The Hardy Fern Foundation was founded in 1989 to establish a comprehensive collection of the world’s hardy ferns for display, testing, evaluation, public education and introduction to the gardening and horticultural community. Many rare and unusual species, hybrids and varieties are being propagated from spores and tested in selected environments for their different degrees of hardiness and ornamental garden value.

The primary fern display and test garden is located at, and in conjunction with, The Rhododendron Species Botanical Garden at the Weyerhaeuser Corporate Headquarters, in Federal Way, Washington.

Affiliate fern gardens are at the Bainbridge Island Library, Bainbridge Island, Washington; Bellevue Botanical Garden, Bellevue, Washington; Birmingham Botanical Gardens, Birmingham, Alabama; Coastal Maine Botanical Garden, Boothbay, Maine; Dallas Arboretum, Dallas, Texas; Denver Botanic Gardens, Denver, Colorado; Georgia Perimeter College Garden, Decatur, Georgia; Inniswood Metro Gardens, Columbus, Ohio; Lakewold, Tacoma, Washington; Lotusland, Santa Barbara, California; Rotary Gardens, Janesville, Wisconsin; Strybing Arboretum, San Francisco, California; University of California Berkeley Botanical Garden, Berkeley, California; and Whitehall Historic Home and Garden, Louisville, Kentucky.

Hardy Fern Foundation members participate in a spore exchange, receive a quarterly newsletter and have first access to ferns as they are ready for distribution.

Cover design by Willanna Bradner
Special Issue ~ Honoring Our Friends
The British Pteridological Society
As They Celebrate Their 125th Anniversary

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President’s Message

I am pleased to dedicate this issue to the 125th Anniversary of our (older) sister organization in Great Britain, the British Pteridological Society (BPS). I had the privilege of joining their celebrations in the Lakes District in the UK this summer with fellow HFF board members Pat Riehl, Jane Whiteley, and HFF founder Sue Olsen. Over the last 16 years I have had the pleasure of traveling and building friendships with several BPS members and it has greatly increased my knowledge and appreciation for ferns. The body of work this society has created over time is truly outstanding and I hope that as the Hardy Fern Foundation continues to grow that it can create a legacy as profound as the BPS.

I hope that all of our members enjoy reading the articles in this issue written by so many of our friends overseas. The history of the BPS is the history of ferns being used in the garden. Michael Hayward’s account of the Society’s history will give you a hint at the accomplishments they have made for over a century. I am also delighted to have an article on fern cultivars by another friend, Julian Reed. He has dedicated an incredible amount of time and effort to finding, sorting out and growing cultivars and has an impressive grasp on this complicated subject. I relish the time I was able to spend a few years ago in the herbariums of Kew Gardens and RHS Wisley looking through hundreds of dried fern fronds to better my understanding of cultivars. These amazing collections contain wonderfully preserved fronds that date back over 150 years.

I am also looking forward to the upcoming Fern Fall Social on October 22 from 11:00am to 3:00pm. This will be held at the Bellevue Botanical Garden and features our yearly frond display, which last year had close to 200 different types of ferns represented. It is a great way to see the full diversity of cultivated ferns in the Pacific Northwest. We will also have several well-versed fern experts on hand so you can bring fronds to the event for identification. I will also be presenting a lecture on “The Odd & Unusual and the Particular & Precious Ferns of My Travels.” In this special lecture I will share some of the rare and unusual ferns I have encountered on my travels, including a few treasures from my summer trip to the British Isles. This fun event is a special benefit just for our members and their friends so make sure you put it on your calendar and send an RSVP to HFF@rhodygarden.org.

As autumn reaches full swing I will be busy in the garden cleaning and tidying for the winter and making notes and marking plants I want to move and divide before the spring. Enjoy the final days of warm weather, fall color and crisp cool nights.

All the best,

Richie Steffen
HFF President

70-Fall 2016

Hardy Fern Foundation Quarterly
The History of the British Pteridological Society, a personal view

Michael Hayward
BPS archivist
Blundellsands, England

The study of Natural History became a very fashionable pastime during the nineteenth century. A great interest developed in the many variations in the natural form of ferns in Britain and varieties were found in increasing numbers as access to the countryside was improved by the rapidly developing rail network. Many of the varieties were regarded as desirable plants for the gardens of the finders and thus the Victorian fern craze was born.

In 1871 a first British Pteridological Society was formed in London, the predecessor of the present BPS. The surviving records of that society are fragmented, but I have been able to identify over 70 members, men of independent means, merchants, affluent members of the middle class, doctors, a chemist, an architect and a museum deputy director. The members came from many parts of the British Isles, the membership list including several women. The society met once monthly, mostly in a residence in what is now the Victoria and Albert Museum, with outings to the countryside in the summer. The Rev. Charles Padley, who had inherited a large fortune and spent the whole of his time hunting ferns in South West England, was probably the chairman and driving force. But Padley spent the whole of his fortune on ferns, was declared bankrupt and forced to take paid employment for the first time in his life. In 1876 the post of chairman was vacant and the society folded. Padley was regarded by his contemporaries as an authority on the varieties of the polystichums. His legacy is his herbarium collection, which came into the possession of the present BPS and is now housed within the RHS herbarium at Wisley. He had also started to produce nature prints of ferns, a project taken over by Col A. M. Jones who expanded it into a series of over 300 prints for which there were around 45 subscribers.
In 1891 a group of enthusiasts in the English Lake District came together in Kendal and formed the Northern British Pteridological Society. Robert Whiteside’s membership card is shown on right. We are fortunate that from the very first meeting minutes were recorded in a large ledger, a treasured possession of the society. Invitations to join were sent to all of the fern collectors known to members and Dr F W. Stansfield was invited to become the first president. The doctor, as he was known, was a member of the family which ran one of two prominent fern nurseries in Sale, near Manchester, and was a great authority on fern varieties. The annual subscription was five shillings (25 pence) and the society was to meet once a year, usually on the August Bank Holiday, when papers would be read, followed by a fern hunting excursion the next day. At the second annual meeting in 1892, ‘Northern’ was dropped from the name of the society. The name of the society has remained unchanged since 1892, despite a number of proposals to change it to the British Fern Society.

Around 40 members were recruited in the first year, including P. Neil Fraser from Edinburgh and G. B Wollaston from Kent, members of the original society. W. H. Phillips from County Down in Ireland and R. L. Praeger from Dublin also joined. E.J. Lowe, the author of many fern books, joined the following year, as did the Birkenhead brothers, owners of the second large fern nursery in Sale. But the most influential new member was Charles T. Druery, a company secretary from London. Druery was a polymath of incredible energy. Apart from his three books on British ferns, he published books of his own poetry, mostly of a humorous nature intended for after dinner recitations. He also included translations of Goethe and of Torquato Tasso in his books and translated scientific books from German to English. His best known poem, ‘The Rocking of the Lilies’, is an autobiographical saga of the courtship of his wife, whom he met on a walking holiday in Scotland.

Charles Druery proved to be the powerhouse of the society. He became President of the society in 1901 and that year edited The Book of British Ferns, published for the BPS by Country Life in London. This was a predecessor of the more recent Special Publications of the BPS and was an effort to distinguish the pick of fern varieties from the excessive numbers of inferior forms that were still circulating. His third and most important fern book, British Ferns and their Varieties, was published in 1909 and is still an essential reference to the old fern varieties.

The longevity of the BPS is probably due in large measure to Druery’s initiation of The Hardy Fern Foundation Quarterly.
British Fern Gazette, published quarterly from 1909 onwards and with almost all of the articles initially written by him. 1909 was also the year in which the first women joined the present society, nine in all, but no ladies are to be seen on photographs of field trips prior to 1939. The first North American members to join were H. G. Rugg of Dartmouth College and C. F. Mason of the Gray Herbarium, both in 1910. There was a surge in the numbers of the society to around 100 members after Druery initiated the British Fern Gazette. He was also a regular contributor to the early issues of Willard Clute’s Fern Bulletin and wrote many articles for magazines and newspapers. He was an extremely skillful and innovative grower of ferns, introducing many excellent varieties, and I am still learning from his articles on fern propagation.

Charles Druery died in 1916 and editorship of the British Fern Gazette was taken over by F. W. Stansfield. There was a noticeable change in the tone of the journal with, for example, the frequent inclusion of poems praising ferns, harking back to the Victorian era. The discussion of ferns remained strictly confined to the native British ferns and their varieties, despite the fact that many members must have been growing ‘exotic’ species in their conservatories. The first change was in 1932 when Stansfield reported that two Indian ferns, Adiantum flabellulatum and A. venustum were thriving in a cold greenhouse.

F. W. Stansfield, who had served three periods as President, died in 1937 and W. B. Cranfield, a London auctioneer, succeeded to the post. Cranfield himself was a great enthusiast for fern varieties, buying up collections of the older growers when they were no longer able to look after them. The fashion for growing fern varieties was however steadily declining and the relevance of the British Fern Gazette, whose emphasis was largely horticultural, was declining, as were membership numbers. A photograph in the BPS archive of a field trip in June 1934 is titled, by the photographer, ‘Antiquities at Sidmouth’. Activities of the society were suspended during the 1939-46 war and after the war the society was in a terminal condition with the surviving elderly members of the committee planning to close it down. That the society survived this near fatal episode is due particularly to J. W. Dyce. ‘Jimmy’ described himself as a ‘fern maniac’ in an article on the history of the society in the centenary year of 1991. Jimmy was appointed treasurer and within a year had recruited over 100 paid-up members. He and his mentor, Stansfield’s son-in-law, Percy Greenfield, were stalwarts of the society in the post-war years. The post-war society was no longer a male dominated one and its first woman President, Irene Manton, was elected in 1969.

Cranfield had been an important member of the Royal Horticultural Society. He had written about the importance of ensuring that collections of rare varieties were maintained for the future, and he left the whole of his fern collection to the RHS. But he had been the only expert on ferns in the RHS. After his death the RHS collected a few ferns from his garden to grow at Wisley, but the bulk of his collection was destroyed. In recent years the society has actively encouraged the sharing of rare varieties between members in order to ensure their long term survival.

Following Cranfield’s death in 1948 it was resolved that in future the post of President
would be of limited tenure, normally three years. A firm association with the Natural History Museum in London started when A. H. G. Alston, a curator in the Herbarium, was appointed as secretary of the society in 1938. Alston was succeeded at the museum by the late Clive Jermy, President 1982-1985, who made major contributions to the society. The original British Fern Gazette had been a catch-all pteridological magazine, but with little scientific content. Jermy relaunched the magazine as the Fern Gazette with a remit to print academic articles on scientific aspects of pteridology. Business aspects of the society were moved to a new magazine, The Bulletin, in 1973, edited by Dyce. A third magazine, ‘The Pteridologist’, was launched in 1984 with Martin Rickard as editor, with a more generalised content, a vehicle for articles on horticultural aspects of pteridology. This three way split of the publications and the increasing activities of the society under the influence of Jimmy Dyce and Clive Jermy, resulted in a steady increase in the membership, stabilising between 700 and 800. The membership now included a number of other societies and institutions as well as individuals.

On relaunching the society, a pattern was established that the Presidency alternates, where possible, between an academic botanist and a non-academic pteridologist. Annual general meetings, which include a series of lectures, alternate between the Natural History Museum and sites outside of London. A programme of regular weekend national meetings and occasional longer meetings in countries around the world was established. Local BPS groups were established and they arrange their own excursions, lectures and AGMs, which are all recorded in The Bulletin. Plant exchanges and sales take place at these meetings and there is also a postal plant-exchange scheme. The society has also organised a number of international conferences on a variety of pteridological subjects, often in conjunction with other organisations, and undertaken the publication of a series of monographs, the Special Publications, on a wide variety of subjects, generally too specialised for commercial publishers to consider.

Since the 1970s the society has organised a spore exchange scheme, with contributions coming from members in many countries as well as from Britain. Around 300 taxa are donated by 30 or so donors each year. The spores are retained for three years, so availability lists always exceed this number. An annual distribution is made each January with requests from around 100 individuals, orders being sent to individuals in many parts of the world. The labelling of each packet includes a code to identify the donor, should that information be needed.

The society celebrated its centenary in 1991 by organising a large series of events, culminating in a week-long tour of the English Lake District. Events to celebrate the 125th anniversary in 2016 included a stand at the Chelsea Flower Show, a weekend event at the RHS Wisley gardens and a replication of the week-long Lake District tour. Attendees included members from the USA, Central America, Canada, Australia and mainland Europe, 49 for the whole week and a further 15 on individual days.

The strength of the society lies in the enthusiasm and variety of its membership. Alison Paul, of the NHM, who has edited The Bulletin continually since 1987 and given quiet support to many members with their enquiries, deserves special mention. The original
membership of the society included a number of nurserymen, as it still does. Reginald Kaye, President 1963-1966, with a small nursery on the Southern edge of the Lake District, made a lasting impact. His book *Hardy Ferns* (1968) became a bible for British fern growers. Martin Rickard, who for several years ran his fern nursery in central England, made an equal impression with *Garden Ferns* (2000) and has been an extremely influential member of the society, editing both The Bulletin and The Pteridologist and serving a term as President, 1997-2001. A. R. (Matt) Busby is another individual who has made outstanding contributions to the society over the last 40 years or so, serving in numerous capacities. It is not possible in the space available to list all of individuals who have made special contributions to the society in recent years, but all of the Presidents and Secretaries of the society have made their individual contributions to its success.

In recent years the society has ventured into social media, expanded its role in education, and developed a comprehensive web site, [www.eBPS.org.uk](http://www.eBPS.org.uk), which is updated at least weekly. The web site is now the first point of contact for many members, new and old, and a viewing will give a good idea of the current activities of the BPS. The society is in excellent health and looking forward to its next anniversary in 2041.

**MEMBERSHIP**

BPS membership is open to all interested in ferns and lycophytes and provides a wide range of information about ferns through its publications and website and also organizes indoor and field meetings, garden visits, a plant exchange, a spore exchange and fern book sales.

Subscription rates (due on 1st January each year) are Full Personal Members £25, Personal Members not receiving *The Fern Gazette* £21, Student Members £12.50, Subscribing Institutions £42. Family membership in any category is an additional £2.50. US airmail postage for all journals is an extra £12, or for those not receiving *The Fern Gazette* £8 and surface to the US is an extra £6. or without *The Fern Gazette* £4.

Applications for membership should be sent to the Membership Secretary Dr. A. J. Evans, Springfield House, Salterforth Road, Earby, Lancs. BB18 6NE, UK ([Membership@eBPS.org.uk](mailto:Membership@eBPS.org.uk)) from whom further details can be obtained. Standing Order forms are available from the Membership Secretary and the BPS website, [www.eBPS.org.uk](http://www.eBPS.org.uk).

**Hardy Fern Foundation Quarterly Fall 2016-75**
The first regular publication of the BPS was entitled “The British Fern Gazette” and appeared in 1909. A5 in size and printed in black and white with a green cover. This was a quarterly that covered a variety of subjects ranging from new cultivars, growing tips, the society’s visits and meetings, financial statements and membership lists.

In 1963 it changed its name to “The Fern Gazette” and concentrated on scientific papers. It is now published twice a year. An annual foolscap sheet was produced to communicate news of Society business to members, which later developed into a more formal Newsletter.

In 1973 the newsletter was replaced by the” Bulletin”. This was also A5 in size and also started life with a green cover. Its purpose was “to serve chiefly the non-scientific membership, and to supply all information of interest to our members.” It is published annually.

In 1984, following a committee decision, the “Bulletin” was split and the “Pteridologist” was launched to publish articles leaving the “Bulletin” to focus on Society business and reports of meetings. This new annual journal started as A5 in size and printed in black and white.

In 2002 it was decided to change the format of the “Pteridologist”. It appeared in full colour and A4 in size. This new style ran to 38 pages and proved very popular. The current editor took over in 2008 and the size of this publication began to increase. It now stands at just under 100 pages with authors from all over the world contributing articles about ferns. It is regarded as the flagship of the BPS and many new members join the society just for this publication.

As to the future, many have suggested that the “Pteridologist” be published twice a year. The present editor might be persuaded to go down this route if there was sufficient assistance amongst the members.
June 24, 2016 Friday
Arrived at SeaTac and the flight was delayed an hour due to President Obama arriving in Seattle on Air Force One earlier in the day. Slow start but it did not affect our connection in London. Left SeaTac at 8:10PM.

June 25, 2016 Saturday – arrive in Shannon, Ireland
Arrived in London 1:30PM. Picked up some £’s (for the UK) and €’s (for Ireland) and a quick lunch. Boarded our flight to Shannon, Ireland – left at 3:10PM and arrived at 4:40PM. Through immigration and customs quickly (and politely!). Picked up the rental car (a manual Citron SUV) and left the parking lot very slowly as I got reacquainted to shifting gears with my left hand. Short drive to the hotel in Bunratty, just south of Shannon on the west coast of Ireland.

The hotel (The Courtyard Guesthouse) was a charming and quaint place with a nice restaurant conveniently located next door. Had dinner then back to the hotel and off to bed to try to shake off our jet lag.

June 26, 2016 Sunday – The Burren, Caher Bridge Garden
Realized I forgot a UK outlet adapter. The computer is temporarily dead, but the schedule is packed for today, so I will have to worry about it tomorrow.

We are on our way to The Burren, directly north of Shannon. The Burren is a harsh rocky climate composed of limestone pavement, calcareous (lime-loving) grassland, hazel scrub, ash/hazel woodland. Three quarters of Ireland’s species of flowers are found in the Burren. The grikes (crevices) provide moist shelter, supporting a wide range of plants including ferns! A thin layer of soil covers the stone in some areas supporting grasslands interspersed with herbaceous plants.

I set the GPS to what I thought was the Burren National Park Visitor’s Center, but it took us to a little back road in the middle of nowhere and announced that we had arrived at our destination! While technically true, it was not what we had expected, but we parked and did some road side botanizing. It is a beautiful area of wide open spaces with stone walls that went on for miles. There were some great plants. Of particular note were some wall ferns, *Asplenium ruta-muraria*; impossible for us to grow in the Pacific Northwest, but always great to see and a few plants of Hart’s tongue fern, *Asplenium scolopendrium*. 
The hardy geranium, *Geranium sanguineum* or bloody cranesbill, was in full flower and the pinky-purple blooms dotted the landscape. It was a very windy day, which seems to be typical for this area making photography a challenge! The stone walls were spectacular and run for miles slicing the open landscape into contained pastures. I wish I had access to stone like this!

We made our way west from The Burren to the coast and proceeded north toward the small town of Fanore. We made a few stops along the way to see what we could find. The coast was very weather beaten. Strong winds blew in from the sea with occasional rain pelting down. The ruggedness was breathtaking.

The ocean waves crashed against black and dark gray cliffs, which we viewed from a distance. Along the road we found *Asplenium marinum*, the sea spleenwort. This small fern occurs only near the ocean and usually within sight of the sea. This small fern sprouted from small sheltered cracks and crevices in the rock and had thick leathery foliage to protect from the harsh environment.

Turning inland we drove up a narrow road to Caher Bridge Garden, the home of plantsman Carl Wright. The rain was coming down steadily during the beginning of the tour and we were joined by two gardeners from a botanic garden in the northern part of Ireland (Co. Down). Caher Bridge Garden borders a creek and is built over karst limestone covered in a thin sheet of soil. Carl has had to add soil to every area where the garden has been developed. The stonework throughout the garden is beautiful and builds on existing
ancient walls that run through the property. A maze of paths leads you up through a gently sloping garden lined with heavily planted beds filled with treasures. Each pathway and planting area has been cut out of a dense hazelnut and hawthorn forest. Around the stone cottage are lush established beds. Once you reach the top of the garden the forest gives way to a view over the Burren.

After the garden tour we returned to the cottage for tea and snacks. We got lost in conversation and did not leave until 7:00pm. Drove back to Bunratty. It was a delight to meet Carl and share his garden with him.

June 27, 2016 Monday – Coolwater Garden and Terra Nova Gardens
We left the hotel in Bunratty, but before leaving the town we made a brief stop to see the castle in the center of the village. Fortunately, nearby, we found a Tesco store (a British multinational grocery & general merchandise retailer) where I bought the much needed
adapter as well as snacks, then we were on our way to Killarney. We made two stops while driving south to visit two private gardens that open by appointment, Coolwater and Terra Nova (not related to the Oregon nursery).

Coolwater Garden and Terra Nova Garden are run by two bothers. Coolwater by Kevin Begley and Terra Nova by Martin and Deborah Begley. Martin also runs the Irish Fern Group page on Facebook.

Coolwater is a small private garden set on half an acre, overlooked on either side by Skule Hill and Rockstown Castle. Designed for year round structure and shape the garden focuses on interesting trees, shrubs and strong foliage. There is an extensive collection of alpine troughs, a small covered aid section, and a large water garden in the center of the back garden. I was especially interested in the troughs. We have several troughs at the Miller Garden and it is always interesting to see how others design their plantings and what kind of soil mixes they use. Kevin shared his insight on trough design and showed us how his planting and layout have changed over the years. It was very interesting to see.

Terra Nova, another small, privately owned garden is a half-acre of winding paths and interesting plants, with a fairy theme through the entire garden. There were several attractive garden areas along with a nice collection of ferns especially the Polypodium cultivars. This mature garden had an interesting focus on good plants making good combinations. Martin and Deborah Begley have collected many unusual plants over the
years and have a nice collection of choice fern cultivars. One that particularly captured my attention was a beautiful specimen of *Dryopteris filix-mas* Linearis Grandiceps Group. The frilly form and densely divided frond tips create a striking showpiece. An added charm was an extremely friendly and adoring white cat that waited in the driveway greeting visitors on their arrival and wishing them well on their departure.

Next destination: Killarney, deep into southwestern Ireland.

**Thoughts on the 125th anniversary of the founding of the British Pteridological Society (The BPS).**

Alan Ogden
Alvechurch, England

Where should I begin? Perhaps with the start of my association with the BPS which was around 1973 so I have been a member for nearly a third of its life. I joined up on a visit to the garden of Ray and Rita Coughlin (regular readers will have heard of them) which was not far from our new home which is a mile from Birmingham U.K. I was so impressed and inspired by their collection of ferns, a group of plants which had already begun to intrigue me.
I was soon made aware of the difficulty of acquiring fern lore and discovered that there was only one good book, “Hardy Ferns” by Reginald Kaye which was published in 1968 and which was one of the first to tackle ferns from abroad. I was delighted to discover that his base was in Silverdale on the edge of the Lake District where my parents had had a static caravan for some years.

We had moved to our new home in 1970 and the garden, neglected for many years, had retained a number of common ferns – maybe a hint that I might add some more? I bought quite a number from Reg Kaye’s nursery and eventually got a tour of his collection in a wooded limestone area which contained some great rarities.

When my father retired my parents gave up the caravan and settled in the next village, Arnside which had several “ferny” connections, one being that it was perhaps the most northerly site in Britain for the maidenhair fern Adiantum capillus-veneris. My mother, a keen flower-arranger, became friendly with Mrs. Rose Butterfield who invited me to her garden to see some ferns which had belonged to her father Robert Whiteside who was one of the founding members of the BPS! Eventually she left me three of his ferns, his pocket fern book “Ferns of the English Lake Country” by W.J.Linton and his membership card for the Northern Pteridological Society which became the BPS. I donated this to our archive and you can see a picture of it on page 56 of “Fern Fever” by Sarah Whittingham.

Since those days the fern world has altered dramatically in many ways. The production of printed material has undergone a revolution. Reg Kaye’s book had only four colour plates and a few black and white photographs but mostly line drawings of fronds. Nowadays colour printing is expected and the whole process simplified by the use of computers. Fern books and magazines can now have colour pictures on every page though sometimes “a wonderful riot of green” as a visitor once commented on our garden! There are now some wonderful fern books available.

The most dramatic change in our lives has been the development of the Internet so that communication is rapid and the availability of information quite staggering. Whole libraries of knowledge and thousands of images are available on demand and one can see on the screen the places we have visited on fern tours and visits which become ever more adventurous. The founding members of the BPS could only communicate by letters, usually in copperplate handwriting and then waiting days or weeks for a response.

In the early days groups of the BPS members would visit ferny areas in their locality and later on in other parts of the country. The trips abroad which we now enjoy would have been unimaginable and the military service in two world wars would have been the first opportunity to see other countries. Sadly the wars led to the loss of many of the choice collections made by the Victorians as large gardens could not be maintained while the gardeners were away.

Scientific knowledge has grown rapidly and in particular the study of fern chemistry and genetics which has helped to unravel the links between fern families. I was astonished
to learn that Equiseta (horsetails) are now thought to be ferns although they do appear to be so different. In the last edition of the HFF quarterly was the revelation that some genetic material from a flowering plant has been found in a *Botrychium* — now how did that happen? I did suggest in the previous issue of the journal that something similar might explain the appearance of fern variants but isn’t this exciting?

I will be forever grateful to the BPS and more recently the HFF for enriching my life in so many ways and providing an enduring interest in the fern world which continues to entertain and educate in such a pleasurable way.

**Sizergh Stumpery opening**

Pat Acock ~ St. Mary Cray, England

As the Main celebration of the 125th anniversary of the British Pteridological Society we had a week long meeting in the Lake District where the society started all those years ago. We were joined by members and friends from America in the Hardy Fern Foundation as well as friends from Canada, Mexico, Holland, Australia and Switzerland.

On a day promising rain, around sixty of us were invited to an early tour of the amazing gardens at Sizergh Castle. They had always had large numbers of ferns and had hosted four national collections of hardy ferns. Sizergh has always been at the forefront of these national collections and the most earnest keepers of these national collections taking on the role with great diligence and seriousness and keeping the collections well maintained and adding to them as new specimens became available to them. Many of these ferns were dotted around the large well designed and dominant feature of the gardens with overspill plantings reaching into other areas of the garden.

The castle and gardens were bequeathed to the National Trust in 1950 but have been continually lived in by the Strickland family since 1239 and we were welcomed to the house at the bequest of the current member of the family, Mr. Henry Hornyold-Strickland, who lives at Sizergh.

The gardens are maintained by a team of professional gardeners under head gardener Susan Rowley and assistant head gardener Andrew Harrison. A large number of volunteers work in the gardens which include formal lawns a large rockery and a walled vegetable garden.

A legacy left to the gardens was discussed and the idea of a stumpery was forwarded and under Susan Rowley the head gardener plans were drawn up for the layout and the
planting of ferns. This was eventually given the go-ahead and after a year of preparation with the help of building firm Costain appropriate stumps were sourced and fetched and brought to Sizergh. They then arranged the stumps with their heavy machinery under Sue Rowley’s supervision. The 125th celebrations of the Fern Society coincided with the stumpery being finished and Sue Olsen and Richie Steffen representing the Hardy Fern Foundation and the British Pteridological Society were invited to officially open the new stumpery at Sizergh.

After a well delivered speech by Richie Steffen, the president of the Hardy Fern Foundation outlining the history of these stumperies and how members of the two societies the HFF and the BPS had supported each other in developing the interest in hardy ferns on both sides of the Atlantic he handed over to the latest incumbent of the castle, Mr. Henry Homyold-Strickland, who further explained details of how the germ of the idea of the stumpery developed into the magnificent display we were surrounded with. He then invited Sue Olsen to declare the gardens officially open.

After this we were invited into the Elizabethan dining room of the castle for a sumptuous lunch provided by Mr. Henry Homyold-Strickland and prepared by the National Trust kitchen. Here we were able to chat to the team and volunteers who had brought the scheme to fruition. An official cake was cut by Susan Rowley, head gardener and shared around all the staff and fern enthusiasts.

After a few more votes of thanks we departed vowing to return to see how this superb stumpery and new addition to the garden develops. We all hope that it will inspire visitors of the beauty of ferns and encourage them to grow them in their own gardens. We are ensured that Sizergh will not only maintain this latest addition to the gardens but also enrich it with further plantings in the future.
The species name “affinis” means “similar to”, most likely in reference to being similar to the true male fern *Dryopteris filix-mas*, and indeed the two are so often confused. *Dryopteris affinis* has been classified under various names including *Dryopteris filix-mas paleacea*, *D. borreri*, and *D. pseudo-mas*. It is regarded by all as a very handsome fern, being large and robust with golden translucent scales in spring, the fronds arising steeply in shuttlecock-like clusters. It differs from *Dryopteris filix-mas* in having a more dense and prominent display of scales and pinnules that are sometimes truncated. It also differs in the more initially yellowish-green color of the fronds which are more leathery in texture and rather glossy on the upper surface. The indusia are tucked underneath the sori when young which is not so in *D. filix-mas*. Finally, *D. affinis* and its subspecies are either apogamous diploids or apogamous triploids whereas *D. filix-mas* is a sexual tetraploid. *D. affinis* is also sometimes confused with *D. oreades* but the latter is generally smaller and in *D. affinis* the unfurling fiddleheads unwind their tips in a rather loose-hanging fashion, looking like open hooks, contrasting with the tightly-coiled croziers of *D. oreades*.

*D. affinis* has a number of variants or subspecies, but we should bear in mind that there does not seem to be any universal agreement as to what constitutes a subspecies in this particular fern. Hoshizaki tells us that “*D. affinis* is a very difficult species complex and the delineation of its many variants is quite controversial.... Even with experience, most variants are difficult to separate....” Therefore, “...treatment of the cultivated plants should be regarded as tentative.” Fraser-Jenkins adds, “Plants can be remarkably constant in appearance within one population, but show considerable variation between populations or between individuals in mixed populations. Sometimes, too, populations of recognizably similar appearance can be found in widely separated localities. This is largely a result of the peculiar apogamous breeding system of the plant....” Complicating things further, greater differences can result from the differing chromosome numbers. For example, subspecies *affinis* is an apogamous diploid while subspecies *borreri* is an apogamous triploid. Most of these variants come true from spore and all are apogamous. Because of its apogamous nature, *D. affinis* has been limited in hybridizing but hybrids do occur. Most notable is *D. x complexa*, a cross between *D. affinis* and *D. filix-mas*, but Rickard informs us that “There are hybrids between each subspecies and *D. filix-mas*: they too are difficult to distinguish and are collectively called *D. x complexa*.” This probably accounts for the variation in *D. complexa* itself. Of further interest, in comparing *D. affinis* with another apogamous diploid, *D. wallichiana* from the
Himalaya, we see the same tendency to truncated pinnules, but in *D. wallichiana* they are strongly truncated. Also in *D. wallichiana* there are apogamous triploid forms as well. There is also considerable variation as in *D. affinis*. Fraser-Jenkins’ comment is of considerable interest: “…it seems highly likely that *D. wallichiana* contains the same genome as that which must have given rise by hybridization to the European *D. affinis* complex….” One last tantalizing tidbit: “An intriguing parallel is found in the hybrid *D. x flemingii* of the Himalaya and the hybrid *D. x complexa* from Europe. *D. flemingii* is a rare apogamous tetraploid and the offspring of either *D. chrysocoma x D. juxtaposita* or of *D. nigropaleacea x D. sublacera*. Either way, the parent plants are diploid sexual and apogamous triploid (respectively). The European *D. x complexa* is the hybrid of *D. filix-mas*, a tetraploid sexual and *D. affinis*, an apogamous triploid (or diploid) and is also a rare apogamous tetraploid. The appearance of these two species is somewhat similar… the pinnules are often truncated in both, particularly near the base.”

*D. affinis* is present throughout most of Britain and Ireland, being quite abundant in cooler areas near the coast where the rainfall is high. It is found in much of Europe, northwestern Africa, western Russia, Turkey, and southwest Asia. It is entirely absent from the Himalaya and northern India. This species prefers acidic conditions but is tolerant of calcareous soils as well. It tends to be cosmopolitan in habit rather than as scattered individuals.

**Description:** The rhizome is thick, stout, and erect, producing over time multiple symmetrical crowns. The stately fronds arise in a rather steep shuttlecock fashion, being very sturdy and more wind resistant than other ferns. The stipes are about ¼ the length of the fronds, bearing dense noticeable golden orange-brown chaffy scales that set it apart from its close cousins. The scales darken as the season continues. The fronds can be 2 to 4 feet in length, occasionally 5 feet in favorable environments and are ovate-lanceolate in outline and pinnate-pinnatifid to bipinnate. The fronds are widest in the middle, tapering very gradually to the apex, but tapering less toward the base, the lowest pinnae being about ½ the length of those mid-frond. The pinnae are adorned with crowded segments or pinnules that have non-tapering sides and can be rounded to pointed or even truncated. The yellowish-green fronds turn a darker green through the season and are tough and leathery and somewhat glossy, being sub-evergreen. There is a curious black dot or spot or blotch found in most forms of this species, being located on the underside of the frond at the base of each pinna, although it may be visible from above. This is a highly variable characteristic which may be hard to see in some varieties but quite noticeable in others.

Fertile and sterile fronds are much the same, the fertile ones bearing two medial rows of large kidney-shaped sori that are quite conspicuous. The dough-nut shaped indusia are diagnostic in that they are convex or domed at the middle, covering the sori with the edges tucked tightly underneath, embracing the sporangia. In contrast, the indusia of *D. filix-mas* spread flatly outwards and are not tucked underneath.

**Culture:** “A magnificent garden fern” is what Martin Rickard calls this beautiful species. Fellow British Pteridologist Reginald Kaye mentions *D. affinis* “…in Lakeland in the spring, when those brilliant golden croziers bedecked with glossy coppery gold scales

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unfurl in the early sunshine, one of the most striking objects of the spring landscape.” Doesn’t that just make you want this fern if you don’t already have it? The golden-scaled male fern is a medium sized to large fern depending upon which variety you have and where you are growing it. It is considered practically evergreen in milder climates but mostly deciduous in the cold north. In Britain and Ireland there are several subspecies, most notably the aforementioned affinis and borreri and also cambrensis but, as has been mentioned, there is a wagon-load of controversy over this entire complex. What may have been considered last month may be unacceptable this month. Be that as it may, there are forms that are crested, crisped, tasseled, curved, and a striking congested dwarf variant. Stableri has been classified under D. x complexa as well as under D. affinis. This species delights in acid soils but seems very adaptable to a variety of soil types, even alkaline conditions. It is also rather drought tolerant and able to take several hours of morning sun. It is hardy in zones 4 through 8 and is quite easy to grow. Truly, it is, as John Mickel states: “One of the great ferns for the garden.”

References:
8. Golding, Roger (Great Britain) Special thanks for his review of the initial draft and his expert and invaluable comments and suggestions.

The Love of Fern Hunting

Julian Reed ~ Sevenoaks, England

Sue asked me to write an article on cultivars as these were the back bone in the creation of the British Pteridological Society in 1891 and 2016 being the Societies 125th Anniversary.

We can’t all be Martin Rickard, George Forrest or Sir Joseph Banks, hunting the world

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for the new. Is it the hunting instinct? The pleasure to be found in finding something new I can understand. To find a fern you have never seen before whether species or cultivar for the first time thrills me (I know I’m easily pleased!) but to find a beautiful variety of a fern well!

Last year Alec Greening took me and Steve Coleman to a sight where he knew a cultivar of polypody grew on a cliff where Reginald Kaye had collected it before 1967. It was on a rock face on top of a steep slope. Well we went via a different route which Alec had used before, and told us to look somewhere up there. The thought ‘needle in hay stack” came to mind but something caught my eye and to use Steve’s words I was like a ‘Exocet missile’ straight as an arrow and there it was. It still makes me smile now.

Polypodium
‘Semilaceratum Kaye’

I found this in the BPS Fern Gazette 1913 By Mr C. B. Green

A LAMENT AND A MORAL.

Whene’re I take my walks abroad,
Though many Ferns I see;
No Scol. vulgare, frilled or fringed,
Will e’er turn up for me.

Polystichums in scores I find,
And Lastreas galore;
But never does a worthy prize
Enable me to score.

Of Lady Ferns I find a few,
Of varied make and fashion,
But none with plumy foliage
Reciprocates my passion.

“Black Maidenhair” on verdant banks
I find with greatest ease;
But no “good sports” will earn my thanks,
They’re all alike as peas.
Green Spleenworts, too, I’ve sometimes found
On limestone rocky places;
And A. trichomanes, of course,
In chinks on old wall faces.

In wild sea-caves, in wave-worn cliffs
Marinum oft I’ve seen;
But Spleenworts all alike refuse
To mitigate my spleen.

Muraria and Ceterach
Alike reward my quest,
But always only “commoners,”
None honoured with a crest.

The humble Polypody, too,
I come across in swarms;
But ne’er a set of double teeth
Accentuates their charms.

Osmundas, Blechnums, too, I find
In close association;
But all, alas! on normal lines,
Sans trace of variation.

But must I be content to glean
The normal or inferior?
By no means, while the spore remains
To breed me forms superior.

To these I’ll turn with careful choice,
Nor longer vainly roam;
But, sowing from the best, create
Rich hunting grounds at home.

Notes Lastrea= Dryopteris Muraria= Asplenium rutamaria Marinum= Asplenium marinum Scol.vulgare=Phyllitis scolopendrium/Asplenium scolopendrium. Black spleenwort=Asplenium Adiantum-nigrum Green Spleenwort =Asplenium viride

It is not often nowadays you get a chance to use poetry but this was fun and Mr. C.B.Green grew amazing things from spore but the spores had to come from somewhere. These came from plants found as variations of a species.

Polystichum setiferum ‘Bevis’ was one of the parents of P.s. ‘Plumosum Green’ named

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Druery got a range of ‘Gracillimum’ and others and Green got just one very special plant called ‘Plumosum Green’

So from wild things that have departed from the norm more things can come.

This was one of the more gentle collections but I found this snippet in *The British Pteridological Society Abstracts of Report and Papers Read at Meetings 1894-1905*.

This is a part of what was read out by Mr W.H. Philips and read in 1894 “On another occasion beyond Newcastle, I had seen in a dry wall (dry stone wall no mortar JR.) of a country road a crested *Athyrium*. I went another day with a pick, etc, to get it, but had to wait a long time to get the road clear of travellers. A small boy was minding sheep, and came up to have a look to see what I was doing, and at once began to take down the stones. Said he “A crowbar would be best” “It would” I said “if I had one” “Oh” he said “I will get one” and ran of to his house, a short way off, and brought one. He was so obliging I said I shall have to reward him. He had the wall away in a few minutes, and I got out a very large *Athyrium*. The day being late, I asked him would he mend up the wall. I gave him sixpence. He received it with great delight saying “When will you be back again sir?”

I doubt you would get away with dismantling walls in country lanes nowadays, but with permission last autumn we were invited to re-home the ferns of a great fern collector, Jack Garstang. We did partially dismantle a wall to get a *Polypodium vulgare* ‘Ramosum’ that he had collected from Grange. We did put the wall back! From the same source but a different collection has come what is now known as *P.v.* ‘Ramosum Hillman’.

I was talking to some one recently, and said I liked species and cultivars. They said “that
once you have seen a species you have seen it” as lovely as it may be, but a cultivar can crop up anywhere like a surprise gift. Why do we value some minerals more than others and is it either for their value or beauty? So are cultivars you can walk through a wood of *Athyrium filix femina* and come upon a gem.

In about 2010 John Edgington who was recently president of the BPS was out walking in Scotland not in a wood and found a gem of a fern. He spotted it as a crested sporling. I believe it to be one of the best cultivars found in recent years he rescued a piece and it is now known as *Athyrium filix femina* (Gemmatum group) ‘Moulzie Burn’. Sadly it is slow to multiply up. It is a stunner. All plants under this name are clones of the original plant.

So to take Mr C. B. Green’s advice, but put it into a nugget find some good quality cultivars and sow spores and see what you get. Try mixing spores of cultivars of the same species whose characters you would like to share. And also don’t assume that hybrid ferns are always sterile you might be surprised 5% of 10,000 spores is still 500 is still a lot.

Why not start with lady ferns. They are easy to grow and grow quickly, but you need to be very picky on the ones you grow. Only grow the best.

Have fun!

After all that some times you just get lucky and a chance sporling turns up!

Bibliography -
*Polystichum Cultivars, Variation in the British Shield Fern* by J.W.Dyce and editors Robert Sykes and Martin Rickard BPS publication No7
Bps Publication No 5
*British Ferns and their Varieties* by Charles Druery
Pictures from Julian Reed
Unless stated pictures from The Reed Garden

Hardy Fern Foundation Quarterly
2016 HFF Fall Social

Hardy Fern Foundation Members and their Guests are invited to The Hardy Fern Foundation Fall Social and Potluck Lunch

October 22, 2016 from 11 am to 3 pm
at the Bellevue Botanical Garden Education Center
12001 Main Street Bellevue, WA 98005

Richie Steffen Curator, Elisabeth C Miller Botanical Garden, will give a talk on “The Odd & Unusual and the Particular & Precious Ferns of My Travels”

A fern lecture dedicated to an assortment of fantastic species and Victorian oddities that have eluded widespread cultivation. Richie has had the pleasure of visiting dozens of specialty fern gardens and nurseries and traveling to several countries to see ferns in the wild. He will share images of pteridophyte gems he has encountered over the years and kindle a love and lust for these fabulous foliage plants.

Please RSVP if you will be attending and tell us if you will be bringing a main dish, side dish, or dessert.
Jo Laskowski - hff@rhodygarden.org, 253-838-4646 x 111
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Articles, photos, fern and gardening questions, letters to the editor, and other contributions are welcomed!

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