

# American Rock Garden Society Bulletin



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# AMERICAN ROCK GARDEN SOCIETY BULLETIN

Albert M. Sutton, Editor

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## HOLIDAY IN SARDINIA

SHEILA MAULE, *Balerno, Scotland*

The idea of this holiday began when friends very kindly offered to us their house in Sardinia. We went with two friends from Aberdeenshire, Peggy and Jack Crosland, of whom I am sure some of you have heard and know, Jack being a very fine grower and exhibitor of alpine plants, and also an excellent photographer. We went in the Crosland's car, a long and enjoyable journey. We started from Balerno, near Edinburgh, on April 27 and drove to Southampton in one day, and crossed to Le Havre overnight, and so started our journey early and fresh next morning. We got along well and through Paris without any difficulty, and so on our way south. The meadows and roadsides were gay with primroses and cowslips, and after a journey of 435 miles we arrived at our destination, a small town on the French-Swiss border called Artemar, and stayed at an hotel where we had been on previous occasions. We had a superb dinner, and next morning we were off on our way to Genoa, from where we were crossing to Sardinia.

The next night we spent in the Alps. We searched quite a long time to find a suitable hotel, and in the end we decided to leave the industrial valley and went to a small ski resort called Valloire. Winter still lingered there at 5000 feet, and at the edge of the melting snow the frail mauve and white flowers of *Crocus vernus* were blooming, and nothing else but a gay little yellow cinquefoil lit up the wintry scene. However, the scenery made up for the lack of flowers; it was really spectacular, peak upon snow-covered peak glittering in the sunshine. The next day we were en route for Genoa, 214 miles away, not a long distance, but rather a difficult drive over the Mt. Cenis Pass. As we climbed, the mist closed in on us, the snow was piled up high on the roadside, and nothing to be seen but snow, and visibility was very poor. Conditions improved as we left the summit, and we had a picnic lunch looking down on an attractive mountain village. There was no time to spare, and there were few flowers, spring coming slowly to the heights, and we reached Genoa in good time for the ferry.

We had a comfortable and overnight crossing to Porto Torres in northern Sardinia, and it was interesting to see on board several Sardinian women wearing traditional national costumes, still worn in some of the remote villages, but unfortunately we did not see any while we were there.

It was a beautiful morning when we arrived, and the sandy banks along the roadside were ablaze with flowers, mostly annuals I would guess, but a marvellous feast of colour after the cold inhospitable landscape of the previous day. I am not a particular lover of the Mesembryanthemum family, they are mostly 'incomers', principally from South Africa, all very brightly coloured, and we saw several different kinds in Sardinian gardens. The commonest ones planted are the so-called 'Hottentot Fig' (*Carpobrotus edulis*) and *Lampranthus roseus*. However, intermingled with the other flowers, the blue of flax, yellow of lotus, orange of small marigolds, and many other annuals, made a kaleidoscope of colour.

As usual we were on the lookout for flowers, and we saw a plant new to us, *Pancratium illyricum*, a liliaceous plant with an exotic-looking sweetly scented head of white flowers, and broad thick leaves. It differs slightly from *P. maritimum* in having a head of 6 - 14 flowers, as against 3 - 12 in *P. maritimum*. Also *P. illyricum* is found only in Corsica, Sardinia and Capri, while *P. maritimum* is found round the Mediterranean.

After a very interesting drive we arrived at the house, which delighted us, being in a lovely position overlooking the sea and an archipelago of small islands. It was all charming, and as the evenings were chilly, there was a large fireplace where we had lovely log fires to sit by after our expeditions.

The first day we rested and looked around. It was a weird landscape like a moonscape with vegetation! There were huge piles of enormous rocks in the most fantastic shapes, and miles of 'marquis' largely composed of *Cistus monspeliensis*, of a small white-flowered type, making a white carpet as far as the eye could see. There were many other plants among the *Cistus* if you looked close enough, *Lavandula stoechas* was plentiful wherever it could get a foothold, and along the sides of the road the much more attractive *Cistus salvaefolius* grew. In the fissures of the rock grew, in a blue dusky line, what I took to be a tiny *Scilla*. (In the Alpine Garden Society *Bulletin* of June, 1943, there is a short reference to Sardinia by Dr. P. L. Guiseppi in an article called 'Over the Hills and Far Away,' in which he mentions 'great boulders covered by the delightful *Allium parviflorus*' which may be the *Scilla*). On the tops of many of the boulders, flat rocks and along the roadside grew a fiery red *Sedum*, very effective in that setting, no doubt needing a lean diet and hot sun to make it colour.

Although this is an article for a rock garden club *Bulletin*, I must make a brief mention of the flowers of the seashore. They were gorgeous, and flowering in such profusion. Sea lavender (*Limonium sinuatum*) intermingled with a small pink *Silene*, a Lotus with silver leaves and yellow flowers sprawling among plants of all different sorts and colours, a complete flower garden on its own. On the dunes we found an attractive *Ophrys*, peculiar to Sicily and Sardinia, *O. lunulata*, with a dark red lip, and a touch of yellow at the apex and a small sickle-shaped blue patch near the base. Almost everywhere we went we found something different. A trip to the northern tip of the island to St. Teresa and Capo Testa was very interesting. Here we saw *Rosmarinus officinalis* cascading down the white limestone cliffs with its lovely clusters of blue flowers, very beautiful, but impossible to photograph well. We then visited a beach of blinding white sand, and growing just above the water's edge, was one of the loveliest plants we found, a crucifer, perhaps



*Pancratium illyricum*

a *Matthiola* species (just a guess) looking like a stock. It had pinky lavender coloured flowers and silvery-margined leaves, the whole plant a dome of flowers, some fully a foot across, absolutely smothered in bloom, and growing with it and often through it was the little pink *Silene* I have already mentioned, making a picture not to be forgotten. Although not an alpine plant in any sense, it would have made a wonderful rock garden plant (not for the purist!). I didn't try to collect it; I am sure it would pine for the white sand and spray of its homeland.

The longest trip we made was to the Nuoro Plateau. The round trip was a journey of some 205 miles. The Nuoro Plateau is interesting; there are prehistoric beehive 'cells' called *nuraghi* about which I think little is known, also found in other parts of the island. The inhabitants of the plateau are of very ancient lineage, and are said to be hostile to strangers. Unfortunately as usual, time was short, and we would have liked to explore further. The plateau rises to around the 2000 foot mark, and the winters are said to be cold. Our first collecting was from a steep bank rising up from the road with a stream trickling down, making boggy conditions all round. *Pancratium illyricum* was growing in quantities, and actually in the running water (no doubt it dries out in summer) and a yellow bunch-flowered *Narcissus*, which a knowledgeable friend tells me is probably *Narcissus cupularis*, the Sardinian development of *N. aureus*. This was exciting, and we dug some bulbs from the sticky black ooze; we found this *Narcissus* in several places, and always in the same conditions. The *Pancratium* was also enjoying the same situation, and it appeared to be of a smaller type than those found at lower levels. This is truly an alpine plant. In an article by Mr. Will Ingwersen, in the *Bulletin* of the Alpine Garden Society, he tells of collecting *P. illyricum*,

which he refers to as 'The Corsican Lily' at 5000 feet on Mt. d'Oro in Corsica. As we neared the town of Nuoro the shady banks on the roadside were covered with *Cyclamen repandum*. I noted in my diary that they were like primroses in Britain, so numerous were they. We frequently saw them in the cork oak woods, growing in pure leaf mould, and difficult to collect owing to the fact that the corms were at a good distance from the flowers and leaves. The flowers were a good rosy pink, and it was a thrill to see them in such profusion. I have some in a pan in the alpine house, and I have risked a few in the peat bed, and it will be interesting to see if they will survive this rather severe winter.

At another stop in a wood, also in boggy conditions, we found that charming tiny *Ornithogalum*, *O. exscapum*, with a fair-sized head of almost stemless white flowers, and growing along with it in the bog was another surprise, that monotypic crucifer, *Morisia monantha* (syn. *M. hypogaea*), which according to Farrer and others grows at low elevations in sand, and here it was on the Nuoro Plateau in a bog. It is not an uncommon plant, and very easy to grow from root cuttings but with its bright gold stemless flowers and ferny leaves against the dark boggy soil it looks beautiful. It has the curious habit of turning the seed capsules downward and burying them in the soil, and I watched with interest my two plants doing just that. They have established well, and true to their native conditions, they have needed plenty of water all summer.

We saw many lovely flowers in Sardinia on our travels; *Anemone hortensis stellata*, *Smilax* species and so many different *Serapias* species of different sorts and colours we almost got blasé about them! There were many and beautiful *Orchis* species, *Ophrys*, *Iris sisyrinchium*, and wherever there was a little shade, that beautiful pestiferous weed, *Allium triquetrum*, with an umbel of dainty white, scented, bell-shaped flowers, altogether looking very innocent, but on no account to be put anywhere special, as it takes over completely.

The roads of Sardinia are good but narrow, and many run along the numerous small valleys. Here grew a very lovely small tree new to us, the flowered ash, *Fraxinus ornus*, with large white, fluffy spirea-like heads of flowers and pale green leaves which show silvery white underneath when stirred by the breeze. This tree is a native of Lebanon, and is cultivated in Sicily and Calabria for its 'Manna,' which is not the manna of the Bible.

One particularly interesting day was when we went up Monte Linbara. Actually we set out to go to a lake that was marked on the map, mainly to look for *Paeonia* species which we knew grew in Sardinia. We never found them, as we discovered later that they grew much further south. On the way to the lake we got lost, partly because a signpost had been turned around the wrong way. But it was a happy mistake, for we found ourselves going up a steep mountain road. Monte Linbara is about 4000 feet and has a fair road up to the top where there is a television station. The first excitement was a most beautiful *Viola*, a lovely violet colour, with a particularly long curving spur, and growing in the loose gravelly side of the road. We stopped to photograph and admire. We saw many more as we climbed up, including white ones, which unfortunately we didn't collect.



*Ornithogalum arabicum*

The weather worsened, the mist was swirling about us, and patches of snow appeared, and at the summit there were large snowdrifts. We could have spent several days here as there were many bulbs and plants to be found, but the weather was worrying, and we were anxious to be off down the mountainside. Tiny *Romulea* (*Bulbocodium*?) flowers were thrusting their purple blossoms through the cold earth, and *Crocus* flowers were almost over. Large mats of *Viola* were not yet in flower at that altitude, *Bellium minutum* and many other plants were just coming out of their winter sleep. Lower down on a gravelly bank in full sun, we saw *Arenaria balearica*, a very good large-flowered type. This was another surprise as it is supposed to grow on shady rocks!

Before I finish with Sardinia, I want to tell you of a visit we made to Corsica. It was a day trip; we sailed from our local village, Palau, to Bonifacio. The scenery was marvellous all the way, the wonderful indented coastline of Sardinia with its beaches of white sand, as yet mostly uninhabited, but alas many signs of building were evident. The entrance to Bonifacio harbour is through a long narrow 'fiord' with high cliffs on either side, a marvellous defensive position in olden days. As we approached the harbour, the ancient town and fortifications towered above us. We had only a few hours there, so after a snack lunch at the harbour, we set off exploring. A handsome plant growing in the limestone rock on which the old town is built, was *Ornithogalum arabicum*, with a dense flat-topped head of flowers, creamy white, and in the centre, what looks exactly like a shiny black bead, the plant about 12 - 18 inches high. Growing with it was *Odontospermum maritimum*, flowering down the rock face, with good, stemless golden aster-like flowers.

I hope you can bear with me a little longer, as I would like to say a little about Provence, where we stayed for a few days en route home. We stayed at a place called Venasque, one of the enchanting hilltop villages of Provence, built originally for defense. Our house was outside the village, and we had a splendid view of Mt. Ventoux, 6000 ft., and which has, conveniently, a road up to the top and down the other side. I had visited Mt. Ventoux on another occasion but in August when the flowers were over, so we had high hopes as we set out this May morning of seeing some interesting plants. Alas this was not to be, as when we got to the top it was sleeting, and there was still a lot of snow around, and it was bitterly cold. However, there were many brilliant yellow patches of the only European *Douglasia*, *D. vitaliana*, in full bloom. We were too early. I am sure a little later there would be plants aplenty.

We hurriedly got over the summit and down to the tree line and came on a marvellous sight, a pine wood absolutely carpeted with *Hepatica triloba* of the purest blue and indescribably beautiful. Unfortunately there was no photographing owing to the bad light. We descended to better weather before we chose a picnic spot; this was a thicket of *Styrax officinalis* in full bloom all around us, which covered the hillsides. It is an attractive shrub with clusters of white flowers, and it is from this tree that the gum storax is obtained, which is used to this day in Roman Catholic churches as incense, also rosaries are made from the seeds.

Another plant we were delighted to find was the so-called flowering rush, *Aphyllanthes monspeliensis* (Liliaceae). We found this plant in all sorts of situations, from the plains to the mountainsides. It is a lovely plant with a tuft of rush-like stems about a foot high, each bearing a head of starry blue flowers. I had previously thought of the flowers as being a muddy blue, but like the *Hepaticas*, they were a good clear blue.

We did a bit of sightseeing, and generally enjoyed ourselves and then it was time to start on our long journey home. The traffic was light and the countryside at its best with everything fresh and green. The hotel where we spent a night had vases of Lily of the Valley on the dining room tables, picked in the woods nearby, and we were given bunches to wear. It is fun to start a holiday and it is good to be back home again to see what had been going on in our absence. So ended a very enjoyable holiday.

\* \* \* \* \*

SCOTTISH-AMERICAN ROCK GARDEN CORRESPONDENCE—According to Mrs. I. Simson Hall (Kathleen), Honorary Overseas Liaison Secretary of the Scottish Rock Garden Club, she is building up a list of members who would like to correspond with rock gardeners in other countries, the United States included. Should you be interested in corresponding with a Scottish rock gardener, write to Mrs. I. Simpson Hall, Marwood, 93 Whitehouse Road, Edinburgh EH4 6JT, Scotland. She writes, "It is helpful to know what particular interests people have, e.g. high alpiners, fritillaries, dwarf rhododendrons and so on, and if they are experienced gardeners or comparative beginners, in fact anything which would enable me to match them up with someone with similar interests."

## THE MARCEL LE PINIEC AWARD 1974 TO DWIGHT RIPLEY & RUPERT BARNEBY

The Marcel Le Piniec Award was established by the American Rock Garden Society to give recognition to those imaginative and adventuresome people who have enlarged by their explorations the plant material available to rock gardeners and who have increased our skill in growing these plants in our rock gardens. Those who have achieved this award in the past make up a distinguished company of plant explorers, propagators, and innovators.

In 1974, the Awards Committee has designated as recipients of this special award two men of particular distinction: Dwight Ripley and Rupert Barneby. It is indeed sad that the former of this illustrious team died between the time of their nomination and the Award's presentation. Dwight Ripley died on December 17, 1973 in Greenport, Long Island, New York.

It was there in Greenport that these two lifelong friends built a final garden together. This garden, a unique and stunning creation, was the culmination of their united efforts in plant exploration, botanical investigations, horticultural experimentation, and rare artistic creation.

Dwight Ripley and Rupert Barneby through their long years of association formed an ideal symbiosis. The former was a poet, artist, adventurer, linguist and passionate gardener. The latter is scholar, botanist, explorer, and modest perfectionist.

Their friendship was formed many years ago when they were schoolmates together in England and their friendship never faltered.

Harry Dwight Dillon Ripley was born in London, England, October 28, 1908 to an American family of long heritage in Litchfield, Connecticut, U. S. A. He was educated at Harrow School and Oxford University.

While still at Harrow, Dwight built his first rock garden and had a small greenhouse at his home in Sussex, England. In 1935, his gardening had expanded to three large alpine houses, one of them the famous tufa wall built against a brick wall and protected by a cantilevered roof. There was also a sand garden for seashore plants, a water garden, and a collection of taller herbaceous plants grown for their rarity or strangeness. These all expressed his restless, sensitive and imaginative spirit. These gardens perished during the Hitler war.

During his early horticultural innovative activities, beginning in 1927, Dwight Ripley began serious botanical as well as horticultural collecting in southeastern Europe and North Africa with special emphasis on Spain, until that country was closed to visitors by the Civil War.

In 1936, he came to the United States and settled in Beverley Hills, California, which became the base for botanical exploration in the western states and northern Mexico. Plant collections of these years are deposited largely at the California Academy of Sciences and the New York Botanical Garden. Accounts of some of these expeditions are to be found in the pages of the Alpine Garden Society *Bulletin*.

Of his many plant introductions he was proudest of *Limonium aspara-*

*goides*, a sea lavender found on the cliffs at a single point of the Algerian coast. His memory will be preserved forever by the Turkish *Omphalodes ripleyi*; by *Gilia ripleyi* of limestone cliffs in the Death Valley region in southern Nevada; by *Cymopterus ripleyi* from dunes in central Nevada; by *Eriogonum ripleyi* from southwest Arizona and by *Astragalus ripleyi* from the upper Rio Grande in northern New Mexico. That is five species from five different families.

In 1948, Ripley and his friend, Barneby, who had joined him in the United States, moved to Dutchess County, New York where they built a large rock garden and later added an alpine house. Summer collecting trips to the western United States added many unusual plants to the garden during this period as well as beautifully written accounts in the pages of the ARGs *Bulletin*.

In 1960, following a severe illness, Dwight and Rupert moved to Greenport, L. I. There, due to the flatness of the land, the lack of natural stone, and the prevalence of rabbits, there was constructed the famous Sanctum, a walled enclosure in which a wide assortment of rare rock plants were accommodated on raised beds against the walls and in a variety of troughs and sinks.

Dwight Ripley was a life fellow of the Royal Horticultural Society and a life member of the Alpine Garden Society from the early 30's and contributed many articles to its *Bulletin*. He became a member of the American Rock Garden Society in the 1940's, but was otherwise not affiliated, being constitutionally not a "joiner." For gifts of scientific materials to the California Academy of Sciences he was elected a Fellow in the 1950's.

Gardening was an important and permanent element of Dwight Ripley's life, but was only a small part of it. He was a poet and artist of high order, who did what he could to conceal his light under a bushel. He had an exceptional gift for languages and was fluent in Russian, Polish, German, and all the Romance languages including Rumanian, with reading facility in the Scandinavian, Greek, and Hungarian languages. For many years he worked on the compilation of a dictionary of vernacular plant names arranged according to philological principles. The manuscript for this unpublished work runs to well over 5,000 pages.

The friendship formed at Harrow between Dwight Ripley and Rupert Barneby was kept alive by their interest in plant exploration while the former was at Oxford and the latter at Cambridge. From Cambridge, Rupert earned a degree in Modern Languages.

During this period, study of the botanical structure and the taxonomy of plants developed into a growing interest in plant exploration in the western United States and Mexico. This interest took him frequently to the herbarium of the New York Botanical Garden, where for many years he assisted as a volunteer and was named Honorary Curator of Western American Botany.

In 1965, he received the Garden's Distinguished Service Award for his highly regarded monograph, entitled *Atlas of Western American Astragalus*.

Barneby has contributed over the years to *Memoirs of the New York Botanical Garden*, to the *Memoirs of the California Academy of Sciences*, of which he has been a Fellow since 1959, and to many other botanical and horticultural journals. He is currently a Research Assistant of the New York

Botanical Garden, and is officially connected with the Southwest Flora Project, which aims at a four-volume illustrated work covering all of Arizona, New Mexico, and the deserts (Mojave and Colorado) of southeastern California. Barneby's interest in the Leguminosae is a continuing one, and he is also working on the Brazilian Cassias. Rupert Barneby's name will be preserved in such plants as *Phacelia barnebyana* and *Castilleja barnebyana*.

Together these two men have made extraordinary contributions to the world of rock gardening by their joint efforts in exploration, introduction, and analysis of remote and exciting flora. Because of their extreme modesty, few of our members know of their extraordinary exploits; and it is most fitting that the American Rock Garden Society honor them on this occasion with the 1974 Marcel Le Piniec Award.

H. Lincoln Foster, *Falls Village, Conn.*

## TO ROXIE GEVJAN THE ARGS AWARD OF MERIT

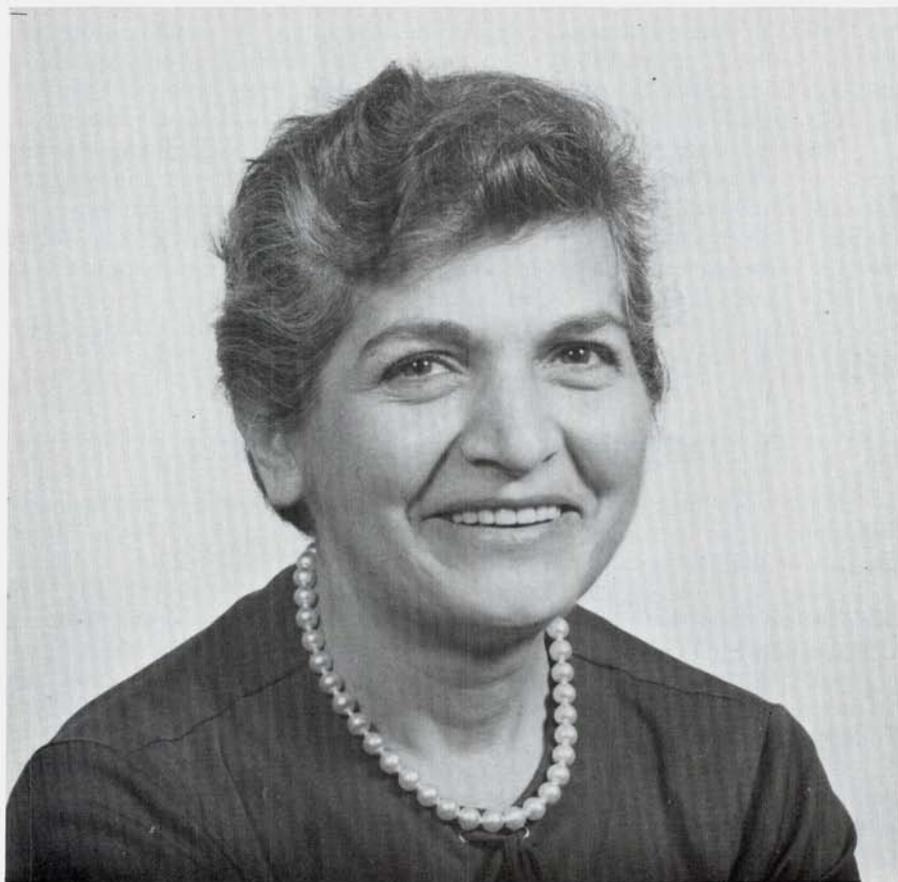
What a joy and privilege it is to tell all of you about one of this year's recipients of the American Rock Garden Society Award of Merit. Roxie Gevjan, of the Delaware Valley Chapter, lives in Dogwood Place and here, in the short span of 10 years, on two acres of suburban Philadelphia has risen from the ashes of the megalopolis a wonderful alpine haven. Roxie, with the able assistance of her husband, Dr. Armen Gevjan, has carved out a beautiful garden. Here, in the spring, paths wander under giant Ash, Oaks and Maples lined to overflowing with bulbs, ferns, heathers, Trilliums and a wonderland of Ericaceae.

After you pass through "Armen's Woods" there are extensive cold frames available for your inspection. Here thousands of pots of alpiners are plunged in sand, and if you go from section to section, all you have to say is, "What a wonderful plant," and it is offered to you. Roxie's generosity in giving plants is well known throughout the Delaware Valley Chapter by the many guests from our other chapters, by British Columbia and foreign visitors.

If you can tear yourself away from the cold frames, it is but a few steps to a new scree that is only approximately two years old. Already, this is beginning to overflow with innumerable treasures. Many of the plants in the scree area, we were sure, would not be hardy in southeast Pennsylvania. How wrong we were. Roxie, once again, blew plant lore myths to smithereens. Try, if you can, to get yourself moving a few more feet and into the alpine house. The aluminum frame and glass house is only two years old. It is fully air-conditioned and temperature-controlled. When the air conditioning is not needed for humidity control, there is continuous forced ventilation blowing currents of air on all the plants.

The effect on the thousands of plants in the alpine house is apparent in rampant growth with specimen after specimen in glorious bloom and in perfect health. We have all spent hours in this mecca and, once again, warm, generous Roxie will share and share. If she has more than one plant of a species, it invariably is yours for the asking.

It's probably almost dark by the time you leave the alpine house, but you



Roxie Gevjan—Award of Merit—1974

can still see where various areas of the lawn have been dug for the extensive dwarf conifer collection. Rare species after rare species of conifers are tastefully planted on the balance of the two acres. Many little paths are available for browsing, where alpine plants revel along the paths and by the house. Now that dark has fallen, Armen Gevjan, that masterful photographer, will show you thousands of slides of alpine plants in their garden and from their many trips over the United States and Europe.

Roxie, in her 10 years of alpine gardening, has served on many committees in the ARGs and in the Delaware Valley Chapter. The apex of her organizational ability was the brilliant management of the ARGs Seed Exchange in its most explosive period—1972 and 1973. She handled her committee with expertise and an efficiency that was a joy to behold.

Our sincere congratulations to Roxie Gevjan, one of the ARGs bright lights to whom we present the American Rock Garden Award of Merit.

Lee Raden, *Chester Springs, Pennsylvania*

## FREDERICK W. CASE, II RECEIVES THE 1974 EDGAR T. WHERRY AWARD

It is fitting that Fred Case receive the Edgar T. Wherry Award. It was to Dr. Edgar T. Wherry Fred wrote during his university days, requesting information about stations of our native pitcher plant. Dr. Wherry's reply helped guide him in some of his first field trips to the southern states in search of *Sarracenia* species. That was in 1964, and the correspondence between the two botanists has continued since that time, as have personal visits.

Fred Case's interest in the genus *Sarracenia* continues, and he is currently writing a comprehensive paper on *Sarracenia*. He has found a newly recognized species of the genus in central Alabama which he has named *Sarracenia alabamensis*. It is awaiting introduction into the literature by *Rhodora*. Fred has published several other monographs on the pitcher plants including one in *Rhodora*, Vol. 58, No. 692 for 1956, on Some Michigan Records of *Sarracenia purpurea* f. *heterophylla*, the albino form of the common northern plant.

Fred Case's plant interests are not limited to *Sarracenia*. He is excited by native *Trilliums* and orchid species and contributes to the literature of these lovely natives. He has written an excellent book, *Orchids of the Great Lakes Region*, copyrighted in 1964 and published by the Cranbrook Institute of Science of Bloomfield Hills, Michigan. For this contribution to Michigan botanical knowledge, Fred received the Minnie O. Robinson Memorial Medal from the Michigan Horticultural Society.

Fred and his wife, Roberta, also grow and hybridize the tropical orchids. In 1965 at the Mid-American Orchid Congress, they received the Outstanding Orchidist Award for Mid-America.

To fill out the image of Fred Case as an exceptional American plantsman, it is important to note that his botanical work in the field has covered a wide part of North America, including many trips into the Smoky Mountains and Blue Ridge Mountains, the southern swamplands, the Everglades, the New England alpine areas, Colorado, Wyoming Bear Tooth Pass area, Glacier Park, California, the Oregon Coast and mountains, Mt. Rainier, the Great Lakes Region, and the Cumberland Plateau in Kentucky.

Fred combines his wide interest and expertise in botany with expert qualifications in horticulture and photography. And with Fred it's not just theory; at their home just outside Saginaw, Michigan, the Case family, including son, David, garden with great freedom and imagination. There you can see some of the most interesting North American plant habitats; including the eastern woodlands, the high alpine areas, the mid-western wet prairies (naturalized with hundreds of fringed gentians). Promising recent additions are many species of *Sarracenia* from the South East.

And Fred doesn't just know and grow the wild flowers. He also shares what he has learned. Probably his greatest satisfaction comes from teaching biology at the Arthur Hill High School in Saginaw. He developed one of the first high school ecology courses in Michigan in 1945. As department chair-



Frederick W. Case, II—Edgar T. Wherry Award—1974

man of biology, Fred encouraged many students in a life-long interest in the natural world around them. In 1971, Fred received the National Association of Biology Teachers Award as outstanding teacher of Biology in Michigan. He has also conducted a Michigan Wildflower Course at Delta College. Because of it, many adults in the Saginaw area better know and love the woodland plants.

Fred is able to inspire others to share his love of knowing and growing our native plants. He generously shares his knowledge and his plants with others, excellent reasons for the American Rock Garden Society to present the Dr. Edgar T. Wherry Award to Frederick W. Case, II.

Harry Elkins, *Grosse Pointe Park, Michigan*

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AN ADDRESS WANTED—Several members have asked for the address of Mr. William R. Van Dersal whose article on "Plant Growth Regions" appeared in the January issue of the *ARGS Bulletin*. There may be others who desire this address but have not yet written for it. Mr. Van Dersal's address is 6 So. Kensington St., Arlington, Va. 22204.

## THE ARGS AWARD OF MERIT TO BERNARD E. HARKNESS

The presentation of this Award of Merit to Bernard Harkness by the American Rock Garden Society seems well overdue. With the services of any kind of a promotion manager, the honor would surely have been bestowed several times by now. There are few who have had a longer love affair with rock garden plants and been more faithful to the ARGS than Bernard Harkness.

Shortly after graduating from the Cornell College of Agriculture in Ornamental Horticulture in 1929, Bernard began learning about rock gardening from landscape architect, O. C. Simonds, and Herbert Durand, native plant enthusiast at the Locust Valley, Long Island estate of Anton G. Hodenpyl. Bernard continued his studies at the Harvard University Graduate School of Landscape Architecture where Stephen Hamblin was then one of the faculty. In the Thirties, he directed the landscape work of the Civilian Conservation Corps in several New York State parks. It was also in the Thirties that a South Dakota rancher, named Claude Barr, put an ad in the *Gardener's Chronicle*, edited by Dorothy Hansell, advising Eastern gardeners that there were gems growing on the high plains. Claude remembers that Bernard Harkness began ordering plants from the Prairie Gem Ranch.

So intriguing were the rugged little plants of the northern prairies to Bernard, now associated with the Garry-Nee Dule Nursery of Baraboo, Wisconsin, that they lured him and his nursery associates out to join Claude Barr in several plant hunting expeditions. One still memorable sight was miles of *Lewisia rediviva* in bloom east of the Big Horn Mountains.

Bernard joined the American Rock Garden Society in 1940 and it wasn't long until he was plant hunting in Szechuan Province, where the Air Force had sent him as a weather observer and cryptographer.

After the war, Bernard settled in Rochester, New York to become the taxonomist for the Parks Department. The acquisition by the city of the site of a fine old rock garden of the Thirties, gave him an opportunity in its restoration to work again with the small plants he loved.

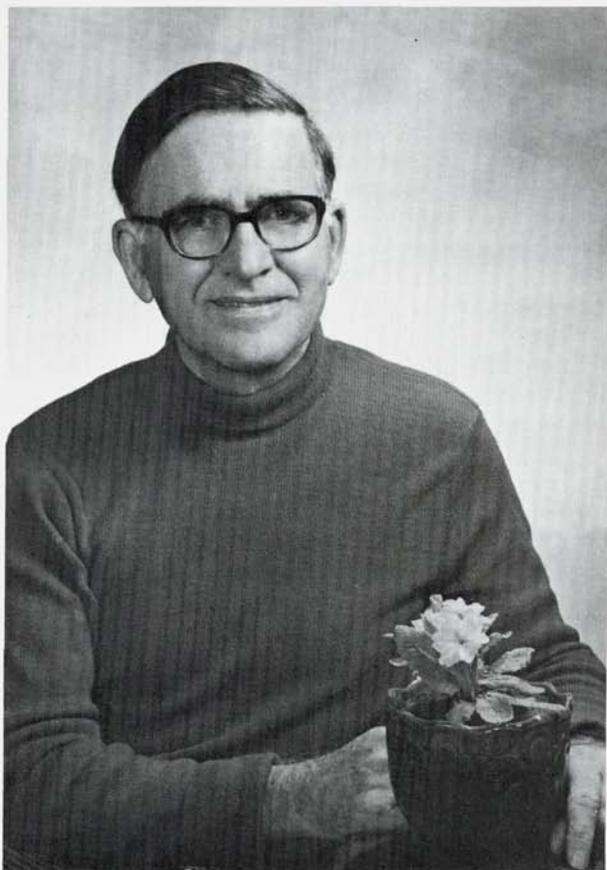
When Bernard took over the Seed Exchange; the list was a modest five pages, with contributions from sixty-four people. That was in 1953. He continued as Director for five years, retired from the job for a few years and resumed the responsibility from 1961 through 1965, for what will likely continue to stand as the endurance record for Seed Exchange Directors. And, still he wasn't finished with work on the seed list. He set about providing for members confronted with the many enigmas of cultural requirements of unfamiliar plants in the lists of three major rock garden societies, a listing of all species submitted in recent years, with essential information about each, plus the titles and authors of 146 books or other publications where one may find more information. It is called *The Seedlist Handbook*, but should also be of assistance in selecting plants from a nursery or plant sale.

In 1967, Bernard retired with his wife, Mabel, to a handsome old field

stone home within sight of one of the Finger Lakes to start a new rock garden, only to be pressed into service the next year as President of the ARGs, and was re-elected for a second term after the first two years. Bernard recalls with pleasure two of the high points of his tenure, the committee meeting when the first Study Week End was launched and the fine co-operative effort of the Northwestern Chapter in making their first annual meeting so memorable.

Recently named Director of Publications for the Society, Bernard is now writing the history of the first forty years of the ARGs, a history to which Bernard Harkness has been a faithful contributor. On one of the pages in that forthcoming volume should be set forth that on this date the American Rock Garden Society presented with pleasure to Bernard Harkness, the Award of Merit.

Harry W. Butler, *Spring Valley, Ohio*



Bernard E. Harkness—Award of Merit—1974  
Holding *Primula* 'Jewel White'

## THE ARGS AWARD OF MERIT TO RICHARD W. REDFIELD

As we make this presentation of the Award of Merit of the American Rock Garden Society to Dick Redfield, two possibly even more important events are occurring in his life. First, 1974 marks the first year of his retirement from the world of brokerage and banking. Second, he is right now pulling up his roots and those of the rock garden from the sandy soil of the Garden State of New Jersey and transplanting them to Connecticut, the Rock Garden State.

This is not really a case of the Hudson Valley Chapter's loss being the Connecticut Chapter's gain, because Dick has generously shared his time and talents with members far beyond his own area, appearing at numerous Study



Richard W. Redfield—Award of Merit—1974

Weekends and Annual Meetings to share his collections of plants in the wild. His collecting, whether in Alaska, New Zealand, Europe, the Virginia Shale Barrens, or the Pine Barrens of his native state, is most often done with a camera rather than with a trowel. And what perfect reproductions of rare plants come from his camera for the enjoyment of all who are lucky enough to see them, and to hear his masterful but unpretentious talks.

At home in New Jersey, the family gardens have evolved through regular gardening, growing and propagating the native wildflowers (Dick is very successful with those difficult plants of the Pine Barrens), a twenty-five year interest in dwarf conifers, and ultimately collecting alpiners and other rock plants. The rock gardening started through the help of a local Closter nurseryman, Ed Theum, in 1958. A couple of years later, friends Robert and Edna Gaed, introduced Dick to the ARGS. It was about this time, too, that he joined the Tappan Zee Chapter of the American Rhododendron Society, through the invitation of Henry and Mary Fleming. A pine grove still gives shelter to a collection of choice rhododendrons (unless they have been recently moved to Connecticut).

In 1967 Dick Redfield was elected Secretary of the American Rock Garden Society, a job which soon involved the whole family of three brothers and a sister, when it came time to mail out the quarterly Bulletins. Each has a share in this award. Dick served as secretary for four years with professional efficiency and an amateur's dedication.

Now with retirement Dick is looking forward to getting the rock garden moved to eastern Connecticut, remodelling the farmhouse, travelling as much as spirit and taxes permit, and, further involvement with the ARGS, having just accepted the nomination for the office of Vice President.

From the American Rock Garden Society comes the sincere desire to help fill the retirement years constructively, and the Award of Merit.

Harry W. Butler, *Spring Valley, Ohio*

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A TWINING GENTIAN PLUS RED BERRIES—A sharp-eyed member, Kay Doleshy, who with her husband, Frank, has traveled extensively in the mountains of Japan (see *ARGS Bulletin* of October, 1971, the article entitled, "Yaku Island: Environment and a Few of the Plants"), noted an error in the spelling of the botanical name of this twining gentian. She writes as follows: "*Tripterospermum japonicum* (Sieb. & Zucc.) Maxim. is the name for this plant used by Ohwi in his *Flora of Japan* (in English). Also it is used in Makino's *New Illustrated Flora of Japan* and in Dr. Masaji Honda's *Nomina Plantarum Japonicarum*. The latter two are in Japanese and Latin.

"In addition to the attributes described by Roy Davidson in his note on it in the Jan. '74 *Bulletin*, this plant produces fruit unlike any true *Gentiana*. It is a red berry, about one-half inch in diameter standing upright on a one inch to two inch stem. Inside it is whitish and pithy and contains many small, dark three-winged seeds (hence the name—*tripterospermum*).

"Note: We sent seed of this for the 1972 Seed List. However, it became listed as *Gentiana trinervis*, a name obsolete for many years. *The R. H. S. Dictionary of Gardening* lists it as such but makes no mention of the fruit being a berry—red or any other color!"

## SEPTEMBER IN THE ROCK GARDEN

REX MURFITT, *Victoria, B. C.*

Wandering around the rock garden in the evening is one of the many pleasures of alpine gardening. It is then that one sees the quiet beauty of the plants; combinations and contrasts in foliage texture present themselves with a new clarity. Even in the familiar terrain of your own garden you can find new sights and experiences. To achieve this pleasant state you must visit the garden with the intention of doing no work whatsoever. Just look and enjoy; these are the moments when inspiration visits. You will see spots that can stand some improvement much easier than when you are deliberately looking to revise. I suggest that you take to carrying a few red plastic labels with you on these occasions so that when you find something that could be worked on, stick a red label in it. It may be only one plant that needs relocating, dividing or some other attention. Then next time you are in the mood for work, seek out the red labels and the inspiration of the evening will be recalled. You will be surprised at the results this little habit produces; try it.

I realized the other evening that rock gardening has unquestionably become accepted as part of the gardening scene. Not too many years ago I remember having to defend, justify and promote rock gardening when and wherever I spoke on the subject. Too often I was assailed by that old familiar stricture, "Oh a rock garden is fine in the spring, but for the rest of the year it is dead." I do not hear that remark any more so I assume that people have found out the real facts of the matter.

There is no doubt that during these September days gentians are stars at center stage. The *G. septemfida* types are all but finished, a few scattered blooms show between the ripening seed pods. The limelight is squarely on *G. sino-ornata* and its hybrids and forms. *G.* 'Kidbrooke Seedling' has done remarkably well this season, there is a square yard of it in bloom now, sturdy, upturned, solid blue flowers above a carpet of fresh foliage. It is hard to tire of these fascinating plants with the striped trumpets. This year the *G. x macaulayi* I planted next to *G.* 'kidbrooke Seedling', my first attempt to actually compare the difference between them, has done well also, I still do not see any great difference, perhaps a shade lighter blue, maybe my plant is not true; if this be the case, which one is not true? Does it really matter?

These fall-blooming Asiatic species are very hard to come by these days so I am very grateful to a true friend in North Vancouver who has enriched my garden with a few seedlings raised from Jack Drake's seed. I was pleased that *G.* 'Susan Jane' came true if only with one flower. I read that it is a self seedling of *G.* 'Inverleith' itself a cross between *G. farreri* and *G. veitchiorum*. I am always impressed with the color of this plant and the expression "electric blue" always comes to my mind when I see *G.* 'Susan Jane.' The A.G.S. *Bulletin*, Vol. 37, page 344 has a good description and in it the color is called "ultramarine." Another seedling from the same source has two buds yet to open and is reputed to be *G. farreri*. *G.* 'Brin Form,' the climbing gentian, (Have you seen this one?) apparently is a form of *G. sino-ornata*. I grew



*Androsace lanuginosa leichtlinii*

The Author

my plant in a seven-inch pot this year because I knew nothing of it and would not plant the one and only outside. It rambled through the pots and plants on the alpine house bench, finally sending up its typical sino-ornata flowers. Next year it will be planted in the rock garden where it can climb through a dwarf rhododendron and a balsam. If I have enough divisions one will be kept in a pot as it makes a lovely cascade plant, for despite the sloppy growth the flowers are always carried upright.

The Origanums or marjorams are too often overlooked and relegated to secondary corners, if grown at all. This is a great shame because if they were planted as an investment for the days of early fall they would pay handsome dividends for the space they occupy. To guarantee your investment plant them in full sun with good drainage; rich soil is not necessary or desirable. *O. hybridum*, which is really just a name of convenience I am sure, should be planted at the back of a prominent outcrop with spring and summer flowers in the foreground that would catch the eye while the marjoram gathers itself to flower; later it will bloom at close to 18 inches high. It is the red bracts that account for the colorful display; the true flowers are insignificant pinkish purple clusters at the ends of the nodding bracts. I should not downgrade the flowers entirely as they have a luminous quality when the sun shines through them. In contrast, tumbling over a rock is another species, this time the leaves are greener and not in the least hairy and the bracts are light green. It was grown from seed as *O. pulchellum* but owing to the lack of hairiness cannot be; the nearest I can come with my limited references is *O. rotundifolium*, if this be so then I must have a dwarf form as it is three years old and still only grows to six inches high, although it is spreading.

Androsaces, to my mind at least, are not associated with fall blooming

but one of the most striking plants in the garden right now is *A. lanuginosa leichtlinii*. It is a great silvery patch with countless heads of primula-like white flowers. It is an excellent plant and well worth growing; perhaps if more gardeners gave it a place in the sun where it can spread and tumble over a rock they would enjoy it a lot more. Every year or so it is necessary to cut all the growth back very hard; it soon makes new shoots from the base.

My small plant of miniature Goldenrod, *Solidago brachystachys* was divided last spring making about half a dozen small plants. Now it is a solid clump of green and yellow, a good bright color that draws the eye. This is another of the easygoing plants that get overlooked or left to struggle in some poor out-of-the-way corner. I guarantee, if you saw my little plant in the fall sunshine you would grow it next year. It grows about six inches tall and has heads of flowers that are a good yellow, not a dirty color as some Goldenrods are. It would be interesting to know more of the origins of this old time plant; the books I have all fall short when it comes to details of this species, if it is a species. I suspect it might be a form found years ago in Europe.

I seem to be concentrating on plants that many might call ordinary; they certainly are easy to grow but they are the plants that brighten up my garden late in the season. So I will give you one more. During the rest of the rock garden season this plant is nothing but a pleasant ground cover of ground-hugging, trailing red stems covered with small pointed leaves. If it is planted where it can cascade over a rock or wall it provides a very natural cover but from September onward it becomes one of the most attractive plants in the garden. Rich pink spikes, two to three inches high cover the whole plant. Yes, I am describing *Polygonum vacciniifolium*. I will always remember this choice Himalayan: it has served me well. I was planting a rock garden in England many years ago for a very influential man, quite a critical man, too. We were all in the garden, head gardener, secretary, myself and the man himself. There were several dozen alpine to be placed and planted. When we came to *P. vacciniifolium* I suggested a prominent place for it and was promptly taken to task but I stubbornly insisted that it was a good plant and worthy of the place. The head gardener, always a careful man, looked at me with some scepticism and whispered, "You have committed yourself now." The great man with no more ado sent the secretary for the final authority, *The English Rock Garden* by Reginald Farrer. There, in the garden we all waited while he read out the word., (Read page 87 of Vol. II of this and see how I made out!). To quote:

"*P. vacciniifolium*, however, not only escapes the charge of coarseness to which this race is open, but escapes it so handsomely as to be one of the loveliest and most refined treasures in which the garden rejoices . . ."

There are a few more plants that could be mentioned here but this is not the place to describe all our old friends, many are too familiar. For example, the Sedums, *Cyclamen neapolitanum*, a few Campanulas are still blooming, *C. portenschlagiana* is flowering for the second time as strongly as the first. *Potentilla eriocarpa*, *Hypericum anagalloides*, *Frankenia thymifolia* and Erodiums all have a few scattered flowers left on them to add to the show.

We know that the days of even the late-blooming flowers are numbered, soon the frost will come and blacken the gentians and the greens will turn to brown. This is still not the end; the next act is beginning to shape up. The color

that catches and holds the eye need not be the bright color of flowers. One arresting display in my garden today is the unbelievable greyness of *Euryops acraeus*. True, it flowered some time ago but more than half its attractiveness is in the foliage color. So the next chapter in the rock garden will be the subtle shades of foliage color. It will be interesting to see what we discover on winter visits to the garden. It can never be said that the rock garden is of spring interest alone.

## THE SEEDLIST HANDBOOK

H. LINCOLN FOSTER, *Falls Village, Conn.*

Every member of the American Rock Garden Society should have this marvelous handbook at his very elbow. Here in 187 pages Bernard E. Harkness has compactly summarized the essential information about the thousands of plants that have been offered as seed in recent seed exchange lists of the American Rock Garden Society, the Alpine Garden Society and the Scottish Rock Garden Club.

If you have this volume for reference when the next round of seed lists arrives, you will no longer need to barricade yourself with a vast array of different books to find the basic facts necessary to make a selection. Or now that your seeds are sown and beginning to grow, you can find in this compilation, by means of symbols, the habit of the plant, the height of the mature plant, the outstanding ornamental or distinguishing characteristic such as flower color, the area of its origin and a reference to the extensive bibliography where more extended treatment may be found.

There are listed 161 horticultural and botanical books which have been used in developing the one-line tabulation after each listing, with references to the particular work in the bibliographical listing where fuller treatment may be located. Though a number of the plants would be described in a number of different texts, only one is given, with preference for newer books reproducing color photographs. For some entries there are footnote references to periodicals and pamphlets.

For a small percentage of the names taken from the various seed exchange lists, no published descriptions could be found, but the names are included in the hope that someone may be able to supply the necessary information for a second edition of the work. Some of those listed without further information are merely varieties, forms or cultivars of basic species that are described. If Mr. Harkness could not find the plant described in the vast library he used for reference, it is possible that the name is a mistake that somehow slipped into one of the seed lists. Mr. Harkness has detected some of these and indicates his suppositions.

Of particular value is the careful research in synonymy and the latest nomenclature. Outmoded names and synonyms are listed in their alphabetical position with a reference to the most recently accepted names. This feature of work should be helpful not only to the selector to avoid getting the same thing under two different names, but to seed exchange directors in making up their lists.

Bernard Harkness was for a number of years the Director of the ARGS

Seed Exchange and from this background and long experience as a research botanist he has produced an invaluable piece of work. Based as *The Seedlist Handbook* is on the exchange lists of three major rock garden societies, it combines most of the names likely to be encountered in any offering of seeds for the rock garden. By rough count, it lists alphabetically over 8,000 entries. This prodigious work of scholarship merits as wide a sale in the British Isles as it does here at home.

The Notebook is a tremendous bargain; Three Dollars, postpaid from Kashong Publications, Box 90, Bellona, New York 14415.

#### ADDITIONAL COMMENTS ON THIS BOOK

In addition to Mr. Foster's short article (a sort of informal book review of Bernard Harkness' helpful book) here is another member's comment on it. Roy Davidson, of Seattle, writes, "While some might have languished or 'rested easy' on retirement and in recuperation, not so Bernard Harkness, who says that he spent about 'a year' on compiling this work, which runs to 187 pages and treats all the seed list items of the early '70's (some before) from the American, British (Alpine) and Scottish Rock Garden seed lists, from *Abies koreana* to *Zinia aurea*, and in between, in all, 151 Alliums, 174 Campanulas, 169 Dianthus, 109 Drabas, 121 Gentians, 148 Irises, 142 Penstemons, 213 Primroses, 178 Rhododendrons, no less than 272 Saxifrages, 118 Violets and thousands of individual items, all with the same precision and attention. At least one additional in-depth reference is given for the great majority of the entries, involving the total of 158 major reference works and a vast number of other articles.

"This handbook is organized in a manner that briefly and skillfully tells what it sets out to tell and concisely refers one to more detailed information without seeming overbearingly scholarly or wordy. Without doubt it will be a boon to both the seed list editors of the future and to their readers, but its usefulness can not be measured only there; the contents are of value to all gardeners everywhere. Best of all, perhaps, it is highly legible and seems to be remarkably free of the bothersome little errors that mar so many compilations. This handbook belongs on every gardener's shelf, where it will save hours of research and provide a guide to many an hour of further enjoyable reading up on little-known plants."

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CALIFORNIA WILD FLOWERS—At the ARGS Annual Meeting at San Francisco, April 19-20-21, 1974, many native California wild flowers then in bloom were tastefully exhibited in the Cotillion Room of the Westbury Hotel. The gathering and exhibiting of the flowers was the work of Mrs. Barbara Menzies and Mrs. Roberta Shockey both identified with past wild flower shows at Stinson Beach, California. A list of the flowers on exhibit was made by Pauline Croxton, Chairman of the Western (host) Chapter. This list was made using botanical names in alphabetical order with details of common names, family and area in which collected. Anyone interested in obtaining a copy of this list should write the editor. It was a bit too long to use in this Bulletin.

## COMMENTS ON THE 1974 SEED LIST

EDGAR T. WHERRY, *Philadelphia, Pa.*

While Dr. and Mrs. Ewert deserve the heartfelt thanks of the American Rock Garden Society's members, far and wide, for assembling the 1974 Seed List, the vast amount of work involved manifestly made it impractical for all 3566 entries to be checked as to current names, desirability, etc. To aid members not well versed in nomenclatural matters to correctly label seedlings they may plan to add to their rock gardens, the following notes are offered: (The numbers refer to the Seed List plant numbers).

- 1 *Abutilon theophrasti*—add invasive.
- 30 & 32 *Actaea alba* & *pachypoda* are the same species; the latter name is favored.
- 101 *Allium ozyphilum* should be *oxyphilum*.
- 153 *Amorpha canadensis* should be *canescens*.
- 254 & 255 *Antennaria dioica rosea* & *A. rosea* are the same thing. *A. rosea* is favored.
- & 259
- 409 *Artemisia absinthium*—Invasive.
- 430 *Asclepias syriaca*—Invasive.
- 492 *Athyrium goeringianum*—species has been changed to *iseanum*.
- 500 *Barbarea vulgaris*—Invasive.
- 568 *Callomia*—Is a misprint for *Collomia* (See 862).
- 591 *Calopogon tuberosa* should be *C. pulchellus*.
- 602 & 603 *Camassia esculenta* is now *C. scilloides*.
- 770 *Chiogenes gaultheria hispidula* should be written *C. (Gaultheria) hispidula*.
- 781 *Chrysanthemum leucanthemum*—Invasive.
- 835 *Clematis verticillaris columbiana*—Omission of *verticillaris* is favored.
- 872 & 874 *Coptis groenlandica* & *C. trifolia* ssp. *groenlandica* are the same species. The binomial seems preferable.
- 1117 *Dicentra eximia alba*—the varietal name *alba* is not botanically valid, and "white" is preferable.
- 1434 *Euphorbia marginata*—Invasive.
- 1450 & 1451 *Frasera* is now replaced by *Swertia*, (See 3233).
- 1516 *Gentiana autumnalis* var. *porphyria*—*G. autumnalis* now accepted; *porphyrio* is a discarded synonym and should go in parentheses.
- 1536 *Gentiana flavida* (Blue) is meaningless—See 1535 & 1537.
- 1706 *Hesperis matronalis*—Invasive.
- 1716 *Heuchera sanguinea* should be *H. sanguinea*.
- 1729 *Hieracium pratense* is super-invasive; its colloquial name is "King-devil."
- 1742 *Hosta caerulea* is now *H. ventricosa* (See No. 1760).
- 1772 *Hydrangia* should be *Hydrangea*.

- 1798 *Hypopitys monotropa*—The names are reversed—Should be *Monotropa hypopitys*.
- 1879 *Iris tectorum album* should be *I. t. alba*.
- 2065 *Linanthus nuttallii* ssp. *floribunda*—*Linanthastrum floribundum* favored.
- 2096 to 2100 *Lobelia siphilitica*—preferred spelling *siphilitica*.
- 2150 *Lysimachia punctata*—Invasive.
- 2157 *Mianthemum canadense* should be *Maianthemum*.
- 2162 *Malva silvestris* should be *M. sylvestris*.
- 2166 *Matteuccia struthiopteris*—Invasive.
- 2189 *Mertensia virginica alba* should be *M. v. berdii*.
- 2282 *Oenothera biennis*—Invasive.
- 2403 *Pellaea*—Instead of *Pellaea* the accepted genus name is *Pityrogramma*.
- 2435 & 2436 *Penstemon digitalis*—Invasive.
- 2494 *Phacelia purchii* should be *P. purshii*.
- 2510 *Phlox ozarkiana* should be *P. pilosa ozarkana*.
- 2519 *Phyllodace* should be *Phyllodoce*.
- 2540 *Phytolacca americana*—Invasive.
- 2574 *Podophyllum peltatum*—Invasive.
- 2591 & 2592 *Polygonatum canaliculatum* and *P. commutatum* are the same; former preferred.
- 2601 *Potentilla argentia* should be *P. argentea*.
- 2759 *Pyrola rotundifolia*—add variety name *americana*.
- 2766 *Ranunculus acris*—Aggressive.
- 2789 *Rhamnus frangula*—aggressive. cf. Gray Manual.
- 2791 to 2794 *Rexia* should be *Rhexia*.
- 2815 *Rhodohypoxis baurii* should be *R. bauri*.
- 2823 *Rhybergia (Actinella grandiflora)* should be *Rydbergia (Actinella) grandiflora*.
- 2883 *Sarracenis* should be *Sarracenia*.
- 3044 *Scilla campanulata* should be *S. hispanica* as is 3046.
- 3081 *Sedum roseum* should be *S. rosea*.
- 3117 *Senecio greyii* should be *S. greyi*.
- 3123 *Seriocarpus* should be *Sericocarpus*.
- 3183 *Smilax herbacia* should be *S. herbacea*.
- 3287 *Thlaspi rotundifolia* should be *T. rotundifolium*.
- 3311 *Tragopogon pratensis*—Invasive.
- 3316 *Tricyrtis macropoda* should be *T. macropodum*.
- 3318 *Trientalis americana* should be *T. borealis*.
- 3348 *Trillium stylosum* should be *T. catesbei*.
- 3405 *Verbascum blattaria*—Invasive.
- 3457 *Viola kitaibeliana* var. *rafinesquii*—leave out *kitaibeliana* v.
- 3466 *Viola papilionacea* should be *V. sororia*.
- 3477 *Viola striata*—Invasive.
- 3480 *Viola tricolor*—Invasive.
- 3483 *Viscaria alpina* is the same as 2128 *Lychnis alpina*; latter preferred.
- 3542 *Oenothera biennis*—Invasive.

## ROCK GARDEN FERNS

### *CHEILANTHES LANOSA, FENDLERI AND EATONI*

JAMES R. BAGGETT, *Corvallis, Oregon*

Of the many species of *Cheilanthes* encountered in the literature, and perhaps on rocky mountainsides, there are several which stand out as being interesting, beautiful and easy to grow. For this article I have selected *Cheilanthes lanosa*, *C. fendleri* and *C. eatoni*. In including the last one I am ignoring marginal hardness in favor of a generally good disposition and good looks. Some other *Cheilanthes* will be included in a future article.

The genus *Cheilanthes* is typically composed of small ferns which have woolly or mealy leaves and live in exposed rock habitats. Most of them are densely tufted, growing from short and compact rootstalks, but there are some which form fairly open colonies. The leaves are persistent, tending to stay green during the winter, with brown to purplish stipes which are scaly, at least when young. The blades are from 1 to 4-pinnate, and may be finely divided into bead-like segments. One of the most important points for recognition of the genus is the arrangement of the sori. These are around the margins of the leaf segments, tending to emerge into a continuous line. The margin of the leaf is rolled in, forming an indusium or cover for the sori, but as the sporangia mature they are mostly exposed.

Because the genus *Cheilanthes* is very closely related to *Notholaena*, a few species have been moved by botanists from one to the other. In some manuals the descriptions of the fruiting bodies are the same; in one, it is reported that in *Notholaena* the revolute leaf edge does not cover the sori, but this difference cannot be very great. *Notholaena* species usually have farina on the underside of the leaf, and the members of this genus I have seen have less finely divided leaves.

There are 100-125 species of *Cheilanthes*, widely distributed throughout the world, mostly in the arid subtropical and tropical regions. Only a few of them are hardy enough to be generally grown in this country. There are about 25 species in the United States, mostly from southern California to Texas.

*Cheilanthes lanosa* forms a dense but rapidly enlarging clump, with leaves about 7 or 8 inches high. The leaves are bipinnate with a very dark reddish brown stipe, lightly covered with small hairs and narrow scales. Both leaf surfaces have hairs, but not enough to affect the color, which is yellowish green. The undersides of the maturing leaves become shiny brown from the densely crowded sporangia, which contributes greatly to the general appearance of the plant.

*Cheilanthes lanosa* is the easternmost member of the genus in the United States, ranging from Connecticut to Minnesota and south to Georgia and Texas. Its habitat is in rocky outcrops, ledges, and talus slopes, especially in limestone or shale. It may be the hardest of the species under discussion and is perhaps the most widely adapted of all the *Cheilanthes* species for rock garden culture. Unfortunately it is not among the prettiest, but is still to be recommended.

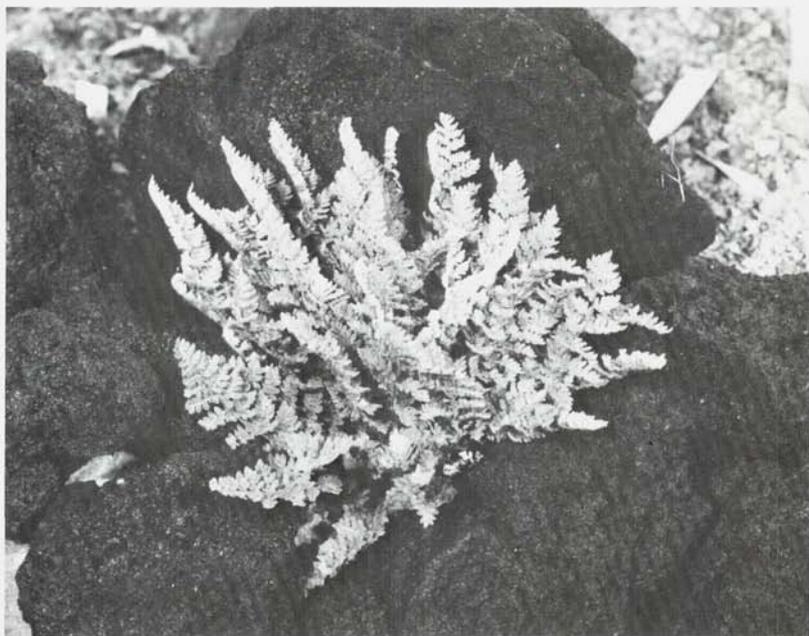
*Cheilanthes fendleri* is a prettier fern and somewhat smaller, spreading

into more open colonies with leaves typically around six inches high. In a sunny exposure and lean soil it may stay at 3½ to 4 inches, a real pygmy spreading slowly among the rocks. The leaves are more finely divided, being tripinnate and with much smaller segments which are bead-like because the indusia or rolled leaf edges cover most of the underside. The color has less yellow than that of *C. lanosa*, and the characteristic appearance of the leaf reverse comes not from sporangia, but from a profusion of long and broad papery scales which become a reddish brown as they mature. The stipe is covered with light-colored, narrower scales. The sporangia are well hidden from view.

*C. fendleri* comes from western Texas to Colorado and Arizona. In Texas it grows at altitudes up to 8000 feet, and in Arizona up to 9500 feet. In Colorado it is listed as ranging from Montrose and Los Animas Counties in the south, to Larimer County which borders on Wyoming, and at altitudes up to 7500 feet. This suggests considerable hardiness and there has been no problem as yet from winter kill in western Oregon. My knowledge of its use by gardeners in other areas is limited, however, so it would be speculation to suggest a range of garden adaptation. My original plant came from a rock garden nursery as *C. tomentosa*, and has been growing happily in my garden under that name for about five years. The same clone has apparently been rather widely distributed and it seems that because of this, *C. tomentosa* may



*Cheilanthes lanosa*

*Cheilanthes eatoni*

The Author

have gained an undeserved reputation for hardiness. In fact, *C. tomentosa* can be readily identified by the really heavy endowment of woolly hairs, being known as the Woolly Lipped Fern, and is usually not considered hardy enough to be grown north of its northern limits in Tennessee to West Virginia. I have not grown the real *C. tomentosa*.

*Cheilanthes eatoni* leads this group for appearance, mostly because of its gray-green color. A thin coating of wool on the upper leaf surface and a mat of it covering the lower surface add a touch of silver. With maturity the wool underneath turns somewhat yellow and the sori emerge as a ring of dark beads around the segment margins. An additional point of identity is a covering of long straw-colored scales on the stipe and the rachis of the leaf segments. Although the leaf is classed as tripinnate, only the basal segments of the primary pinnae are again subdivided, so that the leaf closely resembles that of the bipinnate *C. lanosa*. *C. eatoni* is about the same size as *C. lanosa* and forms a tighter clump. Because of its color it is especially interesting among black or red rocks.

The natural range of *C. eatoni* is very similar to that of *C. fendleri* except that it does not get so far north. In Colorado it grows only in the southeastern quarter at altitudes of 3500 to 6500 feet. In Texas and Arizona it reaches 8000 feet, nearly the same as *C. fendleri*, but I have little doubt that it is more tender. Several of my plants were eliminated by a ten day period of 10 degree weather without snow in January, 1972. However, a few days of similar temperatures without cover, and ten degrees below zero with snow in December, 1972 failed to damage the remaining six plants. *C. lanosa* and *C. fendleri* have not been damaged by these winter conditions.

## CULTURE

These ferns are remarkably tolerant to sun. In this climate they can easily be grown in full exposure, and should have such conditions for at least half of the day so they will remain compact. In hotter climates, light afternoon shade will be beneficial, but if drought is not severe they should not need much protection. In cool and wet climates, such as northwest Washington they should be given full sun and good ventilation as well. Tolerance to sun helps to locate the more tender species in a sheltered spot away from the north winter winds which are destructive in some areas. Several of the less hardy ferns I am trying are planted in a small rock garden close to the south-facing front of the house. Here, where there is protection from north winds and some heat from the house, are the only survivors of several species of *Cheilanthes* and *Pellaea* which perished elsewhere during the cold 1972-73 winter. This space is not wasted on *C. fendleri* and *C. lanosa* because they do not need it. However, there are two plants of *C. eatoni* growing there as an insurance against losing all of them.

None of these three ferns seem to be particular about soil type, though good drainage should be provided, as for all rock ferns. They respond to good fertility by rapidly making a dense and vigorous clump, but after they are established seem to require less nourishment than some, such as the *Aspleniums*, to maintain a good plant and survive. *C. eatoni* has needed some feeding to recover from winter and make new growth, but *C. fendleri*



*Cheilanthes fendleri* in the Baggett garden

and *C. lanosa* are best with the combination of minimal fertility and much exposure to make interesting dwarf plants.

Propagation by division in spring is easy with the open colonies of *C. lanosa* and *C. fendleri*, but should be less so with the tight clump of *C. eatoni* which I have propagated only by spores. Sporelings of most Cheilanthes are not difficult, except that they are intolerant of long residence in tight moist containers. They also survive poorly when kept in pots for extended periods, so should be planted in the garden when they are large enough to survive. Even though they are tolerant to sun, shading with a shingle is appreciated until they become situated.

The Cheilanthes are free from pests; I do not remember seeing aphids on them or slug damage. Such advantages, and their natural and charming appearance growing in rocks should make these ferns worth a try in anyone's garden.

## AT THE SAN FRANCISCO ANNUAL MEETING

THE POINT REYES TOUR—As a part of the 1974 Annual Meeting of the ARGs in San Francisco April 19-20-21, on Sunday morning, two buses waiting in front of the Westbury Hotel, were loaded with members and started at 8 a.m. on an all-day tour. Out over the Golden Gate Bridge we went and on northward. After a pleasant morning's ride with stops along the way at Muir Woods and an Audubon Society bird sanctuary on a long lagoon, where egrets were seen nesting in the tall trees of the hillside, we arrived at Point Reyes in Marin County. This is a veritable flower heaven. Here we had a box lunch then wandered along the cliff tops to see the fine display of California's native flowers. There was mist in the distance and only occasional glimpses of the ocean were possible, but the flowers! They were everywhere on the rolling terrain above the beach. This undulating shoreline was treeless, even shrubless. Yellow flowers predominated. The most numerous seemed to be two species of the genus *Lasthenia*, a composite. They were *L. hirsutula* and *L. macrantha*. The accompanying picture will attest to the real interest the tour members took in the floral display.

ACROSS SAN FRANCISCO BAY—Nestled, between Berkeley and Richmond on the eastern shore of San Francisco Bay is the town of El Cerrito, where on a steep hillside is the fantastic garden of Harland Hand, President of the California Horticultural Society. To reach it, the bus with a full load of ARGs members, had to struggle up a long and very steep grade. Near the top the bus gave up. Then followed a few tense moments of backing down the grade. After a "Well done" to the driver, an easier way was found and soon we were on the level cross street in front of the Hand home. The house stood on the high point of the lot and the garden covered the long and steep slope down to the lower property line. The tour led us through the small street garden, through the house, down the steps and to the main garden. The garden was explored from top to bottom and it took a long time to reach the bottom.



ARGs members at Point Reyes

Donald Peach

To us from the Pacific Northwest, the rest of the United States, leaving out the Southwest, and Canada, none had ever seen or dreamed of such a garden. From the bottom, looking up the long hillside to the house on the skyline, the garden was seemingly not of our world. Plants known to us and plants undreamed of, plants huge and tiny, rocks, paths, pools, waterfalls, steps, curves, retaining walls, cliffs, level spots and from top to bottom a blaze of flowers—a kaleidoscope of color in the dazzling sunlight. There were great poles of varying heights placed upright here and there, up and down the slope, artistically placed—stark and unvegetative accent points!

As a somewhat shockproof rock gardener, but of conventional type rock gardens, I was overpowered, confused and unbelieving at what I saw. Later, after the shock had lessened, in thinking about this garden I began to wonder how it came into existence—a garden of floral gems, unorthodox plantings, seemingly almost outrageous genera growing together happily side by side and sometimes intermingled; of poles and piles, free-standing and scattered, of man-made stone, evidence of skillfully engineered landscaping, great thorny desert plants coddling baby-blue-eyes at their feet, elaborate displays of rhododendrons, peaceful nooks and tormenting plant associations (tormenting to me, not the plants). All of this and at the top on the latticework of the bayside veranda of the house twined the most gorgeous Peace rose in full bloom. Happy, happy flowers, from many climes, perfectly attuned to the San Francisco Bay climatic conditions. One could go on and on. To list the plants in this garden would take clever botanists quite some time.

How did this garden come into being? Who put in years of work to create it? From whence came the imagination and the inspiration? It had to

be the work of a gardener, a botanist, a skilled craftsman, a prodigious worker, a scholar, and above all, an artist. Harland Hand must be all these things for it is his garden. He is responsible for this wonderland of cross purposes, flights of fancy, thoughts and after thoughts, ups and downs and acrosses. All of this is, of course, how this garden affected the editor, who after the passing of over a month, is trying to write down what he remembers. If another member, who visited Mr. Hand's garden at the same time, now wrote his own description and a reader read both descriptions it is likely that he would not realize that it was the same garden being described.

Actually, Mr. Hand is being importuned to become a member of the ARGs and should this come to pass perhaps he may be prevailed upon to write an article about his garden for the *Bulletin*. What an article that would be!

## OMNIUM-GATHERUM

There has been considerable commotion concerning the ARGs Seed Exchange brought about by Mr. George Schenk's article, "The Seed Explosion" in the January, 1974 *Bulletin*. Several "open letters to George Schenk" have been received and the editor has listened to and sometimes taken part in rather heated discussions on the subject. George ably pinpointed the causes for concern. He pointed out that if the Exchange's growth rate of the past few years is projected into the future, the work load of the staff will assume frightening proportions. In spite of this, George indicated that certain extra services should be continued and possibly new ones incorporated in the program. Naturally the staff, after reading George's article and thinking in terms of the future, is apprehensive and already taking the initial steps to secure relief.

There are three principle groups that comprise the Seed Exchange: the donors, the Director and the staff, and the sowers. If either the donors or the sowers, or both, were non-existent, there would be no need for the staff. This places the staff in the category of a service facility. So, in contemplating the future influx of seed, increasing each year, it is obvious to those responsible, or to be responsible later for the staff work, that the work load will assume proportions with which they will not be able to cope. Add to this the extra services contemplated and we have an unbearable situation. Therefore, they reason, and properly so, that the Seed Exchange operation must be streamlined, certain extra services now rendered must be curtailed or eliminated, or the work load must be spread over a much larger base, or some other drastic remedial steps taken. What to do?

It is not necessary here to delineate the various operations that the Director and staff must perform in order that the sowers may select from the current seed list the seed they desire, and receive them in good time for proper planting. Before there can be a seed list, the donors must harvest the seed, do what they must to deliver to the staff, at the scheduled time, good and properly cleaned seed, adequately packaged and legibly labeled with the proper botanical names. The staff does the rest.

It is the extra service, services rendered by the staff that consume many man-hours of patient work, which, according to the staffers could well

be spent in the normal processing of seed for distribution. Two of these extra services seem to be causing much of the staff's concern.

The first is known to the whole Exchange complex as "donor numbering." Briefly, this consists of the following: as seed donations arrive in the mail or otherwise, at Exchange headquarters, the donor of each shipment is given a number and all seed packets from him are marked with his particular number. This in itself is no small chore, but is only the beginning. When the seed list is compiled by botanical name in alphabetical order, preparatory to printing, after each individual species, variety, or cultivar name, there must be inserted the donor number of each donor who sent in seed of that particular species, etc. This is another time-consuming operation, and when the multiple proofreadings are taken into consideration—proofing of compiled lists before typing, after typing, and upon receipt of the galley proofs from the printer, it is quite evident that many man-hours have been expended. Present staffers want, and it is certain that future staffers undoubtedly will want this service eliminated. Donor numbering, however, serves a distinct and valuable service to both the donor and the sower. It stimulates communication between both groups which would be impossible if donor numbering were discarded. Communication between ARGS members is the very life blood of the Society. Without it, there would be no Society. Anything that stimulates communication is worth while, worth even the many wearisome hours of labor by the staff. The solution of this problem has yet to be worked out. More of this later. \*

The second service under fire is that of passing along from donor to sower special cultural directions or pertinent hints for successful growing gained by studying the habitats of plants in the wild from which seeds have been collected. Usually the donors send in such instructions and information with the seed. Much of the volunteered cultural information is highly valuable to the sower. I say "much" because some of it is not necessary, or is very easily obtained from the gardening books already on the sowers' shelves or obtainable from the library. Let us make a distinction between what is readily obtainable cultural and environmental information and that which is not. It is in the second category that we are interested. A rare or difficult plant or one hitherto unknown in cultivation has been brought to successful flowering by a donor. He is proud of his success and wishes to share his methods with fellow gardeners. So, he painstakingly sets down in writing the methods and conclusions and transmits the results with his seed. Another donor goes seed gathering in the mountains or some other wild terrain and collects seed. Again the rare or difficult plants are studied in their native habitat and the donor tries to determine the conditions of soil, air flow, sun or shade preferences, moisture or dryness, altitude, temperature ranges and other climatic conditions. This he writes down and sends in with his seed, hoping to share this knowledge with the sower.

So we postulate that in the case of rare, difficult or little-known plants, the donor's knowledge of the successful culture of the plant or conclusions reached from studying the plants in their native habitats is of great value to the sower-cum-grower and should be transmitted to him. They should not be mislaid or destroyed, not even in order to lessen the work of the staff. Here we must come up with a solution or face a rebellious staff or frustrated donors

or faultfinding sowers. We want none of the three! So what do we do? As far as this second service is concerned there is a possible solution under consideration which, when formalized, will give the sower the benefit of the donor's knowledge and thoughtfulness. (In fact, this information will be available to all members). This method will be made possible through the voluntary action of one member who desires to act as a clearinghouse for such information. This service which so irked the staff, originally called for its members to accumulate the donors' written suggestions as they were received with the seed, differentiate between what constituted useful information and otherwise and to incorporate that which is useful in the seed list—again coded to each donor. Another time-consuming job!

Under the proposed new method, the staff's work in this connection would be reduced by approximately 90 percent, for they would only collect the donors' comments and send them to the clearinghouse. There, this worthy member would separate the sheep from the goats, blend the helpful comments into an article and send it to the *Bulletin* editor. He would print the article in the next *Bulletin* in place of some article that could well wait for the next issue. Thus this information becomes readily available for all interested members, sowers or not, and at no extra cost to the Society. This is one method of spreading the work load. Ideally, this information should appear in each January issue but the Seed Exchange and the *Bulletin* deadlines might make it impossible. We will have to try.

As to a possible solution to the donor numbering problem, or the possibility of securing more volunteers for the staff, or otherwise streamlining the whole process, more thought by more members will have to be forthcoming. The purpose of this long discourse is to start members thinking about the problems of the Seed Exchange and to come up with ideas that may be of help.

An interesting aside: A sower may become a donor at harvest time; after harvest most donors become sowers; even staff members are possibly donors and assuredly sowers, too. And any member may wake up some fine morning and find he has volunteered for Seed Exchange work.

\* \* \* \* \*

Once again the Grim Reaper has been among us. This time it was Jerry Lukins who fell to his sweeping blade. Jerry died April 18, 1974 at Port Chester, N.Y. after a very short illness. He has been a member of the American Rock Garden Society for a long time and the surroundings of his lovely home in Port Chester attested to Jerry's landscaping skill and his love of beauty.

The *Bulletin* editor considered Jerry not only as a friend but much more. Jerry was actually godfather to the then infant editor (infant in editorial experience, though not in years). In 1962, this editor, newly drafted into service, faced his first issue of the *Bulletin* with scant material, doubtful courage and almost minus know-how. In his desperation he wrote letters of appeal to all of the Chapter (Regions, then) chairmen. Only one heeded that cry for help and, of course, Jerry was that one. He was then chairman of the North Atlantic Region of the ARGs. Immediately he got busy and inspired, or browbeat or somehow started twelve of his Region's members writing articles. At once (before the deadline, anyway) articles were written,

dispatched to the editor and his first issue was on its way and the ARGs *Bulletin* kept its schedule. We can all thank Jerry for an uninterrupted succession of Bulletins. Even now some of those members are still writing articles for you to read.

Since that day in 1962, 48 issues have rolled off the press and the editor, because of continuing gratitude, likes to feel that Jerry has had his part in every one of them.

That is the kind of man he was—ready to step into the breach and do what was necessary, even for someone who was at the time unknown to him, but in trouble.

## SOME ALPINE PLANT SITES SOUTH ISLAND, NEW ZEALAND

REUBEN & HARRIETTE HATCH, *Vancouver, Wash.*

To state that the South Island of New Zealand offers many opportunities for mountain hiking and the observance of alpine flora would be a gross understatement. In reality the South Island is largely mountainous not only in the mighty Alps that run north to south but in the multitude of lower ranges that criss-cross most of the Island. It is in these lower ranges of 5,000 to 7,000' that access to alpine fields is often only a matter of a short drive or hike off the main road.

The following will describe areas visited last January which we found particularly interesting. Obviously, there must be dozens of other sites of merit. Most of the areas visited came about through directions and other efforts of Jim Le Comte of Ashburton, New Zealand (see ARGs *Bulletin*, July, 1973).

Much of the mountain land in New Zealand is either government owned and set aside as National Park or Forest Reserve, or privately held. It is well to check in advance if collecting plants is contemplated as it is prohibited in many areas. Private roads up to the higher elevations can often be used if prior permission is sought.

**BLACK BIRCH RANGE**—This area is a mountain site (Mt. Altmarlock, 5,553') reached by private road that leads north off the Awatere River Road at about the fifteen-mile mark. The key to the road gate and to the house near the mountaintop may be obtained through the Department of Public Works, Blenheim. The road up the mountain is steep but well graded and offers a marvelous view across to the Inland Kaikoura Range. At about the four-mile mark the first *Celmisia* was spotted (*C. spectabilis*) which was followed by scab weeds (*Sp. Raoulia* and *Sceleranthus*) growing among the rocks. As the house at about the six-mile mark is reached the mountain shoulder broadens supporting fields of *Celmisia*, *Gentiana*, *Epilobium* and our first view of what we especially sought, *Raoulia bryoides* and *Haastia pulvinaris*, members of the remarkable Vegetable Sheep family. These curious shrubs often reach three or four feet across, or more. Many of them must be quite ancient. The cushions are as hard as rocks and almost impenetrable, and, from a distance on the mountainside they do resemble sheep. From the



*Celmisia sessiliflora* on Gertrude Cirque

R. Hatch

house to the mountaintop, another two miles, was chock-full of interesting plants where it was easy enough to hike around on the rocky terrain. The denseness of plants would never be suspected upon viewing the mountain from any distance, and while the soil close up appeared barren it was surprisingly moist and humusy just below the surface. Some of the plant associations were of interest. One in particular would be coveted in any rock garden: a three-foot mat of a golden-colored *Scleranthus* into which had grown smaller plants of *Gentiana bellidifolia* (?) with its reddish-green foliage, *Raoulia grandiflora*—a bright silver, and *Celmisia sessiliflora* of greenish-silver hue. This trough-like grouping had as its background a sizable mound of *Haastia pulvinaris*, the foliage giving the impression of oatmeal-colored buttons squeezed tightly side by side.

GERTRUDE CIRQUE—Our next adventure was at the opposite end of the Island in the National Park area known as Fiordland. We were drawn to this particular hike after reading its alluring description in Philipson and Hearn *Rock Garden Plants of the Southern Alps* and in Moir's *Guide Book, Southern Section*. We were not to be disappointed. The trail which eventually leads up the northern ridge of Mt. Talbot starts just east of Homer Tunnel at Homer Hut and proceeds up a sheer-walled canyon lush in large-growing varieties of *Aciphylla*, *Celmisia* and *Hebe*. At the canyon end the trail climbs abruptly adjacent to a waterfall course, across and up a rock face, over a huge boulder fall and finally to the saddle. The views back down the mountain face and across to the adjoining peaks as we made our way up justified the effort of the five-mile climb. Protruding from rock cracks along the way were numerous species of *Celmisia*, many only inches high. Also

found in mass and in bloom were *Ranunculus sericophyllus* and *Aciphylla congesta*, both gems. On the saddle, from where a spectacular and dizzying view can be had of Milford Sound, grew several interesting plants including *Raoulia buchananii* sporting a modest flush of tiny red flowers, *Leucogenes grandiceps* which in its prostrate form is a highly desirable plant, and clumps of *Celmisia sessiliflora* and *C. hectori* almost hidden under their large daisy flowers. The Milford Sound area is known for its wet and stormy weather, up to 250 inches of rain a year, so we were grateful for the fine weather at Gertrude Cirque and our other hike in the area, Key Summit.

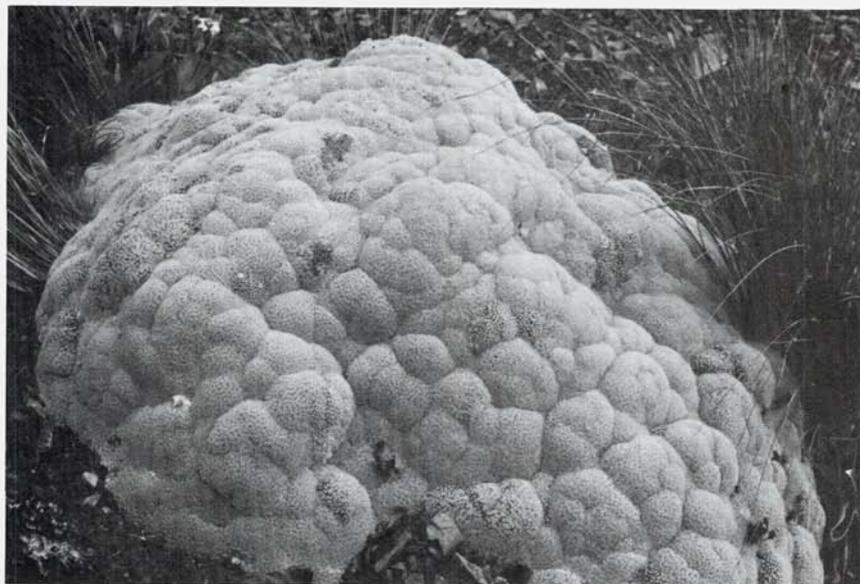
KEY SUMMIT at 4,500' is situated on the main divide of the Alps above the lush Hollyford and Eglington Valleys. The hike was an easy ascent of about one hour. It starts from the Milford Road and proceeds up through a dense forest of beech (*Nothofagus* sp.), fern bush and tree, and some beautiful specimens of Fuchsia with tree-like trunks shedding their papery bark. The trail finally breaks into the open then branches off the main route up a steep hill and on to the top of the ridge. The top is largely alpine bog with large hummocks of sphagnum moss containing *Donatia* with *Nertera* growing through it displaying its red berries, *Drosera*, *Gentiana*, *Herpolirion* and other water-loving plants. We also found some compact forms of *Forstera* which with its whipcord-like foliage and open-campanulate flowers would decidedly make a contribution to the rock garden. The view from Key Summit was spectacular taking in snow-capped peaks on three sides making the hike especially worth while.



"Sheep Station" on Mt. Hutt. *Celmisia* and *Aciphylla* can be seen in with the flocks of *Raoulia*

OLD MAN RANGE—This area has been recently described but might stand a few further comments especially for those whose travel plans do not include a four-wheel-drive vehicle. The range is best approached from the south on the Waikaia Bush Road which meets Highway No. 8 about nine miles north of Roxburgh. The access road is not easy to find and once on it, it's low gear and up, up, up for the next eight miles. The hillsides at the time of our visit appeared barren and eroded and alpine plants were the last thing one would expect to find. At the ridge of the range, approximately 5,000', the road fades into a four-wheel-drive track and the car is best left there. A hut identifies the spot. But it is an easy walk up the track and after three miles or so on the ridge, through tussock grass and small plants, an herb field dense with *Celmisia* and scab weed is sighted. A little further on at a peculiar rock site reminiscent of Stonehenge many interesting cushion-type alpines are encountered including *Myosotis pulvinaris*, *Ourisia glandulosa*, *Hectorella caespitosa* and some most impressive clumps of *Aciphylla simplex* only an inch or two high and two feet across with a unique foliage color close to a honey or brass hue. We returned to our car thinking we had seen most everything but learned later we should have gone a bit further. Sounds familiar, doesn't it?

MOUNT HUTT—The last area to be described is probably the most accessible. This developing ski area is easily reached from Christchurch. The road ends at about the 5,500' level where another 1,500' up over easily managed scree takes one to the ridge. However, this is not necessary as most plants can be found within easy walk of the parking area or along the road below. The main attractions on Mt. Hutt are the Vegetable Sheep, *Raoulia mam-*



Close up of *Raoulia eximia*—a particularly convoluted form

*milaris* and *R. eximia* which grow in abundance. Great clumps of the beasts are almost within touch from the car window which seemed a bit unsporting. Higher up on the ridge we found the fine Hebe, *H. haastii*, with its chubby green leaves tinged red from its lean environment, blending in with the scree. Also found was the curious *Lobelia roughii*, the holly-like leaves protruding just above the rocks. Further down the mountain growing in among the Vegetable Sheep were *Ranunculus chordorrhizos* and *Geranium sessiliflorum* var. *glabrum* both with pitted bronze foliage hardly distinguishable among the rocks and soil.

So much for a few alpine plant sites. One could ramble on in praise of the scenery, the well-tended gardens, and most of all the kind hospitality and friendliness encountered everywhere which had the most to do with making our travels so rewarding.

## ADVENTURING WITH SEMPERVIVUMS

PAUL H. BOSWELL, *Marsillon, Ohio*

To any person who enjoys growing plants, whether or not one has a garden, there is something in the broad field of the rosulate Crassulaceae to provide constant enjoyment. A large pot, a strawberry jar, a flat bowl, a mossed board, a piece of tufa or even a chunk of blast furnace slag can serve as repositories for the tiny amount of soil needed for holding the more obliging houseleeks or hen and chickens—technically two genera, one representing the Eusempervivums and the other the Jovibarbas, both easy from the cultural point of view. On a larger scale, conceivably, one could employ an acre of rockery to house a collection of all of the Sempervivums offered in the trade, especially if one could obtain all of the polymorphs and geographical forms of the alpine Sempervivums and of *Jovibarba heuffelli* and *J. hirta*, the multitude of natural hybrids and the garden cultivars developed over the past two centuries and still proceeding at an accelerating pace as more and more amateurs and professionals get into the act of breeding plants of exotic forms and colorations.

The serious student of botany would prefer to form a collection of the basic species and their varieties and forms as they occur in nature and perhaps the natural hybrids and the nothomorphs which are crosses involving varieties. Outside the Sempervivums proper he could find much charm in the horticulturally blending genera of *Orostachys*, *Sinocrassula*, *Sempervivella*, *Cotyledon*, *Rosularia* and the two rosulate Sedums, *S. pilosum* and *S. sempervivoides*. Climate or microclimate permitting, one could also venture into the more tender Sempervivums of the Canary Islands and North Africa—*Aichryson*, *Aeonium*, *Greenovia* and *Monanthes*.

Though mostly mountain plants in nature, Sempervivums do very well in the lower altitudes where most gardening is conducted. Being evergreen and succulent, they have no dormant period though growth and vegetative reproduction is most marked during the spring months. In the species and varieties which develop heightened coloration of the rosettes, the change in hue begins in winter and develops until hot weather arrives, whereupon most

fade to some extent. Like all alpiners, the plants stay healthy under good snow cover in winter, but mild winters with much rain can damage if not kill those varieties with tight rosettes and woolly foliage. To assure survival of the species native to Macedonia, the Caucasus, the Near East, the Moroccan Atlas and some of the kinds from the Balkans it is wise to winter them under glass where temperatures below zero F. are taken in stride as long as the plants are kept reasonably dry.

*Sempervivum arachnoideum* is probably the most alpine of the houseleeks since it grows at altitudes up to 3090 meters in the Pyrenees, Alps and Apennines, but its cobwebiness can suffer in muggy weather. I find it most happy in a nearly vertical wall where it spreads among the crevices often overhanging by ledges. It likes a granitic soil with acid leaf mould and sharp underdrainage, but is so hardy and adaptable it will tolerate conditions far outside the ideal.

*Sempervivum tectorum*, its four varieties and its multitude of forms (sixty-seven names are given in Praeger's table of synonyms of the species and there are many more horticultural cultivars), seem to prefer limy soils. A rich diet will often produce plants of spectacular size. It does as well in part shade as in full sun and may develop its best color in this situation. *S. tectorum* best justifies its generic name literally translated as "Live-forever", as it is well-nigh indestructible if left to its own devices.

*S. montanum*, with downy, velvety leaves is another ironclad in hardiness and adaptability, utterly delightful in its type and varieties and transmits its beauty to all of the many hybrids where it is involved.

The Jovibarbas also have long been cultivated. Recently separated into a different genus, their flowers are nearly all six-parted, rather than twelve-parted and their chromosome count is an uncompromising N-19 whereas *Eusempervivum* ranges from N-19 to N-21. *J. sobolifera*, the real "hen and chicks", bears its globular progeny on slender threads high in the rosette from which they are easily detached to roll about and set up new colonies. It lends pleasant variety to any collection of houseleeks, however restricted.

If we had but the above four species, enthusiasm of gardeners for the genus would still be strong but there are many more and all are charming. Some require a little coddling, but what would gardening be without challenge? Even in this un-alpine midwestern part of the United States all of the hardy *Sempervivums* could be cultivated. I am certain this statement would be futile braggadocio if applied to the genera *Saxifraga*, *Gentiana* or even *Primula*.

As has been stated by many authorities, the propensity of the alpine *Sempervivums*, and particularly of the species *tectorum*, *montanum* and *arachnoideum* to cross with each other and to further cross with varieties and geographical forms has resulted in a chaos not entirely resolved to this day. The genus *Sempervivum* is a Johnny-come-lately group in the evolutionary scale and is loathe to settle down in its chromosomal behavior. Many of the hybrid plants were described as species during the centuries following the inception of binomial nomenclature. To further complicate the situation, cultivars of garden origin were often given botanic names and no descriptions were submitted. This has resulted in the infamous list of the "nomina nuda" presented in Floyd Praeger's *An Account of the Sempervivum Group*— a

catalog much enlarged since the monograph was printed in 1932. Names without description are, of course, not confined to the Order Crassulaceae and the genus *Sempervivum* is not alone in its habit of creating a melting pot.

The *Violas* of the world hybridize readily in nature and in gardens, *Aethionema* is so promiscuous that any two species grown in proximity will surely cross, *Aquilegia* is like-minded and even *Quercus*, the mighty oak, hybridizes happily within its sections as do *Campanula*, *Gentiana* and *Saxifraga*. The particular disorder that houseleeks have come to is largely the result of the genera having come to popularity without the existence of a discipline governing nomenclature. Other genera, long acclaimed, such as *Narcissus*, *Tulipa* and *Rosa* have been standardized by such organizations as The Royal Horticultural Society, Koninklijke Algemeene Vereeniging voor Bloembollen Cultuur and The American Rose Society. It is now time for *Sempervivum* to come to an accounting.

In 1970, Peter Mitchell organized the *Sempervivum* Society in Bishop's Stortford, Herts., England, later moved to Burgess Hill in Sussex. A quarterly journal was published in the tradition of precise botanical standards and soon a garden was established for study and to supply members with starting rosettes of accredited stock, not only of the species, varieties and forms long known but often misrepresented in the trade, but of the more recent discoveries from Spain, the Balkans, Macedonia, the Near East and the Caucasus. Not the least of the values presented in the *Sempervivum Journal* are the magnificent color illustrations of plants described. Several authoritative articles on horticultural cultivars have been presented. A handbook has been published bringing the genus *Sempervivum* up to date by recognizing the species described during the past forty-two years.

Such societies are essential if people want to keep an endeavor on a scientific plane. We expect that very soon an American *Sempervivum* organization will come into being, not to supplant the pioneer English group, but to complement it and give voice to an increasing body of enthusiasts. Ground work has been laid and a control garden has been established at Sugar Hill Nurseries in Dalton, Mass., where dealers and amateur hybridizers have sent stock for evaluation of nomenclatural validity. Mrs. Crane, of Sugar Hill, has responded with enthusiasm after Mr. and Mrs. Bruce Neil of Briarcliff Manor, New York and Dr. C. William Nixon of Randolph, Mass., a geneticist and botanist, had traveled the U.S., visiting several of the major growers of *Sempervivums* to enlist them in the project. These friendly and hospitable people must share credit for the control experiment. At last mention there were, besides Mrs. Crane, the Paynes of Oak Hill Gardens, the Thomases of Arcady, the Newhards of Palette Gardens and the MacPhersons of MacPherson Gardens.

\* \* \* \* \*

*ADONIS VERNALIS SEED*—Miss Eleanor M. Phillips, South Main Street, Westbrook Conn. 06498, has had trouble in germinating seed of *Adonis vernalis* obtained from reputable growers in this country and in England, seemingly due to lack of freshness. She desires seed of this plant that is *fresh*. Can anyone help her?

## ARGS QUARTERLY BULLETINS VALUABLE REFERENCE VOLUMES

GUS N. ARNESON, *Seattle, Wash.*

I recently learned what, I suppose, many ARGS members know: that the past issues of the ARGS *Bulletin* constitute a rich reference library. Within a collection of these well-edited publications is a wealth of information about plants, where they grow, their propagation and culture, and about the people who discover, grow, and love them and the path to these treasures is made smooth by comprehensive, easy-to-use indexes.

As a relatively new member of the ARGS, I have read each current issue of the *Bulletin* with interest—usually an article or two with care and the rest superficially—and put it on the shelf knowing that it deserved more concentrated attention and with a vague notion of going back to it some day. It was recently my good fortune to acquire the collection of distinguished ARGS member and contributor to the *Bulletin*, Alice Hills Baylor, of Vermont. The collection starts with the January 1951 issue so, with more than twenty years of plant and garden lore within reach, I set myself the task of scanning the collection to find out exactly what I had. I became so engrossed in what I discovered that the “scanning” project took several days and I finished with the conviction that this material will, in future, be frequently consulted.

I became, for one thing, respectfully aware of the distinguished company with which, by leafing through those pages, I could associate. What an assemblage of writers recording their methods, experiences, knowledge and wisdom! There were fifty-four authors during the years 1949 and 1950, seventy-four in those of 1971 and 1972. All of them have been men and women worthy of careful attention, many of outstanding qualifications—Dr. Wherry, Epstein, Senior, Klaber, Worth, Baylor, Nearing, Sutton, Frye, Kruckeberg, Foster, Le Piniec, Davidson—to name only a few. The choicest thoughts and practices from the best thinkers and practitioners!

In the eight issues of 1971 and 1972 there appeared information on more than fifteen hundred plants from *Abies concolor* to *Zygadenus venenosus* (In 1949 and 1950, four hundred and sixty-one plants were described). Many plants have been discussed from different aspects by several writers throughout the years and the index guides the researcher to each article. Sometimes the reader is guided expertly through the complexities of nomenclature, frequently a plant is evaluated as a potential garden resident, often it is named and described along with its associates in the normal environment of some bog, desert, woodland, or wind-swept ridge—the ecological system in which it makes its home.

The geographical scope of the Bulletins is as wide as the world and the volumes are pervaded with a sense of freshness and fragrance of gardens, forests and mountains of far-away places. The pages are enriched with writings by plant experts who write with authority on all parts of North America and of England, Scotland, New Zealand, Mongolia, Iceland, Switzerland, Japan, Kashmir, Italy, Austria, Czechoslovakia, Belgium, and Chile.

Finally, there is a wealth of instruction on how to do things—propagate, collect seed, build cold frames, use lights, fertilize and mulch—how to perform all those not-so-glamorous but oh-so-important operations. I find this especially gratifying because although my plants never appear insulted if I stumble over their Latin names, they droop and die when I am clumsy about their care.

The ARGS Bulletins are alive with interesting and pertinent information and most of what is in the earlier numbers is as timely as what appears in the current issues. They are a guide to better gardening and to appreciation of plants, their environment, and of the men and women who are devoted to them. Henceforth they will occupy a readily accessible shelf in my library and be an immediate source of information, ideas and inspiration.

## FOR BETTER COMMUNICATION AMONG MEMBERS

Filed away in the minds of ARGS members and other rock gardeners who may not yet have become members there is a wealth of knowledge concerning the successful culture of alpiners and other rock garden plants. Such knowledge should be shared and only through communication can it be shared. Read what Mr. Henry R. Fuller, of Easton, Conn. has to say on the subject:

“The article by A. J. Brownmiller in the October, 1973 issue of the *Bulletin* deserves active response. He suggests that individuals who have success with a plant generally found to be difficult, either through devising a more successful technique for pleasing it, or through finding a more vigorous or long-lived strain of it, should pass this information on to other growers. To speed this process he suggests a collator to receive and prepare for publication reports from many members on a specified list of difficult plants. An excellent idea. Would Mr. Brownmiller be willing to serve as the first collator? The Editor might ask him.

“One beautiful plant which continues to frustrate many good gardeners and constantly threatens to become extinct by going into a decline after a vigorous spring blooming is *Phlox* ‘Chattahoochee’, found years ago in the South by Mrs. Henry. Anyone who has any hint about getting this through the summer doldrums after blooming should pass the good news. *P.* ‘Chattahoochee’ may well be a natural hybrid of *P. pilosa* and *P. divaricata*, so people who grow *P. pilosa* well may have things to tell us. I once had a *Phlox pilosa fulgida* from Claude Barr which bloomed in a spectacular fashion for me and then simply died, swiftly.

“I can report that I have kept *P.* ‘Chattahoochee’ going by rooting cuttings frequently, and I have found that it roots easily and quickly in the fall, indoors, under lights. These cuttings will grow well all winter indoors and the first summer outdoors. The following spring they will delight you in the garden; the trouble will begin after blooming—until somebody tells us what to do.

“Ten years ago a very small number of people were growing the western *Lewisia* in the East. That number has now multiplied, and there is much

more experience to be collated and made available to all of us. We have all been forced to experiment, trying them here, trying them there; feeding them this, feeding them that. This past summer, at the time *Lewisia*s take their drying time, we had constant rain, and many of us had losses. It would be interesting and might be valuable if some "collator" would collect and try to find sense in the varied and often conflicting experiences of people seeking ways to make these beautiful plants flourish outdoors in our climate."

The editor did ask Mr. Brownmiller if he would consent to act as collator and he has consented. Questions and answers, as well as personal experiences concerning cultural "know-how" and knowledge of superior strains should be sent directly to Mr. A. J. Brownmiller, R. D. 4, Box 274, Gibsonia, Pa. 15044, who will prepare from this input articles which will appear in the *Bulletin* regularly or as regularly as the input warrants. Thus all members will benefit, knowledge will be shared, communication will flourish, worthy plants will be more widely and better grown, and our rock gardens become more beautiful and diversified. To start with perhaps some of you may be able to shed light on Mr. Fuller's problem with *Phlox* 'Chattahoochee.' If this plant is easy for you, write to Mr. Brownmiller and let him use it in his first article as collator. He undoubtedly will find an appropriate name for this particular column.

## ***PYROLA ASARIFOLIA* BY THE HUNDRED**

MRS. G. W. DUSEK, *Graham, Wash.*

In gardening, ignorance may not be bliss, but were it not for my scant knowledge of *Pyrola asarifolia* about ten years ago, my long love affair with it might never have come to pass. We first met in what was the front of our new property. It was found on a small hummock in a small, sometimes bog, that was home for spiraea, wormy willow and all too thorny native crabapple. Since then I learned that this was not too likely a spot for it. Nonetheless, there it was on the site of a proposed pond.

Rescue was one step ahead of the bulldozer. Since it was dry enough for the use of this equipment, the time for transplanting could not have been ideal. Pieces of the plant were reset on a small hardpan knoll in our alder woods, patted in with hope and water and left pretty much to their own devices. At this point, judging from what I have read since, they should have died. But they couldn't read the book, and I hadn't, so we were off to a good start.

A couple of years went by with multiplication to the point of endangering some *Cyclamen coum* that were getting started lower on the knoll. This put them on the move once more. This time they were reset early in spring on the clay banks of a tiny stream we created below the knoll but far enough away to protect the *Cyclamen*. Here again all went well, though the plants with their backs to the sun were rather thriffter than those on the opposite bank.

The following spring a battle began that I have yet to win. There was a mass of new plants on the knoll. A box of plants was dug for a neighbor. This time I was careful to follow roots and get every visible piece. There

were plenty to fill out the streamside planting. They came back again on the knoll. Last spring I was determined to win the battle so sat patiently and followed down each wayward scrap of root. There was a box of them. This operation was a success—almost. The season following was exceedingly dry. Watering was done where the situation was most desperate and the new *Pyrola* plantings were often last in line, yet few plants succumbed. Indeed, some of the new ones even managed an occasional spike of bloom.

The creekside plantings cover an area about 14 feet long and irregularly 2 to 4 feet wide. On the better side the leaves form a solid ground cover. Flower spikes appeared by the hundred this summer. When I trimmed the seed stalks the dust-fine seeds flew in clouds.

Now, lest everyone is tempted to dash out and dig up *Pyrolas*, please don't. This form that we have seems to be unique in its willingness to grow. We have others in the garden from various sources NONE of which has shown any inclination to get carried away with itself.

Our unusual one has pink flowers. The leaves are medium to rather yellowish-green and rather shiny. They like reasonably heavy shade but not right on top of them, preferring rather a bit less shade and to face away from the sun. They distinctly dislike to be crowded by heavy-leaved neighbors or to have mats of alder leaves on them. Soil seems not to matter. On the hardpan they ramble about under the mosses that take over such spots. They are even happier on humusy soils. They need no fertilizer nor sprays nor any trimming save removal of spent bloom. This must be done one by one with hand shears.

There has been speculation that these plants are parasitic to some extent



*Pyrola asarifolia* in the author's garden

or that they are very dependent on some form of fungus. In the case of my plants this cannot be true since I move them bare rooted both here and as far as 50 miles away where there are no other *Pyrolas* nearby. It is possible that *Pyrolas* are border-line plants that have yet to settle firmly on a life style so that certain non-parasitic or independent clones may be found which will prove amenable to garden conditions.

None of the *Pyrolas* which I have handled are generous with hair roots. This also could be a decidedly limiting factor in transplanting them. Another factor in the ease with which my plants handle is that apparently any scraps left in the ground have the ability to reproduce, unlike all others I have handled.

We have also in the garden the red form of *Pyrola asarifolia* collected near here. From elsewhere we have *P. secunda*, *Moneses uniflora*, *Chimaphila menziesii* and *C. umbellata*. Some show modest increase. So far only the red *Pyrola* has bothered to give bloom.

Our winters are usually open and wet. The best time to move any of these related plants is after the fall rains have begun in earnest and well before spring warms up. When moving any plant from the wild, I always bring along a generous helping of the soil it was growing in on the theory that it might be of help and certainly should not hurt. These plants have to be dug bare root as there is but a single rather brittle root meandering goodness knows where. It is not a job for the impatient. They do not usually appear in the wild as clumps and even if they should, what is above the ground is absolutely no clue to what is going on down below. There are invariably innumerable roots of trees, rocks and other complicating factors. Packing must be done with utmost care so as not to damage the brittle roots. Once home the new site should be chosen with an eye to all important conditions of shade. This should be quite dense until the plants are well established. Planting should be shallow and water supplied generously until there is new growth. Use the rains, but don't count on them! Getting them to reestablish is a very slow proposition.

Of the *Pyrolas* I have grown, my pink has the best all year garden value. The red form has much prettier blooms if it were only more generous with them. Sidebells, *P. secunda*, has not too much to recommend it. Single Beauty, *Moneses uniflora*, is lovely on a miniscule scale. The Pipsissewas (*Chimaphilas*), show great promise if only amenable clones can be located.

\* \* \* \* \*

THE 1975 MEMBERSHIP LIST—The following is a note from our secretary, Mr. Milton S. Mulloy, concerning this new list: "The biennial publication of the Society's Membership List is due in April, 1975. It will be complete, according to the records of the Secretary's office as of the close of 1974. Final date for the receipt of corrections or changes will be Jan. 31, 1975. If addresses are presently incorrect or inadequate in detail, or are to become so before April 1, 1975, a notice to the Secretary NOW will save members from inordinate delay in getting their copies of the *Bulletin*; it will save the Society, in the aggregate, some substantial expense for return postage and your Secretary some small labor that might better be expended in some productive pursuits."

## OBITUARIES

During the early spring of '74, the American Rock Garden Society lost two of its longstanding stalwart members in the deaths of Leonard J. Buck of Far Hills, New Jersey and Jerome A. Lukins of Port Chester, New York.

Leonard Buck was for many years Vice-President and Director of the ARGs and his extensive gardens in Far Hills were the site of many rock gardeners' meetings and on two occasions was the location of the Society's Annual Meeting.

Jerry Lukins was the frequent host for regional and chapter gatherings of the ARGs at his stunning garden in Port Chester. He served as Chairman of the North Atlantic Region and was a generous contributor to all aspects of the ARGs.

To the families of these two notable members the Society extends its deep sympathy.

H. Lincoln Foster, *Falls Village, Conn.*

THE SCOTTISH ROCK GARDEN CLUB SADDENED—Our sister society in Scotland mourned the loss of one of its active members, Mrs. L. C. Boyd-Harvey, who died February 26 after an operation. She was the Honorary Secretary of the Club. In 1971, during the International Rock Garden Plant Conference and Show, Mrs. Boyd-Harvey was the leader of one of the two buses that toured Scotland after the Conference closed. She is well remembered by those ARGs members who were fortunate enough to ride in that particular bus, for her patience and her concern for the comfort and entertainment of those under her charge.

\* \* \* \* \*

'76—FIELD TRIPS GALORE—'76—Plans now being formulated will include visits to outstanding Seattle and Vancouver gardens and parks including the rock garden at the University of British Columbia Botanical Gardens. Field trips during the conference will feature a nature trip to Mt. Rainier—snow conditions permitting.

The number of tours before and after the conference will include trips to the Olympic Mts., the North Cascades, the Wenatchee Mts., and the mountains of British Columbia. Also being considered is a trip of three or four days which will be a combination tour in the North Cascade area of Washington to include some hiking, a boat ride down the length of Lake Chelan and a westward drive over the recently completed North Cascade Highway.

Alternate plans are being made in case of adverse weather conditions at higher elevations. Keep thinking of 1976, the conference and the alpinists that will be awaiting you in the mountains. '76!

A FINE RESPONSE AND A WORD OF THANKS—Mr. Milton S. Mulloy, our Society's secretary, has reported a very good response to his advertisement in the *Bulletin* for back issues of this publication—going back as far as Volume 1. The demand for these back issues comes largely from the newer members and it follows that it is the members of long standing who will have back issues, perhaps no longer needed. Mr. Mulloy wants particularly to thank Mr. and Mrs. Chester A. Burt, of East Sandwich, Mass. for their very substantial contribution going back to the first year of their membership (1950) and in some instances further back than that—even back to Volume ONE. Perhaps readers will gain a better idea of the value of back issues should they read Mr. Gus N. Arneson's short article in this issue.

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If you have no further use for your copies, your contributions of any of the above will be most welcome additions to the Society's reserve stocks. Please send to the Secretary, who will also entertain offers on extensive "runs." (See back cover for address). Many thanks to past donors, many more are needed to meet demands.

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