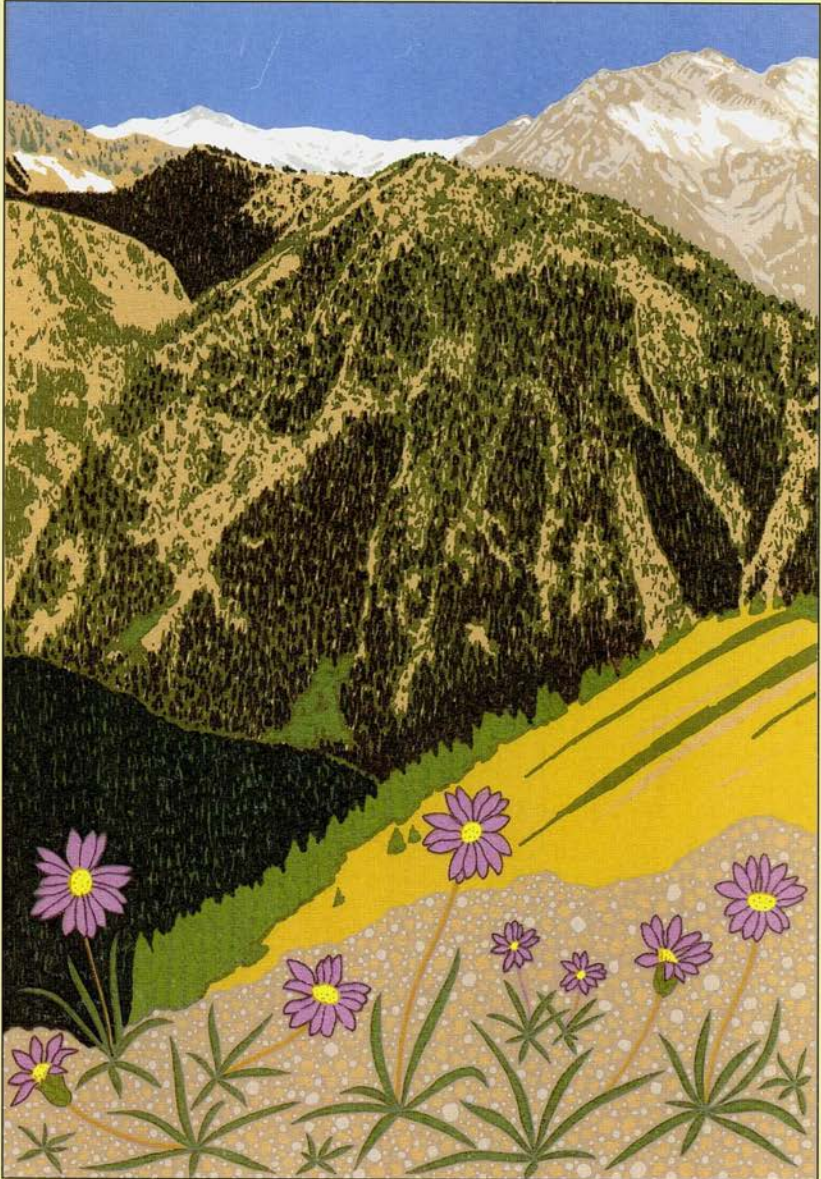


ROCK GARDEN

Quarterly



Volume 59 Number 4

Fall 2001

COVER: *Aster alpigenus* on Mt. Howard, Eagle Cap Wilderness, Wallowa Mountains, northeastern Oregon
Serigraph by Sue Allen, Brightwood, Oregon

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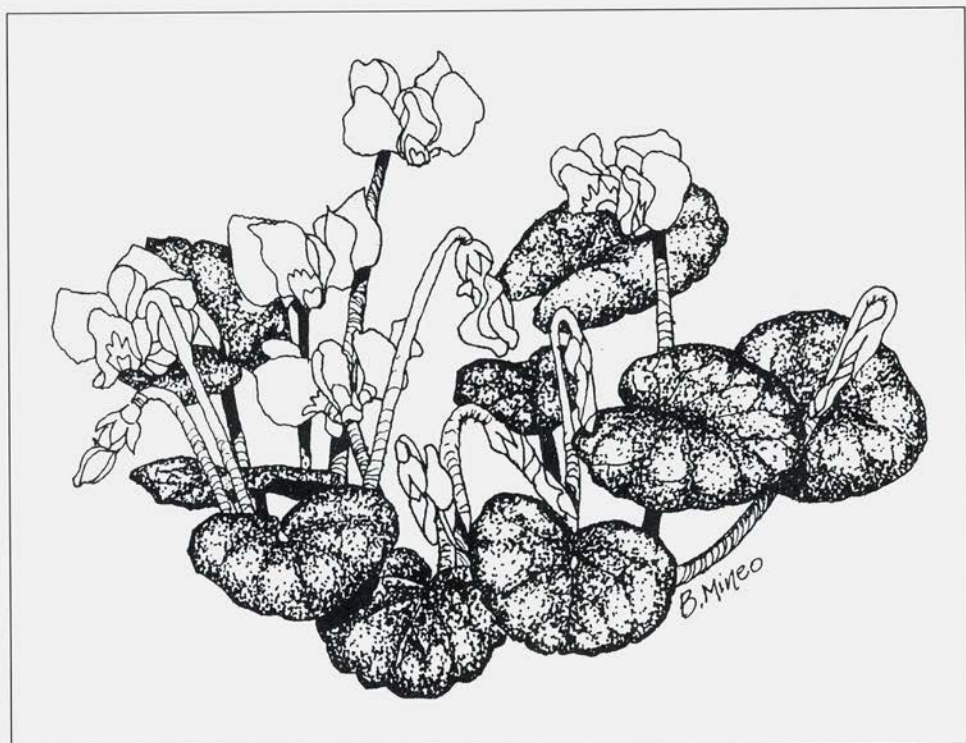
ROCK GARDEN *Quarterly*

BULLETIN OF THE NORTH AMERICAN ROCK GARDEN SOCIETY

Volume 59 Number 4 Fall 2001

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Cyclamen coum (drawing by Baldassare Mineo)

The Magic of Cyclamen

John Lonsdale

Many genera of alpine or rock garden plants contain species that span a broad spectrum of horticultural interest, from the stunningly beautiful through the botanically interesting to the downright ugly. This is true of several genera within the family Primulaceae, including *Primula* itself. By contrast, the genus *Cyclamen*, also in the Primulaceae, is one of few whose numerous species and cultivars are universally appealing.

Cyclamen are endowed with charming flowers ranging in color from near red through pink to white, frequently with contrasting markings at the nose which can extend into the petals; some are even bicolored. Flower shape varies considerably: the slightly dumpy (but still attractive) form of *C. parviflorum* and some *C. coum*; the propeller form of *C. trochopteranthum*; or the long, elegant, twisted gems of certain *C. graecum* forms. If further encouragement is needed, different *Cyclamen* species can be found in flower at any time from July through to April. They possess a variety of fragrances, and variably shaped, beautifully marked leaves which give interest and much pleasure long after the blooms have gone. The foliage alone justifies growing them, and it is the cause of a medically undefined compulsion that causes the afflicted to raise vast numbers of plants from seed in search of a further extension of the myriad of leaf patterns already available.

The ease of growing most *Cyclamen* species adds to their horticultural value. There is hardly a region of North America that cannot provide a garden home for at least one species. *Cyclamen hederifolium* is remarkably winter-hardy and weather-resistant, even in the coldest zones, *C. purpurascens* and *C. coum* just slightly less so. The remaining sixteen species that are in cultivation make excellent garden subjects in appropriate climates and sites (most are at least frost-hardy), and those whose basic needs cannot be met without protection are wonderful pot subjects under glass.

Species and Cultivars

Of the twenty species currently recognized by botanists, nineteen are in general cultivation. Almost all have been further subdivided, either botanically or hor-

ticulturally, and a number of interspecific hybrids have been described. Though it is impossible to do justice to all the variants here, I will briefly discuss the merits of the species and highlight some of the newer and more interesting forms now becoming available in the specialist trade, particularly in Europe. The premier garden *Cyclamen* species, *C. hederifolium*, is discussed in greater detail, as is *C. graecum*, the queen of the species generally considered not frost-hardy, but a superb pot subject. (Photos appear on pp. 265–269.)

Membership in the Cyclamen Society is essential if one wishes to learn about and grow a wide variety of cyclamen from seed and become familiar with the more unusual forms. The Society produces two excellent bulletins each year and is a unique source of fresh seed, gathered both from members' cultivated plants and from plants responsibly collected during Society expeditions. (See the list at the end of this article for information on joining.)

For our purposes, the species can conveniently be divided into those that flower in fall and those that flower in late winter and spring. Depending upon how you look at it, the cyclamen season starts or ends with *Cyclamen purpurascens*. I prefer "starts": the welcome flowers of this woodland plant arrive in the dog days of summer, accompanied by a delightful sweet fragrance and leaves that can be plain green (in the form known as '*C. fatrense*') or well marked with silver or pewter splashes. Sometimes the entire leaf is washed with silver; such forms are found in the Lake Garda region of Italy. *Cyclamen purpurascens* is not the easiest species to please in the garden, but it is remarkably cold-hardy, tending to object more to the heat of the summer, when considerable shade is beneficial in hot climes. It has probably the shortest dormancy of any species—in fact, the emergent flowers and leaves often coincide with the final throes of the previous season's foliage. The usual color range is pink to near-purple, and white forms are rarely encountered. The recently described *C. colchicum* is a close relative of *C. purpurascens*.

Of all the species, *Cyclamen hederifolium* is without doubt the most garden-worthy. Not only will it provide flowers throughout the autumn, it will also reward you with a carpet of beautifully marked leaves for up to 9 months of the year. In the wild, *C. hederifolium* is a woodland plant, but in the garden it tolerates a wide range of conditions as long as it has a well-drained but moisture-retentive growing medium. Once established, it happily seeds itself around, and in a few years a large drift can result, with seedlings in leaf forms that can be totally different from those of the parents. Individual corms can be very long-lived, reaching the size of a dinner plate. The corms lie at or just below the soil surface. In our garden in southeastern Pennsylvania, we have hundreds of plants seeding extensively on a south-facing slope on the woodland edge, some parts of which receive barely any shade. In large populations, one often sees the first flowers as early as late July, especially after a rainstorm, but the main display is in October. A more tolerant plant would be hard to find, and a place should be found in any garden for the everyman's cyclamen.

Cyclamen hederifolium is distributed in southern Europe from southeastern France and Italy through mainland Greece, on the Greek islands down to Crete,

and eastward to southwestern Turkey. It is also known from Bulgaria and the former Yugoslavia. Thus, it is not surprising that it is quite variable. Plants with pink and white flowers are found throughout its range; whites are much rarer in the wild than in cultivation. The leaf shape varies tremendously, from the usual ivy shape suggested by the specific epithet to remarkable long, thin sagittate (arrowhead-shaped) forms. Leaf marking seems infinitely variable, from plain green to completely silver, with every combination in between. Various named strains (see below) are available, but it is not necessary to hunt them down. Any large batch of seedlings produces a fabulous range of leaf forms.

Possibly the most distinct botanical variant is *Cyclamen hederifolium* var. *confusum*, reserved for plants from the Mani Peninsula of southern Greece, Sicily, Crete, and a few Greek islands; these plants have much larger, shiny, deep green, leathery leaves and a more robust stature, and they tend to flower later, sometimes not until November. The corms may be as hardy as the type race, but the foliage (in my garden) certainly is not; plants are usually completely defoliated by the New Year, as the leaves seem very susceptible to ice and snow damage.

There are numerous named horticultural forms of *C. hederifolium*, but few of these are stable enough to produce identical offspring. This brings us to a phenomenon that can cause great joy but also endless frustration to cyclamen growers. Cyclamen are extremely difficult to propagate vegetatively (the corms never form offsets) and are quite variable from seed, and only a small percentage resemble the parent plant. The practice of naming exceptional individual cultivars can cause great disappointment to those growing their offspring. For example, it is now very rare to find plants that in any way resemble the original *C. hederifolium* 'Bowles Apollo', selected many years ago from the garden of E. A. Bowles. Seed of this cultivar has been widely distributed, and the progeny have kept the name with little or no reference to the original description. Even repeated and rigorous selection and back-crossing with the aim of generating a true-breeding seed strain does not succeed. Although many *Cyclamen* species can be flowered from seed in two years, it is a very conscientious nurseryman who flowers every seedling and ensures they are true to type before selling them. It seems pointless to give cultivar names to cyclamen unless back-crossing the best seedlings with the original has produced a strain that breeds at least 95% true, and the distinctive characteristics of the cultivar are published, well understood, and adhered to.

Cyclamen africanum is virtually indistinguishable by eye from *C. hederifolium*, although its flower and leaf variation is not nearly so spectacular. Hybrids between the two species occur freely, and it can be very hard to tell exactly what one is growing. The leaves generally rise directly from the tuber whereas in *C. hederifolium* they spread laterally before rising. In a pot this is often manifest by a ring of leaves around the edge. If in doubt, plant it out: by the end of the winter, you can identify the dead plants as *C. africanum*.

Cyclamen intaminatum, *C. cilicium*, and *C. mirabile* are three small Turkish species that are undeniably elegant, reasonably hardy, and very floriferous from relatively small tubers, blooming somewhat ahead of the foliage. *C. intaminatum*

is a delicate beauty that usually begins flowering with me around September, slightly before its two relatives. Plants would be lost in the open garden, the individual scentless flowers being only 1–2 cm (less than 1 inch) long. The leaves, small and round, can be plain or faintly traced with silver. The flowers are marked with faint gray veins from nose to tip and are usually off-white but can be pale pink. However, beware! The pinkness of a “pink” form varies considerably from year to year in a way that I have not been able to correlate with any particular environmental or cultural condition. My two best pink-flowered plants were both as white as the driven snow in the past two years.

Cyclamen cilicium is another species of quiet charm, relatively invariant in both flower and leaf form. The foliage may be plain green or, more usually, may have a creamy-silver hastate (spearhead) pattern; the flowers may be pink with deeper markings around the mouth, or pure white. Darker pink forms are becoming available, and all have a delightful scent.

Cyclamen mirabile is perhaps the most exciting of these three Turkish species, especially with the recent introduction of some cultivars by Peter Moore of Tilebarn Nursery in the UK. The type forms are clearly distinct in both flower and leaf from *C. cilicium*, although their botanical distinctiveness has been questioned. The flowers of *C. mirabile* are delicately fimbriate (fringed), and the rounded leaves can have a curious puckered appearance, with marginal teeth, which are absent in *C. cilicium*. Flower color can be pink or white, the latter being characteristic of the cultivar ‘Tilebarn Jan’. ‘Tilebarn Nicholas’ and ‘Tilebarn Anne’ were selected because of their remarkable leaf coloration, especially in the juvenile stage. ‘Tilebarn Nicholas’ has a bright raspberry flush in an outer band on the young leaves, the inner portion of the leaves being marked with a glossy green “Christmas tree.” The raspberry eventually fades to a muted pewter shade. In ‘Tilebarn Anne’, the entire surface of the young leaves is raspberry pink, producing a spectacular display. As discussed above, even though great efforts have been undertaken to derive true-breeding strains, only a percentage of the offspring of a plant meeting the cultivar description will comply, and the others should be rogued out.

Cyclamen rohlfsianum is a very distinctive species and quite tender; even a light frost burns its foliage. It is native to Libya. The flowers are unique in that the cone of stamens protrudes well below the mouth, somewhat resembling a dodecahedron. Flower color is pale to deeper pink, the petals often being finely veined in pink. A single white-flowered plant has recently appeared in cultivation. The leaves of this species are coarse, wider than long, and lobed, with a coarsely toothed margin; they can be banded with cream or silver markings. It is the one species that appears to benefit from a totally dry dormancy. *C. rohlfsianum* is relatively stingy with its flowers, and these have a tendency to come with the leaves. It is said that the timing of the first watering dictates their timing and that of leaf emergence, but, since coming to the US from Britain, my plants have all flowered well before the leaves emerged, and my watering regime has not changed.

If *Cyclamen hederifolium* is the premier garden cyclamen, then *Cyclamen graecum* is the ultimate species for pots. It is difficult to find a spot in most UK and

northern US gardens where it will grow well enough to flower, even if it survives the frost. In the wild, it can be found in the harshest habitats, often with its tubers squeezed into rock crevices in the heat of the Mediterranean sun. The tough contractile anchor roots hold the tuber tight to the substrate and delve deeply in search of moisture to sustain it through the hot, dry summer. Herein lies the secret to successful cultivation and flowering: a dry tuber with a hint of moisture deep in the compost. There are several ways to achieve this, one being to sink the pots in a sand plunge kept barely moist during summer. Pots stood on the ground often have considerable root activity out of the drainage holes searching for moisture, and this also suffices.

Botanically, *C. graecum* is now split into three subspecies: subsp. *graecum* from Greece and its islands, including most of Crete but excluding Rhodes; subsp. *anatolicum* from Turkey, Rhodes, and North Cyprus; and subsp. *mindleri* from a small area of the White Mountains in Crete. While plants conforming to the descriptions of the subspecies are distinct, many aficionados with vast experience of the plants in the wild insist that some individuals in most populations can be keyed out to any of the subspecies, often hundreds of miles from their recorded distribution. Taxonomy!

A white form of *C. graecum* subsp. *graecum* was found some years ago in southern Greece and was thought to occur only there, but recently white-flowered plants have also been found in northwestern Crete. All forms are beautiful plants, with leaf markings second to none in the genus: various shades of green, cream, gray, and silver form intricate patterns that include shields, borders, splashes, and veining. The leaves, which may be very large or so small they seem to form a cushion, can have a velvety texture, adding to their appeal.

It is impossible to speak too highly of *Cyclamen graecum*. It has a reputation of being difficult to flower well, but, given the correct summer treatment, it blooms profusely. It is easy to become obsessed with this species alone. Pat Nicholls grows around a hundred mature plants and several hundred seedlings in a greenhouse totally devoted to them. This species seems particularly to resent overpotting (being grown in a pot that is too large for the corm), so repotting every three or four years is appropriate, when the corm and roots seem ready to burst the pot. Short spells a few degrees below freezing seem not to damage leaves or corms, and there is one bizarre volunteer in our US garden that has survived and grown (slowly) outside and unprotected in temperatures as low as 5°F (−15°C). The leaves burn very badly in the ice and snow but increase in size and number every year, and it hasn't flowered yet.

The last of the fall-flowering species is *Cyclamen cyprium*, which often bridges the gap between winter and spring. The flowers are white or very pale pink with attractive darker markings and very prominent auricles, the little "ears" that stick out at the bottom of the flower. It also has a pronounced spicy scent. The leaves of the type form are relatively plain but distinctly angular; in the cultivar 'E. S.', however, they are fabulously spotted and blotched with cream-silver. *C. cyprium* is more frost-hardy than frequently claimed. One of the most attractive cyclamen hybrids, *C. × wellensiekii*, has *C. cyprium* and *C. libanoticum* as its parents

and is truly intermediate between the two. The two parents rarely flower at the same time, *C. libanoticum* being spring-flowering plant, but stored pollen can be used to good effect.

Although slightly out of chronological order, we can consider *Cyclamen libanoticum* here. The flower is uniquely broad and a lovely pale pink, paler at the nose, with little trace of auricles. It tends to be few-flowered, and the leaves are not spectacular, although better forms can be selected. It has a distinctive peppery fragrance. Like the previous species, it can be successfully grown outside and withstands several degrees of frost.

Cyclamen coum, *C. trochopteranthum*, and *C. parviflorum* form a complex of related late winter- to spring-flowering species, the time depending on growing climate. *Cyclamen parviflorum* is a high-alpine Turkish species that can be rather miffy in cultivation. Its flowers are small and dumpy, and with its small, plain, round leaves, it is not the glam queen of the genus. It does have a quiet presence that could border on charm to some beholders, though. *Cyclamen trochopteranthum* is reasonably cold-hardy and is best known for its flowers, which are shaped like propellers and have a lovely spicy scent. They are pale to deep pink; a handsome white form is rarely encountered. The leaves can be attractively spotted with silver.

Cyclamen coum is the spring counterpart of *C. hederifolium*, making a superb garden plant in many regions and coming in a variety of flower colors and leaf patterns. Many cultivars have been named, and forms true to type are well worth seeking out. It has proved very disappointing as a garden plant in Pennsylvania, at least in the forms I am growing. Although the tuber is undoubtedly completely hardy, the leaves are very badly damaged by snow and ice, although they are untouched by very cold air. I understand that there are races around that behave much better in this respect and put on a good show in, for example, upstate New York. *C. coum* 'Urfa' is one form that resists damage.

The flowers of *C. coum* are similar in shape to those of *C. parviflorum*, albeit larger in all parts, and lack the elegance of the more slender and pointed flowers of other species, except in subspecies *elegans*. This plant is desirable for its heart-shaped (rather than round) glossy leaves and flowers with beautifully pointed petals; it is in a class of its own. Of the named forms of *C. coum*, I'd like to single out three favorites. 'Golan Heights', a relatively new pure white form with slightly fimbriate petals and plain glossy green leaves, makes a lovely display. Originating in the borderland of Israel and Jordan, it is rather more tender than the typical forms and also seems less robust. 'Nymans' is an old cultivar with flowers of deep magenta, offset by superb pewter leaves. The original 'Nymans' appears long gone, but plants bearing this name are worth acquiring. Finally, 'Tilebarn Elizabeth' has lovely bicolored flowers shading from very pale to mid-pink with an almost luminous quality, flying over solid pewter leaves.

Cyclamen pseudibericum is the most beautiful of the species flowering in early to mid-spring. The sweetly fragrant, long-lasting flowers are large and bold yet retain elegance; they are usually deep purple-magenta, or a lovely rose pink in forma *roseum*. The leaves are beautifully shaped, the better forms being strongly

marked with gray-green through cream-silver over a very glossy dark green ground.

Cyclamen persicum is often ignored in any discussion of “proper” cyclamen because it is perceived to be responsible for the florist’s cyclamen. Nonetheless, it is well worth growing in its wild forms, and there are some lovely ones around, from palest pinks to pure white. The cultivar found on the island of Karpathos and named after it as ‘Tilebarn Karpathos’ is the most stunning, with flowers of intense cerise. In many ways, this species masquerades as a spring version of *C. graecum*, but without the latter’s refinement and leaf variation. It is hardier than often supposed and can withstand a few degrees of frost.

Bringing up the rear in the cyclamen year are the members of the *Cyclamen repandum* group: the various subspecies and varieties of *C. repandum*, *C. balearicum*, and *C. creticum*, and their interspecific hybrids. All three species are plants of shady places, and they have very thin leaves which wilt easily in the strengthening spring sunshine. All possess refined elegance, sweet fragrance, and fine twisted petals. *C. repandum*, at least in its type form, is relatively hardy and makes an excellent woodland garden subject, but the other two species are definitely for pots and protection.

Cyclamen balearicum and *C. creticum* are relatively underrated, probably because they tend to get passed over in favor of the host of other alpine bulbs flowering at this time of year. Both have small, white, delicately veined flowers, occasionally pale pink, and the leaves are fairly unspectacular, although they can be pleasingly splashed with silver flecks and blotches.

The flowers of *Cyclamen repandum* commonly range from glowing magenta (in subsp. *peloponnesiacum* var. *vividum*) to pale pink with a darker pink rim, although there is a fine white form too. The leaves are heart-shaped and often deeply lobed or angled; they are the last among the species to emerge and are particularly susceptible to rots brought on by heavy-handed watering. Of the three subspecies of *C. repandum*, subsp. *peloponnesiacum* can have pure silver-colored leaves, or even better, foliage spectacularly flecked with silver, as if flicked with a loaded paintbrush. It can often be May before the last flowers of *C. repandum* depart, leaving only a two-month gap before the cycle starts again with *C. purpurascens*.

Garden Cultivation

The cold-hardiness of many species is surprising, and several traditionally considered to be tender in fact show some degree of hardiness. Many species survive and even thrive outside in areas where winter temperatures do not dip much below 20°F (-7°C). As I have found to be true of numerous other bulbs whose cold-hardiness proves greater than I expected, correct positioning and soil conditions are crucial. Excellent drainage is paramount; it is ice rather than cold that kills, and bulbs and corms in a soil that was only faintly moist when it froze can survive far lower temperatures than those that freeze in a wet medium. This phenomenon is exaggerated when plants are grown in pots.

Generally, most *Cyclamen* require some shade during the hottest part of the day, a very well-drained but moisture-retentive soil, and a relatively dry rest during their dormant season. The emphasis here is on “relatively”: several species, such as *C. bederifolium*, tolerate regular watering, whereas others require a dry (but not “baked”) rest. Several species in the latter category are best treated as pot plants, where watering is much easier to regulate. Bear in mind that species such as *C. graecum* experience long hot, dry dormancy in the wild, but their corms are frequently very deeply buried, and the long roots are probably always in contact with a cooler, slightly moist substrate. *Cyclamen* corms can be eaten by mice, voles, squirrels, and other animals, but our five cats are under strict instructions, and so far we have not lost any tasty bulbs or corms to these beasties.

Cultivation in pots

It is possible to grow superb specimens of all species in containers, as evidenced by the stunning plants regularly seen at shows. Although subtle variations in cultivation can benefit certain species, the reality is that most can be treated in exactly the same way. Seed-raised plants always position their corms at the interface between the compost (the soil mixture—not “compost” in the US sense of decomposed vegetable matter) on which they were sown and the grit used as top-dressing, and this is exactly the way we grow mature plants. Although little or no harm is done by burying the corms slightly, the emerging growth is much more likely to rot off if the compost is too wet. Control of fungal pathogens is facilitated if the growth points are above the compost.

There is no magical compost, either. I have used soil-based ones, suitably amended with grit and some peat or bark-based material to increase moisture retention. Because ready-made soil-based composts (referred to in the UK as “John Innes” composts) are not available in the US, I now have to find alternatives. All my bulbs, corms, and tubers are now grown in a mixture of BioComp BC5 (composted peanut hulls) and perlite. If anyone had suggested that mix to me while I was still in the UK, I think I would still be laughing—but it works wonderfully for *Cyclamen*, *Crocus*, *Narcissus*, *Corydalis*, *Iris*, and other genera. The pots are top-dressed with a half-inch or so of coarse grit.

As is the case in many branches of horticulture, especially alpine gardening, the real skill comes in turning on the hose at the right time and pointing it in the right direction for just long enough. *Cyclamen* are certainly vulnerable to overwatering, especially during dormancy, but it is not desperately difficult to get it about right. Drier is definitely preferable to too wet, and regular observation of your plants should result in relatively few mistakes being made. The growth of many species actually starts weeks or months before top growth is apparent. *C. coum* is amazing in this respect: the growing points swell and leaf and flower stalks start to extend in late July, even though they don’t flower until mid to late winter. Once growth is noted, it is important not to let the pots get too dry. However, it is best to reserve the onset of regular watering until September or

even later, and copious water should be applied only when significant top growth is evident.

There is no general agreement on whether to feed cyclamen. I now use an in-line feeder that allows weak feeding every time watering is carried out, and this seems to have been beneficial. I use Miracle-Gro™ fertilizer, and the same effect can be had by watering with this at half strength whenever the plants are watered.

Cyclamen suffer from relatively few pests and diseases, especially if the plants are observed regularly and repotted as necessary (under-pot rather than over-pot). Species with deeply delving, thonglike roots, such as *C. graecum*, *C. persicum*, and *C. rohlfianum*, benefit from deeper pots. As discussed above, too wet a compost can and will cause the corms to rot, usually as a result of fungal infection. By the time this is noticed, either because the plants make no new top growth after dormancy or because the leaves and flowers wilt and yellow prematurely, it is usually too late to remedy. In the UK and in the US Pacific Northwest and Canada's West Coast, botrytis can be a problem, especially in the damp, dull days of fall and winter; in the eastern US, this problem is more common in spring. In Pennsylvania, the humidity of summer is usually past before the plants start flowering in earnest. Spent flowers and flower stems can act as nuclei, so it is best to remove them as soon as possible. Fungicidal treatments can help but are really not necessary for the average collection, especially if good air movement is maintained.

Vine weevil can do serious damage to cyclamen, and again, good plant husbandry goes a long way to making sure pest populations do not build up to levels that result in serious damage. After six years in southeastern Pennsylvania, we have yet to see a vine weevil. Aphids can also attack cyclamen, but they are susceptible to many systemic insecticides. Squirrels have been known to strip seed capsules in the garden, but this is generally sporadic and localized and does little long-term harm to large plantings.

Propagation

Raising cyclamen from seed is one of life's great pleasures. Vegetative propagation by division of the corms into one or more pieces, each with a growing point, is possible, but it is little used and perhaps best saved for the rescue of diseased corms in which the rot has not spread too far. Growing them from seed, by contrast, is easy and very rewarding. The seed exchange of the Cyclamen Society is unsurpassed, with fresh seed of more than 100 species, cultivars, and wild collections available every year. Endless surprises await you, so great is the possible variation.

Seed should be sown as fresh as possible. If sown by late summer or early fall, it generally germinates the next growing season, fall or spring depending on the species. There are several accepted ways to sow and germinate cyclamen seed, some more scientific and involved than others. Cool temperatures (below 59°F/

15°C) and darkness are required, but these can be provided in many ways, artificially or naturally. The following method has worked well, generally giving timely, high-percentage germination.

The same compost used for mature plants is used for seed, which is surface sown and covered with a 1/2-inch (c.1 cm) layer of grit. After watering, the pots are stood in a shady place and kept evenly moist. When the time is right, the seeds germinate and the fun begins, although the first season, most species make only a single, usually unmarked leaf. It is beneficial to keep the seedlings growing as long as possible, keeping them cool, shaded, and well watered. When they finally go dormant, they should be given more moisture than mature specimens, because they can be very prone to desiccation, and they seem less susceptible to rots when young.

Seedlings should be treated like more mature plants from the second season onward, but not transplanted until they are a couple of years old. My preference is to leave them to flower in the seed pots, especially if I am trying to select better forms. This saves much time and space, and the plants do not suffer as long as overcrowding is not extreme. Potting up is best done during dormancy, ideally as the plants are “thinking” about waking up. After potting, they should not be allowed to dry out at all. Some species (e.g., *C. hederifolium*) can flower in their second year, but most require two to four years; *C. rohlfianum* generally takes the longest, up to five years from seed sowing.

Sowing seed collected from one’s own plants is particularly enjoyable, but this obviously requires getting seed set in the first place. As in most contexts, good children result from good parents. This is particularly true for cyclamen, and it pays to start with some of the more interesting leaf and flower forms as seed sources. Fertility varies considerably from plant to plant, and seed is not always set naturally, especially on plants you value the most! Hand-pollination with a small paintbrush is certainly beneficial. Since we have moved to the US, I have found that early flowers are particularly difficult to pollinate, either naturally or artificially, and this seems to correlate with higher humidity earlier in the season. Seed set is better in the fall when the humidity is much lower. Fertilization is obvious because the flower drops rapidly from the swelling ovary and the pedicel starts to coil or bend to bring the capsule down to within the relatively protected area under the leaves. The way the pedicel coils or loops down is species-specific and is fascinating to watch. Excess heat or dryness, especially in the early phase after seed set, can cause abortion.

Irrespective of the time of year the seed was set, it ripens the following mid-summer. The capsules can be huge on some species but are generally around half an inch (1 cm) in diameter. Just before the capsule splits open, it becomes softer and “squishy.” The seeds inside are now pale honey-brown and ripe for collection. If you miss this opportunity, the capsule will split, causing a terminal hole to appear through which the seeds can be seen. If not harvested, they will either be removed by ants (which love their sticky, sweet coating), or they will rapidly dry and fall from the capsule. All seeds should be ripe by mid to late July, usually later in the garden than under glass.

Cyclamen are beautiful, elegant plants, and growing and raising them from seed is a fascinating hobby, not particularly difficult but incredibly rewarding. Whether you want drifts of plants in the garden or beautiful pot-grown specimens under glass, they offer something for everyone. Give them a try if you are new to them, and if you already have some, experiment with a few of the less well-known species—and expect a few surprises and a lot of fun.

Acknowledgment

I would very much like to thank Pat Nicholls, an active member of the Cyclamen Society who gardens in Shoreham, England, who kindly contributed material to this article on *C. hederifolium* and *C. graecum*. Pat is an excellent grower and specializes in *C. graecum*.

John Lonsdale, a microbial biochemist, and his family moved in 1995 from England to Pennsylvania, where he is creating a new garden on a wooded hillside site. He grows a wide range of plants, with a special interest in hardy bulbs and woodland plants.

Further Reading

Grey-Wilson, Christopher. *Cyclamen: A Guide for Gardeners, Horticulturists, and Botanists*. Portland: Timber Press, 1997.

Sources

To inquire about membership of the Cyclamen Society, contact Dr David Bent, Little Pilgrims, 2 Pilgrims Way East, Otford, Sevenoaks, Kent. TN14 5QN, United Kingdom. Email: <membership@cyclamen.org>.

Cyclamen seed is always available through the seed exchanges of NARGS, AGS, and SRGC. All species are now covered by CITES regulations, and importation of plants (not seed) into the USA requires a permit.

Tile Barn Nursery is the UK's premier nursery for *Cyclamen* species. Peter Moore, the proprietor, is a founding member of the Cyclamen Society and has traveled on many Society expeditions. He has introduced several new and exciting cultivars. The nursery exports worldwide. To import into the USA, the UK authorities require you have a USDA import permit (free of charge). A small charge for a CITES certificate is added to your nursery invoice. Tilebarn Nursery, Standen Street, Iden Green, Benenden, Kent, TN17 4LB, UK. Email: <sales@tilebarn-cyclamen.co.uk>; telephone/Fax: +44 (0)1580 240221 <http://www.tilebarn-cyclamen.co.uk>

North American gardeners can obtain domestically propagated corms from the following nurseries:

Hansen Nursery, P.O. Box 228, North Bend, OR 97459 <Hansen.nursery@verizon.net>

David Fischer, P.O. Box 96, Wiscasset, ME 04578

Siskiyou Rare Plant Nursery, 2825 Cummings Rd., Medford, OR 97501

<www.siskiyourareplantnursery.com >

Seneca Hill Perennials, 3712 Co. Rte. 57, Oswego, NY 13126 <www.senecahill.com>

Travels in a Rock Garden

Robin Magowan

The limestone outcrop next to my studio is quite small, barely 6 feet tall and perhaps 30 feet from end to end. When I first came upon it, it was a mess of poison ivy, deeply embedded lily-of-the-valley, and wild ginger, flanked by two moribund ash trees: an unlikely site on which to establish a garden. Over the years, I had tended a few plants here and there, but I would never have called myself a gardener—much less a rock gardener, a craft about which I knew nothing. But after 40 years of writing about travel, I welcomed anything that would unchain me from my desk. The prospect of an earth-box of manageable size, rising up no more than a step from the door, proved irresistible.

In a remarkably prescient essay written in 1908, Victor Segalen remarked that when worldwide travel becomes commonplace, there will always remain some remote peak where, among mountain goats and the last unnamed flowers, true explorers will be. At my age, I did not see myself clambering about on an uncatalogued New Guinea mountainside; but on my outcrop, I realized, I could invite visitors from the far corners of the alpine plant world and found a colony of specimens to assuage my wanderlust.

Once I had cut down the ash tree to the south and cleared the soil as well as I could, I should next have put in a porous, well-drained scree bed composed of four parts gravel to two parts earth and humus. For the previous 20 years, however, I had lived in France and England, and before that on the West Coast—places where the mercury never descends much below freezing—and I did not realize how drastically the sudden thaws and refreezings of a northwestern Connecticut winter could heave little plants about, or what they might require in the way of siting, light, protection, and drainage. And I was, I suppose, impatient. All that concerned me was populating the clay of the little alp I had unearthed with some appropriate plants.

A knowledgeable friend put me on to the catalogue of Siskiyou Rare Plant Nursery in Oregon. Guided by its descriptions and zone indications, I sent away

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for an instant garden of mountain flora. Then I joined the local chapter of the North American Rock Garden Society and bore away as many trays as I could from its monthly seedling sales. Anything with a name new to me seemed worth trying; and if it had been grown locally, it might well be winter-hardy. What space remained, I filled with miniature garden perennials: dianthus, armeria, phlox, potentillas, and primulas.

Since I had no idea how big these seedlings might grow, or what kind of conditions they liked, there was much shifting about before I got the right plants in the right sites. Not everything tolerated these machinations, but a surprising number did, perhaps because their root systems were still so undeveloped I could trowel beneath them. It was the collage aspect of rock gardening I came to love the most: the constant adjustments, replacements, and additions in an ongoing composition. Each time I moved a plant, I learned something about the kind of environment and look I was, willy-nilly, creating.

Unlike the designer of perennial borders, I was not strewing around great swathes of color and texture to create masses. I was merely trying to situate single plants for one visual effect or another. If they were happy and sowed themselves about, so much the better. Unlike the passing traveler, I could study the denizens of this artificial landscape over time and learn what kinds of sites they wanted to inhabit. The tinier the plant, the more of a challenge siting it became; the graver, too, the threat posed by each weed. Soon enough, though, I welcomed weeds and the excuse they gave to get down on my knees and actually make a new visual acquaintance, or to turn over a label and learn what it was I had really planted.

It helped that my outcrop was densely creviced, with a deep trough eroding its center and several big cracks or fissures made by the roots of the two ash trees. The shape of the rock dictated what would go where. The rock's height and the shade cast by the remaining ash tree also allowed a narrow peat-and-humus-based "woodland" garden to develop around the western and northern sides. On the east and south, where the rock gradually descended toward the lawn, I set up an alpine meadow of brawling tap-rooted thugs: poppies, phlox, pulsatilla, daisies, and penstemons. When the dust cleared, I chose the winners.

Winter thaws brought a certain number of upended plants needing to be thrust back into the uncooperative soil, but by and large, the plants were small enough that an inch or two of snow cover provided enough shelter from the worst winds. When they began to come back from dormancy their first spring, we had none of the usual lethal frosts.

In a sense, I may have been too lucky, for by the end of the second summer, I had too many plants and was obliged to expand southeast into the lawn. I covered the grass with newspapers, laid on a foot and a half of soil and a few small boulders, and created an open garden in what I imagined to be the manner of the American Southwest. But of the plants that I either bought or transplanted into this raised bed, fewer than half survived the snowless winter of 1995. I had to be more systematic and deliberate in identifying the mountain plants and the kind of garden I wanted, and in remaking the soil to give them the drainage that would let them survive.

When starting the garden, my primary concern had been to find plants that would quickly fill it and look suitably alpine. Plants that cascade in tumbling waterfalls, like creeping phlox, helped fill in gaps while providing cover for spring bulbs to push through. The art, as I first saw it, was to set one aggressive mat against the next and enjoy the resulting battlefield's riot of color. Later, though, I realized it was not the clash of meadowland warriors that enthralled me as much as the spectacle provided by their evolutionary victims: the tiny, compact-bodied cushion plants that had retreated to the more inaccessible scree and crevices of the topmost mountain ledges.

Up there, buffeted by nearly constant wind, with a window of six to eight weeks in which to grow, flower, and set seed, small size can be an advantage. The smaller the plant, the faster it can feed itself and meet its survival needs. Such a plant competes with its few neighbors in color, size, and the whole complex spectacle of the flowers offered to pollinators. To a bee, big flowers or a mass of tiny flowers may look the same; and with illusionary art, frilly petals can make a flower look twice as large as it really is.

Living on a tight budget, alpinists cannot afford to shed their leaves and go dormant as most perennials do. For some, flowering is the final aria into which a diva puts all her remaining energy, then dies. A number of other scree dwellers either disappear into the earth to await the next year's snowmelt, or develop a sweater of sorts in the form of an insulating cushion of hairs. The hairs enable the plant to retain moisture in dry summers, while providing a coat to ward off wintry blasts; the more exposed the habitat, the more ruffled or woolly the coat.

The startling beauty of alpine flowers beguiled me: the gray or silvery foliage, the compact perfection, the way the plants tumble from ledges and dance over rocks. As Reginald Farrer wrote, "There is something about these tiny plants that makes us their slaves." Unlike gardeners who need plants large enough to stop you in your tracks, I did not see smallness as a handicap. Small plants do not consume a lot of garden. The taller the mound you give them, the more potential ledges you have with which to establish different viewing areas and separate one species from another. The resulting shadows at different angles cast by the sun striking each rock or ledge in turn create microclimates.

I may not be able to grow a whole mountaintop world in a grain of sand, but using microclimates, I can accommodate in several thousand grains a substantial bit of it: spring-flowering gems from the Rockies, Pyrenees, and Alps, from Turkey and the Caucasus; matted midseason bloomers from the arctic tundra or Patagonia; fall gentians from China; and a host of others that emerge in New Mexico, the Himalayas, and South Africa after monsoons to extend a flowering season. They retain a scent of faraway habitats that I must respect if I am to keep them around. Perhaps Maurice Maeterlinck was right: with an alpine garden in my back yard, there is no compelling need to travel.

At the end of the second winter, the remaining ash tree had to be cut down. My caretaker and I dug out the surrounding clay to a depth of 4 feet and installed a steeply inclined sand bed and a scree composed of equal parts of

gravel and earth. The virtue of sand, other than its offering a lovely softness to kneel and plant in, is that it helps retain water, but soil that never dries out can rot any plant that is not set high enough for the wet to drain away.

With the scree, I can now grow most alpine plants that do not require a lime-free, acid-based soil. I can insert pebbles into the crevice pockets if a leaner, more austere habitat is needed. In blazing afternoon sun, the scree reminds me of the dried torrent bed below Mount Ida in Crete where I once ruined a friend's motor scooter taking a hitch-hiker to a country wedding. The 4-foot depth may have been unnecessary, but alpine plants are delicately tendrilled, and a substantial bed gives their roots room to forage, while the boulders strewn over the surface as if deposited by a flood provide crevices that keep the plants cool in summer and sheltered from winter winds. (Photos, pp. 270–271.)

After putting in the two new beds, I dug out the remaining clay and constructed a neighboring pair of little mountains that mirrored the outcrop. Now plants could pop out from different angles, one astonishment succeeding another. Those too small to hold their own in the open garden went onto a bench of troughs outside the studio—an artificial solution, but there at least they were protected in porous tufa and placed high enough to be seen.

By now, I realized I had become a miniaturist. Anything over 6 inches (15 cm) tall was dispatched to the perennial border, but my penchant for miniature plants left a design problem. If I stacked boulders in receding tiers, by the time the crevices were high enough, the plants were too far away to be seen. Troughs were a solution, but I wanted my plants in the garden, not in containers.

The solution was to construct, in the mixed shade of my studio, a berm that continued the outcrop in the form of a ledge garden. In circumference, the berm is not much bigger than the distance my arms can reach as I kneel on the adjacent lawn. Yet the ledges of thin rock descending in parallel walls provided a well-drained runoff that keeps water from collecting around the crown, while protecting the plant in a crevice pocket. If need be, I can tilt the ledge wall at an angle to provide a roof against the wet. In these shaded conditions, the ledges make glittering backdrops that bring warmth while allowing all but the tiniest plants to be illuminated.

A fellow gardener once remarked that, in her acquaintance, there are as many varieties of rock gardens as there are gardeners, and each expresses the gardener exactly. For me, a ledge garden offers something like the possibilities of a picture book: brilliant juxtapositions that you move away from or come back to; individual pockets broken now and then by the two-page spread of a tiny larch or the oddness of a group of cylindrical cacti. The multitude of partitions lets me cram in a great deal of miniature beauty and surprise and grotesque astonishment, and somehow get away with it.

Nonetheless, that “somehow” bothers me. For a couple of years, I kept lists of the plants I had killed, grateful that I was a gardener and not a surgeon. It may be too much to expect a plant to look as good in my garden as it does on a far-away mountainside. In thinner air, the blue of a gentian has an unearthly quality I can't possibly reproduce. As for the environment, there is only so much I can

control. Some plants are happy and return every year; others, despite everything, give up the ghost.

Just as a garden goes through stages, though, so does the gardener. It is an art you can learn, but only when you have evolved, traveled, and seen enough to be ready for a next step. In the process, you are always experimenting, inserting A into B's site while banishing C—an emperor constantly fussing with tiny, beleaguered citizens. The longer you persist, the more you realize it's not you but the plants that generate their own proximities. In the long run, the garden is less yours than theirs, and your task is to keep it free of invasive competition, open to auspicious influences. You may not be able to grow everything you want from all over the mountain world, but you can certainly try. And killing plants has to be part of that learning process.

Beside learning about plants themselves, and what conditions they can and cannot abide, there is inevitably an aesthetic aspect. If alpine gardening is an art, it is because one aims at perfection. When every weed is a menace and you are dealing with very small plants, nothing less will do. You can define a look—a mountain abundance—that you are trying, plant by plant, to reproduce. But beauty requires choices, and every time I get down on my knees in the garden I make them. In choosing, I inevitably learn something about design itself.

At the same time, gardening changes something in me. In our society, we tend to drive or run past tiny plants, admittedly hard to see. But once I am on my knees, I enter a world different from the one I know standing up. As its plants enlarge, so do I. If I wish, I can fish out a hand lens and refine still further this rabbit's-eye perspective; or I can try to record a flowering moment with a photograph, one way of certifying that I actually grew a fabled specimen.

The shift in perspective brings a shift in time as well. Down on my knees, I become rooted. There is only so far I can travel. Like it or not, I start seeing things from a plant's own perspective. It is not time itself that matters, but the soothing warmth of the dirt in my hands, the play of the light on my back and shoulders, as I prop myself with one hand and pluck with the other. People talk about *working* in their gardens. For me, it is more like *playing*. I am out there enjoying the very different lights of a spring or midsummer or Indian summer day. I invent tasks, like collecting seeds, so I can stay out longer and watch the blues of penstemons emerge in twilight shadows. The wind, the swirling gnats, the light, and the garden's restricted, concentrated space make me feel intensely present and alive. That's what every tiny alpine plant is, and what it gives me.

Robin Magowan gardens in Connecticut. His *Memoirs of a Minotaur* appeared from Story Line Press in 1999, and a volume of poetry, *Lilac Cigarette in a Wish Cathedral*, was published by the University of South Carolina Press in 1998. This essay appears in a volume of his collected travel writing, *Improbable Journeys*, published in spring 2002 by Northwestern University Press.

Alpines on Display

The Philadelphia Flower Show

Lee Raden

The Delaware Valley—which comprises Philadelphia with three counties of southeastern Pennsylvania as well as Delaware and southern New Jersey—has a wonderful tradition of horticulture and gardening. The colonial leader William Penn's vision of the "greene countrie towne" of Philadelphia began to take shape with his distinct layout of parks, garden gateways, and urban gardens. Several pioneers of American botany were based in the city beginning in the eighteenth century. It therefore is no surprise that, in 1829, the Delaware Valley gave birth to North America's first flower show.

Today there are 37 major public gardens and arboretums in the area. The most famous are Longwood Gardens, Winterthur Museum and Library, the Scott Arboretum at Swarthmore College, the Morris Arboretum of the University of Pennsylvania, the Tyler Arboretum, and Chanticleer.

The roots of the Philadelphia Flower Show go back to the summer of 1829, when the Pennsylvania Horticultural Society, founded in 1827, held its first annual exhibition. This first flower show occurred at the Masonic Hall in a space measuring 82 by 69 feet (about 25 by 21 meters). Twenty-five members showed off their horticultural treasures. The show is now housed in the Pennsylvania Convention Center, where it occupies 10 acres (about 4 hectares) of the main exhibit hall. It is the largest indoor flower show in the world and attracts approximately 300,000 visitors during its eight-day run.

The Delaware Valley Chapter of the North American Rock Garden Society, at this writing about 300 members strong, has been quite active in the Flower Show since 1966. Individual members often compete in the horticultural classes, and the chapter mounts a display in the educational section. In addition, many chapter members have served among the 500 volunteers who manage the Horticult, as the exhibit area is called. Their jobs include horticulture chairpersons, passers (the people who screen the entries to make sure they adhere to the rules for their classes), stagers, judges, and judges' aides. Volunteers come from all the major plant societies as well as from public gardens and arboretums. All this activity has taken place for the past 30 years under the watchful eyes of Ed Lindemann, Flower Show designer and director.

Two hundred judges from plant societies, garden clubs, and public gardens pay their own expenses to come to Philadelphia for the honor of judging the cream of American plants. It's a feather in one's cap to say, "I judged at the Philadelphia Flower Show." In the most recent show, there were 307 classes and more than 2,000 horticulture entries (excluding an additional 350 orchids). All these entries are beautifully staged in the Horticult, an area of approximately 1.3 acres in the center of the exhibit hall.

For rock gardeners, there are 31 classes specifically for rock and alpine plants. There are three judging days: the Saturday before the show opens and the following Tuesday and Friday. This means that exhibitors bring in new plants for each of the three occasions and remove plants that have already been judged. This provokes a frenzy that starts at 7:00 a.m. on an entry day and lasts until the 9:30 a.m. deadline for bringing in plants, entering them, and staging them. Managing this is only possible because of the expertise and experience of the volunteers, who circulate garbed in variously colored sweatshirts identifying their roles. I have been part of this joyful experience for 35 years as both volunteer and exhibitor. The competition is intense and the sportsmanship evident; friends are made from all over North America and Europe; and all of us are bound together by the love of plants and by showing them to our peers.

Among the top awards, the Margah Flood Memorial Trophy for the horticultural organization accumulating the most points in the horticultural classes has been won eight times in 35 years by the Delaware Valley Chapter. The Doretta Klaber Award, a silver bowl, is offered by the chapter for the outstanding blue ribbon winner in the rock garden classes.

Our chapter has participated in the educational portion of the show since 1966. For 35 years, we have mounted exhibits. The first—inspired by Rex Murfitt, the famed trough gardener who now lives in Victoria, B.C.—was a 4- by 8-foot (1.2- by 2.4-meter) table, landscaped with rockwork and bursting with androsaces, saxifrages, primulas, and many other gems. Rex brought the plants in the back of his station wagon from Stonecrop Nursery in New York, where he was manager at the time. Some of the 35 members of the newly founded chapter helped him set it up. It broke over the show like a bomb: no one had ever seen anything of the kind, and the exhibit won Best in Show for the educational section.

In 1968, John Kistler mounted a huge walk-through exhibit of 900 square feet, with a planted rock wall; this also won Best in Show. In 1971, Karl Greishaber designed an alpine hut of the kind he remembered from his boyhood days in Austria. The roof was covered with alpine plants—another Best in Show. The same award was won in 2000, when Dick Van Duzer designed a magnificent trough garden display. (Photos, pp. 272–273.)

This brief history helps to explain why the members of the Delaware Valley Chapter are so competitive. It is addictive, and it has honed our skill in forcing plants and growing them in pots to a degree uncommon elsewhere in the United States. In addition to socializing with our friends and meeting new ones, it is wonderful to have an audience of 300,000—among them potential converts to rock gardening. It can take weeks to come down from this "high."

Planning exhibits at a show of this caliber can take as much as three years. One has to acquire plants, grow them on, and begin to adjust their growing cycle for “forcing” at least a year in advance. Bringing bulbs into flower at the right time is especially demanding. Remember that the first week of March in this region is not the springlike season that it can be in milder climes! Nonetheless, we prepare every year for that date, when it is time to let the madness begin.

Lee Raden’s garden, “Alpineflora”, is near Philadelphia. He is a past president of NARGS.

Showing Alpines in North America

A Forum

Compiled by the editor

Competitive plant shows are a mainstay of many specialist plant societies and garden clubs in North America, but rock gardeners here are often bemused by the array of rules and classes—and cut-throat attitudes—that can be discerned at a rose, lily, orchid, or flower-arrangers’ show. This is not the case in the United Kingdom, where shows are an important activity of the Alpine Garden Society and Scottish Rock Garden Club, and members busily cart their prized specimens about the country in hopes of gaining a Farrer Medal (awarded to the best plant in a show). Photos and descriptions of winning plants form a large component in these societies’ journals, making their editors’ lives a bit easier.

Why didn’t the British obsession with showing alpines cross the Atlantic as thoroughly as the urge to grow these plants outdoors did? Many answers to this question have been proffered by rock gardeners. Some point to the difficulty of transporting plants over the much longer distances between American towns, especially in the Northeast, where road conditions in spring can be perilous.

Others note that British growers usually show plants grown in alpine houses, specialized cool greenhouses that are uncommon in North America. Michael Riley remarks, “Many people [in the US] with greenhouses seem to prefer tropical or subtropical plant material. . . . I think that there is an ‘economical conscience’ in the US that dictates that all temperate plants should be outside in the rock garden and be able to withstand whatever weather is available.” British manuals on alpine house cultivation are not always translatable to American conditions, either. For instance, Michael Peden in northern New York finds that winter’s cold, dry air is a problem: “Pots sitting on a bench, especially clay pots, dry out surprisingly quickly if the house is left open. It’s obvious that watering when the temperature is struggling to hit 10°F is going to be tricky!” He copes

by placing his pots on damp sand and adding a bit of water or snow to dry pots on warmer days.

Many American rock gardeners resist the notion of competing for ribbons and trophies. *Quarterly* editor Jane McGary, who was intensely relieved when she decided to give up showing dogs after 25 years of unpredictable moments of delight, disappointment, and fury (it brings out the worst in some of us), likes to do at least one thing that is not evaluated, or at least not publicly. Quite a few growers of alpiners work in demanding professions such as medicine, engineering, or law and like to relax without pressure when among their plants. As one physician-gardener remarked, "When a plant dies, you can always get another one."

Barbara van Achterberg, who likes competing, writes, "Winning a ribbon and acclaim from the experts is fun." However, she suggests that a show include both competitive and noncompetitive classes "for those who are diffident or those who have more than one entry per class." She mentions the practice of staging "novice classes" for people who have not previously exhibited; presumably the inexpertly groomed plant here will be excused much as incompletely trained novice dogs are. Marcia Brown Meigs, with a nascent interest in exhibiting, expresses the novice's anxieties: "Many of us feel a bit inferior because we don't have very exciting plants (though there is nothing wrong with a rather ordinary species magnificently grown), or we think 'why bother?' because the well-known people are going to walk off with all the prizes, or we worry about having our offerings sneered at." Let's hope NARGS members are more supportive than that! Criticism should be no more open than a faintly appalled glance exchanged between members of the peanut gallery.

Finally, Michael Riley suggests that "competitive judging is more objective because plants are first judged against a perfect representation [of their species], then against the other plants on the table. . . . Aside from [boosting] the ego of the grower, the exhibit provides an objectively evaluated ground for discussion by anyone viewing" the plants, allowing them to compare their results with those of the exhibitors.

Moving from the individual to the group, we find more agreement over the value of plant shows for a NARGS chapter. Most chapters have an informal "show and tell" period at meetings where members present plants brought in for display. The Columbia-Willamette chapter in Portland stages a noncompetitive pot show for one of its early spring meetings; a panel of several expert members discusses the plants that have been brought in, so there is a formal educational aspect to the show. It is also extremely cheerful to see dozens of flowering plants at this season, which in Oregon is usually wet and gloomy.

Chapters that regularly host competitive shows include Connecticut, Delaware Valley, New England, Allegheny, and Hudson Valley. The Vancouver Island Rock and Alpine Garden Society (VIRAGS, not a NARGS affiliate but a frequent host of study weekends) is famous for its shows, which attract both members and the general public. Plant shows are usually a feature of Winter Study Weekends (WSWs) and Annual Meetings. These tend to be competitive shows in the East and noncompetitive in the West.

Among the finest displays are to be seen in British Columbia; the province's insistence on its English heritage apparently extends to the finer points of horticulture. Fred Hook, current show chairman for VIRAGS, reports that the 2-day annual spring show has been held regularly since 1938 around Eastertime. Almost all of the society's approximately 100 members are involved in staging it. "One of the major difficulties," Fred writes, "is maintaining a pool of judges." The committee does not want to exclude people from exhibiting by appointing them judges, so they call on experts from other parts of the Northwest, especially Vancouver. "The job of clerk/recorder, which involved following a judge around the hall and listening to their comments and recording the marks, is the most sought-after each year." (Photos, p. 274.)

Diane Whitehead of Victoria, who has been exhibiting there since she was a child, writes: "We have classes for alpines by genus, by continent of origin, grown from seed by the exhibitor, troughs and associations. There are classes for woodland plants, ferns, terrestrial orchids, cyclamen in flower or in leaf, bulbs, many primula divisions, bonsai, dwarf conifers, rhododendrons, and more. In addition, there are noncompetitive exhibits by individuals, botanic gardens, and specialty clubs." As if this is not enough, both the Victoria and Vancouver clubs have monthly judged pot shows for members. Diane adds, "A few of us have alpine houses, more have coldframes, but a lot of us just dig plants up out of the garden to show. I must admit that it is a lot easier and more exciting to dig up and pot than to replant, and showing has led to the demise of some of my favorites which didn't like being left in a pot over a rainless summer."

More common according to reports from around the country are chapter efforts to bring rock gardening to the public—and recruit more members—by mounting exhibits at various venues, including garden shows, plant sales, and public botanic gardens. For example, Lawrence Thomas of New York City writes: "The Manhattan Chapter participated two years ago in a show hosted by the Indoor Plant Society at Citicorp's Atrium in midtown. We were the only outdoor group included. We put together a one-table exhibit consisting of one hypertufa trough, two pieces of tufa planted with *kabschia* saxes in full bloom, and six choice potted alpines that Bob Bartolomei sent down from the New York Botanic Garden. We simply knocked the public dead over a three-day period—much the most popular exhibit at the show. We faithfully logged all names and addresses, contacted each with one chapter newsletter and an invitation to attend one meeting. The result was about 20 new members, of whom we kept 10 or 12."

Adolf Ceska of Victoria notes that the VIRAGS show "is usually connected with a sale of plants donated by members, and it is the main source of funds for our organization." Barbara van Achterberg says, "The Connecticut Chapter's plants got oohs and aahs at Hartford's Elizabeth Park, where we also passed out membership fliers to interested people." In San Francisco, according to John Tsutakawa, "a small volunteer group with the Strybing Arboretum Society uses miniature display gardens as part of the monthly plant sales. . . . This has attracted a lot of attention to rock gardening in our area. We've used it to

increase our small group." In Victoria, Fred Hook says, "The annual show is our greatest source of new members. . . . Many become long-term enthusiasts and bring others with them."

Chapters are often invited to place displays and membership information at garden shows, and it is undeniable that a display with living plants stops far more people than a few posters, books, and brochures. A word of warning, though: Don't put any plant out at a garden show that you can't stand to see mauled by visitors who can't seem to perceive it without touching it.

Although no one denies the effectiveness of public plant shows in attracting people to rock gardening, some correspondents sounded a pessimistic note. One said "There is not the manpower in this group to stage a show, though all are aware of shows and like to visit the UK and be impressed. We have a wealth of experience, but age catches up with members and it is not fair to ask more of them than attendance." Several pointed to the problem of distance: many NARGS chapters draw their membership from an area a hundred miles square or larger. One might add the unwillingness of working-age people today to devote the entire day such an event demands, when what little leisure time they have is often absorbed by family duties. Lawrence Thomas, however, is optimistic: "I am not aware of any logistical problems that cannot be surmounted with a bit of advance planning."

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

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Above left, *Cyclamen hederifolium* 'Album' with very unusual foliage (p. 245). Above right, A form of *Cyclamen intaminatum* (p. 245) with heavily marbled leaves and pink-flushed flowers. (photos courtesy of Tile Barn Nursery)

Below left, *Cyclamen cilicium* 'Album' (p. 246; photo, John Lonsdale).
Below right, *Cyclamen rohlfsianum* (p. 246; photo courtesy of Tile Barn Nursery).





Above, *Cyclamen graecum*, typical pink form and 'Album' (p. 247).
(photos courtesy of Tile Barn Nursery)

Below, *Cyclamen graecum* subsp. *mindleri*, flowering plant and foliage variation in seedlings at the Royal Horticultural Society, Wisley. (photos, John Lonsdale)





Above left, *Cyclamen libanoticum* (p. 248). Above right, *Cyclamen trochopteranthum* (p. 248).
(photos courtesy of Tile Barn Nursery)

Below left, *Cyclamen coum* 'Nymans' (p. 248) with very dark flowers and pewter leaves;
below right, *Cyclamen coum* 'Tile Barn Elizabeth' with bicolored flowers (p. 248).
(photos courtesy of Tile Barn Nursery)





Above left, *Cyclamen coum* 'Golan Heights' (p. 248).

Above right, *Cyclamen coum* subsp. *elegans* (p. 248). (photos, John Lonsdale)

Below left, *Cyclamen coum* 'Album' (p. 248; photo courtesy of Tile Barn Nursery).

Below right, *Cyclamen pseudibericum* (p. 248; photo, Jay Lunn).





Above left, *Cyclamen repandum* subsp. *rhodense* near Siana, on Mt. Akramytis, Rhodes (p. 249; photo courtesy of Tile Barn Nursery). Above right, *Cyclamen graecum* in the wild on Crete (photo, John Lonsdale).

A colony of *Cyclamen coum* in the garden at Tile Barn Nursery in England, typical of the variation that results when cyclamen self-sow over the years.





Robin Magowan's sand garden (p. 257) in the foreground of a small spring meadow.
(photos, Juliet Mattila)

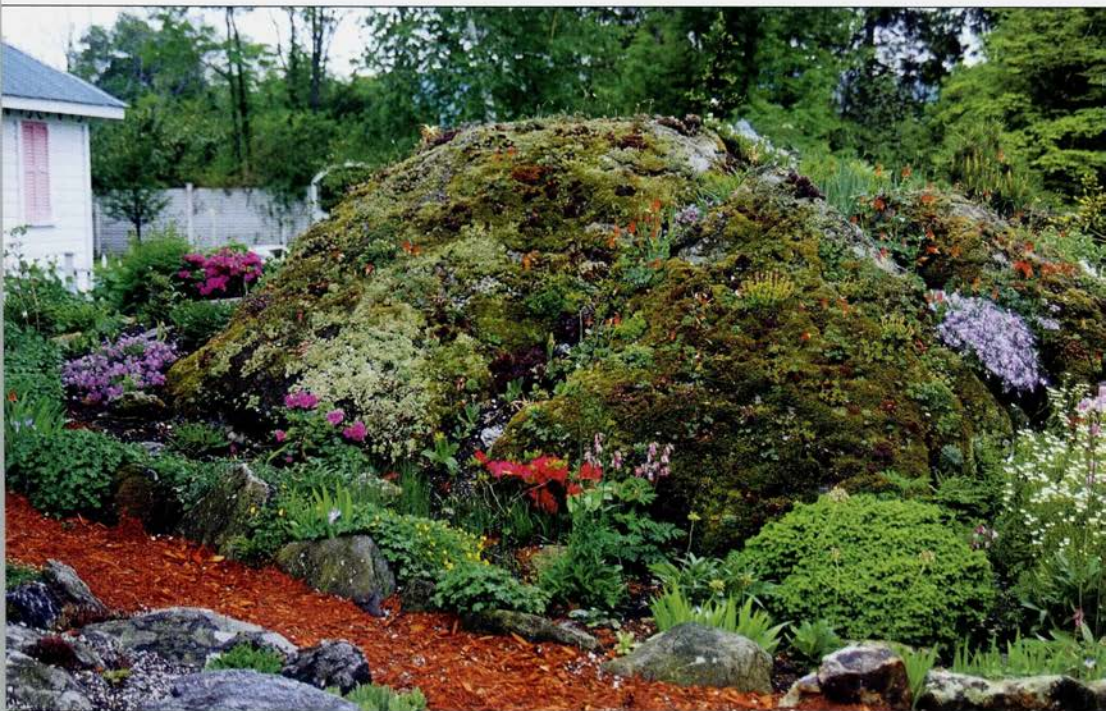
An ascending scree leading to the natural outcrop on which
the Magowan rock garden is based (p. 257).





Scree with boulders in the Magowan garden (p. 256). (photos, Juliet Mattila)

The shaded side of the natural outcrop in the Magowan garden, with woodland plants (p. 257).





This display by the Delaware Valley Chapter at the Philadelphia Flower Show incorporated dwarf conifers and a “tabletop” scree against a painted alpine backdrop (p. 260). (photo courtesy of Philadelphia Flower Show)



A tabletop rock garden designed by Rex Murfitt for the Delaware Valley Chapter's display at the Philadelphia Flower Show in 1974 (p. 260). (photos courtesy of Philadelphia Flower Show)

The Delaware Valley Chapter's prize-winning display in 2000 featured troughs and architectural elements.





A show staged by the Vancouver Island Rock and Alpine Garden Society (VIRAGS; see p. 263). Clearly visible labels, standard for all entries, aid the viewer. (photos, Jennifer Lort)

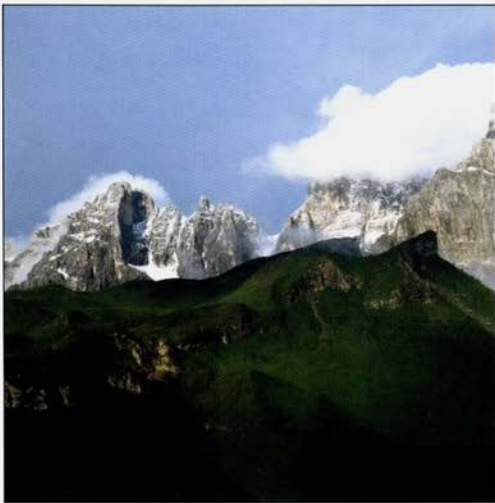
A class for woodland plants at a VIRAGS show. Large clumps of trilliums may be lifted from the garden in early spring and potted for display.





A fine collection of New Zealand alpinines in the Edinburgh Botanic Garden, Scotland (p. 283).
(photos, David Hale)

Left, Cimon della Pala in the Dolomites (p. 284), photographed from the author's hotel
near the Rolle Pass. Right, *Papaver rhaeticum* on Gardena Pass in the Dolomites.





Soldanella pusilla (p. 284) on Pordoi Pass in the Dolomites. (photo, Floyd McMullen)

Primula glutinosa (p. 284) on Rolle Pass in the Dolomites. (photo, David Hale)





Phyteuma hemisphaericum near Nuria, Spain (p. 284); this species is easily grown in rock gardens. (photos, David Hale)

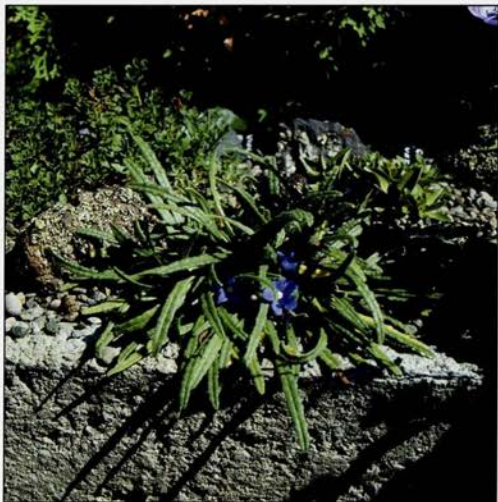
View of Nuria from Pic de l'Agila; plant hunters enjoy the roads and trails radiating from the hotels in the valley.





Pancratium maritimum, the Sea Daffodil, growing on the beach in Crete. (photos, David Hale)

Left, the Cretan endemic *Anchusa caespitosa* (p. 285) flowering in a trough in the Hale garden.
Right, *Ranunculus seguieri* (p. 284) on the Sella Pass in the Dolomites.





Digitalis obscura, a shrubby perennial foxglove from Spain (p. 287): above, a vigorous specimen in the Sebring Rock Garden, Eugene, Oregon; below, in the author's garden, combined with another Mediterranean dwarf shrub, \times *Halimocistus wintonensis*. (photos, Loren Russell)





Norman Singer, late President Emeritus of the North American Rock Garden Society. A memorial essay appears on p. 296. (photo, Andrew Osyany)

Starting Out in Europe— On Your Own

David Hale

When the typical North American decides to travel in the United States or Canada, he or she buys an air ticket and arranges a car rental at the destination. When we fly to Europe, however, we tend to be intimidated by the idea of automobile travel and, instead, go by train or arrange a travel package. Even easier, we might join a guided tour sponsored by the Alpine Garden Society or one of a number of “flower holiday” specialist agencies. These choices are good ones, but they limit the traveler’s mobility greatly, and they cost much more than it is really necessary to spend.

The first obstacle to get over is the fear of foreign driving. Road signs have long been posted in the international format more recently introduced in the US. Driving styles vary from country to country, but not much more than they vary from city to city within North America. (Okay, okay—they vary a lot in Italy!) You can have your travel agent arrange both a flight and a car rental. Be sure that the travel agent uses brokers or consolidators, because these provide the lowest fares; this tends to lower the agent’s commission, however. If you are thinking of making your own travel arrangements via the Internet, remember that travel agents have computers too, so they can usually get fares just as cheaply as you can using your home computer, unless you are willing to take a last-minute, especially discounted fare. You should use your computer, however, to check that your agent is getting you a good fare. We always reserve a 4-door car that is one step up from the cheapest category. This gives us a lot more room and, usually, a somewhat more powerful engine for those mountain roads.

You will need good maps of the area you plan to visit. These are usually available at local bookstores, especially at chains like Barnes & Noble or Borders. We almost always use Lonely Planet guidebooks, since we’ve found that their details are usually accurate and not exaggerated. They give many options for lodging, so as you are approaching your destination, the “navigator” can select a hotel before arrival. This avoids a lot of last-minute searching of an unfamiliar town for a good room.

I have to mention the international youth hostels. Our first reaction to the idea of staying in hostels was negative; we remember the hostels of the 1970s,

which were indeed hostile! Now, however, they are clearly appealing to older folks: the facilities are clean and well run; the staff are always friendly and helpful; and rarely are many children present. You can ask for a “family room” if there are two or more in your party, and this gives you a private room. There are hostels in all major US cities, and there you can get a guidebook that lists all the hostels and what services they offer. Older adults are permitted to stay at “youth” hostels in almost all countries. If you browse the hostel book for Europe, you will find that a high proportion of the lodgings are in historic buildings of considerable interest. We have often stayed in castles and been the only guests there—and at \$11 to \$12 per person, including a nice breakfast, that is very reasonable!

Language can be a concern, but most Europeans speak enough English to answer the necessary questions. English use becomes a little spotty as you move south, but even there, hoteliers usually can give directions.

Choosing travel times is important. It is all too common to read in an article in one of our rock garden journals that travelers—for example, to the Alps of Europe—arrived too early to see the true alpine plants. Some compromise is necessary. If you want to see the alpiners at their peak, you must miss a bit of the earlier flowering at lower elevations. The first half of July is a good time for the alpiners, and there still is a great show in the meadows below.

Schools in the UK and Europe proper spread their vacations more widely than those in North America, so winter and spring breaks tend to be longer, and schools are usually in session until mid-July. As a result, finding accommodation is usually not a problem. Rarely have we had to go on to our second-choice hotel. Anxiety about a place to stay preoccupies many travelers, but I assure you that you will be amazed that there are not more other travelers at your destination, whether in the mountains or a city. For greater mobility, it is essential not to rely on prearranged reservations. However, if you know for sure where you want to be tomorrow and have selected a hotel there, almost any hotelier will call ahead for you at no cost. Even the hostels will fax any other hostel for reservations.

I highly recommend taking only carry-on luggage. This makes it much easier to make connections when flights are not on time. Your luggage never gets lost this way, and ultimately, you will not need most of the things that people bring. Your plant-hunting partners are not going to be impressed by a lavish wardrobe, and the people in the places you pass through won't know that you don't have twelve changes of underwear. A bit of hand laundering in the evening is the solution: take powdered detergent (bar soap doesn't work), wring out the clothes well, and then stomp them rolled in your towel. Yes, you'll have to try to dry yourself on a wet towel, but the clothes are almost always dry the next morning. If you absolutely can't fit everything in one bag, add a small backpack. You can use it on day hikes, and it is rarely noticed when airline agents are trying to reduce carry-ons on a crowded flight.

Many years ago, Lionel Bacon wrote *Mountain Flower Holidays in Europe* for the AGS. If you can buy or borrow a copy, it will be invaluable for you. Very concise, it will lead you to many beautiful sites and, for the most part, give the highlights you will see. You can also search through past rock garden journals, using

the annual or longer indexes. This is time-consuming but very helpful: the articles often outline entire wildflower walks, including plant lists. A few years ago, I told a group of plant-lovers the name of an adventure travel agency that can get you to almost any site on the globe, but the agent got only one inquiry—and that was to find out if he could identify the plants! For my wife and me, the most important thing is to get to the mountains and see the flowers; we will worry about the names when we get there. Nevertheless, we do go armed with as much information about the plants as we can find.

Now let's proceed to some specific suggestions for your initial venture into self-guided botanical travel abroad. We'll start out in the British Isles. In the US, you can join the Royal Oak Society, a counterpart of Britain's National Trust. This will get you in free or at a good discount to all the vast number of National Trust estates and gardens throughout the UK, including many wonderful historical sites not related to gardening.

There are wonderful atlases that show every road in England and Scotland, so you need only follow the lines connecting gardens to picturesque towns. Atlases, especially the compact spiral-bound type, are helpful to the navigator, since they are easier to use in the car than a big map—or a bedsheet, as we call them—which is difficult to refold and can block the driver's vision. The National Trust provides a thorough book listing its sites, their features, and (very important) their open hours. The hours vary widely; some isolated estates are only open two or three days a week, and for only a few hours at a time. For our specialized interest, the Alpine Garden Society (AGS) publishes a list of members' gardens that are open to visitors. This is a chance to visit friends you have made over the years at meetings or by correspondence.

Though not as economical as hostels, bed-and-breakfast places are a good type of lodging in the UK. Driving on the left side of the road is not as difficult as you might imagine. Most people adapt quite quickly. Confusing the turn signals with the windshield wiper lever is my biggest problem; even after a month's travel in England, I still turn on the windshield wipers to go around a corner!

I prefer to visit the UK in May. This is the peak time for *Meconopsis* bloom, as well as for the majority of rock garden plants. One of the few disappointments is that the public gardens (with the exception of the great botanic gardens) rarely include rock gardens because they require so much maintenance, but the other plants more than make up for this.

If we could go to only one place in Europe to visit and see mountain flowers, we would choose the Dolomites, the range of the Alps in northeastern Italy between the Adige and Piave valleys. A five-star location, this region is also perhaps the cleanest, tidiest place in the world. Here in southern Europe, it rains sometimes during the growing season, so bring a good book and be prepared to take a day off to read and do laundry. Munich is a good place to fly in, rent a car, and head for the Dolomites. You will cross other ranges of the Alps on the way, seeing some good plants and great scenery.

Once you are in the Dolomites, it is convenient to stay at one of the high passes. Pordoi Pass is our favorite. At 7200 feet (2200 meters), you are already

among the alpine. Behind one of its three or four hotels begins the Bendel Weg, a trail which rises about 100 vertical feet and then contours for several miles without any significant elevation change, passing through zones of acid and limestone soils. The array of alpine along this wonderful trail includes *Eritrichium nanum*, several *Primula* species, and masses of *Soldanella pusilla*, which for us is difficult in the garden. The sight of *Eritrichium* growing within a few feet of large patches of *Androsace alpina* is still fresh in my mind—and you can see this on a morning stroll. (Photos, pp. 275–276.)

A circular drive that can take a day will bring you to stops at several high passes. From Pordoi Pass you proceed through Arabba to Corvara, Gardena Pass, Sella Pass, and back to Pordoi. This route includes three high passes besides Pordoi, and each one has its unique plants. There are also trails that start from the passes. Sella Pass has a fine trail; only a few feet up it is the finest European alpine buttercup, *Ranunculus seguieri*. *Campanula morettiana* is also nearby, but it flowers later in the season.

Another fine site is Rolle Pass, a little to the south at 6600 feet (2000 meters). There are several good hikes from here which have been written up in rock garden journals; you can also inquire locally about them. Some are strenuous, while others are gentle walks. Several primulas and the occasional hybrid occur here, such as *P. glutinosa* and *P. tyrolensis*.

We like to leave a few days free at the end of this trip to sightsee. The Romantic Road, which links a series of picturesque Bavarian towns from Würzburg to Füssen, is not too distant. To make sure we connect with our flight home, we can spend our last day visiting the Munich botanic garden at Nymphenburg, which has a splendid rock garden.

The Pyrenees, and Spain in general, are also among our favorite places. From Madrid or Barcelona, it is a quick drive into the Pyrenees. From Barcelona to the eastern Pyrenees is a one-day drive, and Nuria is a popular destination for alpine flower hunters. On the mountainside there are a good hotel and an excellent hostel. You must leave your car below and take a cog railway to the mountains. From the door of your lodging, there are several walking routes in the surrounding mountains. You will find acres of *Gentiana alpina* and a couple of primulas, and many near-tame chamois will pose for your photos. It was here that I learned to cover my morning toast with garlic by “sandpapering” a half-clove of garlic over it, it as the Catalunyan do. (Photos, pp. 276–277.)

You can continue along the Pyrenees, criss-crossing them from time to time from France to Spain as you go east or west. There are many passes, all quite interesting, and many hiking trails into the higher mountains. In Spain proper, all you need to do is find a road that passes through a mountain range, get a room in a little mountain town (with a balcony, of course), and explore the local slopes.

Greece is a unique experience, and again, I can't imagine going there only for the plants. You have to make a decision as to timing. The bulbs flower both early and late, with the alpine in between. The sightseeing is unlimited by season, of course. Often it is advantageous to fly within Greece on Olympic Airlines instead

of taking ferries. The cost is similar, but you usually save a day in travel time, and you will have plenty of opportunities to ride on boats.

If you fly to Crete and pick up a rental car, it is easy to see the sights over much of the island in a week or two. Our favorite town (near Panayoti Kelaidis's family's home town) is Hania, a fourteenth-century Venetian port near the north-western end of Crete. For a very reasonable cost, you can stay in one of the old hotels overlooking the water, with restaurants below. From here, you can drive right up into the White Mountains and back in one day, with plenty of time to walk around. *Anchusa caespitosa* is a famous endemic of this region. (Photos, p. 278.)

Some of the Greek islands must be visited just for the pleasure of sightseeing. Santorini is a jewel and can be reached easily in a few hours by ferry from Crete. You can fly back to Athens directly from Santorini, or you can island-hop all the way back; just pick up a plant journal index and find islands you want to visit.

Once you have ventured into this kind of travel, you will become addicted to it. One of our biggest problems is deciding whether we want to visit a new place or return to one of our favorites. We like to say that one-third of the enjoyment of a trip happens before we leave, during the planning stage; you have to get together with your travel companions and hash out your plans over dinner and wine. One-third of the fun is during the trip, and one-third afterward, when the slides are shown and the lies told. And while we are traveling, a large component of the fun is in getting from one place to the next. Say you're on your way the Dolomites; it's 10:30 in the morning, and the driver is getting sleepy; you pass through a wonderful mountain village with an open-air plaza and an outdoor café, where all you have to do is pull to the side of the road and have a coffee in one of the most beautiful towns you have ever seen. Another part of the enjoyment is seeing sights of historical interest or natural beauty, staying in ancient mountain towns, and dining in their restaurants. After many stays in ancient little mountain hotels with balconies overlooking peaks and valleys, we had to have a balcony of our own; this was difficult, because we had to add another level to our house on the Oregon coast to attach the balcony! And finally, of course, there is the pleasure of seeing the flowers of the mountains.

Plant Portraits

Crocus medius

By MIKE CHELEDNIK, Greenville, North Carolina

I think of fall the way most gardeners think of spring—as a time of renewal and growth. In the South, we have arguably the nicest weather during the months of September, October, and November. Gone is the season of high humidity, hot nights, and afternoon thunderstorms; instead, we are treated to numerous days of what I term “Colorado weather”—stretches of cloudless, mild days with low humidity. The white and rose-pink blooms of *Cyclamen hederifolium* dot the shadier parts of the woodland, and plants such as *Arum italicum* and *Clematis cirrhosa* refohate, seemingly in defiance of the coming cold. Just about the time of the first killing frost in my garden—usually the week before Thanksgiving—one of my favorite fall-blooming plants begins to put on a show: the lovely *Crocus medius*.

There are numerous species of autumnal crocus, but to my eyes none is more comely than *Crocus medius*. It is native to the hills above the Mediterranean Sea in northwestern Italy and extreme southeastern France. The specific epithet, meaning “in between in size or shape,” refers to its taxonomic status at the time of Linnaeus, when it was thought to share close affinities with *Crocus sativus* (saffron) and *C. vernus* (ancestor of the Dutch crocuses of gardens). Now that many more species have been identified, it is known that this species is most closely related to *C. nudiflorus*, *C. serotinus*, and *C. longiflorus*, all of which flower in fall.

Blooming for me from mid-November through mid-December in most years, this species measures about 4 inches (10 cm) tall in bloom. The cup-shaped flowers are flashy indeed: rich mauve with a darker “star” of lines radiating from the throat. The blooms are further enhanced by the finely divided, bright orange-red stigmas. The cultivar ‘Millesimo’ is a little richer in color and increases a bit faster, but it is quite similar to the typical commercial clone.

Crocus medius blooms without its foliage, which comes up much later, well into the new year. I grow mine through a mat of the gray-leaved Texas creeper,

Stemodia tomentosa, which sets off the blooms of the crocus to perfection. The plant needs sun, and a well-drained sandy soil is generally advised, although I've seen plants growing in clay; a slightly alkaline pH is also recommended, but it seems not to be necessary.

Bulbs are fairly easy to procure, available from such high-end commercial sources as McClure & Zimmerman and The Daffodil Mart. I've had plants in my garden for five or six years. Although they are not the most vigorous of the autumnal crocuses (the distinction of which would go to the nearly weedy *C. speciosus*), my plants have increased, some vegetatively, in the years I've had them. At least, they have held their own, which is all I feel is needed of most bulbs in the garden. This spring they even produced a few seed capsules.

Digitalis obscura

By LOREN RUSSELL, Corvallis, Oregon

Each year at seed exchange time, I skim through floras to compile a list of "alternates": generally species new for me, common enough that I'm sure to get them if the rarities I order as first choices are exhausted, and likely to germinate. This is a sure strategy for acquiring ugly weeds, but it also has given me some of my handsomest and best-adapted garden plants. Perhaps my favorite among the second choices in my garden is *Digitalis obscura*.

The description of *D. obscura* in Oleg Polunin and B. E. Smythies' *Flowers of South-West Europe* sounded tempting: "A very attractive shrubby plant with long, narrow, curved leathery leaves, and lax one-sided spikes of rusty-brown to orange-yellow flowers." This native of southern and eastern Spain easily made my list of alternate choices. A shrubby foxglove might be nice, I didn't know much about it, and any foxglove was likely to be available at the end of the exchange and to germinate like cress.

I received seed from two 1996–1997 exchanges, and both lots germinated freely. However, one lot produced only a fuzzy-leaved, herbaceous impostor (probably *D. parviflora*), and of a hundred or more crowded seedlings from the second, only about a dozen had the narrow, leathery leaves described for *D. obscura*. I planted these seedlings in my dry-wall garden and sand bed and donated three to the original planting at the NARGS-funded Sebring Rock Garden in Eugene, Oregon. All were in bloom for the NARGS annual meeting in 1998, when they attracted considerable attention. The shrubby habit, narrow glossy leaves, and reddish flowers caused most visitors to mistake this foxglove for a penstemon.

After five years, *D. obscura* has proven one of the best performers for a large rock garden in western Oregon. The plant illustrated (p. 279) is one of the original plants at the Sebring Rock Garden. It has reached a spread of about 80 cm (32 inches) and produces as many as a hundred 50-cm (20-inch) flowering stems over a very long season that peaks for at least six weeks in June and July, with

rebloom in late summer and autumn. When deadheaded, a multistemmed *D. obscura* is a striking evergreen shrub in the winter garden.

Last year I joined the Alpine Garden Society's tour of Andalusia and met *D. obscura* in its homeland, the Serrania de Ronda and both flanks of the Sierra Nevada. This thrilled me, as it does every time I see a beloved plant in the wild, but I found that I was not the first to admire the shrubby foxglove. During the AGS trip, I read this description in Dwight Ripley's classic article, "A Journey through Spain" (*AGS Bulletin*, 1939): "*Digitalis obscura*, one of the most welcome and typical of all Spain's mountain plants . . . a sub-shrub with shining leathery leaves and foxgloves of ardent orange. I am quite shamelessly devoted to this plant, so essentially Spanish . . . in the fiery coloring of its flowers and in its general air of passions fed by grandeur." Purple prose aside, this is a grand plant, and one that has had more than a few lovers; it deserves to have many more.

Digitalis obscura is at its best in sunny rock gardens in the warmer parts of the maritime Pacific Northwest (USDA Zones 7 and 8); the climate here is very similar to that of inland Spain. Like most foxgloves, it does well in poor, dry soil. Limited self-seeding occurs in my sand garden, but I'd appreciate more volunteers. It is hardy to at least -12°C (10°F), though foliar damage occurs at -10°C (14°F), especially where plants are exposed to wind. Older plants are subject to fungal dieback in late winter and after blooming; this is likely the same disease that afflicts shrubby penstemons. (Reportedly, the penstemon fungus can be controlled with systemic fungicides formulated for roses, and this might be tried for *D. obscura* as well.) This Spanish foxglove can also be grown in milder area in the eastern US; I saw a fine specimen in Nick Nickou's garden in Branford, Connecticut. One-year-old plants are sturdy and bloom well, so this species is well worth trying as a short-lived perennial for sheltered spots in Zone 6 gardens.

Books

Stone in the Garden

A Review Article

CARLO A. BALISTRIERI, Oconomowoc, Wisconsin

Stonework Techniques and Projects, by Charles McRaven. Pawal, Vt.: Storey Books, 1997. ISBN 0-88266-976-1, paperback \$18.95.

The Art and Craft of Stonescaping: Setting and Stacking Stone, by David Reed. Asheville, N.C.: Lark Books, 1998. ISBN 1-57990-018-6, pb \$27.50.

Natural Stonescapes: The Art and Craft of Stone Placement, by Richard L. Dubé and Frederick C. Campbell. Pawal, Vt.: Storey Books, 1999. ISBN 1-58017-092-7, pb \$24.95.

Stonescaping: A Guide to Using Stone in Your Garden, by Jan Kowalczewski Whitner. Pawal, Vt.: Storey Books, 1992. ISBN 0-88266-755-6, pb \$18.95.

Stone, Rock and Gravel: Natural Features for Modern Gardens, by Kathryn Bradley-Hole. London: Cassell, 2001. ISBN 1-84188-118-X, pb \$19.95.

The immutable nature of stone is seldom called into question. This most enduring element of our gardens is the embodiment of stability, permanence, and ageless grace. No other elements can provide this character. Water, quite the opposite, is in constant motion even when we suppose it to be still. Plants grow, flower, and die or step backstage until the next curtain opens on spring. Almost alone among the elements composing a garden, stone will outlast even the gardener.

Stone's importance to the design of a natural garden can hardly be overstated. Virtually any garden of significance, regardless of size, contains features built of rock. Take a glance at your favorite garden photographs from any publication,

and chances are that stone, mute and enduring, is featured in the composition or frames it, despite the absence of any reference to it in the captions.

Despite its significance and lasting presence in the garden, little attention has been paid to stone. Books and magazines have perfunctory paragraphs, or occasionally a short chapter, on the construction of rock gardens. Gardeners typically rush through the building stage to get on with the more artsy, romantic chore of placing and planting the living jewels that will be the centerpiece of the garden.

Working and gardening with stone can be every bit as addictive as playing with plants, but it's easy to bruise, sprain, or otherwise maim yourself messing about with boulders. A quick look for recent books about stone in the garden revealed five, four of them published within the past five years. All are similar in many respects—for instance, discussing the different types of stone, how to choose among them, and how to safely move and work with rock. All, however, take slightly different approaches, some more suited to gardeners than others. The common message: using stone in the garden and landscape is an essential part of good design.

The first book will be a quick read if your sole interest is alpine gardening. Charles McRaven's *Stonework Techniques and Projects* is primarily about building walls, entryways, steps, bridges, waterfalls, seats, and other outdoor (and indoor) projects with stone. Although McRaven includes a section on landscaping with stone, the primary thrust of the book is building structures and appurtenances. Nonetheless, a rock gardener can glean precious tidbits of information that can be used as rules for working with rock. Stone should be used as if it were there first: "No stone should be put anywhere that it won't stay by itself." The author urges patience when working with stone, saying, "Stones are accustomed to waiting." Stone, McRaven notes, becomes the focal point wherever it is used. "Every stone will fit somewhere, but not necessarily where and when you want it." Once in place, he says, it just *belongs*.

David Reed, in *The Art and Craft of Stonescaping*, tackles the art of dry-stacking and dry-laying stone (building without mortar). Like McRaven, his scope extends a bit beyond the garden. Well put together and beautifully photographed, this book presents numerous ideas of benefit to a landscape, all contributing in an indirect way to the effectiveness of a garden. There is an excellent section on retaining walls, and a chapter on plants and stone that provides solid but unremarkable advice on working with the two together. Reed contrasts the lush, informal look of heavy planting with the sparser, more formal look of accentuating the stone rather than the plant growth. He apparently doesn't garden much with rock plants. He advises placing 3 gallons of prepared soil behind each plant put in a wall—and includes water-absorbing crystals in the mix. In some places with certain plants (why not plant them in a spot with less drainage and use the right plants for the wall?), this might work, but the irony of creating perfect drainage by building a wall and backfilling, and then ruining it with water-absorbing crystals, won't escape any rock gardener. As with every book you read, accept from it what works for you and take the rest with a pinch of gravel.

Despite the utility of the two books just mentioned, the final three contain the real meat for gardeners interested in the use of stone. The primary topic of *Natural Stonescapes: The Art and Craft of Stone Placement* can be lifted right from its title. No book I've seen addresses the issue of stone placement in such detail. Authors Dubé and Campbell make a fine art of it, and design considerations are paramount. Unfortunately, there is not much advice on planting, and some of the plantings illustrated are awful. Interestingly, rock gardens and alpine plants are not even mentioned. Instead, stone is again viewed in its role as an "exclamation point" in the landscape.

Despite these limitations, *Natural Stonescapes* contains a wealth of information that is easily transferable from the design of landscape features to the construction of a rock garden. The authors refer to stone as "the voice of the designer," speaking to viewers about the garden, its layout, boundaries, purpose, and inspiration. They reinforce the importance of having the stone features work effectively with the plantings. There is an outstanding and extensive discussion of design principles. One small example: use larger and darker stones near the bottom and smaller and lighter ones near the top, to create lines of force that lead the eye upward. I also appreciated the material on humans' fascination with stone and its role in the landscape. This book and the following two contain intriguing sections on the history of our use of stone in the garden.

The final two books will be of greatest interest to rock gardeners. Both state the obvious but usually unspoken premise that stone cradles the soil (which it ultimately becomes), the water, and the plants that form the environment around us, and it provides plants with all their mineral needs. They also brave short treatments of the rock cycle, a reminder that, despite its immutable appearance, rock is not as unchanging as we imagine.

Stonescaping: A Guide to Using Stone in Your Garden, by Jan Kowalczewski Whitner, acknowledges stone's similar role in gardens: it's there whether you realize it or not, holding the soil in place and supporting it in the form of bedrock, and feeding our plants as it breaks down into its constituent parts, never far below the surface. Whitner captures her reader's attention at the outset with a fascinating survey of the history of stone in gardens. She has the most readable, enjoyable style of any of the authors reviewed here. The book is full of tips for all manner of stone constructions, including such novel (but controversial) ones as building reinforced shelters for small animals into rock features to prevent them from doing their own digging and undermining of your work.

Other useful features include an instructive visual catalogue of techniques for moving stone by hand, and a chapter on rock gardens (formal and informal) with useful advice on different types of rock gardens. Whitner addresses the use of hypertufa, but readers interested in the topic are better served by NARGS materials and the recent book on trough gardening by Joyce Fingerut and Rex Murfitt offered through the NARGS Book Service.

The newest entrant into this field is Kathryn Bradley-Hole's *Stone, Rock and Gravel: Natural Features for Modern Gardens*, which differs in several respects from its fellows. It is the most visually arresting of the lot, with many color photo-

graphs and drawings. Though it isn't a "rock-gardening" book, it pays far more attention to the "countless plants that thrive among [rocks]," it has planting ideas throughout, and it contains a plant directory at the end, not restricted to rock garden plants but with a "broad-brush selection of the best or most rewarding plants" for each of its several categories—a skimpy but interesting group.

Like Whitner, Bradley-Hole spends some time, and profitably so, on the history of human attraction to stone. Although only a couple of pages long, the section on the history of early Western rock gardens was of particular interest, with information I haven't encountered before. She weaves an interesting discussion of the major types of stony habitats and their climates with a list of representative wildflowers for each. Along with rock, scree, gravel, dry river, and herb gardens, the book covers rock walls, raised beds and potted gardens, and rock features.

Much of Bradley-Hole's advice is solid: check rock for compatibility with prevailing soil conditions then choose plants to match acidity or alkalinity; don't rush through the rockwork to get to the planting, but force yourself to take breaks; pay attention to rock plants' sometimes marked love or hate for lime. Some of her suggestions, however, aren't so useful: she recycles the standard but now widely rejected advice about crocking for drainage, and she restricts the use of variegated plants to 4% of the material (where did that number come from?).

An extensive chapter on maintenance provides a useful season-by-season aide-mémoire or guide, packed with advice and tips for the chores that need to be done throughout the year. It is constructed to be useful regardless of the hemisphere or region you garden in. Each season is broken into early, mid, and late time periods and is associated with a list of plants that are "looking good" at each time of year—a definite help in creating and maintaining year-round interest in the garden.

Long ago, I was told that in the area of continuing education, the student should know 85% to 95% of what will be presented; it is the remaining 5% to 15% that make a seminar or class worthwhile. If that advice is taken to heart, all these books, particularly those by Whitner and Bradley-Hole, are worthwhile additions to a rock gardener's library. For those unaccustomed to working with stone, they are an indispensable introduction to a fascinating and satisfying art form.

The Himalayan Garden: Growing Plants from the Roof of the World, by Jim Jermyn. Portland: Timber Press, 2001. 320 pp., 128 color photographs, 3 line drawings, 2 maps. ISBN 0-88192-500-4. Hardcover, \$34.95 (discount available through NARGS Book Service).

Reviewed by GERALD TAAFFE, Ottawa, Ontario

Jim Jermyn's new book should be of immediate practical use to rock gardeners just about everywhere. Even in my Zone 4 garden in Ottawa, Canada, a great

many plants from the Himalaya grow well in a climate that should be too cold for them in winter and too hot and dry in summer. Along with *Primula reidii*, the blue poppies (*Meconopsis* spp.), and other plants that I've had to coax along, I've grown many easygoing Himalayan natives, from freely self-sowing primulas of the Sikkimensis and Proliferae sections to gently spreading *Androsace lanuginosa* and rampageous *Euphorbia griffithii*.

Jermyn's book is proving to be a useful complement to my well-thumbed copy of Oleg Polunin and Adam Stainton's *Flowers of the Himalaya*. The latter, with its copious illustrations and encyclopedic inclusiveness, continues to get first call as a guide through seed or plant lists. (A reprint edition, unfortunately with inferior color reproduction, is now available through the Alpine Garden Society's book service.) Without it, I'd be at a loss to know what to expect from, for example, some healthy seedlings I have here of the pretty peashrub *Piptanthus nepalensis*. However, it provides only the roughest of guides to cultivation, and it doesn't include many recently discovered or rediscovered plants, particularly among the more desirable genera, notably the *Primula*, *Gentiana*, and *Meconopsis*. This is where *The Himalayan Garden* steps in to fill the gap.

The photographs are reason enough to acquire and treasure this book. It opens with three magnificent two-page color spreads. There is a vertiginous mountainscape, followed by meadows with *Meconopsis napaulensis*, first in rosette form and then in glorious full bloom. These and a great many other on-site photos from the Himalaya are by the renowned German horticulturalist Dieter Schacht, who also contributed shots from the Schachen Garden in southern Germany. Other Himalayan photographs are by the late George Smith, including one of tubby flowers of the miraculously beautiful *Gentiana urnula* rising directly from high-altitude scree (for another photo of this species, see the summer 2001 issue of the *Rock Garden Quarterly*).

Although Jim Jermyn has not been to the Himalaya, his photographs of plants at his UK nursery bear witness to his expertise in the region's flora. His picture of the much coveted but seldom seen *Gentiana laurencei* var. *farreri* is one of many in this book that made me breathe a little differently, as though I'd had an infusion of extra oxygen. It is a sensation that can occur on those rare enough occasions when a garden, my own or another, is seen at just the right time in just the right light.

The text begins with brief sections on the ecological divisions of the Himalaya and the history of plant hunting in the region, with an emphasis on information that will help in growing the choicest native plants. Next come lengthy essays on how to grow plants native to each of the three ecological zones of interest to most gardeners. The section about the relatively low-lying temperate zone (6600–8500 feet/2000–2600 m), for example, begins with detailed instructions for building woodland and peat gardens. There follow descriptions of suitable plants, bulbous outsiders as well as natives of the zone, along with instructions on their cultivation. The plants grow ever more refined as the text moves on to the subalpine zone (8,500–14,000 feet/2600–4300 m), beginning with instructions for creating a raised bed or rock garden. A peak in more ways than one is

reached in the essay on the alpine zone (13,000–18,000 feet/4000–5500 m), which includes information on plants that, as the author puts it, “will only be available with diligent search through specialist nursery catalogues and annually produced seed lists.” The final two chapters come down from the mountain-tops to deal with propagation and with pests and diseases.

An outstanding feature of the book is the detailed treatment, in text and photograph, of the choicest of the choice. There are more than 25 taxa of *Meconopsis* covered, twice as many gentians, and about a hundred primulas. As the plants become rarer and more exquisite, Jermyn’s prose becomes livelier and the photographs more tantalizing. A brilliant section on the primulas of the Soldanelloides section can be taken as an example. It includes superb, close to full-page photographs of *P. wigramiana*, *P. wollastonii*, and *P. klattii*, and some of the liveliest prose in the book. Jermyn invites readers to brace themselves for the introduction of these and other Himalayan species into horticulture, noting that the event “will certainly deserve a Handelian fanfare.”

To quibble a little, I found the quality of the writing uneven. Certainly the book takes an honored place as a reference work, and I expect to dip into it frequently to look at photographs or track down information about specific plants. The cultural advice may apply most directly to growers in Britain and similar climates, but it always answers the questions I need to ask for my much more severe climate. What I don’t expect to do is to read it again from cover to cover. I found the longer, general “how-to” sections disappointing, either inapplicable to North American conditions or done better elsewhere. On the other hand, it’s unfair to expect the author to be a Geoffrey Charlesworth or Christopher Lloyd, to name two garden writers whose every sentence is a delight.

Bulbs for Warm Climates, by Thad M. Howard. Austin: University of Texas Press, 2001. 276 pp., 179 color photographs. Hardcover, \$60, ISBN 0-292-73125-6; paperback, \$29.95, ISBN 0-292-73126-4. (Available through the NARGS Book Service.)

Reviewed by BOBBY WARD, Raleigh, North Carolina

For several decades, Thad Howard has been a stalwart member of the International Bulb Society, where he has offered professional articles and presentations on collecting, cultivating, hybridizing, and growing bulbous plants. His travels in Texas, Mexico, Guatemala, Brazil, and Argentina have resulted in the discovery of at least 35 new species. Many have been named by him and others have been named in his honor, such as *Polianthes howardii*, *Habranthus howardii*, *Allium howardii*, and *Hymenocallis howardii*. The most recent issue of *Herbertia*, the botanical journal of the IBS, continues to record the ongoing fruits of his botanical labors. In it he details the discovery of three new species of *Milla* (Mexican star), and an article by a different author describes a newly discovered Aztec lily, *Sprekelia howardii*, collected by Howard in Oaxaca, Mexico. The IBS honored Howard in

1970 with the Herbert Medal, its highest award, for his contributions to advancing the knowledge of bulbous plants.

Howard, retired from veterinary practice and now living near San Antonio, Texas, has compiled his extensive knowledge on monocotyledonous geophytes in the much-anticipated volume *Bulbs for Warm Climate*, the documentation and culmination of a 45-year interest in plants by one of the most prolific bulb and seed hunters of the twentieth century. The book is touted as a guide to bulb-growing throughout USDA zones 8 and 9, and it concentrates heavily on the growing conditions that Howard knows best: the alkaline soils, summer rainfall, and hot weather of central and southern Texas, an area that receives some frost each year. Many of the plants he describes easily grow in USDA Zone 7 in the US upper South; however, the conditions of the North American West Coast region may not be congenial to some of the zone 8 bulbs that Howard grows.

The book is an alphabetical list by plant family, from Agavaceae (agaves and yuccas) to Zingiberaceae (*Hedychium* and other ginger). Included are the familiar Amaryllidaceae, Iridaceae, and Liliaceae, and the lesser-known Anthericaceae (*Echeandia*) and Tecophilaeaceae (*Tecophilaea*). Within each family, genera and species are described, some generously and others with minimal detail. Some genera descriptions include cultural suggestions as well as botanical detail. Howard provides excellent treatments of the Texas alliums and *Nothoscordum* (false garlic), *Tigridia* (tiger lily), *Hymenocallis*, *Crinum*, and *Milla*. There is also liberal attention to bulbs rarely addressed by other authors: *Alophia*, *Calydorea*, *Cipura*, *Cypella*, *Chlidanthus*, *Haylockia* and *Pyrolirion*, for example. Howard is most knowledgeable about the rain lilies, *Zephyranthes* and *Habranthus*, and there is much valuable information in his book about them; however, the full depth and breath of his knowledge about this group is not demonstrated, nor is there sufficient mention of his extensive work in hybridization.

Howard's collecting trips are well known in the IBS circles, and his anecdotes and reminiscences have been shared at after-dinner gatherings for years. It is a pity that these wondrous stories and plant-hunting trips are omitted from *Bulbs for Warm Climates*; perhaps an editor was unfamiliar with the subject or worried about increasing publication costs. They would have added immensely to the completeness of this book.

Bulbs for Warm Climates contains an excellent glossary, a detailed index, and mail-order sources. It fills a serious gap for those interested in bulbs that merit wider attention, particularly the long-neglected American bulbs that are his forte. It should be a welcomed addition to your bookshelf.

Norman Singer

1921–2001

A remembrance by Geoffrey Charlesworth

Norman Singer was a person who made things happen. He did things himself, or he made it possible for somebody else to do them. He and I met 56 years ago at Bletchley Park in England, doing Scottish country dancing; we were engaged in military code-breaking during World War II. We discovered our mutual interest in music at once, and our lives since then have been as inextricably intertwined as a *Codonopsis* scrambling around *Lilium canadense*.

Norman began his career teaching social studies at the Juilliard School of Music, which led in a steady progression of events to his involvement with plants. At Juilliard, he also taught morris dancing and square dancing, so in 1954, he was invited to be dean of the summer music school at Aspen, Colorado, and director of the Aspen Music Festival as well. On a visit to Aspen some years later, the chairman of the festival board, Fritz Benedict, took us to the mountains in his Jeep to show us magnificent clumps of *Primula parryi* growing by streams high above the ski runs, and natural rock gardens of *Eritrichium nanum*. We also found *Pulsatilla patens* at the top of the ski lift, and wonderful gardens at the top of Independence Pass. Norman greatly regretted later that he hadn't been interested in plants until he had the opportunity to live with them.

After Aspen, Norman spent several years as director of the Hunter College Concert Bureau in New York City. We bought a house on 78th Street near the Museum of Natural History. It was a run-down street then, but the house had the remains of a garden at the back. This initiated our interest in real dirt gardening—really my interest, since Norman was a busy administrator while I was only a mathematics professor.

Norman brought a lot of new talent to the New York scene. Benjamin Britten and Peter Pears, Maureen Forrester, Joan Sutherland, and Alicia de Larrocha had their New York debuts at Hunter. He started the “Mostly Mozart” series and brought Pierre Boulez to the city. He created a stir by being the first to present full frontal nudity on stage in New York when he invited the Ann Halprin Dance Company to perform.

Meanwhile, I had to buy a house on Long Island when I became associate dean at Hofstra University. It had a suburban garden of azaleas and enough

room for a patch of rock plants, and finally some sun. Norman took over the city garden.

In 1969, Norman became executive director of the City Center of Music and Drama, the components of which included Balanchine's New York City Ballet and the New York City Opera under Beverly Sills. Norman also brought the Alvin Ailey dance company to City Center. Revivals of musicals were staged as well. He was still director when the ballet moved to the newly built Lincoln Center. In 1971, we bought a "summer" house in Massachusetts with 60 acres so that we could meet on weekends and garden to infinity.

On Long Island, I met Bill Brown and became a member of ARGS (now NARGS) and the local chapter. I started buying nice things from Crocker and Kline's Siskiyou Rare Plant Nursery and from George Schenk. One of Norman's board members was Timmy Foster's aunt, and she urged Norman to introduce himself to Timmy's "weird" rock-gardening husband, Lincoln. We first met Linc and Timmy at the annual plant sale of the Connecticut chapter at Betty Valentine's. It amused us enormously to see Ron Beckwith fire a gun to start the sale and to watch the active elbow work as gardeners jostled to buy plants—but we understood the excitement.

We started our garden in Massachusetts the day we closed on the house, bringing back petunias and marigolds from Great Barrington. We each staked out a claim to a bit of the lawn and ever after kept separate beds to avoid abrasive discussion and potential fights. But we gave advice and criticism freely and worked together whenever two people were needed to move the boulders that abounded on the property. We had a long drive to the Connecticut chapter meetings, but they were the highlight of the month. We showed plants at every show, and we gave talks. It was inevitable that Norman would be asked to do something official.

Thus, in 1982, the year after we both retired, Norman became the (unpaid) secretary of ARGS. This meant working with Timmy, who was editor of the *Bulletin* (predecessor to the *Quarterly*), and seeing that the journal got printed. The next year, when Ev Whittemore was handling the seed exchange with Norman and me and Judy Glattstein, she and Bruce did nearly all the filling of seed packets and orders. I did the verification and got the lists down to Judy, who entered them into her computer; her husband Paul wrote the program. (It took a whole night to do a sort.) That was a bad winter, and driving to Westfield and Ridgefield was treacherous—one day, our car rotated 180°. Norman was responsible for getting the seedlist to the printer and mailing it out. We just made it before the holidays closed the post office. The local postmistress was proud to take part in the scramble, because she wanted a Colebrook postmark going to all those exotic destinations.

In 1983 as well, Norman started collecting pledges for what became the Norman Singer Fund. He knew there was a need to have funds available for projects beyond the seedlist and journal, so he applied his experience and charm to get it started. It was formalized the next year. In 1984, Norman godfathered the Ontario chapter of NARGS, as the society was soon to become. Andrew Osyany

was persuaded to get it going, and I think Norman piloted him through the shoals. He also helped the founders of the North Carolina, Ottawa, and Calgary chapters get started.

In 1986, I handed the chairmanship of the Connecticut chapter to Judy Glattstein. We were getting weary of long drives and thought there might be enough people in the Berkshires to start a discussion group. Norman took up the idea and arranged a connection with the Berkshire Botanical Garden, letters of invitation, and all the other organizational things he knew how to do. This group was begun in 1986.

Norman then helped me get *The Opinionated Gardener*, a collection of my essays, published. I could never have done all the publishing and distribution chores that he took on. A year later, Linc Foster, then seriously ill, asked Norman to edit his and Timmy's writings and try to get them published. This resulted in the book *Cuttings from a Rock Garden*. Linc died before the book came out, but he saw most of the work completed.

1989 was the year of the Velvet Revolution in Czechoslovakia. We had been corresponding with a number of Czech gardeners because we were sponsoring a few of their ARGs memberships. Otakar Vydra, Josef Halda, and Vaclav Plestil had been at the 1986 international alpine conference in Boulder, Colorado, and we resolved to go to see Czech gardens the next spring. Not only did we see many gardens, we were invited to speak at Brno, Ostrava, and Prague. We gave other talks together at meetings including Stuttgart, Dublin, Hull, and Seattle.

Norman became vice president of NARGS in 1990. The following year, we went to the alpine conference in Warwick, England. Norman was a great ambassador and made instant friends with Harry Jans of Holland and Joan Whillans of New Zealand. Joan visited us on her roundabout return home, and we saw her again in New Zealand, where she took us with Arthur Dixon to roam the marvelous scree of Mt. Hutt. Arthur, who had been at the 1988 national meeting at Mt. Hood, Oregon, planned a great trip for Larry Thomas, Howard Pfeifer, and the two of us on to the Old Man Range on New Zealand's South Island.

In 1992, Norman was elected president of NARGS. Among other innovations, he made the secretary's position a paid rather than volunteer job and increased the salary attached to the editor's position so that it would attract the kind of skills we have enjoyed. Norman loved the interchange of ideas that went on at meetings and was very fond of the many gardeners he worked with.

Norman was honored to receive the Award of Merit and the Marvin Black Award from NARGS, as well as a Service Award from the Berkshire Chapter. I think he valued these as much as his many awards from arts organizations; he was twice decorated by the French government as a Chevalier in the Order of Arts and Letters.

In 1997, Norman had a stroke which left him unstable without support, but he continued to garden, though he had to give up the woodland area. This past year, he withdrew from the garden entirely, and even spring failed to revive his interest. He died on July 14, 2001.

NARGS National Awards, 2001

Only two of the five national awards offered annually by NARGS were bestowed in 2001. Awards Committee chairman Jim Fox, who contributed the following announcements, reports that nominations were not received for the others. Chapter chairpersons and newsletter editors are encouraged each year to publicize the award process and to submit nominations to the Awards Committee in time for the presentations to be made at the annual meeting. It is to be hoped that all nominations in all categories will be received in 2002, and that the awards ceremony at the 2002 annual meeting (Anchorage, in June) will be replete with honorees.

Award of Merit: James Jones

In 1965, NARGS established the Award of Merit to honor those persons who have made an outstanding contribution to rock and alpine gardening and to



the society, and who demonstrate keen plantsmanship. Only active members of the Society are eligible. Jim Jones, the honoree in 2001, is definitely active in the society, now and in the past. He has been vice president and president of NARGS; he chaired the 1990-1992 Seed Exchange, when the same chapter did all three phases; and for three years he has managed the third phase (order fulfillment) of the Seed Exchange. Helga Andrews recalls, "He handled all three phases of the seed exchange himself and, after we were evicted from a secure place at the Arnold Arboretum, Jim managed to continue the exchange by hauling all the seeds about in his car and finally sacrificing his

kitchen cabinets, sofas and dining table until we finished the distribution." Not content with just national work, Jim has been very active in his chapter as chapter president as in other offices.

Jim Jones also wrote one of NARGS's first book-length publications, *Lychnis and Silene in the Garden*, encouraging others to try their hands at writing books for the society. Under his aegis, NARGS produced *Rock Garden Plants of North America* with Timber Press.

The honoree's plantsmanship is without doubt. Joan Mears recalls his "abiding interest in all sorts of plants. Indeed, his amazing half-acre garden is stuffed with fascinating plants, in general too often ignored by others." His generosity in sharing these plants has enriched many a garden and nursery, and inspired others to join the society.

Jim Jones embodies the ideals of the Award of Merit, and we look forward to many more years of his knowledge, labor, and enthusiasm.

Carlton R. Worth Award: Donna Balzer

Not all authors of inspiring books and articles about rock gardening and rock plants are members of NARGS, so when the Carlton R. Worth Award was estab-



lished in 1985, it was recognized that we are often enriched by such authors and should recognize their distinguished writings. This year's winner, however, is a member of the society.

Donna Balzer has been a self-employed horticulture consultant and writer since 1998. She has written scores of articles, a column for the *Calgary Herald*, and two books on western Canadian gardening. Her recent book *The Prairie Rock Garden* (reviewed in the summer 2001 *Quarterly*) addresses an area of gardening sadly ignored in general gardening books but enthusiastically embraced by gardeners of her region. Now those of us living outside this fascinating area have an opportunity to see what can be made in the northern prairie through her design ideas,

construction suggestions, and comprehensive list of rock garden plants for the prairies.

Donna was also responsible for helping found the Calgary Rock and Alpine Garden Society and developing its admirable newsletter. NARGS looks forward to many more years of her writings and to the new members inspired by her work.



NARGS COMING EVENTS

Eastern Winter Study Weekend: "Noah's Ark: Conserving Plant Diversity," January 25-27, Falls Church, Virginia. Host: Potomac Valley Chapter. Contact: Alice Nicolson, 3435 S. 8th St., Alexandria VA 22204 <taxonomy@aol.com>

Western Winter Study Weekend: "Weekend in the Siskiyou's," February 22-24, Medford, Oregon. Host: Siskiyou Chapter. Contact: Ruby Reed, 310 Brandon St., Central Point OR 97502 <lmrareed@connpoint.net>

2002 NARGS Annual Meeting featuring field trips to the mountains of Alaska, June 11-14, Anchorage, Alaska. Host: Alaska Chapter. Contact: Frank Pratt, 7446 E. 20th Ave., Anchorage AK 99504-3429 <akkrafts@alaskakrafts.com>

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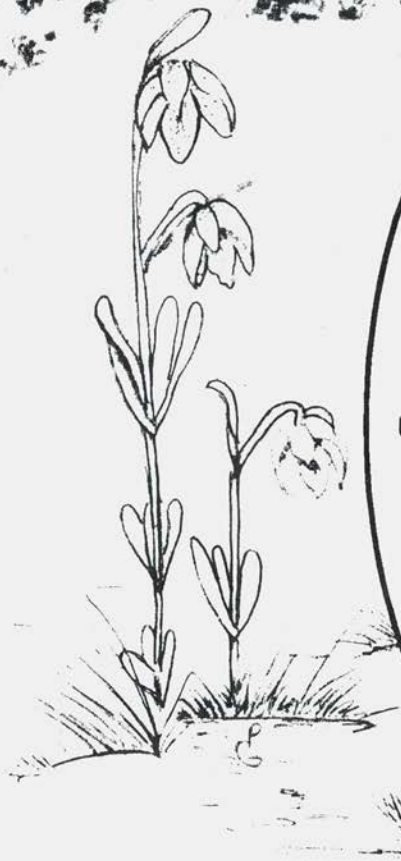
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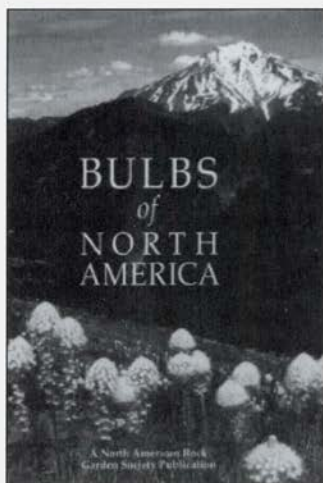
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CHAPTER CHAIRPERSONS

Adirondack	Tom Myers, 3110 Dubois Rd., Ithaca, NY 14850
Alaska	Florene Carney, HC 31 Box 5212, Wasilla, AK 99654
Allegheny	Patricia McGuire, 20 Winslow Dr., Pittsburgh, PA 15229
Berkshire	Geoffrey Charlesworth, 24 Norfolk Rd., Sandisfield, MA 02155
Calgary	Ev Keddie, 1519 Cavanaugh Place NW, Calgary T2L 0M8 Canada
Columbia-Willamette	Christine Ebrahimi, 3400 Tahoma St., Columbia City, OR 97018
Connecticut	Paul Waterman, 163 S. Canterbury Rd., Canterbury, CT 06331
Delaware Valley	Jill Evans, 1503 Boyer Blvd., Plymouth Meeting, PA 19462
Emerald	Eveleen Henry, 32961 W. Tate Rd., Creswell, OR 97426
Gateway	Ruth Hartsell, 1721 Carroll St., St. Louis, MO 63104
Great Lakes	Guerin Wilkinson, 13765 Waterloo Rd., Chelsea, MI 48118
Hudson Valley	Don Dembowski, 130 6th Ave., Pelham, NY 10803-1608
Long Island	Shelley Herlich, 43 Greenfield Lane, Commack, NY 11725
	Fred Knapp, 58 Kaintuck Lane, Locust Valley, NY 11560
Manhattan	Lola Lloyd Horwitz, 446 Sixth St., Brooklyn, NY 11215
Mason-Dixon	Jane Grushow, 213 Meadow Valley Rd., Ephrata, PA 17522
Minnesota	Randall Stanek, 6140 Pleasant Ave., Shorewood, MN 55331
Mother Lode	Barbara Henrietta, 9949 Vine Springs Rd., Sonora, CA 95370
Mt. Tahoma	William Havens, 3518-96th Ave. E., Tacoma, WA 98446
New England	Carol Hull, 15 Maple Ave., Sudbury, MA 01776
Newfoundland	Todd Boland, 81 Stamp's Lane, St. John's, Newfoundland A1B 3H7
Northwestern	Judith Jones, PO Box 1090, Gold Bar, WA 98251
Ohio Valley	Frank Porter, 49607 Rt. 338, Racine, OH 45771
Ontario	Katy Anderson, 29 Riverview Gardens, Toronto, M6S 4E6, Canada
Ottawa Valley	Ernest Boyd, 2356 Upper Dwyer Hill Rd., Carp, Ont. K0A 1L0 Canada
Piedmont	Marian Stephenson, 305 Clayton Rd., Chapel Hill, NC 27514
Poromac Valley	Robert Bagwill, 8350 Orange Ct., Alexandria, VA 22309
Quebec ARGS	Rene Giguere, 5810 rue du Parc, Pierrefonds, Qc H8Z 2V5, Canada
Rocky Mountain	Rod Haenni, 4400 Marigold Lane, Littleton, CO 80123
Shasta	Patricia Swanson, 721 Sugar Creek Rd., Callahan, CA 96014
Siskiyou	Janet Crawford, 2419 Glory C Rd., Medford, OR 97501
Southern Appalachian	Dick Senniff, 44 Red Fox Ln., Pisgah Forest, NC 28768
Watnong	Pamela and Michael Wilson, 506 Openaki Rd., Denville, NJ 07834
Wasatch	David Joyner, 3356 S. Plaza Way, Salt Lake City, UT 84109
Western	Marjorie Harris, 825 Shevlin Dr., El Cerrito, CA 94530
Wisconsin-Illinois	Ed Glover, 503 Johns St., Mount Horeb, WI 53572

QUARTERLY STAFF

Editor	Jane McGary (503) 630-3339 / janemcgary@earthlink.net 33993 SE Doyle Rd., Estacada, OR 97023
Advertising	Please write to the Editor
Editorial Advisors	L. Thomas, M. Moshier, A. Spiegel, T. Cole, D. Joyner
Guest Artists	Sue Allen, Baldassare Mineo
Proofreaders	Hans Sauter, Loren Russell

NARGS WEBSITE

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OFFICERS

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Vice President	Bobby Ward 930 Wimbledon Drive, Raleigh, NC 27609	(919) 781-3291
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