Fall, 2011

The Bulb Garden

~Gardening with Bulbs ~

Volume 10, Issue 4

What's Inside...

Galanthomania: Crazy about Snowdrops!

Freda Cox

Freda Cox (www.fredacox.co.uk), a well-known writer and artist, lives in Shropshire, UK. She regularly contributes to various publications. Her books include Seasons in a Country Garden, *Fulcrum Publishing;* Designing and Creating a Mediterranean Garden*, The Crowood Press;* Garden Design, An Essential Guide*, The Crowood Press.* Snowdrops *will be published by The Crowood Press in 2012.—Ed.*

An obsession sweeping Europe is Galanthomania. Why snowdrops? Well, for a start, these simple but magical blooms appear when little else flowers**.** With grey skies, temperatures below freezing, and ground thick with ice and snow, delicate snowdrops force through iron-hard earth. Within days, carpets of tiny, milk-white, pendant flowers spread beneath gaunt winter trees. Spring is coming.

"The secret of being happy is being obsessed by something."

— David Bellamy, naturalist

Description

To the novice, all snowdrops look similar. Three larger outer segments surround three smaller inner segments, with green markings at their tips, but variations of segment shape, flower, or green marks are all important. Although snowdrops are generally described as having petals, these are in fact tepals, where the perianth cannot be clearly differentiated into a petal or sepal (tulips are another example). Flowers should therefore be described as having tepals, or segments.

Snowdrops are bulbous perennials in the Amaryllidacea. They vary in height from around 10 to 23 cms (4 to 9 inches). Bulbs usually produce two narrow, green-blue basal leaves, and one scape. Flowers are white, solitary, and pendant, suspended from a slender pedicel. A few have upright flowers. Double snowdrops have twelve or more segments forming a cluster beneath the larger outer segments. Some are flushed yellow or apricot or have yellow markings instead of green. Originally, these were considered inferior. Now they are much sought after, commanding high prices.

Galanthus nivalis is the most common snowdrop, the one we think of as the *typical* snowdrop. It has pendant white flowers with inverted V- or U-shaped green markings at the apex of the inner segments.

There are 19 known species and more than 1,500 named hybrids and cultivars. This number increases annually as enthusiastic Galanthophiles find new variations. Many snowdrops remain unnamed as plants are so variable. For instance, *G. nivalis* 'Lady

(continued on page two)

Galanthomania: Crazy about Snowdrops! (cont'd)

(continued from page one)
Elphinstone' has a light apricot blush, but some years normal, green-marked flowers appear. In other snowdrops, green marks appear one year and not the next.

Galanthophiles

Snowdrop aficionados, Galanthophiles, await the appearance of the first tiny shoots with fervent impatience, often travelling hundreds of miles to see plants. Despite freezing temperatures, torrential rain, and often heavy snow, they crawl on hands and knees or lie in the mud to examine a particular snowdrop's markings more closely. Experienced Galanthophiles can spot unusual snowdrops in swathes of plants all looking alike to anyone else.

Galanthophiles flock in thousands to gardens opening specifically to exhibit impressive acres and collections of snowdrops. An annual Galanthus Gala attracts worldwide interest. Bulbs are swapped or sold, and there is a hotly contested auction. Gardens and estates host snowdrop lunches, lectures, tours, and spectaculars.

Edward Augustus Bowles (1865–1954) is said to have introduced the term "Galanthophile," A highly esteemed amateur horticulturist, writer, and botanical artist, he had many plants named after him. Bowles gardened at Myddelton House, Enfield, UK, and wrote numerous articles on snowdrops, also contributing to Sir Frederick Stern's *Snowdrops and Snowflakes* (1956).

G. nivalis **(top) and** ***G. nivalis*** **'*flore pleno*.' Photographs by David Pilling.**

eBay Sensation

In March 2011 a single galanthus bulb sold on the eBay Internet auction site for £360! [*Check www.oanda.com for the current exchange rate.—Ed.]* This phenomenon was *Galanthus* 'Green Tear', a robust snowdrop found in a large colony of *G. nivalis* in the Netherlands in 2000, possibly a hybrid between *G. nivalis* and *G. plicatus* because of the folded leaf edges. A beautiful virescent snowdrop, *G.* 'Green Tear' has long, broad, green-brushed outer segments and inner segment markings extending from base to apex.

A £357 snowdrop, sold on the same site two months earlier, *G. plicatus* 'E. A. Bowles' was discovered in 2004 and propagated at Monksilver Nursery, Cambridge. The large, rounded flowers have unmarked, pure white segments, all exactly the same length. Although there are poculiform types of *G. nivalis*, they are extremely rare in *G. plicatus*. Prior to this, the record stood at £265. Other costly bulbs include: *G. nivalis* 'Ecusson d'Or', £145; *G. plicatus* 'Wandlebury Ring', £123; and *G. elwesii* 'Jonathon', £100. More common varieties regularly change hands for £40 and £50. Collectors seek the latest and rarest hybrids, and, as soon as they appear, bulbs sell within minutes. As Galanthomania spirals, prices escalate further. Very rare snowdrops never make the open market, but are exchanged between collectors.

Many forecast that the passion for tulips that led

(continued on next page)

Galanthomania: Crazy about Snowdrops! (cont'd)

(continued from previous page)
to seventeenth-century Tulipomania has hit the snowdrop world. Then, the highest price paid for a tulip, *Semper augustus*, was 6,000 florins, (£750,000 today).

High prices have resulted in snowdrop theft. Large collections are now carefully monitored, amid increasing security, and some gardens tag plants as a safety precaution. However, the most important consideration for any true plant lover is to enjoy the plant for its simple and absolute beauty, not for the amount it cost or how large and valuable a collection may become.

Climate and Conditions

Native to central and southern Europe and western Asia, snowdrops naturalized well in Britain and northern Europe, where they are considered native, which they are not.

The main flowering period is late January to mid- March. Although snowdrops are associated with spring, some, such as *Galanthus reginae-olgae*, begin flowering in September and October. Other snowdrops flower as late as April. By using different species and varieties, snowdrops can be in flower in your garden for over six months each year.

Snowdrops grow in areas showing distinct climate changes with hot summers and cold winters, preferring cool, damp, humus-rich soils, and north-facing situations. Native habitats include woodland, meadows, and rocky crevices, from sea level up to around 2700 m (about 8,858 ft.). Some are true alpines, growing above 2,000 m (6,561 ft.).

These bulbs can stand drier conditions when dormant providing soil does not dry out completely for extended periods. Snowdrops also withstand extremely cold winters.

The United States has a wide diversity of climates and conditions, and snowdrops grow well in many areas. In some places, humidity and summer temperatures prove too high or winters too mild. The main flowering period is March to April. Look for naturalized snowdrops, snowdrop gardens, and collections. *Galanthus nivalis, G. elwesii, and G reginae-olgae* grow well.

"By using different species and varieties, snowdrops can be in flower in your garden for over six months each year."

***G. reginae-olgae* flowers in September and October. Photo by Mark Brown.**

Canada also has wide ranging terrains and climates, though snowdrops are still uncommon. They grow in Victoria and Vancouver, British Columbia, as well as in Toronto and Alberta. The main flowering period is March and *Galanthus elwesii* enjoys the cold winters.

Numbered plant hardiness zones for North America were first formulated in the USA in the 1960s and revised over the years. Snowdrops grow best in zones 4 to 7, although they can be grown between 2 and 9. The American Horticultural Society also introduced a heat zone chart. For best results use both charts together.

Snowdrops grow in cooler southeastern areas of Australia and in Tasmania, New Zealand, and Japan.

History

Snowdrops were cultivated in Britain in the 1500s. John Gerard (1545–1611/12) referred to them as "The timely flowring bulbous violet." His original 1597 edition of *Gerard's Herball* shows an unmistakable drawing and description of a snowdrop.

The name "snowdrop" first appears in 1633, in Thomas Johnson's revised edition of *Gerard's Herball*. John Evelyn (1620–1706), in his *Kalendar of Horticulture*, lists the plants in 1664.

A reference appears in 1465 with the name of *Leucis i viola alba*, or the white violet. Other old manuscripts list snowdrops among *Narcissus*. And there is an inconclusive reference to snowdrops under *Leukoion* by Theophrastus (372–287 BCE), although this name also

(continued on page ten)

Starting a Bulb Collection, Part II

Alberto Castillo

J. Alberto Castillo is a chemist and works as a Horticulture Professor. His bulb collection is the first private botanical garden in Argentina (appointed in 1986) and is the largest in Latin America (where, our readers will recall, the seasons are reversed). He researches propagation under cultivation and has traveled widely throughout South America. In our Summer 2011 issue, Alberto discussed the importance of budget, time, hygiene and quarantine, spraying, and habitat information when starting a bulb collection.—Ed.

Recording and Labeling

As your collection grows larger from successive additions of pots with seed, pots with seedlings, pots with growing plants, and pots with dormant bulbs, it will become more difficult to find a given plant among them. We normally label each pot with a rectangular piece of some material on which we write relevant information. Labels can be of wood, aluminum, different kinds of plastic, and so on. The main problem with labels is exposure to sunlight. Wooden labels are seldom used as they can become brittle or impossible to read. Aluminum is eternal in theory, but information written on it can become illegible. Plastics are practical and cheap, but most of them become brittle and shatter with time. Vinyl is very durable, although it can bend under intense heat. As for markers, most of those "permanent" ones are not so, and the writing fades. There have been several interesting discussions on the PBS forum concerning methods of labeling, with several people swearing by their own. In addition, Brian Mathew suggests writing the information ***twice*** on the same label, first on the portion that will be buried in the pot and then on the visible portion. This is very effective when cats are in the neighborhood: a broken label is as good as no label at all. Bob Rutemoeller's interesting innovation resolves genially most problems with labels (cats, birds removing labels, etc.). He makes two identical labels for each pot; the first one is placed at the bottom of the pot, then mix and bulbs follow, and the second label is placed in the normal way, visible on the pot rim.

Personally, for really large collections I would suggest numbering the pots. This way, if a label is lost in your records, you will still be able to trace what is in which pot. Another thing that has worked very well is to use labels of two colors: one color for winter-growing and another for summer-growing bulbs.

Sooner or later, a database should be started to keep your records. I have read harsh critiques of Excel, yet after having used several programs, including some tailor-made for botanic gardens, I find Excel spreadsheets very practical for a dynamic database of our bulb holdings. Consider the following fields:

Pot number. Information seldom used, but handy when labels are lost or mixed up.
Name. The botanical name of the species as complete as possible, including subspecies or variety status.
Accession number. A number given to the batch of seed or to the same batch of plants. A consecutive series is normally used, but is too inflexible. We have adopted the International Transfer Format scheme in which the accession number is formed by Year+Month+Day+Number of the plant or seed. Thus, 20110530012 means plant material number 12 received on May 30, 2011. The accession number becomes information in itself.
Data. Country, state, location, altitude, habitat, plant associations, if available.
Donor. The individual or institution the plant material was obtained from with original identification number, if it exists.

These are the basics. Other fields could include mix type, current status (dead or present), date of latest inventory, and many more.

Growing Your Stock from Seed

Growing your collection from seed is a fascinating process. Beginners often find it intolerably slow, but you will build up a stock of the best possible plants. Plants grown from seed have several advantages over bulbs: they show better adaptation to your conditions, are more robust, are virus-free (until they eventually catch one), grow faster, and have all the energy of youth. Species grown from wild-collected seed will come true. You cannot depend on this with most hybrid varieties that make the bedding displays of spring, as they would not come true from seed. Selecting a named variety implies thousands of crosses and thousands of seeds sown, from which a handful of good plants arise. For those named varieties you will have to start your collection from bulbs.

Bulbs from Commercial Sources

You can start your collection by ordering bulbs from commercial sources. *Large mail-order companies* often have high prices, but usually the material is first-class. Bargain offers can be true to name and

(continued next page)

Starting a Bulb Collection, Part II

(continued from previous page)
acceptable, or a disappointment.

Small mail-order companies are often middlemen for the Dutch bulb industry. They give mixed results and a lot of virused material. A few serious ones sell very healthy material.

Amateur growers can be an excellent source for small quantities of high-quality bulbs; the prices are usually lower, and they often have the added advantage of being adapted to your own conditions. The Seed and Bulb Exchange of the Pacific Bulb Society is a source for excellent seeds or bulbs for small sums, often only enough to pay for postage.

Pots

The material your pots are made of affects your results. *Plastic* pots have several advantages: they are cheap and durable, and the contents are comparably stable even in full sunshine. Color has a certain influence as well: in the sun, white pots remain cooler, while black ones heat up considerably.

Clay pots are a lot more popular, possibly because they dry off rapidly. They are more expensive and break rather easily. More important is the fact that they refrigerate the contents when soaked, a condition tropical and subtropical plants do not enjoy at all.

A huge bulb collection was maintained in California in boxes made of *redwood*, with great success. It is difficult, however, to obtain wood that does not deteriorate when subject to regular exposure to water.

Styrofoam boxes like those used for transporting living fish are excellent for growing bulbs, but a number of extra drainage holes must be made, as styrofoam is a "wet" material.

Concrete pots are cheap and long-lasting, but they are highly alkaline and many bulbs will dislike this chemical condition.

Soil Mixes

Bulbs have a natural resistance to drought. In extreme cases, they go dormant, losing their leaves and part or all of their roots. In nature they grow in many types of soils, but usually prefer well-drained soils—soils so porous and open that they lose moisture rapidly. This is why losses are apt to be high with most bulbs in a water-retentive mix. Bulbs adapted to seasonally moist soils are a minority; experience shows that if adequately watered in growth, they do perfectly well in a porous mix.

The general approach is to mix several ingredients that will provide congenial physical and chemical conditions, that is, good drainage and fertility. Prepare a mix with excellent porosity, then provide nutrients regularly as part of a fertilizing program. A suitable bulb mix will contain a large proportion of grainy, crumbly mineral ingredients like decomposed rock, coarse pumice, or coarse sand.

It is not necessary to repot—to change the mix—once a year, if the soil is properly porous.

Cultivation Methods

Frames. A frame is basically a long raised bed (like a box with no top and no bottom) filled with a suitable well-drained mix. A glass structure is usually placed on it to exclude rain and damp. A poly film tunnel over the frame, like a miniature hoop house, is a cheaper alternative. There are different variants to this scheme, but the principle is the same.

Tunnels. Tunnels made with curved metal or PVC and a poly film covering can provide excellent protection against frost and wind; the latter factor causes plants considerable stress.

Greenhouses. If you are fortunate enough to have one, the variety of interesting and unusual plants you can grow increases. Small greenhouses are difficult to heat and to cool, and this can prove frustrating.

Plunge beds. Pots with plants are plunged in a porous material (inside a greenhouse or in a raised bed in the open) to provide a more constant, natural environment, particularly when clay pots are used. The plunge material is usually coarse sand.

Pots buried in the garden. Bulbs can look spectacular in a seemingly natural setting among shrubs or at the base of trees. The problem is, when dormant, it will be impossible to guess their exact spot in order to separate them or simply check on their condition or permanence. Planting the bulbs in pots, or better, in aquatic plant pots (actually bins or crates of plastic mesh—be sure they have mesh on the bottom as well as the sides) and burying these in the ground provides a solution. The bulbs' roots will have a free run into the surrounding soil, but they are easily located when dormant. In addition, these containers offer some protection from burrowing rodents.

Community pots. Many kinds of bulbs could be regarded as miniatures, but a number of them can be large plants. For the latter, small pots will cause the "bonsai" effect. It may be impossible to provide each species with a large pot of its own, but several species can be grown together in a large container such as a planter or trough. They must be totally disease-free; they must have the same growth cycle and similar cultural requirements; and the bulbs must be easily identified in a dormant condition. You cannot mix several species of *Freesia* in the same pot, for instance, as they will be impossible to identify as corms (the only time when they can be handled without damage). But you can mix one species of *Freesia* with one each of *Ixia*, *Hesperantha*, *Ferraria*, and *Babiana,* as they will be easy to sort out when dormant.

✿ ✿ ✿

Revisiting *Zephyranthes* in the Land of the Long White Cloud

Ina Crossley

Ina Crossley began gardening at age 12 in Holland. Now she lives in Auckland, New Zealand, where her soil is volcanic and "lovely for gardening." In our Winter issue of 2009, Ina told how she got started growing Zephryanthes *from seed. Here's what happened next . . . . —Ed.*

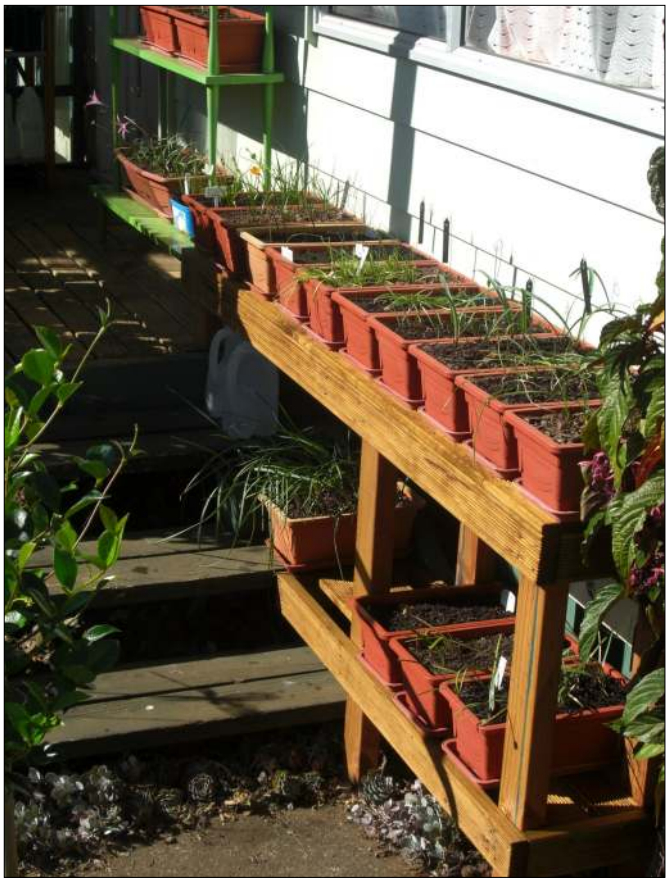
Almost all my *Zephyranthes* and *Habranthus* bulbs have been grown from seed, so it has taken patience to get this far. I started in 2008. By now I am growing them in the garden as well as in the containers I started with.

Photos by Ina Crossley.

When the Texas nursery sent me about 200 seeds of *Zephyranthes drummondii* and about 100 seeds of *Z. Lindleyana* that was the start of the various varieties. I did panic a bit since these bulbs are supposed to grow to tennis-ball size and my already well-established garden is only about one-sixth of an acre. So containers it was. I covered in the front deck (above), which provided a warm and sheltered start for the seedlings, which at that stage were still very much mixed with other plants in containers.

Meanwhile, I bought more seed on eBay and a few bulbs from a couple of local specialist nurseries—Bill Dijk's Daffodil Acre, Tony Palmer's Kellydale nursery, Terry and Lyndsey Hatch's Joys Plants.

I ran out of space and built a plant table (below) to house more and keep them sheltered since I was not sure how the bulbs would cope with the Auckland climate. Meanwhile, some bulbs had grown too big for containers and had to go into the garden. So part of the lawn got turned into a bulb garden, nice and sunny, where most of the *Zephyranthes drummondii* and the *Z. lindleyana* were planted. It started off with just a few of each; then the garden got extended and the rest were planted out a year later. Those that were planted out first flowered for the first time last spring. I got right down so I could smell the *Z. drummondii* and the scent is just wonderful.



As the various bulbs began to flower, I crossed them. Since this is something I knew nothing about, I just crossed whichever ones were in bloom with each other. Some of those flowered last summer. From that I realized that white with white really doesn't do much. All this is probably old hat for those living in the US and elsewhere where people have grown these

(continued on next page)

Revisiting *Zephyranthes* in the Land of the Long White Cloud (cont'd)

(continued from previous page)
bulbs for ages, but not here in New Zealand. My seedlings take two to three years to come to flowering before I can see what the crossed ones look like. I am still waiting for most of the results.

I also found out about apomixis [relating to reproduction in which union of sexual cells or organs does not occur], but had very little information as to which species are actually so. I don't even *start* to think about things like chromosomes.

I consider some of the bulbs close to a weed, like the *Habranthus tubispathus* var. *texensis*. It is one already grown in New Zealand by others, even if they don't know the name.

I save the seed of any of the Zephs and Habs. Some I have sold on eBay. I also send them to a contact in Florida. The spare ones I now sow in the garden among other plants. I grow some of my own seed since I also sell the bulbs within New Zealand. So it is useful to have more of the bulbs.

Clockwise from top left: *Zephyranthes drummondii*, *Z. verecunda*, *Z. verecunda* x. *Z. primulina*, and *Z. verecunda rosea*.

At the end of last summer a couple of the latest *Zephyranthes primulina* flowered and they were white! As I had not crossed these, there must have been some shenanigans going on without my knowledge . . . . Only one of the two flowers set seed, so I have saved those and will grow them on to see if by any chance they will grow true.

Since I grow from seed, I am reliant on growers from other countries for those. One of my contacts decided to send me some in a CD case, with a CD. Oh dear! MAF, our local biosecurity people, were not impressed. So I had a visit from one of their inspectors. *I* was not impressed as, from the sound of it, they have little actual knowledge.

On that score I was talking with a plant society member who told me that when biosecurity was first set up in the 1990s, they contacted the plant societies and asked for a list of plants that were already in NZ. This society put in every kind of iris they knew of, worldwide, and now have little problem bringing in more. Of course, that didn't happen with *Zephyranthes*. Pity.

It is interesting to have contact with various people who are "into" *Zephyranthes* and *Habranthus* too. Being told that *Z. verecunda* is quite rare in cultivation. I would actually call it *Z. verecunda alba*. One of my contacts says his are a soft pink; mine have a dark band when in bud, but open pure white—and do well in the garden.

Then there is *Z. verecunda rosea*, which is a deep pink and doesn't photograph well. But is it labelled correctly?

The white *verecunda* with the lemon *primulina* came out *primulina*-shaped but smaller and white—showier than the white *verecunda* but nothing too special.

I don't think any of them object to the Auckland climate. Some people have tried to grow *Z. citrina* and have lost them. They seem happy here in Auckland, but then they like the dry and hot, which we have here in summer. Mine in the garden do fine.

In a few years it might be time to write another article to show the result of the cross pollination.

✿ ✿ ✿

From My Point of View

Marguerite English

Marguerite's garden and the surrounding countryside offer her pleasure and diversion during the last days of summer.—Ed.

Our hot weather finally arrived in August here on my hilltop east of San Diego, California, at 3,700 feet. The nights are cool, though, and evenings spent on the patio are delightful. The powerful wind that keeps me inside during winter slows to a cooling breeze in August.

There isn't much blooming in the garden. Naked Ladies (*Lycoris squamigera*, below) are lovely and I have clusters all over the property. They don't reproduce very quickly out in the open areas, but they survive without the gopher cages I have to use for tastier plants. Pink and white crinums, *Liatris spicata* and *Habranthus robustus*, have been lovely this year. The *Liatris* has developed into a nice cluster. It's about time for my small cluster of *Sternbergia lutea* to show up. These make a bright yellow mat in one of the rose beds. I was sick in July and didn't properly deadhead the penstemons, salvias, and daisies, so they are a bit behind with their normal second season of bloom.

Last year's experiment to move some of the bulbs to outside beds wasn't as productive as I had hoped. I think I lost my *Lycoris sprengeri*, and *Lycoris radiata* hasn't shown itself so far. The clusters of *Zephyranthes* got green leaves, but most showed blooms only here and there. Something may have nibbled the buds before I saw them. In the greenhouse, *Bomarea* has put out occasional flower clusters again this year after its first flush of heavy bloom. And what a delightful surprise I got when Ellen Hornig's *Haemanthus humilus* actually bloomed barely two months after I got it from the BX.

It was lovely and I will have to try more of these! Sorry, we got busy meeting a deadline and didn't get a photo. That's the problem when your photographer is a daughter and business partner.

On the wild side, chaparral has overgrown the roadside bank where the native *Calochortus* bloom (see top left), so they didn't flower as well as usual. We'll have to clear that area again before the fire marshal chases me down with his ticket book! We never found the wild *Fritillaria biflora* (bottom left) meadow this year on our spring botany drive-bys. I think the tall growth of the chaparral has shaded that out also, but the *Bloomeria crocea* (below) bloomed in their heavy clay banks. It's amazing these stay alive. Their soil bakes hard during summer and the only rains we get here are occasional monsoons in early fall. In our valley, the road association sprayed the area where *Dichelostema* has bloomed over the years. I try to mark places that I don't want them to spray. Unfortunately, I only had to miss once! I finally managed to get a cutting of our local California fuchsia to take in my garden. Even though it isn't bulbous, I was happy to get a safety net started for it.

(continued on page eleven)

Board of Directors Meeting, August 2011

Your Board of Directors conducted a very efficient meeting on August 7, 2011! One of our main goals is to spread the word about our organization to keep our membership numbers high. We agreed to print bookmarks to be used to advertise PBS to potential new members and (by email vote after the meeting) decided to allocate $100 to support the Northern California Regional PBS meeting organized by Nhu Nguyen. Membership Director Jane McGary is planning to host a visit to her new gardens sometime next year once her plants have had a chance to establish themselves. We'll keep you updated. Jane reported that we had 243 members paid through the end of 2011. Look for those membership renewal notices in the mail – we would hate to lose a single one of you!

The BX has been slow, as is normal for this season. That made a bit of time for BX Director Dell Sherk and Treasurer Arnold Trachtenberg to formulate a new plan to deal with the very few members who have become delinquent in their BX payments. When an account is behind by 3 payments or $25, the member will be notified and will not be able to purchase from the BX until the account is current. We noted that activity on the PBS Market Place has been slow (it has since been closed).

Despite the constant fluctuations in the market that we have all grown to dread, the treasury remains strong. Arnold reported a balance of $17,200 and noted that we lost about $300 to the market.

As always, we remain grateful for our members' support of PBS!.

Jim Shields has spent a lifetime growing all sorts of bulbs. He has dedicated his energy over the last 50 years cultivating and willingly passing along his knowledge to all who will listen.

As an tribute to Jim Shields, a donation was made to the Pacific Bulb Society to further the goals of the society.

Treasurer's Report, Second Quarter 2011

BALANCE 4/1/2011	**$18,986.12**
U.S. Members	**$340.00**
Overseas Members	**$425.00**
Contributions	**$15.00**
BX Receipts	**$489.31**
Investment Results	**$80.31**
TOTAL INCOME	**$1,349.62**
BX/SX Expense	**($1,042.91)**
Board Conference Call	**($67.11)**
Total Publications	**($1,150.00)**
PayPal Expense	**($156.09)**
IBIBLIO Donation	**($250.00)**
Postage	**($439.09)**
TOTAL EXPENSES	**($3,105.20)**
BALANCE 6/30/2011	**$17,230.54**

~Gardening with Bulbs ~

It's time to renew !

We appreciate your support— we would hate to lose you!

Renewing is easy. You can renew **ONLINE** ($20 U.S., $25 international) via PayPal. Just use the button on our membership page:

http://www.pacificbulbsociety.org/membership.html

You can also mail in your renewal.
Please direct it to Jane McGary, 4620 SE View Acres Rd., Milwaukie, OR 97267
Whether renewing online or by mail, please send in this form or contact Jane (janemcgary@earthlink.net) if any of your contact information has changed.

Name:_____

Address: _____

Telephone: _____

Email: _____

Thanks again for your continued support of the Pacific Bulb Society!

Galanthomania: Crazy about Snowdrops! (cont'd)

(continued from page three)
applied to other plants. The true derivation of the name is unclear. The closest is Swedish *Snödroppe*. Some say it comes from the German *Schneetropfen*, a style of sixteenth- and seventeenth-century drop earrings. The German *Schneeglöckchen* and the Dutch *Sneeuwklokjes* refer to snow-bells. Other names for snowdrops include Fair Maids of February, Candlemas Bells, Dingle-Dangles, Pierce Snow, Snowbells, Tear Drops, and White Bell. In France: *Galantine d'hivre* or *Pierce-neige*; in Italy, *Bucaneve*.

In his 1753 *Species Plantarum*, Linnaeus gave the plant its generic name, *Galanthus,* from the Greek *gala* = milk, and *anthos* = flower, and the specific epithet *nivalis* (of the snow).

Nineteenth- and twentieth-century plant hunters discovered new snowdrop species. Bulbs of G*alanthus plicatus*, for example, came with soldiers returning from the Crimea. The 1879 *Gardener's Chronicle* records four species—*G. nivalis*, *G. elwesii*, *G. plicatus*, and *G. reginae-olgae*, together with nine different *G. nivalis*. *G. nivalis* 'Flore Pleno' appeared in 1703, though its origins remain obscure. As new hybrids were introduced, snowdrops became increasingly popular.

The Royal Horticultural Society held an inaugural Snowdrop Conference in 1891. One speaker was James Allen (1832–1906), a keen horticulturist who propagated more than 100 varieties of snowdrop at his home, Highfield House, Shepton Mallet, UK. He had the largest collection in England and was known as the Snowdrop King. Snowdrops naturalized throughout his garden, but sadly, after his death, before the value of the collection was realized, most were lost when the site was redeveloped for local council offices.

Identification

Identification of snowdrops is notoriously difficult, even for experts. Certain key points help.

The **leaf base** is taxonomically the plant's most distinctive feature. The arrangement of emerging leaves, vernation, helps distinguish different species and the parentage of hybrids. **Applanate** leaves have two blades pressed flat, opposite each other in the bud and as they emerge—for example, *Galanthus nivali, G. gracilis,* and *G. reginae-olgae.* **Explicative** leaves are also flat against each other but leaf edges are folded or rolled back, such as *G. plicatus.* **Supervolute** has one leaf clasped tightly around the other inside the bud and often emerging from the bud—such as *G. elwesii, G. fosteri,* and *G. ikariae*.

Green segment markings also aid identification. Most common is a single inverted U- or V-shaped mark at the apex of inner segments, around the notch or sinus. Different snowdrops carry a diverse range of marks, some covering almost the entire inner segments. Outer segments can also be marked green. Galanthophiles eagerly look for new variations.

Growing Snowdrops

Snowdrops naturalize beautifully, especially in woodland settings. Lift plants every three to four years, divide, and replant. Small offsets around parent bulbs soon produce flowers.

Traditionally plants are lifted "in the green," before leaves die back. Some growers suggest waiting until bulbs are completely dormant. Purchasing dry bulbs is problematic. Snowdrops hate drying out and dry bulbs are notoriously difficult to grow. If this is the only option, bulbs should be very firm.

Most snowdrops produce seed. This can grow naturally or can be collected and sown in pots until large enough for planting.

Twin scaling and chipping are technical methods of increasing stocks. They require sterile conditions, but results can be good. Slice the bulbs into segments, each containing a portion of the basal plate. Place in plastic bags of damp vermiculite until growth commences, then pot on individually. Specialist companies undertake this process commercially.

Plant bulbs 7 to 10 cms (2 1/2 to 4 in.) deep, and 5 to 10 cms (2 to 4 in.) apart, in humus-rich soil and dappled shade. The addition of sharp sand aids drainage in heavy soils. Plants benefit from a light application of bonemeal in autumn.

Snowdrops are generally easy-going, tough little plants. Some less hardy species are difficult, but common species such as *G. nivalis, G. elwesii, G. plicatus, G. woronowii,* and *G. reginae-olgae* grow and flower well with minimal attention.

Snowdrop leaves and bulbs contain an active substance called galantamine, now used in a group of anticholinesterase drugs (acetylcholinesterase inhibitors). These are beneficial in treating Alzheimer's disease, injuries, and pain associated with the nervous system.

Whether you simply enjoy seeing these exquisite flowers or you are a seriously committed Galanthophile, snowdrops have the ability to win your heart and fire your passion, making them irresistible plants for the garden.

✿ ✿ ✿

PBS Members Get Together in Northern California

Nhu Nguyen

A thick layer of fog covered much of the East Bay even at 11 a.m. when almost everyone had arrived at the meeting place on the eastern slope of the Berkeley Hills. Soon the fog gave way to bright, warm sunshine for a perfect day for a picnic in Tilden Park where we were surrounded by large coast live oaks, fragrant California bay laurel, and majestic redwoods.

Some of the seventeen attendees had traveled all the way from San Jose to the south, Ukiah and Gualala to the north, and Davis and Stevinson in the Central Valley to the east. The rest of us were from the immediate Bay Area. We were a mix of those who are just starting to grow bulbs and experienced growers.

It was a very casual picnic event with plants thrown in. The table in the shade was dedicated to food, and on the table in the sun we laid out show plants as well as back issues of *The Bulb Garden* and the sparkling, freshly-made PBS bookmarks. Things were calm until the boxes were opened. Suddenly, hands were flying and the atmosphere was more energetic as enthusiastic bulb lovers sorted through four boxes of excellent bulbs and seeds. Material included *Oxalis*, *Lachenalia*, *Moraea,* other South African irids, *Calochortus*, California themids, *Arum*, *Bomarea*, and more. There were also interesting non-geophytes such as drought-tolerant terrestrial bromeliads (*Puya berteroana*) and moisture-loving carnivorous *Drosera* and *Sarracenia*, which complemented the bulb selection nicely.

The display plants consisted of a *Clinanthus variegatus* 'Apricot', *Costus osae*, *Haemanthus albiflos*, *Haemanthus coccineus*, *Nerine sarniensis* 'Corusca Major', *Scadoxus membranaceus*, and *Tigridia hallbergii*. Jacob Knecht's *C. osae* created fun and conversation because of its extremely fuzzy leaves. The *H. albiflos* from Bob Werra was such a nice specimen that no one realized it was a giveaway. Mary Sue Ittner brought the lovely pot of *S. membranaceus* grown from seeds and she shared with us its interesting back story.

Mike Mace even brought some important society-related business to the meeting. We had a round (picnic) table discussion about the USDA regulations on plant import and how we can work with the policy maker so the plants we know and love would not be put on the banned list. This is an ongoing process and will take a lot of effort, but thanks to Mike for leading us on this front.

It was such a pleasure to be able to connect faces to the names that I have seen and corresponded with on the PBS list. The meeting was completely enjoyable—too bad it could not last longer! I wished there had been time to talk more deeply with everyone and extract the vast knowledge from the years of growing experience among the society's horticultural sages. The good news is that I am organizing a longer meeting in the spring for PBS's tenth birthday where we would meet and eat one day and go for a bulb hike the next. If you are a member and are not on the PBS list, please contact me directly (225–266–5918) so I can keep you informed of the meetings. I hope to see everyone then!

✿ ✿ ✿

If you live in Northern California or plan to visit soon, be sure to contact Nhu. Hopefully you can be in the next photo!

From My Point of View (cont'd)

(continued from page eight)

In addition to the regular animal life, a roadrunner that lives nearby has visited several times this month. He hops the fence to use the birdbath, which is only a few feet away from my chair when I go out to the patio in the late afternoon. He doesn't seem afraid of me at all. Water is a precious commodity here. The usual mountain bluebirds visit and the little yellow finches. A family of woodpeckers lives in one of the trees; they fly back and forth in front of my bedroom window most every morning. Hawks and vultures drift over the open areas most afternoons. A couple of rattlers, a large gopher snake, and a gorgeous king snake also visited so far this summer.

My daughter adopted three cats, so the ground-squirrel and gopher population has moved on and I don't have to put cages over the leaves of tender plants outside the fence. Unfortunately, the quail have also moved down to the other side of the road. I miss their morning visits at my window. My dog keeps the cats out of her yard, so the rest of the birds can use the birdbaths in safety.

✿ ✿ ✿

Pacific Bulb Society

Gardening with Bulbs

Anyone surprised to see *Galanthus* paired with *Cyclamen* will enjoy Freda Cox's discussion of the former, in which she explains how we can have *Galanthus* blooming in our gardens six months out of the year. Above: *Galanthus reginae-olgae*, photographed in Greece by Mark Brown.

Inside This Edition:

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.
Editor: Jane Merryman, jane@sonic.net;
Co-Editor: Jennifer Hildebrand

Visit us online! www.pacificbulbsociety.org

Arnold Trachtenberg
140 Lakeview Avenue
Leonia NJ 07605

www.pacificbulbsociety.org