz

Ferns of the Atchafalaya Basin and Avery Island, Louisiana - Fern Foray 2013

by Mary Stensvold

At 8:15 on Saturday, July 24, thirty-three fern enthusiasts, in search of ferns, piled onto a very comfortable bus and cruised out of the New Orleans Hilton bus tunnel. We travelled southwest, bound for the Atchafalaya River basin and Avery Island. Atchafalaya River basin is part of the huge Mississippi River delta system. Over the millennia the Mississippi's mouth has changed location many times, moving east and west across the delta. The Atchafalaya River is a secondary mouth of the Mississippi. At 137 miles long, the Atchafalaya is relatively short, forming at the confluence of the Red River and the Mississippi River. Because of concerns that the Atchafalaya would capture and cause a major reroute of the Mississippi River; the Army Corps of Engineers built river control structures just upstream of the confluence, continuing to allow 30% of the Mississippi River to drain into the Atchafalaya River. Southern Louisiana is made of soil from the middle part of North America that has washed down the Mississippi and deposited on the delta. This fertile flat land combined with large amounts of water and a subtropical climate results in an intricate complex of swamps and waterways.

Much of our route was on an elevated freeway crossing vast expanses of bald cypress (*Taxodium distichum*) swamps, very wild looking country. Meanwhile, fascinating fern conversation filled the bus. About 60 miles southwest of New Orleans we stopped at Wilson's Kountry Korner grocery/gas station in the tiny community of Chacahoula. Here we had a rest stop and chance to buy some junk food to tide us over until lunch. More importantly, we found our first fern, resurrection fern (*Pleopeltis polypodioides*). This epiphytic fern was growing on large branches of an old southern live oak (*Quercus virginiana*). Most importantly, this is where we joined our guide for the day, Garrie Landry, a biology Professor at the University of Louisiana, Lafayette. He gave us a handout that included a checklist for ferns of south central Louisiana, and a publication: Botanical Study of the Five Islands of Louisiana, by W. D. Reese and J. W. Thieret (*Castanea*, Volume 31, No. 4, December 1966). Avery Island, our final destination is one of those five islands.

The bus dropped us off at our first formal fern stop about three miles north of Chacahoula. We were on a road cutting through a forbidding bald cypress-tupelo swamp (*Taxodium distichum*, *Nyssa aquatica*). We searched swamp pools for the extremely rare, floating antler fern (*Ceratopteris pteridoides*). Garrie had made a special "*Ceratopteris* grabber" out of a long pole and small rake-head, which he used to scoop the floating ferns from the water (Fig. 1, next page). This allowed us a closer look at these unusual ferns. The leaves of this fern are dimorphic, the sterile leaf has broad

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The Editors of FIDDLEHEAD FORUM welcome contributions from members and friends, including miscellaneous notes, and reviews of books on ferns. Articles may be submitted electronically by e-mail, on disk (PC compatible) or typed.

Regular membership in the American Fern Society is on a calendar-year basis and includes access to field trips and the spore exchange. Regular members receive the *Fiddlehead Forum,* but not the American Fern Journal, for $15 (to U.S.A., Canada, and Mexico) Regular members in other countries receive the *Fiddlehead Forum* for $22. Individuals interested in regular or journal membership should contact the membership secretary.

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Fig. 1. The "*Ceratopteris* grabber" in action, preparing to grab a floating antler fern. Garrie Landry is on the right. Photo by Chris Haufler.

lobes, and the fertile blades are finely cut. Besides reproducing via spores, this fern also reproduces via buds that form in notches along the leaf margins. The plantlets arising from these buds are shown in Figure 2. Floating antler fern is growing at its northern range limit in Louisiana; it also grows in Florida, central and south America, southeastern Asia, India and China and is commonly sold as a "water sprite" aquarium plant because of its fast growth rate and ease of propagation. In swampy ditches along the road edge we saw several other ferns: marsh fern (*Thelypteris palustris*), common scouring rush (*Equisetum hyemale*), and Ferriss' horsetail (*Equisetum* x *ferrissii*). Ferriss' horsetail is a hybrid between tall scouring rush (*Equisetum hyemale* subsp. *affine*) and smooth scouring rush (*Equisetum laevigatum*). Because it is a hybrid between two species it does not produce viable spores, instead it reproduces vegetatively

Fig. 2. Floating antler fern (*Ceratopteris pteridoides*) plantlets emerging from notches in the fern's leaf margins. The fern was released to its ditch. Photo by Chris Haufler.

through its spreading rhizomes. Garrie pointed out the interesting fact that if the above-ground green stems are cut or mowed in to fragments, each green fragment is quite capable of producing a new plant. Floating stem fragments in water will quickly produce roots and small stems at the nodes, which will then become full size plants.

Floating on the water's surface was a mat of water spangles (*Salvinia minima*) (Fig. 3, next page). Water spangles is an invasive plant in North America. This tiny fern invaded southern and eastern states from an initial introduction to Florida about 80 years ago (water spangles are native to central and south America). This rapid spread is due to its tiny size and reproduction through fragmentation, these ferns and fragments are accidently moved from water body to water body via boats, boat trailers, animals, and flooding. It is interesting to note that water spangles is not included in J. W. Thieret's *Louisiana Ferns and Fern Allies*, published in 1980. Now, 33 years later, this invasive plant covers great expanses of Louisiana's still waters. At this one stop we saw five species of ferns displaying four modes of reproduction: spores, budding, spreading rhizomes, and fragmentation.

Just as a thunderstorm started to dump torrents of rain, the bus arrived to pick us up. Our next stop was relatively close by, near the town of Gibson. The ecosystem at this stop was similar to the previous stop; again, water played a major role in the ecosystem (and atmosphere--we were dodging rain squalls associated with thunderstorms). Ferriss' horsetail was growing at the edge of a swamp pond. The surface of the water and associated ditches were covered with water spangles. Among the water spangles we saw another, much

smaller floating fern, Carolina mosquitofern (*Azolla caroliniana*), a native plant, which is distributed across the eastern half of the United States. As we were hurrying back to the bus (outrunning the rain) we saw a royal fern (*Osmunda regalis*) at a distance of about 50 feet across a swamp. No one was brave (or foolhardy) enough to launch into the swamp and closely examine the plant.

Fig. 3. Water spangles (*Salvinia minima*) floating on the water's surface. The water spangle leaf is about ½ inch long. Photo by Mary Stensvold.

We then drove about 35 miles west to an important stop: lunch at the Forest Restaurant in Franklin, where we enjoyed a variety of real Cajun foods. After lunch we continued west across the very flat Atchafalaya delta toward Avery Island. Avery Island is one of five salt dome "islands" that are aligned in a northwest-southeast trending line (they are Jefferson Island, Avery Island, Weeks Island, Cote Blanche Island, and Belle Isle). These salt domes are surrounded by land, yet are called islands because they arise out of the flat delta and support ecosystems much different than those of the surrounding delta.

The numerous salt domes in the southern United States are located on land and offshore on the adjacent continental shelf. They originated from layers of salt that were deposited as an ancient sea filled and evaporated many times. Subsequently, thick layers of sediment covered the salt. Because the salt is lighter than the sediment (now rock) the salt slowly rose through weak areas in the overlying rock; the upwelling salt rose as blobs and columns (think, Lava Lamp). Some of the salt masses are close enough to the surface to protrude from the surrounding delta as visible domes such as the five islands.

As we were driving toward Avery Island, Garrie called our attention to one of the salt domes, Weeks Island, about eight miles in the distance. Although it was noticeable in the flat landscape, we would not have seen it had he not pointed it out. Now we were driving through farmland dominated by sugarcane plantations. As we approached Avery Island via a side road, farmlands gave way to sawgrass prairies. Sawgrass is not a grass, but a sedge (*Cladium jamaicense*). Garrie had special permission to lead our group to parts of Avery Island that are off limit to the public, so we whisked through gates and past "no trespassing signs" to be deposited in the middle of the Island near the entrance of a salt mine. People have used Avery Island salt since prehistoric times; now the island supports a large salt mine. In addition to salt, Avery Island is the home to Tabasco Sauce, a hot pepper sauce. In the late 1860s

an island resident, Edmund McIlhenny, mixed capsicum peppers from his garden with salt and vinegar -- Tabasco Sauce was born. Peppers are still grown on the Island and the sauce is still made here. Much of the island has been altered by human development, salt mines, pepper fields, a sauce factory, roads, canals, oil exploration, manicured areas and secluded residential areas. However, about half of the Island remains as mixed upland deciduous forest. Figure 4 shows Avery Island protruding above surrounding swamp and prairie, as well as the mosaic of land uses and forests on the Island.

After being dropped off we walked up a dirt road toward a pond called Blue Hole. The vine-like Japanese climbing fern (*Lygodium japonicum*) was weaving itself among the trees along the road to the pond. The leaves of this fern are extremely long, each "fern leaf" borne on the climbing tendril is a pinna, and the climbing tendril is the leaf's rachis. The pinnae are dimorphic, sterile pinnae are not as finely cut as the fertile pinnae. Sterile and fertile pinnae are pictured in Figure 5. Japanese climbing fern is not native to the Americas; it was introduced to the American south in the early 20th century from eastern Asia. As we approached Blue Hole's shore we saw a large live oak supporting an attractive population of resurrection fern (Fig. 6). When the weather is dry the leaves of these ferns dry out and curl up, when they have enough moisture they unroll, rehydrate and come back to life; thus the name "resurrection" fern. Near the Blue Hole there is a shaded gully in the forest with an interesting array of ferns, but because water levels were high we could not clamber down to see them. From the edge of the gully we could peer down and see a Christmas fern (*Polystichum acrostichoides*). At the forest edge, along the forest/manicured meadow ecotone, we also saw ebony spleenwort (*Asplenium platyneuron*) and downy shield-fern (*Thelypteris dentata*).

Fig. 4. Avery Island, a little more than two miles wide, is surrounded by swamps and prairies. Image from Google Earth.

Fig. 5. Japanese climbing fern showing sterile and fertile pinnae. Photo by Mary Stensvold.

Fig. 6. Resurrection fern growing on a live oak branch at Blue Hole pond. Photo by Chris Haufler.

Fig. 7. Fern foray participants walking along Pepper Field Road through an upland deciduous forest. Photo by Mary Stensvold.

Next we walked south on Pepper Field Road toward what Garrie called "a rookery". Walking on this narrow road through the forest was very pleasant; forest plants were interesting and the sun came out and birds were singing (Fig. 7). Here we found southern shield-fern (*Thelypteris kunthii*) growing at the edge of the road on exposed soil (Fig. 8). As we approached a pool called Saline Woods Pond, we could easily see large white birds perched in the trees on the Pond's far side (Fig. 9). This is part of a large colony of snowy egrets, the colony was established by Edward Avery McIlhenny, in the 1890's. The hat-feather industry was eradicating snowy egrets, and he was concerned

Fig. 8. A luxurious clump of *Thelypteris kunthii* growing along Pepper Field Road between Blue Hole Road and Saline Woods Pond. Photo by Mary Stensvold.

about their potential extinction. So he gathered the eight young egrets that initiated this nesting colony. Birds and their allies were impressive at Saline Woods Pond, which was almost entirely covered with water spangles, as shown in Figures 9 and 10.

It was time to head back to New Orleans, so we returned to the salt mine and awaiting bus. On the way back we gave our sincere thanks to Garrie for a wonderful trip and dropped him off at Franklin, in the middle of Cajun country. The drive was long, but the time went quickly because the conversation was lively and the passing landscape was interesting. With a large dose of strange and interesting ferns, food, geologic features and animals, we had a fine fern foray.

Fig. 9. Snowy egrets (white dots) perched in trees on the far side of Saline Woods Pond; note water spangles covering the surface of the pond. Photo by Mary Stensvold.

Fig. 10. Close up of water spangles nearly covering Saline Woods Pond. An alligator's head is barely visible. Photo by Chris Haufler.

Fig. 11. Three generations of pteridologists enjoyed the foray, including Donald Farrar (center) and Eddie Watkins (left). Photo by Chris Haufler.

Ferns we saw in the Atchafalaya Basin and on Avery Island:

Scientific and common names	Atchafalaya Basin	Avery Island
Asplenium platyneuron (ebony spleenwort)		X
Azolla caroliniana (Carolina mosquitofern)	X	
Ceratopteris pteridoides (floating antler fern)	X	
Equisetum x *ferrissii* (Ferriss' horsetail)	X	
Equisetum hyemale (common scouring rush)	X	
Lygodium japonicum (Japanese climbing fern)		X
Osmunda regalis (royal fern)	X	
Pleopeltis polypodioides (resurrection fern)	X	X
Polystichum acrostichoides (Christmas fern)		X
Salvinia minima (water spangles)	X	X
Thelypteris kunthii (southern shield-fern)		X
Thelypteris dentata (downy shield-fern)		X
Thelypteris palustris (marsh fern)	X	

From the Fiddlehead Forum, 1992. Vol. 19, No. 6, pg 42.
Reprinted for the Holiday Season. Enjoy!

A group of botany graduate students, under the tutelage of Don Farrar, undertook the study of pteridophytes during the 1991 summer session at Iowa State University. Part of the course involved a field trip to the Upper Peninsula of Michigan, culminating in a *Botrychium* fest in the Grand Sable Dunes area near Grand Marais, Michigan.

After a week of intensive ferning and many hours of van riding, certain melodies and lyrics began drifting through the minds of the class, and the spores for the *Botrychium* carols were sown. The carols came into being later while waiting for the final practical exam. They are dedicated to Don Farrar, the tireless leader of the class who had to be led to (forced into?) the van by flashlight at the end of each day! Thanks for the memories! -- *Ned Crane, Cynthia Dassler, Deb Lewis, and Susan Reiter, Department of Botany, Iowa State University, Ames, Iowa 50011*

Dashing Through the Dunes

(to the tune of "Jingle Bells")

Dashing through the Dunes
one species on our minds;
Butts high in the air,
flagging all our finds.
Don told us what it is,
but I don't see it yet.
How will I ever know with just
this silly silhouette?
Refrain:
Botrychium, Botrychium hiding in the grass.
Oh what fun it is to find *B. pallidum* at last.

The Twelve Days of the Field Trip

(to the tune of "The Twelve Days of Christmas")

On the first day of the field trip, Don did give to me,
1. *B. matricariifolium*
2. Two I didn't know
3. Three hybrids
4. Four small ferns
5. Five new species
6. Six to send to Wagner
7. Seven bugs-a-biting
8. Eight forms of *simplex*
9. Nine keys to sing in
10. Ten cryptospecies
11. Eleven new fern papers
12. Twelve xerox silhouettes

Botrychium matricariifolium

Botrychium, Botrychium

(to the tune of "O Christmas Tree")

Botrychium, Botrychium
How lovely are your pinnae.
Botrychium, Botrychium
How lovely are your pinnae.

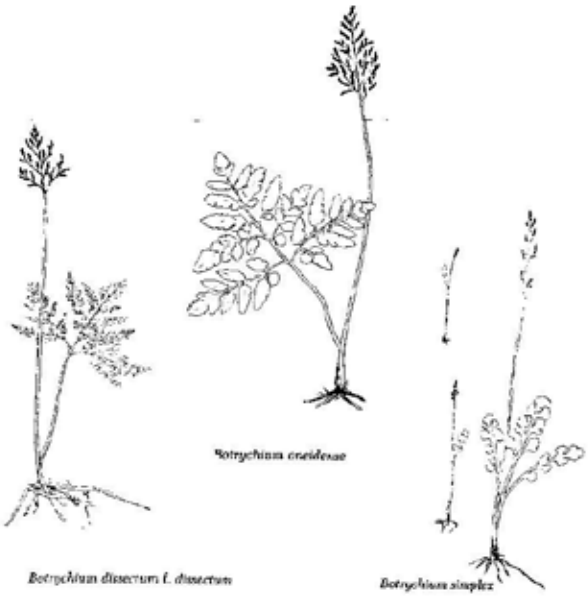
1. Go to the Dunes, get on your knees
look under all the cedar trees.

Refrain:
Botrychium, Botrychium
How lovely are your pinnae.

2. Your sporophore, your trophophore,
One species here, there must be more.

Repeat Refrain between each verse.

3. Some reproduce by small gemmae.
They owe these to *B. campestre*.
4. So many forms of *B. simplex*,
so many xerox silhouettes.
5. Pegasus wings will indicate,
the pinnae are acuminate.
6. *B. minganense, B. spathulet*,
we're not sure of your parents yet.
7. *B. pallidum* is hard to find.
You must display your quarters-hind.
8. *Hesperium*, oh how I wish,
you didn't smell so much like fish.
9. If anyone finds *lanceolatum*,
make sure that you congratulatum.
10. *Sceptridium*, there's two I sense,
multifidum and *oneidense*.
11. In many forms, but only one
B. matricariifolium.
12. *Virginianum*, I know you
from rocky woods and sand dunes, too.
13. Well, I'll be damned - *lunaria*!
Botrychium hysteria.



Botrychium oneidense

Botrychium dissectum f. dissectum

Botrychium simplex

The 6th Asian Fern Symposium
26-28 August 2014 Bali Botanic Garden
Asian fern research: how far can we go?

url: www.ptti.or.id/afs2014

contact: Dr. Dedy Darnaedi (darnaedy@gmail.com), Dr. Bayu Adjie (bayu.adjie@lipi.go.id)

The **Asian Fern Symposium** is a meeting for fern scientists who work in Asia or work with Asian ferns. The 6th Symposium will be held at the Bali Botanic Garden, Indonesia in August 2014. It is a collaboration between LIPI and PTTI. This event is held in conjunction with the Bali Botanic Garden's 55th anniversary.

All scientists, students, and fern lovers are invited to present their works either in oral presentations or posters. This meeting is also a good opportunity to share ideas and knowledge, as well as networking.

Penggalang Taksonomi Tumbuhan Indonesia (PTTI) or Indonesian Plant Taxonomy Society is the only professional non-profit organization in plant taxonomy, biodiversity and conservation in Indonesia.

Bali Botanic Garden is unique in Bali as a place for botanical research, conservation, education and recreation. It provides a place where you can relax in beautiful and peaceful surroundings while learning about the use of plants in the daily lives of Balinese people as well as many interesting tropical rainforest plants and birdlife.

Maurice Broun - Botanist and Ornithologist

by J.A.Lankalis, jalank@verizon.net

I recently purchased the new *Peterson's Field Guide to Ferns* to catch up on the latest taxonomy. I had been away from ferns for more than 35 years. I noticed that there were a few mistakes in it, but I would like to call attention to one particular mistake on the top of page 124. It reads, "*Diplazium pycnocarpon* (Spreng.) M. Brown." Everywhere my mentor, Maurice Broun went, his name was always misspelled and mispronounced. Brown should be Broun and pronounced Broon.

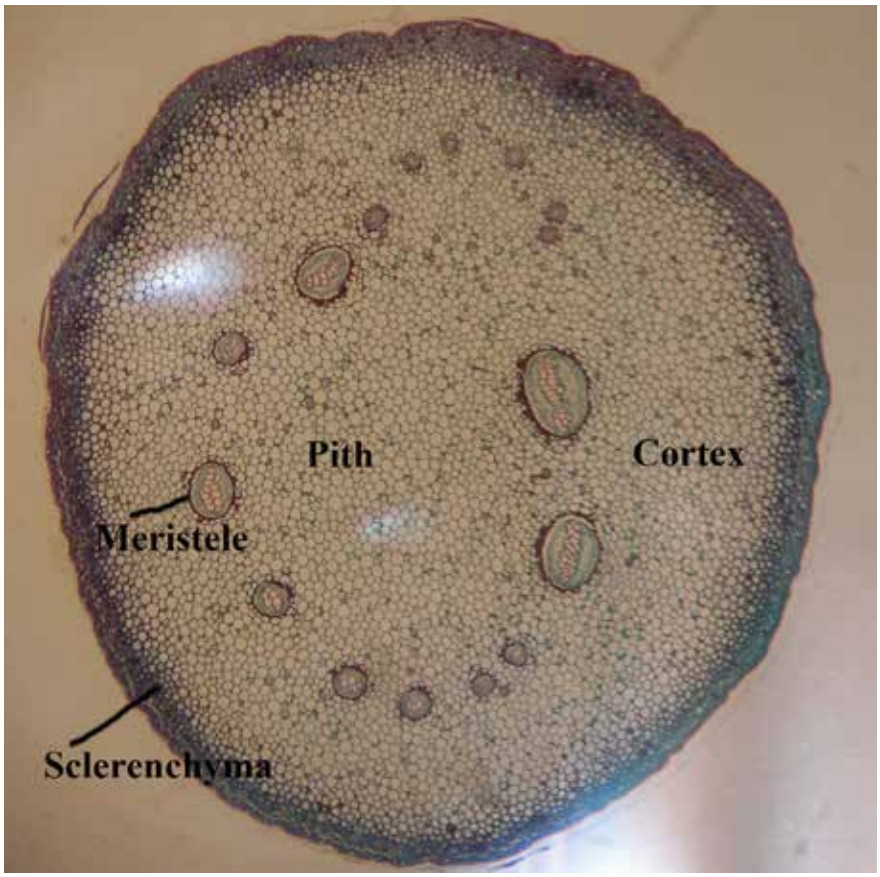
Maurice's forte was birds. He was also an accomplished botanist and started studying ferns in the mid 1930's. In 1938, he published in the AFJ that *Athyrium pycnocarpon* really belongs in genus *Diplazium*. The new second edition of Peterson's Field Guide agrees. Maurice published in 1938 his *Index to North American Ferns*. This book lists all of the North American ferns and articles published about them. This book is now obsolete due to being replaced by the internet.

Maurice was raised in an orphanage and only had a high school diploma. His interest in birds lead him to be granted an honary Doctor's degree from Muhlenberg College in Allentown. He was the first curator at Hawk Mountain Sanctuary. Each fall, hoards of hunters showed up there to slaughter hawks by the thousands. Rosalie Edge purchased the mountain and in the fall of 1934, and Maurice single-handedly turned away the disgruntled hunters.

Maurice was a personal friend of mine. When I first started studying ferns in 1970, I was delighted to learn that he lived only 11 miles from me. He was my mentor. Maurice succumbed to stomach cancer in 1979. He was instrumental in providing protection for raptors. Photos and a more thorough biography can be found on the internet.

Polypodium rhizome in cross section

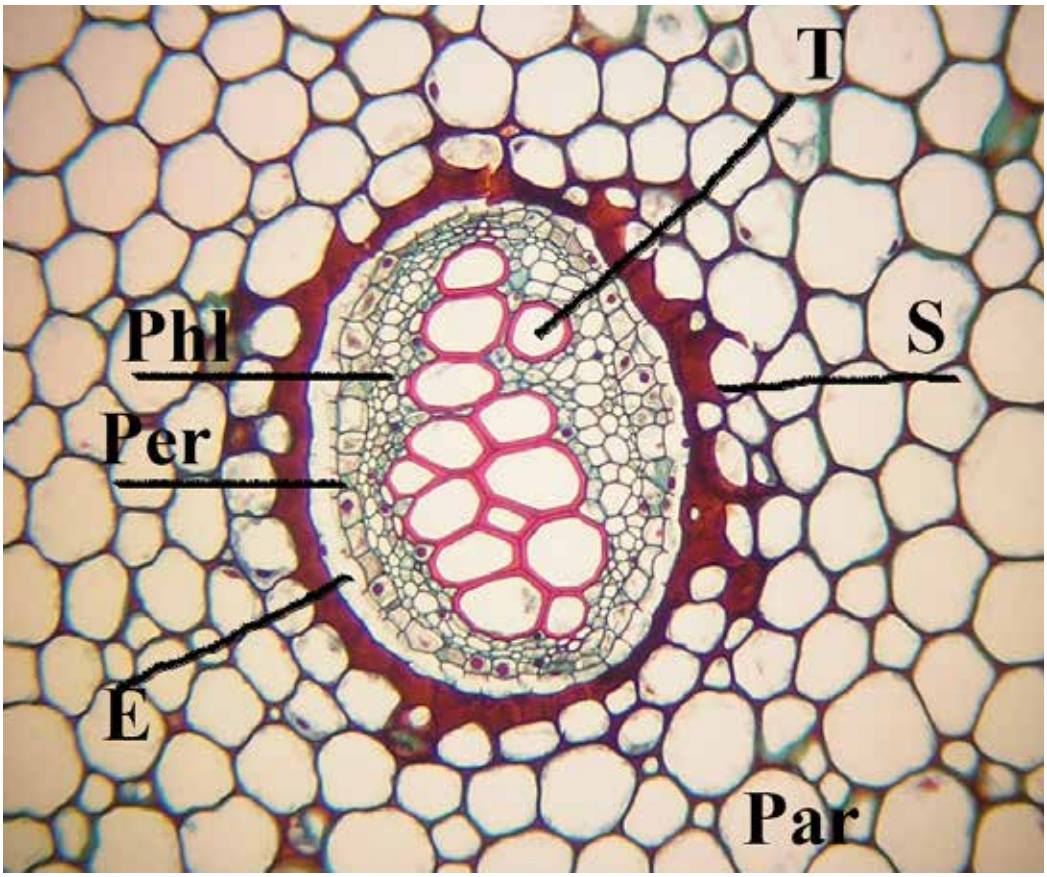
by Joan Nester-Hudson



I teach a plant morphology class and the students study a *Polypodium* rhizome in cross section. I am always fascinated with the different cell types and their organization in this rhizome.

At left is the cross section of *Polypodium loriceum* rhizome viewed with the dissecting microscope and with the compound light microscope (below). The slide is over 25 years old and from Triarch, Geo. H. Conant, Ripon, Wisconsin.

The pith, cortex, meristele and cortex schlerenchyma are identified in the microggraph at left. The pith and cortex are pimarily parenchyma cells. The sclerenchyma is for support/strength. This rhizome is approximately 4 mm in diameter.



The photomicrograph at left is an enlargement of the indicated meristele (above)

T = tracheids of the primary xylem which have a thick secondary cell wall and are dead at maturity, transporting water and dissolved minerals.

Phl = primary phloem which surrounds the xylem and transports sugar dissolved in water.

S = sclerenchyma cells - thick-walled cells which surround each meristele.

Per = pericycle

E = endodermis - some of the cells are torn because it is difficult to section through the scherenchyma.

Par = Parenchyma cells

TREASURER'S REPORT FOR 2012

April 22, 2013

TO: A.F.S. COUNCIL AND OTHER MEMBERS OF THE SOCIETY

Ladies and Gentlemen:

I have the pleasure of presenting to you a report on the financial condition of the American Fern Society, Inc., for the year 2012.

Current receipts amounted to $61,214.11. With $4,068.31 in my checking account and $2,537.47 in the Membership Secretary's savings account at the beginning of the year, the grand total of receipts was $67,819.89. Receipts from the dues category amounted to $20,474.11. This figure includes dues received by the Membership Secretary from the British Pteridological Society and dues received by the Treasurer from BSA by online transactions. The Membership Secretary received three life memberships this year. Gifts were about one-third less than the amount received last year. The society received no bequests and very little income from the Spore Exchange. Sales of back issues/volumes were about the same as for last year, and sales of Pteridologia were about three times more than last year. Receipts for page charges were about two-thirds less than for last year. Interest earned from checking and savings bank accounts was about half the amount this year than the amount for last year due to a continued downturn in the national economy. Revenue from Bio One, JSTOR, the Copyright Clearance Center, and the Gale Group was about $1,000.00 higher this year than last. The revenue from these organizations is a valuable help in paying expenses. The society received no Botany 2012 meeting revenue share this year from BSA. A statement on the financial status of the several accounts accompanies the Treasurer's Report along with a statement of assets and liabilities. Overall, the receipts for 2012 were higher than for 2011 due to a slight increase in receipt of dues, revenue sharing, and a large withdrawal from savings to pay for the production and printing of Pteridologia 4 and increased costs of printing and mailing issues of AFJ.

Current disbursements amounted to $58,109.00. With $5,496.67 in the Treasurer's checking account and $4,214.22 in the Membership Secretary's savings account at the end of the year, the grand total of $67,819.89 balances with the grand total of receipts. Journal and bulletin printing costs were much higher this year than last due to the introduction of Pteridologia 4, and increased costs for AFJ as mentioned previously. The journal and bulletin editors continue to do an excellent job in keeping expenses to a minimum, and the journal editors in encouraging the payment of page charges by publication authors. Other Council members' expenses were in the expected range as were other expenses.

There was a problem in the dues reconciliation program between the American Fern Society and the British Pteridological Society. I sent an international draft for $2,389.67 in Great Britain Pounds to the Treasurer of the BPS Gillian Smith last August. She forwarded the draft by mail to the bank in London where BPS has an account. The draft did not arrive to the BPS account. I stopped payment on the draft and was refunded $2,178.66 last November. The $202.01 loss was due to the change in rate of exchange at that time. I sent the $2,178.66 in GBP to the BPS bank account by electronic wire. The transaction appears on the January, 2013 bank statement and thus will be reported in the 2013 Treasurer's Report along with the 2013 reconciliation payment.

In spite of the financial problems, I am pleased to report to you that the society is in a sound financial condition. In anticipation of 2013 invoices, there was not enough money left over in the treasury at the end of the year to add funds to the savings certificates.

I wish to thank the Membership Secretary, Dr. George Yatskievych; the Journal Editor-in-Chief, Dr. Jennifer Geiger; the Managing Editor, Dr. Jill Dill; the Pteridologia Editor, Dr. R. James Hickey; the Bulletin Editors, Drs. Joan Hudson and David Schwartz; and the Publications Curator, Dr. James D. Montgomery, for their help in keeping the society treasury accurate.

Respectfully submitted,
James D. Caponetti
Treasurer

Treasurer's Report for 2013

RECEIPTS			
Cash on hand, January 1, 2012			
Treasurer		$4,068.31	
Membership Secretary		$2,537.47	
TOTAL			$6,605.78
Current Year's Dues Received by Membership Secretary Directly		$10,560.00	
Current Year's Dues Received by Treasurer from BSA by Online Transactions		$7,545.99	
Prepayments for Future Years		$75.00	
Current Year's Overpayments		$32.12	
Life Memberships		$1,080.00	
Gifts to the Society		$769.00	
British Pteridological Society Dues		$1,181.00	
Spore Exchange, Net		$8.00	
Sales of Back Issues of the Journal Treasurer - $431.00 Memb. Sect. - $0		$431.00	
Sales of Pteridologia		$1,313.80	
Savings Interest from Memb. Secretary Bank		$2.63	
Checking Interest from Treasurer's Bank		$3.93	
Page Charges		$500.00	
Funds Received by Treasurer from Membership Secretary		$12,000.00	
Bio One Revenue Sharing		$10,875.00	
JSTOR Publisher Pool Revenue		$4,276.92	
JSTOR Sales Service Revenue		$68.00	
Copyright Clearance Center Royalty Payment		$255.99	
BSA Botany 2012 Meeting Revenue Sharing		$0	
Outreach Fund Contributions		$0	
Transfer from Treasurer's Savings Account		$8,000.00	
The Gale Group Royalty Payment		$57.07	
Refund of BPS International Draft		$2,178.66	
2012 Checks Outstanding		$0	
CURRENT RECEIPTS			**$61,214.11**
GRAND TOTAL			**$67,819.89**

DISBURSEMENTS			
American Fern Journal (Allen Press)			
Vol. 101, No. 4	$6,757.80		
Vol. 102, No. 1	$6,271.31		
Vol. 102, No. 2	$6,306.76		
Vol. 102, No. 3	$3,972.82		
TOTAL		$23,308.69	
Pteridologia (Allen Press)			
Volume 4	$7,084.03		
Fiddlehead Forum Printing (Sam Houston U. Press)			
Vol. 38, No. 5	$1,137.67		
Vol. 39, No. 1	$1,108.19		
Vol. 39, No. 2	$1,319.35		
Vol. 39, No. 3	$1,630.25		
TOTAL		$5,195.46	
Treasurer's Expenses		$170.00	
Blanket Fidelity Bond		$187.00	
Membership Secretary's Office Expenses for AFS		$709.76	
Membership Secretary's Office Expenses for Pteridologia		$0	
President's Expenses		$0	
President-Elect's Expenses		$0	
Secretary's Expenses		$0	
Publications Curator's Expenses		$54.99	
Journal Editor-in-Chief's Expenses		$3,500.00	
Journal Managing Editor's Expenses		$1,750.00	
Web Server Maintenance		$119.40	
Domain Name Renewal		$0	
Webmaster's Expenses		$0	
Bulletin Editor's Expenses		$0	
Fern Foray Expenses		$300.00	
A.I.B.S. Dues		$200.00	
Refunds to Agencies and Members		$43.00	
British Pteridological Society Dues		$2,380.67	
Addition to CD in First Tenn. Bank		$0	
Addition to CD in Home Federal Bank		$0	
Funds Transferred from Checking to Savings		$0	
Botany 2012 Student Travel Awards		$800.00	
Botany 2012 Student Wherry Award		$250.00	
Botany 2012 Symposium Expenses		$0	
Botany 2012 Conference Fees		$0	
Outreach Coordinator's Expenses		$0	
Funds Transferred to Treasurer by Membership Secretary		$12,000.00	
Bank Charges			
Treasurer	$25.00		
Membership Sec.	$31.00		
TOTAL		$56.00	
Bad Checks		$0	

CURRENT DISBURSEMENTS		**$58,109.00**
Cash on Hand, January 1, 2013		
Treasurer		$5,496.67
Membership Secretary		$4,214.22
GRAND TOTAL		**$67,819.89**

STATEMENT OF AFS ASSETS AND LIABILITIES AS OF DECEMBER 31, 2012	
Assets	
Cash in Treasurer's Checking Account	$5,496.67
Cash in Membership Secretary's Savings Account	$4,214.22
Cash in Treasurer's Savings Account	$2,671.50
Savings Certificate in First Tennessee Bank	$30,000.00
Savings Certificate in Home Federal Bank	$57,218.73
Journal Inventory	$19,818.25
TOTAL	**$119,419.37**
Liabilities	
Prepayments for Future Years	$75.00
Current Year's Overpayments	$32.12
Savings Certificates	$87,218.73
General Fund	$32,093.52
TOTAL	**$119,419.37**

STATEMENT OF AFS BANK ACCOUNTS BALANCE OF FUNDS AS OF DECEMBER 31, 2012, AND INTEREST EARNED DURING 2012		
BANK ACCOUNTS	BALANCE OF FUNDS	INTEREST EARNED
Membership Secretary's Savings Account in Commerce Bank	$4,214.22	$2.63
Treasurer's Savings Account in First Tennessee Bank	$2,671.50	$2.76
Treasurer's Checking Account in First Tennessee Bank	$5,496.67	$3.93
Treasurer's Savings Certificate in First Tennessee Bank	$30,000.00	$54.94
Treasurer's Savings Certificate in Home Federal Bank	$57,218.73	$229.01
TOTALS	**$99,601.12**	**$293.27**

Auditor Report

April 22, 2013

REPORT OF THE AUDITOR

I hereby certify that I have seen the books and accounts of James D. Caponetti, Treasurer of the American Fern Society, Inc., and have obtained confirmation of the correctness of the Society's balance on hand as set forth in detail in the accompanying report of the Treasurer.

Broker, G.R.I.
Nathan E. Way

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Back Issues of AFS Newsletter on AFS Website

by Joan Nester-Hudson

Did you know that the first newsletter of the American Fern Society was called *News and Views*? *News and Views* was published from January 1971 until November 1973. Mr. Gordon Foster and Dr. James Montgomery were the editors. I have scanned all issues of this newsletter and Stephen McDaniel, the AFS webmaster, has added them to the AFS website.

The *Fiddlehead Forum* was first published in February 1974, replacing *News and Views*. Dr. John Mickel was the first editor. I have scanned back issues from 1974 until 1985 and Stephen McDaniel has added them to the website.

I would like to thank John Mickel for providing the *News and Views* and issues of the *Fiddlehead Forum* which are missing from my collection. I am continuing to scan the back issues, as time permits. Check out the back issues of both of these newsletters. If you like puzzles about ferns, the early *Fiddlehead Forum* often had challenging puzzles. Answers were also provided. There are many interesting articles about ferns.

Please consider making a submission to the Fiddlehead Forum.
The Fiddlehead Forum depends on you!