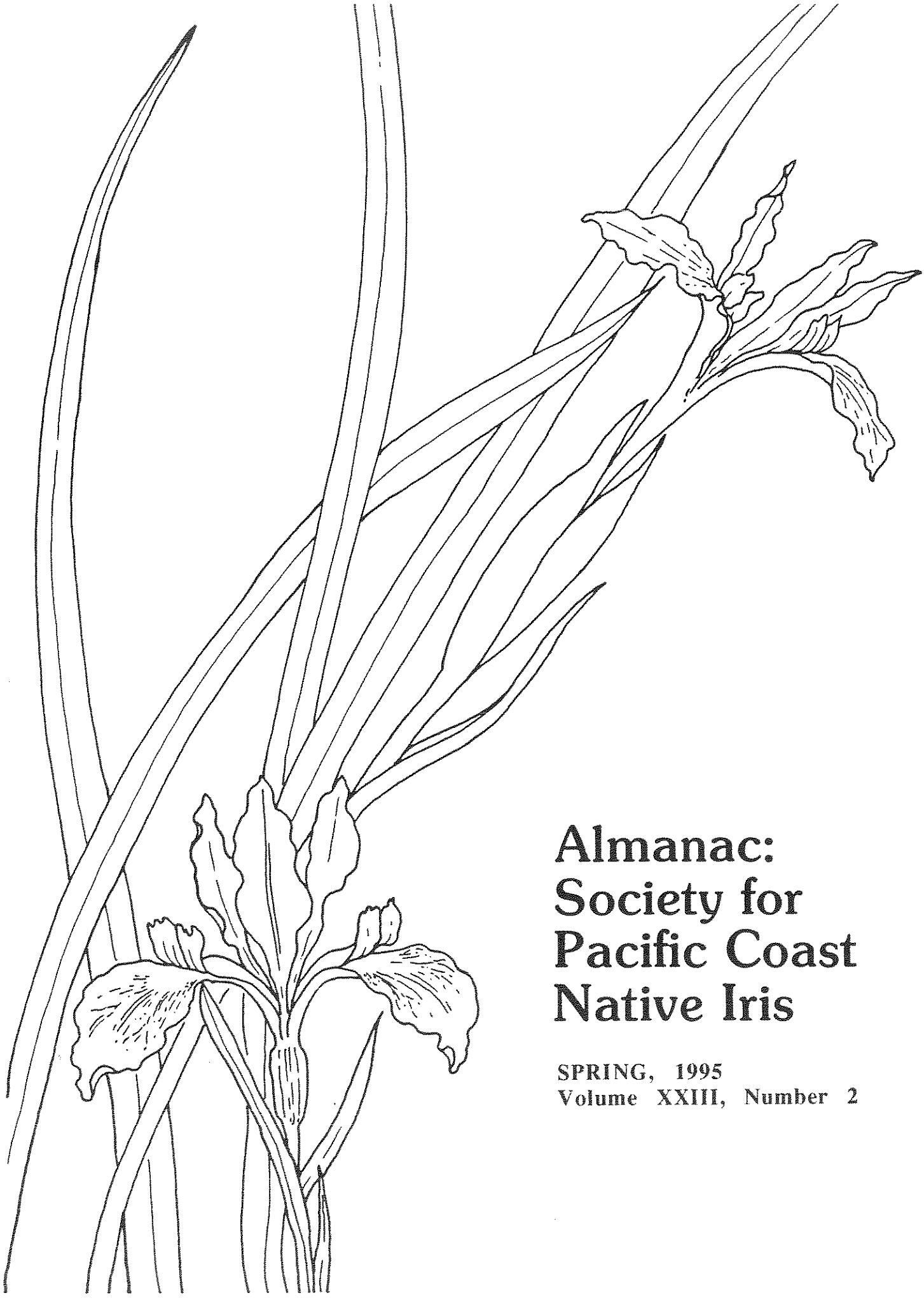

Almanac: Society for Pacific Coast Native Iris

SPRING, 1995
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PUBLICATIONS AVAILABLE FROM THE SPCNI TREASURER

Check List of Named PCI Cultivars
Lewis Lawyer, Editor: 48 pages. Lists and describes Pacific Coast native iris and named hybrids through 1990. $5.00 postage paid.

Diseases of the Pacific Coast Iris
Lewis & Adele Lawyer: ALMANAC, Fall 1986. 22 pages, 9 photographs. $3.50 postage paid.

A Guide to the Pacific Coast Irises
Victor A. Cohen: The British Iris Society 1967. Booklet, 5.5 x 8.5, 40 pages, 16 line drawings, 8 color and 6 black-and-white photographs. Brief description of species and sub-species including their distribution. $4.00 postpaid

A Revision of the Pacific Coast Irises
Lee W. Lenz: Photocopy of *Aliso* original. Booklet 5.5 x 8.5, 72 pages, 9 line drawings, 14 photographs, and 12 maps. Definitive work on the taxonomic status of the *Californicae*, with a key to the species and sub-species. Detailed maps and accounts of distribution. $6.00 postage paid.

Hybridization and Speciation in the Pacific Coast Iris
Lee W. Lenz: Photocopy of *Aliso* original. Companion booklet to the above, 5.5 x 8.5, 72 pages, 30 figures, graphs, drawings, and photographs. Definitive work on naturally occurring interspecific crosses of PCI, including detailed account of distribution. $6.00 postage paid. If ordered together, both Lenz booklets may be obtained for $10.00 postage paid.

SEED AVAILABLE

Seed of species and garden hybrids is available for $1.00 for the first packet and $.50 for each additional packet from the Seed Distribution Chairmen listed in the column to the right.

EXECUTIVE COMMITTEE

COMMITTEE CHAIRMEN

ALMANAC REPRESENTATIVES

MEMBERSHIP & SUBSCRIPTIONS

The Society for Pacific Coast Native Iris is a section of the American Iris Society; membership in AIS is a prerequisite for membership in the SPCNI. If you wish only to receive the ALMANAC (two issues per year), the annual subscription rate is $4.00.

Membership	Individual	Family
Annual	$ 4.00	$ 5.00
Triennial	10.00	12.00
Supporting Annual	6.00	
Life	50.00	65.00

Please send membership-subscription monies to the SPCNI Treasurer.

ALMANAC

DEADLINES: March 1 and September 1. Back issues are available for $3.50 each, postpaid. Complete chronological index $2.00, postpaid. Index by subject matter, or by author, $4.00 each, postpaid. Please address the Editor.

PRESIDENT'S MESSAGE

I am looking forward to our return to the Portland OR region on this year's Spring Expedition. Although the final itinerary will be dictated by the weather between now and then and the presence or absence of flowers at potential sites, one possibility is the area around Mount St. Helens, where we would have the opportunity to witness biological recovery in a region recently devastated by volcanic eruption. Not long ago, there was a program on *Nova*, the PBS science series, about scientists studying the post-eruption recovery in the very same area; the program showed studies of the return of insects, the reappearance of fish and frogs in the streams and the procession of repopulating microorganisms. Only a few minutes were spent on the smaller plants that are re-establishing themselves, but enough to raise my interest in this regenerative process.

My thoughts turned to the idea of recording some of our observations made on our expeditions, creating a record of the location, varieties, numbers and conditions of the irises and other plants that interest us. While this certainly is not a substitute for a thorough and scientific study of these areas, it could well provide some basic information for people (including scientists) interested in observing changes of iris populations in the wild. One concern of the SPCNI and its members is the continued survival of wild populations of our favorite species, yet we have very little information on which to judge whether these populations are healthy or not. Are they increasing, decreasing, spreading to new sites, becoming more restricted in distribution, etc.? I propose that we create a simple format and guidelines to record our expedition observations in a journal that can be kept in the SPCNI archives for future reference. Each expedition would benefit from the modest efforts of a few volunteer recorders. Our expeditions are described in the *Almanac*, but these narrative descriptions are not suited to recording the details that would be in the archive records. Given the limited distribution of many native iris populations, it is inevitable that we will revisit some areas; these revisits will allow comparisons of the populations to be made from our field records, which should reveal any major changes in the native irises and their environment.

Of course. if any of you think this is a good idea, there is no need to wait on our expeditions! You are free to start records of iris populations wherever you see them. I know that many of our members live within a short distance of wild populations.

FROM THE EDITOR

We have just gone through the magic period, the period of metamorphosis when our garden transforms itself from its winter garb of browns and grays through a succession of newly unfolding buds and flowers into a place of wonder. We have seen it all happen many times before, but this just makes it like a familiar piece of music: the anticipation of what you know is coming is as exciting as the reality of the moment. We watch for the first star-like flowers of the *Spiloxene capensis* and the brilliant orange and yellow of the *Homeria elegans*. Like the crocuses of many gardens, these are our harbingers of spring.

In our garden, as in most gardens, for each of these familiar stanzas there are equally exciting improvisions: The first bloom of a plant given to us by a friend the year before. A bud about to open for the first time on a seedling of our own, or on a plant from seed Adele found so intriguing in one of those devilishly colorful catalogs. We must admit, spring is an exciting time!

In our garden the PCI are certainly the most planned and time consuming of all the plantings. Our wants are simple: a perfectly-shaped pure blue flower borne on a sturdy, well-branched stem, and supported by a disease-free, faultlessly-clumped plant which will increase somewhere between 2 and 2.5 fold each year. Each morning during this exciting season, we go out and look for this flower. On most mornings we find nothing important, but on the few where we find something new that meets at least one of our criteria, it makes all the rest of the mornings worthwhile.

Now, our PCI beds have had their day. We have gone from 1184 open blooms on March 31, to 132 today. We have tagged about a dozen plants to look at again next year, one of which is uniquely exciting. A good catch for the season. Next we look forward to a series of new perennials picked up last year at nurseries from Ventura to Santa Cruz. We also are excited about a new color we found two years ago in our California poppies. These seedlings which we have called "Peaches and Creme", are just starting to bloom. For the next month or so, we will wander down to the poppy bed just after lunch each day to pull out any plant whose flowers don't meet our narrow color specifications and to enjoy the beauty of those previously selected.

We anticipate the familiar *Neomarica,* the Kangaroo Paws, the waterlilies, the chrysanthemums, and finally the October-blooming *Nerine* and *amaryllis* offerings. In October we will select our last group of seedlings: *Nerine sarniensis,* X *Amarygia parkerii,* and *Amarine zwanenburg.* Then we can watch our garden squeeze back into its chrysalis, leaving only a few brave plants like the swarms of winter-blooming *Moraea polystachya,* which self-seed here and there to brighten the winter days.

FOREWORD

This is the first time the ALMANAC has had a foreword, but I thought that its contents and timing needed an explanation. It seems that, beginning last fall, there have been an overwhelming number of chores with innumerable deadlines in which we were entwined. This, coupled with the demands of our garden: a major replanting of all our iris cultivars, most of our bulbs, and the acquisition of a new set of perennials, made it seem like "the faster we worked, the behinder we got"! So I procrastinated on getting articles for the ALMANAC, and with the exception of the article by Clarence Mahan which was obtained by our East Coast Representative, John White, this issue is mostly devoted to a collection of PCI-related facts and figures which we have observed in our garden during the past several years. Then, on Easter Sunday, just at the time I had started putting the ALMANAC together, I made a wrong decision. I decided to test our 30-foot long one-rope swing before the grandchildren arrived for their Easter egg hunt (and their inevitable rides on the swing). Our loquat tree had grown to where its limbs were interfering with the wonderful sensation of flying out into space, so I trimmed it back to where there was a foot or more clearance. This clearance, unfortunately, was measured without my weight, and I had forgotten that nylon rope stretches like a rubber band. I jumped off the 8-foot tall ladder onto the swing, as is the usual procedure, cleared the tree by a few inches going out, but hit one of the limbs coming back. This spun me around like a top and I crashed into a rock wall with both legs, breaking the small bone in my left leg, ripping out some flesh, and badly bruising everything. So, ever since then I have been on antibiotics and crutches, popping pain killers, and spending most of the time with my legs elevated, unable to do much of anything. My doctor gives me no sympathy, saying that it was self inflicted and that I should have had more sense, but I just want you to know that I am a poor thing, and that you are lucky to get your ALMANAC at all.

EXPEDITION 1995

June 3 and 4, 1995 is the date of this year's field trip. Colin Rigby is coordinating the trip, and has made food, lodging, and bus transportation arrangements. The route for the first day is being planned by Bill Ferrell and Scott Christy, and for the second day by, Claude and Joanne Derr. We are also fortunate to have Roy Davidson of Bellevue, Washington, accompany us. He will help identify the wild flowers which always enrich the pleasure of these trips.

So far, we have 43 reservations for the 47 spaces on the bus. To reserve, please send deposit of $50 per person toward bus, lunches, and dinner and program Saturday night to: Adele Lawyer, 4333 Oak Hill Road, Oakland, CA 94605.

Contrary to the announcement in the Fall 1994 *Almanac,* Mt. St. Helens may not be on our itinerary. It is a considerable driving distance from our headquarters and no native iris have been found in the area by our scouts.

Headquarters remain at the Mark 205 Inn and Conference Center at 221 N. E. Chkalov Drive, Vancouver, Washington 98684. Complimentary transportation from the Portland airport is provided. Reservations can be made by calling (800) 426-5110 and mentioning the block of rooms held for SPCNI until May 12, 1995. Reservations after this time will be on a space available basis. Room rates are $55 for one or more persons.

The bus will leave each morning at 8 am, so if you are coming from afar, it will be advisable to stay overnight at the motel on Friday as well as Saturday evening. We will be back at the motel by 5:30 on Sunday.

If the bloom season is normal, we plan to look for *Iris tenax* and *Iris gormanii* in the hills west of Portland on Saturday. Our scouts will locate alternate sites if necessary. We will also visit Tom and Ellen Abrego's Garden at Dundee, and the Berry Botanic Garden. On Sunday, we will go to the Mt. Hood area to see *I. tenax* in its many color forms, and the rare and lovely, *I. tenuis,* nearby. The Leach Garden, a native plant garden operated by the city of Portland, may also be included in the itinerary.

GARDENING WITH IRIS SPECIES

This was the title of the International Symposium, sponsored by the Missouri Botanical Garden. the Greater St. Louis Iris Society, the Species Iris Group of North America, and the Gateway Chapter of the North American Rock Garden Society.

Your editors attended the Symposium which was held at the Missouri Botanical Garden. St. Louis, Missouri, on March 24 through 26, 1995,

It was an exciting event, drawing together individuals interested and knowledgeable in iris species from all over the world. We were honored with speakers covering many aspects of the species. And the comprehensive Proceedings, prepared and assembled by Dr. James Waddick, are an invaluable resource, with contributions from 37 authors from around the world!

Talks started with classification of *Iris* species according to morphological and DNA sequence analysis, presented by Peter Goldblatt, of the Missouri Botanic Garden. This was followed by presentations by Panayoti Kelaidis, Brian Mathew, Alan McMurtrie, Dave Niswonger, Phil Ogilvie, Bob Pries, Darryl Probst, Colin Rigby, Eberhardt Schuster, James Waddick, Jean Witt, Tomas Tamberg, and George Rodionenko. Almost every species of the genus *Iris* was discussed, including the *Californicae,* covered competently by Colin Rigby.

We brought about 50 cut stalks of blooming Pacificas to St. Louis from our Oakland garden, and Ben Hager brought some from Stockton, California. These were displayed at the hotel registration table and in the Botanic Garden, where the bouquets attracted much attention.

Of particular interest to *Californicae* enthusiasts, in addition to Colin's talk, were the talks and slide presentations of Carla Lankow, Lorena Reid, Tomas Tamberg, and Jean Witt dealing with inter-species and/or series crosses involving *Californica.* Each of these individuals

has been responsible for a good share of the progress being made.

Jean Witt's slide presentation summarized much of the progress made since 1927 when Amos Perry of England, crossed *I. chrysographes* with *I. douglasiana* to produce the Cal-Sibe, Margot Holmes.

The coverage given to Tomas Tamberg's talk in the Proceedings make it easier for us to simplify the complex advances which have been made.

During the past 20 years, Tamberg, of Berlin, Germany, has been using colchicine treatment of germinating seeds to produce tetraploids, so that fertile inter-specific and inter-serial hybrids can be created. With fertility, hybrids, improved in decorative value and in ease of cultivation, can be produced. He has succeeded impressively in this pursuit. His presentation was illustrated with slides depicting the hybrids he has achieved.

Tetra-Calsibes, crosses between 40-chromosome Chinese Siberian iris from the series *Chrysographes* and the *Californicae* are now in the fifth generation. Two garden-worthy varieties have been introduced to date, and others resulting from advanced generation efforts are now being registered.

"Tetra-Calsibes have been crossed back to Tetra-Californicae and to Tetra-Chrysographes irises. Seedlings from the latter type of cross are vigorous plants with well branched, upright stems and flowers in a good spectrum of colors. This group was named "**Sibcal**" hybrids by Tamberg." (*Berlin Sibcal* is registered.)

Tamberg has also produced **Calsata**, which are hybrids between Californicae and Ensata, and **Caltosa**, hybrids between *Califonicae* and *I. setosa*. He has grown both Calsata and Caltosa, but has abandoned these combinations because they lacked vigor and would not bloom in his Berlin environment.

Another successful tetraploid conversion with application to the *Californicae* are **Chrysata**, (hybrids between the *Crysographes* sub-series of Siberians, and forms of *Iris lactea* from Series *ensatae*). These tetraploid Chrysata hybrids have been crossed to Tetra-Calsibes as well as Tetra-Chrysographes.

Other successful combinations reported and pictured by Tamberg involve versicolor with laevigata, chrysographes with setosa, Siberians (4n=56 group) with versicolor, and with prismatica.

In the *Species Around the World* section of the Proceedings, very few authors reported that the *Californicae* series were adapted to conditions in their gardens. Robyn Rohrlach, from the province of Victoria, Australia, takes note that interest in Pacific Coast Native iris is catching on with the general gardening public. We are also aware that this is also the case in New Zealand, although the author of the New Zealand Section makes no note of it. The Pacific Coast native iris do well in Scotland, according to author, Ron McBeath, and in England, also. They are not successful in Germany where it is too cold and most soils are high in lime. The same is true of Switzerland. And even in South Africa, where the climate would be favorable for our Pacific Coast irises, they are not mentioned. This region has so many lovely native plants that they are probably not interested in adding to their garden options.

BENEFITS OF INCLEMENT WEATHER

Adele S. Lawyer

The first rains of the 1994-1995 season came to California in earnest, starting on November 11, 1994, and they have continued almost without letup ever since. Having suffered through 7 years of drought, it was hard to believe that a year with adequate water might be in store for us. We hoped that our seasonal rainfall could climb up to 18 inches, our long term annual average in the San Francisco Bay area where we garden. We reached that amount on January 12th of this year, however, and it continued to rain and to snow in the mountains, seemingly without letup. Even the reservoirs were full, and the snow level gave promise that water storage would be replenished with the spring thaw. By the time the Pacifica iris were in peak bloom during the last week of March and the first week of April, we had accumulated a total of 33 inches for the season! We were pretty tired of the

WHAT'S NEW IN GARDEN LABELS

Lewis Lawyer

Labeling garden plants is not for everyone. If you just desire a pleasant setting, tranquility, and a succession of beautiful flowers, labels might even seem intrusive. If, however, your garden is open to friends or groups who are interested in flowers and their identity, labels become a helpful way to let them know what plant they are admiring (or perhaps coveting). Ultimately, if you are breeding and selecting, selling plants, or giving them to your friends, and need to know their exact identity, labels can become a necessity. It is then that you discover that many plants, especially iris, look very much alike when not in bloom.

There was a discussion of labels in the Fall, 1992, issue of the ALMANAC, inspired by a letter from Kenneth Hixson of Eugene, Oregon. At that time I wrote that, in my opinion, the combination of "See Fine" stakes from See-Fine Marker Company of Lewiston, Idaho, and snap-on labels from Evergreen Garden Plant Labels of Cloverdale, California, make the finest labels available. Shortly after that, I placed an order with Evergreen, and found out that the clip-ons were no longer being produced.

So last year I decided to try making the labels on the computer. How computers do it, I don't know, but it seems to be a simple task for them to spew out data in any form you desire. I already had all the plant names in the computer for printing the pages of our plot book, so I called for a "label layout", and without having to type a word, there was a potential label for every plant in the garden.

Unfortunately, the only label sheets I could find were those manufactured by Avery for mailing labels. I inquired at garden supply outlets, nurseries, and office supply stores, but none had heard of a peel-off label for garden use. So, although their shortcomings were obvious, I printed about 200 self adhesive paper labels and scattered them appropriately throughout the garden.

These paper labels lasted about 3 months, and might have been satisfactory for a single-season usage, except for the ravages of one or more paper-recycling pests, possibly snails or earwigs, which ate more than half of them.

Later last season, I learned that sheets of plastic peel-off labels, especially made for garden use, were available from mail-order sources. Those of you who attended the AIS National Convention in Portland, saw them in use at several of the gardens. I got mine from Horticultural Printers Inc, PO Box 180318, Dallas TX 75218.

The labels are self-adhesive, opaque white plastic, and come in at least two sizes. The size I ordered was 1.25 inches x 2.5 inches, or 24 labels per standard sheet. The toner from either a laser printer or a copy machine fuses or bonds to their surface so that the print becomes both waterproof and sun-proof.

These can then be affixed to any garden label which is large enough to accommodate them. I still prefer the See Fine markers for iris. For those of you who are not familiar with them, they consist of a 1 3/4 x 3 3/8-inch galvanized sheet-metal plate hinged to a 1/8-inch steel wire stake. They are available in 24-inch and 13-inch heights which are suitable for tall bearded and other iris. I prefer even shorter stakes for the PCI. I have shortened a few hundred of them to 8-inches for this purpose.

If desired, the metal plates can be spray-painted, but this is a matter of choice. I have sprayed most of ours with hunters green. With the white plastic labels now available, perhaps a lighter color would be more appropriate, but I have hopes that eventually the peel-off labels will be available in more garden-friendly colors.

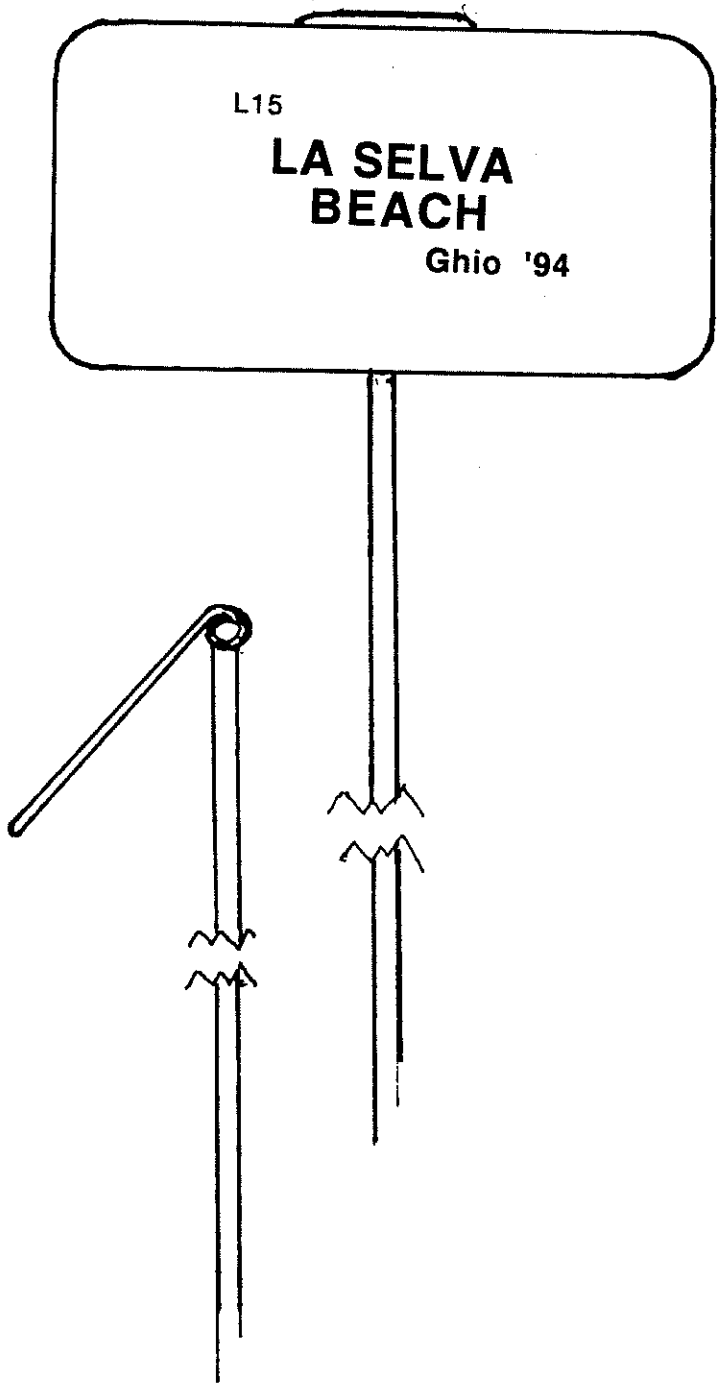
NOTE: These plastic peel-offs are also useful for even smaller garden labels. We are all familiar with the small 1/2-inch X 4, 5, or 6-inch white plastic labels which are fine for a season, and then become so brittle that the slightest bending will shatter them. Many have substituted aluminum Venetian blind slats, usually the 1-inch width, for the plastic. For my smaller labels, I am using 1/2-inch, cream-colored aluminum slats which can be cut to 5 or 6-inch lengths with a household scissors.

Since, as I noted earlier, the plastic peel-off labels are 1 1/4 inches high, you can get 2 plant descriptions on each label. You can then cut them into two 1/2-inch strips and stick them to the aluminum stakes. This results in a very legible small-plant label.

GARDEN LABELS

The garden markers pictured below full size, are the ones we use the most in our garden. Also shown is the use of the peel-off plastic labels as described in the article

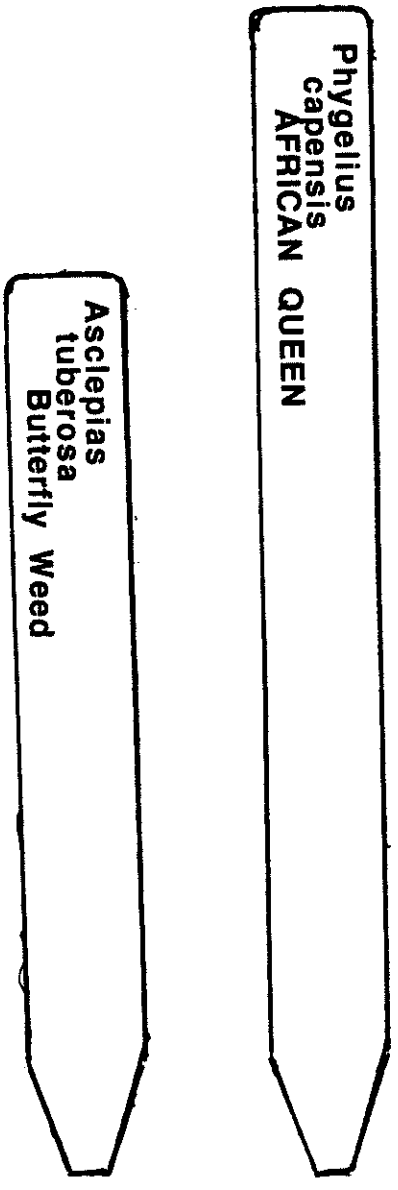
SEE-FINE MARKER



Left: Side view showing how the plate is hinged to allow positioning for more-compact storage or easy viewing.

Right: Front view, with peel-off label in place.

HALF-INCH ALUMINUM VENETIAN-BLIND MARKER



Above: 5 & 6-inch labels cut from Venetian-blind strips

PACIFICA BLOOM SEASON

Lewis Lawyer

We have recorded the date of first bloom of our named PCI cultivars and selections for the past 20 years. When you take into account the fact that the maximum bloom on each cultivar could occur ten or more days after first bloom, the data indicate that with the proper selection of cultivars, you could achieve a spread of about 3 months of continuous bloom with presently-available PCIs.

The dates shown are the date of first fully opened bloom of each cultivar, averaged over the number of years we have grown each. For your information, the number of years grown is given in the last column.

Over the years, scattered blooms have been noted as early as December and January on a few cultivars. These have all been recorded, but unless there have been multiple instances for a given clone or more than one bloomstalk involved, they have not been included in the data presented. Also, at least five years of data has been considered minimum for the average to be meaningful. One exception has been the inclusion of the Late Douglasiana clone found by Duane Meek near Sandy, Oregon, and perhaps introduced to that area from the Walter Marx Garden. We have grown it for only three years, but it had been equally late-seasoned in Duane's garden. It is the only cultivar we have found that is as late as a line we have been working with for several years, and here represented by XP50B .

DATE OF FIRST BLOOM

Bloom Date, Cultivar, & Breeder	Years
Feb 23	
LAS FLORES (Ghio '79)	19
Feb 27	
PASATIEMPO (Ghio '70)	19
Mar 1	
CITY HALL (Ghio '78)	14
COUNCILMAN (Ghio '76)	14
Mar 8	
CALIFORNIA NATIVE (Ghio '73)	20
Mar 19	
CALIFANCY (Hager '88)	5
Mar 21-25	
PACIFIC DAZZLER (Hager '88)	5
SIERRA BUTTERFLIES (Lawyer '84)	16
WILD TIME (Ghio '87)	8
Mar 26-31	
AMIGUITA (Nies '48)	20
BANBURY GNOME (Brummitt '72)	20
BANBURY PRINCESS (Brummitt '74)	20
CHIMES (McCaskill '72)	19
CUP OF TEA (Ghio '88)	8
FLAMENCO QUEEN (McCaskill '77)	5
FOOTHILL BANNER (Lawyer '90)	12
HARLAND HAND (Lennette '89)	6
IDYLWILD (Ghio '880	8
LATIN BLOOD (Ghio '87)	9
LEMONADE SPRINGS (Davidson NR)	20
MONTARA (Ghio '840	11
PACHECO (Meek '87	9
SIERRA DELL (Lawyer '88)	12
SMALL TOWN (Ghio '87)	9
SUSIE KNAPP (Phillips '71)	20
UVAS (Ghio '86)	9
Apr 1-5	
CALIFIA (Ghio '70)	17
ENDLESS (Ghio '85)	9
FAIRY CHIMES (McCaskill '72)	20
GARDEN DELIGHT (Stambach '74)	20
HALF TIME (Ghio '79)	16
IN THE MONEY (Ghio '88)	8
QUEEN CALIFIA (Ghio '86)	9
ROARING CAMP (Ghio '85)	9
Apr 6-10	
CANYON ORCHID (Dodo Denney)	9
CANYON SNOW (Emery '75)	19
ESPARANTO (Meek '87)	8
GRAND DESIGN (Ghio '84)	11
MIRAMAR (Ghio '85)	11
MISSION SANTA CRUZ (Ghio '85)	9
MOONLAD (Davidson '72)	20
OJAI (Walker '69)	20
PEACOCK GAP (Rigby '86)	9
SUGAR CANDY (Brummitt '66)	20
SUNDANCE EIGHT (Mulseed '79)	20
VIOLET ELF (Walker '60)	19
Apr 11	
SOQUEL COVE (Ghio '77)	19
Apr 14	
MAYOR (Ghio '77)	17
Apr 15	
CAMPAIGNER (Ghio '85)	8
DEL RAY (Ghio '79)	14
Apr 19	
I. Douglasiana (Late) (Meek NR)	3
Apr 20	
XP50B (Lawyer NR)	14

VOICE FROM THE PAST

Clarence Mahan

When John White asked me if I could contribute an article for the *Almanac;* my first reaction was to think that I would have to respond that I could not. My experiences with PCIs have been limited, and fairly well covered in past reports. Then after thinking about the matter, it struck me that I have a great deal of material about PCIs that is not available to most people. As an historical iris enthusiast and a voracious collector of iris books, my library has many writings from past generations that might be of interest to present-day PCI growers. In fact, I had just been reading a very interesting book by Sydney B. Mitchell, which has a section entitled "California and Oregon Natives". The book is *Your California Garden and Mine.* (New York, 1947).

It is probably difficult for the present generation to fully appreciate how great an impact Sydney B. Mitchell had on the horticultural world in general, and the world of irises in particular. He was the first president of the California Horticultural Society and the editor of the *journal* of that society for many years. He bred sun roses and brooms in addition to irises. His work brought him many honors, including the AIS Hybridizer's Medal and the British Iris Society's Foster Memorial Plaque. It was written of him that he "...is the best known and most popular gardener in the whole state of California."

Perhaps because AIS itself was for so many years dominated by tall bearded iris interests, Sydney B. Mitchell's name has been almost exclusively associated with that class of irises. Mitchell, however, had universal interests when it came to irises. Among those he grew and promoted were PCIs. He was one of the first to recognize the garden potential of these beautiful perennials, a real pioneer. This is what he wrote back in 1947:

"Next in time of flowering [after *Iris unguicularis*] comes the large section of irises native to California and Oregon, several of such great garden value that it is hard to explain their neglect. An understanding of their simple yet very specific needs might remedy this. I recommend first of all *I. douglasiana,* native to the coast of northern California and the redwood belt, thriving on mesas and hill slopes, varying in size of flower, but identified by its strong growth of dark green foliage---which turns red as it dies in the autumn---and by its stems, often eighteen inches or more high and branching, with two or three flowers in each head. The color variations seem innumerable from pure white, which is rare, through lavender and mauve to deep violet purple; there are also cream forms, often with pinkish markings.

"Less luxuriant in foliage are two species found mainly in Oregon, *I. bracteata* and *I. tenax.* The former, taking its name from the bract-like leaves that clothe the stems, is a plant of scantier foliage, broad and shiny on the upper side. Flower stems are about 8 inches high with single heads of two flowers, yellow, veined brown. More important as a garden plant is *I. tenax,* with its narrow foliage and stems a foot or so high, bearing flowers varying from red purple to mauve and lavender, with paler centers and rounded blades to the falls. Much smaller than these is *I. macrosiphon,* with a long distinctive perianth tube and flowers---often opening low down in the tall narrow foliage---generally deep blue purple, though red-purple forms are found; not a particularly robust plant, but it grows easily enough for me. It is found on Mount Tamalpais and up the coast into Oregon. Also small and dainty but a better garden plant is the more recently found *I. innominata* from Oregon with slender, grasslike leaves and flowers, usually of a lovely warm orange, though blue forms exist, an iris more suited to the rock garden than the border and enjoying more shade and water than the tougher species from California. There are several other California species---the nomenclature is in need of revision---but they are of little garden value. Such a one is *I. hartweigii,* a yellow or lavender from the Sierra; you can see it in the Yosemite Valley; it is of little more than botanical interest.

"Presumably, inability to obtain these natives readily in nurseries or iris gardens is the main reason they are seen so

little in our gardens. However I note that Carl Starker lists native species and selected forms. Transplanted stock or divisions of new growth in autumn or early spring seems to move pretty well. Collecting in the wild would be the easiest and most interesting way to get fine forms if it were not that these irises all resent being moved in flower. While I have transplanted them in full bloom and Hugh Logan of Inverness tells me that he also has done so, my success has been best when in January, just before the beginning of growth, I removed the youngest outside single rhizomes or growths with a chisel or similar tool and replanted them without too much delay and before they had dried out. Handled in this way they moved very easily. Whole clumps transplant badly. But by far the best way to get the species iris is from seed, picked when ripe in mid-summer (or purchased), and sown in beds or frames in autumn. Seeds germinate readily in January or February and plants can be moved into permanent places in early summer, if there are facilities for summer watering, otherwise it is best to transplant them only after the rains commence. Seeds are offered by specialists in California natives."

After I read these words in *Your California Garden and Mine,* I though how many mistakes I would have avoided in my early attempts to grow PCIs had I read Sydney B. Mitchell's advice first. There is much information on other types of irises in this book too. If you find this book in an old book store or on a bookseller's list, my advice is to buy it. This advice would apply to other books Mitchell authored as well: *Gardening in California* (1923), *Adventures in Flower Gardening* (1928), and *From a Sunset Garden* (1932).

It is remarkable how well Mitchell's work has stood the test of time, and certainly fitting that the highest award for PCIs be named in his honor, The Mitchell Medal.

UNUSUAL PLANT GROWTH ON A PCI CLONE

Lewis Lawyer

Most PCIs have a predictable growth habit. Most are near dormant during the summer. In the fall, following a good rain, the old fans start to grow again and the plant sends up new fans around the periphery of the old. During the winter months the new fans increase in size and become almost indistinguishable from the old. Then, in the spring, bloom stalks are produced by most, if not all, of the old fans and a few of the new ones. Hopefully, following their normal bloom season, a few fans will remain to carry on into the summer.

Here, for the record, are data on two clones which have a different growth sequence, but which may be typical of that of members of some wild species, especially those growing in areas where this growth habit may help them survive a late spring freeze. This could include *Ii tenax, hatrwegii,* and *munzii.* growing in the Cascades and Sierras.

In 1984 Adele and I went down to the Thornton Abell garden in Santa Monica, and with the help of Dodo Denney selected 14 PCI plants which Dodo remembered as being in "the munzii blue area" of the Abell PCI planting. One of these plants, which we dubbed "Abell 10", had such a pretty flower that for a time we considered registering and introducing it in Thornton's name.

Over the years, however, it became apparent that this clone was not increasing fast enough to be introduced. But it also had another interesting characteristic: it never produced new fans during the usual fall and winter rainy season. Furthermore, in all but two seasons since then, every mature fan has produced bloom stalks. In most clones this would signal a "bloom-out", but in Abell 10, about the time that the old bloom stalks start to turn brown and you think everything is gone, one or more fans appear out of the bare ground. These new fans grow slowly during the summer, increase in size during the winter, and bloom faithfully in the spring.

Abell 10 has bloomed every year since we planted it in 1984 and, except for the fright of facing a bloom-out every spring, this growth pattern wouldn't be so bad.

The table below shows by year, the number of bloom stalks, the number of fans remaining, the number of new fans emerging after bloom, and the total fans available in the fall for next year.

ABELL 10 TEN-YEAR INCREASE DATA

Year	Bloom	Rem	New	Total
1984				2
1985	2	0	2	2
1986	2	0	4	4
1987	4	0	5	5
1988	3	2	2	4
1989	4	0	4	4
1990	4	0	6	6
1991	6	0	5	5
1992	4	1	5	6
1993	6	0	4	4
1994	4	0	3	3
1995	2	1		

So here we are, ten years later, with 1 fan, half as many as we started with. But have faith, by mid summer we may have another fan or two.

I have observed a few other cultivars which display this tendency at least to some degree. All were my own selections or hybrids, and all incorporated *Iris munzii* in their background, as did Abell 10. XP200A is a good example. It was selected in 1991 and, because of its growth habits, will be discarded this year. Its growth data are as follows:

Year	Bloom	Rem	New	Total
1991	2	1	3	4
1992	4	0	1	1
1993	0	1	1	2
1994	0	2	4	6
1995	6	0		

Most of our munzii-derived clones are later to start growing in the winter than are the other cultivars in our garden. Whereas most cultivars start growth, including new white roots and new fans, in late October, most of those with a munzii background are best divided in late November or early December. Some, like Sierra Butterflies, never start growth in our garden until late December, and we have lost many transplants attempted at an earlier date. All of these, unlike Abell 10, however, do start making new fans prior to blooming.

OPTIMUM TIME FOR TRANSPLANTING

Lewis Lawyer

The previous article ends with a note on the optimum time for transplanting and a suggestion that, in addition to climatic differences, it could be influenced by the growth habits of the particular cultivar involved. After writing that article, I was looking around for something of interest to include in this issue, and ran into the following information in a British Iris Society article regarding PCI growing in Kent. The information was obtained during a meeting of the Kent Group, and was edited by Mary Tubbs. It seems that their optimum time for transplanting is earlier than in California, and much earlier than in our garden in the hills of Oakland.

"What is the best time to plant? September - avoid other times at all costs. Ivor Knowles often broke up his plants at other times, but got them to survive by planting them in soilless compost in pots standing in a dish of water, planting out later when the roots had grown well. Eunice Frenkiel asked if one should tease out the roots growing round the pot edge. Emphatically, no! The rhizomes produce very few roots which have very few root hairs and this is why they are so reluctant to be transplanted, and allegedly they only produce roots in September; so if you manage to have roots, pop them in complete, with the least possible disturbance. If the soil is dry, fill the hole with water to encourage the roots outwards, and plant in the usual way."

Shipping time has long been a bone of contention between growers in southern California, northern California, Oregon, and Washington, but I have never heard September mentioned as an alternative. Vern McCaskill of Pasadena, California, in a 1987 ALMANAC article, laments that, "Roy Davidson wasn't able to ship plants in the fall when I wanted the plants because up in Seattle he was already frozen

in. So he would ship to me in the spring, and they would invariably arrive here at the beginning of a hot spell. I would keep them in the shade and pour water on them, but it was a losing battle."

Jean Peyrard, an SPCNI member in France has the opposite problem. He, like others of you in early-frost areas, gets his shipments from California in the fall, and before they can start to grow they are frozen to death.

We can't do much about the weather nor the differences in climates between shipping and planting regions, but we can circumvent most of the problems by means discussed many times in previous ALMANAC articles. So the optimum time for transplanting in Washington could well be the spring, in California, fall, and in Wales, September.

There seems to be well-substantiated evidence that the optimum time for transplanting is when the plants are actively growing and are producing new white roots. There is also substantial evidence that they survive transplanting best if given time to become established prior to the onset of any unfavorable weather occurrence.

I do feel that the PCI growers in Wales could probably find white roots at times of the year other than September, but I can't dispute their contention that regardless of root condition, September could be the best time to transplant in their area. Here in our garden, one group of 20 or so PCI cultivars have been growing for the last 13 years in an area automatically sprinkled every night. Plants in this area grow a little bit all season and exhibit new white roots at all times. Although I have not attempted to transplant any of them at times other than late fall, I have never noted either greater or less success than with plants from other areas in the garden. Contrary to expectation, moreover, it is one of the few areas in the garden where root or crown rot has never occurred.

One more observation related to optimum transplanting time should be noted. As stated in the previous article, most of our munzii-derived clones do not transplant well before November or December. This last season, when we moved about 400 PCI plants, we obtained enough evidence to support previous observations that transplants survive best if moved not only after they have made new white roots, but also after they have started to send up new fans with their own tiny roots.

Certain Munzii-derived clones of ours do not make new fans as early in the season as do others. These old fans without a crown of new fans, and despite a wealth of beautiful new white roots, did not survive as well as those with a growth of new fans.

UPDATE ON WILSON RESEARCH

As most members are aware, a research project to verify species classification in the *Californicae* is being funded by SPCNI, along with the American Iris Society. This project is being conducted by Carol Wilson as her thesis for the Ph.D. degree in the Integrative Biology Department of the University of California at Berkeley.

She has concluded her field and morphological studies, and is now engaged in the molecular phase. Using a laboratory at Berkeley, she has successfully sequenced eight of the thirteen species and subspecies she is analyzing. Unfortunately, when she resumed her analysis in this lab after an interval of teaching responsibilities, the samples remaining to be tested were contaminated by spores of the fungus, penicillium, a prolific sporeformer, which is the subject of an ongoing nuclear study being conducted in the lab she is also using.

Carol, whose home is in Portland, Oregon, is now teaching in the Department of Biology at Portland State University for a period of six months. When time in their lab allows, she is continuing her *Californicae* studies, including the sequencing phase. She will not, however, be able to conclude her sequencing and analysis under her major professor at Berkeley until her teaching commitments are completed.

LETTERS TO THE EDITOR

Elaine Hulbert, Floyd, Virginia

You would hardly expect to hear much about PCIs from this address at this date [4-28-95], but I actually have high and immediate hopes. It has been so unusually warm for most of the early spring that I can see buds already on the PCI's I usually count on for mid-May. In fact I see color, - yellow- on the buds of one, MISTRESS PERRY, that Colin sent me last fall. Of course I have to add that it has spent a lot of time lately under heaps of dry leaves at night, because our nights have been frosty. But it can hardly miss blooming tomorrow since it is predicted to be as warm and sunny as it is today. This will be the high point of the bloom season.

The other PCIs that are budded or will bud are all veterans of a lot of these eastern climate conditions, and I feel deeply attached to them, even though seeing them again has a rather ho-hum-ness about it. There is a seedling of Colin's RED BLUFF, that he is not very proud of, and yet it is just the thing for my garden.

While I was in St. Louis for the Species Symposium, I was very disappointed to miss getting Carla Lankow's *Iris ruthenica* at the auction. Then when I came home, I found that a BIS ruthenica seedling had made a wonderful comeback and was blooming as nicely as you please. People who don't garden can't imagine the roller-coaster of thrills and disappointments!

John White, Auburn, Maine

(Excerpted from a letter to Seed Chairman, Colin Rigby, November 2, 1994)

The tenax seed is now planted in flats in milled Sphagnum moss and in the refrigerator until about March first.

I am finding that the PCIs like full sun up here in the northeast. Richard Kiyomoto agrees with that. I moved my one tenax twice because it did not get enough sun. I think that is why it has never bloomed. It is now out on the hillside in the power line and gets sun 3/4 of the day. It appears to be doing better. If it survives a fifth Maine winter perhaps it will bloom next year.

I plant my seedlings right in the ground in their 2 1/4 inch pots when the plants are 2 to 3 inches high. They stay in the ground all winter and are <u>not</u> mulched. I want to find those that are hardy enough to take a Maine winter without being pampered.

Last winter we had 24-30-inch snow cover from mid-December to mid- April, and no rain. Ideal conditions for plants here. A few nights with 0 to 15 degrees below zero.

Barbara Schnieder has three PCIs from Richard Kiyomoto, and I believe that those have survived three winters. Of course, Massachusetts and Connecticut are a little warmer than Maine.

I think I have enough seed in the refrigerator for about 300 plants. We'll see what develops. I ought to get a few hardy ones to cross with the tenax.

Doug Murray, Hope, B.C., Canada

My Pacificas grow well, - some are reluctant to bloom, including Ghio's DRIVE YOU WILD. Seed from '93 species had spotty germination. From hybrids, mostly yours, I did very well. I have about 150 seedlings in all, including "mixed 40's", and about 10 spaces in my garden. Something will have to give!

Our season for iris this year stretched from February 16 with Histrioides and Danfordiae and ended September 28 with seedling vesper iris (*I. dichotoma)* that bloomed just 6 months after planting with 12 and 14 blooms. Reblooming Japanese and Sisyrinchiums filled July and August. I've added *I.unguicularis, I. cretensis* and moraea this fall to stretch the season a bit longer. I'm looking forward to next year when quite a few of the "Lawyer" seedlings look big enough to bloom.

Elyse Hill, Sebastopol, CA

A lot of my PCI seedlings were covered with mud from extensive mole tunnels pouring water and soil onto them; but after digging them out of the mud, they gave me quite a nice show this spring, some with interesting patterns and markings.

Editor: Moles are causing a great deal of trouble to the Hill family's garden in Sebastopol. An article on mole damage is being researched for the AIS Bulletin, since many others have found moles to be destructive, too. Elyse sent these comments on Pacificas, along with a picture of the damage for the AIS Bulletin.

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SPCNI TREASURER'S REPORT, 1994

BALANCE Jan 1, 1994		**$4877.44**
RECEIPTS		
Dues	1047.00	
Dues Through AIS	343.00	
Sales of Cohen Booklets	165.00	
Sales of Lenz Booklets	198.00	
Sales - Back Issues Almanac	124.50	
Sales- Check List	59.00	
Seed Sales	245.50	
Deposits for SPCNI Expedition 1994	3261.00	
Interest on Checking Account	59.51	
Donations	$121.50	
Deposits for SPCNI Expedition '95	$1400.00	
Above Deposits forward to 1995	($1400.00)	
Total Annual Receipts		**$5624.01**
DEBITS		
ALMANAC Spring, 1994	814.54	
ALMANAC Fall, 1994	916.42	
Secretary - Treasurer	151.87	
SPCNI Expedition '93	3020.08	
Supplies		
Publication Reprints	65.92	
CNPS Adv.	48.75	
California Tax	5.00	
Mitchell Award	15.40	
Donation to U.C. Regents	800.00	
Total Annual Debits		**$5837.98**
BALANCE Dec. 31, 1994		**$4663.47**