

The Bulb Garden



~Gardening with Bulbs~

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COMPANION PLANTING, PART 1

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Plants in nature generally grow in company with other plants, and only rarely on their own. So why not adopt this in cultivation? This article shares my experience of growing groups of smaller geophytes in the same pot. Another topic is growing bulbs with other suitable companions in the open garden, which I will write about in Part Two. Having started tentatively some time ago, I can now look back at several years with this growing technique. It has proved particularly successful in the Mediterranean climate after my move to Portugal in 2017, and it is a very suitable way to keep an ever-growing collection manageable.

General considerations for companion planting in pots. Not all bulbs are suitable; the very vigorous ones would choke or otherwise outcompete their co-residents, and very small and fragile ones would be the first victims. The former would include *Zantedeschia aethiopica*, which forms massive clumps, dense foliage, big tubers and a very strong root system. It can be successfully pot-grown but is better on its own. The same applies to plants like *Crinum*, *Agapanthus* and *Clivia*. Apart from the competition, it would be very difficult to separate unhappy partners from the dense tangle of roots. And somehow, I have never felt happy with including *Cyclamen* with companions. However, there is otherwise an almost unlimited range of bulbs which are eminently suitable to be grown in company with excellent results.

First of all, those bulbs that will be future co-residents must have the same cultural require-

ments. I mostly practice companion planting with winter-growing bulbs from the various Mediterranean climates of the world, but even among these some have a longer dormancy than others, and some like more moisture, light, or fertilizer than others. The fine-tuning of the latter conditions will be dealt with later.

Surprisingly, the substrate does not seem to matter: I grow most of my bulbs in the same substrate, which is, believe it or not, a fully organic material made of composted bark. It has excellent stability, high air content, good drainage, and moisture retention at the same time. For some more root-fragile bulbs I add up to 50% coarse sand. For seed I use a similar composted bark of a much finer grade with about 50% of the same sand. These substrates are low in nutrients and therefore produce excellent vigorous, “hungry” roots. The nutrients are topped up at least three times during growth with a balanced low nitrogen, high phosphate and potassium fertilizer.

Another practical necessity is that the dormant bulbs should be clearly distinguishable: I repot almost all my mature bulbs annually during dormancy and would hate it if I could not distinguish similar-looking bulbs. It is therefore not a good idea to plant several species of the same genus together — for example, several different *Oxalis*, *Gladiolus*, *Lachenalia* or *Babiana*. It would end up in a terrible muddle. Even so, I have found it difficult to distinguish, for example, small species tulip bulbs from smooth-skinned oxalis.

Let's have a look at the pots used for companion planting. I use fairly big pots, none smaller than 6 litres (1.5 gallons)* and as wide as they

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are deep. Mainly three sizes of the same model are used: 6 litres, 8 litres and 10 litres (1.5, 2 and 3 gallons). These pots do not fall over as easily in windy conditions as the taller, narrower versions and are still deep enough to allow good root run for most bulbs. Bulbs with a known deep root run are planted in deeper containers. As I grow all my winter-growing bulbs outside without protection, pot size does not matter as much as it would in the limited space of a greenhouse. (*In the U.S., for example, typical pot sizes would be 1, 2 and 3 gallon pots, and these would be either a tall pot or squat, rounded pot. The shorter, broader pots will work well for most bulbs.)

Now to the details of companion planting. The most obvious advantage is reducing the sheer number of pots to look after. This was my initial motive, but there are far more advantages. The large size offers a much better root run into

a much larger volume of substrate than do small individual pots. This means a much more even supply of moisture and nutrients; bigger pots do not dry out as easily as small ones, and their soil temperature is much less prone to drastic changes. During dormancy the bulbs are much better protected from summer heat in a big pot. These aspects matter especially for young, immature bulbs, but mature plants benefit as well. Large pot size is probably the most important explanation for success.

Among the best candidates for companion planting are the dainty species of *Gladiolus*. They are so delicate, and their grass-like foliage might be easily mistaken for grassy weeds so that they might quickly get lost in the garden. They never choke a neighbor, and being slender and relatively tall they are never choked themselves. They happily combine with *Lachenalia* species, for example. Even the vigorous and relatively tall ones like *Lachenalia bulbifera* or *Lachenalia aloides* and their various forms have never done any

harm to *Gladiolus* species in the same pot, provided the gladiolus are not first-year seedlings.

Lachenalia and *Gladiolus* then combine happily with oxalis. At this point we can get into trouble if the oxalis is too vigorous for the *Lachenalia* neighbors; some oxalis are therefore not suitable. The only companions I use *Oxalis bowiei* and the similar *O. semiloba* with are tough *Albuca* species, which can defend themselves against a strong-growing oxalis. That combination needs extra-big pots and produces spectacular displays. *Oxalis hirta* in its different forms is also quite vigorous, but *Gladiolus* or small *Watsonia* species are happy companions.

Another good partner is dwarf narcissus: their thin, upright foliage does not disturb their neighbors, and the flowers look very attractive over a carpet of very low-growing oxalis or *Anemone coronaria* leaves, even without flowers of the latter. The dwarf autumn-flowering *Nacissus serotinus* looks very pretty with dainty autumn-flowering pink oxalis, for example *Oxalis callosa*. I made the mistake of combining *Nacissus serotinus* with a white autumn-flowering oxalis: I had a muddle of white flowers which did not complement each other. Blue *Hyacinthoides lingulata* is added to this autumn symphony.

If we look at these combinations, they fulfil all criteria: all are summer-dormant and winter-growing. The combination of some narcissus and anemone works well because both do not like to be brutally baked during summer. The bulbs can be easily distinguished when unpotted. These combinations are beautiful!

We have not yet considered the aesthetic aspect of companion planting: the advantage is that the same pot can look interesting at different times of the growing season when partners are chosen which flower or otherwise look attractive at different times. Another pot can look very attractive if contrasting colors, textures and shapes are combined which are at their best at the same time. Both solutions have their pros and cons. Sometimes I have combined bulbs of which one partner had an extremely late period of interest (*Triteleia* and *Brodiaea*) when its companions' flowers and even foliage was already withering. That happened when my seedling *Brodiaea* and *Triteleia* flowered for the first time, as I was not familiar with them. A new

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combination with partners with longer-lasting foliage was needed the following season.

Most arum species are too big for companion planting except in the seedling stage. However, *Biarum* species combine well, and *Arum pictum* looks magnificent together with *Oxalis* 'Ken Aslett', the golden yellow flowers and silver leaves of the oxalis contrasting beautifully with the dark maroon spathes and distinct leaves of the arum. The narrow gladiolus leaves which emerge in between do not disturb at all and will give their own display later, still underlined by attractive foliage. Aroid tubers are very easy to distinguish from other bulbs.

Labeling: Accurate labels are important in any plant collection, but with companion planting there is another aspect: I write notes on the labels if I am not happy with a combination or if I find it very satisfactory. A label might say, "Next time combine with this or that other plant," or "This one is not suitable for companion planting," or "Multiply and plant much denser!" This applies to dwarf narcissus, dwarf freesia like *Freesia caryophyllacea*, and some oxalis such as the moss-like *Oxalis kasvogdensis*. Overcrowding rarely happens for me, but that can be noted on the label as well: "Use a much bigger pot." This happens quite often when seedlings are potted together and develop much better than anticipated. The *Massonia* species in my collection are marked "Do not combine with oxalis," because the faded oxalis petals will lay on the flat *Massonia* leaves and transmit rot onto them.

I also have a set of coloured labels. Red labels without any writing on them stand for attention, observation. Blue labels stand for a not-so-dry dormancy, and their pots are grouped together and get extra water during dormancy, for example *Tropaeolum* (not suitable for companion planting) and all Ranunculaceae like *Anemone*, *Ranunculus* and *Paeonia* seedlings. If this fine-tuning by notes on labels is kept up over the years, the result becomes more and more satisfactory and adapted to the given growing conditions (and to the aesthetic preferences of the gardener). I have had unhappy combinations, but have never lost a species due to companion planting. Most of the plants thrive much better in company than on their own in smaller pots.

How do I plant? There are two ways of planting companion pots. One obviously is by using mature dormant bulbs and combining suitable species. It often happens that some need deeper planting than others, so planting in layers is the solution. I do not

place bulbs directly on top of each other to avoid the upper ones being pushed up by a vigorous fellow from downstairs. Two or three layers of bulbs are quite feasible. This also applies to very large, ornamental containers where commercial bulbs can be planted very densely in layers to give an impressive show — for example, very early tulips combined with very late ones underplanted with blue muscari, or narcissus hybrids with hyacinths in complementary colors. Most commercial bulb companies offer sets of suitable companion bulbs, but this article focuses on the smaller species bulbs.

The other technique is transferring seedlings in the green from their seedling pots into the community pot. I do this with growing plants and not during dormancy. Whenever I see a dense population of seedlings emerging after the first dormancy, I decide it is time to move on into a bigger pot. This mostly happens at the beginning of the growing season, but even later I keep up-potting seedlings if they grow too densely. I stop, however, in late winter, because the benefit will be smaller the closer we get to summer dormancy. While I initially hesitated to repot growing bulbs, I have **never** had any losses. The big new pot is prepared with new substrate up to a level to comfortably accommodate the new root balls. I turn the seedling pot upside down onto one hand so that the whole content comes out like a cake and set it into the new pot without manipulating the root ball or disturbing the roots.

Up to three companions will follow. The resulting cavities are filled with the same new substrate, and everything is well watered in. I use 8x8x9 cm (approximately 3-inch) square seed pots, so that up to four of these root balls can be accommodated in a 6-litre pot. Even in 10-litre pots I do not put more than four companions. This technique has proved extremely successful: the seedlings seem to explode into growth after transplanting. Most of these seedlings are in their second season, but with *Gladiolus*, *Geissorhiza* and *Romulea* species, for example, I often wait another season before I repot them. These species are so thin and fragile that I worry about the root ball falling apart in the process if I transplant them too early. However, they run a higher risk of loss during dormancy in their smaller square seedling pots than in the big one.

These companion pots with very fine-textured bulbs might not be repotted the next year, because the bulbs/corms may still be so small that they could be lost in the process. (I **never** re-use my composts.)

COMPANION *continued*

In this case, the pots get an extra red label which says “no transplant in 2022.” But the disadvantage is that these pots will have a lot of weeds germinating on the surface next season, and weeding between hair-thin leaves is a tricky job which needs patience, time and concentration. And of course, the companions with the seedlings have to be chosen carefully in order to avoid an over-vigorous one squeezing a fragile one. So there are always pros and cons and continuous learning and observation.

Yet another aspect: So far we have dealt with companion *planting*. But there is also companion *sowing*. This may sound weird, but I discovered a tremendous advantage. I have almost never managed to keep anemone and ranunculus seedlings alive during their first dormancy, using my standard 8x8x9 cm pots. Even in a shaded place with some water during dormancy, they shrivel away. I have the same problem with winter-growing *Watsonia*, but by sowing in a big pot (3 or 4 litre or 1 gallon) the survival rate of both is quite good although still not perfect. As they can be easily distinguished as dormant tubers/corms, they can remain in their big seedling pot for at least two seasons and then be repotted and separated. This is still in an experimental stage and I have not done it very often.

Why do I grow so many bulbs in pots and not in the ground? I do in fact grow quite a lot of bulbs in the open garden, but pot culture has some definite advantages. It is much safer for any bulbs which are prone to being eaten by rodents. So far here in Portugal, the mice have hardly ever discovered the contents of dormant pots. I lost a mature pot-grown specimen of *Canarina canariensis* to mice. They dug through the entire large container and not a single bit was left. To be on the safe side with valuable or irreplaceable bulbs, I grow a small “safety stock” of bulbs in pots whereas the bulk is planted in the open garden if I have enough of them. In addition, my experience after four years in Portugal has been that seedlings in pots develop very much faster than in the open garden. I have compared *Amaryllis belladonna*, *Lilium candidum*, *Fritillaria lusitanica* and various cyclamen species. None of them has developed satisfactorily after sowing in a well-prepared seed bed in the open garden. Weeding and fertilizing did not help. The same seed in pots has produced excel-

lent results, except with *Fritillaria lusitanica*, which seems to be difficult to raise from seed.

Many of my companion pots are home for seedling bulbs until they are big enough to go into the garden. Their labels will eventually say “plant out.” This applies more to the robust and large-growing species which are only temporarily grown in pots. However, there are many smaller species which may be better accommodated permanently in pots because they might get lost in the garden, particularly during dormancy. It might depend on how a garden is organized, but as mine is still very much in the making, for now I prefer to plant out only the robust plants. My aim in pot-grown bulbs is full pots which give a good display. I have always admired the pictures in the journal of the Alpine Garden Society which show pans of densely flowering rarities (sometimes too dense for my taste, though); and last but not least, a large pot in full flower can be moved to a prominent place and be replaced by another one when it fades.

How do I manage the pots during dormancy? The pots with growing plants are placed in full sun in front of my greenhouse, standing in rows on woven black plastic fabric to prevent weeds. The front row is protected from too much heat with boards leaning against the front line of pots. The rest of the containers shade one another, especially when the plants are growing. This is fine during winter when the sun is at a low angle and not excessively hot. Almost all bulbs like full sun during growth, and some flowers like oxalis only open in direct sun. But come spring, this becomes too hot on bright days. We have rainy days here well into May, but in between it is warm and sunny. Warmth induces dormancy in winter-growing bulbs, and some species are more easily triggered into summer rest than others. As I put a lot of emphasis on keeping my bulbs green for as long as possible, I gradually move the most susceptible ones into a shaded position under our cork oaks, where they will spend the summer.

As I was very busy with other things this summer, I only moved some of the pots, especially those with blue labels (meaning not brutally dry), and left most of the others in place but covered them with white horticultural fleece. This was not a good idea for several reasons: the white fleece gives a certain amount of shade and

COMPANION *continued*

reflects some of the sun, but not enough. Also, a fleece cover hides the pots from the gardener’s eyes, so incipient problems are not noticed. After lifting some of the fleece, I found deformed plastic labels, which meant that the (black) pots had become much too hot. When it came to unearthing the bulbs and repotting again, I found some bulbs were dehydrated and soft to the touch, although not dead. Only a very few had succumbed to the heat, and many looked as if they had liked it... but I did not. Maybe this needs further observation; the proverbial “baking” during summer seemed to be a bit too much. Practically all the bulbs have recovered from this mistreatment and have sprouted vigorously. Also, I noticed that under the protection of the fleece, rodents were about to

End of October: freshly potted and watered bulbs start into growth. Pots lined up in front of the greenhouse, weather still warm and dry.



start to dig in the pots, though there were no significant losses. Had the fleece remained in place a little longer...

A sand plunge would be perfect, but having so many large pots, I do not see myself building one at the moment. A permanent solution might be to build a sand plunge with a pot-in-pot system. The pot containing the bulbs could be lifted without the dry sand immediately filling the hole which is kept open by a just slightly larger pot in which the bulb pot was sitting. Does anybody have experience with this kind of sand plunge? My biggest concern would be that pests, especially soil-borne ones, can easily spread in such a system.

For next summer, I will move the pots into shade before they get too hot. During the hottest time, I

give them a superficial watering with a hand rose every 4 or 6 weeks without really moistening the compost throughout.

My conclusion is that companion planting in pots has proved very satisfactory after some learning what not to do. I would like to encourage bulb enthusiasts to experiment with different growing techniques and invite them to share their experience.



Begin with the planting of mature bulbs: *Lachenalia bulbifera*, *Oxalis luteola* MV 4748 and one corm of *Moraea polystachya* in the center.



Oxalis luteola starts very quickly. In the center, the emerging shoot of the *Moraea* is visible. One of the *Lachenalias* is just showing.

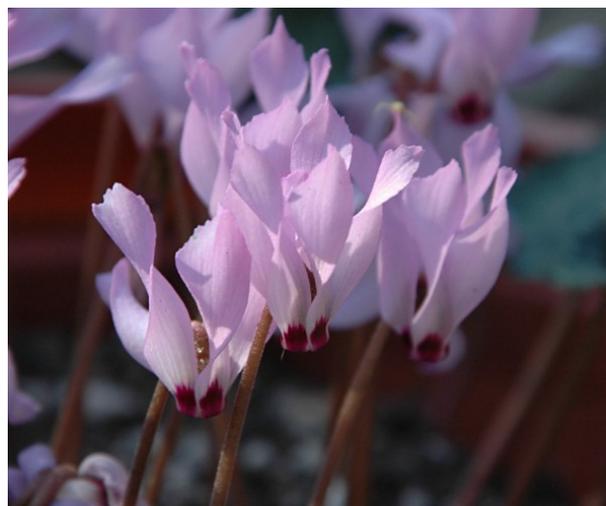
COMPANION *continued*



Moraea polystachya flowering, complemented by the yellow oxalis. Below: Would you believe this is the same pot? The oxalis is a good long-flowering partner. The seed head of the *Moraea* is barely visible and the *Lachenalia* is in full flower.



Another group of companions: *Lachenalia aloides*, *Babiana melanops* and *Oxalis obtusa* MV6235. ★★★



Cyclamen mirabile, above. Photo: Mary Sue Ittner. Below: Note pink tint to leaves. Photo: Robin Hansen.



FALL FLOWERS in the BULB GARDEN by Jane McGary

Every gardener wants to extend the flowering season past spring and summer, and bulb enthusiasts have many opportunities to do this. Where I live in the maritime Pacific Northwest of the USA, fall-flowering bulbs are well adapted, but I was curious what growers in other areas found most useful at this season. An inquiry on the PBS discussion list was enlightening.

Two regions appear to dominate this season. The shores of the Mediterranean Sea host many species that come into growth and flower with the onset of cool, moist autumn. Other Mediterranean-climate parts of the world rely on these plants for gardens, especially the Pacific coast of North America. They would also do well in Chile; I haven't visited there in the Southern Hemisphere autumn, so I don't know if anyone is trying them. The other group of plants mentioned by multiple correspondents is subtropical Amaryllidaceae, including bigeneric hybrids, and these seem especially popular in the southeastern United States.

One obstacle to introducing fall bulbs in gardens is limited availability. A few Dutch bulb catalogs list some, but to succeed, these early-developing plants have to be shipped well ahead of the common spring bulbs such as daffodils and tulips. Even when I was able to buy fall bulbs from overseas specialists, most of which no longer ship to the USA, they often arrived already in flower. That doesn't harm a large colchicum, but it might be bad for a little crocus. American gardeners should look for sources of American-grown (not imported) fall bulbs; see the "Sources" page on the PBS website for suggestions.

Here are some good subjects, along with reports of growing them in various regions.

Cyclamen. *C. hederifolium* is probably the most widely adapted species, reported from southern Ontario, North Carolina, northern California, Oregon, Washington state, and France. In my garden it covers the ground surrounding two huge Douglas fir trees, where almost nothing else can grow. I made sure to bring plenty of white-flowering forms from my previous garden, so there's now a pretty color mixture. Ants have transported seeds into the lawn and the roadside gravel parking strip. I need to lift some of the little silver-leafed seedlings and get them into more useful places. A spectacular fall cyclamen is *C. graecum*, which is hardy in the open garden here given good drainage; it should be used much more in California. Other autumnal species

include *C. cilicium*, *C. cyprium*, *C. mirabile* (see page 6), *C. africanum*, and *C. rohlfianum*. With winter lows around 18° F (-8° C), I can keep *cilicium* and *mirabile* on the rock garden, but the others are in pots brought inside during cold snaps. Mary Sue Ittner on the northern California coast can grow all of them without protection. Robert Parks in San Francisco reported *C. coum* in flower in October, which surprised me since mine rarely open before January, though growing strongly by November. *C. coum* is another species that self-sows very freely; here it is a ground cover under a large deciduous magnolia.

Sternbergia. The bright yellow flowers of *Sternbergia* remind one of crocuses, but it's actually a close relative of *Narcissus*. *S. lutea* and the doubtfully separable *S. sicula* are most common in gardens, but difficult to obtain in North America, partly because the entire genus is CITES-listed and thus expensive to ship. They do well in sunny, well-drained sites and tolerate occasional summer water. I also have a garden group of *S. greuteriana*, which is smaller but increases well vegetatively. Another autumnal species is *S. clusiana*, which can, with patience, be grown from seed; its flowers are quite large. Several other species flower from midwinter into spring. Like *Narcissus*, *Sternbergia* is vulnera-



Sternbergia greuteriana. Photo: Angelo Porcelli.

ble to bulb fly.

Crocus. The autumnal crocuses are too numerous to mention all of them here. The best-known is

Fall Flowers *continued*

C. sativus (saffron), a sterile triploid derived from *C. cartwrightianus*; the latter is also a good subject for summer-dry gardens, whereas saffron appears to do best with richer cultivation. Mary Sue Ittner enjoys *C. goulimyi* from southern Greece. Martin Bohnet in Germany mentions two names new to me, *C. puringii* and *C. xanthomelas*, possibly among the numerous new

species recently published by Turkish botanists. Outdoors I grow *C. boryi*, *C. niveus*, *C. kotschyanus*, *C. pallasii*, and *C. serotinus* in the sparse, dry turf of the bulb lawn, *C. tournefortii*



Above: *Narcissus serotinus*. Photo: Angelo Porcelli. Below: *Acis valentina*. Photo: Jane McGary.



Photos by Laura Grant of winter protection arrangements.

and *C. ochroleucus* in a raised bed, and *C. speciosus*, *C. medius*, and *C. banaticus* in irrigated parts of the garden. *C. speciosus* is available in named forms from commercial catalogs and

Fall Flowers *continued*

probably the most widely adapted autumnal species. Some other autumnal crocuses I consider too precious to risk outside the bulb house, and fortunately this genus does well in pots; there, *C. wattiorum* and *C. veneris* flowered for me the first time this fall. Crocuses are easy to grow from seed, if you can obtain it.

Narcissus. Around the Mediterranean one finds autumnal daffodils, small, slender plants mostly with white tepals and a yellow or orange central cup. These are collectors' plants for warm-climate gardens and heated greenhouse culture. Carlos Jiménez in Spain is growing a good range of them, reporting in order of flowering *N. deficiens* (syn. *miniatus*), *N. serotinus*, *N. obsoletus*, *N. elegans*, *N. broussonetii*, *N. ×perezlarae*, and *N. viridiflorus*. Ross Hornsby reports growing some of these in Alabama. Only *N. elegans* has survived for me, in the unheated bulb house. One correspondent mentions *N. cantabricus* as autumnal, and I suppose it is, since for me it opens just before the official start of winter.

Acis (snowflakes, formerly included in *Leucojum*) has several fall species. Quite common in gardens is *Acis autumnalis*, a little plant given to self-sowing, and often flowering here as early as September. Some forms have red stems and a pink tint on the flowers. The other one I grow is *Acis valentina*, about the size of the familiar spring *Leucojum* species. Both are Mediterranean in origin. The former is quite hardy and is reported by many PBS members; it increases quickly by both bulbs and seeds. The latter is rare in cultivation, probably best obtained from seed, and is hardy outdoors for me in western Oregon and for Carlos Jiménez in Spain.

Oxalis. The cultivation of *Oxalis* (mostly in containers, one assumes, given the invasiveness of most species) is popular among PBS members. Species mentioned by correspondents as fall-flowering include *Oxalis bowiei*, *O. articulata*, *O. atacamensis* (with crepuscular bloom), *O. bifurca*, *O. engleriana*, *O. hirta*, *O. livida*, *O. massoniana*, *O. palmifrons*, *O. pardalis*, *O. perdicaria*, *O. peduncularis*, and *O. tuberosa*. Mary Sue Ittner in coastal northern California curates an extensive collection and often supplies these to the BX.

Laura Grant has kindly provided a description and photos of her extraordinary arrangement in her gardens in Toronto, Ontario, and in northern New York state. (See previous page.) She writes: "My plants are in a raised bed amended with about 18 inches of sand and gravel. The bed is facing south

against the house wall. I used to protect them with a deep mulch of shredded oak leaves but that proved to be too much work in the spring. So now the mulch consists of 'pillows' made with contractor-grade garbage bags filled with styrofoam packing pellets and sealed with duct tape. The pillows end up being about 4 inches thick. These pillows are then covered with a waterproof tarp to prevent the wind from blowing them away and to keep the beds dry. Some rodent protection is used to stop them from making winter homes and feasting on my bulbs."

Near Portland, Oregon, I grow many of the bulbs mentioned in a "Mediterranean house" with a solid roof and wire-mesh sides. Some are planted directly in a raised bed and others are in pots plunged in sand. Most winters they experience low temperatures around 20° F. Species that require summer water are either in irrigated sections of the garden or in containers on a roofed patio; the latter can be moved into an unheated garage during severe cold spells.

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Oxalis bifurca. Photo by: Mary Sue Ittner.

***Moraea insolens*—Mike Mace**

Mike Mace is a long-time member and contributor to The Bulb Garden, and is proof that persistence pays handsomely. If at first you don't succeed, keep trying... This brief plant portrait is taken from his posting to the PBS Discussion List.

I wanted to share a little success story with you. It only took nine years, but *Moraea insolens* finally bloomed for me this week, for the first time ever. As you can see, it's a very cheerful deep orange flower with unusual brown and cream markings. It was quite a treat to find the little flower glowing among my other plants.

Moraea insolens is a rare bulb, known from only a few spots in South Africa. Seed has been offered commercially a couple of times that I know of in the last two decades, but it doesn't look like it's well established among PBS members. The only references I could find on the PBS list were that Joyce Miller once offered a few corms to the bulb exchange, and Will Ashburner in Australia reported once that it had bloomed for him (only two years after germination!). I wish I knew how he did that.

In my garden *Moraea insolens* is not as easy to grow as most of the other *Moraeas*. I tried several times to grow it in pots, with no survivors. What finally worked was a raised bed in a spot that stays damp all winter. Even with careful care and watering, the bulbs took nine years to reach blooming size (the usual for *Moraea* species is 3-4 years). I know that's not a long wait compared to some Amaryllids, but for me it was a long delay. The little *M. insolens* seedlings put up a single threadlike leaf that was a little bit more robust each year. This year one plant put up a normal-looking leaf and then a short bloom stalk.

I don't know why it chose to finally bloom this year. Fire is supposedly a trigger for these plants in the wild, so I burned some dry grass over them in the summer. Maybe that helped. Or maybe it just takes a long time to build up its strength in my climate. Anyway, it's a very cute little plant.

If anyone else has this species, please ping me -- maybe we can exchange pollen, so we can get some seeds. In the meantime I am having fun trying to make hybrids. ✨ ✨ ✨

**ANNOUNCEMENTS**

Due to the volume and size of the Pacific Bulb Society Seed and Bulb Exchange, the Board of Directors has decided to appoint two people to manage the exchanges in the U.S. Please welcome Jan Jeddelloh of Portland, Oregon and Bridget Wosczyzna, Seed Director and Bulb Director, respectively.

Jan Jeddelloh says she has loved growing from seed since she grew her first patch of Sweet William at age five. Her interests now have gone far beyond that (to our benefit). She has been growing plants, both bulbous and non-bulbous from seed exchange seed for many years. She was forced to grow shade-tolerant plants under trees and so developed a particular fondness for trillium, erythronium and cyclamen. Now that she has a sunny garden her interests have expanded into sun lovers. It may be obvious to most, but she says she was dumbfounded at how much better plants, particularly most bulbs, grow with sun. Of late she has particularly enjoyed growing species narcissus. She is also quite enchanted by the little guys like *Narcissus cyclamineus*, *N. asturias*, *N. triandrus* and the *N. bulbocodium* tribe.

Over the years she has been involved in all aspects of the NARGS seed exchange except intake and has donated seed for many years. She also helps pack seed each year and several times the Columbia-Willamette (Portland) NARGS chapter has been responsible for fulfilling the seed request. This has given her familiarity in how a seed exchange should work.

Bridget Wosczyzna (wa zeen a) is our new Bulb Exchange director. Bridget gardens in southeastern Pennsylvania and is building a new garden on recently acquired five and one-half acres in scorching sun. She has a passion for hardy aroids and digs and stores her entire collection (of hundreds) of *Arisaema* each year. Bridget came to gardening in her late 20s and is a former garden maintenance small business owner. She grows Japanese woodlanders, Mediterranean arums and hardy perennials but has a barn full of pots of winter-flowering South African bulbs, which she grows and even occasionally flowers! Bridget embraces the challenges of gardening and especially the fact that we continually learn with each success and failure.

ANNOUNCEMENTS *continued*



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c/o Arnold Trachtenberg, 140 Lakeview Avenue,
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Whether renewing online or by mail, please contact Jane McGary (janemcgary@earthlink.net) if any of your contact information has changed.

Thanks again for your continued support of
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**If you're about to move,
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ATTENTION PBS Members

CALL FOR APPLICATIONS FOR THE 2022 MARY SUE ITTNER GRANT FOR BULB STUDIES

This grant is set up to support anyone interested in learning more about bulbs. It may be used to support any type of research, including field-work and education. It is available to paid PBS members world-wide, and you may apply for membership when you submit your application. Applications deadline is May 31.

PBS has awarded applications to study Floral Traits and Pollination Syndrome in *Thalictrum*, Umbel-viable Diversity in *Allium*, and Phylogeography and Trait Evolution of the Ethnobotanically Important *Bomarea edulis* among others. You will find the reports of these studies in future issues of *The Bulb Garden*. For more information, visit PBS on the web under Grant.

The deadline for this year is March 31, 2022

The complete announcement, conditions, and additional information are found here:

<http://www.pacificbulbsociety.org/grant.html>

ANNOUNCEMENT

The Pacific Bulb Society is pleased to announce
publication of
The Genus *Hippeastrum*
(Amaryllidaceae) in Bolivia

As part of the Society's commitment to its members and to the public, and after nearly four years' effort, it is with great pleasure that the Society now has available copies of The Genus *Hippeastrum* in Bolivia. Please see also the ad on the back page of The Bulb Garden. Publications Director Arnold Trachtenberg is in charge of shipping the books, and payment can be made easily through PayPal. Arnold can provide details by emailing him at

hippie.book@aol.com

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The Bulb Garden is the newsletter of the Pacific Bulb Society (PBS). It is published, if enough articles are submitted, around the third week of each quarter and is available to PBS members. This newsletter provides gardening or bulb related articles, news of interest to members, and announcements of the PBS organization.

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