Creating a Garden Around an Iris Collection

Carolyn Craft

I'm not quite sure how my husband and I ended up growing over 1,200 iris, because I like all plants. I do love iris; they mix in beautifully with other plants. They don’t require much water and are very easy to grow in most soils as long as they have sunshine. With the varieties available and the new re-bloomers, you can prolong their bloom season for many months.

When we bought this property, an abandoned horse pasture, the sloping 1.5 acres of weeds was enough to make my heart flutter. I brought a lot of named iris and was eager to start growing.

We planted a small vegetable garden and went to work on the house. For two years we allowed tree companies to dump huge loads of tree clippings on the property. They covered the hard packed clay (it required a pick axe to dig into!). The mounds of clippings would steam for weeks, composting themselves. Before my husband leveled the mounds of mulch with a tractor, a friend commented that it looked like a miniature mountain range. Without any plan, I started planting near the house with the many potted plants I had brought with us.

I like to plant what friends give me from their own gardens, anything that happens to catch my eye, and anything new and different. At the urging of my husband, I realized we did need some sort of a plan. I measured out the garden on paper. I then drew a pathway around and through the property and back to the beginning.

In the center I put a circular rose garden, with space for 60 roses. It was a vague plan but we started planting. I belong to a few iris societies; from those meetings I soon had hundreds of registered hybrid iris which we planted as fast as we could. I will provide instructions for most of the iris we grow.

(continued on page three)
In celebration of the 400th anniversary of Henry Hudson’s voyage of discovery of the eponymous river, the New York Botanical Garden is hosting several events under the umbrella name of the Glory of Dutch Bulbs. One is a display of 50,000 bulbs in bloom in the Enid Haupt Conservatory.

“So what?” you say. “Forcing spring flowering bulbs is so easy a child could do it.” True. But what if the show begins on May 1st and will not close until June 7th, after most of the bulbs would have finished their garden flowering? This is the challenge faced by Marc Hachadourian, Manager of the Nolen Greenhouses for Living Collections.

With the chilling capacity of two huge rented refrigerator cargo containers, greenhouse space, and lots of help, Marc has managed to convince endless pots of bulbs that they’re growing in Maine, not next door to Manhattan.

The bulbs were primarily potted in November and December, with just a few handled as early as October. The diversity of bulbs includes a broad range of daffodils as well as many tulips, including single late, parrots, fringed, viridiflora, and lily flowered. “No early tulips such as Tulipa greigii or T. kaufmanniana,” said Marc. “There would be no way to hold them back.” He went on to say that “We did get some Duc van Tol tulips from the Hortus Bulborum, and we are using T. chusiana and T. accuminata.” Curious, I asked if the tulips were carefully potted with each bulb’s flatter side toward the pot’s rim for better display. Yes, and not only that, each tulip had its tunic carefully removed. That way, Marc explained, the emerging shoot could not become constricted. It’s easier to remove the tunic than fiddle with freeing the shoot.

Hyacinths? Of course. Also Muscari and Dutch iris, lots of lilies, a number of alliums, Fritillaria persica and several forms of F. imperialis. The latter two genera were the most problematic. Both fritillaria and allium began growing when it was their time to grow, even in the dark, even in the cold.

Cold was the key. Once potted, the bulbs were held at 50º to 65º Fahrenheit for three to four weeks. In January they received their first cooling, down to 40º to 45º F. The third stage was to place them into suspended animation, two and a half months at 32º to 35º F. Marc even managed to trick Scilla peruviana. Let the potted bulbs start growing, get an inch or so tall, then “ice ‘em down,” he said. Now growing again, these winter blooming bulbs will be on display for the show, five months out of their natural cycle.

The month-long show will start with tulips, daffodils, hyacinths and fritillaria, and finish with allium and lilies. Timing is critical. When I visited (continued on page four)
Creating a Garden Around an Iris Collection (cont’d)

(continued from page one)

The majority are Bearded Iris; they vary in size from two-inch miniatures to four-feet tall plants. The bearded iris need at least six hours of sun a day to bloom. They should be divided about every three years when the rhizomes crowd each other, or they will stop blooming. Dig, divide, and replant in late July through early September. Keep the rhizomes dry before replanting. On the day of planting, soak the rhizomes in a solution of one part Clorox to nine parts water for 20 minutes, then rinse well: this takes care of most diseases. Luckily we do not have iris borer pest in California. Use a slow release fertilizer or one that has the same three numbers. Plant the rhizome very close to the surface, but dig a deep hole to loosen the soil. This allows deep root growth before winter dormancy and guarantees spring support for tall blooms.

Water during growing season and rely on the rains during winter months. Bearded iris rhizomes will rot if they stand in water. Fertilize again in late January (February in colder climates) with something that has the same three numbers. This is a minimal amount of work for spectacular results.

Pacific Coast Iris, of course, grow best along the coast. I’m not sure if anyone has Pacific Coast Iris success elsewhere (editor’s note: if you do, please tell us about it on the listserv!). Along the coast they get ocean mist with very little ground water. Inland they like growing in the drip lines of oaks and conifers or in dappled shade with a little more water. We rarely divide these as we want a good-sized, one-foot-tall clump with a bouquet of two inch blooms. Dig and divide in October. Never let the rhizomes dry out when out of the ground. Put them in buckets or jars of water until fresh, white, brittle roots grow about an inch long. Don’t break those brittle roots! Plant in well-dug, loosened, acidic soil with excellent drainage.

Arilbred Iris prefer high desert conditions. Arilbreds are a cross between a bearded iris and an Aril iris; they are easier to grow than pure Arils. They require full sun and excellent drainage, prefer sandy or granite soils, and need no watering in the summer when they go dormant. The Arils have very exotic looking flowers. Keep the rhizome dry when replanting in late July-early September, and water after planting.

Siberian Iris bloom with bouquets of two- to six-inch flowers that are similar to Dutch iris. They prefer a cold winter. They like water, but do not want their roots in standing water, particularly during summer. They are not heavy feeders. Dig, divide, and plant these in the fall. Never let their fibrous rhizomes dry out when transplanting. Plant them about three inches deep in well com-

(continued on page six)
“behind the scenes” on April 21, I saw tulips in the Nolen Greenhouses, hyacinths and fritillaria outdoors, narcissus still in the refrigerator containers, and more pots of *Fritillaria imperialis*, yellow from lack of light but determinedly in bud.

The latter will green up in seven days, then bloom in 10 to 14 days. Tulips bloom in 14 to 20 days, depending upon variety. There is a third refrigerator cargo container, not as accurate in temperature control as the other two, which functions, where needed, as an intermediate stage before the greenhouse. At this close run-up to the opening of the show someone is daily checking the growth of bulbs. How tall are the emerging shoots, what’s the height of the flower buds?

It’s going to be wonderful! Look for 50,000 bulbs and companion plants, all in bloom in May.
Creating a Garden Around an Iris Collection (cont’d)

posted soil in full sun. They will take a year or two to settle in. Do not divide them for five years or more.

**Spuria Iris** make excellent landscape plants at the back of the border, along a fence, or as a stand alone accent. After becoming established, which can take a year or so, they make huge three- to five-foot tall clumps and should be left in place. The flowers resemble Dutch iris blooms. Shorter Spurias are available; always check the height when you purchase them. Spurias need full sun with good drainage. Plant these in the fall, keeping the rhizome wet until planting. They are heavy feeders.

**Louisiana Iris** grow anywhere: a swamp, a bog, a watered lawn, and any dry spot you alter by watering frequently. They have large open blooms from three to six inches across, and bloom in sequence on one- to five-foot stalks. Their rhizomes should never dry out during planting. They cannot compete with tree roots for water, and they prefer fertile, acidic soil with full sun. Plant them five feet apart, because their rhizomes can grow three feet in each direction.

**Japanese Iris** are the most dramatic of all iris. They have large, graceful, flat blooms up to ten inches across. They are the last to bloom. Their fibrous rhizomes must never dry out. Plant them in the fall in wet locations in acidic soil. The greenery of some will completely disap-

pear in the winter and show new growth in February. I grow them in five gallon containers set inside children’s plastic wading pools. Empty the wading pools, clean, and refill as necessary. Use mosquito pellets in the water. Do not keep them in water that might freeze them during the winter months. They should still be kept moist. The blooms are worth the trouble!

I also collect species iris and other *Iridaceae*. Each seems to have different requirements, some easy, some not. I like planting iris with different textures and shapes. We have a lot of reblooming iris, but I have also made sure that we always have something in bloom by planting some companions. We have added more than 80 fruit trees to the garden, lots of berries, and many other plants and vines. We try to separate plants according to water needs.

My husband keeps nine beehives in the garden, which is always full of bees, butterflies, moths, lizards, and birds. Bees can travel quite a distance for pollen. I believe our honey is extra-good because we have such a variety of plants. With all of this diversity, the garden is at its loveliest when the iris are in bloom.

If you are interested in growing any of these iris, I suggest ordering directly from known hybridizers. For more detailed information, I recommend: Bee Warbuton and Melba Hamblen, eds., *The World Of Irises* (American Iris Society, 1978) and James Waddick and Zhao Yu-Tang, *Iris of China: Chinese Iris in the Wild and in the Garden* (Timber Press, 1992).
Use of the Small Lots of Seed Permit

Joyce Fingerhut

Joyce has served as the President of the North American Rock Garden Society (NARGS). Currently she holds the dual NARGS positions of Government Liaison and Director of the Seed Exchange. She worked closely with APHIS for the establishment of the Small Lots of Seed permit, and continues to devote her efforts to simplifying the seed import process. She describes herself as an “eclectic gardener.” — Ed.

What's this fuss about the Small Lots of Seed permit, and how does it differ from my other plant import permit?

The new Small Lots of Seed permit can be used to import horticultural seeds into the United States from Canada and overseas, through the mails, without a phytosanitary (plant health) certificate. Although imported seeds needed a phyto for many years, that requirement was not enforced by the USDA’s Animal and Plant Health Inspection Service (APHIS) until January 2002. After that date, all seeds entering the U.S. had to be accompanied by a phyto, obtained at quite some cost and effort by the exporter. Because of the expense, and also because not every foreign country would write a phytosanitary certificate, APHIS established a new, alternative permit, which does not require a phyto for importing Small Lots of Seed. This permit is free, good for three years and multiple importations, and can be obtained either by mail or online. Previous import permits may not be used to import seeds without a phyto.

The following descriptions of three important steps in obtaining and using a seed permit should provide a broad understanding of this relatively simple process:

1. Applying for the permit
2. Sending order(s) to overseas/Canadian exporter(s)
3. Exporter(s) sending seeds to the U.S. importer

Applying for a Small Lots of Seed Permit: Snail Mail

The application process couldn't be simpler. Information about the Small Lots of Seed permit can be found on the APHIS website at: http://www.aphis.usda.gov/import_export/plants/plant_imports/smalllots_seed.shtml. Here you will find a list of the directives to the importer and exporter about what kinds of seeds may be imported, as well as how they should be (continued on page eight)
The Bulb Garden  Volume 8, Issue 3

Meet Dell Sherk, Your BX Director!

I have been interested in the other, non-human organisms that occupy our planet for as long as I can remember. As a five year old, I fell into an ancestral mill pond in Ontario, Canada, while reaching for a water lily. At age nine, I discovered my first amaryllids, pink "naked ladies," blooming along my grandfather's driveway in Pasadena. Their fragrance sent me on my lifelong bulb quest. Soon I received my first microscope, and could not get enough of protozoans and planaria, frog's innards, and pollen.

My plant mentors in my youth were the ladies in the neighborhood, rich in years and tolerant of a boy who asked a lot of questions. They showed me how to grow perennials, spring bulbs, vegetables, and the "Night Blooming Cereus" that one lady received from her daughter who lived in Phoenix. On the nights when the cereus bloomed, a small group of friends, sometimes only I, gathered on her old-fashioned, house-surrounding porch to watch the event. What an occasion! It did not smell as good, however, as Grandpap's pink flowers.

During my college years, while I studied chemistry and English, gardening had to take a back seat. But later as a teacher who had my summer's off, I kicked into high gear growing bulbs, iris, hemerocallis, herbs, gesneriads, and vegetables. Also, I discovered the International Growers Exchange, the first source I knew for exotic bulbs like crinum and cyrtanthus and lycoris. Still searching for the fragrant pink flowers I remembered from my grandfather's house, I purchased any bulb that sounded like it might be the one I sought. 

Crinum xpowellii and Lycoris squamigera bore a visual resemblance but lacked the heavenly fragrance of what I later found out was Amaryllis belladonna.

With the age of home computers came my discovery of the large variety of plant societies online and the even greater number of suppliers with websites. Finally, I discovered the fragrant xAmarcринum (xCrinodonna) which was as close as I could get, and it would bloom in a pot. I had arrived!

Shortly thereafter, I started joining plant societies including ones that focused on geophytes. I tried growing every bulb, root, or tuber I could get my hands on. I even volunteered to help with seed exchanges. After running the exchanges for the IBS for a few years, I came over to start the PBS BX, and have been running it now since 2002. I still have to teach children to earn money to buy plants, and in my spare time I eat and sleep.

Spring Brings Glorious Visions ... Or, Why I LOVE Living Here

Robin Hansen

Robin gardens in North Bend, Oregon just east of the Pacific Ocean on a property sheltered by dunes and conifers (slightly colder and hotter than USDA zone 9). She grows and sells Cyclamen and a few other Oregon native plants. To ask questions or request her plant list, send an E-mail to robin@hansennursery.com. — Ed.

Spring is two or three weeks late again this year. The dogwoods are only now coming into full bloom in the interior valleys, along with Red Elderberry and Amelanchier. All are showy, white-flowered native shrubs or small trees, growing along woodland edges or sheltered by other trees on the hills. The dogwoods were a blizzard of glory along Highway 38 today between Reedsport and Drain, splashed in every direction amid all the fresh green growth.

The early blooming red flowering currant and osoberry have finished and the native maples are nearly leafed out, although a sudden windstorm has left a thick yellow-green litter of maple flowers along the roadsides. The early trilliums are only dangling bits of dried petal and the slugs have feasted on the Scoliopus leaves. Viola adunca is blooming in small scattered clumps in the "can yard" where it has seeded gently about. I only wish these tiny violets were fragrant, to make them absolutely perfect. V.adunca bellidifolia from the Siskiyous in southwestern Oregon is a darling miniature with white flowers penciled in purple. I use it in troughs — the Pacific Northwest equivalent of Viola verecunda v. yakuimana, the tiny Japanese violet that has disappeared much too often for me.

Clumps of white Douglas iris I planted last spring are flowering and the native western redbud soon will be, its leaves already showing. I can see that our native Aster chilensis is much too happy and is overwhelming its neighbors at light speed. I need to move it to a much more punishing location where it will stay below a foot in height.

Potentilla fruticosa, planted in a cement box in front of a large west-facing window is staying quite dwarf. Little rain reaches it under the deeply overhanging eaves of the house.

Of course, the weeds are flourishing, the grass will soon be too high to mow with the reel mower, and the burn pile needs lighting before fire season shuts down the largest part of my spring chores this year. Even though I garden on sand, it's still too wet to weed much, but most evenings I take a turn around the garden to see what's blooming while trying my very best to ignore the chores piling up until we get another dry spell.
Board of Directors Meeting, May 2009

Greetings from your Board of Directors! We had our most recent meeting (via conference call) on May 24.

As Treasurer Arnold Trachtenberg said, and as his report in the next column shows, we are “holding our own” in the finance department. He also confirmed the transaction of the $250 gift certificate to a Lithuanian bulb dealer as a thank-you gift for Algardas, whose help (along with Mary Sue Ittner’s hard work, and that of her other volunteers) absolutely saved our wiki. Special thanks to all of you! The board is very proud of the wiki; we feel that It is one of the most important and enjoyable resources available online.

In Old Business, we spent quite a bit of time on improving the way we do handle membership issues. We hope that by tightening up our procedures and by sending out renewal reminder postcards each January, we – and you – will benefit. Please remember our membership term runs with the calendar year and dues are not pro-rated. Our membership cost is very low, and managing multiple renewal times would overwhelm our volunteer staff. We also hope the new Paypal button on the website will make it easier for you to renew your membership and for us to keep accurate, up-to-date records.

For those of you traveling to symposia this summer, please consider contacting the organizers to try to set up a regional get together with other PBS geophyte-o-philes attending your conference. If you do, please let us all know how it went.

For many, many contributions to the wiki, we applaud and thank Nhu Nguyen by giving him an honorary membership for 2010. Thank you, Nhu! We value your assistance!

As you all know, Marguerite English is leaving as editor of The Bulb Garden. We will miss her dearly, and we are grateful for all the expertise she has given us, but we wish her all the very best in her new endeavors! Our search for a replacement will continue over the next several months. Once we find a replacement, we will review the possibility of reinstating the Topic of the Week via the listserv; it was a valuable program in the past. Please contact President Jane McGary if you have suggestions or are interested in either of these positions.

At some point, we hope to coordinate another group order under the aegis of PBS. We need a volunteer to oversee this project — if you can help, please contact BX Director Dell Sherk or Secretary Pam Slate. Interestingly, we’ve been informed by APHIS that we can, in fact, obtain our own import permit and that “bulbs are pre-cleared from Europe”. To learn more about some of the new importation procedures associated with the Small Lot of Seeds Permit, be sure to read Joyce Fingerhut’s article in this issue!

We’d also appreciate suggestions from you about how to possibly reformat the BX Archives. Publications Director Jennifer Hildebrand summarized the first 100 BX sales for the website, and we’ve recently surpassed the 200 mark. This is our accession list, an important piece of our group history. Should it be reformatted, and if so, in what kind of software? The answer depends on what its future uses might be. It would be interesting to hear from any of you who refer back to those early sales.

Our next board meeting is in August. Please let us know if you have agenda suggestions. Have a happy gardening summer!

Pamela Slate, PBS Secretary
For a full summary of the minutes, email pameladaz@msn.com.

Treasurer’s Report, 1st Quarter, 2009

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Enjoying your bulbs?
Make sure others can, too!

As you enjoy the blooms in your garden, please don’t forget to collect extra seeds & bulbs to send to the BX so that others can enjoy them next season! Donations of CLEAN, clearly labeled seeds or bulbs/corms should be sent to:

Dell Sherk
6832 Phillips Mill Rd.
New Hope, PA, 18938
USA

Donors will receive credit on the BX for the cost of postage for their donations.

Non-US donors: please email Dell for instructions before sending seeds: dells@voicenet.com.
Use of the Small Lots of Seed Permit (cont’d)

(continued from page seven) identified and packaged by the exporter (e.g.: an overseas seed exchange, or a Canadian seed house). These requirements basically boil down to the seed being clean and identified with the name of the plant, the exporter, and country of origin. Each packet of seed may hold no more than 50 seeds or 10 grams (whichever is more); each shipment may hold no more than 50 packets of seed.

Also on this page are clear and simple instructions for filling out the application form for the permit.


The directions for filling in the form are straightforward. Here is the key information for Section 2:

Country of Origin: write “Various Approved Countries.” This is the simplest option, which also allows the importation of the broadest list of taxa. Scientific Names of Plants: write “Various Approved Countries.” This will allow you to import any seeds that are not prohibited.

To learn which plants are prohibited entry, or are restricted because they require a test or treatment before entering the U.S., check the Plant Protection and Quarantine Nursery Stock Manual: http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/nursery_stock.pdf

Scientific Names of Plants: write “Seed.” This will allow you to import any seeds that are not prohibited.

You can also view a list of seeds that are prohibited/restricted on the website of the North American Rock Garden Society: http://www.nargs.org/RestrictedSeed/

Taxes are denied entry if they appear on the CITES list, are regulated under the Endangered Species Act, are parasitic or noxious weeds, or otherwise regulated under APHIS quarantine rules. If prohibited seeds are found in a shipment, they will be confiscated and destroyed, and a notice of that action will be sent with the remaining seeds.

Here are some more directions:

U.S. Port of Arrival: you may choose any of the 17 stations on this list: http://www.aphis.usda.gov/import_export/plants/plant _imports/plant_inspection_stations.shtml. I would avoid Miami and Los Angeles until some problems have been worked out.

Once you have filled out the form, mail it to the APHIS address in the upper-right corner.

Applying for a Small Lots of Seed Permit: Online

You may also apply online, after completing a two-step authentication process. This process requires following the link on the Small Lots of Seed page and creating an eAuthentication account. The first step is a Level 1 Access account. But to do business online with APHIS (including applying for, or renewing, a permit), you will need Level 2 Access, which requires that you appear, with a photo ID, at one of the USDA Service Centers (e.g., an Extension Service office). The list of these offices may be found at http://offices.sc.gov.usda.gov/locator/app.

This is a one-time trip; with Level 2 Access, you will be able to do all further business with APHIS online. To keep your eAuthentication current, simply log onto your account about every four months.

Sending order(s) to Overseas/Canadian Exporter(s)

When you receive your permit, it will be accompanied by several green and yellow mailing labels, printed with the address of the Inspection Station that you chose.

A green and yellow mailing label and a copy of all three pages of the permit must accompany orders sent to an overseas/Canadian seed house or seed exchange. Since this permit is still relatively new, many inspectors are still unfamiliar with all its conditions. Having a copy in the container of imported seeds will facilitate the inspection process. Send one set of permit and labels for each 50 packets that you order.

Exporter(s) Sending Seeds to the U.S. Importer

The exporter will place in the shipping container, with the seeds: an alphabetized invoice, listing all the taxa in the shipment (it can be the order form you sent); a mailing label with your name and address.

The green and yellow mailing label will be pasted on the outside of the crate/container, with NO OTHER ADDRESS written on the outside. This label will direct the package to the APHIS Plant Inspection Station. After checking the seeds, the inspector will paste your address label on the outside of the package, and return it to the post office for delivery to you, the importer.

At a few inspection stations (e.g., Miami, LA), there has been confusion about whether additional postage is required for the package to be delivered to the importer. The USPS has clearly stated that it is happy to continue the forward mailing of these shipments (they refer to it as “chain of custody”) without any additional postage. APHIS and the USPS have recently agreed on a process to insure that all shipments are forwarded to the importer without additional postage, and this will be in effect in the near future.

This whole procedure is much easier to do than to describe, so if I have muddled an essentially simple process, or if I have neglected the very detail that you have questions about, feel free to contact me:

Joyce Fingerut
537 Taugwonk Road
Stonington, CT 06378
860-535-3067
alpinegarden@comcast.net
The Useful Bulb Frame, Part 1

Jane McGary

This article is a reprint from a much earlier volume of The Bulb Garden—Ed.

I began to collect bulbs in a focused way around 1990 when I learned that it was not difficult to grow many unusual species from seed. Soon I acquired many plants from cold desert or warm temperate regions that could not flourish in western Oregon's cold, wet winters. My land at 1600 feet elevation in the foothills of the Cascade Mountains, southeast of Portland, experiences about 45” of rain per year between October and June and winter minima ranging from 0° to 20° F. Minimum temperatures may occur anytime from early December to late March; during cold snaps, snow cover may or may not be present.

My British reference books advised growing many bulbous species in a bulb frame, but I had only a vague, intuitive notion of what that was. The introduction to Martyn Rix's Random House Book of Bulbs clarified the concept, providing a detailed description and a helpful photo. Essentially, a bulb frame is a raised bed with a cold frame over it. In 1992, I had an area just outside the garden graded level and put up two 4’x40’ frames. Since then I've added three more of similar size and various designs.

Use of the Small Lots of Seed Permit: A Few Pointers

In the course of the past years of handling queries and problems about the system of importing seeds with the new Small Lots of Seed Permit, I have learned that a few steps will help expedite the process:

- Be sure to include a copy of all three pages of the permit with your seed order;
- Send a typed, alphabetical list of requested taxa, to be used as an invoice for the return shipment;
- Include a legible, printed label with your name/address;
- Do not request seeds that are restricted/prohibited by APHIS, or seeds with a vague country-of-origin (e.g.: Caucasus);
- If receipt of seeds seems unduly slow, and you wish to inquire at the Inspection Station, use your permit number; it's the only way they can locate your shipment.

The primary purpose of a bulb frame is to control the moisture regime. Many bulbs are likely to decline and die if grown in excessively wet soil, especially during their dormant season. Even Mediterranean-climate bulbs may not survive the amount of rain that falls here, especially when the rainy season extends through June. Species that have evolved in regions with cold, dry winters, such as alpine regions, are mostly willing to grow if not too wet.

A secondary aim of the frames here is to protect against winter cold. A maximum-minimum thermometer with a remote sensor placed in the frame will tell you how much cold protection the frame gives. Here, the frame is only 3°–5° F warmer than the outdoors, but this is usually enough to help out marginal species. Adding some kind of heating to a frame is possible in more severe climates, but I haven't considered doing so because the frames are so far from electric power. When I expect outdoor temperatures to drop below about 23° F, I cover the more vulnerable plants (which are grouped together) with sheets of microfoam nursery insulation. Laying a few sheets of newspaper loosely over the plants is also effective, but the newspaper gets soggy if the temperature goes above freezing. Pots with especially tender plants can be pulled and brought into a heated area at such times.

Why grow bulbs in a frame rather than in a greenhouse? First, frames are much cheaper and easier to build and maintain; they're unlikely to fly away in a windstorm. Less obtrusive visually, they fit in better with the garden landscape and may avoid disputes if you live in a development with covenants. Insects are not as troublesome in frames as in greenhouses because natural predators have more access to the frames. Humidity is likely to remain lower in a frame, too. The drier, slightly warmer conditions are conducive to fertilization and seed set, especially on early-flowering species that would not set seed in the open. The only regard in which frames are worse than greenhouses is that they are a lot less comfortable for the grower: you have to admire your plants in the cold rain, and work on them bent over at a backbreaking angle.

Next edition: Jane will discuss frame designs and bulbs' annual life cycles. — Ed.
BX Director Dell Sherk’s bulb habit has spread into his classroom! Read his bio on page 8.

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   By Carolyn Craft
Holland Bulbs at the New York Botanical Society (Part 1)
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Use of the Small Lots Seed Permit
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The Useful Bulb Frame (Part 1)
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Editor: Marguerite English, meenglis@cts.com; Co-Editor: Jennifer Hildebrand

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