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# The Bulletin

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## Contents

### Vol. 37 No. 3

### Summer 1979

Two Eastern <i>Dicentras</i> —H. Lincoln Foster .....	105
A <i>Dicentra</i> Variant—Mercer Reeves Hubbard .....	107
We're in the Chips—Boyd C. Kline with Edward Huggins .....	109
A Small Glamorous Shrub: <i>Fothergilla gardenii</i> —Mrs. Ralph Cannon .....	115
Lester Rowntree .....	116
<i>Nomocharis</i> in Massachusetts—Ronald A. Beckwith .....	117
<i>Cyclamen</i> in Containers—Brian Halliwell .....	123
The Turfing Lilies—John Osborne .....	125
A New Hybrid <i>Saponaria</i> —Zdenek Zvolanek and Jaroslav Klima .....	126
A Good Tempered <i>Synthyris</i> —Edith Dusek .....	127
Victoria Rock Gardens—Sybil McCulloch .....	129
The Evolution of a Garden . . . and Gardener—Florence Free .....	133
Award Winners—1979: Sallie Allen, Laura Louise Foster, H. Lincoln Foster .....	136
Book Reviews: Manual of Alpine Plants by Will Ingwersen; Wildflowers of the Northeastern States by Frederick W. Case .....	139
Notes from Alaska: Botanizer's Bonanza at Eagle Summit—Helen A. White .....	142
Of Cabbages and Kings: A Fresh Approach—Henry Fuller; <i>Clematis Texensis</i> —Pam Harper; Cutting Dates—Dorothea De Vault; Poison Ivy Cure; <i>Cyclamen</i> Society .....	144
In Praise of Rock Gardening—Charles Gordon Post .....	150
Front Cover Picture— <i>Dicentra cucullaria</i> —Laura Louise Foster, Falls Village, CT	

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# Bulletin of the American Rock Garden Society

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## TWO EASTERN DICENTRAS

**H. LINCOLN FOSTER**

**Falls Village, Connecticut**

**Drawings by Laura Louise Foster**

Fleeting but elegant are the two species of dicentra that grace the early spring flora of Eastern United States: *D. cucullaria* and *D. canadensis*. Similar they are to the point of confusion, with only slight above ground and yet conspicuous below ground differences.

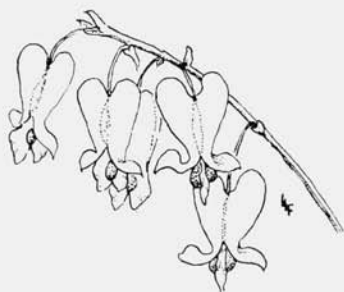
*D. cucullaria*, most commonly known as Dutchman's Breeches, has green ferny foliage early in the spring topped by a one sided raceme of nodding, white, dancing flowers most curiously formed. The structure of the blossom is intricately arranged with the four pleated and folded petals assuming such unlikely postures that their basic poppy relationship is not only concealed but

flouted. Instead of raising a cup of crinkled petals upward to bask in the sun *D. cucullaria* wraps two of its petals upward to form puffed wide-spreading horns — yes, like an upside-down pair of Dutch pantaloons, suspended by an almost invisible pedicel and filled only with air. Two other petals curl down to form a pouch that expands at the mouth into two cupped wings tipped with gold. Wrapped within are the functional stamens and pistils. These blossoms dance for a week or so in earliest spring above the lacy platform of deeply cut, slightly glaucous green foliage. Then, after this ballet, all collapses with remarkable suddenness; the ballarinas sink as they sway, their gar-



ments shrivelling to tawdry brown. Black seeds within the horned pods of the ovary extension harden and glaze. The pod bursts. The seeds extrude. The foliage fades from green to yellow, glimmering down gently to leave no remnants and the underground base of this ballet of blossoms is called upon to carry on the life processes below ground and unseen until another performance the following spring. These underground parts consist of a short root-stock bearing a cluster of pinkish-white rice-like tubers, huddled into a scaly bulb.

In *Dicentra canadensis* the subterranean rhizome carries loosely held, golden, grain-like tubers. It is this feature that gives this plant its colloquial name, Squirrel Corn. The foliage is quite im-



*Dicentra canadensis*

possible to distinguish from that of Dutchman's Breeches though it appears a bit later in the spring and persists for a week or two longer. Squirrel Corn blossoms are carried in a manner similar to those of Dutchman's Breeches, but the individual flowers, though superficially similar, are quite distinctively shaped. Here the upward pointed furred petals form shorter more rounded spurs, parallel rather than divergent, looking, indeed, like the erect ears of a baby rabbit, and the wings on either side of the mouth are pinkish

rather than yellow as in *D. cucullaria*.

These two dicentras, similar as they are, possess other less obvious differences. Though their ranges overlap to a large extent, they do not hybridize as they have different chromosome numbers and there appear to be subtle differences in their site preferences.

*Dicentra cucullaria* has a slightly more extensive range south and west, extending from Quebec west to North Dakota and south to Alabama and Missouri with a curious disjunct population, distinguished as var. *occidentalis*, in Oregon, Washington and Idaho. Where its range overlaps with that of the less widespread *D. canadensis* the two are occasionally found growing together in rich woodlands, but in all state floras Squirrel Corn is described as much rarer than Dutchman's Breeches.

Neither of these dicentras is commonly encountered in rock gardens despite their intrinsic beauty and the fact that most rock garden texts list at least *D. cucullaria*. For some years I thought these two charmers were difficult to establish in cultivation even though *D. cucullaria* is locally abundant in certain natural settings. These seemed almost invariably to be at the base of rocky slopes in woodlands, most always where the rock was acidic. Investigation showed that the tubers lie close to the surface in pockets of almost pure humus.

Efforts to move a few clumps of Dutchman's Breeches from an area along a major highway where expansion of the road was impinging on the rocky slope, were successful to the extent that some leaves appeared the following year, but no blossoms. My site, though rocky and shaded by high trees was amidst rocks of Stockbridge Marble, an ancient metamorphosed limestone. Meanwhile I had purchased



from a "wildflower nursery" — that means usually plants collected in the wild — some tubers of Squirrel Corn. These I put in a nearby spot under some Kaempferi Azaleas. For a year or two there were a few sprigs of dicentra foliage and no real display of blossoms, so I tried moving a few corms of each species up into the acid soil of the woodland garden.

Then, I think it was the third year, there was a fine burst of early Dutchman's Breeches blooms along the path amidst the limestone rocks. And year by year their numbers increase and they have spread into the most unlikely and enticing pockets: amidst ferns, primulas, mertensias, arisaemas, all huddled together with the Dutchman's Breeches generally leading the parade of flowers. They appear to thrive on competition and, conversely, never interfere with the most delicate neighbors.

After about five years I suddenly became aware that at the very end of the blooming season for the Dutchman's Breeches, there was a great flush of flowers on an expanding bed

of Squirrel Corn which had been quietly multiplying unnoticed beneath the Kaempferi Azaleas.

What I begin to think is that you need patience and fresh seed. The cluster of tubers usually breaks up in the transplanting and the individual grain-like scales become scattered, taking a few years to grow into a clump sufficiently big to support blossoming stems. The shining black seed has, at its point of attachment, a fleshy white aril, which shrivels quickly when exposed to air and it would seem that once this aril becomes desiccated the seed loses viability.

Both species are beginning to appear here and there in greater and greater abundance in other areas of the garden, either among basic or acidic rocks. Seeds do get scattered and it is quite possible that the tubers also are spread about by foraging mice. Some find a good niche. And the rewards in the very early spring when the butterfly blossoms dance in the chill air above the lacy foliage are heartlifting.

## A DICENTRA VARIANT

**MERCER REEVES HUBBARD**  
Pittsboro, North Carolina

On a walk in central North Carolina's Chatham County woods with my husband and his father some years ago, we came upon an exciting concentration of native plants in flower: Alum Root, Foam Flower, oxalis, Jack-in-the-Pulpit, Hound's Tongue, Trout Lily, white hepatica, flags, Dutchman's Breeches, Toothwort, Paw-paw, and Buttonbush, all could be seen within an area of a few acres. I never have found my

good walking stick that I threw down to look more closely at a large population of dicentra. One group was easily recognized as the typical white Dutchman's Breeches, *Dicentra cucullaria*, but there were others — pink ones, really pink ones!

Not finding a pink *D. cucullaria* listed in our books, we crept up upon these plants several times during the next few years, wondering if they were

really pink breeches or if the white had faded into pink. Color remained constant; in addition the pink-blossomed plants seemed to present a slightly different aspect from the remembered Dutchman's Breeches of our mountains.

Hoping that we had discovered a new plant, finally I found my way to native plant authority, Dr. Albert E. Radford, in his office on the top floor of the Botany Building at the University of North Carolina at Chapel Hill, a hike quite as exhilarating as climbing the steep bluffs of Chatham.

Dr. Radford said that what struck him at first was the color and shape of the corolla. He said that he had never seen that variation: the small corolla, the more rounded apex, the beautiful pink coloration. "You get a little pink in Dutchman's Breeches, but not all that pink — a rich pink which was retained." He added whimsically that the breeches were not as baggy as those regularly seen in *D. cucullaria* and promised to look it up to see if it could be a new variety.

In *Brittonia*, at that time a publication of the American Society of Plant Environments edited by Kingsley Stern, Dr. Radford found that *Dicentra cucullaria* is listed as having a great amount of variation, particularly in respect to flower form. The shape of our variant, as well as other shapes, was sketched and treated as a variety of *D. cucullaria*, but with no recognition of named varieties. I thought I would

surely get famous and have 'Mercer's Pink Breeches' officially listed; this is what volunteers at the North Carolina Botanical Garden named the variant. Dr. Radford said we'd watch it for a while and see what happens. "I don't think its going to change color or shape; I think it's genetic. A disjunct population which is genetically different is likely fixed and might even be a new variety."

Of significance, possibly, is a discovery made last spring, while the plants were being photographed by Ken Moore, NCBG Superintendent. A form was noticed with very straight corolla sacs (breeches) with dark reddish-brown and others with orange coloring at the constrictions of the petals. After viewing the slides exhibiting the various forms of straight corolla sacs, rounded corolla sacs, and varying shades of pink, Dr. Radford expressed enthusiasm over the distinct genetic variation within this population. The entire population merits further observation and study and horticultural selection of some of the specific forms.

After the hard winter of 1978 these plants struggled to bloom according to their accustomed schedule. Although the winter was below freezing later than usual, the plants came up and were in bloom within six days. They could almost be seen growing.

This gets more interesting all the time. We don't know how many new plants are left to be found, but we'll be taking more walks in the woods.

## 1979 Seed List Correction

Please note that Number 55 should read *Aciphylla montana* Armstrong, the name under which it was contributed, and not *A. lyallii*, the result of unauthorised alteration.

James R. Le Comte, Donor 481

# WE'RE IN THE CHIPS:

## Exploring the Himalayas of Kashmir

**BOYD C. KLINE, Medford, Oregon**  
with **EDWARD HUGGINS**

Photographs by Mr. Kline

This last July we flew from New Delhi to Srinagar, in northwest Kashmir, and there set out upon the adventure of a lifetime.

There was Barry Starling of Great Britain, the ericaceae expert and accomplished nurseryman, with his patience, persistence, and quiet British humor — and Reuben Hatch of Vancouver, Washington, the hard working, successful rhododendron nurseryman and leader of our expedition, his visit to Kashmir four years ago now serving us well indeed — and, of course, yours truly, the old man of the mountains.

Making headquarters at once in Srinagar, the capitol of Kashmir, we looked forward to a month of excursions. We would drive northeast into the Ladakh territory and perhaps glimpse to the far north the snowy peaks of the Karakorum Range. Intrepid explorers of wilderness areas, we three would scramble up countless meadows and screes through eastern Kashmir, even as far south as Menali, everywhere searching along the highest ridges to behold all the fascinating plants we had read about for years but never seen. Challenging the Himalayas has a rather romantic ring to it. But when I actually gazed up at those awesome heights I could only murmur, "Egad, what have I gotten myself into?"

Such was our reaction one morning in Sonamarg, a tiny village near

Ladakh and some eighty-five miles northeast of Srinagar. It was July 30, 1978, the weather perfect.

We rose at seven-thirty and went to the village "pony-boy" station. Ghul, our forty-five year old "boy," saddled our ponies and we mounted, jiggled our stirrups, and were off — preceded by Ghul and his pack-ponies laden with our paraphernalia as well as with tents, food, and supplies for our grand entourage — four pony-boys, a cook, a guide, and the guide's twelve year old boy. So began the trip that would take us twenty miles northwest to Lake Krishensar, to Lake Vishensar above it, and up at last to the 13,000 foot ridgeline. In these four days we would see the best plants that we found in all Kashmir.

The trail out of Sonamarg headed down at first. It then climbed mile after mile until, after a 2,000 foot ascent, we reached a ridgeline meadow. Ahead, northwestward, the meadow sloped up sharply to a soaring peak, its spire a gray, shaly rock in nearly vertical, tilted layers, its side a green mantle swooping to our left to form the meadow's spine before plunging. Sheep herders' mud huts clustered near the spine. Peak after peak marched northward, each with its up-slope pelt of dark trees and lighter green shrubs fingering toward but never surmounting the naked spire, and each with its downslope striations of gray rock and



scree. Close to our right, a forest of long-needled Himalayan pines and Indian firs edged the ridgeline, which fell north to a river valley.

Barry, Reuben, and I wanted to explore down this north-face trail. Its slippery mud terrified the ponies though, so we dismounted, leaving Ghul and his boys to lead our mounts farther up the ridge to a rock and scree descent. We three made our way toward the valley.

Alongside the upper, forested part of the trail, in shady places among the rocks we found a wide variety of ferns — athyrium, polystichum, asplenium — all in species unknown to us. Barry gathered fronds with plenty of ripe spore, and I could not resist picking out several small specimens. The trail opened out into meadows. We waded down through acres of flowers waving at us in the wind, the salvia and geranium and potentilla so abundant that we soon walked among them as familiarly as among old friends. And even when this or that rare little beauty peeped out, no matter how new and exotic, no matter how she widened our eyes, Barry would hardly betray the twinkle in his eyes as he bent down to observe quite calmly, "This looks good." Beautiful *Meconopsis aculeata* grew in singles here and there, the flower's baby blue petals flared out around a golden ring. We saw both white and yellow forms of *Anemone obtusiloba*, some close together. The fern-like foliage of *Adonis chrysoyathus* appeared in great clumps ten to fifteen inches high among the rocks, each stem topped with a large, solitary, golden yellow bloom. We came upon a *Salvia hians* more than a foot tall; the cluster of large, basal foliage grew in moist soil, where rivulets of melting snow may once have carved a bed, and the dark blue flowers were

huge. Instead of the usual purple, they had throats of white.

Farther down the slope, in a jumble of rocks, we were examining cheilanthes when we heard a clatter and looked to see our ponies scrabbling, pitching, and jouncing goatlike over the maze of boulders, manes abobbing. We shook our heads and laughed, glad to be afoot.



*Primula reptans*

The trail dropped precipitously to the river and brought us to a ridge with layers of flatrock shale. "We should find *Primula reptans* in here," said Reuben. And sure enough, we did. Gorgeous things! Their difficulty in the garden paled before their rare beauty here in the valley. Tight, flat mats they were, their tiny buns pressed right against the outcroppings' shaded face. With the patterned stone a fascinating backdrop, the extremely compressed buns and diminutive leaflets were striking enough. But the blooms in full flower clinging tightly to the mats — the sight raised the hair on our necks. In dark purples and light lavenders, the blossoms huddled upon the foliage as though trying to hide from our gaze.

Shadows lengthened. We had a fifteen mile ride up river to make camp at Lake Krishensar, so we mounted up.

But our ponies were old hands at fun and games. "Stumble Bum," as I politely named my pony at first, quickly discovered that I froze to the saddle every time he lurched, so he gleefully tripped over every rock and log. Then he tried a new game, "accidentally" leaning against a great boulder and squeezing my leg between his ribs and the hard place. Well, the next time he tried that I swung my other leg and "accidentally" gave him a swift kick to the jaw. Meanwhile, Barry offered his pony a marathon lecture on its unsavory ancestry, and on we went with never a respite to look at plants along the way, teased and tested at every river crossing, hill, and pebble.

Before nightfall we reached Krishensar (11,500 feet), a large lake at the base of the mountain we would climb the next day. A young German couple, camped near the water, spoke happily about the fishing in the river, where they had caught fine German brown trout. We made camp on a flat a few hundred feet below the lake, near where the river emerged. Our guide went fishing. Barry went looking — and in rock crevices right by our camp found *Asplenium viride*, a delightful, tiny fern with the stems not black but green. He discovered *Asplenium septentrionale* on a large, solitary rock in a meadow nearby, the very fern I had seen in the Colorado Rockies the year before.

At six the next morning we took a quick breakfast, left everyone behind but Ghul, and went for the gold ring. Right away, on the steep, open meadow that mounded up from Krishensar to nearby Vishensar, we spied the huge, bright yellow flowers of foot-high *Geum elatum* as well as the most striking

of all potentillas, *P. nepalensis*, its one to two foot stems procumbent and tipped with beautiful crimson blossoms, some variegated to an orange-red. Then up and up the ponies struggled, no shenanigans today, and at more than 13,000 feet we reached the top saddle of the ridge above Lake Vishensar. From the steep climb and the altitude, Ghul had a terrible headache, so I gave him some aspirin and told him to rest before he headed back down to camp with our ponies. Barry, Reuben, and I wished to spend the day on foot exploring the chips.

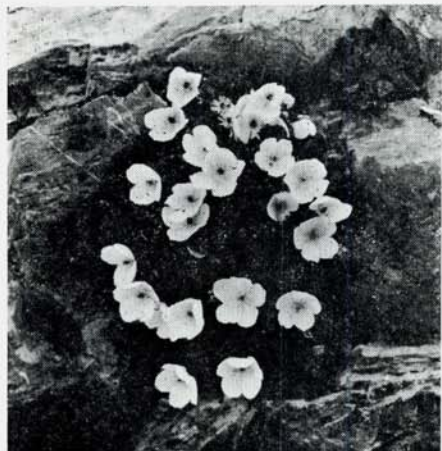
Along the whole ridge a mantle of chippings overlay a deep, rough scree. These finely shattered chips had broken down from the many shaly outcroppings poking up from the ridges. All of these higher outcroppings looked like brownstone.

Right at our feet we noticed pad after pad of *Androsace sempervivoides* and *A. muscoides*. The dark, heavily flowered mound of *Androsace mucronifolia* surprised us with its tiny rosettes.

Soon we came upon the Queen of the Himalayas, *Paraquilegia grandiflora*. Right up on the windswept ridge, it grew tightly adpressed to the surface of chippings and stood barely one inch high. Most of the seedpods were green, but we scurried from plant to plant and finally, with diligence, collected a fair supply of ripe ones. Looking at the unexpected abundance of plants here, we felt overwhelmed to think of all the seed that would ripen in just two more weeks. Then, knowing that every time we found this shaly, sandy-red rock we would find *P. grandiflora*, we explored the north face of a great outcropping and discovered several dozen plants (with tremendous taproots) all up and down the labyrinthine stairsteps of rock. On



some plants the aquilegia-like foliage curled into tight little fists as though

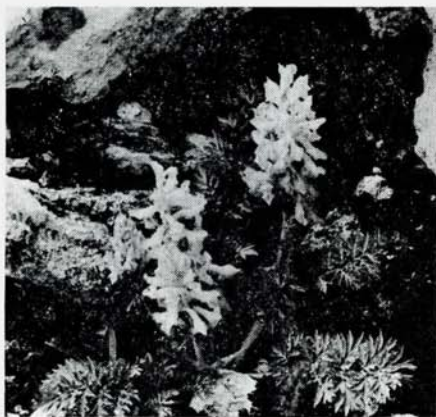


*Paraquilegia grandiflora*

protecting its wealth of blossoms and seed; on others the leaves lay open, contouring the whole plant into a magnificent mound. We found amazing variation not only in the foliage but in the flower — one with blooms the size of a dime, another smothered with blossoms the size of a quarter, and still others as large as a half dollar, twice the size of any other forms I had seen. In contrast to the well-known but smaller, bright lavender flowers found in Nepal and elsewhere, these had a light lavender tint upon the back of the petal, as we saw on one plant with its dozens of buds still tight — but the whole inside of the open bloom was pure white, a lovely Queen.

Higher up the ridge we climbed, seeking *Mertensia tibetica*. Here a deep red allium bloomed in large groups, yet onions hardly drew our interest amidst the teeming royalty. For in this area we came upon pink-blooming patches of *Androsace muscoides*, *Corydalis thyrsoiflora* with short, compact flower heads of deep yellow, and the huge, flat, succulent leaves of *Corydalis crassifolia*, which despite its rather dull

lavender flowers aroused interest with its inflated seedpods. The Whiplash Saxifrage, *S. flagellaris*, was everywhere, one of the very few plants not endemic to Kashmir (how curious that it grows at 13,000 feet both here and in the Rockies). The large yellow blossoms whipped and danced in the breeze, while below them the reddish, spidery stolons crept out along the ground for new scree to conquer. Another very interesting saxifrage, but new to me, was *S. jacquemontana*, its bun not only molding itself to rocky ledges but its yellow blooms a deep orange-yellow. The flowers seemed unable to open themselves fully. On rock outcroppings we saw *S. imbricata*, the tiny leaves compacted into a tight bun; from the center of the leaf clusters came small, stemless, single white flowers. And we found *S. sibirica*, the



*Corydalis thyrsoiflora*

dense tufts of reniform leaves one inch across and the stems four to eight inches tall with bulbils at the base; a corymb of fairly large white flowers topped each stem. To our delight, *S. sibirica* grew thickly amidst the beauty we came seeking — *Mertensia tibetica*. We found it all around, an amazing multitude, some clustering under rock



ledges, others taking full sun right out in the open. Unlike most mertensias, the dark blue flowers turned their faces upward, as if sipping the infinite azure of Kashmir.



*Mertensia tibetica*

Barry glanced up — “We seem to have a visitor.” Not far above, on the top ridge, a sheep herder stared at us — peculiar white men scampering about and grabbing plants and seed

and clambering straight up the mountainside.

One large wall of gray, creviced rock contained some beautiful Himalayan endemics that held us spellbound. In the rock shelving we saw *Primula reptans*, *Primula elliptica*, *Mertensia tibetica*, and *Androsace sempervivoides*. On a stone ledge above us stood a *Sedum crassipes* with its clusters of twelve inch stems arising from a single root-stock, each stem topped with bright red, paint-brush flower heads. And there, right beside it on an eight inch stem, the hoodlike yellow daisy of *Cremanthodium decaisnei* peered at us.

We reached the shepherd's level. We said nothing. He said nothing. We walked on, just a mite self-conscious.

Clouds, like the sighs of a mountain god, ambled about the gray peaks, touched them lingeringly, and moved on.

Another ridge and another, and the day wore on. The mind can only absorb so much. Ever intoxicated with blossoms, *Gentiana argentea* roamed far



Barry Starling and Reuben Hatch on Vishensar Ridge

and wide over the high meadows; though a small annual only three inches high, it was dense with terminal clusters of bright blue flowers. *Pedicularis* showed a grand array of sizes and colors — the variegated white and rose-purple of *P. pectinata*, the bright rose-purple of *P. siphonantha*, the one and a half inch long pale yellow blooms of *P. versicolor*. Soon, excitement settled down. We squirmed around to get the right photo angles. Talk grew quieter.

A *Pedicularis bicornuta*, one foot of pure elegance just ballooning with large puffed yellow blossoms like giant buttered hominy, drew a speculative look, a whispered "Nice," and a couple of photographs.

Along the bowl-rim ridges we circled back and down to camp. Tired. Contented.

The next morning, August 1st, we breakfasted on trout our guide had caught and took it rather easy by hiking up a small canyon between Krishensar and Vishensar. Here we spotted a *Rhododendron anthopogon* and a few species of primula. We gathered seed-pods from *Aquilegia nivalis*. Above all, we came upon a dwarf *Aconitum heterophyllum* only ten inches high, but with unusually large helmet flowers of lime green, striped a dull, purplish brown. Then Barry found his long sought *Cassiope fastigiata* at the top of the canyon ridge.

We got back to camp by midafternoon, itching for a swim, and traipsed up to the shore of glacier-fed Krishensar, Canadian Club in hand. Ah, a few swigs to warm up. Then we stripped, ran, and dove into the lake — hah! — and out much faster. Towels. Clothes. A few more swigs and lots more plant talk occupied a beautiful, beautiful afternoon.

We spent that evening caring for the day's collection — picking out dead

leaves and debris, washing roots clean, enclosing each plant in a plastic bag to retain moisture, and packing them together snugly in cartons. And the next morning we prepared for the journey back to Sonamarg.

Only when Ghul yelled "Osha!" at especially steep, precarious spots did the ponies leave off their fun and games and attend to boulders. Plantsmen are never content in the saddle, though, so on and off we got to check plants along the return trail. A monsoon rain swept upon us, soaking us to the skin in seconds, and for a quarter of an hour we had the ride of a lifetime on slippery saddles upon bouncing ponies up mountain trails and down. In the terribly rocky, muddy area beyond Nichinai Pass, Reuben's pony floundered to its belly and pitched him head over heels into muck. Reuben calmly remounted. All the while I kept giving my pony swift kicks for his tripping tricks and his propensity for choosing wrong trails and so, when we got back to Sonamarg and I got one foot on the ground but the other boot stuck in the stirrup, the pony, expecting well deserved kicks in the ribs, kept sidestepping and sidestepping and I kept hopping alongside like a one-legged duck wishing I *could* kick that varmint. Ghul finally got my boot out and I spit out a few purple epithets. Ghul only grinned and shrugged.

I joined Reuben and Barry, who were gazing back at our mountain peaks.

Had we actually conquered a wee bit of the Himalayas? Had we perhaps put our footsteps beside those of Blatter, Coventry, and other great plant hunters of the past? At least in our hearts and minds we had our own small "Vale of Kashmir," twenty miles long, a million memories wide.

Everything we had come seeking we had found, except *Corydalis*



*cashmeriana*. We had hoped so much to find that, and perhaps it was in another area (Zojila Ridge, no doubt), or possibly mere steps from where we had walked. In fact, it may even have passed from bloom and gone to seed right under our feet. But the plants that we did find exceeded our hopes — *Metensia tibetica* in unbelievable

abundance, the outstanding beautiful *Primula reptans*, and thousands upon thousands of *Paraquilegia grandiflora* in all her loveliness.

Now, having been home for several weeks, an interlude affording me occasion for deep thought, in retrospect I must confess with all honesty — I wish I *had* kicked that damned pony!

## A SMALL GLAMOROUS SHRUB: *Fothergilla gardenii*

MRS. RALPH CANNON  
Chicago, Illinois

Flowering shrubs are among the most important features of a garden; they definitely play a supporting role. If the garden is small the lack of space prevents the gardener from growing anything approaching the collection of his dreams. The temptation to plant more and more shrubs leads to overgrowth along with drastic pruning which results in the shrubs losing their natural shape and beauty.

There are many dwarf species and varieties that should be considered for they not only contribute flowers but beauty of form and foliage. A dwarf shrub worthy of inclusion in any collection is *Fothergilla gardenii* (*F. alni-folia*) which rarely exceeds three feet in height and is very striking both in spring and autumn. Belonging to the Hamamelidaceae family makes it a handsome cousin of the Witch-Hazel. It does well in semi-shade and on a light acid humus soil. This little round upright bush prevails with its foliage and flowers against any competition from any flowers. Being low growing it can be ideal in many different positions, rock gardens or general landscape design. One of its virtues is that it

flowers at a very tender age so there is no wait for a certain size to be reached before you can expect flowers.

Its witch-hazel like leaves are obovate to oblong, base rounded or broadly cuneate, to two inches long and coarsely toothed; nice green color above and paler beneath. In May it produces fluffy inflorescences of fragrant flowers resembling stubby bottle brushes. The quantity of bloom makes the shrub outstanding. These white blossoms without petals are borne in dense terminal heads in which the stamens are the conspicuous part. They appear in short clusters on the naked branches before the unfurling of the leaves and are most decorative. There is a particular charm about shrubs that flower before the tufts of green leaves show as it permits the structure of the naked twigs that support the lovely white flowers to be seen.

*Fothergilla gardenii* was named after the Quaker, Dr. John Fothergill. In 1762 Dr. Fothergill had a most notable garden in Upton, England, second only to Kew. After eighteen years his gardens contained 3400 species of exotic plants in addition to his trees and



shrubs. In 1772 the nurseryman, James Lee, made the following request in a letter to Linnaeus, "I know Mr. Miller sent you a drawing of a plant he wanted you to name after my great friend Dr. John Fothergill. The doctor is fond of that plant as it is sweet and elegant and will endure in the open air in the severest of winters." *Fothergilla gardenii* answers to the description of this plant. The *gardenii* part of the name is in honor of another contemporary doctor, Dr. Alexander Garden, who practiced in Charleston in 1755 but spent all the time he could spare from his profession on botany. He corresponded frequently with Linnaeus.

We are told that this shrub is hardy into Ohio and Massachusetts although it

is a native of the south-eastern states and mostly from the Appalachian mountains. It can be propagated from stem cuttings, root cuttings, by layering, or from seed. Good plants can be obtained from most garden centers and planted in the spring at least by the first of May.

Frequently when seeking plants with decorative shades of colored autumn leaves one turns to some member of the Witch-Hazel Family. Few bushes can rival *Fothergilla gardenii* for the orange-yellow color of its leaves before they fall in the autumn. This seasonal effect is very glamorous. One thing is certain, even one specimen of this little shrub can be worthwhile and will bring color and elegance to your garden.

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## Lester Rowntree

Lester Rowntree, a recipient of the ARGS Award of Merit in 1967, died on March 21, 1979 just eight days after her 100th birthday. Born in England, she came to the United States with her parents when still a school girl and spent most of her adult life in California where she had an astonishing garden built on a steep mountainside overlooking the Pacific in Carmel Highlands.

Mrs. Rowntree spent comparatively little time in her garden, however, as she traveled extensively, usually alone, throughout the southwest United States and Mexico, even exploring as far afield as the Mediterranean maquis and the Chilean highlands to collect the seed of native flora of these areas, which she then dispensed throughout this country and abroad.

Mrs. Rowntree's two books (unfortunately now out of print), *Hardy Californians* and *Flowering Shrubs of California*, are a delight to read. A writer of talent, her books, though authoritative, are not dry botanical texts, including, as they do, lively accounts of her adventurous explorations.

Mrs. Rowntree maintained joint citizenship in Britain and the United States and on the occasion of her hundredth birthday received a cable of congratulations from Queen Elizabeth II. She was a charming person with a lively sense of humor, a dedicated plantsman and conservationist, and a legend in her own time.

# NOMOCHARIS IN MASSACHUSETTS

RONALD A. BECKWITH  
Southampton, Massachusetts  
Photographs by the author

"If the Peat Garden enthusiast had to confine himself to twelve genera, *Nomocharis* would not be last on that short list." — Alfred Evans, *The Peat Garden*

In 1889, in the "Journal de Botanie," Adrien Rene Franchet, Director of the Museum D'Histoire Naturelle in Paris, France, designated the genus *Nomocharis* from specimens collected by Delavay in western China. The name derives from the Greek *nomo* for meadow or pasture and *charis*, meaning outward grace, loveliness. Surely a delightful name for a delightful plant. Our friends the taxonomists made no mistake with that name.

Franchet apparently set up the genus on account of the basally swollen filaments, and the wide open flowers with the outer segments entire whilst the inner segments are much broader and fringed at the margin, with large, almost lobed nectary glands.

Following the introduction of new species, the genus was reviewed in several papers. The first revision was published in 1918 by Sir Isaac Bayley Balfour in the "Transactions of the Botanical Society of Edinburgh" and was followed by E. E. Wilson in 1925 in *Lilies of Eastern Asia*; W. E. Evans in 1925 and 1926 in "Notes," Edinburgh Royal Botanical Garden; and D. Wilkie in 1946 in the Royal Horticultural Society "Lily Year Book."

Fourteen species were recognized, some of which possessed slender filaments. A more recent revision done in 1950 by J. Robert Sealy in the "Kew Bulletin" reduced the genus to eight species, placing *N. euxanthum*,

*georgei*, *henrici*, *Lophophorum*, *mackliniae*, *nanum*, *oxypetalum*, and *souliei* in *Lilium*. *Nomocharis*, as conceived by Sealy, is a small homogeneous genus, obviously closely allied to *Lilium*, *Fritillaria* and *Notholirion*. This relationship has given rise to plants that loosely fit into either genera, therefore, periodically there are shifts in taxonomic opinion and species pop back and forth between the genera.

To complicate matters further, *Nomocharis* species have proved to be a trifle promiscuous, presenting us with the problem of natural and man induced hybrids. This has resulted in the creation of the grex *N. x finlayorum*.

The eight species that Sealy accepts are as follows: *N. pardanthina*, *meleagris*, *mairiei*, *basilissa*, *farrereri*, *synpatica*, *aperta* and *saluenensis*. Of these, *N. basilissa* and *synpatica* are probably not in cultivation. In this article, I will confine myself to the *Nomocharis* that I grow and which I believe to be readily available in the seed exchanges.

The history of the introduction of *Nomocharis* into cultivation resounds with the names that reverberate throughout the world of rock gardening: Forrest, Farrer, Rock, Ward, and not forgetting those great French missionary collectors from western China, Delavay, Soulie and Maire. I think that perhaps here we should acknowledge the tremendous part that the Royal Botanic Garden, Edinburgh has played



in the history of the genus *Nomocharis* and its consequent retention in cultivation. I am sure that I speak for all growers of these wonderful plants who firmly believe that, if all else fails, Edinburgh and that select group of astounding Scottish growers can be counted on to keep things going. Taxonomically, Edinburgh has been in the forefront, with many reviews and papers on the genus emanating from there.

Pere Jean Marie Delavay (1834-1895) was a priest in the French Missions Etrangeres and from 1867 until his death in 1895 lived in China. He was stationed in northwestern Yunnan between Tali-fu and Lichaing. Working mostly alone, he sent a most remarkable amount of material back to France, to the extent that some fifty years after his death his herbaria were still being sorted and classified. It was to Franchet at the Paris Museum that Delavay sent the first known collection of *Nomocharis*. This was classified as *N. pardanthina*. Delavay collected *N. pardanthina* in June 1883 in the pastures of Mount Koua-la-po in the Tali district, Yunnan Province. However, it is to George Forrest that we are indebted for its introduction into cultivation. It first flowered at the Royal Botanic Garden, Edinburgh in 1914 from seed that he had sent back. Frank Kingdon Ward also collected and sent back seed. *N. pardanthina* ranges in height from eighteen to thirty-six inches with whorled foliage. The flowers tend to be nodding, about three inches across, white or flushed with the palest pink, the inner segments fringed whilst the outer are entire. The face is quite heavily spotted crimson towards the center, giving the effect of an eye. The filaments are swollen from their base to a little over half way up, after which they become rapidly reduced, becoming thread-like

before attaching to the anther. This swelling is quite unlike anything in *Lilium*.

*Nomocharis farreri* is sometimes given as a variety of *N. pardanthina*, which it quite closely resembles. However, *N. farreri* is reputed to grow much more strongly, to have narrower leaves, and the inner segments of the flower are not so heavily fringed, being only nicked. Plants that I have grown from seed under this name did not show these characteristics. *N. farreri* was first found by Farrer in the Hpi-mau Pass. Upper Burma in 1919 (Burma-Yunnan Border Region). It was later collected by Forrest and by Ward.



*Nomocharis aperta*

*Nomocharis aperta* is another Forrest introduction. He collected *N. aperta* sometime in 1906 in southwestern Szechuan and northwestern Yunnan. This is rather a distinct plant with the segments entire and the perianth of a flat saucer shape. The more or less outward facing flowers are three to four inches across, white or flushed rose with blotches of deep crimson around the nectaries. The filaments are not swollen. Although this species is reported to attain thirty inches, with me it tends to be rather short, growing some eighteen to twenty-four inches tall.

The leaves are paired to scattered (unlike *N. pardanthina*).

*Nomocharis mairei* (how I admire this plant) was first collected by E. E. Maire in 1912 in pastures at 10,000 feet at Ta-Hai in northeast Yunnan. However, again we are indebted to Forrest, and later Ward, for its introduction into cultivation. I find it difficult to categorize plants, but this really is a most lovely plant, rather reminiscent of an *Odontoglossum*. The tepals are white or flushed pink and heavily spotted with crimson over all the segments, giving way to a crimson-eyed center, the inner tepals are beautifully fringed. By contrast, the pollen is yellow. *N. mairei* var. *candida* is reported in the literature. It is said to be pure white and unspotted. The flowers of *N. mairei* hold themselves well, facing out or slightly down, the tips recurved. The filaments are club shaped, but again, they become thread-like before attaching to the anther. The leaves are whorled.

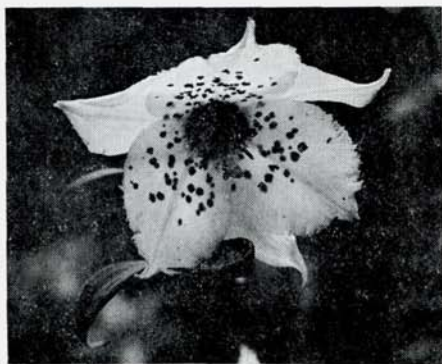
When I was preparing to write this article, I read the published species descriptions and I found that some of them did not exactly correspond with my plants. Comparison of living material with the herbarium sheets at the Gray Herbarium of Harvard University was made as a further check. In this I was much aided by Mr. H. Ahles, Keeper of the Herbarium at the University of Massachusetts-Amherst. Although *Nomocharis aperta* and *N. mairei* matched well, the conclusion was reached that there were no true *N. pardanthina* or *N. farreii* amongst my plantings even though several batches had been raised from seed under those names. Many came very close, but did not quite fit the descriptions. References to the Royal Horticultural Society's Lily Year Books led us to the conclusion, somewhat to my dissatisfaction, that



*Nomocharis mairei*

I had a fine batch of the grex *Nomocharis x jinlayorum*.

Perhaps a review of how this name came about would be fitting. During a visit in June 1969 to the garden of Keillour, the home of the late Major and Mrs. Knox Finlay, Patrick M. Syngé, former Editor of the Royal Horticultural Society, saw several groups of *Nomocharis* which he believed to be of hybrid origin. It was thought unlikely that these plants would be cloned, but would be kept in cultivation by seed propagation, and therefore, it was decided to give them a grex name, hence *N. x jinlayorum*, after Major Knox Finlay, who for many years was a regular exhibitor and superb grower of



*Nomocharis x jinlayorum*



these plants. The original description can be found in the Royal Horticultural Society "Lily Year Book" 1969, p. 107.

What can I say about *N. x finlayorum* to help you identify them? Mostly, they have whorled foliage and they have an obvious affinity to *N. pardanthina*, *farreri* and *mairei*. The flowers are white to pale pink, the spotting anything from all over the face to confined merely around the central eye. Indeed, some have no spotting but just the central eye. They are very lovely and worthwhile additions to any garden; a clump standing some two to three feet tall is a most delightful sight.

Another *Nomocharis* that I am raising from seed is *N. saluenensis*, which is reported to be closely allied to *N. aperta*. *Nomocharis saluenensis* was collected from altitudes between 9,000 and 14,000 feet in southeastern Tibet, northwestern Yunnan, western Szechuan and northeastern Burma. The present stock in cultivation is believed to be derived from George Forrest's collections of 1921-1922. Photographs and attendant literature show that the widely saucer-shaped flowers are upward facing, white to pale pink (even pale yellow has been reported) with purplish spotting towards the center. These are borne on plants that grow two to three feet tall. As in *N. aperta*, the filaments are not swollen and the leaves are paired to scattered. Its name is derived from the Salween River. I would venture to suggest that the photograph of *N. saluenensis* featured in *The Peat Garden* by A. Evans (Plate Xd) is a good example of this *Nomocharis*.

But "Ah" you say, "This is all very well; how do we grow them?" I can only speak from my experience of them here in the Northeast. I tried growing them in Britain (just north of London

on the East Coast) when I lived there, but I never got them to flowering size. While I have been here in the United States (Massachusetts), I have had much better success. Starting off with seed in 1972, I have tried various seed mixtures, but these seem to make little difference; drainage seems to be the important criterion. The mixture that I use now is basically: one part of peat humus, one of loam and one of sharp, coarse sand to which a base fertilizer is added. Then according to how the soil mix "feels," (and you, as rock gardeners, are just as familiar with the term as I am) I add grit or one-quarter inch trap rock screenings, I suppose perlite would be all right too. Really, the drainage is the most critical factor. I do not use Jiffy Mix or vermiculite on slow-germinating seeds. I do not have anything against either; it is just that during the length of time that I leave *nomocharis* seedlings in the pot, Jiffy Mix and vermiculite tend to break down and get mushy.

I have used baby flats as containers in the past, but I now prefer four or four and a half inch square plastic pots as they are deeper. I always put a layer of three-eighths inch trap rock over the bottom for drainage and then fill with the medium to about one-fourth inch below the lower rim. The medium is then firmed.

I try to sow the seeds very thinly as I am going to leave them in the pot two to three years, depending on their growth. One can usually determine if the seeds are good by placing them on wax paper or thin typing paper and holding it over light. You should be able to identify a good seed because the embryo appears as two lines in the endosperm, going part of the way across it. However, use this as a rough

guide and do not discard any seeds, only what is obviously chaff, even though only a few appear good. I always shoot for the works and assume that I might have missed some. If the seeds appear really good, I will sow maybe twelve in a four and a half inch pot, but if it looks very poor and I can see only a few seeds with the embryos plainly visible, I will sow sufficiently thickly that they are perhaps even touching each other. I then cover the seeds with about one-eighth inch of medium over which I place a layer of siftings from three-eighths inch trap rock, i.e., one-fourth inch or less. Just a single layer of trap rock pieces will suffice. It will help keep the moss out. I then water the seeds in well from the top.

When to sow? Frankly, I don't think that it matters. The books all say to sow in early spring but I have sown in the fall, and in the winter (January, February). As soon as the seed is sown I put the pots out in the cold frame where they get frozen solid. In most cases seedlings will appear in the spring although I have had them skip a whole year and come up the following year. I have also sown seed in April, in which case, they sometimes germinate almost immediately, but sometimes they wait. I want to stress the importance of not becoming over-anxious and pitching them out if they don't germinate quickly; as with all good alpiners, wait three years.

For the first year or so after germination, I keep my seedlings in the cold frame, which I shade during the summer with snow fencing so that the pots receive a thin moving shade. I never allow seedlings to flower in the seed pots, however. Bearing in mind that they are in smallish pots, I keep a special eye on them during their second to third spring post-germination.

Once the plants start putting on some stem growth I plant the whole potful out as a clump, placing them *slightly* lower than the soil level and then working soil in around the stems to bring it up to soil level. I leave them like this until the first flowers appear. Usually one or two will flower before the others in the third to fourth years.

As soon as the flowers are faded, I dig the clump up and separate the plants out. Care must be taken in digging because *Nomocharis* bulbs tend to get down deep like those of *Erythroniums*, so you must dig well down to get the spade under them, or you will leave the bulb behind and cause yourself much annoyance. I like to replant immediately. I separate out the bulbs and I dig holes eighteen inches across and nine to twelve inches deep with the soil at the bottom of the hole well forked over. I then plant six to nine bulbs in the hole, working the soil in around them carefully as I go. Hold the stem and plant them as you would a tree sapling. Take care that the plants are as deep or even *slightly* deeper in the soil than they were before. They can and will adjust themselves within reason. I always tread my plants in after planting, treating them more like saplings than bulbs.

As to where to plant them? I can only speak for my garden. I have grown *Nomocharis* in two very different gardens. Though their planting site in both gardens was well drained, in my former garden it was much damper than in my present garden. Also, in the former garden they were planted on the eastern side of *Pinus strobus*, but the trees were quite small and dense (twelve to eighteen feet); at present my *Nomocharis* are growing under a large *Pinus strobus*, mostly on the north and eastern sides, and on a north slope. They have a somewhat thinner shade



than previously as well as a much drier situation. I think, therefore, that it is reasonable to say that *Nomocharis* prefer some shade in *this climate* (western Massachusetts). I give them bone meal in the fall and I spray them every ten to fourteen days during the growing season to keep them free of aphids.

I think that hand pollination is required in order to get seed; without it the seed-set is not very good and seed seems to be the only reliable way to increase *Nomocharis*. While mine grow well, I have not noticed any great increase in numbers. This is merely a general observation, as I do not go round counting them. From all that I read, they can continue undisturbed for several years. There appears to be no great need to lift and move them every three or four years as I would advise with lilies.

What does all this mean? Simply,

that I believe that *Nomocharis* can be grown, at least in the Northeast, when given reasonable conditions and that they are not as difficult as many would suggest. Believe me, they get no better care than the rest of my plants. As alpine growers, you all know the importance of microclimate and finding the right place for the plant. So far they have proved hardy and I have had no problems with rodents or slugs.

This is how I have grown a few *Nomocharis*. I hope that this will encourage others to try growing them. I feel there is nothing more satisfying than to show your friends a group of *Nomocharis* in flower during June and July. They have a refined ethereal quality about them and they are all true alpinists with none known in the wild to occur below the 9,000 foot level. So how about adding a little Grace to your Pasture?

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## The Myth of the Lime-Loving Plant

I am not going to say that *no* plant needs lime and will perish on an acid soil; my experience is far too limited for such a sweeping statement. I do say that I would not be deterred from trying any plant I wanted to grow because I read that it must have lime. I am at present growing at least three species which, theoretically, ought not to flourish in a pH 5 soil without benefit of lime, namely, *Camptosorus rhizophyllus*, *Clematis* — in variety, and *Iris unguicularis* (seven different cultivars.)

“*Clematis* and lime are forever linked, like salt and pepper,” writes grower-member Richard E. Farrell. How do these myths continue to be perpetuated?

—Pamela J. Harper, Seaford, Virginia

# CYCLAMEN IN CONTAINERS

BRIAN HALLIWELL

Kew, England

Many cyclamen, including *Cyclamen persicum*, described below, require a Mediterranean climate; hot dry summers; spring and fall rains; and low, but not prolonged freezing temperatures in winter. For this reason many of the very choice species will not do out-doors in the United States except perhaps in the Southwest, though some will survive in the Southeast if given good drainage. They can all, however, be grown in pots as explained in this article by Brian Halliwell of the Alpine and Herbaceous Department at the Royal Botanic Garden in Kew, England. — Ed.

The so-called Persian Cyclamen, *C. persicum*, from which the florist's plant was developed by selection, did not originate from Persia and, in fact, is not to be found there. It occurs in several countries at the eastern end of the Mediterranean: Greece, Rhodes, Cyprus, Israel, Lebanon, and Syria. In these countries it can be found from sea level to a height of about two thousand feet, usually in woodland although it also grows in the open amongst shrubs or at the base of rocks. Usually it is found growing in alkaline soil that is well supplied with leaf-mold. Corms, which can be as large as a tea plate, may be over a foot below the surface where the soil is deep but can also be just covered where the ground is thin or stony. It is very rare to find corms exposed as they often are in cultivation.

During the hot dry summers of these countries, corms are dormant with

growth commencing at the onset of autumnal rains. Leaves appear first in October and November with flowers appearing in January or February although they can still be seen as late as April. Insects are responsible for pollination and when this has occurred, the flower stems elongate; as the seed pod swells, the increased weight brings it down to ground level. Unlike those of the other cyclamen species, the flower stems of *Cyclamen persicum* do not coil into a spring after pollination of the bloom. Leaves often die away before pods are fully ripe. These eventually split to expose sticky seeds that are attractive to ants, who seem mainly responsible for distribution.

Leaves have serrated edges and are heart-shaped, usually about two inches across at their broadest and of similar length. There is much color variation from plain dark green throughout to completely silver, but in general there is a green background on which there are bands or zones of silver arranged in attractive patterns.

The flowers, which are deliciously scented, stand well above the leaves on six to nine inch stems. Petals are about an inch in length, narrow and twisted. These are usually held vertically as in all typical cyclamen. Most often their color is pale pink but a search in any colony will disclose variation in shades from white to a fairly deep rose and whilst most have a darker eye some are self-colored. Besides variation in color, flowers will be found where petals are held horizontally instead of vertically, and flowers in which



there are ten petals instead of five.

Few sights are more beautiful in early spring than a pine forest in one of this plant's native countries where the forest floor is carpeted with the "Persian Cyclamen". On a warm day the flower fragrance can be so intense that it drowns the scent of the pines. Unfortunately such a scene is unlikely in gardens but an individual plant or plants make a delightful addition to an alpine house or cool room.

Cyclamen of all species are raised from seed, most of their forms coming true to type. Best results are obtained from fresh seed sown as soon as collected at which time germination is most rapid and even; old seed takes longer and germination is erratic. Unless the gardener or his friends have plants, fresh seed will be unobtainable so before sowing seed should be soaked for twenty-four hours in cold water. A compost for sowing can consist of equal parts of soil, sand, and leaf-mold (leaf-mold seems to suit cyclamen better than peat.) Space out the seed in a container or sow individually in small pots, insuring that the seed is covered with one-quarter to one-half inch of the compost.

When fresh seed is not available, sow in January if sufficient heat is available (50 to 60° F.) otherwise delay until temperatures are rising in April or May. Unless individually sown, pot the seedlings singly into small pots when they have developed three leaves. Seedlings of *C. persicum* should be potted one to a five-inch pot whereas all others can be potted several to a nine- to twelve-inch pan, insuring that at all times the tubers are kept well above the soil. Use the same basic ingredients as already mentioned but add some lime and a light dressing of balanced feed.

During the summer months, con-

tainers are best kept out-of-doors and plunged to their rims in a frame where they receive some shade. Water whenever required and keep them growing until flowering takes place. Time of flowering will depend on species, when sown, and the amount of winter heat available. Rehouse in the fall before frosts arrive. A winter temperature of 45 to 50° F. is ideal but as long as the glass house can be kept frost free the plants will prosper. Apply water carefully whenever needed being careful that none fall onto the foliage or tubers. Keep the plants in a dry airy atmosphere avoiding at all times stagnant conditions which encourage disease.

The disease *Botrytis* is a serious menace, attacking first dead or damaged plant material. From here it spreads to immature flower buds and, whilst there will be no obvious symptoms, these fail to develop. Pick over the plants at regular intervals, removing yellowing leaves, faded flowers, or any damaged material taking care when detaching the stems that no ragged plant remnant remains adhering to the tuber. Dusting the centers of the plants with sulphur will give control against the disease spores and will also act as a deterrent against further infection.

When flowering is over gradually reduce the amount of water but do not dry off completely. As the danger of frost passes, transfer out-of-doors and plunge to the rim in a sunny part of the garden where the plants will receive such summer rain as falls so they do not dry out completely. Sun and/or warmth is required by the tubers to insure free flowering in the following season. In wet areas protect in a frame to which maximum ventilation is allowed at all times.

Normal watering for *C. purpurascens* (*europeum*) will continue throughout

the summer; for other species it should resume as flower bud formation is noticed or as new leaves start to develop. Before rehousing, pick over the plants to remove any debris, scrape the loose soil from the surface of the

container and replace with new. Cyclamen grow and flower best when they are root bound so repanning will only be necessary when the corms become so large as to touch each other or the sides of the pot.

## THE TURFING LILIES

There is considerable confusion between the two closely related genera, *Liriope* and *Ophiopogon*, the Asiatic turfing lilies; the only difference separating them being that the *liriope*s have a superior (the perianth attached below the ovary and not to it) rather than a half-inferior ovary as in the *ophiopogon*s. *Ophiopogon* comprises ten or more species that range from India through China to Japan and Korea, while *Liriope* contains fewer species, possibly no more than four, which have a narrower range, being confined mostly to China and Japan.

Both genera form dense tufts of arching, dark green, narrow straplike leaves from three to eighteen inches long or more. They bloom in late summer and fall in spike-like racemes that are usually shorter than the leaves and vary in color from white to deep purple. These and the leaves rise from short rhizomes, which often produce slender stolons.

*Liriope platyphylla* (F.T. Wang and Tang) and *Liriope spicata* (Lour) are much the same, though the latter seems to be the one found in most gardens. But here again there is much confusion as the latter plant has been known as *Ophiopogon spicatus* var. *communis*, *Liriope graminifolia*, *L. spicata* var. *densiflora* and *L. muscari*. It has flowers of a light purple and there is a very attractive variegated form

with light green and cream colored stripes running the length of the leaves.

Probably the most exotic of the *ophiopogon*s, *O. nigrescens*, comes from northwest Nepal. It produces a small tuft of glossy, dark green leaves about four to five inches tall and flowers resembling those of a creamy Lily-of-the-Valley. In the best form, known as "Black Dragon Beard", the leaves are of such a dark green as to be almost black. The fruit too, a pea sized berry, is darker than in most *ophiopogon*s, being a deep navy blue. Not all the plants will come true from seed, however; about fifty percent will have bright green leaves.

Except for some of the *ophiopogon*s from warmer climates, which may need some winter protection in more northerly gardens, these plants will tolerate almost any reasonable soil or climate. They will do well in most garden soils, but prefer it rather sandy. Though they will grow in both sun and shade, they flower best in half shade.

Both genera divide easily, are long lived, and make very attractive additions to the rock garden. Planted closely they make an excellent ground cover and most forms will spread slowly but steadily to form a dense mat, a proclivity which gives both *Liriope* and *Ophiopogon* their soubriquet, Lily Turf.

John Osborne  
Westport, Conn.



## A NEW HYBRID SAPONARIA

ZDENEK ZVOLANEK AND JAROSLAV KLIMA

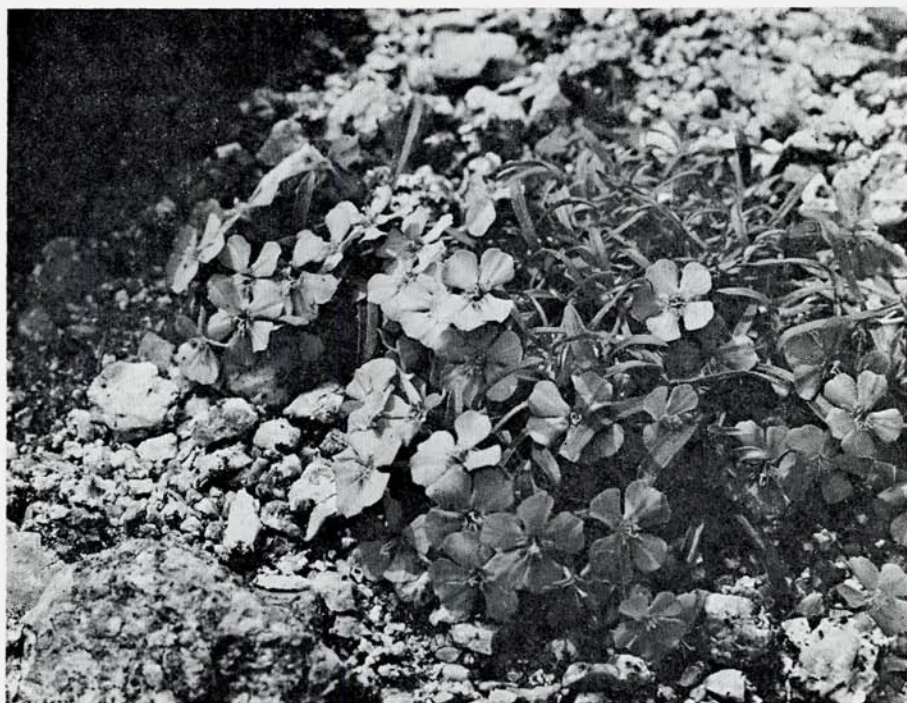
Prague, Czechoslovakia

Photograph by Jan Hulka, Prague

For a number of years Czech rock gardeners have been enjoying such saponaria hybrids as *S. x olivana* with its large cushions bearing pale rose flowers

on a compact mat. It showed its quality at the May, 1978, Show in Prague, blooming for three weeks in full sun.

This hybrid results from the activity



*Saponaria pumila x ocymoides rubra compacta*

of good size and the less frequently seen *S. x 'Bressingham Hybrid'* with its smaller, bright red flowers on tiny bright green cushions. Now our growers are excited by a new, so far unnamed, hybrid originating in Austria from a cross between *Saponaria pumila* x *S. ocymoides* 'Rubra Compacta.' This outstanding hybrid has flowers of a warm rose up to an inch in diameter

of our pen-friend, Fritz Kummert of Mauerbach, Austria. The cross was made in 1974 and the seed was sown in October of the same year. Only two seedlings came up. One proved very similar to *Saponaria pumila*; the second is the new hybrid.

According to Mr. Kummert (and in our experience, also) it is easy to propagate cuttings from plants planted out

in the garden, but not from potted plants. Cuttings should be made of the young shoots in early June taken from the center of the plant when it starts into growth again after trimming it

back following its blooming period.

This excellent hybrid has not been widely distributed until recently. It has only one small defect: it is as yet unnamed.

## A GOOD TEMPERED SYNTHYRIS

EDITH DUSEK

Graham, Washington

The impact of some plants can best be described as love at first sight. Others steal slowly into one's awareness, taking on the comfortable companionship of a pair of old shoes. My first sighting of *Synthyris reniformis* on the gravel prairies near Olympia, Washington created almost no impact at all. Wee scraps tangled in other herbage and struggling for the right to live, they had few leaves and even fewer flowers. Still, they were the earliest of our native wildflowers. Most of them were of that indeterminate color our English friends are wont to call mauve with an almost audible sigh of resignation. Unlike *S. missurica*, whose flowers climb nimbly up the stem, these were collected toward the top where they did their best to make some sort of showing.

A bit of searching revealed here and there a plant with blossoms of a quite respectable lavender. More rarely there would be a pure white one whose virginity was set off by glowing pink stamens. "Oh well, might as well try one," I thought. Prying the chosen one away from the stems of the shrub it had chosen as a provider of shade took a bit of doing. On arriving home, disengaging the plant from the grass in which it was enmeshed was even a more delicate operation. The result

was a wisp of roots, four leaves, and two scrawny stems of flowers. A check around the garden turned up a likely looking home, rich in humus, where sunshine and shadow played tag across the plant. Once it was tucked in, I promptly forgot all about it as showier plants and other garden matters demanded attention.

Early the next spring as I was scooting around trying to finish the "fall" clean up, a bright spot caught my eye. There was friend *Synthyris* blooming its heart out. What a difference! The scrawny thing had increased to a hand-sized clump and was a solid mass of bloom. To be sure, each flower was a small thing in itself but when it socialized with its many fellows, the effect was quite pleasing. Small checkered gray and white butterflies were as enthralled as I. The plant was so well attended by them that there was standing room only. It is said to be impossible to make a silk purse from a sow's ear but this little plant had set out to prove otherwise. Needless to say, my indifference to this small person began to disappear.

In succeeding years I have added a white flowered plant and a few with somewhat larger petals of a more definite color. Each year the original plant has tried to outdo its performance of



the year before. It would now cover a dinner plate with a ruff of purplish old leaves on which sits a perfect nosegay of blossoms. Despite its floriferous efforts, it has managed to produce only a few offspring. Its conduct has been nothing short of impeccable. It neither asks for coddling nor does it become overly enthusiastic with itself or its kind. Its stature makes it a suitable companion for plants of the size of hepatica, bloodroot and cyclamen.

Some time later an Oregon pen pal informed me that *Sythyris reniformis* grows down that way too only the flowers were blue. Indeed they are, though that is rather an understatement. In contrast to the rather delicate tints of our local plants, those from Oregon are a rich full blue, sometimes so much so that they become a deep purple. Plants generally are larger in all parts without losing the charm of their northern cousins. In addition to this, and despite being botanically identical, they do not behave in the same manner in the garden. Coming as they do from the south of Oregon, one might logically expect them to wait for weather here to moderate before putting on their act. Not so. They think winter is the proper

time for blooming and bloom they do for months on end before our natives get into the mood. These plants do not flower all at once as ours are prone to do, rather the blossoming stalks flower in succession. I have yet to see one of them produce the nosegay effect (perhaps in time?) but since the individual flowers are of good size, they are still quite effective. They quite make up in size and rich color what they lack in number.

As might be expected, in addition to shades of blue, an occasional pink-flowered plant may be found. Mine has rather small blossoms (for the Oregon form) of a very nice pink. It set a nice crop of open pollinated seed last year. When they ripened, I tucked them in at "mother's" feet. Despite a summer to end all summers for drought, the seed germinated nicely. Doubtless most or perhaps even all will prove to be blue flowered but with back-crossing something of note may appear.

Garden life seems to agree with the Oregon plants too for they have increased in size and vigor without showing any signs of wearing out their welcome. It is not often that one finds a plant of such intrepid good humor.



Most dwarf conifers remain constant in character, but occasionally a few branches will revert to type, particularly if the dwarf originated as a bud sport on a normal tree. A pendulous clone may give rise to upright "leaders," or a side or top shoot with the strong, faster growth of its "normal" parent, will suddenly appear on a dwarf tree. Miniature ivies will sometimes do the same and shrubs grown for their color variation may produce branches whose leaves are a normal green.

Such reversions should be controlled as soon as noticed by cutting out the offending branch; if permitted to grow they will destroy the desired character of the plant.

# VICTORIA ROCK GARDENS

SYBIL McCULLOCH

Victoria, British Columbia

Photographs by the author

Victoria, British Columbia! — I often wish I had been aboard the first ship to sail into its harbor, it must have been lovely in its untouched beauty. It still has the setting, hills and rocky outcrops, encircled in sparkling blue water and snow-capped mountains, but gone are the bogs, streams, and except in isolated areas, the native plants.

Even when I was young *Erythronium oreganum* grew in multitudes on the rocky slopes and in the woods with *Camassia quamash* and *lichlinii*, *Dodecatheon pulchellum* and *hendersonii*, *Sisyrinchium douglasii*, and *Sedum spatulifolium*. *Cypripedium calceolus* grew in the Pemberton Woods and *Calypso bulbosa* carpeted the forest floor with mauve and filled the air with its scent. *Chimaphila umbellata* and *Goodyera menziesii* (now *oblongifolia*) were their choice companions. So you see the early settlers did not have far to go for choice plants for their gardens.

The British Isles were home to many of these early Victorians so that when the great plant explorations to Asia took place early in this century, news of the collections came quite rapidly to Vancouver Island. Indeed, Reginald Farrer's cousin arrived on the Island about the time that Mr. Farrer was in China and Tibet. The Royal Horticultural Society used to send some of the collected seed to Mrs. R. P. Butchart at Benvenuto, now the world famous Butchart Gardens, to give them a chance of survival if they did not do well in the United Kingdom.

After World War I, many Victorians were demanding greater variety in their gardens than the arabis, aubretia, alyssum and campanulas that made such a colorful display on the rocks in spring. The Layritz Nurseries already were importing the new rhododendron species and exotic trees and shrubs, but Mr. Farrer's books had whetted the appetite of some keen gardeners and they formed a group in 1922 to discuss and grow alpine plants. This group grew into the Vancouver Island Rock and Alpine Garden Society. About this time the first rock and alpine nursery was started by an Englishman named Croft Bennet. He published a catalog in 1925, which was quite extensive and included alpine plants from Europe and Asia, as well as some he had collected on Vancouver Island. Other founders of alpine nurseries were Hugh Preece and A. Nichols, John Hutchinson and Norman Rant. I am told that Mr. Preece grew alpine plants to perfection in pans. Mr. and Mrs. Hibberson (of *Trillium hibbersonii* fame) grew them in troughs. Mrs. Hibberson now grows alpines in the alkaline and dry interior of British Columbia at Savona on the way to Kamloops. I remember Mr. Hibberson speaking of *Gentiana verna* as though she were his mistress; she grew well for him.

In 1929 a young Victoria couple, Mr. and Mrs. Edmund Lohbrunner decided to explore the Forbidden Plateaux on Vancouver Island with a friend. Mr. Lohbrunner had been asked by Croft Bennet to see if he could



find a white form of *Penstemon scouleri*. When he arrived in the alpine meadows, the sight of the myriad numbers of flowers and their exquisite beauty sealed the fate of Edmund Lohbrunner. He decided to live with them. This was the beginning of what was to become the famous Lohbrunner Nursery.

The beautiful early gardens of Major and Mrs. A. Morkill, Mrs. B. Wilson, Mr. and Mrs. W. Pemberton, and the Misses Angus have made way for sub-

plants. One area over thirty feet in length and about five to six feet wide between rocky outcrops lent itself to excavation. This was cleaned out to a depth of six feet in places. The area is on a thirty degree slope and faces west. It has been lined with three inches of chipped rock for drainage and then filled with a scree mixture of one third loam, one third sand and one third leaf mold with some peat moss and a generous topping of shale or rock chippings. This scree ends in a moraine,



Garden of Mr. and Mrs. Vern Ahiers

divisions or apartment buildings, but that of Mr. and Mrs. R. H. Edgell is still beautiful and choice as is that of Mr. and Mrs. Vern Ahiers. Both of these gardens have interesting natural rock formations but each has been developed in a different way.

Mr. and Mrs. Ahiers used their rock to provide suitable homes for their extensive collection of alpine plants by either building up suitable areas or by deepening crevices to provide a cool root-run and proper drainage for their

bog and pond.

The top of the scree is carpeted by *Gentiana acaulis* and *Rhodohypoxis baurii* with *Asperula suberosa* trying to hide a magnificent plant of *Daphne petraea*. *Kalmiopsis leachiana* thrives in the shelter of a north-facing rock. Three *Asperulas*: *nitida*, *hirta* and *lilaciflora* grow well with *Erodium chrysanthum* and *Anacyclus depressus*. *Geum borisii* flaunts its orange-scarlet banners with two of the lovelier helichrysums: *HH. frigida* and *milfordiae*. And

these are only a very few of the choice plants that grow so happily in the scree. Mr. Ahiers tells me that during the many years he has been growing alpines that he has had at one time or another all but two of the plants mentioned in Royton Heath's book, *Collectors Alpines*. Quite an achievement.

On the north side of the rock outcrop can be found in their due seasons several cassiopes, including *C. mertensiana* and *C. lycopodioides*; *Arcterica nana* ramps vigorously along with the wee trilliums: *T. nivale* and *T. rivale* and the form known as 'Vern Ahiers.' *Penstemon scouleri*, *Arenaria balearica* and *Erigeron mucronata* frame a ferny cave above a pool whose boggy rim shelters *Dodecatheon dentatum*, *Caltha leptosepala* and other bog loving plants.

Many shrubs and dwarf conifers enhance the rocky outcrop which is shaded by our native oak, *Quercus garryana*. Among these grow two convolvulus: *C. cneorum* and *C. mauritanica*, cistus, many hebes and *Nierembergia rivularis*, one of my favorites.

The rock and scree have been melded into the lawn very naturally with dwarf rhododendrons and daphnes, including the lovely hybrid, *D. x 'Leila Haynes.'* A well grown plant of *Corokia cotoneaster* is charming in the spring with its little yellow stars crowning a bed of *Lithospermum oleifolium*, whose silvery blue flowers enhance the yellow stars.

One rocky area is set aside for North American plants: various phlox, including *P. diffusa*; *Eriogonum douglasii*, *Penstemon gairdneri*, and three of the loveliest lewisias: *LL. tweedyi*, *rediviva* and *howellii*. In spring visitors can admire a very complete collection of erythronium, trillium and the rare *Scoliopus hallii*. Other woodlanders skirting the rocky outcrops are *Shortia uniflora*, *Schizocodon* (now *Shortia*)

*soldaneloides*, *Phlox adsurgens*, *Gaultheria sinensis*, *Epigaea repens* and several cypripedium including an ever increasing clump of the European *C. calceolus*. These are just some of the treasures to be seen.

Mrs. Edgell's garden is planned in a different way. The rocky outcrop is used as a focal point to bring the eye from the riotous color of rhododendron and azalea borders with their underplantings of native woodland plants and ferns: *Clintonia uniflora*, *Asarum hartwegii* and *A. caudatum* and *Phegopteris dryopteris*. Many varieties of Asiatic primulas grow with *Meconopsis betonicifolia* in drifts among the shrubs and azaleas lining the grassy paths that lead up to the rocky area. The rock itself slopes down to a pool, which provides wet areas for the bog loving primulas, various caltha, and *Lobelia cardinalis*.

The rock is flanked by prostrate shrubs, hebes and *Clematis alpina*, along with *Jasminum parkeri*, *Astilbe chinensis*, various dianthus and dwarf iris. Mat-forming plants grow well in the rocky pockets: *Gentiana acaulis*, *Globularia cordifolia* and *Dryas octopetala* to name a few. *Helchrysum milfordiae*, flanked by *Lewisia howellii* grow well in a rocky seam. *Cytisus kewensis* ramps down from the summit, as does *C. demissus* and *C. procumbens*. Dwarf conifers find nourishment in some of the pockets and a fine specimen of *Abies koreana* looks well to the right of the pool.

Springtime in the Edgell garden is gay with dwarf narcissus, tulips, aconite and fritillaria. Anemones carpet many areas: *A. nemerosa*, *A. ranunculoides*, and *A. blanda*, followed by pulsatilla in some lovely colors. Erythroniums also thrive in this garden as do various species of cyclamen: *CC. coum*, *repan-dum*, and *neapolitanum*.





Garden of Mr. and Mrs. R. H. Edgell

This garden is not nearly so easy to describe in detail as that of Mr. and Mrs. Ahiers. It's the overall effect of shrubs and trees planted to blend color and texture all during the year

that gives it such a pleasing effect. Ground covers blend in with the shrubs and the very fine collection of rhododendrons.

### Rejuvenating The Garden

The Editor of the Alpine Garden Society asked Mr. Hanger, then curator at Wisley, "How often is the rock garden soil rejuvenated or replaced and is complete replanting of a section aimed at from time to time?" The reply (AGS Bulletin, No. 123, p. 66) was that "Each year certain pockets are resoiled, as for *Gentiana sino-ornate*, etc., and a generous top-dressing of sterilized soil is given annually in autumn, except to the screes. Small sections are resoiled at intervals as necessity arises."

As to a large-scale rejuvenation, Wisley's some two acres of rock garden do present a rather extensive job. "During the war (1939-1945) many perennial weeds became established, and following (1949-1951) the entire rock garden was overhauled, a piece at a time. Certain stones were reseated where erosion had taken place. All plants except a certain few large shrubs were lifted and almost all soil replaced. Then it was replanted."

It is thus seen that the problems of a large public garden are not too different from those besetting any and all of us and that a regime of maintenance and repair is probably something each must work out for his own situation.

—R.D.

# THE EVOLUTION OF A GARDEN...

## And Gardener

FLORENCE FREE  
Seattle, Washington

"Be it ever so humble —!" What can give a deeper sense of satisfaction than moving into a brand new house, soon to be a home, destined to be the one and only home. The early snapshot of our small daughter leaning over the porch rail viewing a recently bulldozed lot sprouting a vigorous crop of pigweed shows a little brick house sitting high on its concrete foundation in a row of equally bare little houses, all on fifty foot lots. The high foundation makes possible a garage under the house with an excavated driveway boring down to it. A dream house, no less!

In the thirty years since that picture was taken, not only a garden, but a gardener has evolved.

I made it a point to be home the exciting day that the man came to put in the lawn. He brought up a question which I had never considered. How wide did I want the shrubbery border around the house to be? Intent on getting the dirt covered up as soon as possible to keep it out of the house, I thought two inches would be about right. It was the first miscalculation. The lawn has been shrinking ever since, away from the house and the garden perimeter. However, I am now curbing that tendency. A small garden, full of a wide variety of plant material, needs a generous amount of lawn to bring cohesion and serenity to the scene.

There was never a blueprint for this garden. It just happened. It evolved. I fell in love with a plant, I found a place for it. It outgrew its place, I moved it. It got too big to move,

something else had to go. Until finally the decisions were not mine, I just did what the plant dictated.

And a lot of my most valued plant material was either a gift or came to me by chance. For instance, a happy chance brought a seedling of *Cornus nuttallii* to my garden via a bird in the peach tree. In the nick of time I recognized the little stranger for what it was and instead of weeding it out I moved it to a corner of the garden where it could expand into the tree it was destined to be. Now it is thirty feet high and so dominates that corner of the garden with its shade and roots that the vegetable garden has had to go.

Another bird brought me a seedling mahonia which persisted in a clump of blueberries in spite of my best efforts to weed it out. I finally changed my tactics and decided to grow the mahonia instead of the blueberries. It is now fifteen feet high, and the blueberry patch has changed into a woodland garden.

When I speak of "the garden" I am primarily referring to the area in the rear of the house. Although the lot is only fifty feet wide, it is one hundred sixty-five feet deep so that there is quite a bit of room back there, one hundred feet or more. This is further enlarged by a bank running across it, dividing it into two levels. When I joined the ARGS in 1958, this east-facing grassy slope became the site of the Rock Garden. It was spaded up, the turves turned over and buried and a montane situation simulated by spreading a heavy mulch of crumbled



granite over it. We collect this disintegrated granite in certain areas in the mountains. It has been spread as a mulch each year and has also been dug in around plants when they are moved, so that it is now quite deep, at least a spade's length deep in most places.

Many plants seem to like the granite. Such raoulias as *R. australis*, *glabra*, *hookeri*, *lutescens* and *subsericea* grow happily there. I have also found that the granite makes a fine seed bed, and as a consequence there are many plants of gentians and castillejas. Seed of the castilleja was originally rubbed into mats of *Raoulia australis*, but it is now seeding itself into other things such as eriogonum and sedum species, and *Parahebe canescens*. In fact, it is seeding into just about anything that will protect it from my weeding. We especially value the castilleja for its long blooming season. As I write this, mid-July, *Castilleja miniata* and *Gentiana septemfida* are blooming together and making a brave display. *Castilleja levisecta* started the blooming in May.

Another bonus of the granite is that it discourages slugs. They seem to dislike its gritty, fast-drying surface. As a consequence I can grow such slug favorites as campanulas.

There is another bank along one side of the garden having a northern exposure which is deeply shaded by overhanging shrubbery. When cultivated, erosion was a problem. When left alone, moss was a problem. "Sweet are the uses of adversity". I decided to leave the moss alone and have a moss garden. But may I say that "left alone" is not truly descriptive of the way it evolved. It is actually a high-maintenance garden. It takes constant vigilance to keep undesirable mosses out of it, to keep bird and squirrel depredations to a minimum, and to hunt and destroy

the slugs that love its damp depths. However, it is a lovely setting for such things as ramondas, (grown in chunks of tufa, green with moss), schizocodons, shortias and hepaticas. Soldanellas bloom well here and self-sow. *Loiseleuria procumbens*, *Arctericana nana*, and the small form of *Rhododendron radicans* cascade down the bank. *Adiantum pedatum* var. *aleuticum*, *Athyrium iseanum* "Pictum" and other ferns enhance the picture.

Another bit of adversity which turned into an asset was a low area on the opposite side of the garden. We debated about how to drain it, but in the end I decided to do nothing and have a bog garden. How glad I am that I did! A bog garden is a very interesting and attractive thing to have. Here I can grow *Lobelia cardinalis*, *Epipactis gigantea*, and *Habenaria dilatata*. It was about 1964 that we collected a plant of *Veratrum californicum*, (a job to dig!). It is now a large plant and each spring we enjoy the unfolding of its large pleated leaves, and await with anticipation its tall spire of bloom, but so far, in vain.

Shrubs in the bog are *Betula nana*, *Andromeda polifolia alba*, *Kalmia polifolia microphylla*, ledum and chamaedaphne. I have found that the foliage of *Iris gracilipes* and *Ophiopogon planiscapus nigrescens* have an aesthetic affinity for each other and they both do well on the upper slopes of the bog. For ground cover, *Mazus reptans* with blue flowers is easy and pretty, but *M. radicans*, with white flowers that slugs love, is much slower to increase.

Four years ago I discovered the joys and benefits of trough gardening. Now I am able to grow things that were impossible before. *Campanula piperi* is a prime example. This is its fourth year to thrive and bloom in a twenty-

two inch by sixteen inch by eight inch deep trough. One trough is devoted to the more interesting succulents such as *Sempervivum ciliosum*, *Crassula milfordii* "Silver Stars" and *Orostachys spinosus*. Under them I am trying some of the aestivating little bulbs such as *Fritillaria pudica* and *F. recurva*, successfully the first year. *Dodecatheon clevelandii* var. *patulum* is doing well and increasing rapidly after three years.

Another trough is devoted to things from New Zealand. *Raoulia grandiflora*, *Helichrysum milfordiae*, and *Celmisia sessiliflora* are some of the plants that I am attempting to grow here. *Fuchsia procumbens* cascades over the side. I keep a plastic, hand-made cloche over this trough in winter. In fact, I hope to keep cloches over three more troughs this winter if I can prevail upon my husband to make them.

A *Sophora japonica* in the "Upper Forty", a mere whip of a thing when I planted it in 1961, is now thirty feet high and forty feet wide, and covers the whole upper garden with its beautiful, lacey shade patterns. It is another case of not being master in my own garden. I have had to give up growing such delights as salpiglossis and zinnias, but am well compensated by being able to grow some woodland things like trilliums and erythroniums. I grow many kinds of them, and my favorite erythronium, *Erythronium revolutum* var. *johnsonii*, is naturalizing artistically. I have been able to keep *Cypripedium calceolus* for eight years, but I have to keep a screen around it to protect it from birds and

squirrels. It is planted in decomposing forest litter with an old drain tile buried eight inches below to assure quick drainage.

One of the shrubs that I am especially fond of in the upper garden is *Menziesia purpurea*, grown from seed started in 1959. I love the subdued elegance of this Japanese member of the Ericaceae family when it is covered in spring with its small campanulate flowers of bright red tinged with purple.

Garden visitors are interested in the labelling system which we have developed. My husband has made labels by capping nails with plastic tape on which are punched numerals. Each plant has its numbered nail beside it and the number refers to its name on a plant list. This system is only used where leaf raking is not necessary because the nails are so apt to be raked out and lost. Aside from that they are permanent and ideal. I use them for all plants in the troughs, bog, scree and moss garden. I have limited their number to eight hundred to keep down the work of checking them over once a year and making new plant lists as some plants fail and others take their place.

After thirty years of gardening this little plot, I look around and I am pleased. Also amazed. I didn't do it. I just played out there a little bit, did the things that obviously had to be done, and let the plants dictate the landscaping. And behold! I have a mini-estate.



## AWARD WINNERS—1979

### Award of Merit Winners



#### SALLIE ALLEN

Probably no member of the American Rock Garden Society has done more to promote strong international ties among rock gardeners than has Sallie Allen of Seattle, Washington as Chairman of the International Relations Committee for some fifteen years. Her contribution on a personal and organization level was especially noteworthy in regard to the 1976 Interim International Rock Garden Plant

Conference in Seattle and Vancouver.

Her sense of commitment has been similarly shown while serving as a national director of the Society when she readily offered sound counsel on matters of concern.

As a recognized authority on *Cassiope*, Sallie grows most of the taxa of the genus. In studying and expanding her wide knowledge of the small Ericaceae, she has developed world-wide relationships that have shared her knowledge and that have led to a generous sharing of her plants as well. This facet of her busy life has enhanced and, to a degree, shaped her role in the international relations of the Society.

Sallie Allen's horticultural interests are not confined to rock gardening. In addition to her ericaceous contributions to Pacific Northwest rock gardens, for years she has had an active role in the Northwest Ornamental Horticultural Society, whose bulletin she currently edits. She is active in the Lake Washington Garden Club. In both these she has introduced many to rock gardening, sharing her knowledge and plants generously with the uninitiated in the best traditions of gardening.

More recent involvements reflecting her interest in people as well as in gardening are her active role in horticultural therapy and in organizing and directing horticultural tours.

The American Rock Garden Society is proud to present its Award of Merit

to Sallie Allen for distinguished service to the Society and for outstanding contributions to the promotion of international good will among gardeners.

## Laura Louise Foster

Rock gardeners and botanists rejoice in the delightfully definitive plant portraits produced by one of our most talented members, Laura Louise Foster of Falls Village, Connecticut. A vital part of H. Lincoln Foster's *Rock Gardening*, of the *Connecticut Plantsman* during its brief life, and of the Society's *Bulletin*, our "Timmy's" drawings demonstrate well her unique perceptiveness, precise craftsmanship, and understanding of the living plants. For those who find special pleasure in the forms of the ferns, there is further cause for appreciation of Timmy's talent in Cobb's *Field Guide to the Ferns* where exquisite drawings enhance its usefulness for plant identification.

While Laura Louise Foster's drawings have done much to aid us to become more knowledgeable plantspeople, this has been but a part of her contribution. Those who know the meaning of "Millstream" can readily compare its luster to that of our finest coin of the Land — the golden "double eagle". As a coin has two faces, "Millstream" has Lincoln and Laura Louise Foster identified inseparably with its rich beauty. Timmy's reputed disclaimer of being "Just my husband's weeder" serves only to place this "weeder" among the best of gardeners.

Throughout her membership in the American Rock Garden Society, an ever-ready willingness to lend a hand has marked the strong sense of responsibility and dedication which is so much a part of the character of Laura Louise Foster. Time does not permit enumeration of the many times that she has

met one or another need of the Society. Her dedication to the purposes and objectives of the Society could stand alone, however, on her assumption of the editorship of the *Bulletin* when most needed. The excellence of the *Bulletin* under her editorship testifies fully to her commitment and competence.

The American Rock Garden Society is proud to present its Award of Merit to Laura Louise Foster for distinguished service to the Society and for outstanding accomplishment in the arts and in rock gardening.

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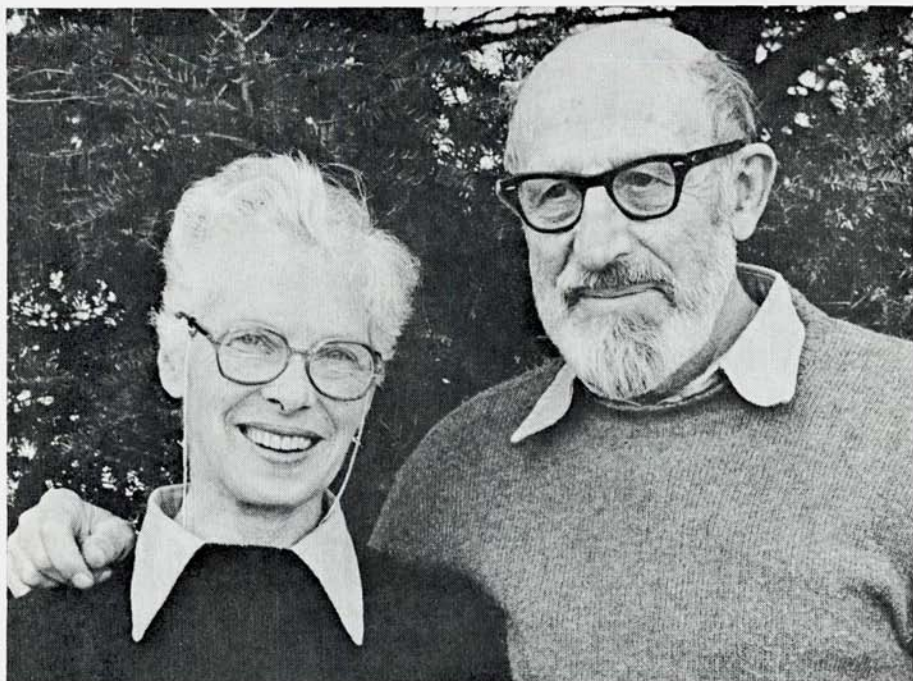
## Marcel Le Piniec Award

### H. LINCOLN FOSTER

Gardeners, especially rock gardeners, identify the name Millstream with artistry in growing the distinctive plants that embody the creativeness and perceptiveness of an exceptional plantsman, H. Lincoln Foster of Falls Village, Connecticut.

The intellectual discipline, perseverance, and critical perceptions that Lincoln Foster translates ultimately into Millstream are recognized the world over. "Millstream" identifies an ever increasing number of fine plants that include such names as *Phlox procumbens* 'Millstream', *Buxus* 'Millstream Green', *Pieris floribunda* 'Millstream', *Tsuga canadensis* 'Millstream No. 1' and gives assurance of superior garden quality. To cite these few specifics leaves untouched rampant accomplishments among the saxifrages, rhododendrons and other much desired groups. Whether a product of discovery, selection of form, or careful breeding, each plant that receives the Millstream hallmark attests to Lincoln Foster's





Laura Louise and H. Lincoln Foster

Martha Porter photo

competence as a plantsman.

Lincoln Foster's right to recognition as a superior plantsman could rest alone on his creation of Millstream and the fine plants that are identified with his years of productive effort there. He has not, however, confined himself to the laboratorial potting bench and its environs. His sponsoring of North American wild flowers for garden use, his extensive writings, including the classic *Rock Gardening*, and his ready participation in discussion — whether person to person or in symposia — all add immeasurably to his great con-

tribution to horticultural knowledge and his personal achievement. Not least of his contributions are his skills as designer and constructor of rock gardens, exemplified in Millstream, which bring joy and inspiration to all who view them.

It is most appropriate that in May 1979 the American Rock Garden Society present to its former President, H. Lincoln Foster, the Marcel Le Piniec Award for distinguished plantsmanship and sustained outstanding service to rock gardeners and rock gardening.





## MANUAL OF ALPINE PLANTS

by Will Ingwersen V.M.H. 1978, Ingwersen and Dunnsprint, Ltd., East Grinstead, W. Sussex, England, \$20.00. Available in U.S.A. and Canada from HHH Horticultural, Hightstown, N.J.

Here is an eccentric and interesting volume about rock garden plants. The author, Will Ingwersen, has a name to conjure with not only in his own English countryside, but here in America where he has visited and lectured. His credentials are impeccable. Will Ingwersen has spent a rich and full life associated with Birch Farm Nursery in West Sussex, England, a nursery of world-renown founded by his father, Walter, just over fifty years ago.

Will's father was a giant in all the early days of alpine gardening in England. His nursery and its catalogs were the source — the well spring. He was not only a tireless figure in the day to day running of the famed nursery, but he was an informed and avid explorer for plants. His fascicled supplements to the nursery catalogs, genus by genus, and his columns in the pages of the old *Gardener's Chronicle* were models of scholarship and horticultural writing.

On the 50th Anniversary of the founding of Birch Farm, his son, Will, was quite naturally moved to com-

memorate the occasion by a special publication. I am sure he had been urged more than once to write a book based on his long experience with rock garden plants.

Periodically, in England as elsewhere also, there is a demand for an update on all recent introductions into the rock garden plant world. Sampson Clay in 1954 in *The Present Day Rock Garden* updated Farrer's work, correcting some slips in Farrer and adding a vast number of items to the catalog of possible rock garden plants. His work ran to almost seven hundred pages of close packed text, a monumental work based largely on compilation of all the up-to-date botanical literature. He corrected some Farrer errors and classified and described hundreds of plants not mentioned in Farrer. Many he apparently grew, most he abstracted from literature. It remains a valuable reference work. Of course in the days of Clay's book, publishing was a different matter from what it is today.

It is very possible, yet I have no way of knowing, that Will Ingwersen was persuaded by his admirers and even by a potential publisher to do a full scale update of the Farrer-Clay sequence. Things have been going on in the way of exploration and introduction since those days. We do need an update. The information is contained in various publications to which most



rock gardeners have no access and yet we all want to know what is the latest word on primulas, drabas, dionysias, et al. A work devoted solely to the purpose of bringing into one source all the latest information on new plants would serve, I think, a real need.

What Will Ingwersen has done in this manual is a curious mixture of the old and the new, the extended and limited, full of first hand and much second hand information. It is certainly not in the scale of Farrer and Clay. In fact, in the introduction to the work, the author makes clear the purpose of the book.

"It is our intention that the Manual should be used in conjunction with our annual catalogue, which will appear each year in an abbreviated form. All plants described in the Manual, of which we have available stocks to include in our catalogue, will be listed and priced but not described. In the case of such families as Aubrieta, Phlox, Helianthemum, etc., of which there are so many named cultivars and hybrids, the name of the variety will be followed by a colour description.

"Many plants which will be in our annual catalogue will not appear in the Manual. For these there will be the necessarily brief description which, unfortunately, economy now dictates. Bulbs, with certain exceptions, are excluded from the Manual, as are Heathers and Conifers although some which are truly rock garden shrubs are included, shrubs are also excluded. In any case I did not wish to become involved in deciding what was, or was not, a shrub!"

Aside from a single page of "Cultural Advice" there is little specific information about growing or propagating the plants listed. Genera are listed alphabetically for easy reference. The name of each genus is followed by

its family designation and a gratuitous and rarely enlightening derivation of the generic name, most of the information for which the author ingenuously admits he shamelessly cribbed.

One cannot help but admire the devoted efforts of research, and praise the fine presentation in readable type. There are, as is inevitable in so crowded a work, a few questionable pieces of information and an occasional carelessness in editing.

Though this work may not be the first book of reference to which a rock gardener turns when faced with questions about a particular plant, it will find a place in my library as a source I'll turn to when presented with a name like *Gratiola*, for instance. — H.L.F.

#### **WILDFLOWERS OF THE NORTHEASTERN STATES**

by Frederick W. Case, Jr. 1978, The New York Botanical Garden; McGraw-Hill Book Co., New York, N.Y.; \$18.95

This book, sponsored by the New York Botanical Garden, represents a new dimension in book publishing. It is, in a sense, a multi-media offering, a slide lecture in print, the slides serving to illustrate the wildflowers discussed in the text. It serves as an adjunct to the first volume of the *Wild Flowers of the United States*, also sponsored by the New York Botanical Garden, and is, we understand, the first in a series highlighting a selection of the wildflowers covered in the six volumes of that monumental work.

It will be interesting to see how this novel approach will be accepted. It has its limitations: the reader-viewer must either own or borrow a slide viewer or projector so as to enjoy the slides and it would be difficult, though not impossible, to do so in conjunction with the reading of the text. These

carpings out of the way, let us proceed.

This book covers forty plants all to be found, we discover upon reading the preface, in the State of New York. The number of plants discussed is limited by the number of slides that can be stored in the transparent pockets fastened to the inside of the front and back covers of the book. It must have been extraordinarily difficult for Mr. Case to decide which wildflowers to select out of all the thousands available in order to fit them into this restricted format. As he explains in his preface the choice was his and he tried to strike a balance between the common and rare species found in a number of differing habitats, choosing, when possible, those of special interest. Thus the book is divided into three sections: the Eastern Deciduous Forest; Meadow and Streambank Habitats; Northern Coniferous Forest and Spruce-Tamarack Bog. Within each section and to some extent throughout the book these plants are presented roughly according to their season of bloom.

Each section opens with a short description of the ecology of the particular habitat under discussion. Light, moisture, temperatures and soils and the effect of these factors on the plants to be found in that habitat are briefly described. A list of the plants to be discussed in that particular section, giving both the common and botanical names of each, is followed by a series of essays on these plants. These verbal portraits, each keyed to the appropriate slide, are headed by a small black and white reproduction of the slide; the essays themselves are models of the genre: concise, informative and delightfully expressed. They give a full botanical description of each plant along with information about its growth habits and requirements, an occasional bit of folk lore and, in most cases,

hints as to how best to grow them in captivity. Only in a few instances does Mr. Case suggest that they are best left where they are found, and as members of the ARGS know, such advice from a grower as skilled as Fred Case should best be heeded.

The slides, though of necessity all duplicate reproductions of the originals taken by the author, are of excellent quality and are in themselves almost worth the price of the book. As those who have heard and seen Mr. Case's lectures would guess, they are all beautifully composed and lighted, giving clear detailed images of the flowers, in many cases of the foliage, and sometimes of the whole plant as well. In a few instances Mr. Case has concentrated on the blossom to the exclusion of most or all of the foliage, which I personally regret as I do not feel such pictures, beautiful as they may be, give an adequate portrait of the plant. This is perhaps a minor point for, as Mr. Case points out in his preface, this book is not intended as an identification manual.

Unfortunately the slides, though each in perfect focus, are not all in the same focal length so that occasional adjustment is needed to get a clear image. Even more annoying, however, are the thumb marks which, particularly on the vertical shots, in the majority, are frequently misplaced, at least in our copy. This means that each slide should be carefully examined and remarked before projection, a chore that should not have devolved upon the reader. There are also a number of careless typographical errors in the text. Such details, though not in themselves major, are regrettable in a book that is otherwise so beautifully conceived and executed.

This book is intended for the uninitiated layperson or for those only ca-



sually interested in wildflowers in the hope of obtaining converts to the study of native plants and convincing them of the worth of wildflower conservation. Most, if not all, of the flowers portrayed will be familiar to ARGS members. However, even they will find much to enjoy both in the text and the slides and many may learn facts about some

of these plants that they did not previously know.

The New York Botanical Garden, if they decide to publish more books in this series, will be hard pressed to find an author and photographer as knowledgeable, skillful and delightfully literate as Fred Case. — L.L.F.

## NOTES FROM ALASKA

### Botanizer's Bonanza at Eagle Summit

**HELEN A. WHITE**  
Anchorage, Alaska

On the Steese Highway, out of Fairbanks 108 miles, one can find one of the best botanizing areas in Alaska. It probably is the best except for Aitu Island in the Aleutians, Point Hope in northwestern Alaska and the Teller Road out of Nome. The good thing about this place, Eagle Summit, is that it is on a main highway and thus is easily reached. If you are traveling in a camper or motorhome, you have it made; just come on up and camp for a few days and look the place over and browse around among nature's gems.

Many people camp at Eagle Summit on the nights of the 20, 21 and 22 of June so that they can watch and photograph the midnight sun. If you are not prepared to camp, drive on to Circle City (54 miles), Circle Hot Springs (27 miles) or to Central which is only 19 miles from the summit. There are accommodations at these places but it is best to call ahead from Fairbanks for reservations. Incidentally, Circle City is on the banks of the mighty

Yukon River and is the farthest north one can drive on interconnecting highways.

But, let's get back to botanizing. The feast really begins at Twelvemile Summit back at milepost 89.6. From here to Eagle Summit and on the surrounding mountainsides can be found a fabulous array of alpine plants. One could easily spend a week in this general area without seeing all that is to be seen. Eagle Summit is at an elevation of 3,624 feet which probably will not seem like a very high mountain to those of you who dwell in the South 48. However, when you consider the latitude as well as the altitude, it is equal to at least 10,000 feet in the Colorado Rockies. Some of the plants here will be familiar to those of you who have botanized the Rockies, too.

As you no doubt know, each degree of latitude north is the same as 200 feet more elevation. Thus one does not have to be very high above sea level to discover alpines found at much greater elevations farther south. And

what a wealth of plants are everywhere underfoot. Some are bound to be crushed as we walk along.

Eagle Summit is a place of extremes. I have seldom been more uncomfortable from the heat than here. On another day I saw it raining harder than I have ever seen it rain before or since in Alaska. We could not see at all through the summer downpour and had to stop driving for half an hour until the torrent lessened somewhat. Also, I have seen more vicious mosquitoes per square inch on Eagle Summit than anywhere else, yet it is not always "buggy." In fact, most times I have found it pleasantly bug free. One summer we arrived at the Summit to find virtually no plants showing. It had been an exceedingly dry season and everything seemed to be dead. However, the next summer the myriads of plants had grown and blossomed as usual. But let us see what plants are to be found in this area which includes both Twelve-mile Summit and Eagle Summit.

The lowly saxifragas are said to be our basic rock garden plant. There are nearly twenty saxifraga species in the neighborhood. This is the first place I ever saw *Rhododendron lapponicum*. If it isn't its flowering season you may have difficulty finding it, but it is there. There are also perhaps ten species of that intriguing little shrublet, salix. Even though *Silene acaulis* is a rather common alpine plant, it is a striking one, to be sure, and there is plenty of it here. Its broad bright green cushions with rosy purple flowers are seen on all sides. It is too bad that *Lloydia serotina* is not a more imposing plant because there are many of these little lilies. *Polygonum bistorta* stands out with its elegant plumes of pink. There are a couple of claytonias and stellaria, too, in variety. *Oxyria digyna*

with its oddly shaped leaves is abundant. Anemones, AA. *richardsonii*, *drummondii*, *parviflora* and *narcissiflora* can be noted all around.

Many varieties of *minuartia*, *arenaria*, *melandrium* are also found in this area. The strange little blue flowers of *Corydalis pauciflora* are in evidence here and there and we must not overlook *Papaver macounii* with its gay yellow flowers dancing in the mountain breeze. *Parrya nudicaulis* is an attractive plant and there are several cardamines, including the appealing *C. purpurea*. We shall also see *Sedum rosea* (what Alaskan rock garden is complete without it?) and about a dozen species of draba. *Cornus canadensis* is manifest, of course, as it is over so much of Alaska. The legumes are certainly well represented in the region. Here are six oxytropis, *Lupinus arcticus*, six astragalus and two hedysarum.

In peaty pockets or along the few streams you may come across *Viola epipsila*, and *V. biflora* can be found on some of the slopes. Several nice potentillas make their homes in these mountains and some rubus and vaccinium do well in the surrounding area. *Dryas octopetala* is interspersed with *D. integrifolia*, and *Geum rossii* is one of the more winsome plants to be found on the Summit. Alaska's state flower, *Myosotis alpestris* is obviously present. A related plant, *Eritrichium aretioides*, is the jewel of the natural flower garden on Eagle Summit and a real jewel it is. *Androsace chamaejasme* is another gem and it is here in great abundance.

I have heard that both *Cypripedium guttatum* and *C. passerinum* are in the area but I have not seen them. *Douglasia gormanii* and *arctica* are supposed to be up here, too, but I have not seen them either.



## • • • of Cabbages and Kings • • •

Spring arrived in this cold northwest corner of Connecticut in a sudden rush of blossoming and green grass in the last week of April.

After a cold, wet, but practically snowless winter that left the ground encased in ice and carried the frost six, even seven feet down to freeze water pipes and plant roots, March came in like a lamb. It continued lamblike, or reasonably so, all month with temperatures wobbling from the fifties (and even the low sixties on several days) to below freezing at night. And it rained and rained and rained. Water poured over the frozen ground and, unable to penetrate, settled in every hollow. Brooks and rivers became torrents, lowlands became lakes, roads flooded, and the local volunteer fire department was kept very busy pumping out cellars that over night became cisterns. Then it thawed and froze and thawed again and the earth turned to the consistency of peanut butter. It was, what in New England is called, "The Mud Season."

Then came April and the temperature dropped into the twenties and the 'teens again and the wind blew cold and dry or cold and sleety. Winter was back with a vengeance and buds that had tentatively begun to swell were pinched and broad-leaved evergreens turned sere and brown. It was typical New England weather.

But spring came at last with the first warm rain and though we shall have occasional light frosts and snow may fall (even in May up here), it will be a warm snow: "Poor man's fertilizer", we call it, and though branches, heavy with buds and even young leaves, may be broken by its weight, and soft green sprouts may be pressed

flat, spring has arrived and the heart swells and the gardener rushes out to see what has survived.

Most things have, but there are always some losses to mourn. The wise gardener waits and watches, however, and is cautious with the pruning shears and with-holds the extirpating spade; there is frequently life in those dessicated twigs and, given a chance, new growth may sprout from buried root-stocks.

But for survival under such adversity a plant must have strong healthy roots to pump nourishment to the stems and buds. Indeed, without properly functioning roots a plant will suffer dieback and eventual death no matter how favorable the conditions in which it is growing. And so it is with an organization such as the ARGS; the membership of such a society provides the nourishment that keeps it viable. To date the Society has flourished mightily. Its chapters are burgeoning. In less than fifteen years the membership has grown from under 1,000 to nearly 3,000. Yet perhaps it has grown too lushly for there are signs that all is not well.

This past year the Seed Exchange nearly collapsed. Again and again our president, Jim Minogue, reminded the membership that the term of the Seed Director would expire in the spring of 1979 and that a new director was needed. In the pages of the Bulletin Board and through the chapter chairmen at local meetings, he asked for volunteers for the job to step forward. The response was discouragingly small. A few, but only a very few, individuals did, indeed, volunteer, but upon discovering the amount of time, space and assistance needed to fulfill the job,

decided they would be unable to follow through. A few others sent in the names of possible nominees. These, too, were followed up by Mr. Minogue and the members of the Administrative Committee, but came to nothing. In the Spring Issue of the Bulletin Board, our president regretfully announced the possible demise of the Seed Exchange for lack of a director.

Only at the last moment was a reprieve granted; Kathy Freeland of Holliston, Mass. reconsidered her former doubts and agreed to try the job of Seed Exchange Director for a year. Kathy deserves the whole-hearted thanks of us all.

But make no mistake. We must not now heave a sigh of relief and relax. This is only a remission in a disease to which too many volunteer organizations are only too prone. Though it has no name that I know of, its first symptoms are always the same. As the organization grows larger, the membership forgets its vital function. It no longer works to keep the society viable, but becomes accustomed to letting "George do it," forgetting that they are "George."

True, the work of any organization becomes more arduous as it grows. In the May-June Issue of the 1944 Bulletin, Mrs. Hildegard Schneider of Bronx, N.Y. wrote the first report of the newly reorganized Seed Exchange of which she was chairman: "Soon after the seed lists were sent out to the members, requests for seed came pouring in and to date 536 packages of seed have been sent to 49 different persons; this seems a pretty good response to a venture which formerly had not been successful." Compare these figures to those reported by the Seed Exchange Director, Mrs. Frances Roberson, in 1979: Her committee catalogued 4267 different kinds of seed

from 503 donors and sent out 24,881 packets to fill 882 requests.

The job of the Seed Exchange Director, along with those of all the others who serve the Society in various capacities, has indeed, grown to tremendous proportions as the Society has grown. In its first years the Seed Exchange was handled by one person, sometimes with the assistance of one or two others; Mrs. Robinson had the assistance of sixty members of the Northwestern Chapter.

Perhaps this number of assistants in situ is not essential. A dedicated group of four to six people could probably handle the job if most of the seed was sent for packaging to groups within the chapters across the country. This has been done by past directors and is, I believe, the method used by the Director of the Seed Exchange of the Alpine Garden Society in England. After a botanist or other person familiar with plant names has, with the help of reference books, verified the names and their spelling and proof-read the file cards, these could be farmed out to an expert professional typist for preparation of the list for the printer.

Perhaps a judicious pruning of the seed list would ease the burden on the Exchange without diminishing its quality. Donors could help by being truly selective in their offerings: seed readily available elsewhere, such as that of border perennials, should not clutter up the Seed List of the ARGS. It only adds to the Director's problems to be placed in the position of having to choose which seeds should be culled from the list as inappropriate. Needless to say, seeds should be sent in properly cleaned and packaged and clearly labeled with the correct name properly spelled.

But despite the number of helping hands and carefully selected, clean



donations of seed, the job is still an enormous one. A love of rock garden plants and an enthusiasm for growing them from seed is not enough. Though the work entailed in the Seed Exchange is in many ways stimulating and fascinating, much of it is donkey-work. And it is the Director who bears the burden and responsibility of managing the complicated process of receiving, collating, cataloguing, listing, sorting, packaging and sending out the seed. It is, however, a job for which many of our members are surely qualified. It requires a fairly systematic person with some knowledge of plants, a willingness to attend to detail, and a true dedication to the Society. A certain amount of executive ability does also help.

It has been suggested that it would be better to have a more or less permanent Seed Exchange Director, as in the past, rather than continuing the present system of shifting the burden every two years to a new director and a new group of people. Both systems have been tried and both have their advantages and disadvantages. Obviously the running of the Seed Exchange is easier for a person who has managed it for a number of years and knows the ropes than it is for a neophyte. However, it is a burdensome job and for this reason a long-term Seed Exchange Director is hard to recruit and keep. To date, fairly frequent changes of directorship have not proven a detriment. In the past thirty-six years only one person, Bernard Harkness, has served as Director for more than three years. Mr. Harkness served two terms of six years each with three years off in between. Mrs. Schneider, the first Director, Mrs. L. D. Granger, Dr. A. R. Kruckeberg and Lawrence Crocker served for three years each. Five directors served for two years apiece, and

two served for only one year.

It has also been suggested more than once that a stipend attached to the job of Seed Exchange Director would make it easier to fill. Perhaps so, but the Exchange itself, which has traditionally been self-supporting, could not support a large additional expense, though certainly the price of the seed packets could be higher, which would help defray such a cost. Some societies charge from fifty cents to a dollar-fifty for a packet of seed and though some members might consider this exorbitant it would be better than having no Seed Exchange at all. However, even with this additional revenue neither the Seed Exchange nor the general budget of the Society could pay more than a token honorarium such as is presently paid to the Secretary and the Editor of the Bulletin. The job of Seed Exchange Director would still be, as is true of all the jobs that make the Society function, a volunteer job.

Without willing volunteers the Society would soon cease to exist. The best way to keep the ARGS and all its services viable is, indeed, to have "George" do it, remembering always that *you* are George.

## A Fresh Approach

Henry Fuller of Easton, Connecticut, sends in this note on *Jeffersonia dubia*:

This spring I observed in my garden something I had never seen before. It was as surprising as water running down hill, but I had never thought of it until I saw it, and the principle could be used to make something very beautiful which I have never seen and never read about.

In the past I have planted *Jeffersonia dubia* in woodland locations, shady and fairly level; and always many seedlings germinated quite close to each mother

plant, where the seed fell, and where there was little room for growth. But some time ago, because Selma wanted to see it from her window, I hesitantly moved a large Jeffersonia plant to a rocky gravelly slope, open to the sky and sunny, but not fiercely so and not all day long. Dwarf rhododendrons grow nearby. The Jeffersonia liked it, bloomed beautifully, thrived.

This spring I saw it, the horde of little Jeffersonias growing happily in the gravel down the slope from the mother plant. Could water running down hill carry little seeds? The little plants are too thick, but after thinning out they should grow happily where they are, and the excess planted elsewhere. In the sun, the little plants seem to be growing faster than their cousins in the shade.

I planted my Jeffersonia near the bottom of the slope. But suppose some more resourceful and imaginative gardener should plant a few Jeffersonias near the top of an appropriate slope. In a few years what a beautiful sight he might create! I wish someone, somewhere, would do this, and let me know. I would not have to see it to take great pleasure in thinking of it every spring and throughout the year. If he needs little plants I have them in abundance and would gladly send.

## Clematis Texensis

Pam Harper of Robanna Shores, Seaford, Virginia sends in the following note on propagating *Clematis texensis*:

*Clematis texensis* can't normally be propagated by cuttings because it is not self-branching and makes no growth buds in the axils (maybe a tip cutting?) It also seems to me that freshness of seed must be of considerable importance. Mrs. C. W. Har-

vey of Kitchener, Ontario reported to me that *C. texensis* is a favorite of hers. She received her original plant nearly twenty years ago and after it had bloomed collected the seeds and planted them in late October directly into the cold frame in good friable garden loam. Fifteen seedlings appeared the next May and these she potted up, overwintering them in the frame before planting them out the next spring against a trellis about a foot from a west-facing wall. They commenced flowering in May and have continued to flower annually until the end of November when hard frost kills them to the ground. They are, however, root-hardy.

Mrs. Harvey reported that she never again lacked *C. texensis* as she can always find seedlings near the foot of her mother plants though she finds them difficult to germinate in containers. She achieves her best results by scratching in some seed late in the fall near the mother plants though she has a friend who successfully germinated fresh *C. texensis* seed on the kitchen window sill without bothering to freeze it first.

Pam grows hers at the foot of that lovely dwarf hybrid cherry, 'Hally Jolivette' so that the clematis can scramble through its branches and hang its fleshy, urnshaped flowers in the shrubby tree after the pale pink, double cherry blossoms are gone. It must be a pretty sight. *C. texensis* is usually fiery red on the outside and the six pointed sepals curl back to display the buffy-pink interior though some forms are a good deep pink on the outer surface.

Pam offers to send off a few seeds (so long as the crop lasts) as soon as they are ripe to any member who cares to send her a *stamped self-addressed envelope*. Her address is in the Membership List.



## Cutting Dates

The following note on some cuttings and when to take them was received from Dorothea De Vault of Easton, Connecticut:

I enjoy making cuttings, sometimes by guess and by golly but of recent years I have been more careful to keep records. Timing is often critical so perhaps this account of recent successes may be helpful.

On July 3, for the first time, I attempted cuttings from an especially fine plant of *Gentiana scabra*. On July 16 cuttings were taken from a favorite evergreen azalea, unfortunately not named as no one so far can seem to aid with identification. On July 18 I took stock from *Pieris pygmaea*, a delightful, delicate dwarf in our rock garden, which I seldom see in other gardens. July 25, rather as an after thought, for I seldom make deciduous cuttings so late in the summer, I tried Baby's Breath, *Gypsophila paniculata*. Here I think the lateness was a plus for the stems were sturdy. Other years *G. paniculata*, with thinner stems, has been difficult for me to root.

Results: On August 4 the gentians were husky, well-rooted plants and put in individual pots. They were planted in their permanent homes on August 26. On August 25 all the other cuttings

## In Praise of Rock Gardening

*And this our life exempt from  
public haunt,  
Finds tongues in trees, books in  
running brooks,  
Sermons in rock gardens . . .*

Reader, forgive me. The banished Duke Senior said nothing of the sort. He said 'stones' not 'rock gardens'.

made at later intervals had struck roots.

## Poison Ivy Cure

The leaves, stems and roots of Sweet Fern, *Comptonia peregrina*, described on page 43 of the Winter issue, pulled bodily from the sandy soil in which the plants prefer to grow, will cure a case of poison ivy within a few days reports one of our correspondents, whose family has used this remedy successfully for several generations. Cut the plants: stems, leaves, roots and all, into sections small enough to pack into a large pot; cover with water and stew gently for two to three hours; cool and strain to remove the cooked vegetation before using. The resulting brownish green broth may be slopped on the affected area fresh or bottled and kept in the refrigerator for use throughout the summer.

## Cyclamen Society

A new plant society, The Cyclamen Society, replete with semi-annual journal edited by Col. James A. Mars, famed for his outstanding bulb nursery, has recently been formed. ARGS members interested in joining should write Col. James A. Mars, Foxbreak, Courtsmount Rd., Haslemere, Surrey, GU27 2PP, England. The membership subscription is two pounds a year (about five dollars) to cover overseas postage.

But let it go. Shakespeare will not suffer vexation of spirit.

That I hit upon rock gardening in my seventies was due to two friends: Elisabeth Sheldon of Lansing, New York, and Virginia Briggs of Ithaca. They are responsible for introducing me to this gentle, energy-consuming and spiritually elevating pursuit. Mrs. Shel-

den gave me three plants, among them a *Geranium sanguineum lancastricense* or true geranium and I was caught. It came as a shock to me that the geranium of my childhood, the flower that was sold by all florists and which adorned the window-sills of many a schoolroom, was not a geranium at all. Then Mrs. Briggs, a rock garden expert, gave me about thirty alpine and saxatile plants and I was bound hand and foot, imprisoned, corralled, encysted, incased.

It so happens that at one side of our lawn there is a slight slope. This I have converted into what is called a scree, that is, "a mass of detritus, forming a precipitous, stony slope upon a mountain-side". There is no mountain-side, and there is nothing precipitous about it; but I did turn the soil, added well-rotted compost, broken stones and chicken grit and introduced larger rocks, buried, like icebergs, eight-ninths below the surface. At the same time I tried to give the garden a natural look. A local farmer permitted me to raid his stone pile which I did frequently, accompanied by groans from the car; the smaller stones I gathered at the lake shore and these were used primarily as mulch. To provide better drainage (the sine qua non of rock gardening) I built two short dry walls in the interstices of which I planted several varieties of campanula.

At first, the garden measured four by fifteen feet; as plants were given me (rock gardeners are indeed generous) the garden was extended fifteen feet; after two years, the garden now measures four by forty-five feet, a modest garden to be sure, but a rock garden and not a garden of rocks. There are about sixty different plants.

Of course, I couldn't do without guides, the most useful being H. Lincoln Foster's *Rock Gardening*, charmingly

illustrated by Laura Louise Foster. I joined the American Rock Garden Society which can boast a membership more exclusive than either the Quakers or the Mafia, and receive the helpful ARGS *Bulletin* four times a year. I bought seeds from the ARGS Seed Exchange; and I began to meet knowledgeable and dedicated rock gardeners.

Well, here are no gorgeous, sophisticated displays; there are no dahlias, no fireballs, no peonies got up like over-dressed and bejewelled dowagers; no super-giant parrot tulips, no giant hyacinths, in fact, no giant anything. Everything is on a small scale. To see some of the flowers I have to get down on my hands and knees but it is worth the effort.

Simplicity and delicacy — these are the dominant qualities one finds in a rock garden. There is nothing gross about any alpine or saxatile plant.

Every day in spring, summer and fall I attend the garden. There is watering to be done, weeds to be pulled, the more aggressive species to be restrained, the more fragile to be protected. Often I just stand and admire and note developments. On our winter evenings I plan ahead. This coming year I hope to begin growing from seed since, as Foster says, "plants of the rarer alpine are almost impossible to obtain from nurseries". And this neophyte likes to experiment.

Sermons in rock gardens? Of course, there are sermons in rock gardens, sermons that one hears from all nature, from the mountains, the fields, the oceans and the streams, from the smallest of animals and the most insignificant of flowers, and all based upon the same text: *ignore nature at your peril*.

I like, however, to think that my plants have a special message. They



say to me, Yes, we are simple, we are unpretentious, but we do manifest a quiet beauty. Look at our colors: the lovely yellows of the *Primula polyanthus* or the *Lysimachia japonica*; the rich blues of the *Omphalodes verna*; the white of the *Oenothera speciosa*; the pink of the geranium. Look, too, at our foliage: the grace of the *Athyrium goeringianum* or Japanese Painted Fern, the charm of the heart-shaped leaves of the *Tiarella Cordifolia* (Foamflower), the soft, silky touch of *Artemesia schmidtiana nana* (wormwood), or the frank, shining leaves of the most modest plant I ever came

across, the *Asarum europeum* or wild ginger.

Somehow, by some peculiar operation of the mind, I associate these plants and their earthly home with dignity, integrity and decency. "In Nature's infinite book of secrecy/A little I can read", declared the soothsayer in Antony and Cleopatra. Though I have not the percipience of the soothsayer, when I turn from my garden to other pursuits, I turn refreshed, and with more hope and equanimity contemplate my small world.

Strange, what age does to one.

Charles Gordon Post, Aurora, N.Y.

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