Jim Waddick

Recently I became both the new president of the Pacific Bulb Society and a board member, and I had a change in my point of view about exactly what PBS “is.” My friends seem astonished, not that I'd be elected president, but that there is a “Pacific” bulb society. Since I live in Kansas City, Missouri, my view of the Pacific Coast is a bit obscured by thousands of miles of prairie, plains, mountains, and more.

Jane McGary, the recent past president of PBS likes to claim that the “Pacific” part of PBS reflects not geography, but a sense of calm, peace, and an easy-going nature. So this got me wondering how much PBS is Pacific (pertaining to the Pacific Ocean) or not. I went to two sources, but first . . .

Part of the reason I became president was because of a major review of the membership rolls, a change of membership director, and a new system of keeping records. As president I am able to access both the new and old membership rolls. The newest figures suggest that around 60 percent of our members reside in the three Pacific Coast states of Washington, Oregon, and California. (California alone is about a third of our total membership).

However, 25 percent of the PBS membership is spread out among 27 other states and 15 percent represent 13 countries from all continents. So it is safe to say that although our members do reside in Pacific Coast states and that area's Mediterranean climate plays a big part in the bulb discussions, the total membership goes way beyond the geography of the western United States. We are a varied geographic group. Many members (10 percent) are the only one in their state or country, including me, the only member in the entire state of Missouri—

(continued to page eight)
Starting a Bulb Collection, Part I

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. —Ed.

The fascination with bulbs has been explained many times, yet the ways they keep attracting people to cultivate them remain somehow mysterious. The problem is that, when you start growing them, it is difficult to stop, and sooner or later you will have many kinds of plants to care for. You will have a collection by that time, and here are some comments on the many factors involved in starting a bulb collection. You will find discussions on many of the subjects mentioned here in the archives of the Pacific Bulb Society forum on the PBS website.

Budget

Naturally, budget will be a limiting factor, but bulb seed is relatively inexpensive, depending on its rarity. It is seldom possible to order hundreds of seed packets at once, and, if your experience is limited, it is better to start with a reasonable number of species. There are quite a few sources for bulb seed, but quality varies. Information from other growers is valuable on this count. Common bulbs used for bedding and spring flowering in the garden can be inexpensive if they are old varieties, but novelties can be surprisingly expensive. It would not be the first time, though, that the best bargain gives the worst results. Again, it is better to obtain information from other growers as to reliable dealers. Most are willing to help, and you will avoid disappointment when your bulbs do not flower or never appear at all.

Time

Many seed packets will mean many pots with seedlings (at best) or a mixture of empty-looking pots and, very probably, growing seedlings to care for. They will demand a watchful eye and regular watering as the mix dries off. If you are absent for most of the day, as is the case with most mortals, large numbers of unattended pots invite disaster. Bulbs are comparatively undemanding, but in the baby stage—which means the whole first year of life—they are small and fragile enough to be easily killed by pests, drought, or, more often, excessive watering. Although it is normal to want every stunning plant one sees in books or on the Web, they will have to be kept alive. Again, try to limit yourself to a small number of pots at first until you gain experience. Basic tasks include sowing, planting, preparing potting mixes, weeding, spraying against pests and diseases, and watering.

(continued next page)
Hygiene and Quarantine

A sensible strategy is based on prevention. A number of diseases and other ailments are possible to cure, but in many cases we will be left with a pretty battered plant. In other cases, the main evidence of the problem’s presence is the death of the plant. So, much trouble is saved when some simple procedures are followed:

- Use clean, disinfected pots. Old mix in pots could be a source of infection. Disinfecting pots eliminates much of this risk. If it’s not possible to disinfect pots when you first receive them (you will find that people give you plenty of used pots if they know you are starting a collection), put them in a large plastic bag and close it securely until the day they will be treated. Do not let the pots lie around.

- Use clean tools. Disease can spread among plants through transferred sap. Garden tools can be a direct source for infection. Disinfect them regularly.

- Use clean mix. Old mix in which plants have died of disease must never be re-used or dumped into the compost heap. To be sure, plant remains like old leaves, inflorescences, bulb tunics, dead roots, and so on are better burned, if this is allowed in your area. If this is not feasible, put them in a plastic bag and close it tightly before discarding it. Never put this material in the compost, which will be likely to recycle dormant pests and diseases into your collection and the neighborhood.

When you introduce a new plant into your collection (obtained as a plant, not from seed), it is risky to place it at once among the others you already have, no matter how normal it looks. It is safer to choose a spot away from the main collection and keep it there for a certain period, normally a few months of growth. When a plant is moved to a different environment, the stress can trigger any latent disease or pest that was not apparent in its previous site. If, after this period of isolation, the plant looks healthy, it is safe to assume that no disease or pest is present. Watch closely the development of new growth, as it is at this stage that virus symptoms are most visible.

Regular Spraying Program

Some regions of the world have the proper conditions to grow plants with few chemical controls. Most do not. If you are “organic”—that is, you decide that you will only use organic methods for treating problems in your bulb collection—it is better to keep your collection small. An assemblage of many plants from several parts of the world, from different climates and environments, is by no means natural: it is highly artificial, despite our efforts to provide the best conditions available to the plants. To expect that natural food chains and ecological relationships will take care of the problems is naïve, to say the least. Your intervention—
Starting a Bulb Collection (cont’d)

(continued from previous page)

moisture persist. Here are some examples from South African bulbs:

Dryland Conditions
Moraea fistulosa, lewisiae, macrocarpa, polystachya, serpentina, verecunda, vlokii
Massonia depressa
Gladiolus floribundus, leptosiphon, saccatus
Babiana cuneifolia, geniculata, scabrifolia, scariosa

Damp Land Conditions
Moraea angulata, cedarmontana, deltoidea, flaccida, fugacissima, linderi, longifolia, lugubris, nubigena, ramosissima, riparia, stagnalis, tricolor, vegeta, vespertina
Gladiolus angustus, aquamontanus, aureus, buckerveldii, cardinalis, carneus, delpierriei, geardii, insolens, meliusculus, mostertiae, nigromontanus, oreocharis, ornatus, pappei, phoenix, quadrangulus, sempervirens, stokoei, sufflavus, trichonemfitolius, tristis, undulatus
Babiana angustifolia, leipoldii

Habitat Information
Although it is possible to grow an ample variety of bulbs under the same conditions (especially if they are adaptable plants and if grown from seed), obtaining information about the conditions where they grow in the wild can be very helpful in adjusting your cultivation methods. Growing species from widely diverging habitats together can produce disappointments. Read reference books and reports of expeditions carefully to select compatible species. At the very least, provide separate sections of the collection for winter-growing and summer-growing species and for those that tolerate or even require very dry conditions when dormant. And do remember that “dry” doesn’t mean “baked” in most cases, because many bulbs from arid regions grow deep in the soil where a little coolness and

In the fall issue, Part II of Alberto’s article will cover recording and labeling, growing your stock from seed, bulbs from commercial sources, pots, soil mixes, and cultivation methods.
California Adventures: Ring Mountain’s Geophytic Treasures

Nhu Nguyen

Nhu is a mycologist who also loves plants and combines that passion with travel and photography. He is a graduate student at UC Berkeley and is also a painter. View his work on the Web at www.flickr.com/photos/xerantheum. —Ed.

The Tiburon Peninsula is a mostly well-developed piece of land that juts into the Bay just north of San Francisco, where on a clear day the Golden Gate Bridge can be seen from afar. Complete development on this valuable piece of land with giant mansionlike houses with open views was imminent until intervention by a group of local citizens headed by Phyllis Ellman led to the purchase of a 367-acre portion by the Nature Conservancy. In 1995 the land was deeded over to the Marin County Open Space District and designated as the Ring Mountain Open Space Preserve. To the locals, this place is simply known as Ring Mountain.

To developers, Ring Mountain is one of the most valuable pieces of real estate on the planet, but the true value of the land lies underneath the serpentine green soils of the upper slopes. In these toxic soils lie millions of valuable nuggets of treasure found nowhere else on Earth. The little nuggets are, of course, bulbs (in the broad sense).

Access to Ring Mountain is open to everyone and those who are interested in geophytes will find themselves among some of the strangest geophytes in the world. The top of the mountain isn’t very large, but the concentration of bulbs is high and probably can’t be matched by many other places in California. Starting in April, when the grass is still green, tiny Calochortus umbellatus can be seen poking out of the grass or in clearings of serpentine soil that is too toxic for many grasses but perfectly fine for these bulbs. In the most exposed and rocky area, crinkly glaucus leaves of Chlorogalum pomeridianum by the hundreds open up to the bright sunlight and bone-chilling winds above. These plants promise a show of flowers later on in the season.

Then in May giant patches of a serpentine onion, Allium lacunosum var. lacunosum (see photos next page), start their parade that can last one to one and a half months. It is easy to find these patches because they occur in concentrated serpentine where few other plants grow. The thousands of white petals with a central brown stripe make a geophytic show that is dazzling to the eyes. The display morphs from white to pinkish brown as the flowers age. With so many onions blooming, the air is lightly perfumed on any protected slope where the scent isn’t immediately carried away by the frequent wind.

June is the real show on Ring Mountain. This is when the grasses have turned brown along with most other herbaceous plants, leaving open opportunities for splashes of color produced by geophytes. The earlier promises of Chlorogalum pomeridianum come true with tall and airy inflorescences of large white flowers and thin petals. The buds and backs of the tepals are marked with a strongly contrasted median stripe. Unfortunately, these flowers don’t stay open long, so you have to catch them at the right time.

Among the grasses, tall and deeply penetrating purple inflorescences of Triteleia laxa make a wonderful show. The Ring Mountain form is one of the most interesting forms of this variable species. The tepals are thick and waxy, bathed in a strongly contrasting violet with their backsides dusted lightly in a powdery coat. The (continued to next page)
California Adventures (cont’d)

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perianth tubes are slightly curved, distinguishing themselves from so many other forms of the species. Not too far away and often intermingling with the dark T. laxa are vibrant Brodiaea elegans. Growing on poor soil, the spikes are dwarfed, but the size of the flowers remains large and showy, like violet chalices rising from the ground. One of the best things about these plants is that they bloom only when the leaves have withered away leaving the brilliant flowers that are reminiscent of autumn-blooming South African plants.

In contrast to these colorful geophytes, the true treasure of Ring Mountain hides away inconspicuously among the browning grasses. It takes a considerable bit of time searching, but once spotted, the flowers can be seen again and again throughout the serpentine-rich area. The treasure that I speak of is the federally-listed threatened and extreme endemic Calochortus tiburonensis. It grows only on one side at the very top of the mountain. It wasn’t described until 1973, not surprisingly, since it is not at all conspicuous. No two flowers are exactly alike. The variations are subtle and can only be appreciated when the flowers are next to each other. Our own Mike Mace wrote a popular article (Google hit #2 when searching for “Calochortus tiburonensis”) about his hunt for these treasured flowers. It can be seen on the Web at: http://www.bulbsociety.org/About_Bulbs_CONSERVATION/Mace/Calochortus.html.

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When I decided to do some research a few years ago before venturing out to find these flowers, his article helped me quite a bit. Through the work of concerned local citizens and conservationists, this area is now stable and protected for posterity. A walk around Ring Mountain takes only half a day, but the treasures to be found are priceless. In certain areas, if you are lucky enough, you will come across three to four geophytes blooming happily together. I do hope that anyone living in the vicinity of the Bay Area—or anyone chancing to come to the Bay Area during blooming season—will pay a visit to this wonderful and fragile area where the relicts of the past may live on into the future.

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Previous page: Top, *Allium lacunosum var. lacunosum* (flowers in full bloom); Middle, *Allium lacunosum var. lacunosum* (faded petals give a nice bronzy color!); Bottom, *Brodiaea elegans*. This page: *Calochortus tiburonensis*. Note the variations in the colors and forms of this extreme endemic species. Photos by Nhu Nguyen.
Pacific Point of View (cont’d)

(continued from page one)

interesting, considering that Missouri is the home of one of the major American botanical gardens.

It is more convincing that PBS is a very calm, peaceful, and easy-going group. Our educational point of view predominates over geography and climate. Bulb topics in just the last few weeks have ranged from South American and South African genera to hardy tulips and snowdrops as well as Crinum, Cardiocrinum, Crocus, Dahlia, and much more. What other groups would cover this range of bulb topics and do so with kindness, intelligence, and calm?

So if you are the only PBS member in Belgium or China, Montana or South Carolina, sit back, relax, and enjoy your member benefits: this newsletter and our Seed/Bulb Exchange. Both are low key, but also presented in a very calm, direct manner. Membership in PBS is the very core of both this organization and a much bigger, much wider, much more current electronic mailing list. Supporting PBS supports a number of “venues.” Don’t be the sole member in your geographic spot. I hope you'll go out and get friends to join in the fun and conversations. Enjoy.

Jim Waddick, Kansas City, Missouri, USA, June 2011

Though he won’t admit to having a favorite, there is a special spot in Jim’s heart for Lycoris. Clockwise from above left: a tangerine colored hybrid, possibly involving L. sanguinea; L. squamigera; L. chinensis; photos by Jim Waddick. L. sprengerii grown from a Jim Waddick bulb; photo by Lee Poulsen. Possible hybrid between L. chinensis and L. longituba; photo by Jim Waddick.
Board of Directors Meeting, May 2011

As most of you know by now, the PBS Board of Directors approved some changes at their last meeting on May 1, 2011.

With brisk BX/SX business, we’re now up to speed on the changes Dell Sherk recommended implementing. While seeds remain at $2 per packet, bulbs are now being offered at $3, $4, and $5, depending on weight, with slightly higher charges for the heaviest. All of this is due to higher postal and supply costs. Thank you, Dell, for providing receipts in our order packages explaining the change. We can all be grateful for this efficient bargain, especially considering it’s the first change since 2002!

The PBS Market Place is up and running. After much discussion, this new member benefit was approved as a means to eliminate commercial announcements and business from the elist. This is a trial to be reviewed after six months. Check it out for some interesting offers to buy, sell, or trade. Thanks to Ellen Hornig for hosting this venture at: http://www.senecahillperennials.com/index.php?page=pbs.

In appreciation of our Web host, we have again agreed to make a $250 donation to ibiblio, one of the largest free information databases online, where we’re able to share our educational goals and experiences without commercial interference.

What some of you may not know is that our elist and wiki are sometimes “infiltrated” by other groups. Our wiki editor, Mary Sue Ittner, monitors both continually and recently found that one blog was copying entire wiki pages, complete with text and photos! After she spent countless hours supplying the URLs, Google finally removed the entire blog.

You’ve probably noted the significant increase in wiki entries lately. The worldwide bulb community is lucky to have our talented and tireless wiki team of Mary Sue Ittner, David Pilling, Nhu Nyugen, and Mike Mace. With this in mind, we are pleased to offer a complimentary annual PBS membership to Mike Mace for his many contributions. Thanks to all of you!

The board also voted a five-year complimentary membership with special thanks to Patty Colville, our Membership Coordinator who resigned in March.

And finally, new Membership Coordinator Jane McGary reports as of June, we are 230 members strong . . . and looking to recruit more!

For a complete copy of the minutes, contact Pamela Slate at pslate22@yahoo.com.

Our Apologies

We regret that the last two lines were cut off from Robert Werra’s article “Passing the Torch” in the Spring 2011 issue of The Bulb Garden. Robert told of his experience volunteering in his local elementary schools, teaching students horticultural skills such as pollinating Moraea pedula, harvesting seed, and tending seedlings. The end of the article should read: “The biggest prize is mine, however—the opportunity to pass the torch of our passion for bulbous plants on to the new generation. And, besides, it’s just plain fun interacting with these little children. I believe each of us can reproduce this project in some way in our own communities and we can pass on our torch.”

Treasurer’s Report, Year End 2010

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Bob Werra and a kindergarten student at St. Mary’s School pollinate Moraea pendula.
Alstroemeria is another great companion plant when backed up by the iris fans. (Do purchase some from our member, Roy Sachs. I love his ‘Lipstick’ and ‘Cream Burgundy’ varieties. His website is Buy-Alstroemeria.com.) I moved A. ‘Lipstick’ and A. ‘Parrott’ in front of some white Iris ‘Immortality’ this year and am waiting for next year’s show from that combination.

A couple of years ago I joined our San Diego County Iris Society. What a bargain! For a mere $5.00 membership fee, I get to go to ten enjoyable meetings a year where we share a potluck lunch. The members are very friendly and there are always enough door prizes for every attendee. It is rare to go home without a new iris. I have replenished the irises I lost in the fire several years ago and gained some Louisiana iris, at least one Siberian iris, and a gorgeous Arilbred iris this

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way. That doesn’t even count the lovelies that I have purchased at the annual fun-and-laughter-filled auction. This group is affiliated with the American Iris Society. I suggest you look up your local group if you garden at all.

One tip I got shortly after I joined was to keep new irises in containers for a year. First, it keeps the gophers unhappy, and around here that counts for a lot! If you use five-gallon containers and feed the irises well, they will usually bloom the next year. I put a shovelful of composted horse manure at the bottom of each container and then fill with whatever type of bagged soil I have on hand. At that point, I can move them around without disturbing their roots.

I like to mix my plants the way an artist mixes paints. During May, I move the containerized plants all over the garden, looking for the right combination or location. Since we often have terrible weather in May, I try to locate them in front of the living room window where I can look out during my morning coffee break. That helps me believe that spring really will arrive sooner or later! When I like a location, there they sit until August, when I’ll remove them from the containers and plant them. I also like to place the irises in drifts. Once I have a great look, I like to add more of the same variety until there is a three- to four-foot cluster of the color combination in spring.

Don’t forget about another of my favorite iris groups: the adorable, tiny reticulatas. I used to have several of these, lost them during the nongardening years after the fire, but have started replacing them. Currently ‘George’ and another called (of course I had to buy this one!) ‘Marguerite’ bloom in late winter. Several Louisiana irises are at home in water at the base of my large bird bath. I thought that would be enough unusual choices, but recently won another door prize: a gorgeous Arilbred iris donated by the hybridizer/speaker. I had to look it up to see how to treat it. It is a desert grower and needs to be dry in summer while dormant, as are many of my other bulbs. Another speaker showed us many of the gorgeous Pacific Coast iris that he grows. I buy a few Dutch irises every year and place them in heavy clay containers with the tulips. They make another delightful combination when placed along the front walk. How many different kinds of beautiful iris can one woman collect? I suspect we’ll be finding out, since I know others will tempt me at next year’s sales. They’re worse than potato chips—you can’t stop with just one!
Marguerite English shares *Iris* ‘Sugar Blues’ and several other iris beauties in this month’s “From My Point of View.” Photo by Carole Dearman.