

American Rock Garden Society Bulletin



IN PRAISE OF SKUNK CABBAGE— <i>Gus N. Arneson</i>	137
1973 AWARD CITATIONS—ELEANOR BRINCKERHOFF	140
CLAUDE A. BARR	142
EDWARD H. LOHBRUNNER	144
ALEX D. REID	146
A REMARKABLE GARDEN CLUB— <i>Dr. H. H. Arnold</i>	147
DESIRABLE STRAINS— <i>A. J. Brownmiller</i>	149
PLANT HUNTING IN THE BULGARIAN MOUNTAINS II	
<i>Josef Halda</i>	152
FOOTNOTE ON MECONOPSIS— <i>William Rawson</i>	159
DR. WORTH'S GARDEN— <i>Mary Tibbetts Freeman</i>	160
OMNIUM-GATHERUM	166
ONE MAN'S CHOICE— <i>Bob Woodward</i>	171
COLLECTOR'S NOTEBOOK— <i>Roy Davidson</i>	173
THE ROCK GARDEN SOCIETY OF OHIO & THE ARGS	
<i>Robert M. Senior</i>	176
OBITUARIES	177

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DIRECTORATE

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Editor Emeritus

DR. EDGAR T. WHERRY, 41 W. Allens Lane, Philadelphia, Pa. 19119

Editor

ALBERT M. SUTTON

9608 26th Ave. N.W., Seattle, Washington 98117

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AMERICAN ROCK GARDEN SOCIETY BULLETIN

Albert M. Sutton, Editor

VOL. 31

OCTOBER, 1973

No. 4

IN PRAISE OF SKUNK CABBAGE

GUS N. ARNESON, *Seattle, Wash.*

Skunk Cabbage is, in my opinion, one of the finest ornaments of spring. Individual plants are handsome, and large colonies in swamps and along streams are spectacular; it enriches the breath of February with a musky fragrance that stimulates the senses and lingers in the memory. Skunk Cabbage deserves more favorable attention than it gets.

Three similar species bear the inappropriate common name of Skunk Cabbage: *Symplocarpus foetidus*, native of eastern North America and Asia; *Lysichitum camtschaticense*, the white species of eastern Asia; and *L. americanum*, of northwest North America, eastern Asia and Japan. Bailey, in his *Standard Cyclopedia of Horticulture*, writes of *Symplocarpus foetidus*: "Their coloring is a never-failing delight. They are mottled with purplish brown and green and yellow. . . . Its hardiness and bravery have been celebrated by outdoor writers from Thoreau to the present days." Haskins, in his *Wild Flowers of the Pacific Coast*, contemplating *Lysichitum americanum*, the Yellow Skunk Cabbage, writes: "Here is real beauty. Forget the name: disabuse your mind of any connection with the mephitic animal and the plebian vegetable and see the swamp for what it is—a veritable 'field of the cloth of gold.'"

I have had affectionate association with *L. americanum* since boyhood. When their yellow spathes glow in the shadowy recesses of the forest like lighted tapers, and I breathe their lusty aroma, I experience a buoyant sense of renewed life and vitality together with a flood of memories of past rejuvenating springs.

It is a pity that these fine citizens of the marshes and stream banks are degraded in the popular mind by a notion that they are malodorous. They are not. The literature is replete with misleading expressions such as: evil smelling—foul smelling—fetid—rank odored—having a disgusting odor. The 1963 College Edition of *Webster's New World Dictionary* uses eleven words to describe Skunk Cabbage: "A plant with thick roots, wide leaves, and a disagreeable smell."

It is true, of course, that the odor of none of the Skunk Cabbages is of a type to be enjoyed in concentrated form but they should not be so taken. They are wild flowers and their musk is appropriate to their environment. It is ridiculous to break them off and remove them from their cool haunts to



Lysichitum americanum

The Author

cut-flower vases in living rooms. The propriety of kneeling in the swamp to thrust the proboscis inside the cloak for an intimate smell can be questioned but even then the musk odor would not be found excessive unless the plant were crushed. Bailey writes: "All parts of the plant give a strong skunk-like odor, but only when crushed."

The Random House Dictionary of the English Language says that fragrance means "having a pleasing odor" and on that ground I say that Skunk Cabbages, outdoors where they belong, are fragrant!

It is interesting and encouraging to note that, wild as Skunk Cabbages are, imaginative gardeners with adequate space and proper growing conditions find them attractive and easy to grow in plantations. Writers report both the *Lysichitums* and *Symplocarpus foetidus* desirable and useful in gardening. *The Royal Horticultural Society Dictionary of Gardening* says of *S. foetidus*: ". . . the fetid odour as of a skunk is not so marked as to exclude it from gardens," and A. G. L. Hallyer writes in *A Treasury of Flowers and Plants in Color*: "They are showy plants for the streamside or to grow at the edge of a pool, but they need plenty of room . . . hardy and easily grown provided they have plenty of moisture." T. H. Everett's *Encyclopedia of Gardening* says of *Lysichitum*: "They grow freely in moist soil, loamy soil enriched with decayed manure or compost, and are useful for waterside planting . . . It is a striking plant for the bog garden or waterside."

Spring, the renaissance of plant life, and Skunk Cabbage, its exuberant harbinger! Let them be praised!

* * * * *

A NEW MEMBER (AND A NEW ROCK GARDENER) NEEDS HELP—
Excerpts from a letter from Mrs. Muriel T. Barron, Downsville, N. Y.,
13755. Help her if you can!

"To begin with I am a very new gardener. There are no expert gardeners or good nurseries within 50 miles of me . . . so when I found mention of ARGS in a Botanic Garden *Bulletin*, I subscribed thinking I might, at least, find sources for plants, if not good gardening advice. Of course, I have found both in your *Bulletin*. What I should have perhaps expected, but did not, was the sophisticated level of knowledge assumed of your readers. After a year of reading I still have to look up almost every botanical name and I do not as yet have good sources. Is there a concise dictionary of all botanical names and pronunciation? I would prefer one with common names given, too." She continues, "Oddly enough, although I am put off by most of the technical jargon, I nevertheless find the articles in the *Bulletin* interesting for the most part. They make me envious of the knowledge and success of others more experienced, and of the trips and conferences I cannot afford to attend. Nevertheless, I do not expect to drop out. I aim to truly belong some day even as a late starter. All I ask of the *Bulletin* is a few "how to" articles and sources of needed material, e.g. limestone chips from a nursery as close to me as possible. I am located off Rt. 17 between Liberty and Binghamton. I have dealt very gratefully with Mayfair Nurseries but they do not seem to supply potting material. I did not ask for seed from the ARGS last year for fear of wasting it. But perhaps I will try this year—who knows, with your help and support some day I may be able to supply someone else."

THE ARGS AWARD OF MERIT TO ELEANOR BRINCKERHOFF

We have all been raised on the legend of the Renaissance Man, that fabulous creature who was indeed a man for all seasons and all occasions. Only recently have we recognized that in that legend was a cruel cultural bias. There was not a recognized Renaissance Woman, at least in the legend.

Let it be known that long before the Women's Lib movement fumbled into prominence, in the very ranks of the ARGS, there arose, as from the brows of Jupiter, the perfect Renaissance Woman, Eleanor Brinckerhoff.

It is a fitting coincidence that ten years ago precisely Ellie attended her first meeting of the North Atlantic Region of the American Rock Garden Society. By the time Ellie was introduced to the ARGS and the ARGS to Ellie, she had become, in Georgetown, Connecticut, a legend.

There on one corner of the long-established Brinckerhoff farm in Georgetown she and her husband, known to us all as Brink, built literally a world. Two charming girls graced their union and grew up in that world of home-grown vegetables, fresh eggs, flowers, dresses homemade, ovens full of bread and cookies and a building hand-constructed. And there were very few of the ramifications that Ellie herself did not take an active part in, tireless and resourceful always. In fact, she became the expert mason of the family, with a feel for rock and its structural uses in foundations, walls, patios, and even the huge main fireplace and chimney. Together Ellie and Brink worked with rock and soil, cement and water to contrive a modern Mecca.

On a sharp bend of the main road one turns into this Mecca. On the right is a spacious garage the walls of which are beautifully constructed of local stone. Ellie stood on the staging and laid the rocks, each by each. Down from there to the house one has a choice of routes, weaving through and over a high rocky mound decked with rare and flourishing alpiners or down by a side sweep of elegantly laid steps; each the common handiwork of Ellie and Brink.

To support the steps and terraces on the way down are aptly constructed rock walls, all beautifully planted, and Ellie had her nimble fingers in each. And now every spare corner is graced by homemade troughs stuffed with the most exquisite combinations of dwarf plants—troughs by Ellie, plants grown from seed by Ellie.

Beyond the house and across the stream, surrounded by the vegetable garden, the root cellar, and the henhouse, is the famous frame yard. Each year since Ellie was introduced to the ARGS Seed Exchange and other seed sources there has passed through that magnificent assortment of frames, benches, pots, and plunges untold thousands of rare and expertly grown plants. Every knowing visitor spends hours poring over that collection of plants in the frame yard. Ellie has a magic touch with seeds. There is probably hardly a rock garden in Connecticut, New York, New Jersey, Pennsylvania and most of the New England states that doesn't prize plants from this particular frame yard. They may have been gotten from plant sales but



Eleanor Brinckerhoff—Award of Merit—1973

Perry Ruben

more likely as the always generous gifts that may embarrass but perpetually delight every visitor. And there against the barn is the Ellie-made alpine house, designed and managed, too, in her "free time," full of rare things grown from seed or gathered together on her trips collecting in the wild or selecting from the best nurseries abroad.

As though her total involvement at home, making a wonderful world of plants, hospitality, good food, and charm for family and friends were not enough, Ellie has managed untold activities for various branches of ARGS. She has had an important management role in at least three Winter Weekends and two Annual Meetings. It was she who five years ago initiated the formal organization of the Connecticut District under the North Atlantic Region. Since then she has been the guiding genius of its continuing growth. Tireless, diplomatic, and cheerful always, Ellie has made the Connecticut Chapter a sort of macrocosm of the wonderful world of her family. She has ever been ready to serve on committees for the national society and has through her imagination and spirited suggestions added immeasurably to its growth and delight.

It is for all of these accomplishments in her own garden, for her con-

tributions to the North Atlantic Region, to the Connecticut Chapter, and to the national society of the ARGS that we honor ourselves by presenting this Award of Merit to Eleanor Brinckerhoff, but most especially for the inspiration that she has been to members of the Society through her generosity, her enthusiasm, and her personal charm.

H. Lincoln Foster, Falls Village, Conn.

CLAUDE A. BARR RECEIVES THE EDGAR T. WHERRY AWARD

Tonight is the inauguration of the Edgar T. Wherry Award of the American Rock Garden Society. Dr. Wherry is a pioneer in American horticulture and American botany. It is fitting that the first recipient of this award is also a pioneer.

Claude A. Barr homesteaded in southwestern South Dakota. This is a land of rolling prairie. Looking southwestward, there is no sign of a road, a power line, or any evidence that man ever touched this treeless land. In the distance a low line of buttes infringes on the monotony of the waving grass. True enough, behind us is a trim white house and a grove of pine, juniper and fruit trees. Telephone and running water were put in this year so that modern conveniences are now available. Hot Springs, South Dakota, is only 30 miles away. Yet, the track winding over two miles to the nearest gravel road, the battery-operated radio that was the connecting link for so many years, and the absence of any neighboring house all convey the feeling of freedom and isolation.

In this loneliness, a man built a garden. It stands before you. There is a brilliant white lath house of generous dimensions. There are numerous little rock outcroppings draped with *Phlox hoodii* and *P. alyssifolia*. Cacti of much variety poke out between the stones. Low mounds and mats of Penstemon lie spangled with their delicate flowers. Somewhat beyond are shrubby buffalo berries, yuccas, and prostrate evening primrose, lined out in nursery rows, for this is a most improbable nursery in a most improbable place, the Prairie Gem Ranch. Man's hand is evidenced by the encircling fence that keeps out the wide-ranging cattle that are the livelihood of this region.

The paths are neatly lined with stones and each bed is weeded with care. It seems ready for a visit from a group of ARGS members tomorrow morning. Few will visit here, for the nearest town, Smithwick, is already ten miles away and is composed of one gas pump, three houses, and a cafe with two tables and eight chairs.

But it is not as a gardener that we honor Claude Barr, but as a plantsman who on every opportunity, traveled this vast prairie searching and selecting ornamental dwarf plants of decorative foliage and pleasing flowers. It was a fruitful exploration, for this land is abundantly endowed with all manner of tight little hummocks, creeping mats, and tight cushions. Many seem to have been miraculously transported from some alpine summit for they all have the look about them of some crag-hugging king of the alps. And in fact that may be their origin as much of this prairie is high country



Claude A. Barr—Awarded the First Dr. Edgar T. Wherry Award

Anton J. Latawiec

(5000 feet) by many standards and these plants are remnants of an alpine vegetation that is continuously adapting to a settling land.

Claude Barr saw the potential in these plants, a potential that has as yet been only faintly realized by alpine gardeners. It seems inevitable that these plants will become standard treasures of alpine plant enthusiasts once it is learned to grow them in sand overlaying soil. It is then that they can enjoy freedom from their arch enemy, mold, and send their foot-long roots down to the soil layer in search of water and sustenance.

Claude Barr was the featured speaker at the 1972 Annual Meeting of the ARGs. Slide after slide swept before us. There were Phlox, Astragalus, Penstemon, Clematis, Dodecatheon, Anemone, Aster, Erigeron, Hymenoxys, and others all in the form of neat, dwarf plants covered with bloom. Among these were his botanical discoveries such as *Astragalus barrii* and *Phlox andicola* var. *parvula*.

Claude Barr is the plant explorer of the Great Plains. Although he did not face the trials of foreign tongues and hostile inhabitants, he had his own obstacles to overcome. There were no financial grants or shares to sell. It was a labor of love made on his own spare time and his own modest resources. Few can have loved plants more than tonight's award winner.

These explorations have culminated in a book, *Jewels of the Plains*,

which is at the publishers now. This book will bring this undeveloped treasure trove to every alpine gardener's doorstep. It is left to this book to describe the plants, but perhaps a moment can be taken to mention several of the greatest prizes. There is no more superb Dodecatheon than *D. pulchellum* 'Prairie Ruby' and 'White Comet.' Farrer has already sung the praises of *Leucocrinum montanum*. *Penstemon nitidus* is an electric blue that rivals any gentian. *Nemastylis acuta*, the blue tigridia, is one of the most beautiful single flowers in the world, but it only lasts for a few hours. The Phlox are a story by themselves. The great gaping *Oenotheras* and the bouquet-like desert *Astragalus* are hardly known yet in ARGs circles. The *Erigerons* and the *Townsendias* are just beginning to be appreciated with *Erigeron scribneri* a real prize. *Mertensia lanceolata*, *Clematis occidentalis*, and *Aнемone caroliniana* are among the very best of their respective genera.

In his own modest way, Claude Barr will bring to alpine gardening as wide a variety of plants as any of the plant explorers. It is fitting that we honor him tonight by presenting him with the first Edgar T. Wherry Award of the American Rock Garden Society.

Norman C. Deno, *State College, Pa.*

THE MARCEL LE PINIEC AWARD

1973

To Edward H. Lohbrunner

Edward H. Lohbrunner, born August 7, 1904 in Victoria, British Columbia, has spent most of his adult life in the pursuit of knowledge of alpine plants. In 1929 he married Ethel Reid of Victoria who has always encouraged and shared in his enthusiasm and devotion to alpinism. The early awakening of this devoted interest can be traced back to a memorable trip to the Forbidden Plateau in central Vancouver Island where he became fascinated with the small plants whose names at that time were unknown to him.

His knowledge of Latin and botany was self-taught as he extensively explored his native Vancouver Island. He made four trips to Alaska, one of three months' duration in the company of his brother, Joe, drifting in a skiff 800 miles down the Yukon River. They stopped frequently, sometimes hiking many miles to botanize and collect in the interesting wilderness through which they passed.

Over the years Ed has traveled extensively throughout the alpine areas of western North America, always meticulously seeking out the finest forms of plant material to collect. In addition he has botanized Quebec, Ontario and the Alps of Europe and Japan. He has been growing, propagating and distributing superior plant material for 44 years, beginning with the Lakeview Aquatic Gardens, later expanding to include rock garden plants; established in 1946 what we now know as Lakeview Gardens. He has exchanged plants with keen gardeners all over the world, and undoubtedly has one of the finest collections of alpine plants in the world.

Through his nursery, Ed has introduced to the American continent not only native plants but innumerable New Zealand and Asiatic alpinism. He has



1973 Marcel Le Piniec Award—Edward H. Lohbrunner

Jim Ryan

a great fondness for ferns. He discovered and introduced *Polypodium vulgare* var. *malahatense*, an interesting bi-pinnate form of our native polypody. When asked what his favorites were of all plants, he replied that if a choice had to be made, it would surely have to be the Ericaceae family.

Ed has always been unfailing in giving encouragement, information and strong support to educational projects. He contributed heavily to the non-competitive educational exhibit at the American Horticultural Society Congress in Seattle, in September of 1972. Among his many beautifully grown and presented rare plants, the two most fascinating that come to mind are the true *Cassiope wardii* and *Drapetes lyallii*. He is also an enthusiastic supporter of alpine shows in Victoria, Vancouver and elsewhere.

Among his many talents, Ed is an accomplished photographer and lecturer. He is well known for his unwavering integrity, his delightful sense of humor and his natural modesty concerning his accomplishments and many talents. He is meticulous in the naming of plants, always learning and seeking out correct nomenclature.

When he attended the International Rock Garden Plant Conference at Harrogate in 1971, it was apparent how very well known and respected he was internationally, and he was received with the same warm affection that we feel for him here.

It is especially fitting and meaningful that Ed Lohbrunner should receive this award since he and Marcel Le Piniec together shared plant hunting expeditions and enjoyed a close friendship for many years.

Sallie D. Allen, *Seattle, Washington*

AWARD OF MERIT

to

Alex D. Reid

Alex D. Reid has given his expertise as C. P. A. and financial consultant to the preparation annually of a scrupulous report as Treasurer of the American Rock Garden Society. He has served since 1950 and there are few who would continue in this capacity so long and so faithfully.

Alex also showed his attention to details and displayed his thoughtfulness, kindness and courtesy as Chairman of the Committee on Arrangements for the Annual Meeting held in New Jersey in 1968. In spite of ill health, after a serious operation, Alex carried on and saw that all arrangements were carefully executed.

The Award of Merit is presented to Alex in grateful appreciation of his faithful service to the American Rock Garden Society for twenty-three years.

1973-74 SEED EXCHANGE DATES — TAKE NOTE!

DR. EARL E. EWERT—*Director*

NOVEMBER 1—This is the closing date for receiving seeds. So prospective donors please observe! This closing date for donors is necessary in order that your committee can compile the seed list, check the nomenclature with the consultants, get the list to the printer, check his galley proof and get it back to him for printing; all so that the printed booklet may be mailed to our members as early in January as possible. It is estimated that nearly 4000 or more entries will be cataloged. Just a small item incidentally: it is not inconceivable that in the neighborhood of 40,000 seed packets will be packaged.

MARCH 1—This is the final date for receiving seed requests. The Executive Board voted that for the coming year the Seed List would be sent on request only. So please remember this and in the latter part of November and during December let your committee know that you want a list. The format of the booklet will be essentially the same as last year. One last word—Type or print on your seed packets. And clean the seed! By actual time count it takes on an average of 25 minutes to clean a packet of seeds that are chaffy or contain a lot of debris. By far most seeds are beautifully clean. Thank you.

A REMARKABLE GARDEN CLUB

DR. H. H. ARNOLD, *State College, Pa.*

Editor's Note—Traditionally an editor's desk is cluttered and it is easy for material to become misplaced, especially if it is unusable at the moment of receipt for any reason. Such was the case of the following article. Though it was written some two years ago, it is still timely and it deals with a part of the United States which is seldom written about by contributors to the *Bulletin*.

Last April I shared the spring activities of the most enthusiastic gardeners and nature lovers that I have met in several years of lecturing to garden clubs in five states. This was at Mena, a town in western Arkansas with a population of about five hundred. The membership of the Mena Nature Club (numbering about 131 men and women) represents also the neighboring towns with such picturesque names at Hatfield, Cove, Black Fork, Mt. Ida, and others. Most members are, I suppose, "native sons," who receive the visitor with that inborn southern hospitality that is so delightful. But many, too, are recent settlers who have built fine homes in the area. These have fled from the high taxes, crime, and pollution of the cities, having become "pioneers in paradise," to coin a phrase. Like pioneers everywhere, they are capable of forming instant friendships. They value their neighbors.

Under the able leadership of Mrs. Lillian Leddy, an ARGS member, the club professes an interest in private gardens, woodland tours, native plants, horticulture, bird watching, and I may add from observation, in rocks, reptiles, and ecology. There seem to be specialists in each field.

I counted thirty men in the membership list. It was not amazing to see on one of our tours a group of our men squatting around a tiny snake bent on identifying it. Men and women were equally excited as we examined a specimen of a pink Bird's-foot Violet growing in the garden of one of the members. This is *Viola pedata* country. They were well aware that the usual color is lilac. Pink is a color variant, or forma, not mentioned in the books.

Mrs. Leddy, it's clear, is the initial source of much of this enthusiasm. Her large garden, surrounding the house at the foot of a pine-covered hill, is open for display to the public at all times. A stream borders the level part of the ground. There are walks, a pool, statuary, and several bird baths.

The program of the week began with the annual banquet of the club on Saturday, April 17. The speaker of the evening was Dr. Harriet Barclay of Tulsa University. Dr. Barclay explained, with fascinating color slides, the ecology of alpine plants in the mountains of Colorado, how flowers cope with the barren conditions of cold, high winds, and the short growing season.

Sunday evening brought us another fine illustrated talk. Aileen McWilliam (vice-president of the club) spoke on the ecology and the demands of conservation in Polk County.

Monday morning began the week's series of tours and outings. Each day we were to gather at the Leddy house and garden, setting out after rolls and

coffee in a motorcade of about twelve cars. We drove first to the wild flower planting of John and Ruth Lambert on a wooded slope above the Mountain Fork River. John had moved to this place from Michigan his large collection of Trillium varieties and had planted them here among native flowers. The planting is destined to become a wildflower preserve of very special interest to visitors from far and near. The motorcade moved next to a picnic area near Hartley Bridge on the Cossatot River for a sack lunch and for browsing among wild flowers and rocks. Beneath the budding underbrush of a sloping hillside there were a number of thrifty clumps of large green leaves the size and shape of mullein leaves, but perfectly smooth. After considerable puzzlement they were identified as a biennial of the Gentian family, American Columbo (*Swertia caroliniensis*). I was to find the same plant a week later in the park at Mammoth Cave. During the summer some of these plants will develop a tall spike bearing odd flowers with four greenish yellow petals, each with brown dots and a large gland fringed with hairs. (A sister species, *S. radiata*, grows at high altitudes in the Rockies. They call it there the Monument Plant).

This was the height of the blooming season for Bird's-foot Violets. One could see patches of their modest color while driving along mountain roads. Rich red Fire Pinks (*Silene virginica*) were growing on the banks, but you had to get out of the car to find them. Canada Verbena (*Verbena canadensis*) was one of the two showiest and most abundant flowers in bloom. By roadsides in open country there were long drifts of Downy Phlox (*P. pilosa*). In a few places there were patches of the white-flowered form of this species. White ones may not be as rare as the books indicate. Other flowers at the height of bloom, seen on this excursion or as "transplanted" to one or more of the ten gardens visited in the course of the week, may be named here. A pink, or rose-flowered Spiderwort (*Tradescantia*) was, for me, the most beautiful flower we found. The species is *bracteata*, I think. I failed to collect a specimen. If you like yellow flowers, the Celandine-poppy (*Stylophorum*) will be your second choice, or perhaps third, after the Downy Phlox just mentioned. A sessile, greenish Trillium was common. The Dwarf Larkspur (*Delphinium tricorne*) and a pretty Phacelia were represented in scattered places. On a roadside I dug up from among many a sample of the Potato-Dandelion (*Krigia*), which has pea-sized tubers on its underground stems.

A darling little weed (!) that grew in matted patches on many lawns, and that when in bloom might be taken for a smaller Bluet (they are, indeed, of that family) was identified as Blue Field Madder (*Sherardia arvensis*). Unlike the Bluet its leaves stand along the stem in whorls of four to six. The botany department of Penn State University notes that its only central Pennsylvania station is as a lawn weed on the campus: "the weed that went to college."

The excursions of the week included a picnic at the Little Missouri Falls. Here the men were busy with photography and wild flowers while the women, for the most part, gathered into plastic bags and lunch boxes smooth pebbles from the warm sand and gravel bars by the waterside. Another trip took us to the Runestone State Park near Heavener, Oklahoma. Here eight runes are carved at shoulder height on the face of a huge slab of granite: I, for one, am

convinced that they were cut there by none else than Vikings—certainly not by Indians.

A late afternoon brought the motorcade to the low cabin home of one of our most active members, Floyd Lane. Although fitted on the inside with every modern convenience, the outside wall and the shed at the back display many kinds of the tools and implements of pioneer life. Ranged against the rustic fences of the wide lawn there are about two dozen big millstones, the largest collection in the United States, it can easily be believed. It was a memorable week.

DESIRABLE STRAINS, ANYONE?

A. J. BROWNMILLER, *Gibsonia, Pa.*

Over a few hills and in all innocence, but with a little extemporaneous advice, a complete novice maintains a spreading square foot of *Gentiana verna* in luxurious abandon with bloom both spring and fall, while in our whole Chapter no one had really established the species out of the alpine house for more than three short years. His cultural practices do not include John Innis Soil Mix No. 1, but whatever loam, leaf mold and sand is on hand, with morning sun and 36 inches of rain that happens to fall every year. Contrariwise, although some very good gardeners invariably follow directions minutely they occasionally have failures. It's part of the game.

We read of these failures in the English and American literature: "is not successful here," "blooms sparingly in our garden," "not for our extremes of climate," "only in an acid soil," "this, for the alpine house," "treat it as a biennial:" all bespeak of sundry and various failures. Then again, commercial growers can not always supply seeds and plants due to bad weather or crop failures. For the surprisingly tractable *Gentiana verna*, an English writer recounted it endangering a smaller plant nearby, yet states he "plants seed of it each year just in case . . ." Truly the rock gardener must have the fortitude of Job while trying to emulate the exploits of Alexander.

While the reverse of our problem, bringing lettuce to fruition on the mountain tops would have been more formidable, the expert gardeners, the commercial growers and gifted amateurs have done a herculean job of bringing alpiners down to the lowlands where the humidity may vary from that of a near desert to a sauna. One can not expect a few hundred years of artificial selection to make a plant relatively foolproof throughout the length and breadth of a continent when it has taken natural selection an incredible number of years to keep them self-seeding in a harsh climate.

Since the Alps and Rockies are approximately five million years old, the alpiners there in their untold millions have been adjusting to a colder, drier and more gravelly condition, or their opposites, with the resulting low, compact, early maturing strains which we now find there. This is a process of vast magnitude compared with several hundreds of years of conscious selection by scores of individuals and commercial establishments but with hundreds of thousands of plants. However, more breakthroughs will come with an increasing number of gardeners who select the variations and mutations not to mention the constant hybridizing of possible prospects.

We need only to look at the plant lists to see a small fraction of what has already been accomplished. 'Tiny Rubies,' 'Little Joe,' 'Veitchiorum,' 'Bressingham Hybrids,' 'Millstream,' 'Inverleith,' 'Dr. Henele' and so on attest to the acuity of plantsmen. With the exceptional extremes of conditions in North America a still greater opportunity exists for alpiners, if one dare coin a word, to select strains for hardiness and longevity, not to mention color. It is not that thousands are not looking for possibilities but in this continent of wide open spaces the gardener from Pennsylvania will never see his failures growing beautifully in the garden of that interesting lady in Montana, unlike in England where a more personal and intimate relationship can develop due to proximity of those who like to contemplate the eccentricities of their difficult species. For gardening is not merely a technique but a shared passion for exploring the mystery and beauty of life. As in other lands, variations do exist in North America. If only gardeners would communicate their hopes and dreams to others so that possible choice strains might not "waste their substance on the desert air."

Many there are who have grown and increased the most difficult species for years without being aware they have had a long-lived strain or a particularly rewarding cultural practice which might have been of benefit to others. Back in the hills plant buffs grow and increase *Cypripedium acaule*; the natural cross between *Camptosorus rhizophyllus* and *Asplenium platyneuron*; adder's tongue, *Ophioglossum vulgatum*; the matricary grape fern, *Botrychium matricariaefolium*; various *Habenarias*, all in their backyards without drumrolls and fanfare. Assuredly a wealth of expertise might be found in ordinary plant lovers and dilettantes, some of it perhaps tangential but some surprisingly valid. No one can fake or dispute vigor and longevity in a lush bed of spreading plants.

But before we season and dish out the savory strains let us first catch the rabbit. What are the species repeatedly dying out for all too many gardeners even after the proper cultural directions have been followed? Perhaps *Calandrinia umbellata*, the mossy saxifrages, even *Pulsatilla alpina* which reportedly die out in some gardens, but may seed themselves on a gravelly slope in the shade of an adjacent bush in a garden not too far distant.

We may well ask why gardeners do not follow cultural directions given in the literature but the advice given in a book published for a wide distribution must necessarily be in the form of generalizations that may not apply to specific microclimates and habitats. A mossy saxifrage in dense shade may do beautifully in a dryish summer but in a wet one may brown as dreadfully as if it had been in full sun in a dry summer. Nor would light shade in Virginia be the equivalent of light shade in the low humidity area of the Midwest. Dappled sunlight might be the answer in many situations so the standard advice recommends trials in various exposures. However, only the successful local gardener may know the complete answer for his locality.

Dianthus alpinus is another case in point. Without a moraine one must adjust the shade and moisture in "good drainage" to the humidity factor of the air, a delicate balance which often tips the scale toward failure. Gardeners do grow the species successfully in the most unlooked for places either because of a felicitous combination of factors or an unusually long-lived strain of the plant. If such successes were known, the information would enable others

to improve their methods or place a premium on long-lived vigorous strains.

What then are the difficult alpiners, if there are such, whose traits could be investigated? Not by a congressional appropriation, but by a lone collator who could receive the names of a score or two of standard plants considered difficult, baring local endemics and obscure and endangered terrestrial orchids. He would then impose on the good nature of the editor of the *Bulletin* to publish such a list after which successful gardeners would report, nay boast, of ten years or more successful culture without much pampering. Either special cultural procedures for local areas or long-lived strains might be found. Reports would necessarily have to be detailed along the following lines:

Epigaea repens, several old clumps through standard practice of cuttings or layerings, in acid leaf mold and loam, shade; or small transplanted clumps covered with an inverted goldfish bowl and watered every dry day for a year. No problem.

Cypripedium reginae, four spreading clumps, two to five blooms apiece, nine years old, no failures, north shade of house with 40 minutes sun of summer solstice, in wells of leaf mold and loam in a rich heavyish water retentent loam, no watering except 36 inches of rainfall, undoubtedly acid near azaleas although it does grow in neutral and marl bogs.

The response will indicate whether anyone has found a species difficult and would like to hear of a successful culture. Whether anyone has had success with such a species over the years remains to be seen. But with the wealth of experienced gardeners interested in helping others the answer probably will be in the affirmative. Therefore, if anyone has had continued difficulty with any species please report to the collator.

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BOTANICAL NOMENCLATURE—Don't let it scare you! No gardener is born knowing botanical names of the plants we grow in our gardens and search for in nature. We all had to learn as we went along with our rock gardening and it was fun learning and such a satisfaction in being able to read plant and garden literature without having to bother about so-called common names, which are not "common" names at all. To quote from *A Manual of Plant Names* by C. Chicheley Plowden, (See Book Review—*ARGS Bulletin* of October, 1971), "In different regions the plant names varied, with the result that today many plants are known by several names, and the same names are applied to several plants."

* * * * *

ONE PLANT WITH TWO NAMES—BOTH GOOD!—Upon the authority of three good people we find this odd nomenclatural situation. (Refer to pages 118 and 127 of the *ARGS Bulletin* of July, 1973 where *Gaultheria hispidula* and *Chiogenes hispidula* are both considered as good names for this ericaceous plant). You take your choice! The response to the editor's request for clarification in a former issue of the *Bulletin* was generous though not exactly conclusive. The present status of this mild controversy seems to be that the genus *Gaultheria* is more often preferred over that of the genus *Chiogenes* as the proper botanical name for this fine rock garden plant. Perhaps it is just as well to let the matter drop for the time being or until authorities arrive at a final decision.

PLANT HUNTING IN THE BULGARIAN MOUNTAINS

PART II

JOSEF HALDA, *Prague, Czechoslovakia*

The name Vichren could be translated as "Windy Mount," in Turkish it was known as El Teepe, "Mount of Storms." It has a very majestic aspect so the old Slavonians regarded it as the home of their old gods, the greatest of which was Perun, the god of storms—all the ridges that made up the mountain were named Pirin.

And on this scree at the bottom of the hollow (see the last paragraph of Part I of this article that appeared on page 61 of the July, 1973 issue of the *Bulletin*) is found a large colony of *Saxifraga discolor* Velenovsky. This was the plant of my dreams when as a boy I started rock gardening. This plant, with rosettes similar in size and hairiness to *Sempervivum arachnoideum*, sends up stems about 5 cm high with flowers which are white but sometimes pale rose. Another surprise on this limestone scree was a colony of *Sieversia (Geum) reptans*—this plant is usually described as a strict lime hater—I do not know why it grows here on limestone against all rules of botany. Here, too, were many plants of the yellow-flowered alpine poppy, *Papaver kernerii*, with silvery and finely cut leaves; *Veronica fruticulosa*, with rounded leaves and nice blue-violet flowers; *Achillea* species akin to *A. atrata*, with white flowers and very finely cut leaves; a *Myosotis* species close to *Myosotis alpestris*, but nearly without any leaf rosettes, with dense, head-like inflorescences. *Viola grisebachiana*, resembling *V. cenisia* by its large violet flowers and rounded leaves, filled each small crevice between stones together with a *Thlaspi* species which belonged undoubtedly in the group of *T. rotundifolium*, with small heads of whitish or rose flowers.

The top of Vichren is desert-like, where occasionally is to be seen a small colony of *Saxifraga ferdinandi-coburgii*, *S. luteo-viridis*, *Androsace villosa* var. *arachnoidea* and several other plants. All were sterile here, evidently at the upper limits of vegetation.

On the way down I chose to come by Lake Banderic (named after the small mountain river, Banderica) where *Gentiana djimilensis* grows in abundance though very variable in color; it is possible here to find flowers from rich blue to pale blue, white, pale violet to dark violet. I found only several specimens in bloom but their flowers seemed large. I visited the slopes above the scree in search of seeds of *Pulsatilla vernalis*, but in a few minutes came fog and rain making orientation impossible. So the day ended slowly and darkness came. I had to spend the night somewhere between rocks. It was a cold night, the thermometer descending well below zero and in the morning all the landscape was white with hoarfrost and I was worried because I had no reserve film. During the night there had been a wonderful display of colored fireworks in the sky and I was very surprised when I reached the cottage in the morning to find that people there were fearful that I might not have survived the cold night and that the fireworks were set off by the Mountain Service—for me! They hoped that I might be guided to safety.

*Cerastium lanatum**Armeria alpina* var. *balcanica**Viola grisebachiana**Papaver kernerii**Geum reptans**Saxifraga discolor**Myosotis kernerii*

From the Pirin Mountains

Jarmila Haldova

From Pirin, I went next to the Rhodopes. I started from the little village of Backovo (Batschkovo) where there is a small, but very old, monastery, quite apart in character from the Rilean one. Immediately here starts the main ridge of the central Rhodopes, and here at an elevation of 300 to 900 m is the home of a very choice Gesneriad tertiary relict, *Haberlea rhodopensis*. It inhabits the northern and the eastern cliffs and rocky walls and forms there hanging masses of foliage and flowers. With it are *Ceterach officinarum*, *Asplenium ruta-muraria*, *A. trichomanes*, *Daphne oleoides*, *Astragalus monspessulanus*, *Rhamnus rupestris*, *Achillea clypeolata*, which is very showy with its finely fringed, silvery leaves and white flowers; *Achillea chrysocoma*, an alpine with golden yellow flowers and densely woolly leaves; *Hypericum olympicum*, the low, large-flowered plant with rich yellow flowers: several nice *Teucrium*; a yellow-flowered *Jovi-barba* with distinctly mucronate leaves; *Sedum dasyphyllum* with bluish leaves; some larger *S. album* with white flowers; *Silene saxifraga* with very thin stems and slightly undulate petals. But the most showy plant of the Rhodopes is undoubtedly *Saxifraga sibirnyi* (Velenovsky) Podpera. Velenovsky has described it as a variation of *S. porophylla* Bert., but this species is of narrower leaves, smaller flowers and with some difference in arrangement of glandules and trichomes in inflorescence and on the stem. For it, Podpera has separated the Velenovsky plant

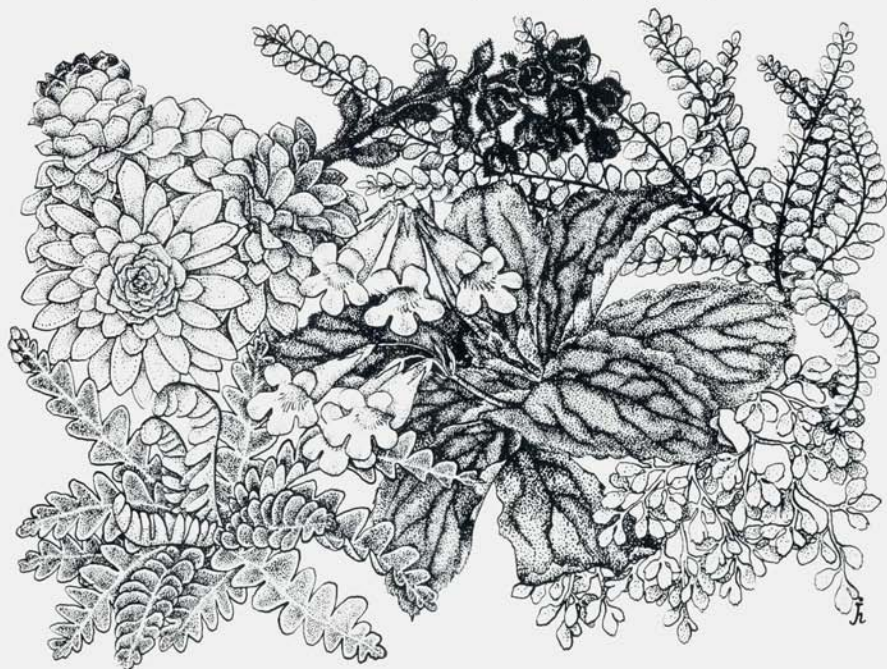
later as a species. It is at first sight closely akin to *S. grisebachii*, but less robust. *S. stribrnyi* has its leaf rosettes purely silver, leaves with rounded tips and inflorescence not dense; the individual flowers are each on short but distinct pedicels. All stems, pedicels, bracts and calyx are nicely red. These species of *Saxifraga* which I have named, are not true alpiners as they inhabit mostly the lower and warmer sites. Many growers say that these plants, if grown together with the true alpine *Saxifragas* as for example *S. luteo-viridis* do not do well. It is true that *SS. porophylla*, *grisebachii* and *stribrnyi* prefer warmer spots in the rock garden and may be treated as some other warm-loving lowlanders, for example *Adonis vernalis*, *Pulsatilla pratensis*, etc. They heartily dislike moisture except in early spring when they increase. The same could be said, perhaps, of *Haberlea*, *Ramonda*, *Jankaea*, *Ceterach*, *Notholaena*, etc. When I collected plants of *Haberlea rhodopensis* and *Saxifraga stribrnyi* they seemed to be too dry and their leaves fragile; *Ceterach officinarum* had its leaves rolled in. These plants at first seemed very small but after watering them at home they increased during the night into very nice large specimens. Especially with our European members of the family Gesneriaceae it seems to be essential to let them spend a dry summer. During this time they form the initial stages of their buds in their rosettes for the next season. It does not matter if they seem to be dry and have rolled leaves, for the spring moisture will start them for the next season's growth very quickly. Those who have seen some of these plants blooming in the wild will agree with me. With such saxifrages as *SS. porophylla*, *grisebachii* and *stribrnyi* I do not recommend autumn propagating by cuttings as the cuttings under the usual treatment rot very easily. The best time is to take cuttings in the spring, immediately after flowering.

The third mountains that we will discuss today are situated at the center of the east Carpathians and their name is Bucegi; I visited this area in Roumania on my way back from the Rhodopes. It is near the town of Brasov and my starting point was Sinaia, a small town at the foot of Bucegi. The way up is easy by the cable and it ends at an elevation of about 2000 m. Here, immediately around the upper station are very large covers of *Rhododendron kotschyi*, which is no doubt the showiest species of the European Rhododendrons. Here it grows up to 50 cm, but in gardens mostly only from 15 to 20 cm. In its flowering time here all slopes around are covered by its flowers, varying from pink to bright rose carmine. We have also found an albino form and several years ago one specimen with double flowers. All the Bucegi mountains are composed of basic matters, up to 1800 m. a. s. It is limestone conglomerates with very interesting patterns of enclosed stones; far up it is changed for the usual hard limestone and dolomites.

I will start with the plants associated with *Rhododendron kotschyi* as it is the most abundant plant here and is accompanied by *Loiseleuria procumbens* and *Crocus heuffelianus*, which bloom together before the Rhododendron. Filling the small areas between the Rhododendrons, which bloom about mid-summer, grow *Soldanella montana*, *S. pusilla*, *Vaccinium myrtillus*, *V. uliginosum*, *V. vitis-idaea* and *Bruckenthalia spiculifolia*. Also *Primula minima* forms large carpets here. Among the large scattered limestone rocks which discourage the Rhododendrons, grow many small alpiners. Here are

covers of *Dryas octopetala*, *Silene acaulis*, *Polygonum viviparum*, with young plants already growing in spikes full of bulbils, (it is the same with *Festuca vivipara*). There were clumps of *Cherleria sedoides* and *Cerastium lanatum* with relatively large flowers; *Oxytropis sericea* with violet flowers and densely white and silken hairy leaves; small clumps of *Androsace chamaejasme* which has small yellow or reddish eyes in its white blooms; *Armeria alpina* in a rich rose form; *Thymus parviflorus* with its minute flowers and glossy green leaflets; *Saxifraga aizoon* var. *brevifolia*—a very small variety of the well-known species; covers of *Salix reticulata*; scattered white *Pinguicula alpina* and very decorative lichens, *Cetraria nivalis* and *Thamnolia vermicularis*. The spots left free are inhabited by the vivid green moss of *Polytrichum juniperinum* together with tiny bluish *Festuca glacialis* and *Sesleria caeruleus*, which has many nicely colored spikes. Nearly everywhere grows *Potentilla ternata* with deep golden yellow flowers; violet *Astragalus alpinus*; *Viola alpina*—one of the nicest violets. It has only a very small clump of leathery and dark green leaves and above them its large violet flowers 2 to 3 cm across, with a central black eye. On small rocks and also in the grass grows *Leontopodium alpinum* in abundance. I have never seen this plant in such abundance anywhere else in the Carpathians or the Alps.

Some exquisite alpine plants that should not be overlooked on the small rocks are first of all *Eritrichium jankae* which prefers especially exposed and small



Saxifraga sibirnyi

Haberlea rhodopensis

Asplenium trichomanes

Ceterach officinarum
From Rodopi Mts.

Asplenium ruta-muraria

Jarmila Haldova

windy ridges—a dream of many alpine gardeners! From the grayish clumps of densely hairy leaves runs up nearly stemless inflorescences of rich blue, *Myosotis*-like flowers, changed later for coarse and spiny fruits. This plant, as with all other *Eritrichium*s, is easy to grow in upper elevations where the soil is frozen all winter. In lowlands its needs to be wintered under glass as it is very quickly destroyed by winter moisture. It is essential that it be kept completely dry when it is dormant. Its cultivation is easy both from seed and from cuttings. It also flowers well. Another distinct plant here is *Dianthus gelidus*, a species very near to *D. glacialis* but much nicer in color, varying from rose to nearly orange-red. It is nearly stemless and grows in crevices together with *Androsace villosa* var. *arachnoidea*, *Artemisia baumgartenii*, with sweet-scented, silvery, finely cut leaves and yellow button-like flowers; *Gypsophila petraea*, not creeping as it often does but has only compressed basal leaf clumps and upright flowering stems not more than 5 cm high. *Asplenium ruta-muraria* also inhabits the ridges with *Kernera saxatilis*; the yellow-flowered *Bupleurum diversifolium* with basal rosettes of glossy, narrow leaves; several species of *Draba*, as *D. haynardii*, *D. fladnizensis*, and *Draba compacta*. Also here in the smaller crevices are the small blue, less often white, *Campanula cochlearifolia* (*pusilla*); rose *Dianthus tenuiflorus*; yellow *Saxifraga luteo-viridis*; white *S. demissa*; *Biscutella laevigata*, with small yellow flowers; the well-known *Campanula carpatica*, and on each rock perhaps *Saxifraga oppositifolia* ssp. *latina* with large rose-carmine flowers. I have seen carpets up to one meter across full of flowers.

On the dry exposed rocks is to be seen yellow *Alyssum repens*, forming a blue carpet of leaves. *Carex sempervirens*; *Poa violacea* with rigid and bluish leaves; pleasantly blue *Linum extra-axillare*; violet-blue *Phyteuma orbiculare*; *Festuca amethystina* and even in the smallest crevices *Botrychium lunaria*.

In company with *Carex curvula* are found these plants which prefer neutral or slightly acid soil, for example, *Soldanella montana*; *Gentiana acaulis* (*excisa*, *kochiana*), in its broad-leaved form; the endemic *Campanula*, *C. bucegiensis* which is very close to our *C. alpina* but smaller in all its aspects and with very pale flowers; together with it is *Gentiana frigida* in solitary clumps, usually with yellow flowers. Also *Ligusticum mutellina*, a minute umbellifer with rose flowers, is present here.

Salix herbacea together with *Soldanella pusilla*; *Ranunculus crenatus*; *Sibbaldia procumbens*; *Gnaphalium hoppeanum* and *G. supinum* are plants of minute snowfields and they are also scattered in formations of *Rhododendron kotschyi*. In the small clumps of *Pinus mugo* (it is sparse here after its devastation by pasturing) are seen in abundance *Sieversia montana*; *Veronica bellidioides*; the yellow-flowered *Pedicularis oederi*; *Luzula sudetica*; *Scleranthus neglectus*; *Senecio carpaticus*, etc. *Gentiana verna* is found on all rocks and in small meadows, with both large and small flowers, together with a nice violet *Homogyne alpina*; *Viola declinata* with deeply cut leaves; *Pedicularis verticillata* glows with its carmine flowers; the blue *Phyteuma nanum*; white *Minuartia gerardii* and violet *Erigeron uniflorus*. In moister meadows and on brooksides is *Pinguicula vulgaris* with violet flowers; carmine *Cortusa matthioli*; rose *Primula farinosa*; *Tofieldia calyculata* with spikes of greenish yellow flowers. *Menyanthes trifoliata*, with finely fringed corolla lobes, inhabits boggy spots; also *Parnassia palustris* and *Triglochin palustre*, with

minute, roundish, white heads; and a large-flowered, low-growing *Caltha*.

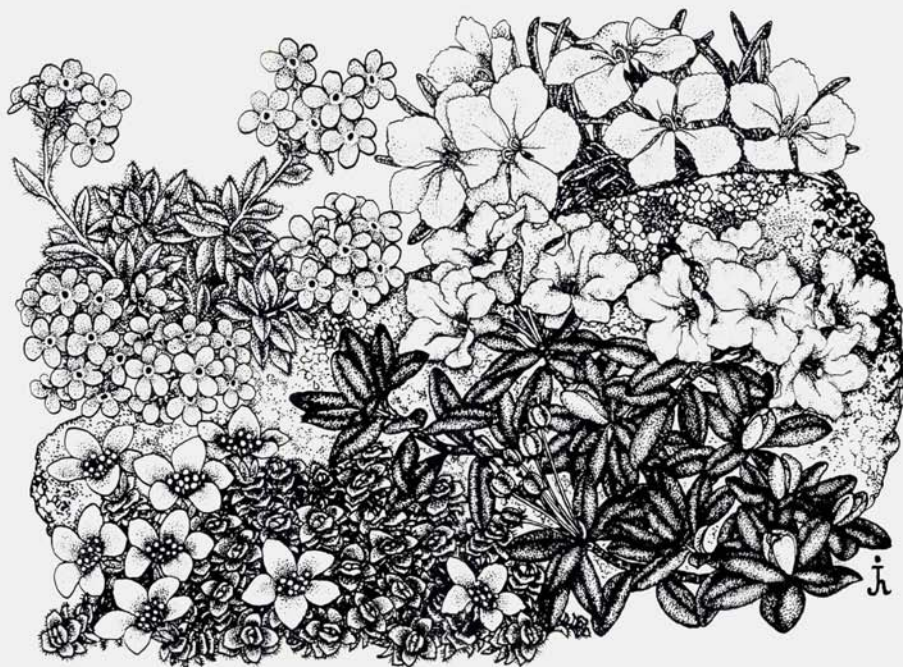
The upper acid meadows characterized by formations of *Nardus stricta* in June are white with *Pulsatilla alba*, *Anemone narcissiflora* and in early spring by *Crocus vernus*.

Stony slopes and small rocks are inhabited by *Gentiana clusii*, the plant with very large flowers of an unimaginable blue; *Gentianella (Hippion) nivalis* forming compact, minute clumps with small, rich azure flowers; yellow *Helianthemum alpestre*; *Antennaria carpatica*, which does not produce runners but only simple leaf rosettes; *Oxytropis carpatica* with deep violet flowers; *Primula longiflora* and *Hedysarum obscurum* with rich carmine flowers; *Arenaria rotundifolia*; *Achillea schurii*, with only one large involucre and with finely cut silvery leaves; yellowish green-flowered *Saxifraga moschata*; white *Minuartia recurva*; yellow *Sedum alpestre*, with small leaflets turning red; long-haired *Hieracium villosum*; *Scabiosa lucida* with rose heads; rich blue *Myosotis alpestris*; a golden fern, *Botrychium lunaria*; *Selaginella selaginoides (ciliata)*; *Veratrum album* and a very wide range of nice lichens.

The higher meadows are the home of many interesting orchids—greenish *Chamaeorchis alpina*; *Leucorchis albida*; *Nigritella rubra*, a rich red *Orchis* and also its albino form *leucantha*; *Nigritella nigra*, with blackish violet flowers in very dense terminal spikes; rose orchid *Orchis globosa*. In montane and subalpine zones and even in the forests are *Cypripedium calceolus*; *Cephalanthera alba*; *C. rubra*; *Orchis masculata*; *O. majalis*; *O. mascula*; *O. tridentata*; *Gymnadenia conopaea* and also *G. odoratissima*; *Platanthera bifolia* and *P. chlorantha*; *Listera ovata*; *Epipactis atrorubens* and many other species and their natural hybrids.

Also the associations on the scree are very nice where the dominant plant is the small *Doronicum carpaticum* with small, rounded and dentate leaves in relation to its very large flowers; also with it are *Oxyria digyna*; *Achillea schurii*; white-flowered *Hutchinsia alpina*; *Ranunculus alpestris* with its white, nearly translucent, fine flowers; *Saxifraga androsacea*; *Cortusa matthioli*; *Heliosperma quadrifidum*, with nicely dentate white flowers; yellow *Viola biflora*; white *Saxifraga ascendens*; *Arabis alpina*; *Rhodiola rosea*; *Sieversia (Geum) reptans*; the omnipresent *Polygonum viviparum*; *Taraxacum nigricans*, a smaller kind of mountain dandelion, *Myosotis alpestris*; endemic *Papaver pyrenaicum* ssp. *corona-sancti-stephani*, with rich golden yellow flowers which contrast nicely with violet *Linaria alpina* and with the white-flowered *Cerastium lerchenfeldianum* and minute lilac *Thlaspi kovatsii*.

In the drier meadow on the way down was met *Scorzonera rosea*, a fine rose composite which resembled a dwarf Gerbera; the tall *Gentiana lutea* and *Lilium martagon*; *Ligularia sibirica*; *Doronicum carpaticum*; *Gentiana asclepiadea*; *Polygonum bistorta*; *Astrantia major*, with white or pale rose flowers; *Chrysanthemum rotundifolium*, with rounded basal leaves; *Solidago virgaurea*; *Primula elatior* ssp. *carpatica*; *Pulmonaria rubra*; *Polystichum lonchitis*; *Daphne mezereum*; *Crocus heuffelianus*; and very showy *Dianthus compactus*, only 10 to 15 cm high, which belongs to the group of *D. barbatus*. Also found was the double form of this very nice plant. Down among *Pinus mugo* we more often met trees of Swiss stone pine, *Pinus cembra*; larches, *Larix decidua* and spruce, *Picea excelsa*, and slowly it changed to a continual spruce forest where the undergrowth became poorer and poorer, and in deep shade



Eritrichium jankae
Saxifraga latina
 From Bucegi Mts.

Dianthus gelidus
Rhododendron kotschy

Jarmila Haldova

only *Oxalis acetosella* survives along with *Homogyne alpina*; *Soldanella montana*; several kinds of ferns and *Equisetum* and moss in abundance.

From here it is within only one day of driving home; it rained during the trip and I, very tired, and after various improvisations am looking forward to sleeping in a good bed.

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CORRESPONDENCE INVITED—From New Zealand comes this letter from W. J. Forrest, 19 Fairview Place, Te Puke, N. Z. He is a very new member. He wishes to correspond with other members who might be interested. He writes, "I am trying to build up a collection of Western American plants, particularly bulbs, many of which do very well here. I certainly would be happy to find people who had similar interests and the time to correspond. Many of your more difficult species like *Calochortus* I have been having quite an amount of success with, but would like local knowledge." He adds, "I have quite a big selection of other plants, particularly South African bulbs and some ARGs members might like seed of these. As for true alpinos our New Zealand varieties have a bad reputation, I believe, overseas but again I can obtain seed of quite a number should people be interested." It is suggested that in any correspondence with New Zealand, air mail be used.

FOOTNOTE ON MECONOPSIS

WILLIAM RAWSON, *Los Gatos, California*

A few years ago, I was driving along a small road in the nearby Santa Cruz Mountains when I spotted a patch of red flowers growing in the shade. I stopped and walked back to see what they were. They proved to be a species that was once a member of a genus still held in high esteem; the genus *Meconopsis*. This plant, once known as *Meconopsis heterophylla*, is now known as *Stylomecon heterophylla*. While it was yet known as a *Meconopsis* (our California wind poppy), some writers were led to speculate as to how this genus, which originated in Asia, spread to Europe as *M. cambrica*, the Welsh poppy, with a stop-over in California for *M. heterophylla*.

The wind poppy grows in the shade and requires good drainage. (I found it growing on a steep slope). It grows 12 to 18 inches high and has bright red flowers two inches in diameter. It is called the wind poppy because the petals are very fragile and fall at the slightest breeze. Mary Elizabeth Parsons in her book *The Wild Flowers of California* says that the wind poppy varies from shades of orange to maroon, but the ones around here are scarlet red. She also says the plant has small flowers in Southern California and for that reason is known as "blood drop."

I was very surprised to read in Clarence Elliott's book, *Rock Garden Plants*, that *Stylomecon heterophylla* was one of the few annuals he would tolerate in his rock garden. I was surprised for two reasons: first, that he was able to get seeds and second, that he would choose our wind poppy from among the many suitable annuals for a rock garden. The wind poppy is more of a woody plant than a rock garden plant.

Not long after the gardener gets the rock garden bug, he acquires an urge to grow those lovely blue poppies, especially *Meconopsis betonicifolia baileyi*. The variety *baileyi* is much preferred over the type species since it has its ovary covered with yellowish bristles rather than being glabrous. You can imagine what a startling effect these yellowish bristles have in the garden! Unfortunately, *M. betonicifolia* will grow only in the cool areas of North America. I have had it up from seed but not very much further. Mr. and Mrs. Ray Williams of Watsonville, Cal., have flowered it. It grows very well in the Pacific Northwest. I have, however, grown the yellow species, *M. regia* and others, long enough to appreciate their lovely foliage, but not long enough to see their flowers. I would like to try *Meconopsis quintuplinervia*, the harebell poppy, but seed from Britain never germinated. Have any of our members raised this poppy from seed? I seem to recall reading that British seed of this species was never viable.

My one success with *Meconopsis* was with *M. horridula*. I planted seedlings under *Rhododendrons* and the following year they reappeared to bloom. I was particularly pleased because I had not given them any especial attention. When they went dormant the first year I assumed they had died. My plants had wine-colored flowers which is a kindly way to describe a color approaching magenta. There are good blue forms and I have some seedlings

this year from our ARGs Seed Exchange which I hope will be of a better color. If you have not been able to grow the blue poppies in the past, try *Meconopsis horridula*. Perhaps you, too, will be surprised. *Meconopsis horridula* is rightly named—it is more prickly than thistles or cacti.

DR. WORTH'S GARDEN

MARY TIBBETTS FREEMAN, *Ithaca, New York*

Part 1: Frames and Alpine House

Dr. Carleton Worth's garden is located at his farm approximately fifteen miles northeast of Ithaca, in the township of Groton, N. Y., a beautiful section of the country. The surrounding farmlands are open and rolling; wide fields are planted to corn or wheat or sometimes buckwheat. Here and there are woodlots; more often a fine tall specimen tree standing solitary in the field recalls the days when these lands were worked with horses. The region here is higher—the drive up from Ithaca is a slow, steady climb—and colder. Almost always there is a wind. Spring comes later and winter earlier by about two weeks, and in several instances plants which live out-of-doors through Ithaca winters are not reliably hardy such a short distance north in Dr. Worth's cold garden.

Although Dr. Worth does his seed sowing in March, the gardening year in his garden generally opens around the twentieth of April. The pussy willows and peepers in the boggy area at the western edge of his property may have been signaling spring earlier than that by a week or two, but even at the end of April, with rare exceptions, there are remnants of snow banks in and around the garden, and sometimes more than remnants. So, in 1971, to the north behind the house deep-drifted snow blocked entrance to the rock garden and lay behind the alpine house and bulb frames well into May. But beyond the snow bank, although snow still lingered in the paths and lower sections, on April 21, 1971, the garden was a joy of color and beauty as a myriad of bulbs blossomed within inches of the snow. First the bulbous iris—*I. histrioides major*, bluest of the blue, and *I. histrio* var. *aintabensis*, a little more delicate in appearance but equally courageous: *I. 'Joyce'* and the slightly larger-flowered *I. 'Harmony,' I. reticulata* in several shades, and the dwarfer, stouter, lemon-colored *I. danfordiae*; then *Corydalis solida densiflora* seemingly everywhere, and snowdrops—the common single *Galanthus nivalis* and also the double form and the larger *G. elwesii*. In small groupings *Narcissus asturiensis* was lifting fully open tiny golden trumpets, some on delicate 2- to 4-inch stems, but in one or two places, others, tiniest of the tiny, on sturdier one-inch stems. Dr. Worth has had this very small form of *N. minimus*—*N. minimissimus*?—for years; in every part it is in perfect scale and absolutely charming. And there were other bulbs in blossom: *Chionodoxa gigantea* (one of Dr. Worth's favorites among the early bulbs) in blue, white, or pink was making drifts of beautiful color; *Scilla bifolia alba*, *Bulbocodium vernalis*, and *Crocus chrysanthus* in assortment were also contributing to the show. *Adonis amurensis* was in bud, as was, here and there, *Anemone blanda*.

Although the early bulbs accounted for the greater part of the color,

several other plants were in blossom also: *Primula abschatica* whose lovely deep rose-pink flowers are marked by a small yellow and white eye; *P. denticulata rosea* whose flowers were just beginning at ground level; *Trillium nivale*, snow-white and very small; the deep clear rose-pink double *Hepatica triloba* was in blossom and making a promising recovery although during the previous winter it had been so devastated by mice that Dr. Worth had almost despaired of its surviving. *Kabschia saxifrages* climbing up a series of crevices on the north side of a mound were not in blossom but were in bud and showing color. Outside the rock garden proper, to the west under the lilacs, just as they had come from seed and above leaves still flattened from the snow, a large patch of *Helleborus niger* was lifting large (3 inches in diameter) clear white flowers with now and then one flushed with pink.

In addition to the rock garden proper, Dr. Worth's garden includes an alpine house and bulb frames. On April 21, 1971, the alpine house was still winter bound, but in the frames spring activity was beginning. In the shadier frame only *Corydalis diphylla* was stirring; it was in full bloom and continued to so be until after May 13. In the sunnier frame, however, things were further along: *Narcissus bulbocodium nivalis*, *N. cyclamineus*, and *N. bulbocodium tenuifolius* were in full blossom; *Anemone biflora* was coming up, *Tulipa pulchella violacea* was in bud, and the early bulbous iris were in bright bloom—all those to be found in the garden and in addition *I. reticulata* 'Clairette,' *I.* 'Purple Gem,' and the lovely very pale yellow *I. winogradowii* which Dr. Worth had previously had trouble keeping in a pot in the alpine house but which seemed to like the growing conditions provided in the frame.

Dr. Worth also likes the growing conditions provided by the frames and has several times said that were he at the beginner's stage in growing alpines, he would work with frames and an alpine house but not bother with a garden. The two bulb frames constitute the newest part of the garden. The first frame was built in 1967 in anticipation of some *Oncocycclus* iris from the Cheese, Mitchell, Watson expedition to Iran; the second was constructed the following year. The frames lie south and west of the alpine house and garden, but close by and in the open, although the more western one is slightly shaded through part of the day by a grapevine-draped hazelnut [*Corylus*]. Their construction is of wood—wide, thick (2 inch) planks for the sides and ends—and the size is such as to provide good height for sitting and an easy width for reaching—8 x 2 x 4 feet. At first window frames were used for covering, but heavy snows broke the glass; now Dr. Worth uses panels constructed of a layer each of chicken wire, heavy plastic, and hardware cloth, and finds them tougher as well as lighter and, even though the plastic must be replaced every year or two, all in all, very satisfactory. The frames are left open from April to late June and then, except for occasional weeding and watering are covered and kept dry until the following spring. In filling the frames 3- to 4-inches of field stone was placed in the bottom for drainage, then several inches of pea gravel, next the soil—a standard mixture of two parts of loam to one each of sand and peat (Dr. Worth wanted to use red clay instead of loam but none such was available and so he used what was at hand)—and finally a substantial surface covering of rock gravel.

From the beginning the frames have proved most satisfactory both for the Onco irises and for other plants as well. In the five years since the Onco



View of the Alpine House from the Entrance

The Author

irises were first planted, with one exception, all have shown good increase and some have more than quadrupled in size. Again with one exception, they blossom generously—in May 1971 one plant was boasting of eleven blossoms or buds—and set seed. All in all they seem very happy. *Silene hookeri* apparently feels much the same way; in two of the last three years that it has been growing in the shadier frame it has reappeared in late May and has had four or five long-lasting blossoms and one or two seed pods; by early August it has again gone completely underground. Fritillaries and others of the somewhat difficult bulbs also find the frame congenial: *Fritillaria pudica*, the speckled yellow *Fritillaria kurdica* (CMW expedition) and a *F.* sp. collected in Lebanon by Oleg Polunin appear and blossom regularly; species tulips (*T. aucheriana*, *T. bakeriana*, *T. pulchella* and others collected on various expeditions and named only by numbers) thrive. The Juno irises (*I. graeberiana*, *I. bucharica*, *I. willmottiana alba*, and *I. orchioides*) increase and blossom; *I. sindpers* and *I. persica* (a dull dirty purple, not the beautiful blue and sea-green form which Dr. Worth once had years ago) blossom and although increase is debatable, neither grow less in size.

The alpine house has been part of Dr. Worth's garden for years and indeed predates the present rock garden, of which it occupies the southwest corner. In construction it is long and narrow and partially underground, in many respects much like a sun pit or sunken greenhouse. Its roof is gabled and on either side touches the ground; the side toward the south is all glass for about three-quarters of its length in order to take full advantage of the winter sun. Yet throughout the year the glass is covered with snow fence so that in summer the inside light is filtered and softened and in winter additional

strength is given against the heavy snow. At the eastern end four steps leading down to a door provide access. *Ramonda myconi* and several Globularias, Dianthus, *Ptilotrichum spinosum roseum* and *Edraianthus pumilio* find deep root runs and good drainage among the stones fitted into the embankment on either side.

Within, a narrow central aisle runs east and west between the benches. At a point half way through, a cement wall blocks the aisle and shows that at some time the alpine house was given its present size by doubling an original smaller house which branched off and down from the potting shed which still adjoins it at the west. Beyond the alpine house, the potting shed extends northward to bound the garden. The floor of the alpine house is dirt and from midsummer on some of the space under the benches is usually closely packed with seed pots hopefully set aside to wait out a one-or-two-year germination period. Sometimes, too, the cool darkness of the under bench area is put to use as a recovery place for choice plants which have been recently divided or have just been received from collectors or nurserymen.

Throughout the year the benches on either side of the central aisle are filled with pots—the seedlings and sun-loving plants to the south near the windows: on the north the Soldanellas, Cypripediums, Trilliums, *Podophyllum emodi*, and other wild flowers and semi-shade lovers. Flats of transplants and trays filled with cuttings occupy the darkish corner at the western end where on the south side a solid roof replaces the glass. Frequently, large flats filled with Primula seedlings usurp this shady corner, for in the case of primroses Dr. Worth generally transplants first-year seedlings from the seed pots into roomier containers for growing on by mid-August, the calendar for transplanting being largely determined by the season's heat and humidity. The smaller species are usually set into larger (5-6 inch) pots where they often live for several years before being put into individual pots or moved into the garden; but the coarser-leaved doubles, Julianas, Hose-in-Hose, and Jack-in-the-Greens are transplanted into large, deepish flats and then in the spring after flowering are planted out-of-doors.

For many years Dr. Worth emptied the alpine house during the summer, transferring the pots out-of-doors to shaded frames and plunge beds, but for the last five or six he has discontinued this laborious and time-consuming practice and has been pleased to find that, by leaving the doors at either end open to make for good air circulation, summering the plants in the alpine house seems to do quite as well.

The pots of seedlings on the southeast bench usually represent the successful sowings of the spring or year before. Dr. Worth rarely pricks out seedlings when they have set their second set of leaves; rather he prefers to wait until the young plants have made good root growth and have generally hardened off somewhat before disturbing the seed pots. So doing, he has found, cuts down the rate of loss and allows time for delayed germination, since in the case of several genera, Primulas, for example, the seeds seem not to germinate all together. Not infrequently after the second spring, pots on the benches contain both yearling plants and newly germinated seedlings. Transplanting to the open garden or into a second stage of pot culture usually takes place in the second summer. Frequently from one pot of seedlings. Dr. Worth will transplant some into the garden, pot up others to grow

along in the alpine house, and give still others away to be tried in Ithaca gardens, for he is always interested in seeing new plants behave under different conditions and slightly different temperatures. He feels, too, and especially in the case of a plant of some rarity, that sharing it with other growers is good insurance since wider distribution narrows the chance of its being lost. And many have been the times when he has been able to get a lost plant back again from someone to whom he had given it.

A comparable insurance policy also applies to many of the plants which he grows in the alpine house. So although the double pink *Hepatica triloba* and *Anemonella thalictroides* are completely hardy and grow in the rock garden, specimen plants are also grown in pots inside. The same is true of *Ramonda myconi*, *Epimedium warleyense* and *E. flavum grandiflorum*, *Aquilegia scopulorum*, *Thalictrum kiusianum*, and *T. coreanum*, *Sedum pilosum*, *Campanula x stansfieldii*, and the primroses; *P. x pubescens alba*, *P. 'Linda Pope'* (both the true and the false), *P. 'The General'*, *P. 'Mrs. J. H. Wilson'*, *P. clarkei*, *P. fauriae*, *P. allionii*, and *P. spectabilis*. So, too, in the case of a very dwarf form (3 inches) of *Astilbe simplicifolia* and of pot after pot of saxifrages. Dr. Worth grows many saxifrages of all sections, and in addition to those he grows from seed (in 1971 he had 22 seed pots of saxifrages; in 1972, 69 pots!) or buys, each year he takes many cuttings. Always in the alpine house there is a proud show of Saxifragaceae in all stages of growth ranging from established pot-filling plants through year-old seedlings and recent transplants of rooted cuttings, to tiny sprouts with the first pair of leaves. On the waist-high benches all are easily seen and admired and in late April and May the established Kabschias make the alpine house beautiful as they blossom generously and spatter-free in a range of color and sizes.

In the winter of 1969-1970 mice completely ravaged a large area in the rock garden, and had it not been for duplicate plants in the alpine house, many plants would have been entirely lost. At other times, when disaster (perhaps in the form of an over-wintering, hungry chipmunk) has struck inside, plants in the garden have come through unscathed, and again not all was lost.

The alpine house is not insulated and in winter the inside temperature goes below freezing with sometimes disastrous effects; so *Dionysia aretioides* which Dr. Worth had grown from seed collected by the Archibald expedition survived one winter, bloomed with lovely soft yellow blossoms the following spring, and throughout the summer flourished and increased only to perish the following winter when plunging temperatures stayed too low for too long. Generally, however, the temperature in the alpine house does not sink as low nor stay down as long as it does outside; certainly it tends to be more stable, with the result that the plants growing in the alpine house do not experience the repeated freezings and thawings which those in the rock garden each year undergo. Many choice plants which will either barely keep alive or not survive at all in Dr. Worth's cold garden thrive and blossom in the alpine house: *Ranunculus alpestris* each year an early blossomer, *Androsace pyrenaica*, *Draba mollissima* spreading happily into lovely soft silvery-gray downy mats, *Asperula suberosa* whose pink blossoms almost cover the woolly foliage, the brilliant blue-flowered *Polygala calcarea*; *Campanula allionii*, *Phyteuma comosum* which each summer opens several curiously-

shaped purplish blooms: *Conandron ramondioides*, *Haberlea ferdinandicoburgii*, *Sedum sempervivoides* of the gorgeous red blossoms, several of the species cyclamen—*C. pseud-ibericum*, *C. cilicicum*, *C. mirabile*, *C. libanoticum*, *C. africanum*, *C. persicum* (the wild form), *C. cyprium*. The Calceolarias are happy inside also: *C. falklandica*, *C. polyrrhiza*, and *C. mexicana* which casually self-sows among the neighboring pots; *Polemonium mellitum* usually opens its pale yellow blooms, and every August brings brilliant scarlet blossoms to *Silene laciniata*.

Among the dwarf shrubs which find Dr. Worth's alpine house congenial are the lovely *Azalea* 'Flame Creeper,' *Erinacea pungens* (*Anthyllis erinacea*) whose seemingly leafless stems are bright in late May with large pale lavender butterfly-like flowers, and several of the *Daphnes*—*D. arbuscula*, *D. collina*, *D. blagayana*, and *D. tangutica* whose blossoms are softly pink and very fragrant and which Dr. Worth grew from seed.

Yet other plants Dr. Worth keeps in the alpine house because he wants to watch their progress closely, as in the case of the beautiful double blue *Hepatica*, or *Schizocodon soldanelloides* var. *ilicifolia*, *Iris gracilipes* fl. pl., or *Jeffersonia dubia* (*Plagiorhegma dubia*). Still others may represent a new interest; so in 1971 during the late winter he was reading up on and ordering hardy dwarf ferns, and during the growing season he wanted to have these newcomers where he could keep close watch over them, see how and what they did, and generally get to know them.

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1973 WEATHER—The weather this year has been much in the minds of our members. Mostly it has not been so much "unusual" as downright awful. Mostly the reports are of too much wet weather—and heavy rains, even floods. In Wisconsin we heard that for two years the planting of some crops had been delayed as much as three weeks by excessive moisture. From Ohio comes word from more than one member, of flooded basements though it is summer, of burned out motors located in these basements—of seedlings lost because of flooded frames in July—of a mild winter and a wet spring and summer. Word from Connecticut is that humidity has been unusually annoying; that in August brooks are running bank full as they did in spring. A Maine member tells of weeks and weeks of fog with only one day intervening of clear sunshine. California, during the winter and early spring had far too much rain and a low enough temperature to damage or kill many of their beautiful roadside blue gums (*Eucalyptus*). From watching weather reports from the East and Great Lakes states we find high temperatures and excessive rain on the same days which makes for undesirable high humidity. All of this means tough times for alpiners and many headaches for rock gardeners. And here in the Pacific Northwest, where we are so often chided because "it rains all the time in Seattle," we are praying for rain. To date for this year Seattle has had but approximately half of its normal allotment. The weather world is topsy-turvy and it all boils down to the fact that rock gardeners are forced to combat conditions to which they are not accustomed. Many gardeners have been quick to realize the danger, to change their customary tactics and thus save their plants, or most of them at least. Others have not been as fortunate.

OMNIUM-GATHERUM

THE ARGS ANNUAL MEETING IN 1973—This Annual Meeting held in Milwaukee the first week in June and the tour following through Door County have been well reported in the July *Bulletin Board*. The welcome sign on the Milwaukee City Hall was mentioned. Accompanying Omnium-Gatherum is a picture of the City Hall and its sign taken by Donald M. Peach, a member from Hales Corners, Wisc. It shows the height of the sign above the street and the size of the lettering. It must be noted that this sign was brilliantly lighted at night. Other "high lights" of the meeting and tour may be of interest to the 90 plus percent of the ARGS members who were absent from the meeting, but who, it is assumed, read the *Bulletin*.

First a word about Don Havens, Chairman of the Wisconsin-Illinois host Chapter. Don was responsible for everything that was right about the meeting and tour. (Nothing was wrong). Of course, he was aided by the members of his committee. The whole affair was brilliantly conceived, thoroughly planned and executed without a flaw. Accommodations, both at the New Milwaukee Inn and at the Bailey's Harbor Yacht Club at the lakeside town of the same name were adequate and the food on several occasions was superlative. Transportation about Milwaukee on the Saturday local tour was also adequate and on the tour to Door County, most excellent.

But it was the assembled members, some 150 of them, that brought a glow of pride and a sense of warmth to the occasion; friend meeting friend, new acquaintances being made, garden talk, alpine jargon, laughter, good fellowship and a feeling of belonging to one great cohesive family. Happiness is attending any ARGS affair.

Saturday we started on a tour of Milwaukee and its environs. The first garden visited was that of Mr. and Mrs. Ted Berginc on the outskirts of Milwaukee at West Allis. Here was a neat and well-groomed garden thoroughly and harmoniously floriferous, where the genus *Dianthus* was a delight to study, so many species, every one glowing with health and happiness. It is almost certain that no one has ever seen *Penstemon pinifolius* so beautifully grown. Soon we arrived at Chiwaukee Prairie where rubbers, even boots were a necessity because of the many damp, even wet places hidden in the tall grass; not hidden were the flowers—*Dodecatheon meadia* in such numbers as to resemble an army marching with banners flying.

Here many of us made our first acquaintance with the Puccoon, *Lithospermum canescens*, ablaze with bright orange-yellow flowers. It seemed to lord it over the much smaller and daintier *Hypoxis hirsuta*, a yellow-eyed star grass. All through the grassy prairie, where it was not too wet, were countless Bird's-foot Violets, *Viola pedata* var. *lineariloba*, a delight to all.

Saturday night, as we gathered for the Award dinner there was a feeling of expectancy. Soon the reading of the Award citations would begin. Our President, Harry Butler, all warmth and sincerity, read the four citations and made the presentations without in any way stealing the limelight from the awardees. An Award of Merit was given Alex Reid for 21 years of service to the society as treasurer. Alex was not present. Eleanor (Ellie) Brinckerhoff,



Milwaukee's City Hall and our welcome

Donald M. Peach

of the Connecticut Chapter and presently a Director of the society, also received an Award of Merit, and her remarks after the presentation were demure and self-effacing. Edward H. Lohbrunner, Victoria, B. C. received the Marcel Le Piniec Award and made a gracious acceptance talk. It was revealed that he and Marcel were friends and had gone on plant exploring expeditions together. Then came the presentation, for the first time, of the newly created Dr. Edgar T. Wherry Award. Claude A. Barr of South Dakota, listened carefully as Harry read the citation and presented him with a handsome plaque and then came to the microphone and talked at length about his favorite subject—the wild flowers of the Great Plains. His enthusiasm, modesty and delightful smile warmed the hearts of every person present.

Much can be said for the Door County tour. Two fine buses were used. The bus to which the editor was assigned was in charge of Louise Erickson, Racine, Wisc. Her knowledge of the flora of the area was matched by that of the area's geology, especially the Ridges. By the time the afternoon ride was over, and we reached the Bailey's Harbor Yacht Club, our headquarters for the tour, we had been well briefed for the walking tours scheduled for the next day. The first of these tours was through the Ridges Sanctuary, situated not far from the Yacht Club.

The weather was fine and some 100 of us set out to walk along the pathways of the several nearly parallel ridges. Each long ridge was a narrow bit of dry ground elevated slightly by nature above damp or watery swales, also long and narrow. These ridges had intriguing names—Sandy, Wintergreen, Deerlick, Twayblade and Winter Wren. Modest foot bridges made it possible to walk from one ridge to another. These above-water ridges were heavily vegetated. Tall deciduous trees were more plentiful than tall conifers, the latter being few and scattered. Perhaps many former resident tall trees had been unable to survive the many years of wet feet. At that there were enough of them left to relieve the monotony, if any, of the lower tier vegetation. Small conifers, up to eight feet high, many shorter, were fascinating. Those of us from the Pacific Northwest, who thought we knew all about conifers in the wild, had to admit that we had yet much to learn. These small conifers, to give them their local names, were balsam fir, black spruce, white cedar and both white and red pines. They were greatly admired; intricate patterns of foliage, the new foliage of a fresh spring green and each tree bearing itself as though supremely happy with its lot.

Here, let me make an observation which it is hoped will not be misunderstood. While in Wisconsin, we found everywhere great interest in plant life and much knowledge, but in conversation and in printed matter relative to the Wisconsin flora, it was noted that common names were used almost to the exclusion of botanical nomenclature, much to the confusion of visitors from a distance with a different floral background. In our hurried treks about the Wisconsin countryside we had great difficulty in translating the local common names to the botanical names we have learned to use through the literature.

Back to the Ridges! Can you imagine a hundred enthusiasts spread out in a long single file on a very narrow path following these rigid instructions: *Remain on the trails or bridges at all times. Do not step off the trail. Keep your place in line. Do not walk two abreast. No stopping for picture taking.*



Don Havens, Chairman of the host chapter—Wisconsin-Illinois. Picture taken in Iceland, not Wisconsin.

Do not touch the plants nor pick the flowers. Naturally, with that many people, most of them with cameras, stops were made to photograph such lovely flowers as *Iris cristata* var. *lacustris* (in Wisconsin common name language, Dwarf Lake Iris) or *Cypripedium arietinum* (Ramshead Ladyslipper). Naturally this held up the line and many were unable to take the pictures they wanted. We had only a limited time for this delightful walk as we HAD to be back at the bus at a stated time. Don Havens saw to it that this schedule was rigidly adhered to, bless him!).

Many of us who took this walk resolved to return to this most exciting Ridges Sanctuary and alone, or with a few companions, take a whole day for exploration and inspiration (staying on the trail, of course). We realize that those responsible for the creation of this sanctuary and its safe maintenance must make and enforce trail rules. And its costs money, too. ARGS members who are interested in such sanctuaries and are appreciative of what has already been done may help financially by contributing even as little as \$2.00 per year. The address is Ridges Sanctuary, Inc., Bailey's Harbor, Wisc. 54202.

On the way back to Milwaukee, a stop was made at the estate of the Wests, known as "West of the Lake." This beautiful six-acre garden estate was created as a labor of love. Throughout the 32 years of its transformation from a weed-choked, otherwise barren piece of seemingly worthless property, no heavy machinery, no bulldozers, have ever been used. Back breaking work, love, the pursuit of a dream and a growing knowledge of horticulture and gardening and landscaping has created this very highly developed estate on the shore of Lake Michigan near the city of Manitowoc. Mrs. West (Ruth) was our gracious hostess and while most of us, after a tour of the estate, were

gathered about a table lavishly covered with exotic refreshments, some inspired photographer took the picture that appears with this account. From left to right in this picture are Mrs. Olafur Gudmundsson and her husband of Reykjavik, Iceland, Mrs. West, our hostess, Mrs. Edith Kenzie of Toronto, Canada and Mrs. and Mr. R. C. Tucker, Herefordshire, England. Mr. Gudmundsson has been a contributor to our *Bulletin* and was the speaker following the Friday night dinner in Milwaukee. The Tuckers are new ARGS members, and shortly after the meeting visited friends in Seattle and Victoria, B. C.

The last stop before arriving back at Milwaukee was at the home of Mr. and Mrs. Alvin Rein, also in Manitowoc. It was rather hot upon our arrival and as we were guided to the rock garden at the back of the property it was very refreshing to hear the sound of falling water. The main rock garden was situated in one corner of the lot and in the foreground was a fairly large pool with a fountain in its midst. The rock garden sloped upward from the pool to the corner creating a hillside covered with flowers. This display of color was somewhat subdued by the generous use of small ferns. It was pleasant here and so we journeyed back to Milwaukee with memories of this last garden.

Such was the excellence of the meeting and the tour that many times were heard such comments as: "I am coming back to Wisconsin soon for another visit."—"Didn't Don and the Wisconsin-Illinois Chapter do a marvelous job? It could not have been better!"—"We are not the only ones who know how to grow alpines or to entertain." Our sojourn in Wisconsin will not soon



ARGS is truly International—Four countries represented in this picture taken at West of the Lake

Staff Photographer—Herald-Times-Reporter, Manitowoc-Two Rivers, Wis.

be forgotten. Our thanks and congratulations to all of you who made this Annual Meeting such a highly enjoyable occasion. It is our hope that we will see many of you who attended this meeting again at the 1974 meeting in San Francisco next April, as well as many members who were not at Milwaukee.

ONE MAN'S CHOICE: PLANT FAMILIES

BOB WOODWARD, *North Vancouver, B. C.*

There comes a season each year when I have the pleasure of poring over almost a hundred *Indices Semina* (Seed Lists to the *hoi poloi*) from various botanical gardens and rock garden and alpine societies throughout the world. A thought has occurred to me; which are the favourite plant families as far as alpine gardeners are concerned? Myself, I noticed a definite pattern in search of the most exciting plants in the lists. The three families I invariably investigate first are *Primulaceae*, *Liliaceae*, and *Gesneriaceae* and after these an unvarying pattern emerged, a great deal of this is, of course, personal preference, but I thought there might be some value in jotting down my method of attack as far as plant families and good alpinists are concerned.

I begin with the *Primulaceae*, primarily, I confess, because of my favourite genus, the Androsaces. From the domed, hard-cushioned Aretians (e.g. *A. wulfeniana*) to those which spread miraculously on strawberry-like runners (e.g. *A. sempervivoides*); I love 'em all. Expectation is high when one picks up a Seed List and I always hope that someday I may find listed the scarlet Androsace, *A. aizoon*. Of course, their North American counterparts, the Douglasias, are almost as good. Other reasons why *Primulaceae* holds pride of place: Cyclamen, although they are temporarily in my personal Coventry, I know I shall reconsider and restore them to a hallowed place. Changing tastes are one of the hallmarks of the alpine gardener as a species. Dodecatheons are a taxonomic pandemonium these days but I still take a chance. In Soldanellas I look for the subspecies such as 'austriaca' and 'hungarica.' Among the Primulas themselves such a preponderance to chose from: I search out the especial sections: Parryi for North American species, Soldanelloideae with their beautiful glistening bells; Nivales; the Petiolaris, even though seed of the latter should be sown green. And who knows, sometimes on a list of *Primulaceae* one might see Dionysia. As I say expectations are always high. Almost as exciting are the haunting Omphalogrammas from their high Himalayan eyries.

Liliaceae may seem an odd choice for second spot. Monocotyledons as a rule are longest from seed to develop a flowering plant, especially if they're bulbous. Fritillarias are liliaceous and therein lies my decision. I even found *F. michaelovskii*, the 'Hallowe'en fritillary' because of its orange and black markings, on one recent list. After Fritillaria I look for Calochortus and Nomocharis and Notholirion: all other-worldly in their beauty. The Japanese toad-lilies, the Tricyrtis, are easy from seed, intricately marked, strangely shaped, valuable autumn plants. Allium is usually the longest list of any genus and one must seek out the few good alpine onions (e.g. *A. narcissiflorum*). But almost any Erythronium if you are willing to wait about

five years. Hosta is suspect seed in that there are so many hybrids and sports and cultivars. A few unusual Liliaceous ones: Aphyllanthes, the blue lily; Heloniopsis; Scoliopus; above all Philesia as in *P. magellanica*. Will it ever appear? *Trilliaceae* is sometimes separated from *Liliaceae*.

Gesneriads are by no means easy nor too hardy. But they have such a quality of presentation both in the velvety texture of the foliage and the dynamic range of the colour tones, I invariably try them! They are difficult from seed, remaining for two years as pinpoints of plants, hardly any growth at all. After the familiar Ramondas and Haberleas and the non-existent (on Seed Lists, at least) Jankaea and Didissandra, I hope for such things as the lovely yellow Briggsia or Japanese Chiritas (*Oreocharis*), Conandron, and Lysionotus or Chilean Mitraria or Chinese Petrocosmea. All of these have proved hardy down to 10 degrees F. for us if they are in the right position.

Next a quick perusal through the most prolific families as far as alpiners are concerned. These are *Ranunculaceae*, *Campanulaceae*, *Saxifragaceae*, *Gentianaceae*, *Portulacaceae*, and *Papaveraceae*. I confess that I prefer two families above these: *Ericaceae* and *Diapensiaceae*. Both of these, however, are very tricky from seed for me: the seed is so fine and the growth so infinitesimal. But I always consider the listed Gaultherias and Pernettyas and hope for some of the rarer dwarf Rhododendrons such as *R. lowndesii* or *R. roxieanum* var. *oreonastes*. Many lists contain Rhodothamnus, but why will it never germinate? Same comment for Zenobia. Some lists separate the *Pyrolaceae*, which includes *Pyrola* and *Chimaphila* the Shortias and Schizocodons (or are they all one by now?) rival *Diapensia* itself in *Diapensiaceae*. I have raised *Schizocodon* from seed but after six years and a healthy, thriving clump I have yet to see a single bloom on the plant. And let us not forget the legendary Pixie, *Pyxidantha* in this family.

* * * * *

1976—1976—1976—Keep this year in mind for that is the year of the next International Rock Garden Plant Conference and Seattle, U.S.A. and the Canadian cities of Vancouver and Victoria, B. C. are the locations. Later will come dates and other information. Look forward to 1976 and make your plans to attend.

* * * * *

CHAPTER PROJECTS — Dr. Edgar T. Wherry writes, "Members who attended the recent annual meeting in Wisconsin report how impressed they were with the beauty of the prairie Puccoon (*Lithospermum canescens*). This led to my reflection on how difficult it may be to rescue neglected natives. Several years ago, I assembled six addresses of wild flower dealers or amateur suppliers in the region in which this abounds and wrote for material. Two on the list sent roots, but they were in such poor condition that they did not survive. Another two replied that roots could not be dug and that the species never set seed. The third group could not understand what wild flower I was talking about.

"Why can not each of our Society's chapters organize a project of supplying seed or growing stock of the attractive but unused natives of their areas for the enjoyment of members of other chapters?"

COLLECTOR'S NOTEBOOKROY DAVIDSON, *Seattle, Wash.**Lupinus lepidus aridus*

If the gardener is disillusioned over not being able to succeed with a very much coveted subject, the best remedy for his despair is to search out another such good prospect for his attention. *Lupinus lepidus lobbii* (better known by the name of *Lupinus lyallii*) is not the one and only good silver cushion species of the genus. There is, for example, *L. breweri* (even lower and perhaps as difficult to please) and several others of the *L. lepidus* aggregate. All have silken dewdrop-cups for foliage.

To best succeed with all these one needs a well-ventilated and very sunny slope and a very open, porous soil that is cool beneath. This suggests a two- to three-foot depth of scree over clay or something similar. The truly alpine "lyallii" is found at its best in such; often in deep pumice or cinder beds near Cascadian volcanic peaks, and was named by Gray from Lyall's material from north Cascade summits. The species *L. lepidus*, now considered to be a widespread and variable polymorph of the northwest, reaching from British Columbia to California, east to the Rockies of Montana, southeast to Colorado, was named with David Douglas's material as its type, this taken from the Columbia Gorge and Columbia plateau at much lower elevations. It ranges then from lowlands in scab rock and dry-bank situations to the alpine heights, and as such has evolved seemingly at least five distinguishable "races" treated as intergrading geographic or ecological varieties by Hitchcock (1961). Of these, the most esthetically desirable is, of course, the variety from the pumice, "lyallii", but a second look might be cast toward the var. *aridus*, also named from Douglas material, but this from "Columbia Gorge toward sources of the Missouri" (Blue Mts. on the Washington-Oregon border).

Though not so closely compact, *L. lepidus aridus* has been noted in some excellent forms, where it covers great sweeps of stony slopes with six- to eight-inch silvered mounds covered over with short azure spikes. Other forms, including about a dozen named, but submerged within the one species, are not nearly so concise, and some seem to intergrade (suspiciously) toward other taller neighboring species. Populations from summits of the Blue Mts. and across Hells Canyon in the Seven Devils and further east closely approach "lyallii" and are every bit as good for the alpine garden, only asking for summer draught in a cool aspect.

Balsamorhiza rosea

Most of the Balsam-roots are big coarse sunflowers, some with strikingly flannelly foliages: they come from the dry prairie regions of north-western United States. Three known colonies are attributed to *Balsamorhiza rosea*, all in Washington state; one in Spokane Co. is said to be disappearing

or breeding out by hybridization; a second in Yakima Co. is very widespread and extends into adjacent Benton Co. in the Horseheaven Hills, while the third is but a disjunct of it, in Walla Walla Co., the Wallula Gap of the Columbia River interrupting. Plants of this last station are the subject of this discussion.

Balsamorhiza rosea does not appear to have been attractive to gardeners, perhaps because its hybrids with *B. careyana* or *B. sagittata* have been mistaken for the species. All those in Walla Walla Co. are consistent in being well under a foot and of most refined appeal, of perfect use in the rock garden or stony pasture scree. It is a scab rock plant in nature, the thick "carrots" of rootstock penetrating the thin soil to be firmly seated in frost-formed subterranean crevices in the Columbia basalt substrate; it is probably this situation that protects it from the ravages of rodents.

In early spring, the beautifully incised, slightly hoary leaves push up to form an intricate rosette on the surface and from its midst quickly come one to three (or more) short, woolly, slender stems to about six or seven inches, the summits crowned in time with superb two-inch, golden-orange Gaillardia-like daisies. As these mature they subtly turn a burnished coppery-rose or rusty salmon ("fulva" would have been a better epithet for it). The foliage is even more lovely as it dries, becoming ashen and retaining its shape. This ought not to be difficult in the hottest part of the garden in a dry stony soil in full sun. Companions in the wild include such xerophytic plants as Phlox and Astragalus.

The rather similar *B. hookeri* (of which *B. rosea* was once considered a variety) is, in its typical phase in Kittitas Co., Wash., a larger species, the leafage cut in a very attractive, simple pinnate manner (though occasionally nearly entire) and the comparably lovely flower remains golden in decline.

Frasera albicaulis

As we are all aware of the great beauty and desirability of the Gentians, we also quicken a bit at the mention of Gentian relatives. Some are good, others not so good. A good one is *Frasera albicaulis*, of a genus of about a dozen western American dry land plants (dry in summer) from intermontane prairie, valley and foothill, a fitting subject to attempt growing in deep loamy soil on sun-flooded slopes in the garden. *Frasera* was once merged with *Swertia*, a move which may have killed the appeal, but those now known as *Frasera* are NOT big coarse rhubarb plants. They were sensibly liberated by St. John (1941) on morphological distinctions, being of four parts rather than the five of *Swertia* (except in both, the ovary): there is also a significant cytological distinction supporting the separation.

This is NOT a bold or stunning, not even a coy and winning subject; in fact it is so unobtrusive that one is inclined to miss it, until suddenly, "Wow, where have YOU been all my life?" The species is widespread from British Columbia east of the Cascade-Sierra rift, eastward to slopes of the northern Rockies in Montana and Idaho. There is a degree of variation but it is mainly in the amount of color in the flower, though variations in pubescence seem to be linked. As seen in the Blue and Wallowa mountains this is a foot-high plant that is a pale powdery blue throughout the entire



Lupinus lepidus aridus, *Balsamorhiza rosea* and *Frasera albicaulis*.

Roy Davidson

thing, including leaves, stems and flowers having a cool, misty, faraway appeal. It is a herbaceous perennial that forms a crown from which may arise a dozen (more or less) stems clad in pairs of puberulent narrow-lance leaves each prominently 3-nerved lengthwise and minutely but distinctly edged in silvery white. These pairs of leaves, about five in number, and gradually diminishing in size, are replaced on the uppermost third of the stem by crowded thyrses of pallid blue (or white) cross-shaped blossoms, not large, but fully packed and marked with blue lines, the alternating prominent stamens making a pretty design; individual petals are each marked with a fimbriate-hooded pit (Swertias have a pair), gland-like structures toward the base, and there is a "fringy process" corresponding to the "pleats" of the interstices in Gentians.

All these small features contribute to the soft and cool, mist-blue effect. Other forms are white-flowered and the near related *Frasera montana* of central Idaho is creamy white and a bit coarser, otherwise similar. *Frasera albicaulis* is a quietly beautiful plant; it is not likely to bowl one over like a gentian does, but it is a dignified and simple delight, not to be forgotten.

THE ROCK GARDEN SOCIETY OF OHIO & THE ARGS

ROBERT M. SENIOR, *Cincinnati, Ohio*

(Editor's Note) The following excerpts are from an article written by Mr. Senior and published in the *Bulletin* of the Garden Center of Greater Cincinnati, Vol. 32, No. 3, dated April-May, 1973. The editor regrets to report that Mr. Senior died at his home in Cincinnati on June 29, 1973. Thus the ARGS lost one of its oldest members, both in terms of membership years and in age. Mr. Senior could well be named "Mr. Campanula" for he was a recognized authority on the genus *Campanula* and the other genera that make up the family Campanulaceae. He has contributed numerous articles to the ARGS *Bulletin* as well as to many other like publications. For many, many years he was Chairman of the ARGS region (later, chapter) which included Ohio.

A person attempting a history of the growth of horticultural enthusiasm in the Cincinnati area would have to take account of our old Rock Garden Society of Ohio, which had its origin in this city. As far as we could ever learn, our "society" was the first of its kind in the world. A year later the Alpine Garden Society of England was formed.

About 1929 several ardent horticulturists got together in this city, and I was delegated to invite to a meeting anyone who might be interested in rock gardening. Possibly because I sent out the original letter, I was asked to serve as the society's first president.

Somehow people throughout the country heard of our "society" and asked to join. Quickly we had over a hundred members. We even had a couple of European members, one of whom was the important English nurseryman, Charles Elliott. Our local members met regularly throughout the winter months. During summer months we visited each other's gardens.

About two or three years after we were launched, there was formed the American Rock Garden Society. Several of our own members attended their charter meeting in New York and helped to select their first officers. A few seasons later our Ohio society invited to its Cincinnati meeting the membership of the American society. This invitation was accepted and for the occasion the Cincinnati Park Board gave us space to erect a couple of rock gardens that were planted by our local members.

Formation of the American society (ARGS) marked the start of the decline of our own society. Some of our out-of-town members resigned and joined the American society. Some local members followed suit. Our secretary,

a volunteer, found the correspondence burdensome and resigned her office. When the American society appointed a paid secretary we were placed at an even greater disadvantage. Not many years after, only a handful of our members remained. Though in its early history our society had been the source of great pleasure to its members, those of us left felt there was no real need to continue.

MARGÔT STUART

Margôt has laid down her trowel. No more will her beautiful rock garden in the hills of Scotland know her loving presence.

Margaret Stuart, known to most as Margôt, lady of Scotland, died quite suddenly on June 9, 1973. Her death followed closely that of her husband, Dr. Thomas A. Stuart who died in New Zealand at year's end while visiting a brother there. Together, Margôt and Tommie, by imaginative planning, by sure knowledge and downright hard work, in a few years developed a delightful and extensive garden at Mill Glen, their home, situated at Moulin on the outskirts of Pitlochry. Both were members of the American Rock Garden Society as well as belonging to other like societies. Margôt was currently a Director of the Scottish Rock Garden Club.

Many Americans have visited the garden at Mill Glen and have been charmed by its informal excellence, its wealth of well-chosen and happy plant material and by the clever use of water from a semi-diverted stream. Margôt, in the past few years, had become known personally to many American gardeners as a result of her two visits to the U. S. A., especially to the Pacific



Margôt Stuart (left) showing her garden to a visitor

Brian O. Mulligan

Northwest. To these friends Margôt exemplified the very spirit of Scotland, and so, through her, Scotland, too, has found a warm place in their hearts.

Now that Margôt has left us there is a great sense of loss. This loss can only be assuaged through gratitude that we have been privileged to know her and her gentle ways and to have found inspiration in the garden at Mill Glen.

Dr. and Mrs. Gordon Alexander

Some weeks ago, July 29, Dr. Gordon Alexander and his wife, Marion, were killed in a morning plane crash at Boston, Mass. That is the tragic fact.

Not only were their relatives and close friends shocked and anguished, but those of the ARGS who in the past few years have come to know the Alexanders and to love them. They were ARGS members, contributors to the *Bulletin*, and active in the affairs of our Society. They attended the Annual Meeting in Seattle in 1970, the International Rock Garden Plant Conference at Harrogate, England in 1971, and the latest Annual Meeting held in Milwaukee in 1973. They were among those taking advantage of the bus tours in connection with these meetings and in many instances were seated close to the editor and his wife. They were delightful traveling companions and became good friends.

Dr. Alexander was active in the Biology Department of the University of Colorado at Boulder. Mrs. Alexander was also a biologist. Together, they had their place in many of the ecological matters that affect our nation. However, it is certain, because of their quiet and unassuming nature many of our ARGS members acquainted with them were quite unaware of the esteem in which they were held among biologists and members of other scientific groups.

So again the ARGS has lost good friends and good members and we mourn.

FROM CALIFORNIA TO MICHIGAN—William Rawson of Los Gatos, Cal., writes of a contemplated move from his California home to the Thumb area of Michigan. He says that he is taking along a few seedlings which he hopes will survive the trip, and his pet rock plant, *Primula x pubescens* 'The General.' He continues, "I raised this from seed from the SRGC exchange and it bloomed only once during the six years I have had it, but the flowers are lovely. Perhaps the cooler climate of Michigan will suit it better." He continued, "The last two summers have been scorchers and last winter was very cold, killing some of my Australian shrubs."

APPRECIATION—"I am taking time out to write a note of appreciation and to say how very much I enjoy the Society. I look forward to each *Bulletin* and all its information." Thus writes James P. Long, Rt. 2, Marion, Virginia 24354 in a letter to our President. He also writes in appreciation of the Seed Exchange and other services of the ARGS. He ends his letter with, "It is a joy to know and correspond with the members, both in the U.S.A. and overseas. Each time I have asked the members for seed or plants they have answered me and sent what I wanted. I hope to do the same for other members."

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