International Rock Gardener

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In its January 2011 issue IRG published in good faith an amended extract by Robert Rolfe, credited as coming from the AGS booklet of 2001, 'The Smaller Daphnes'. The IRG Team understood that it had the permission of the author and that this was adequate permission so the extract was used in the spirit of sharing information between like-minded enthusiasts.
The SRGC has received a complaint from The Alpine Garden Society claiming copyright infringement by use of this article without permission from the AGS. The Editorial Team of IRG offers a full and unreserved apology for this unintentional breach of AGS copyright.

February 2011 cover picture is *Pulsatilla ambigua* var.*ambigua* by Liam McCaughey, Northern Ireland.

---Plant Portrait---

Pulsatilla ambigua (Turcz. ex Hayek) Juz.

PEPiPEDIA and Harold McBride.

Meet the relatively unknown Asiatic rock garden plant from the grasslands and forest edges in Mongolia, China and Siberia. The synonyms are *Anemone =ambigua* and *Pulsatilla barbata.*
This species occurs at elevations of 2000 – 3400 metres and we recommend cultivation in richer substrates which retain moisture, made from loam, sand and some humus. Slightly alkaline reaction will help; cooler sunny aspects in a crevice outdoors or an alpine house are needed.
It is a spring plant making tufts with erect flower stems and one-inch long pink-violet oblong ovate sepals. A plant in flower is 16-20 cm tall. The tripartite leaves are relatively small, 2 - 3 cm with petiole 3 -10 long. The rhizome is 5 - 8 mm in diameter.
The Czech pioneers Jurášek and Pavelka saw *P. patens* subsp.*flavescens* in Mongolian steppe pastures (near the boundary with Siberia) in 1993.
This *Pulsatilla* shared the grassy areas with red or yellow *Lilium pumilum* but they never met *P. ambigua* in this part of Asia, so this pretty species is unknown in Central Europe. The hope is that Czech specialist on Asiatic alpines, Vladimír Staněk, has 3 plants from the seed exchange (collected in Siberia), though they have not flowered yet.

Left: *Pulsatilla patens* subsp. *flavescens* at a Prague Show

Our lovely IRG cover portrait by Liam McCaughey shows a well-selected rose-pink variety exhibited in Ireland by the Irish Master Harold McBride.

Here is Harold's story:

"I first saw this delightful *pulsatilla* during a visit to Alan Furness's garden in the North East of England in 2005 and immediately marked it down as a " must have " plant to add to my collection. Alan had grown the plant from seed, which had been listed on the Alpine Garden Society Seed Exchange seed list as "*P. ambigua,* collected Russia*".*

Alan's fine plant was growing in a deep pot, as it was his practice to exhibit it at AGS shows where it had already gained many top prizes.

I asked my friend for some seed and he kindly handed me an 8" pot, which contained dozens of newly germinated seedlings. Alan explained that I must 'prick out' all the seedlings and grow them on to flowering stage, when I should then make a selection of the best pale pink forms. Two years later some of the seedlings flowered and the remainder followed in year three. As Alan suggested, they proved indeed very variable with white, purple, or deep pink flowers while around 25% were the pale pink of the seed parent. I retained some white and all the pale pinks; the others were given to the AGS Group plant sales or gardening friends. In all Alan's pot of seedlings produced over 70 mature flowering plants!

I now have seedlings from my own plants some of which will flower in 2011. Some of my *P. ambigua* plants are growing in pots, which I have exhibited at Irish AGS Shows while the remainder have been planted out in the rock garden and raised beds where they flower well.

Above: *P. grandis* 'Budapest' photo H.McBride

I grow many species of *Pulsatilla* including several forms of *P. vulgaris* including the native English form, *PP. halleri*, and *grandis* including ´Budapest´, *PP. rubra*, *albana*, *cernua*, *. montana*, *patens*, *pratensis*, *vernalis* and *campanella*. However I rate ***Pulsatilla ambigua*** alongside ***Pulsatilla grandis*** ´**Budapest**´ as being the most attractive of a very fine race of plants". H.McB.

Left: *P.grandis* 'Budapest' buds photo H.McBride

Ideas for Troughs, Tufa and Cleft Construction by Harvey Wrightman, Ontario, Canada (June 2010)

One of the best “trends” to hit mainstream gardening is container planting - trough gardening for most of us. Adaptable and accessible to most any situation, troughs can be used as accents to an alpine garden or perennial garden; or they can be the sole feature with a varied number of sub-themes. Each container represents its own particular ecological/horticultural expression.

Right: trough newly planted by J.Halda

Using the Czech style [Ed. Halda and Jurášek] of narrow clay crevices, it is possible to provide a better growing environment for both the easy alpines and those that we know less about their specific cultural needs.

Containers – Almost any sort of container will do for a first effort. Hyper-tufa troughs are readily available and will last ~ 10 years or more.

Some recommendations for Canadian and American gardeners are Betsy Knapp– sleek, modern looking, these troughs are light and very, very durable. Also, Betsy can make shapes and sizes not normally seen. Wrightman Alpines– a variety of natural stone troughs in sandstone, limestone and tufa. The tufa troughs are lighter in weight (~40%) than other stone. Tufa has an earthiness that helps to create the mountain atmosphere of the planting. HaddonStone– manufactured stone; but, very well sculpted troughs. They are heavy and permanent.

[ED. Readers of the SRGC Journal or website will be aware of the possibilities of adapting Styrofoam (polystyrene) boxes to extremely durable troughs by various means.]

Left Halda trough after one year

Soil - We use Spanish River Carbonatite (SRC) in most of our container mixes. The carbonatites are particularly good sources of minerals in a form that feeds at a steady rate and does not over-stimulate growth. A reasonable substitute would be “greensand”, which may be easier to source.

For troughs I use: a coarse sand as a base material ~ 65% : SRC ~20% : composted pine bark or some other organic material ~15%.

This is a physically heavy mix, but it provides long-lasting, stable structure and nutrition for the plants. Mixes that use a lot of organic material tend to change negatively in a short time. One could add Pumice or perlite to lighten the mix.

Right: *Erigeron* and *Gentiana* in their first year

Planting- Now comes the part where you must ditch all the poisonous cultural teaching of agrarian-derived societies; i.e. the rock formation that you will create will be elevated and not appear to be stable. I find it easier to deal with pre-school children. They instinctively "get it." For the chasmophytic plants, what they desire is a place without the competition of those horridly aggressive flatland grasses and forbs – the basis of agricultural crops. When you think about it, the narrow crevices where the special ones grow will have thin veins of soil that have been brought in by wind and water. The soils that will stick are mainly the smaller particles of silt and clay which also provide more nutrition for the plants though the actual volume may not be very much at all.

Below: *Eritrichium aretioides*

Rock work -
So, for the basic formation in a trough, you can use any type of stone that has flat surfaces that you then align to form a narrow crevice. It may be vertical or tilted. There may be 1 or 2 parallel lines in the formation for the trough. Don't make it too complicated or you will be lost in the details. This crevice line presents a significant space for a good number of plants to grow. One side of the crevice is plastered with a sticky clay. The plants, rooted cuttings or seedlings (minus most of their potting mix) are laid out on the clay with their roots suitably spread out.
Below: *Saxifraga cochlearis minor*, *Silene acaulis* 'Frances' and *Androsace* sp. after second year in clay.

Advantages -
1) a greater choice of plants as larger, potted specimens can be used
2) immediate contact with a growing medium (clay mixture), and less damage to the roots.
3) "perfect drainage"- I love those words used to describe the right site for a plant, "…rich soil, moist, but well-drained." – how is that possible after heavy rain and the air turns steamy??? An elevated position means the crevice will provide a more constant moisture level and allow the area around the crown to dry out quickly. The crown is where most disease problems occur.
4) The drama of vertical plantings, cascades falling over a cliff are obvious and appealing. This is the best way to improve the beauty of a planting. Although the technique is simple, I am always amazed at the variety of compositions that I see in the workshops we run.
5) It is important to keep the crevice to less than 1/2" wide. Capillary movement of water is better in a narrow column. Also, some erosion of clay will occur until the plants cover the line. This is less of a problem in a thinner line. You can always dress-up the line with more. Adding some small gravel bits helps too.

6) Almost any plant can be used. The decision then lies in what the combinations will be. Ever wonder how confusing that can be? The great thing about this method is it intuitively directs you to place things.

To make the verticals work, you need small mat-formers such as *Arenaria tetraquetra, Androsace villosa, Draba bryoides, Silene acaulis, Gypsophila aretioides, Asperula* spp. and the ultimate plugger-*Sempervivum* cvs.- of the tiny sort. These plants spread quickly enough to stop erosion. They are small enough that other, showier plants can grow through the mats. 'Semps' which are so easy to establish are especially good. Once they outgrow their usefulness, they can be removed with little disruption. The mats provide a good foil to set off the choicer plants – these are myriad in number, tight growing *Androsace* spp., kabschia saxifrages and tiny campanulas like *C. zoysii.*

Plants will fill and trail down the crevice as they grow. Touch up with extra clay where needed.

The method used does take a little nerve and daring, but that's why you're here, right? It helps to actually see it done. I'm sure as more people employ the technique and the results are seen, that it will become a valuable tool.

Left: suitable flat stones Below left: planting into paste

Cleft Construction

In early April, Josef Halda stayed with us, putting the finishing touches to the lectures he brought for his NARGS North American tour. I have always admired the vertical, cleft formations that are so often seen in Czech trough and alpine gardens and imagined that they must be painstakingly constructed and slow to mature. Regardless, I was interested in knowing the process, and having Halda here provided an excellent opportunity to learn.

As it turned out, the whole affair was far easier than I imagined, and the results accrue very quickly. Once I had seen the process, I wondered why I had never been able to figure it out. It was that simple. When I explained to Josef what I wanted to see, he went to the tufa yard and chose quite ordinary-looking stones that could be split along the sedimentation lines.

This tufa was from a denser, layered formation that splits on its rift lines quite predictably; and, Josef indicated that it is very similar to the stone they have in the Czech Republic. The breaks are clean and angular making it easy to bring pieces closely together. For a trough, one piece can be split into 2 or 3 pieces. These will match and then form the basic crevices.

Left: adding third layer with clay

Left: partial top-dressing with clay paste

To glue the slabs together a paste of clay is made with some sand added. We used Spanish River Carbonatite as its grain size was acceptable and it would provide added nutrition. While one could dig clay from the backyard, it is easier to buy a bagged mason's or refractory clay from a hobby store. Measure out 3 parts clay to 1 part sand and mix the two together thoroughly as dry materials. Then slowly mix in water until a sticky paste is formed. Using a flat spatula, the clay paste is applied to one side of the crevice to ~10mm thickness

Below: Firmly connecting the rock/plant sandwich

Now the daring parts, for us Josef did this outside during a week when it froze solid every night, and all the plant material was from the heated greenhouse! The plants were bare-rooted whether they be cutting, seedling or potted plant. The roots were splayed out on the side smeared with clay, the crown set just above the crevice. The matching piece is then gently brought into contact, and the 2 were pressed/tapped together to eliminate any voids. That is the basic method.

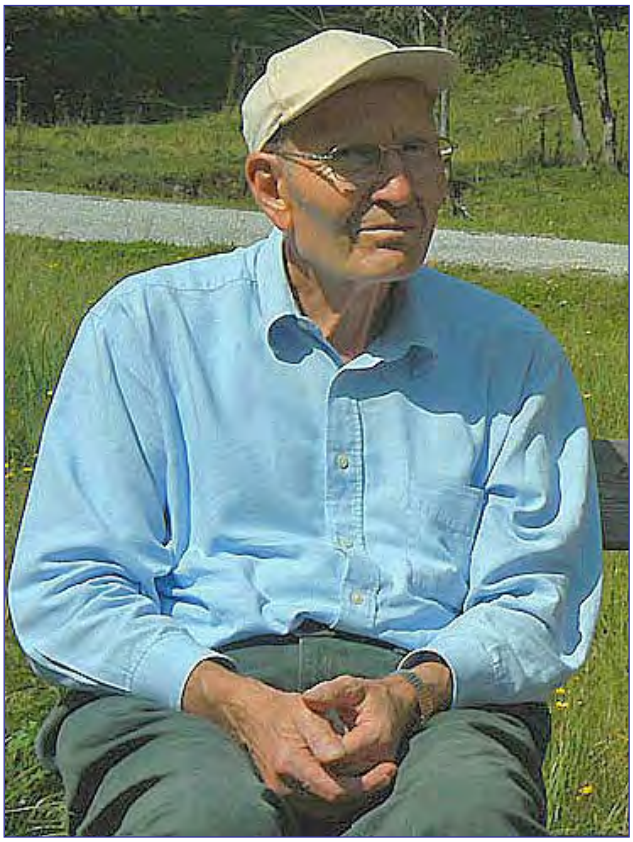
Why does it work? This is a process that closely mimics actual crevice conditions in nature. Heavier, clay/silt materials will accumulate in such formations because the particles stick together and do not wash away, as sand on gravel would. Provided a crevice is elevated and does not sit in water, it will not collect excess moisture. Neither will it dry out too quickly. In effect, the moisture level remains within a range suitable to plant growth. Clays have far more surface area for cationic activity and will provide better nutrition. Although the use of clay seems counter to most published advice regarding "drainage", elevating the piece will ensure that over-saturation never occurs.

Watching Josef choose plants and where he placed them was also very instructive, as he has a huge amount of actual field experience. Many of his choices were new seedlings from the winter's sowing, including some *Eritrichium aretioides*, *Gentiana* spp. and *Androsace* spp. from West China. He was very happy to see them and have the use of them. All were lined up in the crevices - both vertically and horizontally, adding dimension to the planting. Useful too, are small mat/cushion plants such as *Arenaria* spp., *Silene acaulis*, *Gypsophila aretioides* and *Salix* spp. In these mats, gentians, primulas and others will grow comfortably, again replicating what will happen in nature. From what we have observed so

far, this is a great improvement in cultural conditions and our control over them. As a bonus, lots of sensitive species can be grown this way. Perhaps even more importantly, the stylistic side of culture is greatly enhanced. The use of vertical plantings produces drama, and even quite ordinary plants become riveting when displayed this way. H.W.

---Portrait of an International Rock Gardener---

Franz Hadacek by his old friend Zdeněk Zvolánek



Wintertime is always useful for remembering all our oldest friends, the older masters that help to raise ever higher the level of the knowledge and range of rock garden plants in our collections and who have inspired us. We are continually building our gardens on the base prepared and settled by these senior local heroes. The Central European rock gardeners' movement received strong support and influence from Franz Hadacek, the quiet gentleman from Vienna, Austria.

Franz is known from 1960 when he installed "the Saxifraga Silky Route" starting in Germany, Switzerland plus Austria and ending in Czechoslovakia. I was a beginner in 1972 when this tall Austrian gave a great lecture for our Prague Club members. At that time the prevailing Czech audience and myself had no ability to understand German so everybody enjoyed the fact that Franz was able to deliver his talk (with outstanding photographs) in a delightfully 'deformed' Czech language, because his grandparents were from Southern Moravia.

Below: Franz and his wife Christa photo by Luit Van Delft

My closer connection with Franz came 30 years later when we were both speakers at the Saxifraga Society Seminar in Beroun, Czech Republic. There he was a perfect lecturer in English with his slides again of a high standard. We quickly formed a cordial friendship and it was such bad luck that after this happy period, when I visited his plantsman´s garden in Vienna, his health started to revolt. For years now he has endured permanent back pain but is still tending his plants.

Below: troughs in Franz' garden Photos: Franz Hadacek

Saxifraga callosa subsp. *callosa* in the wild.

This illness has not prevented Franz from spreading his wisdom to other growers: for many years on the SRGC online Forum Franz has been a greatly valued contributor, sharing his knowledge and superb photographs with thousands of readers, not only of plants in his garden but from his numerous travels around the world to study alpine plants.

Various Forumists have had the honour of visiting Franz' garden, to meet Franz and his wife Christa and talk about alpines with this most charming couple.

A visit to his relatively dry garden in Eastern Vienna is instructive. The rock garden in the front of his house is mature and elegant. Plenty of troughs show evidence of his personal care and are full of happy plants especially the Silver Saxifrages, Kabschias and *Androsaces.*

Left: *Edraianthus pumilio in a trough*

Tulipa sylvestris in Franz' meadow

Iris histrioides seedlings among pots of *Cyclamen coum*

Franz in the garden 2009 photoLVD

Lots of new plants are kept in pots under high shaded construction, because he loves to work with seeds from mountains and he would like to grow everything small (under 10cm) in his garden. Particularly famous is his rich bulb flowering meadow (*Colchicum speciosum*, *Sternbergia sicula*, *Crocuses* etc.), which I know only from pictures. Franz has developed a large personal website so everybody interested in his life long effort to introduce mountain plants has the chance to see it here. Just enter http://www.franz-alpines.org and you will be surprised how it is rich in rock garden plants and encyclopaedic knowledge about them.

Below:*Crocus* seedlings and *Anemone blanda* in Franz' meadow

---Mountains in the Garden---

An Irish Crevice Garden

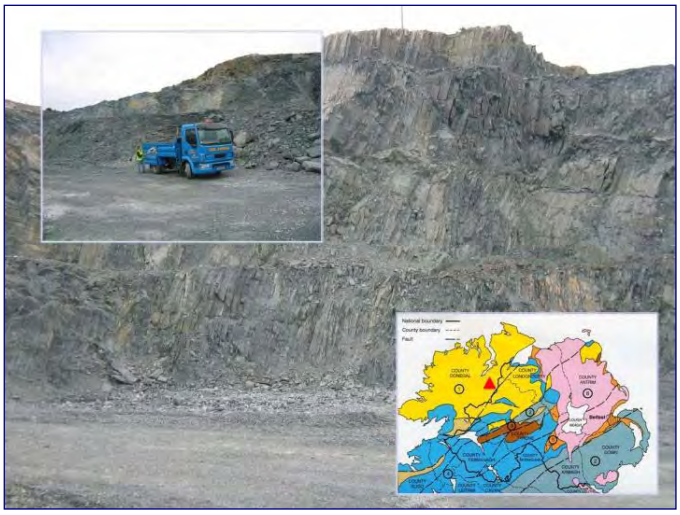
by Joan and Liam McCaughey

In 2004, Zdenek Zvolanek took 38 members of the AGS Ulster Group to see Czech crevice gardens, and the next year ran a workshop while constructing two crevice gardens in Northern Ireland. In 2006 we

moved into a new house, new-built in a field, with unpromising heavy clay soil. A year later, things had moved forward, and we decided to attempt a crevice garden, hopefully using Zdenek's principles, on the north-facing slope shown on the right. (This was after 180 tonnes of grit had been added to our soil and rotovated in.)

The first stage was to establish drainage, and drains were inserted at every point where water could conceivably collect. This took some time and effort. A layer of new topsoil and compost was added on top of the slope, as this was mainly impervious glacial clay left over from the last ice-age! However on more mature consideration, and some advice from Frank Tindall, we mixed in a couple of tonnes of 'blinding' – the quarry waste used normally under drives and paving stones, again for drainage.

We live just at the edge of the Antrim Plateau, so the natural stone here would be black basalt. However we compromised by importing dark grey Silurian greywacke from a County Down quarry (Near the National Trust garden at Rowallane), in order to have rock with some sort of bedding plane, and yet not too



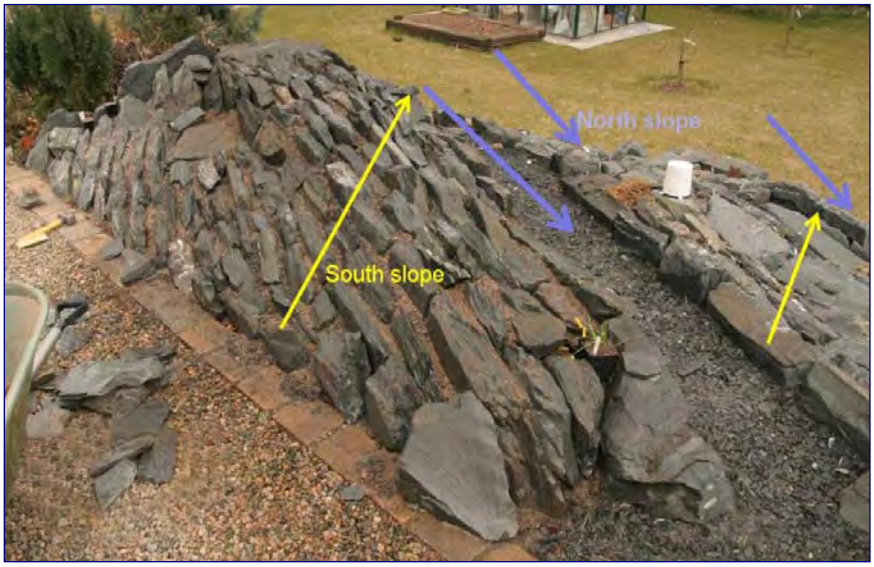
dissimilar in colour from our natural country stone. You have already seen a picture of Joan with the first stone being laid, in this journal, Feb 2010. Having placed the big stone (centre of picture on left), smaller

stones were aligned with it, diagonally across the main, north, slope. The gap marked by the arrow was covered by a membrane and then a scree of slaty stones to form an access path. The area nearest the camera, at the bottom of the slope, has slightly more organic material and is damper, and will be used for plants which should like these conditions.

20 Saxifraga sempervivum VH 08 482
21 Sax. paniculata paniculata RN
22 Sax. Southside Seedling Gp (Kevock)
23 Androsace carnea
24 Silene acaulis 'Blush'
25 Dracocephalum aucheri
26 Edraianthus pumilo
27 Androsace carnea
28 Gentiana acaulis JCA 515002
29 Potentilla deorum VH 331
30 Sax.
31 Ranunculus alpestris
32 Saxifraga 'Lidiche'
33 Aquilegia
34 Silene acaulis
35 Veronica schmidtiana nana
36 Boykinia jamesii
37 Chorispora bungeana (Kazakhstan
38 Thalictrum isopyroides HMCB
39 Rhododendron nivale ssp nivale (Timpany)
40 Primula capitata
41 Penstemon rupicola
42 Ramonda myconi
43 R. Alpestris

By July 2009, the north slope was shaping up, and planting had begun – the picture above shows how I had attempted to fit the shape of the available rocks to a natural slope. Labelling by taking a digital photograph is one way to avoid the white tombstone effect, though it is easy to forget to update. At the top of this picture can be seen a row of big stones, which were placed to allow a reverse slope facing south (shown below), as a different exposure for plants which prefer a sunnier environment. As well as the access path, just visible in the top picture, a couple of stones can be seen which were laid horizontally to aid access (important as the gardeners mature along with their plants).

After a delay, the South slopes were completed by spring 2010, and the overall shape can be seen (together with another flat stone placed for access but commandeered by the cat as it is south-facing and sheltered.



Planting continues; we are using a very free-draining mix of coarse sand with very fine crushed rock and just a trace of compost. Top-dressing is with some more of the crushed rock, and then rock splinters, fitted closely, or hammered in using the ZZ technique. The Northern Ireland climate is generally Atlantic, mild and damp (this winter is an exception with temperatures down to -15 here), and plants such as saxifrages are growing very well in the good drainage. One surprise has been the central Asian *Glaucium squamigerum*, which has not only survived but self-seeded. Left: *Saxifraga longifolia*

Dianthus ‘Rivendell’

Gentiana acaulis

We have tried to use the different exposures of the north and south slopes, as well as shaded or exposed positions, to suit the requirement of the plants, and also the slightly more organic and moister soil at the bottom of the slope takes for example *Salix boydii*, *Rhododendron* etc. So far plants are generally doing well, though with some casualties - including a *Paraquilegia anemonoides* planted under an overhang and with a north exposure, but eaten by a passing slug.

Ranunculus alpestris

Saxifraga ‘Lidice’

Rhododendron nivale

This has been an interesting, and continuing, learning experience. We have used local stone, which does not have the same sharp cleavage planes as some sedimentary rocks, but is not foreign.
It has been a challenge to try to combine varied habitats for alpines with a structure which fits the structure of the garden.

Now we have to find what will suit our local climate, especially the warm damp winters which have been the pattern at least in the past.

Thanks again to ZZ who has been the inspiration for this amateur effort which has provided so many happy hours over the past couple of years. J.& L. McC.

Eranthis by Ian Young

While *Eranthis* are not true bulbs in the botanical sense -they are tuberous rhizomes, I'll call them tubers- they do fall into the general category that most growers would describe as 'bulbs'.

Eranthis hyemalis is the most familiar Winter Aconite that we see commonly in our gardens. It is one of these successful plants that is widely and cheaply available but we should not think any the less of it for that: in fact that makes it in many ways a much better garden plant than a rarity that is difficult to get and even more difficult to grow.

Left: John Gennard's photo of his woodland in Leicestershire, UK, taken on 17th February 2011

Below: E. 'Guinea Gold' tubers

Dry tubers should be soaked for at least twenty four hours to rehydrate before planting, this will give a much more successful establishment. The best way to increase garden stocks is to allow them to self seed and naturalise. On sunny days I have often observed hover flies visiting and so pollinating the flowers. The flies are not just attracted to the bright yellow beacon shining brightly in the sunlight but also to the delightful scent of pure honey that the aconites

have. If you have never got down on your knees to smell one you should - or pick a flower and raise it up to your nose to enjoy this other great pleasure these spring flowers bring to us.

Left: *Eranthis cilicica*

As you move east to Turkey, Iraq and Afghanistan you will come across *Eranthis cilicica* which some authorities recognise as a separate species while others lump it in with *Eranthis hyemalis*. Whatever the botanists decide I find that there are significant differences to the gardener. *Eranthis cilicica* generally has larger, darker yellow flowers and more finely divided leaves than *E. hyemalis*. I also find it opens its flowers at lower temperatures than does its close relative. Opening your flowers like this may be a good move in Turkey but it is not always the best idea in North East Scotland as they can fill with rain water.
I do find them not so easy to establish in our garden and I suspect they are not as hardy as the more familiar *Eranthis hyemalis*.

When you bring these two great species together you get hybrids – the Eranthis Tubergenii group – the most famous of which is *Eranthis* 'Guinea Gold' seen in the centre (above) between its parents *E. hyemalis* left and *E. cilicica* right.

I always keep a stock of *Eranthis* 'Guinea Gold' (right) in troughs so that I can replant and divide them every year when they are dormant. Regular replanting into fresh compost does speed up the rather slow rate of increase of this fabulous plant. This plant also grows extremely well in the open garden where it will increase slowly by division but, being a sterile hybrid, it does not set seed. I have been told that there are some fertile hybrids in the Tubergenii group and I have been busy transferring the pollen both ways between *E. cilicica* and *E. hyemalis* in an attempt to get our own crosses.

The tubers form amazing structures: the hollow centre enlarges as more and more growth points appear- in time the larger ones separate off, becoming independent from the parent. It is possible to split up the tubers by cutting off the individual growth points but this can lead to rot and I prefer to wait until it happens naturally or until the link between the offset and the parent is so slight that it breaks when I handle it.

There are an increasing number of cultivars of these species appearing with colours ranging from orange to very pale yellow (I have not yet seen a pure white form) as well as semi-double forms.

For me one of the great beauties of this genus comes from the mountain woodlands of Japan: it is *Eranthis pinnatifida*. It is a smaller plant than its western relatives with white flowers of just over 2cms across but what they lack in size they make up for with their stunning colour combination. Strong growing plants can have twin flowers per stem the second flower forming shortly after the main flower is mature. One observation I have made is that unlike *Eranthis hyemalis* and *E. cilicica* this species does not open and close its flowers according to the light and temperature - they never appear to form a bud but open before the petals are fully formed and continue to grow until the true beauty is displayed. This plant is fully hardy but due to its diminutive size and scarcity in cultivation we grow it in a pot plunged in an open cold frame only bringing it in under glass in February when the flowers start to push through. I carefully fertilise the flowers when the pollen is flowing and most years get a good seed set. I sow the seeds as soon as the capsules open and place the seed pots in an open frame which results in a good germination which occurs at the same time as the parent plant starts into growth. Once I get enough of the seedlings to flowering size I will plant some out in troughs and raised beds where they can be fully appreciated.

Other similar white species occur, such as *Eranthis stellata* in Russia, but I have not yet managed to acquire any seeds or tubers to try for ourselves. I.Y.

---Report from the Beauty Slope---

by Zdeněk Zvolánek

Cyclamen repandum var. r*epandum* forma *repandum* in Croatia photo Pavel Křivka

Early February opened on our slope with a half-week period of “warmer” weather so I could admire the first blooms of *Cyclamen coum*, the brave species which has, during the last three years, covered all the available soil close to the mother plants with its seedlings. Our first cyclamen were planted behind rocks to have some minimal protection but now all the young *Cyclamen coum* are part-by-part transplanted to new places (a flat plateau with a slight slope to the north) where much more sun and a breeze are available to allow their gentle naturalising.

Left: *C. purpurascens*

I was careful and half a dozen of my *Cyclamen purpurascens* are not in full sun. My best form is from a limestone area in western Slovenia. This form last year produced its first seedlings, which are protected under their mother’s skirt. *C. hederifolium* had a problem getting the freedom to spread themselves in this garden with no properly shaded area. I have had some self-seeding of *C. pseudibericum* and my happiness will be complete if I see the first seedlings appear near two established Cy*clamen mirabile* and three younger *C. cilicium* (all the plants raised from seed by Rudi Weiss).

This year in spring time I plan to plant *Cyclamen repandum* var. *repandum*, which is practically unknown here. The depth of the planting must be a minimum of 10cm underground for better protection against frosts. It is only a dream to have some compact mountain form; my inspiration is lovely plant photographed by writer and collector Pavel Křivka in limestone canyon Paklenica in the lower part of Velebit Mts. in Croatia.

The new botanical name for this form with magenta-purple flowers is *Cyclamen repandum* var. r*epandum* forma *repandum.* This triple repetition of the same adjective is easy to remember for new members of Cyclamen Society and the older members of the human society. My second plan is to establish Cyclam*en alpinum* (syn. *trochopteranthum*) at the Beauty slope (I obtained two plants in November in Wisley).

Right: *Cyclamen pseudibericum*

Visitors have admired the fine condition of my cyclamen and I am sure that it is the influence of my local volcanic alkaline soil (the weathered dolerite). I opened a piece of my rented slope and use it as a miniature quarry to get brand-new mineral soil with high volume of young clay. This fresh clay has the important cationic exchange capacity; it can interact with the molecules of the nutrients, which is essential for the transport of nutrients in the soil.

Left: *Cyclamen mirabile*

Now we know that 95% of rock garden plants live in symbiosis with microbes in the social process called Mycorrhizal partnerships. These are symbiotic or mutually beneficial between plants and fungi. Many plants cannot survive without this symbiosis.

Left: *Cyclamen cilicium*

So, I plan to mulch cyclamens with raw pine-needle humus (with some surface soil) from a nearby Austrian pine forest to enrich the soil with supporting microbes (fungi and bacteria).
I have not protected the *Cyclamen* for four years so they must be hardier in my steppe conditions than they are in the UK.
A fine ripening of all the “sow breads” in our continental summer results in quite hard tubers.

February is served to us with icy decoration and we can only dream about spring and its first delegates. There is a need to show pictures of plants which can please us during frozen days with nearly no snow cover. There is some help coming to my report: the influence of SRGC Forum (the thread called '*Sempervivum* and *Jovibarba*') I love compact mats of *Sempervivum arachnoideum*, which are happy on my stove-hot dark stone cliff, but in the last few years I most admire the all-ornamental tight buns of Jovibar*ba heuffelii* which the forumists called 'heuffs'.

Left: *Jovibarba heuffelii*
Below right: *Jovibarba heuffelii, reddish form*

I saw this species with slipped rosettes in Monte Negro (limestone Prokletije Mts. at Albanian boundary) and they had greyish-green colours. Large overcrowded patches with darker colours and smaller rosettes decorated serpentines above tree line (1800m) at Mt. Smolikas in Greek Macedonia. I saw a picture of forms with brown-red rosettes growing in Macedonian Skogovo Mts. near Albanian a Kosovo boundary and they are probably the ancient parents of all the new cultivars.

Of course, those darker pastel colours are very desirable for their aesthetic effect all year. I have reddish forms from my friend Rudi Weiss and I bought a very striking American cultivar ´Torrid Zone´ in England.
I will surely invite all available cultivars of 'heuffs' like ´Cloverdale´ or ´Sundancer´ to the sunny Beauty Slope and I must think about sowing all available seed.
Left: *Jovibarba heuffelii blue-green selection*

Right: *Sempervivum arachnoideum* growing in crevices in the Ligurian Alps photos Rudi Weiss

[ED. Click these links for Forum threads on the Ligurian Alps from Rudi Weiss and the Ligurian Landscape from Robin Gemmill]