

The Trillium

newsletter of the Piedmont Chapter of the American Rock Garden Society

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March, 1991

Spring Crocus for the Rock Garden

by Richard W. Hartlage

Despite their ancient association with gardening, members of the genus *Crocus* (Iridaceae) still are underutilized and enjoyed by so few. In early times, Dioscorides knew saffron, the dried stigmata of *Crocus sativus*, as a perfume; Pliny listed the medicinal attributes of saffron; while Clusius knew it as a dye. Linnaeus considered the known crocuses of his day to be subspecies of the saffron crocus. However, since the 18th century, some 79 species have gained taxonomic recognition. Today, the genus is divided into two large groups, vernal and autumnal crocuses, based primarily on their flowering season. With such a wide range of flowering times, choice of color and cultural adaptability, it seems odd to me that rock gardeners don't take advantage of such versatile garden plants.

The division of crocus species into a spring and fall flowering grouping is a broad classification because, between these two seasons there is winter and many crocus flower at that season. In my garden, *Crocus imperati* has been in bloom the last three years on Christmas day with peak of flower in mid-January and some sputtering on into late February. The buds of this Italian species are buff with dark purple feathering, and they open to a lavender interior with purple veining. An orange stigma and yellow throat further accent the open flower.

Crocus sieberi also makes itself known early in the year, January, weather permitting, is its prominent season. C. sieberi subsp. atticus is the type most often available commercially. It forms little hummocks of globular flowers that are clear lavender with a deep yellow throat. Variety 'Tricolor', an interesting oddity and difficult to find, has a prominent white band between the gold of the throat and the body of the petal. 'Bowles White', on the other hand, is quite worth the search because this variety is a crisp, pure white with a golden throat and is large flowered. 'Violet Queen' is smaller but compensates with greater color intensity and works well in combination with gold leaved oregano, Origanum vulgare 'aureum'.

The Scotch crocus, C. biflorus, is not native to its namesake but primarily to Turkey; thus, it might be better called by its other and more poetic common name, 'Cloth of Silver'. This crocus increases rapidly producing thick tufts of goblet shaped flowers variable in color depending on the subspecies or vari-

Continues, see Crocus, page 2

Dwarf Conifers for a Piedmont Rock Garden

by Paul Douglas Jones

If you've had any experience growing dwarf conifers, you probably have realized that "dwarf" is a relative term. Used in the context of conifers, it usually means slow growing; ultimately, on a time scale measured in years, these dwarfs may be too large for use among small rock garden plants. But with my own experience and from personal observations in growing them, I want to share with you some of the best of the dwarf cultivars that truly grow slowly enough to be valuable additions in Piedmont rock gardens for at least 15 years or more. I have included a variety of colors, habits and textures—and all of these are personal favorites of mine. Some of these conifers will be readily available to you, while others may be more difficult to locate.

A detailed summary of cultural requirements is beyond the scope of this overview article. However, there are several generalizations that are important to make regarding cultural requirements of dwarf conifers. First, the conifers cited here are sun-loving. To achieve optimum denseness, compactness and, in the case of the colored foliaged forms, brightness, they should be sited so that they receive at least 6 hours of full sun daily during the growing season. Second, typical garden soils and moisture regimes are adequate. However, one cannot plant conifers in poorly drained heavy clay and expect success. Nor will the driest of parched sands be sufficient; but, then, few rock gardens are constructed in either of these ways. Finally, given moderately decent soil, fertilization is usually unnecessary. Cultivars cited here are what I would term "middle of the road" in their cultural requirements.

What this boils down to is that, in my opinion, dwarf confers are easy rock garden plants. It has not taken an extreme effort on my part to grow any of the cultivars that I am Continues, see Confers, page 4

Next Meeting

Saturday, March 16, 1991, 10:00 AM Totten Center, N.C. Botanical Garden, Chapel Hill, NC

Program: Judy Glattstein

Author, Lecturer, & Gardener Made for the Shade—Plants for the Shady Garden ety. C. biflorus subsp. adamii is pale to medium blue and may or may not have exterior markings of a dark purple. Subspecies alexandri is white flowered with medium to deep purple markings on the exterior of the outer petals, with the best forms having saturated markings of royal purple that are bordered by a thin white edge around each petal. Subspecies weldenii is large flowered and wholly white with a yellow throat and only a tinge of blue on the perianth tube. The Scotch crocus is durable and floriferous and a must should you choose to limit the number of species in your garden.

The most-named varieties is the boast of Crocus chrysanthus. The snow crocus is aptly named for its ability to push itself through snow cover to flower-should it not be too deep. Thankfully, this opportunity is not a frequent occurrence here in Raleigh. February and early March are the prime months for this crocus and there is some variance in this depending on the variety. 'Fuscotinctus' is a natural variant of golden yellow with dark brown feathering exteriorly. 'E. A. Bowles' is larger flowered, of cadmium coloring, and also with outer markings. 'Blue Pearl' is also sizable with a misty pale blue accented with a bright orange stigma. 'Cream Beauty' is creamy yellow, as its name implies, and is lovely in drifts with one of the deep golden varieties sprinkled in for a bit of contrast. An interestingly marked crocus is 'Advance'. A straw-colored interior and lavender exterior make it unique; it also comes toward the end of the C. chrysanthus bloom season. 'Lady Killer' is smaller flowered and white with dark purple brushed on the outside of the outer petals. I have planted this latter one en masse under a winter hazel (Corylopsis sinensis), although it could be used to advantage growing through a silver carpet of mother-of-thyme (Thymus praecox). There are some 30 varieties of snow crocus—far too many to mention here; however, all are garden worthy. Mr. Bowles selected and named many of the C. chrysanthus for the songbirds of Britain. The references speak highly of these 'songbird' selections although I have never found any of them to try.

A diminutive stature does not lessen the impact of C. ancyrensis. With small cups of golden yellow, the color is eyecatching in the garden. One is charmed upon closer inspection by the tiny rounded petals and the bright orange-red stigmata. Bloom time is typically early- to middle February. This crocus is often sold under the invalid name of C. susianus and is known as 'Cloth of Gold'. Another species C. angustifolius is also sometimes, although less frequently, sold under the name of C. susianus. While C. angustifolius has much the same coloring as C. ancyrensis, its petals are more strap like and the outer petals are streaked with a rich red brown that also colors the perianth tube. Its a shame that a perfectly delightful common name might go unused due to this taxonomic confusion. Both of these species are successfully combined, when used in quantity, with the green flowering hellebores, such as Helleborus foetidus, H. argutifolius, or H. viridis.

The Corsican crocus is one of the most beautiful of winter flowering species. It is most stunning when the flowers are closed. The long fawn-colored bud is heavily feathered with a saturated plum. The bud opens nearly flat into a star of mauve-lavender with a white throat and orange or red stigma. C. corsicus

is native to north and central Corsica between 1500 to 7000 feet in elevation. The tunic of this crocus is reticulate and is important to note, since this is the most distinguishing characteristic between this species and its close ally C. minimus, which has a tunic of parallel fibers. Also native to Corsica but farther south, C. minimus is found at lower elevations from sea level to about 4500 feet. Other distinguishing features are that it is a week or two later in bloom and has smaller flowers of deeper tones. The exterior of the petals are typically stained more heavily with a near black purple. The stigmata of C. minimus range in color from orange to yellow; thus they differ from C. corsicus—although there is some overlap. Should you be fortunate to locate a source for these, don't be surprised to find fellow gardeners wanting to make pilgrimages to your garden in February and early March to admire and pay homage to these two very garden-worthy species.

One of the great joys of growing Crocus fleischeri is admiring it before you plant it. The corm is little more than a quarter of an inch in diameter but the tunic which covers and protects it is intricately reticulate, like a flaxen sock of herring bone weave. I know little else that is so miraculously delicate. Once in the ground, this delicate species produces small white flowers that are veined with deep blue which is visible from either side of the petal. The orange red stigmata, which are finely divided, also add to the visual aspects of this species. C. fleischeri is slow to increase, but tough. Don't plant it near something that might overcome it and squeeze the life from it. The top of a low wall near a path is a good spot where it can be admired and appreciated close at hand.

Another golden species for this season, already abundant with flower, is *C. korolkowii*. The only species native to Afghanistan makes up for lack of cohorts by being quite diverse in its range of yellows and degree of complexity in its markings. Flower color ranges from pale buff to yellow-orange. Markings can range from none to a simple collar around the base of the flower to lightly washed streaks to having nearly all of the outer flower petals darkened. The color intensity of these markings also varies, from a pale gray-brown to a deep mahogany-purple. The form in my garden lacks the large color swatches on the exterior of the petals but rather is a bright and happy deep yellow. Flowers are produced in great abundance and are sizable, thereby making this species my favorite of the yellow-flowering species.

For the frugal, Crocus tomasinianus will give one his money's worth. Corms are inexpensive and increase by offsets and self-seeding at an amazing rate. The English warn of the possible weediness of this species, and I have seen it in an old garden in Raleigh, NC, forming sheets of self-sown seedlings blooming in February and early March. Flower color ranges from pale silvery-lavender to dark red-purple. Pointed petals open into thick clusters of stars dotted across the lawn; hence, this is an excellent species to naturalize in turf along with the later flowering blue stars of Ipheion uniflorum (Liliaceae). 'Whitewell Purple' and 'Barr's Purple' are exceptionally large flowered and deeply colored red-purple forms of C. tomasinianus. Graham Stuart Thomas seems to think that the charm of this species is lost in becoming "grandiflorus". He may be correct, but I can't help recalling the vivid picture of a

drift of these in Nancy Goodwin's rock garden (in Hillsborough, NC) glowing a luminescent violet in a late afternoon February sun. I, myself, grow 'Whitewell Purple' under a whiteflowering forsythia Abeliophyllum distichum.

With March comes the great and gaudy show of the Dutch hybrid crocuses, and appropriately so, because this is the end of the season till August when C. kotschyanus begins the season anew. 'Dutch Yellow', or 'Yellow Giant' as it is sometimes known, is a sterile tetraploid of C. aureus, a seedling found and named over 200 years ago; it is still in commerce. Cup-shaped flowers of yolk yellow appear before the C. vernus hybrids in February—with some overlap. The smaller flowered C. vernus of nature is virtually never found for sale. Native to the Alps and the Pyrenees, it forms great colonies with its flowers ranging from white to royal purple and colors in between, including some bicolors with stripes and streaks.

These Dutch giants of C. vernus, perhaps more than any other spring flowering bulb, herald spring for the common man. They are readily available in fall at planting time, to be found in every seed and discount store as well as every nursery and garden center, proclaiming, under huge banners that we have become so familiar with in modern marketing: "Holland bulbs are here!" There are a good many named varieties, but I will mention the ones most frequently found for sale. 'Snowstorm' is large pure white with an orange stigma and reported to be the best of the whites. 'Little Dorritt' has a cup-shaped silverylavender flower and, too, is often available. The earliest is 'Vanguard', also silvery-lavender, but with more elongate petals. 'Pickwick' is pale lavender with heavy striping of dark purple radiating from a purple base, and further calling attention to itself with a bright clear orange stigma. 'Remembrance' is an early variety of solid violet-purple. Finally, there is the satin sheen and deep rich solid purple of 'Purpureus Grandiflorus'a crocus that is truly "grandiflorus"; it is an old variety and still one of the best.

Crocus culture poses no great difficulties. Corms should be planted in fall as soon as they are available, but they can go in the ground as late as December with little harm for those who procrastinate. A site with well-drained soil that gets plenty of winter and early spring sun is preferred. Under deciduous trees and shrubs is perfectly acceptable. A planting depth of four to six inches is ideal depending on the friability of the soil, the more friable the deeper. If I am planting only a few corms of some choice species or variety, I may even work in some compost and a handful of even-balanced fertilizer (e.g., 8-8-8); however, if larger numbers are to be planted I forego the extra work of digging-in compost and just top-dress with the same fertilizer. It is also advantageous to top-dress annually in August or September to keep established corms healthy and flowering in abundance. If one has additional interest-and energy, it is advisable to lift corms every third or fourth year and divide them. This is particularly advantageous to increase the rarer ones. I think crocuses are used to best advantage when planted to look naturally in large drifts and sweeps with as many corms as the pocket book can sustain. You may have to reduce your selections to only one or two choices because the extremely rare ones can be expensive (e.g., C. sieberi 'Tricolor' cost me \$10 a corm.)

I have grown crocuses in pots with varying success using

a mixture of one part garden soil, two parts sand, one part perlite, and three parts of a soilless potting mix. I usually incorporate a handful of lime and mix thoroughly; fill the pots, plant the corms and label them. I think it's best to plunge the pots in the garden or place them in a cold frame. I do the former. It is also a good idea to top-dress with slow release fertilizer (e.g., Osmocote) at this time. Come spring, those that I have planted in pots flower and flourish. I have sustained losses, however, because I've discovered that when growing crocuses in pots, it is essential to dry them out completely when dormant. Pots do not drain thoroughly when the plants are not growing, and thus the corms may rot. It's advisable to repot your crocuses annually in early fall before they initiate root growth. Pot culture is more work but is worth the effort if you are trying to keep tract of a single corm of some precious variety.

If you are encouraged to try some of the crocuses I've described here, Wayside Gardens [Wayside Gardens, Hodges, SC 29695-0001] is a good source—although a bit pricey. Scheepers [John Scheepers, Inc., RD 6, Phillipsburg Rd., Middletown, NY 10940] and White Flower Farm [White Flower Farm, Route 63, Litchfield, CT 06759] also carry some of the rarer species. There is no one source that is inclusive, so one must catch-as-catch-can if you're really interest in the genus.

The crocuses I've mentioned are only a smattering of the potential for the rock garden. Even, if you're not adventurous to spend extra effort—and it does require time to find some of the more obscure species—the giant Dutch hybrids are a must for they truly are the herald of spring, probably more so than any other spring flower, herbaceous or woody. The golden yellow of 'Dutch Yellow' can't help but lift the spirit and motivate the body in this vernal season. We all need something to attract us into the garden to weed out the winter weeds, like henbit and chickweed, before they go to seed. Spring crocuses are just such an impetus.

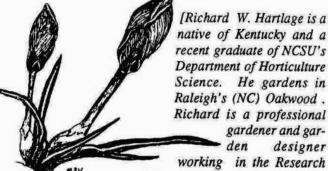
Recommended Crocus References

Bowles, E. A. 1924. A handbook of crocus and colchicum. Martin Hopkinson, London.

Mathew, Brian. 1983. The crocus: a revision of the genus Crocus (Iridaceae). Timber Press, Portland, Oregon.

Phillips, Roger and Martyn Rix. 1989. Bulbs. [edited by Brian Mathew]. Random House, New York, New York.

Thomas, Graham Stuart. 1984. Colour in the winter garden. J. M. Dent & Sons Ltd., London.



native of Kentucky and a recent graduate of NCSU's Department of Horticulture Science. He gardens in Raleigh's (NC) Oakwood . Richard is a professional gardener and gardesigner

Triangle, NC area. He is also cocurator of the new winter garden at

the NCSU Arboretum]

recommending. I do think it is important to establish a plant well, and thus I tend to pay particular attention to a new plant's needs for about a year.

As a rule of thumb, it usually holds true that how well adapted a given species is to an area is a good indication of how well dwarf forms of that species will perform. A welcome exception is the case of Picea glauca, the white spruce of boreal North America. I have never been able to succeed with the species; yet there are several valuable dwarf selections. Most gardeners are probably familiar with the dwarf Alberta spruce. P. glauca conica, but few may realize that its ultimate size exceeds 10 feet. A much more modest sized selection is 'Echiniformis', a blue-gray, mound forming cultivar that increases at a rate of about 2-3 inches per year. Occasionally it will produce an obviously stronger growing shoot that should be immediately pruned; however, full sun and lean soil help in thwarting this non-conformist activity. A relatively deep mulch of old pine bark will benefit its growth and that of just about any other dwarf conifer you may choose to grow.

There are a couple of additional spruces that deserve mentioning. The blue form of the Colorado spruce, *P. pungens glauca*, is a beautiful tree that has given us many smaller selections. The very miniature 'St. Mary's' is among the brightest and slowest of these cultivars, and I have found it to be most reliable. It is irregularly globose in habit and produces 1-2 inches of new shoot growth each year. Colorado spruces disdain poor drainage, but they are among the more tolerant for drier sites. And, they generally warn you when they're in trouble by forfeiting a branch or two, instead of just turning up dead one morning.

Where tolerance is concerned, *Picea abies* is second to no other spruce in this respect. Typically, cultivars of this species grow at a faster rate in the South than in the cooler environs in which they were selected. Nevertheless, *P. abies* 'Little Gem' forms a dense, flattened globe that I highly recommend. The shoots of 'Little Gem' grow about one-half to an inch a year and are compactly crowded together. Be prepared though, for this cultivar has a tendency to occasionally lose a major branch for no apparent reason, but the effect only adds interest to the plant and is in no way indicative of unsuitability.

If a dwarf pine with character is what you need, then there is none better than the miniature Japanese white pine, *Pinus parviflora* 'Adcock's Dwarf'. This pleasingly asymmetrical little pine works its way upward at the "speedy" pace of 2-3 inches a year. It produces lots of buds, which means a much branched interior, and short one inch needles that obscure the new shoots they so densely clothe. If you would like to play around with bonsai in your garden, 'Adcock's' is a natural.

Where Junipers are concerned, there is definitely a dearth of good, reliable dwarfs for a small garden. In fact, only a couple come to mind; however, one of these, Juniperus chinensis 'Echiniformis' is one of the absolute best as far as I'm concerned. 'Echiniformis' develops into a dense urchin-shaped mound, sea green in color. New growth is almost imperceptible, but it does seem to expand about an inch in girth each year. Because it is stiff, hard to the touch, and brittle, it must be kept away from footpaths. This little jewel, more than all others, looks as if it

is transplanted from an alpine scree. I have an 18 year-old specimen that now measures about 20 inches in both height and width.

Not to be overlooked is Juniperus squamata 'Blue Star', a now more or less common recent introduction that is an exceedingly nice plant for its color alone, if nothing more. It grows somewhat faster than other selections mentioned here, but is still within the useful range for rock gardens. The soft texture of its foliage and its billowy habit make it a very attractive plant.

While there may be a pittance of junipers from which to select, the opposite is true of the false cypresses, especially Chamaecyparis obtusa, the Hinoki false cypress. About the best golden dwarf conifer you could select for your garden would be C. obtusa 'Nana Lutea'. When sited in full sun the vertically held, fan-like foliar sprays of 'Nana Lutea' tint a combination of white and rich golden and butter yellows, with very little evidence of green. It may reach 1.5 to 2 feet in size after 15 years. If this is too large, you may opt for 'Golden Sprite' or the green selection 'Juniperiodes', both of which are buns that grow at about one quarter the rate of 'Nana Lutea'.

In order to round out this list of recommended conifers for the Piedmont rock garden, at least one prostrate form should be mentioned, and none could better fill this position than the Canadian hemlock, *Tsuga canadensis* 'Cole's Prostrate'. This cultivar is best used where it may sprawl downward over rocks, creeping along at about 3-4 inches a year. Ultimately the most striking feature is the framework of its older trunks.

I hope this overview will be of some use to you if you're contemplating using dwarf conifers in your garden. The listing is not complete since only a fraction of the cultivars available are represented here; however, these are reliable and, perhaps more important, reliably dwarf.

Recommended Dwarf Conifer References

Bartels, Andreas. 1986. Gardening with dwarf trees and shrubs. Timber Press, Portland, Oregon.

Gelderen, van, D. M. and J. R. P. van Hoey Smith. Conifers. Timber Press, Portland, Oregon

Welch, Humphrey J. 1979. Manual of dwarf conifers. Theophrastus, Little Compton, RI.

[Conifer enthusiast Paul Jones is a horticulturist with the Sarah P. Duke Gardens at Duke University in Durham, NC, and is the past chairman of the Piedmont Chapter of the ARGS. He owns Fascinations, a small dwarf conifer nursery which, he notes, "helps support his habit." Paul was a contributor to the woody plants and dwarf conifer section of A Rock Garden in the South, a recently published posthumous work by Elizabeth Lawrence. He is a member of the Planning Committee for Alpines '96 to be held in North America. His garden and nursery near Hillsborough NC, are open by calling him at (919) 732-8656.]

Night Magic

by Hoyt Bangs

Garden lighting can provide extended use and enjoyment of our landscapes well into the evening hours. Thoughtful design and proper placement of light fixtures enables artificial illumination to enhance the natural look of the garden. Rock gardens and wilderness paths are often best lighted from above. Moonlighting, a popular lighting technique, reproduces the magical play of light and shadow on the ground associated with the glow of a full moon. Outdoor lighting effects are unlimited and offer a continued personalization of every gardener's domain.

A well conceived outdoor lighting scheme should incorporate, in a pleasing unified manner, safety, security and esthetic appreciation as basic design tenets. Ground lights can be used to mark pathways, steps and potential hazards and trees can serve as lighting standards with fixtures attached to their limbs. Where trees are used, lighting is directed down through the branches to simulate moonlight. This technique not only creates a romantic effect, but provides a secure feeling void of the harsh effects of glaring floodlights. Uplighting and backlighting can highlight or silhouette your favorite plants or add a sense of drama to sculpture and water features.

Outdoor lighting systems are powered by standard 120 volt house current or low voltage transformers. As a rule, low voltage systems can be installed without an electrician's help, whereas, it's best to have a professional install 120-volt systems. You'll find that there are numerous fixtures available to reproduce any conceivable garden lighting effect that you may desire. Unfortunately, indiscriminate corner mounted floodlights, bare bulb "brass & glass" front door fixtures, and low voltage kits of mushroom style fixtures lined up in runway style along the front drive and sidewalk, dominate our nightscape.

The many alternatives to these prevalent styles of lighting may make you wonder why you haven't already started creating your own outdoor lighting system. As with any new endeavor, the unknown can be intimidating. Some of the following suggestions might help in getting started with your own personal garden lighting system:

- Spend time in the garden at night observing what is already lighted.
- Decide what you would like to illuminate and highlight.
 Don't light areas you would rather not see at night.
- Consider where you need lighting to make your way safely along the paths, on steps and grade changes. And consider that it's not really necessary to light every step; instead, use "pools" of light to guide you through the garden.
- Think about security: Is it a concern? How much light is necessary to make you feel at ease in your garden at night?
- Purchase the fixtures that you believe will best achieve the desired effects and hook these up temporarily in the evening to see how they look at night. Change the intensity of the lamp and add and subtract fixtures over several nights, making any adjustments before proceeding with any final installation.
- Unless designed to be seen, hide the fixtures with foliage and make sure that lights aren't aimed where they are intrusive to the eye or the neighbors' windows.

 Lights mounted in trees should be accessible by an extension ladder for seasonal adjustment and lamp changes.

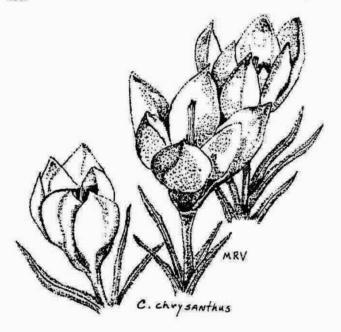
In choosing night lighting for your garden, consider that trees with light, airy foliage are more effective in reproducing a moonlight effect, than are dense canopies. Further, conifers are best lighted where foliage tips are emphasized. In your wilderness garden, you may choose to add night lighting to beds of annual plants that have light colored blossoms. Whites and pastels in these beds are reflective and will stand out in a soft light.

Finally, have fun with your lighting design and installation. The addition of candles, luminaries, and tiki torches, for example, can alter the very aspect of your garden and transform it to a festive atmosphere, or to a romantic mood, or to one that is personalized to your own taste.

[Hoyt Bangs is a garden and outdoor lighting designer in Raleigh, NC. His garden is in the early stages of a satisfying landscape. Although he usually recommends a mature landscape as the best opportunity for creating garden lighting, his yard is lighted and available for viewing by calling him at (919) 787-1875].

Artwork in this Issue of The Trillium

The drawings of Crocus chrysanthus and C. vernus and of Galanthus nivalis are by Martha R. Vaughn of Mount Airy, NC. Ms. Vaughn owns Woodcreek Farm and Nursery, a field tree nursery, which includes native material such as Clethra accuminata. She has also contributed her art talents to the NCSU Arboretum: her drawing of Magnolia grandiflora 'Little Gem' graces arboretum notecards and a print of Crape myrtle Lagerstroemia fauriei is also available through the arboretum. The Crocus drawings were made for initial use in The Trillium to accompany Mr. Hartlage's article. We appreciate her donating her time and talents in preparing these drawings for our use.



ARGS Eastern Study Weekend -Introduction of Asian Plants to the New World

The announced theme for the recent Eastern Study Weekend of the American Rock Garden Society was "The Plants of China", although, in fact, it could have more appropriately been called "The Plants of Asia Plus." The topics of the speakers covered a wide range geographically on subjects horticultural. They considered much of interior Asia, Japan, Korea, and, for some reason, the American Southeast. Hosted by the Potomac Valley Chapter of the ARGS in Alexandria, VA, about 250 rock garden hounds gathered at the fully subscribed program on January 25-27, 1991, to share a weekend of flora, fellowship, fun-and slides. The weekend featured a break from the rounds of slides with a restful bus trip to the U.S. National Arboretum (USNA) where members heard a fine presentation by Asian Collections curator, Larry Lee, who provided some breathtaking views of high mountain flora of Huang-Shan province (China). Attendees also enjoyed viewing the arboretum's graceful bonsai collection, the Gotelli assemblage of dwarf and slow-growing conifers, and the arboretum's vast work-inprogress: China Valley, a five-acre slope designed to botanically simulate a temperate Chinese hillside.

The speakers delivered a wealth of material on rare flora, colorful alpine plants, and spectacular vistas from a variety of botanical tours. Slides complemented the knowledge of the impressive array of talent that the Potomac Valley Chapter (PVC) had garnered for the three-day program. Most speakers, however, chose far too many slides for the programmed allotted time. One presentation overflowed with 202 enumerated slides plus a half dozen more or so that were unlisted in the annotated handout. Future study weekends may want to consider restricting visuals and requiring keen adherence to the allotted times to avoid the inevitable rush-through of slides and the limited opportunity for questioning that resulted. They may also want to require speakers to submit in advance a slide list for publication in the printed program, thereby, avoiding needless wasting of time going up and down the aisles passing out sheets of list-of-slides and frequently apologizing for not having enough handouts for all the attendees; or, forgetting altogether to note that handouts were even available. A disappointment at the study weekend was the paucity of book dealers and absence of any nursery plants for sale to attendees.

The introductions of speakers were provided by PVC member Harry Dewey who kept the audience puzzled but in stitches wondering what turn these "introductions"—albeit generally overly long—would take next. Two presentations stand out by far as the weekend's best. One was given by Alexej "Sasa" Borkovec, a true alpinist, who lovingly told us in a direct, unpretentious manner about the jewel of a rock garden he has developed and cares for in Washington, DC. "Sasa" uses layers of the Washington Post to create natural-looking garden walls, which he advises "leans to the left." The other memorable presentation was by curator Phillip Normandy who contributed a fully-measured, intelligent presentation on the Oriental collection assembled at Brookside Gardens in Mont-

gomery County, MD, by Barry Yinger from Barry's travels in Japan and Korea. The latter presentation included handsome slides, some taken in the wild, of the very plants from which cuttings and seed have found their way to J.C. Raulston and the North Carolina State University Arboretum.

Among the American and Canadian rock garden luminaries who attended the study weekend were authors Geoffrey Charlesworth, Norman Singer, and Judy Glattstein; octogenarian Harold Epstein, President Emeritus of the ARGS; ARGS Bulletin Editor Gwen Kelaidis; and Ontario Chapter Journal Editor Anna Leggatt. The Piedmont Chapter was represented by 13 of its chapter members, including Sandra Ladendorf, the current ARGS national President, who presided over the Board meeting and other events of the study weekend.

The Potomac Valley Chapter spent the past two years planning for the study weekend and growing 1000 hospitality plants that were either given to registrants or used for a plant raffle and a silent auction. At the Friday night dinner, each diner received a charming Chamaecyparis pisifera plumosa compressa 'Twinkles'. Our thanks and appreciation to all the PVC'ers, and perhaps others, who volunteered numerous hours to help plan, coordinate and make this study weekend possible. The next Eastern Study Weekend (the 24th) will be held on January 24-26, 1992, on Long Island in Hauppauge, NY at the Marriott Wind Watch Hotel. It will be hosted by the Long Island Chapter of ARGS. —BJW

Our Piedmont Chapter March, 1991, Speaker:

Umbraphile Judy Glattstein's "Thousand Points of Shade"

Shade-lover Judy Glattstein gardens a one-acre woodland site in Wilton, Connecticut, and dislikes the deer that amble onto her plot. By her own words, it's an eclectic garden she shares with the deer, now some twelve years in the making. About half the lot is shaded with elegant stands of 100 year-old white oaks with an under story of mixed hardwoods, including fine dogwoods. Hers is a naturalistic garden rather than a formal display of plants. At least a portion of her garden has a gentle west-facing sunny slope. Her passion is phytoumbraphilia, the shade loving plants. Because, most shadetolerant plants are spring blooming, her garden draws from the vernal richness of our very best native as well as non-native plants. Therefore, she doesn't object to growing in the same area of her woods North American Trillium alongside Asian Helleborus and European Scilla, or as companions with Japanese Arisaema if the soil conditions and shade are just right. Her woods are also carpeted with thousands of spring- and fallblooming bulbs.

As an active member of the Connecticut Chapter of the American Rock Garden Society, Judy has been its Chapter Chairman. She has written several articles for the *Bulletin* of the American Rock Garden Society including a recent fine article on fall bulbs for the rock garden (Fall, 1990). She has also been an instructor on garden design, shade gardening, native plants

and bulbs, and she is a landscape consultant specializing in herbaceous border design.

Judy is also busy on the lecture circuit—including internationally. Most recently in the fall of 1990, she traveled to England and spoke to the Royal Horticulture Society's Great Autumn Show in London; the Hardy Plant Society meeting at Merrist Wood Agriculture College and at Ness and Bristol Botanic Gardens. Her topic for these lectures was native plants of the North American woodlands and grasslands. Currently she is working on a book, Garden Design Foliage [alternate title: Consider the Leaf—Gardening with Foliage], planned for publication in the fall of 1991 by Story Communications, a Division of Harper & Row. Judy is also the guest editor of a new handbook of bulbs for the Brooklyn Botanic Garden scheduled for release in August, 1991.

"Finding room for extra ferns, Japanese peonies, and primroses makes gardening a never ending story, she says. I'll never get finished." Perhaps she also believes she'll never finish fighting deer that nibble the tender foliage from her woodland garden. Recently, she confided that she had venison for dinner. Whether, the meal was provided her by someone miles away or was the result of her revenge from one too many trampled trillium, she didn't say.

Come meet Judy Glattstein at our next Piedmont Chapter meeting of the American Rock Garden Society. She will be the guest speaker at the meeting on Saturday, March 16, 1991, at the Totten Center of the N.C. Botanical Garden in Chapel Hill, NC at 10:00 am. The topic of her "thousand points of shade" talk is Made for the Shade—Plants for Shady Gardens, and she'll use examples of native- and non-native plants. —BJW

Annual ARGS Meeting Planned for White Plains, NY on May 10-12, 1991

The American Rock Garden Society (ARGS) will hold its annual meeting at the Crowne Plaza Hotel in White Plains, NY on May 10-12, 1991. The theme of the meeting is "A Kaleidoscope of Gardens" and will feature gardens at the New York Botanical Garden, Wave Hill, La Rocaille, Stonecrop, and two gardens of two members of the Hudson Valley Chapter, the host for the annual meeting. The latter two are a ledge garden with western plants and choice alpines and a rock outcrop garden with deep scree beds.

The introductory and dinner speakers will be George Newman who will speak on "A passion for wildflowers: Flora of New England and eastern Canada" from his experience in his New Hampshire native plant garden; and Marion Jarvie on "The best of the West: Mountain plants of the West" from her trips to the western alpines and desert flora sites. There will be a plant sale, plant show, rare books sale, and optional visits to members' gardens. The Piedmont Chapter of ARGS will present the Elizabeth Lawrence Award given "for one pan [pot] of bulbous or rhizomatous plants suitable for a rock garden."

For information on the meeting, contact Gail Lunsford, Registrar; 18 Calumet Avenue, Hastings-on-Hudson, NY 10706; telephone her at (914) 478-1852.

Piedmont Chapter of ARGS Board Members

Chairman: Bobby Wilder, Route 6, Box 145, Apex, NC 27502; telephone (919) 362-7115

Past Chairman: Paul Jones, 622 Stagg Road, Hillsborough, NC 27278; telephone (919) 732-8656

Vice-Chairman: Ed Steffek, 3333 Alabama Avenue, Durham, NC 27705; telephone (919) 471-4008.

Treasurer: Edith Boyer, Route 3, Box 191, Chapel Hill, NC 27516; telephone (919) 933-9619

Publicity: Kay Maltbie, 1830, N. Lakeshore Drive, Chapel Hill, NC 27514; telephone (919) 967-4043.

Board Member-at-Large: Sandra Ladendorf, 123 High Hickory, Chapel Hill, NC 27516; telephone (919) 942-1734. The Trillium Newsletter Editor: Bobby J. Ward, 930 Wimbleton Drive, Raleigh, NC 27609; telephone (919) 781-3291.

Don't Forget Upcoming Piedmont Chapter Events

Judy Glattstein Wilton, Connecticut

Made for the Shade— Plants for the Shady Garden

Saturday, March 16, 1991 10:00 am, Totten Center of the NC Botanical Garden, Chapel Hill, NC

Members' Spring Garden Tour

Saturday, April 6, 1991
1:00 - 4:00 pm
[See map insert for locations and note change of date]
Chapel Hill, NC

Annual Nurserymen's Sale

Saturday, April 13, 1991 North Carolina Botanical Garden 1:00 to 4:00 pm (in the afternoon this year) [Contact: Norman Beal at (919) 231-2167] Chapel Hill, NC

Annual Spring Picnic and Meeting

Saturday, May 18, 1991 12:00 Noon Bring Covered Dish Drinks will be furnished by the Chapter

Nancy Goodwin's Montrose Nursery, Hillsborough, NC [Park in elementary school ground next to Montrose Nursery entrance]

Paid Your \$5 Dues Yet? Check for Red Dot on Your Mailing Label

Does your mailing label to The Trillium have the spring-time red dot blues? You don't know? Check your mailing label. If there is a fat red dot it means that you haven't paid the \$5 dues to the Piedmont Chapter of the American Rock Garden Society (ARGS), and, with this issue, we are dropping your name from the mailing list and from participation in further events for chapter members. You can cure the blues by immediately sending your membership dues to our Treasurer, Edith Boyer at 145 Norwood Road, Chapel Hill, NC 27516. Her telephone number is (919) 933-9619. This issue of The Trillium will be the last one mailed out to a number of you whom we have carried on the mailing list for several issues. We are purging and updating our list. Please check to see that your address is correct and complete—and that we have not incorrectly or inadvertently—given you a red dot.

While the Piedmont Chapter doesn't check to confirm it, you are required to join the national membership of ARGS with annual dues of \$25. These may be paid to Jacques Mommens, Executive Secretary, ARGS, P.O. Box 67, Millwood, NY 10546.

Popular Plant Auction Sale/Show & Tell Continue at Piedmont Chapter March Meeting

With the widely and wildly successful mini-sale auction of plants at the January, 1991, Piedmont Chapter meeting, Chairman Bobby Wilder urges members to also donate plants for the next plant auction sale at our March 16, 1991, Chapter meeting. The January meeting offered pots of Helleborus foetidus, H. orientalis, and H. niger, hybrid Salvias, two species of Cyclamen, a double form of Vinca minor, Viola applachensis, Ramona sp., a pot of handsome Galanthus nivalis, variegated Pachysandra terminalis, and a dozen or so other competitively bidded-for species. Please label clearly and completely each plant that you bring in to donate for the sale. Proceeds from the auction sales go to the Chapter treasury. The January sale netted \$155.50. Thanks to each of you who contributed plants for the January auction-sale and to each of you who purchased plants. Bring some more plants and your piggy bank to the March meeting.

Finally, members are encouraged to bring in plants for a brief "show and tell".

Who Are We?

The Trillium is the newsletter of the Piedmont Chapter of the American Rock Garden Society (ARGS). It is published five times a year in January, March, mid-summer, September and November. The newsletter is distributed to all Piedmont Chapter members, to presidents and/or newsletter editors in each of the other 27 chapters of the ARGS, (which includes one Canadian chapter) to the editor of the Bulletin (the national newsletter of the ARGS); and as sample copies to local prospective members. Piedmont Chapter meetings are held generally

on the third Saturday in January, March, September, and November. The Chapter, located in Chapel Hill-Durham-Raleigh, NC, also generally holds a seedling plant sale to members at its September meeting, a spring annual nurseryman's plant sale, a spring garden tour (usually in April), and an annual spring picnic and meeting (usually in May). For questions or comments on The Trillium contact its editor, Bobby Ward. For questions on the Piedmont Chapter of ARGS, contact its chairman Bob Wilder. The names of all the Piedmont Chapter officers, their addresses and telephone numbers are reprinted in each issue of The Trillium (page 7 of this issue).

Piedmont Chapter Welcomes New Members

We welcome to the Piedmont Chapter of ARGS the following new members who have joined us since January, 1991:

Dern Tenare

Keith Rohn

Durham, N.C. 27707

Keim Bonn	Bryn 1racy
Little River Farm Nursery	8408 Wyndridge Dr.
Rt. 1, Box 200	Apex, NC 27502
Middlesex, NC 27557 965-9507	779-7575
Ollie Reagan	Kim Tripp
Garden Accents, Inc.	NC State University
2620 Yonkers Road	Dept. of Horticulture Science
Raleigh, NC 27604	P.O. Box 7609
828-1116	Raleigh, NC 27695-7609
	737-3167
Julia W. Skinner	Jon Michael Carter
2607 Barmettler St.	5820 Bayberry Lane
Raleigh, NC 27607	Raleigh, NC 27612
834-8383	870-7714
Gertrude Nerad	Richard S. Lovesy
2502 Nation Ave.	P.O. Box 294

Obituary

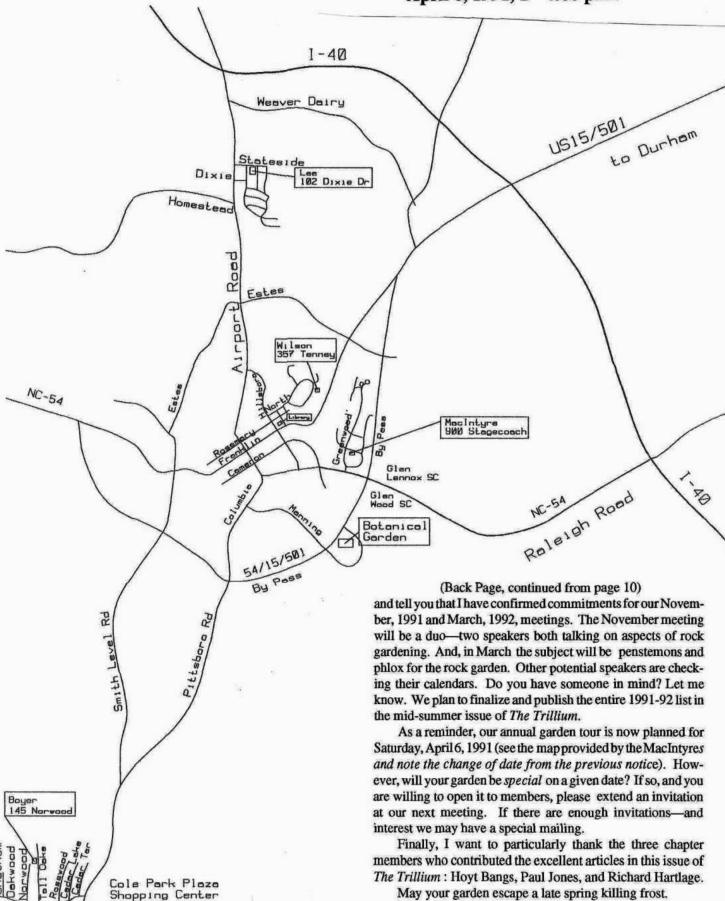
Elon College, NC 27244

W. T. Lamm, Jr. died in mid-January, 1991. He was the husband of Piedmont Chapter member Linda Lamm and the brother of chapter member Jack Lamm. Our condolences to both Linda and Jack.

Members' Bulletin Board

Robert Foss is looking to share a ride to the annual meeting of the ARGS in White Plains, New York, May 10-12, 1991. If interested, give Robert a call during the day at (919) 248-4064, or at night at (919) 782-6472.

Piedmont Chapter 1991 Spring Garden Tour April 6, 1991, 1 - 4:00 p.m.



Mann's Chp Rd

The Back Page... Chairman's Comments by Bob Wilder

We will close out our program year at our upcoming meeting in March. I believe it has been a very good year. I saw Judy Glattstein, our March speaker, at the Winter Study weekend in January in Alexandria, VA, and she promised me a very good final program.

We have such a brief time together at our meetings that we don't really get to know one another. How can we improve on this? Come forward with your suggestions. I have not received a bad suggestion from you yet. For example, earlier, Thurman Maness suggested that we should make the "show-tell-sale" of plants more visible and Norman said we should auction the plants rather than set prices. Good! We've acted on their suggestions. We have had fun at the auctions and have raised more than \$200 for our chapter treasury this year. I am sure there are other members that have good ideas and/or special expertise that could benefit our chapter. Come forward and let us hear from you. For example, do we need a "greeter" to welcome new members and visitors? If so, who? I know we need a chairman to take charge of arranging the refreshments for our chapter meetings next year. Will you volunteer to be the "greeter" or the refreshments chairman?

Norman Beal has agreed to organize the Nurserymen's Day sale on Saturday afternoon, April 13, 1991. Those of you who want to participate should contact Norman soon. He's at (919) 231-2167 or 2324 New Bern Avenue, Raleigh, NC

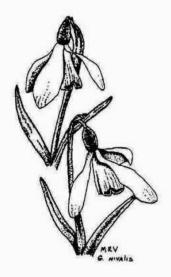
27610. For those members who are not familiar with this special event, let me explain what it is: any member who has plants to sell qualify as a "nurseryperson". A \$5 minimum or 10% gross of sales, whichever is greater, is contributed to the chapter.

It has come to my attention that some members who participate in the nurserymen's sale feel that the nurserymen provide the greater part of operating expenses of the chapter (membership dues barely pay for The Trillium costs). However, last spring, one of our members contributed a large number of rare and unusual plants to the sale-a 100% contribution. The fact is that most of these plants were sold to members before the public was admitted to the sale. Let's expand on this member participation. Check your inventory for "rare-unusual-special" plants and donate to the sale (e.g., Epimediums would fit into this category). Label these plants and deliver to the Membership Table on April 13, 1991. You may even bring them to the March meeting and we will hold them. One of our members has offered under-the-bench greenhouse space for somewhat tender plants. Above all, support the sale by being there and by telling others. It is a rare opportunity to find so many good plants in one place.

On another note, the 1991-1992 program is still in the planning stage. However, I will whet your appetite, just a bit,

(Continues, see Back Page, page 9)

Bobby J. Ward American Rock Garden Society Piedmont Chapter Newsletter Editor 930 Wimbleton Drive Raleigh, NC 27609



First Class

Mailed March 1, 1991