VOLUME 18, ISSUE 3
APRIL—MAY
2008



Rock Garden Ferns

By Tom Stuart

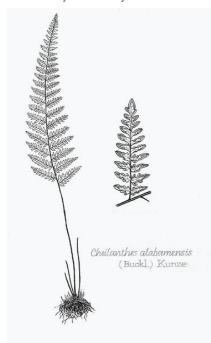
My initial fascination with ferns came from the challenge of identifying them. Then as I got to know them better, the complex relationships between them took my attention. These familial relationships are still being sorted out and pose a contrast to the comparatively-decipherable relationships of seed-bearing plants, based as they are upon the structure of the flower.

The ferns are commonly thought of as more primitive than the seed plants, but this is no longer official doctrine. The vast majority of the pteridophytes evolved in the shadow of flowering plants, that is, in the understory of the tropical rain forest. The hardy ferns, those that moved from the tropics to temperate areas during the last 40 million years, comprise a very small component, perhaps 5%, of the fern flora. The rock garden ferns constitute, in turn, a small portion of the hardy ferns. North America has a rich allocation of this prize dowry.

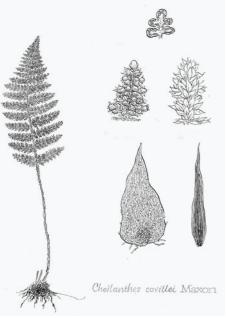
The largest genera of hardy ferns are *Dryopteris, Polystichum* and *Athyrium*. Most of the ferns you see in a walk through the woods of the East are from this group. Few of these species are appropriate for rock gardens, though there are exceptions such as *Dryopteris fragrans*, native to boreal areas. *D. fragrans* detests warm summers and slugs. If you see it for sale, resist the urge.

The dryland ferns (Cheilanthes, Astrolepis, Pellaea, etc.) would be cited by many as the premier rock garden ferns, but

are mainly not hardy in colder areas. Exceptions are Cheilanthes alabamensis,



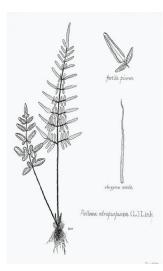
C. lanosa, C. tomentosa and C. fendleri, all of North America and all in commerce, sometimes irregularly. I've found C. fendleri easy in the open garden, given excellent drainage; it's bead-like ultimate segments resemble the prized C. covillei, a more difficult plant with respect to both winter wet and cold tolerance. C. lanosa and C. tomentosa (lanosa means wooly, tomentosa means densely hairy) meet the requirements of a good rock garden plant (except for flowers): congested, evergreen, textured. The former is native from Connecticut to the Gulf Coast, the latter to the Southeast west to Mexico. Cheilanthes alabamensis is found from northern Mexico across the southern United States and northward



(Continued on page 2)

to West Virginia. All of these are small, lacy, and hairy. *Cheilanthes argentea* (from China, requiring lime and drainage) has a silvery white underside. It is often marketed for zone 6, but I have never seen it survive a winter in any zone 6 garden. It grows in mortared walls in Beijing, a zone 7 city.

Astrolepis sinuata is for me a house plant, but should do fine in zone 7 gardens so long as good drainage is provided. It makes an excellent specimen in a few years. Each pinna/leaflet has a sinuous margin and the soft reverse is covered with hair-like, chestnut scales. Its territory runs from the southwestern U.S. to southern South America with disjunct appearances in the Caribbean and Georgia. This species has spent considerable time in the genera Cheilanthes and Not-holeana, where you may be more likely to find it if its acquisition is a priority in your life.



Lime lover *Pellaea atropurpurea*, native from Canada to Guatemala, has eluded my best efforts; I keep trying. This does well in part to full sun, requiring consistent moisture to become established, drought-tolerant thereafter. If you fall in love with one of these drylanders, and cannot make them love the Southeast, they all seem to do well enough as house plants.

Asplenium is a genus of 700 species, most of them tropical. There are a number of hardy ones, though relatively few in cultivation. Most of them are beloved by slugs and snails. In eastern North America the most abundant is *A. platyneuron*, a fern with an astounding disjunct distribution in southern Africa. A native of rocky habitats, it is very easy here, popping up unexpectedly in stone walls, sand beds, under shrubs, in mossy ramparts; just about anywhere. Reportedly difficult outside its native range, you need not worry about that.

A. trichomanes has a number of forms, sometimes separated as species, but all are hardy; this forms a rosette of many 4-8" pinnate fronds. The species is known in both diploid and tetraploid forms, something that would go unmentioned here except that the former is partial to acidic substrates and the latter is an obligate limestone lover. Both are temperamental

in getting established, resilient thereafter.

A. scolopendrium, synonym Phyllitis scolopendrium, comes from rocky, limestone woodlands of Europe and Asia. Rosette-forming, it takes a long time to become too big for the rock garden. There are numerous forms, most of them ugly compared to the species. This one propagates easily by breaking off last year's old, decaying stipe bases from the rhizome and growing on under glass in sphagnum. A North American look-alike is unaccountably difficult and rare or endangered to boot.

Asplenium sometimes includes the European A. ceterach, synonym Ceterach officinarum, the rustyback fern, remarkable for its hairy (actually scaly) underside, its crinkling up in dry times, and handsome rosette in good times. It is, however, rarely in commerce due to difficulty in growing: perfect drainage, limestone substrate, slow to mature. Another tough one is the eastern North American Asplenium rhizophyllum, also called Camptosorus rhizophyllus. This also requires lime and is found on mossy rocks in nature. It is not frequent in commerce, but can be found. Here the difficulty, once you've sited it properly, is slugs. Conquer them and you are home free.

Adiantum pedatum, normally too large for the rock garden, has nonetheless never been kicked out of any garden I've heard of. The northern maidenhair is light and airy and there's no other native like it. Not too particular as to substrate, it is easy in shade if provided with reliable moisture. In sites that dry out it will perform poorly but usually survive. The look-alikes A. aleuticum and A. japonicum have been invariably smaller for me. A. aleuticum's size is a distinguishing character for the gardener, if not the botanist, and it also keeps its foliage well beyond the first frost. A. japonicum has intensely colored fronds in the first flush. Sometimes, perhaps depending on cultural factors, perhaps on the season, it is bright orange; other times a pinkish-orange. The intensity diminishes in the course of the season, but is still apparent in July; at any time of spring this coloration is diagnostic. Both are fine candidates for the shady rock garden and meet the demands of the purists size-wise. This paragraph makes the trio sound quite different, but in August it is best to have a label.

Adiantum venustum of the Himalayas, unlike A. pedatum and friends, maintains its green foliage throughout the winter. Very lacy, short, temperamental in establishment, it slowly forms a stunning ground cover. It will look its best if given

a haircut in early April before last year's fronds die off. It is less drought-tolerant, and my guess is that reliable moisture is a must in the Piedmont.

Cryptogramma crispa of northern regions of Europe and Asia is called the parsley fern, not that you would actually mistake it for the herb. Found on acidic rocks, it is probably easy if you have cool summer nights. Not if not. I haven't found this deciduous fern for sale. C. crispa's territory once included North America, but C. acrostichoides was split off due to being evergreen and a distinctly less divided habit. Also likely difficult in North Carolina

east of the mountains.

Gymnocarpium is circumboreal, latitude descending in the Rockies, the Appalachians, the Alps, and the Himalayas. Among the oak ferns *G. dryopteris* is partial to shady, acid soils, *G. robertianum* to shady alkaline places. Both are of rock garden dimensions with more than twice-divided, horizontal blades perched on wiry stems above a long-creeping, subterranean rhizome. A stand undulates in the breeze.

The Beech ferns, *Phegopteris connectilis* and *P. hexagonoptera*, bear some similarity to the foregoing in sporting a triangular horizontal blade on a vertical stipe. These are larger overall

but still do not usually exceed a foot in height. Both *Phegopteris* species have their pinnae/leaflets connected to each other by a narrow wing along the main axis of the frond. *P. connectilis* has a soft, matte finish to the lamina; it is circumboreal and descends in eastern North America to the mountains of North Carolina. It differs from *P. hexagonoptera* in **not** having the lowest pinna connected to the rest of them, the opposite of what you'd expect given the name. *P. hexagonoptera* is found only in eastern North America, its territory overlapping with *P. connectilis* and extending south into Florida.

The polypodies are mainly tropical and mainly epiphytic, but there are around a dozen temperate, terrestrial species. In Europe it is most commonly *Polypodium vulgare* in the North and *Polypodium cambricum* in the South. The latter is not hardy for me, but should be no problem hereabouts. Given our look-alike natives, *Polypodium appalachianum* and *Polypodium virginianum*, however, there is little from a design perspective to warrant bothering



with Old Europe.

A denizen of acid rocks with mossy upholstery, polypodies can be a little tricky to establish (keep watered; the habitat dries out fast) and will establish more easily in soil, but there can succumb quickly to competition. Another good reason for an epipetric (on rock) site for polypodies is their diminished size in lean situations and on a rock it does not have to put up with interlopers. North America has half a dozen similar species, one or two are epiphytic along the West Coast. A *Polypodium appalachianum*, native here, was recently found growing at a height of 115 ft. on a *Liriodendron tulipifera* in Tennessee. The only visible (they differ in chromosome number) characteristics separating them is the more elongate blade of the Appalachian polypody and the details of the scales on the rhizomes. Since they both vary a lot, fern nuts love to do battle over identification.

Closely related is native *Pleopeltis polypodioides*, epiphytic on oaks in the southern part of its range, but more on rock the farther north it's found. This species is a diminutive adornment to rock or bark. Epiphytes and lithophytes (rock-lovers) are always drought-tolerant, but this resurrection fern is truly deserving of its common name. When you see a desiccated resurrection fern, it is difficult to believe it is capable of reviving after a thunderstorm. But it does.

The word "polypody" is used in three different, related senses. In the narrowest meaning it embraces only the members of the genus *Polypodium*. That has been a flexible genus since 1753 and a story in itself. Polypody is also used as a synonym for the family Polypodiaceae and in its narrow sense, that is, *sensu stricto*, it encompasses 40-50 genera and 1000 ferns, nearly all of them epiphytes. The largest, widest use of the terms polypody and Polypodiaceae, *sensu lato*, accommodate almost all the ferns, and this was the most common use of the term prior to about 1950. This explains why gardeners who went to polypody school a long time ago speak a different lan-

The Trillium Page 3



It also introduces this ambiguous declaration: my favorite genus of polypodies is *Pyrrosia*. This is an Old World genus, commonly called felt ferns, mainly tropical, mainly epiphytic, and mainly with small to medium-sized, simple, entire fronds. All of these characteristics have exceptions. A signature sign of *Pyrrosia* is stellate hairs, shown schematically. These hairs, found on both surfaces of the fronds, are relatively rare among both flowering plants and ferns, but are always present in this genus. They are also the source of the felt-like appearance.

Originating in the tropics, the genus speciated northwards into subtropical and temperate areas of eastern Asia, that is, China, Japan, Korea, and Russia. Some of the temperate species are not in cultivation.

We start with *Pyrrosia linearifolia*, known from Taiwan in the south, northwards on all of Japan's islands, to Korea, and on into Manchuria/Jilin. A vigorous, short-creeping fern with fronds no more than four inches high, it is very felty on both surfaces. Two kinds of stellate hairs can be seen: an upper layer with needle-like rays and a lower layer of wooly ones. *P. linearifolia* can be found on both trees and rock.

Is the material in cultivation from Taiwan or Manchuria? Having just looked at my test in the garden here, I'm leaning towards the latter. Taiwan is zone 8 or 9. Manchuria is zone 4 or 5. Provenance is important. Sometimes.

P. lingua, the tongue fern, is so-called because someone thought the frond looks like a tongue. Not to me. The fronds rise a foot, typically, though can be much shorter, and are leathery above, tan-felt below, or if fertile, aging to orange. Stipes are up to half the frond. The rhizome is long-creeping, typically 1-3" between fronds, and branching modestly. Growth rate is moderate. On the upper surface stellate hairs are irregularly scattered and hydathodes (crystallized calcium deposits) are widely spotted. As usual in the genus, the hairs are denser on the lower surface. The sori are in a patch, not quite merging at maturity, either at the apex or all over. Fertile fronds are infrequent.

P. lingua is the most common Pyrrosia in gardens, frequent enough in zone 7-8 ferneries. Many gardeners stick it in the ground and ignore the epilithic or epiphytic habitat in nature. Cultivars of this species abound, especially in Japan. The nursery Asiatica has several.

Based upon its distribution in eastern Asia, as far north as southernmost Korea and southern Japan, it ought to be successful in zone 8 and borderline in zone 7. That is what is seen in gardens in eastern North America. However, there is a taxonomic variety encompassing all the territory from Vietnam northwestward and extending on to the Tibetan Plateau. Variety *heteractis* gets its name from the possession of two



types of stellate hairs; *heteractis* means multi-rayed. It should be hardy to zone 5 or 6. It does not seem to be in commerce here, though Hoshizaki reported it in 1981 (under the name *P. heteractis*) as coming from northeastern India, Burma, and southern China and not as robust as *P. lingua*; clearly this was not material from Tibet.

Pyrrosia hastata and P. polydactyla share many similarities including being the only exceptions to simple fronds. P. hastata is hastate, P. polydactyla is digitate. The former is native to southern Korea and southern Japan. The latter is endemic to Taiwan. Both are modest in size, under a foot, clumping, moderate in growth rate. They have monomorphic fronds with scattered hydathodes and a dense, persistent mat of boat-shaped rays. The sori are sometimes at the apex, some-

mat of boat-shaped rays. The sorn are sometimes at the apex, sometimes all over. Both are very soft felt. Both are principally found on rock, less often on

trees. Peter Hovenkamp (from Leiden, the authority on the genus) reports that when they are grown in identical conditions they tend to look like each other. Though some microscopic characters weakly support separate species, it appears the most important support comes from different distributions. He concludes more study is needed to determine whether the species level can be maintained. This might explain, too, why some photos on the web appear to be misnamed. Whatever the appellation, you want to touch them all over.

I had *P. hastata* come through a winter in zone 6, albeit reduced in vigor. Perhaps in a drier site it might fair better. In any case zone 7 seems likely. For *P. polydactyla* I can find no evidence for other than zone 8. Of course I'd like to hear otherwise.

Pyrrosia petiolosa is possibly the hardiest of all *Pyrrosia* and is not in cultivation. It is a small fern, not exceeding 8", often a good deal less. Closely related to *P. lingua*, it is, besides smaller, more leathery, and has more confluent sori. It is used in China as tea and as a medicinal. Despite these economic uses, I can find no evidence of cultivation. It is almost exclusively epilithic, perhaps very much like several temperate *Polypodium* species.

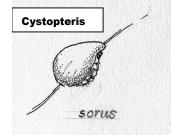
P. petiolosa in its southernmost distribution near China's border with Vietnam is subtropical, but extends northeastward to embrace Korea, Manchuria/Jilin, Inner Mongolia, and Russia's far east. Based upon distribution, some territory is at least as cold as zone 4.

Pyrrosia porosa has an even wider distribution than *P. petiolosa*, extending from Sri Lanka eastward to the Philippines in tropical territory and north to the Himalayas, Inner Mongolia and Japan. Its colder sites are perhaps zone 4 or 5. In northern areas it is likely only epilithic, but is found on trees in the tropics. Fronds to one foot, without or with an indistinct stipe. The brown stellate hairs are both needle-like and wooly. Sori are closely packed, but not merging. *Pyrrosia* is Shiwei in Chinese; the name for *P. porosa* is Soft Shiwei.

Pyrrosia davidii is submerged in P. porosa by Hovenkamp, but is recognized in the Flora of China and seems to occupy the northern areas attributed to P. porosa in the monograph. (To add to the confusion, it is P. pekinensis in the Flora of Japan.) P. davidii is common on Chinese and Japanese web sites, far more so than P. porosa. A crested form of P. davidii with no resemblance to the species is offered by Asiatica; otherwise the species, no matter what the name, does not appear to be in commerce in North America.

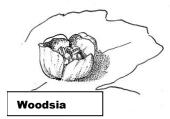
By all that is right and proper *Pyrrosia sheareri* does not qualify as hardy based upon its distribution in southern China, at best zone 9. However, I've seen it in a garden in eastern Germany, a garden which must be either zone 6 or 7. *P. sheareri* is epilithic by preference, epiphytic at times, possibly the largest of the genus, and distinguished by a long stipe, up to half the frond, with a distinct white-to-yellowish midrib. Needle-like stellate hairs on the leathery upper surface are quickly shed, but a mat of hairs on the fuzzy, tan lower side stays in place. Hydathodes are scattered over the lamina; sori are in an ill-defined patch. The rhizome is short-creeping and frond production is **slow**. Plants grown in warm condi-

tions appear more robust, can exceed two feet.



On April 19th, more on growing Pyrrosia.

Cystopteris and Woodsia are both smaller, lacy ferns of rocky woodlands. They are also often difficult for neophytes to distinguish, but at the generic level, the indusia are entirely distinct. In Cystopteris the indusium looks like a hood; in Woodsia it is cup-like. In Cystopteris, all the species look like this one; in Woodsia, the segments forming the cup vary greatly; this one is



Woodsia obtusa. Of course you do need a hand lens to see these. The indusium, however, has

a very short life, shriveling at maturity. If you miss the window, you will have to sit down and learn more about the two genera.

Cystopteris fragilis, circumboreal and disjunct in South African mountains, is found on cliffs and in thin soil over rocks. A number of closely related species have evolved in North America, but, while easy, are probably not readily available. Aesthetically, they are not distinct, but an exception is C. bulbifera. As one might infer, it produces bulbils, in this case on the frond underside. It multiplies steadily in limestone habitats. Older plants are probably too large for the rock garden. Cystopteris fragilis and the rest of the genus are always appropriate in the shady rock garden.

Woodsia is last, not due to the alphabet, but because it is my favorite. All the Woodsia come from rocky habitats (as do nearly all the ferns mentioned here); most are not fussy about pH. Woodsia obtusa is native all over the East and easy in shade or part sun. If the latter site is accompanied by sufficient moisture, it can be divided every year, as I've found with any happy woodsia. Unlike the other woodsias it has evergreen sterile fronds, smaller and horizontal, in contrast to the foot-high, erect, deciduous fertile fronds.

The Trillium Page 5

Not often listed, but easy among rocks, sun or shade, acid or calcareous, is *Woodsia polystichoides*. It is pinnate, that is, once-divided, and derives the name from the upward-pointing ear on the pinnae, a hallmark of many *Polystichum* species. It has a felty texture and is the earliest emerger of all my ferns, early April, and only dies back well after the first frost. Identical in nearly all respects except diminished size, is the Lilliputian *W. intermedia*. The latter can be distinguished from the former by the number of pinnae pairs along the rachis: less than 20 here, more than 20 in the case of *W. polystichoides*, but the size difference is dramatic enough so that once you know them, there is no need for counting. *W. intermedia* is a fine candidate for troughs.

Most of the ferns above can be divided because most of them have short- or long-creeping rhizomes. Exceptions are among the drylanders and aspleniums which are usually propagated from spore or tissue culture.

References? Two comprehensive books, both from Timber Press:

Barbara Hoshizaki and Robbin Moran, authors of the Fern Grower's Manual (revised 2001) cover both hardy and tropical ferns. Drawings of all the species and photos of 10%. Recommended for those more scientifically inclined.

Sue Olsen's book, *Encyclopedia of Garden Ferns*, came out last year. It embraces all the hardy ferns and a few sub-tropicals. It has extended descriptive and anecdotal accounts with lots of good photos. Recommended for those more horticulturally inclined.

For me both are imperative. And online: descriptions, photos and more ferns at: http://hardyfernlibrary.com

The illustrations here are by Edgar Paulton, deceased, from the 1979 How to Know the Ferns and Fern Allies by John Mickel. The stellate hair is from Peter Hovenkamp's A Monograph of the Fern Genus *Pyrrosia*, Leiden, 1986. Silhouettes of *Pyrrosia hastata* and *P. polydactyla* from Barbara Joe Hoshizaki, "The Genus *Pyrrosia* in Cultivation," <u>Baileya</u>, 21:53-76 (1981). All used with permission.

Tom Stuart, tstuart@westnet.com

Tom gardens on a glacial moraine in the Northeastern coastal forest ecoregion. Chestnut once dominated his garden. It still comes up from the roots, one hundred years after first succumbing to the blight fungus, then does so again within a few years.

Juniper Berry Pie: The Discovery of the Box Huckleberry in N.C.

By Stefan Bloodworth

When my son Ethan and I found a curious shrub on my family's property in northern Durham County, all I knew was that this was something different; something I hadn't seen before. We had climbed to the top of a west-facing slope overlooking the Flat River, and were contemplating how to make our way down the other side through the thick Mountain Laurel when this diminutive groundcover caught my eye. That day we took some photos to aid in identification. When I and some of my colleagues here at the Duke Gardens came up with the name *Gaylussacia bracycera*, we were puzzled. The Box Huckleberry, as the shrub was named, was not supposed to exist in North Carolina. Thus began a search that ended with a special discovery. Let me start at the beginning.

In 1796, the botanist/explorer André Michaux found a low, evergreen shrub growing in the woods of West Virginia. Because of how closely the leaves of this plant resembled those of Boxwoods (Buxus), he named it Buxella brachycera, with the specific epithet meaning "short spurred". Shortly after this discovery, the plant seemed to "disappear" for a few decades, with almost no records existent for wild populations. It was not until botanists and naturalists began to inquire of the local communities where such a plant might be found, that they learned of numerous, often large, populations of a plant known to the locals as the "Juniper Berry". It seems that it was quite a popular plant for making pies, and that many of the specimens covered a considerable amount of the forest floor with stems bearing multiple blue drupes or berries. Growing on sandy, often acidic slopes among Chestnut Oaks (Quercus prinus), and Mountain Laurels (Kalmia latifolia), the Box Huckleberry (Gaylussacia brachycera), as this plant came to be known, had been found, lost, and then found again.

As the twentieth century progressed, more specimens were found in the wild. Often many were enormous, with one community covering over ten acres of a Pennsylvania forest. This was later proven to be a single specimen, having spread by underground runners for over 13,000 years! When this was found to be true through further research, it was named the oldest living thing on earth.

(Continued on page 7)

(Continued from page 6)

When similar research was done on other large communities of Box Huckleberry, most were also proven to be single individuals, or "clones". As scientific research continued on just how these plants grow, the growth of local human populations were slowly encroaching on the forests where Gaylussacia brachycera grew. It turns out that while many of these plant populations were large, they were rather few and far between. Logging and road building, coupled with residential and commercial construction have seriously reduced the number of viable populations of this plant. Of the eight states with recognized populations of the Box Huckleberry, there are only one hundred known sites where it grows. In Maryland, it is the state's rarest shrub, with only two known specimens. Pennsylvania has three populations, and lists the plant as threatened. In light of a recent discovery, it appears we can add North Carolina to this list of states with small populations of Gaylussacia brachycera, the main difference between North Carolina and its neighboring states being that, up until this year, there were no known populations of this plant in North Carolina.

The curators of two university herbaria have positively identified the plant that my son and I found as *Gaussacia brachycera*, and it is the only known specimen of the species in the state of North Carolina. It covers approximately 15,000 square feet of forest floor with a carpet of green year-round, and has become the "poster plant" for one of my driving pursuits: the preservation of local forests. If this plant, which covers ½ acre of forest can go undetected for hundreds of years, what other specimens of this and other rare species are waiting out there to be found?

As curator of the Blomquist Garden of Native Plants, I do not want to see my garden become one of the last remaining homes for plants such as this. It is obvious that we need a more comprehensive picture of our native North Carolina flora, and this can begin with you, the reader. If bird and insect species can gain recognition through the fervor of amateur ornithologists and entomologists wandering our woods, then surely a new generation of amateur botanists can help to pinpoint new and interesting areas to be investigated more closely.

Education is one of the tenets of my job as Blomquist hoticulturist, and it is my dream that someone might catch the plant bug from me through a lecture or tour, and go out into the woods to find a hitherto unknown specimen of (Continued on page 8)

Proposed Rock Garden Program
Fall 2008-Spring 2009

September 20, 2008 Frank Hyman Durham, N.C. "Moss Gardening"

October 18, 2008

Mark Weathington
Raleigh, N.C.

"Underused Species: Plants That Missed the
Marketing Push"

November 15, 2008
Russell Stafford
South Lancaster, Mass.
"Bulbs" {topic to be announced}
http://www.odysseybulbs.com/

January 17, 2009
Bobby J. Ward
Raleigh, N.C.
"Rock Gardening in the South"

February 21, 2009 Scott McMahan Clermont, Ga.

http://www.mcmahansnursery.com/contactus.mv "Plant Hunting in the Himalaya and Vietnam"

March 21, 2009
Pam Beck
Wake Forest, N.C.
"Small Space Garden Design"

April 18, 2009
Lisa Bartlett
Atlanta, Ga.
"Container Gardening: Tricks of the Trade"
http://www.greenandgrow.com/

The Trillium Page 7

Distance Ci

Piedmont Chapter Meeting

April 19, 2008

Tom Stuart

Gardener Croton Falls, NY

Rock Garden Ferns

Totten Center, NCBG, Chapel Hill

The Trillium, Newsletter of the Piedmont Chapter The North American Rock Garden Society 1422 Lake Pine Drive, Cary, NC 27511 Place Stamp Here

First Class Mail

Mail label

BOARD OF DIRECTORS

David White, Chair

dmwhite_nc@yahoo.com

484-7885

3 Ontario Court, Durham, NC 27713

Bobby Ward, Past Chair

biblio@nc.rr.com

919-781-3291

930 Wimbleton Dr, Raleigh 27609

Bobby Wilder, Treasurer

wilder@nc.rr.com.

919-755-0480

2317 Elmsford Way, Raleigh 27608

BOARD MEMBERS AT LARGE:

Kirt Cox kirtley@ncrrbiz.com

919-489-7892

2539 Sevier St, Durham 27705

Dave Duch dduch@nc.rr.com

919-467-0653

1422 Lake Pine Dr., Cary 27511

Tom Harville tomhar@bellsouth.net

919-851-5369

104 Birklands Dr., Cary 27511

Todd Lasseigne taxodium@mindspring.com

336-337-6919

523 S Bunker Hill Rd, Colfax. NC 27235

Marlyn Miller marlynmiller@earthlink.net

919-467-3554

1107 Imperial Rd. Cary, NC 27511

Patricia Scolnik bzhh@aol.com

919-918-7976

101 Bayview Dr., Chapel Hill 27516

TRILLIUM EDITORS:

Dave Duch and Marian Stephenson

marian42836@yahoo.com

919-918-3580.

750 Weaver Dairy Rd, #205, CHill 27514

OTHER SIGNIFICANT POSITIONS:

Sept. Plant Sale Manager: Kirtley Cox Refreshments:Gwen and Maurice Farrier

Meeting Refreshments

This is our last meeting at the Totten Center until the 2008-2009 season begins in September. If you feel inclined to bring goodies to share, they certainly would be appreciated. As always, Gwen and Maurice Farrier will be providing the beverage refreshment.

(Continued from page 7)

some special plant thought to be vanishing or lost. It is my hope that the Box Huckleberry is just the first of many plants that we might find in our local forests to make the arguments of conservationists even more powerful. I harbor a secret hope that, on some local wooded slope where few feet have tread, we will find more *Gaylussacia brachycera* hiding. Maybe one day we will know of enough specimens to make a juniper berry pie!

Visit to Charlotte Gardens

There are still a few spaces left on the bus for the visit to the Charlotte gardens. Gardens of Lindie Wilson, Geary Mandrapilias, and Bob Rossier, as well as Wing Haven Garden and the UNCC Botanical Garden will be visited. For details of the trip, see the previous issue of the Trillium. If interested, call Bobby Wilder at 919-755-0480 to sign up.