SRGC ----- Bulb Log Diary -----

BULB LOG 49.....4th December 2013

Narcissus hybrid, 'CC'

I return to the Narcissus hybrid I showed last week as more flowers have been encouraged by the sunshine to open. We have the impression that we have enjoyed good weather this November and that is partly true as here in the North East of Scotland we have had a lot of sunshine hours but the temperature turns out to match the seasonal average. This could explain why we currently have fewer Narcissus in flower than we have had in some previous years. I believe that it is largely the temperature, after roots have emerged, that controls when the flowers will expand and open so while the sunshine gave me the impression it had been good weather the record shows it was not that mild.
There has been much discussion on what triggers bulb growth and flowering time both on the SRGC forum and on the PBS site which are well worth reading.

Crocus biflorus

Crocus are among a number of bulbous genera that have autumn and spring flowering species, forms or varieties. Crocus biflorus, above, is in flower now while other close relatives wait until spring before they will bloom. Some types evolved to capitalise on autumn pollinators while others wait until the better spring weather. Some of the autumn ones also produce early leaves, as seen below, while others have leaves that grow slowly through winter to fully develop in the spring. What controls these growth patterns is one of the great mysteries of bulbs that fascinate me.

Some bulbs must have a requirement for a cold period, after they have rooted, before they flower while others do not.

Obviously the weather and environment of their native habitats has been the main influence on when bulbs flower, So, when they are grown in the alien and varying conditions of our gardens, they respond to our changeable conditions - they do not follow the calendar.

Tecophilaea corms

The majority of the bulbs that we grow come from a classic Mediterranean type climate – cool moist autumn, cold moist winter, warming wet spring followed by a hot dry summer – their growth pattern has evolved to respond to triggers within this climatic type. Every so often something happens in our garden that gives me another clue to understanding their mystery. On the 15th of April 2012 some Tecophilaea corms arrived that had been raised in the Southern hemisphere – they are basically six months out of sync with our plants which at that time were going out of flower and into setting seed. I planted the new corms and watered them as I had done with our own plants some six months earlier and by the 26th June they were growing normally and in full flower -they had gone from being dormant to flowering in around 40 days.

Tecophilaea flowers

What does this tell me? The main lesson that I can take from this is that Tecophilaea cyanocrocus do not require a cold winter to initiate the flower growth – if they did they would not have flowered until the following spring. However the lesson did not end there. These new corms went dormant as the summer progressed –I repotted them when they dried off and was pleased to see that despite the much shortened growing season they had all produced

good sized new corms- some also had offsets. Now they were at the same stage of growth as our own corms and were given the exact same treatment getting a good soaking in September and kept moist. However no signs of growth appeared in December as I expected and indeed they did not grow at all the following year, 2013. I checked the corms in spring of 2013 - they looked good and were firm but showed no signs of any root or shoot growth so I allowed the compost to dry off. I started them again this September along with all our other bulbs.

This week I see the first signs of shoots on our own Tecophilaea just breaking the surface so I decided to have a poke into the corms that came from the Southern hemisphere.

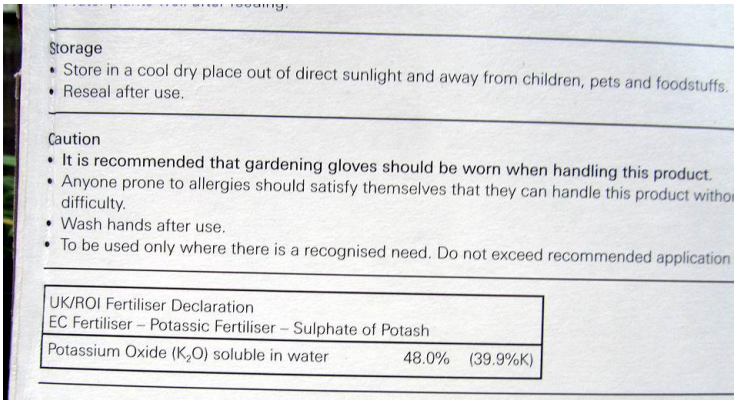
I prodded very carefully so as not to damage any delicate growth and to my delight I was greeted with shoots slowly pushing upwards. So what prevented these corms from growing last year, what trigger had they missed? They got the autumn rain, the cold winter, the rising temperature in the spring but what they missed was the summer warm. 2012 was the year that we had no summer conditions - it was cold and wet for all of our summer months so I speculate that Tecophilaea corms have a requirement for a minimum(hot) temperature for a set period during what we call the dormant period. When we first got them it was autumn in the southern hemisphere so they already had the hot summer down there- they got a cool wet period when I planted them and they flowered but as they went back and dried off they got no heat so did not react to the cool moist conditions I applied in autumn of 2012. This year we have had a good summer so they have responded and are now coming back into active growth – I am interested to see how they will grow next spring- could any flowers survive this prolonged rest period? Our own corms did flower this year, 2013, because as they were going dormant in April/May of 2012 we had a heat wave giving them a hot period this coincided with the growth of the southern corms to grow and flower but then the weather went cold and wet so they got no hot period.

Sternbergia leaves

While I am on the topic of heat treatments I have always attributed the lack of flowers from our Sternbergia bulbs to our lack of summer heat, even under glasshouse treatment. I cannot use that excuse this year as we had a lovely summer with the glasshouse temperatures often rising well above 30C so there must be something else that I am missing.

My thoughts must turn back to feeding – am I giving them enough of the correct fertiliser? Am I giving them it at the time they require it? I have always delayed giving the autumn flowering bulbs potassium supplements until the late winter, usually around February, but now I am wondering if some bulbs, such as Sternbergia, actually start to

form next season's flower buds in the late autumn/early winter. This year I have started a new feeding regime for the Sternbergia- this week I gave them a dilute feed, around 1/3 recommended rate, of a liquid tomato fertiliser. In addition to the normal N-P-K formula the one I choose to use also has some seaweed extracts and magnesium providing some of the micro nutrients as well as the major ones. I did not repot them this year so I thought that a small amount of nitrogen may help, ideally this should be applied earlier when they are making roots and leaf growth.



Storage
- Store in a cool dry place out of direct sunlight and away from children, pets and foodstuffs.
- Reseal after use.

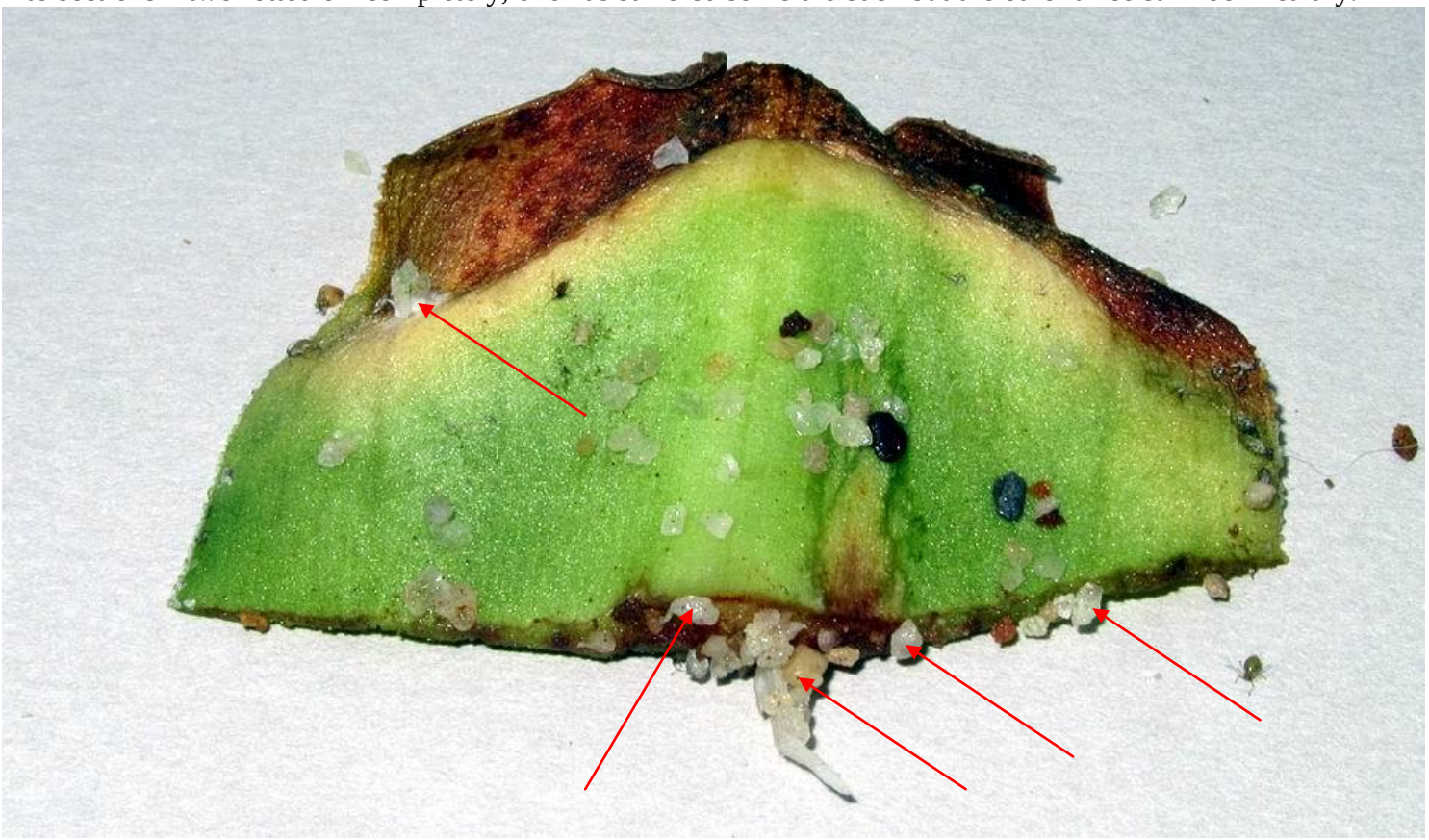
Caution
- It is recommended that gardening gloves should be worn when handling this product.
- Anyone prone to allergies should satisfy themselves that they can handle this product witho difficulty.
- Wash hands after use.
- To be used only where there is a recognised need. Do not exceed recommended application

UK/ROI Fertiliser Declaration EC Fertiliser – Potassic Fertiliser – Sulphate of Potash		
Potassium Oxide (K_2O) soluble in water	48.0%	(39.9%K)

In a few weeks' time I will apply some potash, in the normal white powder form that I have used for years. I show the containers that I just bought but any brand will do, it is the formula that is important. Tomato fertiliser is ideal for any of the pants that we grow because of its relatively low nitrogen level, I often use it if a plant in a raised bed or trough looks like it needs some extra feeding. Higher nitrogen levels are really not necessary and can produce more foliage growth than the plant roots can support.

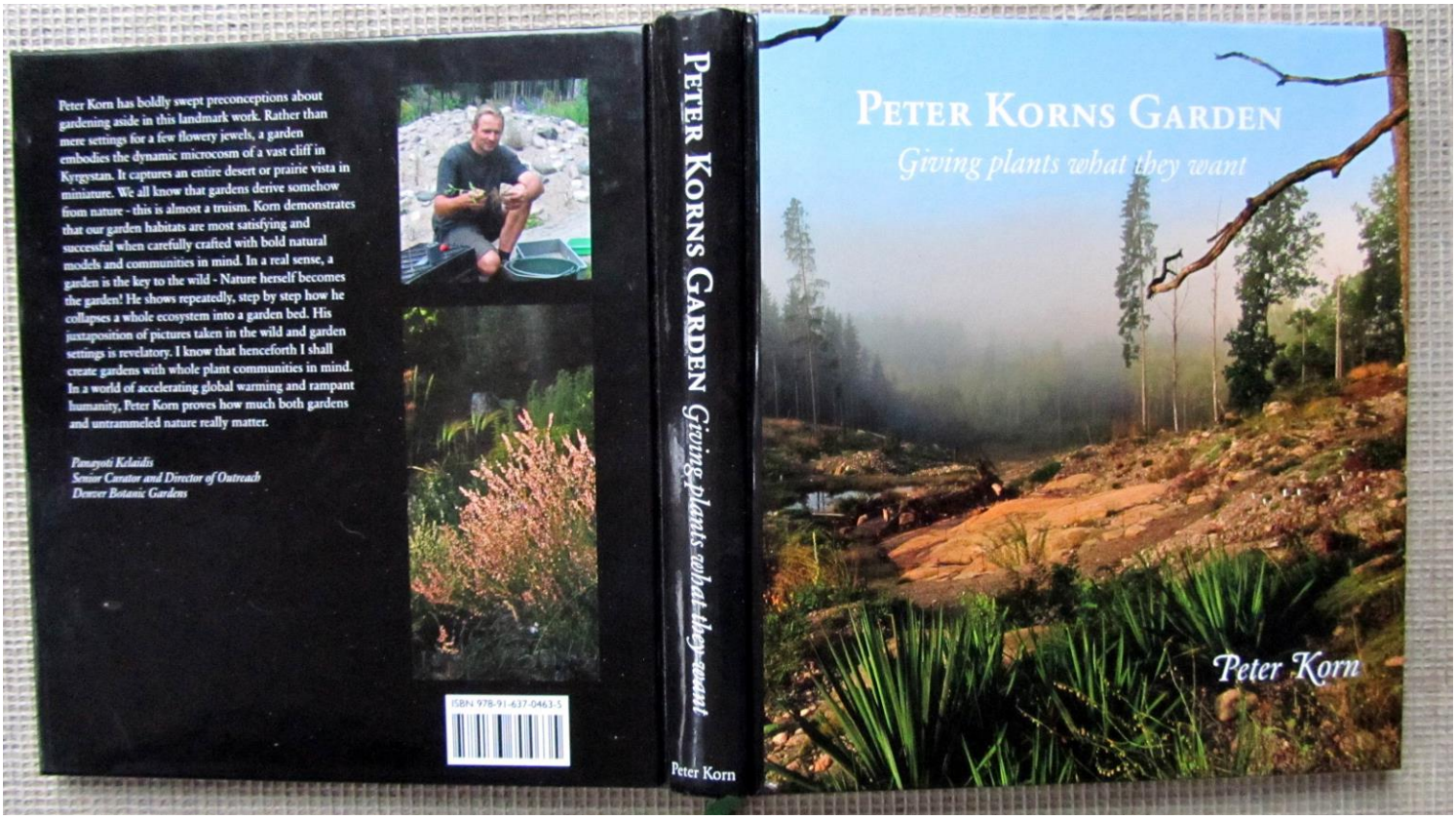
I am using some of the lower level of my new staging for propagating, on the right is the mist unit which is not running in the winter but I am using the area on the left.

Here I have a layer of silica sand which I am keeping just moist enough to support some cuttings but not so wet as to encourage rot to set in. Almost anything will root from cuttings if you can keep the material alive until it forms a new root system – you are the life support system. Cuttings of Androsace and Saxifrage are relatively easy rooting slowly over the winter when the transpiration rate is very low but the leaf cuttings of Eucomis schijffii are very fleshy and more prone to rotting. These cuttings were taken around ten weeks ago by removing a leaf and slicing it into sections – two rotted off completely, one has suffered some die back but the other three still look healthy.

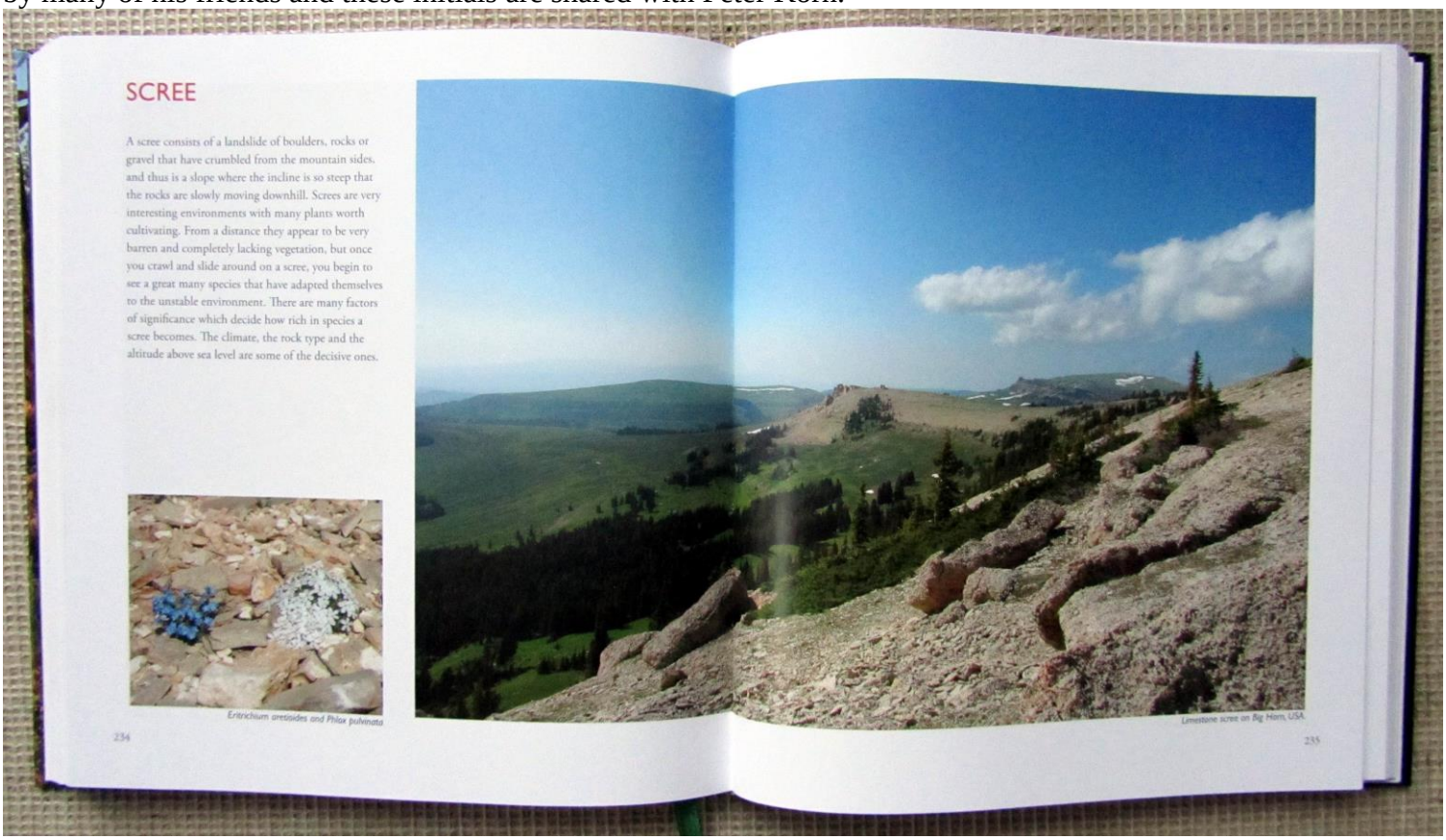


Eucomis schijffii cutting with bulbils

Curious to know what was happening I lifted the damaged one and to my delight there are a number of bulbils forming along both the cut and the damaged edge – the largest of which also has root growth. I will not disturb the others.

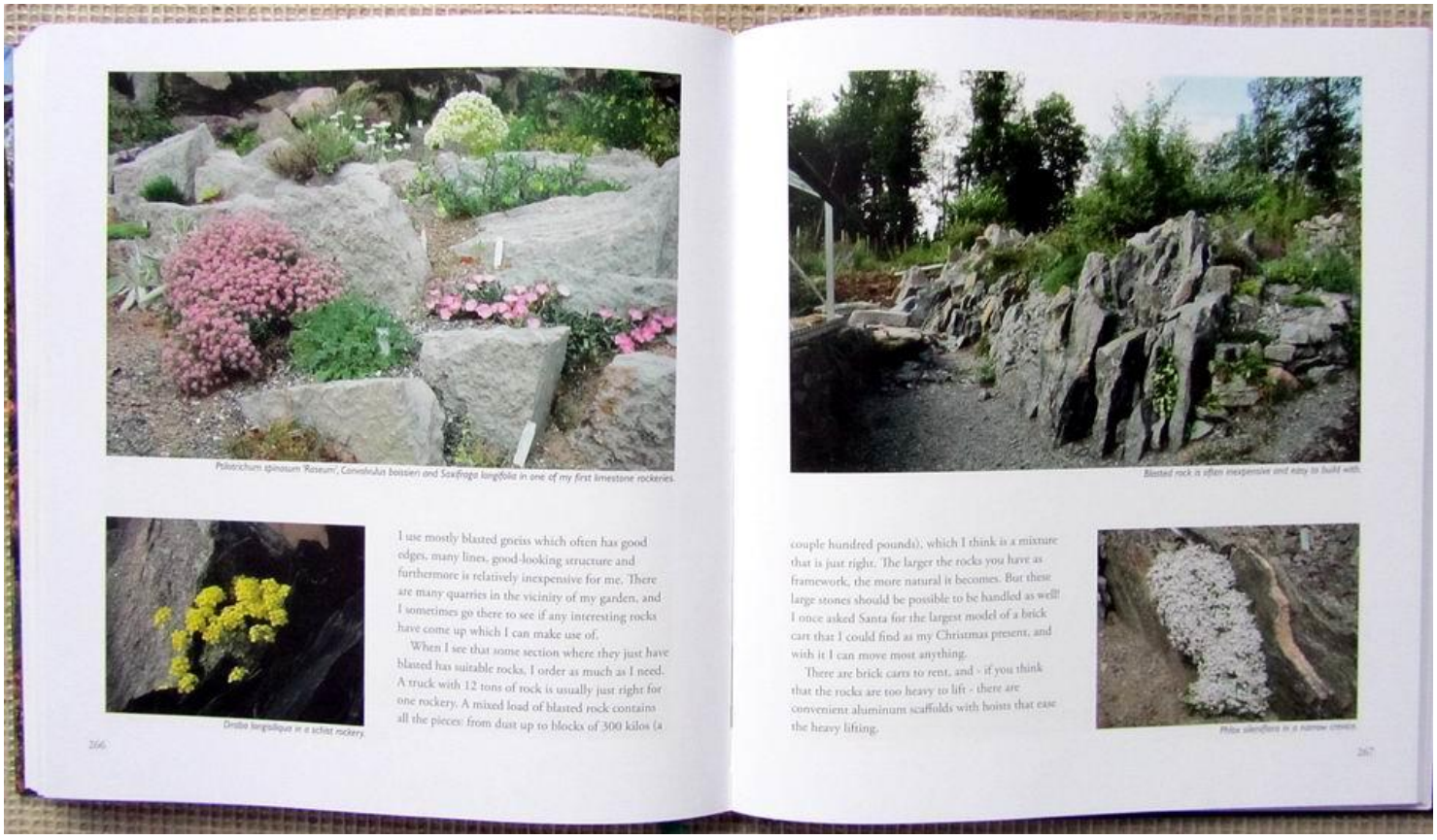


Over the years I occasionally review or recommend books in the Bulb Log and this week I want to draw your attention to a real gem of a book Peter Korns Garden. Like many I have known and followed Peter's progress since around 2001and have been continually amazed at both his herculean work rate and his ideas. In many ways we share a similar approach where we try and create environments suited to the growth of specific plants the big difference between us is the scale – I do things on a small scale often creating these environments in troughs Peter on the other hand does it over acres. Peter is perhaps the most remarkable gardener that I have known and I know a lot of remarkable gardeners. I am not the only one to have such a high respect for Peter - Panayoti Kelaidis writes highly of Peter and this book on its back cover. I find some amusement that Panayoti Kelaidis is called simply 'PK' by many of his friends and these initials are shared with Peter Korn.

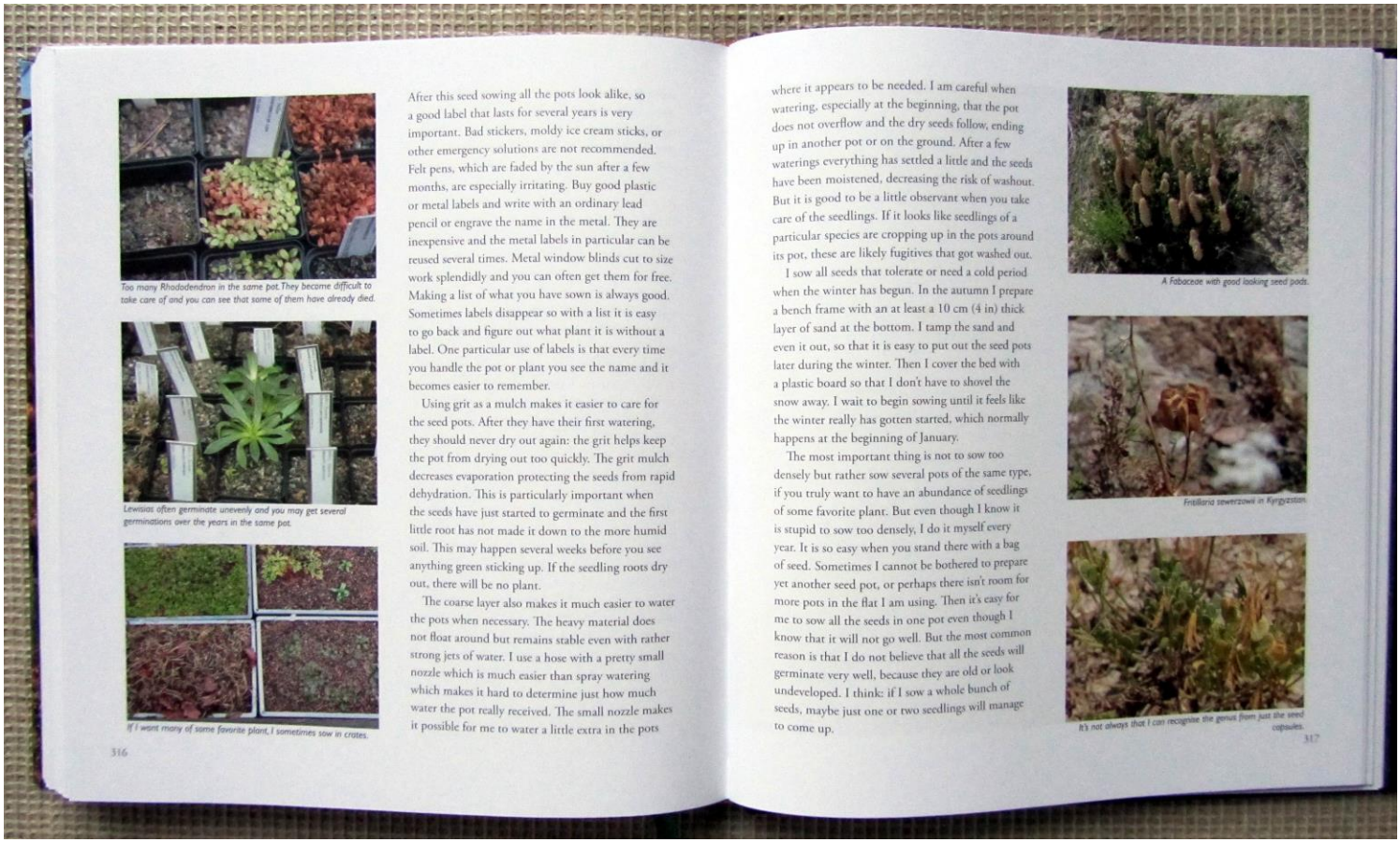


Peter's book explains how he tries to mimic the natural environments of the plants habitat explaining the key characteristics of each and how he tries to recreate similar conditions in his garden.

The book is lavishly and beautifully illustrated both with Peter's own pictures as well as those of other well-known plantspeople - it is well worth the cover price for these alone. You could call it a perfect 'coffee table book' as you can pick it up at any time flicking through and admiring the many wonderful pictures but that would not take into account the great lessons that Peter has learned from his experiences and shares in these pages.



Pictures of wild habitats and their plants sit side by side with pictures of and plants from Peter's garden – in fact it is sometimes difficult to tell which is which and that is exactly what Peter has set out to achieve.



Too many Rhododendron in the same pot. They became difficult to take care of and you can see that some of them have already died.

Lewisias often germinate unevenly and you may get several germinations over the years in the same pot.

If I want many of some favorite plant, I sometimes sow in crates.

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After this seed sowing all the pots look alike, so a good label that lasts for several years is very important. Bad stickers, moldy ice cream sticks, or other emergency solutions are not recommended. Felt pens, which are faded by the sun after a few months, are especially irritating. Buy good plastic or metal labels and write with an ordinary lead pencil or engrave the name in the metal. They are inexpensive and the metal labels in particular can be reused several times. Metal window blinds cut to size work splendidly and you can often get them for free. Making a list of what you have sown is always good. Sometimes labels disappear so with a list it is easy to go back and figure out what plant it is without a label. One particular use of labels is that every time you handle the pot or plant you see the name and it becomes easier to remember.

Using grit as a mulch makes it easier to care for the seed pots. After they have their first watering, they should never dry out again: the grit helps keep the pot from drying out too quickly. The grit mulch decreases evaporation protecting the seeds from rapid dehydration. This is particularly important when the seeds have just started to germinate and the first little root has not made it down to the more humid soil. This may happen several weeks before you see anything green sticking up. If the seedling roots dry out, there will be no plant.

The coarse layer also makes it much easier to water the pots when necessary. The heavy material does not float around but remains stable even with rather strong jets of water. I use a hose with a pretty small nozzle which is much easier than spray watering which makes it hard to determine just how much water the pot really received. The small nozzle makes it possible for me to water a little extra in the pots where it appears to be needed. I am careful when watering, especially at the beginning, that the pot does not overflow and the dry seeds follow, ending up in another pot or on the ground. After a few waterings everything has settled a little and the seeds have been moistened, decreasing the risk of washout. But it is good to be a little observant when you take care of the seedlings. If it looks like seedlings of a particular species are cropping up in the pots around its pot, these are likely fugitives that got washed out.

I sow all seeds that tolerate or need a cold period when the winter has begun. In the autumn I prepare a bench frame with an at least a 10 cm (4 in) thick layer of sand at the bottom. I tamp the sand and even it out, so that it is easy to put out the seed pots later during the winter. Then I cover the bed with a plastic board so that I don't have to shovel the snow away. I wait to begin sowing until it feels like the winter really has gotten started, which normally happens at the beginning of January.

The most important thing is not to sow too densely but rather sow several pots of the same type, if you truly want to have an abundance of seedlings of some favorite plant. But even though I know it is stupid to sow too densely, I do it myself every year. It is so easy when you stand there with a bag of seed. Sometimes I cannot be bothered to prepare yet another seed pot, or perhaps there isn't room for more pots in the flat I am using. Then it's easy for me to sow all the seeds in one pot even though I know that it will not go well. But the most common reason is that I do not believe that all the seeds will germinate very well, because they are old or look undeveloped. I think: if I sow a whole bunch of seeds, maybe just one or two seedlings will manage to come up.

A Fabaceae with good looking seed pods.

Fritillaria sewerzowii in Kyrgyzstan.

It's not always that I can recognise the genus from just the seed capsules.

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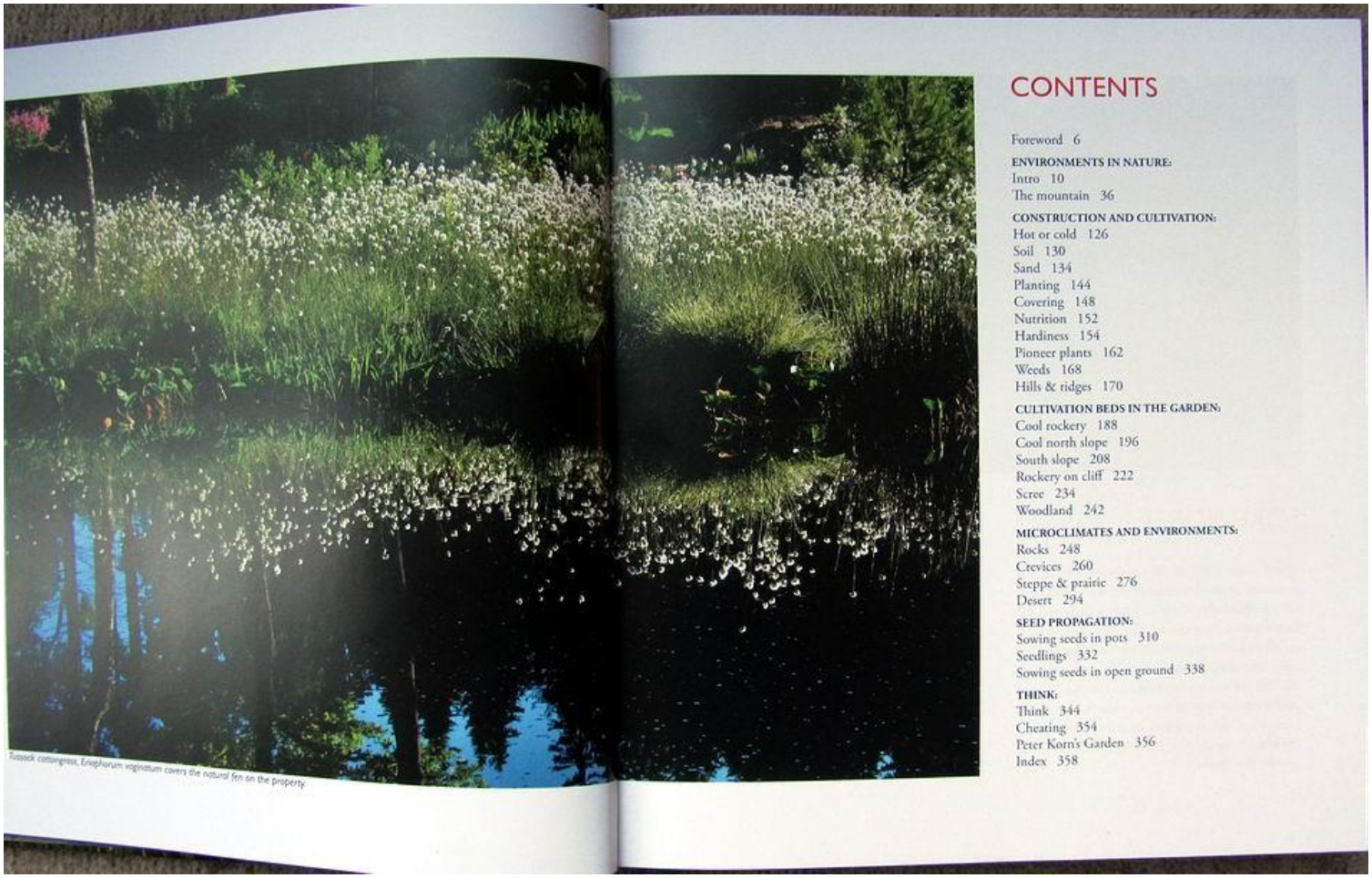
Peter raises many thousands of plants every year, mostly form seed using his own methods which he explains and illustrates in these pages.



Russock cottongrass, Eriophorum vaginatum covers the natural fen on the property.

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The book is self-published and was originally only in Swedish but now an English language version is also available. I cannot recommend this book highly enough and you will learn much from Peter's methods which in some instances turn rock gardens as many know them upside down. To learn more or purchase the book you must go [Peter Korns web site]

I want to introduce you to two new members of the Bulb Log family. About six weeks ago we re-homed Molly, left, and Megan, centre, here with Miss Lily. They are 7 1/2 years old and are great fun - they are responding very well to being trained to only walk on the paths in the garden with Lily setting a good example, I am sure you will see more of them in future logs.

Finally for this week another picture of wee cute white things - that narcissus hybrid…….