



**Almanac:  
Society for  
Pacific Coast  
Native Iris**

**SPRING, 1997  
Volume XXV, Number 2**

## TABLE OF CONTENTS

President's Message	3
From the Editor	3
Time To Collect Seed	4
Future Expeditions	4
Expedition 1997, Roseburg, Oregon	4
Post Expedition Exploring	14
Mixed California Iris Seed	15
How Do Your Iris Grow	15
Mail Order PCI Sources	22
Germinating Seed in Cold Winters	23
Let's See What We Know	23
Update On The Lates	24
Alfalfa Meal	24
Seedling Production Guidelines	25
New Members and Address Changes	26
Treasurer's Report	26
Check List Update	27

## PUBLICATIONS AVAILABLE FROM THE SPCNI TREASURER

### Check List of Named PCI Cultivars

*Lewis Lawyer*, Editor: 59 pages. Lists and describes Pacific Coast iris and named hybrids through 1955. \$6.00 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 inter-specific 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

### President, *Bob Ward*

54 Belmont Drive, Little Rock, AR 72204  
(501) 664-0013

### First Vice President, *Eugene Loop*

518 Persimmon Road, Walnut Creek, CA 94598.  
(510).939-3418

### Second Vice President, *Not filled*

### Immediate Past President, *David Lennette*

1325 Court St., Alameda, CA 94501  
(510) 521-7053

### Secretary-Treasurer, *Adele Lawyer*

4333 Oak Hill Rd., Oakland, CA 94605  
(510) 638-0658

### Editor, *Lewis Lawyer*

4333 Oak Hill Rd., Oakland, CA 94605  
(510) 638-0658

## COMMITTEE CHAIRMEN

### Seed Distribution, *Colin & Teresa Rigby*

18341 Paulson SW, Rochester, WA 98579

### Trip Chairman, *Colin Rigby*

18341 Paulson SW, Rochester, WA 98579

### Slide Programs, *Roland Kenitzer Jr.*

341 Hidden Valley Rd., Port Angeles, WA 98362

## ALMANAC REPRESENTATIVES

### Washington & B.C., *Jean Witt*

16516-25th NE, Seattle, WA 98155

### Oregon, *William K. Ferrell*

Post Box 207, Philomath, OR 97370

### Northern California, *Eugene Loop*

518 Persimmon Road, Walnut Creek, CA 94598

### Southern California, *Duncan Eader*

111 West Magna Vista, Arcadia, CA 91006

### Central U.S., *Robert Ward*

54 Belmont Drive, Little Rock, AR 72204

### Eastern U.S., *John W. White*

RFD 2, Box 980, Auburn, ME 04210

## 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

Our spring season began April 14th in Little Rock with Ghio's BLACK EYE. Two hours later Rigby's HONTA YO opened. Still later I counted 42 bloom stalks on 18 *I. douglasiana* clumps. As for *I. innominata*, several stalks began showing on April 20th, and these will bloom in the first week of May. By April 15 AGNES JAMES had six stalks blooming. This iris' original stock came from Jean Witt. I sent a division back to her in 1996. Still in tight buds are: *I. tenax*, *macrosiphon*, and *hartwegii*. *I. bracteata* is just beginning to show stalks down in the foliage. It blooms usually in mid May here.

A word of encouragement for you out there with your hopes up. It is best to

start your Pacifica iris program with seeds, and do it for at least 3 or 4 years. Secure all the information you can and apply it to your climate.

For those who attend the Dearborn Convention, I'll be showing 5 slides each from several of our members on how the Pacificas grow in their gardens. Some of the slides will be from iris taken in the wild.

The best to you all, may you see many blooms this year.

Bob

## FROM THE EDITOR

Your response to our request for information on how well your Pacificas are growing was very gratifying, and for this we thank each of you. In fact, the response was so good that we have split it for inclusion in this and the next issue. As you will see, we have sorted your letters by geographic area so that your success and failures can be more easily reviewed by others living in areas with similar climatic conditions.

Next we sorted your letters in the order they were received so that the earliest arrivals will appear in this issue, and the later arrivals representing each of the geographical divisions will appear in the next issue.

We will not attempt a summary or any comments until all your letters are in. With the split into two issues, however, there is time for some of the rest of you to respond for the fall ALMANAC. Also if

anyone has additional data, don't hesitate to send it in.

We have started a new feature in this issue, SEEDLING PRODUCTION GUIDELINES, presenting what we consider to be the optimum techniques for pollination, saving seed, and growing seedlings. Our recommendations are based on all the data and personal experiences which we have accumulated to date. We would like to consider it a manual, 'subject to change' as new data and suggestions come to our attention. Please read it over and if there are any additions, changes, or questions you consider unanswered, please let us know.

Laura

Join the American  
Iris Society



Single annual \$18 Family annual \$23  
Single Triennial \$43 Family Triennial \$54.  
Send to Marilyn Harlow, Box 8455, San Jose, CA 95155-8455

## TIME TO COLLECT SEED

It is time to collect seed for the SPCNI Exchange. Happily, according to our grapevine, seed set this year appears to be superior to that of the two previous years. Seed Chairman, Colin Rigby, tells us that his supplies are virtually gone, so we are depending on you for a fresh supply.

Please keep open-pollinated seed from individual named varieties and hybrids in separate envelopes. When less than 10 seeds are available from this category, however, they should be combined as "mixed garden hybrids".

There is always much interest in the *Californicae* species seed. If you live near their habitat, please collect seed for us. We would like to have *I. tenax* from the Roseburg area in the lavender-purple shades, and would also like to have some from the areas east and west of Portland, where many other colors are involved.

*Iris innominata* is another favorite, and we would appreciate seed from yellow-orange specimens, as well as the *innominata-thompsonii* in lavender, pink, and pastel shades in the Smith River highlands and along the Rogue.

We haven't had seed of the *Iris douglasiana* that grows tall, in huge, husky clumps along the northern California coast. We saw these in meadows in or near to the Johnson Redwood Grove on our 1992 Expedition centered in Crescent City, CA. And we saw others like it that year along the beach on the road leading to the Fern Grotto.

We need *bracteata*, *fernaldii*, *hartwegii*, *purdyi*, *macrosiphon*, *tenuissima* - whatever other species exist, we want it!

Please do not harvest all the pods from any one area, we want to preserve the diversity, as well as the population. And please don't dig plants.

## FUTURE EXPEDITIONS

According to guidelines of the SPCNI, two-day bus tours will take place every other year. Colin Rigby announced at our May meeting at Roseburg that 1999 will mark the occasion of our next full tour, which will be centered in Santa Rosa, California. The Rigbys lived in this area for many years and are familiar with the haunts of the regional native iris. These include *I. fernaldii*, *macrosiphon*, and *purdyi*.

SPCNI has also established the option of having one-day caravan trips in years when the bus trip does not occur. There

could be more than one such trip planned in these alternate years. In 1998, Lewis and Adele Lawyer would like to lead a group of cars to see *Iris munzii* in the area of Porterville, California. Headquarters for those who need to stay overnight would be at a hotel in Visalia. Details will be in the Fall issue of the *Almanac*.

For the convenience of local iris enthusiasts, other caravan trips in Southern California, Oregon, or Washington could be planned before next spring. Suggestions are welcomed.

## EXPEDITION 1997, ROSEBURG, OREGON

*Adele Lawyer*

### PRELIMINARIES

Colin Rigby's plans for this year's Expedition resulted in another wonderful excursion for *Californicae* lovers.

Colin and Teresa first drove to Roseburg from their northern Washington home in the spring of 1996 to assess possibilities. They attended Roseburg's annual Wildflower Show on the last weekend of April, and pranced it fabulous. Then they drove about 40 miles northeast

to Steamboat, noting *tenax* locations by mileage signs along the way. They backtracked toward Glide and stopped at the Rock Creek Fish Hatchery, which they found a great *tenax* location. They contacted Lloyd (Bud) Cruger, and arranged to visit his garden, which was recommended by the Lawyers, long time professional associates. The Rigbys decided on a lunch site, other stops, and explored a 20 acre property which the owner in-

vited us to visit next spring. They also explored west of Roseburg, made arrangements with the Windmill Inn, investigated the adjoining restaurant, and lined up a bus company.

Late April was, on the average, a little early for PCI bloom, so the Flower Show was reluctantly sacrificed and the dates of May 10th and 11th were selected for the 1997 Expedition.

This year, one or two days before the tour, the Rigbys, the Loops, and the Lawyers arrived to help check out current bloom.

Lewis and I started exploring 2 days in advance. Driving on Highway 5 from the south, we turned off at Glendale and stopped at a local eatery hoping to find someone to give us directions. Sure enough, the waitress said we were lucky that Bill was there, and he knew all the back roads. It turned out that Bill was a bear hunter. He told us how the male bears killed baby bears about this time in the spring, and he was going out to find and shoot males that Sunday. We asked directions to locate Siskiyou Forest Service Road 3348. He knew the way, "I go up there a lot for bear hunting," he said. We were told to go north a bit on the Cow Creek Loop Road and we would see a sign saying "To The Coast".

We wanted to find Road 3348 because it cuts through the hills to Eden Valley near Mt. Bolivar, where beautiful hybrid swarms of *tenax* and *innominata* were reported to us by J. Lawrence, whom we were unable to contact before the trip. We could continue on 3348 to #33 (State 219 outside of Siskiyou National Forest). We would enter 33 a short distance south of China Flat, which is the premier location for yellow-orange *I. innominata*; and we wanted to include it on the weekend tour. If we could cut through on 3348 we would eliminate many miles plus wasted time sitting on the bus.

At Bill's suggestion, we stopped to fill the car with gas before starting to explore. As we pulled into the Glendale gas station, we were amazed to see Gene and Joanne Loop, who had stopped at the station to confirm that they were on the road leading to Cow Creek.

The Loops were going to check out the iris on the Cow Creek Loop Road before going to the Windmill Inn. They had started driving from Walnut Creek early in the morning and were ready for a rest. They left us and drove north; and we

turned off to the west at the road marked "To-the-Coast", as Bill had instructed.

The map showed some wiggles, indicating curves. Although the road was black-topped, the curves were continuous. We swung around, up and down hills - some very steep with drop-offs sometimes on our side of the road. There were individual iris here and there along the road, but no substantial colonies. We wished we could have been able to park to picture one magnificent clump of white *Erythroniums*, which we can still see in our mind's eye.

Although we drove for hours on this road, and it was a Thursday, when logging trucks would be expected to be operating, we did not pass another car on the road. And eventually we discovered the reason. Shortly after we saw a sign indicating that Eden Valley was ahead, we stopped abruptly! There was a chained gate across the road, - no way to get through. And we were so close!

When we had to turn around and go back the way we came, it seemed as though the return trip was longer and the curves more challenging. We felt depressed, having been so hopeful on the way up, and so disappointed on the way back. There was a branch in the road three quarters of the way down the hill marked "Riddle", which is the town at the northern end of the Cow Creek Loop Road. We took this road instead of continuing on the Glendale branch. When we came to the start of this road, also marked "To The Coast", there was a prominent sign saying, 'Road Closed Ahead'. ==NOW they tell us!

A shower and a good dinner with the Loops revived both couples. The Loops had not been impressed with possibilities for including the Cow Creek area on the tour this year.

The next morning, while the Rigbys were pin-pointing the areas east of Roseburg prime for viewing on the first day of the expedition, the Loops and Lawyers doubled up and continued to locate second day stops to the west..

We went south on 5 to Highway 42 and then west to 10-Mile Road where we found many areas on this and other roads in the area where the bus would have room to park and there were extensive stands of *Iris tenax*, and a few spots where *chrysophylla-tenax* hybrids were present in smaller amounts. These areas were reserved as possibilities if we

weren't "tenaxed-out" after viewing the many sites of this species on the first day.

We wanted to stop at Camas Summit, but passed the first turnoff. There was a second turnoff almost immediately afterward, so we turned into this wide but very short loop facing uphill. The wide space was ideal as a bus stop, and we found some lovely *I. chrysophylla*. Although we didn't realize it at the time, we had missed the best iris areas here because of our parking position. When the tour bus actually arrived here and parked downhill, the road to which the Summit loop gained entrance was in full sight, and proved to be a bonanza for pure *I. chrysophylla*! There were wonderful clumps of them along the road.

Next, we went on to see whether *I. innominata* was in good bloom at China Flat, and to see if we could access Eden Valley from the Powers-Agness Road. We stopped at the Powers Ranger Station to ask about road conditions and found that rain damage was serious, indeed. A map in progress in their back office showed major damage on 9 of the Siskiyou BLM roads; and each of these had multiple areas needing serious repairs. They estimated that it would be the summer of 1998 before the principal road, #33, could be open all the way to Agness. The good news, for us, was that the portion of China Flat which we wanted to visit was accessible, although there were 3 major slide areas farther west on this road.

Leaving the ranger station, we went south to China Flat, passing small streams on the high banks to our left, which had been raging torrents earlier, running into the South Fork of the Coquille River immediately to our right. There were huge piles of trees and soil pushed to the side, and occasionally the right side of the road had dropped down as much as 15 feet below its original level. You could see the black-topped road beneath us, unbroken with the white line still intact.

We were happy to see the flowers at China Flat were in full bloom; and an area that would serve as a lunch spot was located at the intersection.

We decided to continue on 3353 to see if we could locate the tenax-innominata swarm reported by George Gessert and confirmed by J. V. Lawrence. It is located about 6 miles west on this road, near Barklow Mountain. After driving a good many miles, we came to a wide area of the road beyond which the damaged road was

again closed. We got out of the car, and wandered around, looking down to see whether iris were present. A rec vehicle drove up and the occupants came over and asked Gene what we were doing. They were hoping that we had located the white jade that they were looking for. It turned out that they were in charge of setting the route for a Rock Collecting society, whose field trip would also take place that weekend. There are certainly a lot of different kinds of crazy people in this world!

After returning to #33, we continued south on it, passing other dropped road areas and incomplete slide clean-ups. There was a highway crew working not far down the road, where gates and chains closed it. This was at the point where Road 3348 branched off. We asked if we could go up that road to see if we could get through to Eden Valley from this side. They told us we could try it, but to be cautious. Proceeding up this muddy road, we soon came to another gate. Eden Valley couldn't have been more than 3 to 5 miles ahead, but there was no way to reach it from either side!

#### THE EXPEDITION

DAY ONE: The first stop on Saturday was Bud and Carol Cruger's garden, located on the south fork of the Umpqua River. Since the Crugers hybridize dahlias and sweet peas and live on the banks of the Umpqua, their garden is named *Dalpeaqua*. Unfortunately, they were out of town at a son's graduation; but they had left the 5-acre garden immaculate, and so free of weeds that we cheered when someone located and exhibited a very small weed! It made the Crugers seem a little less perfect - more like the rest of us. Although there was only one Pacific Coast native iris blooming, there were Dutch, tall-bearded, and spurias, all beautifully grown, as well as many other flowering plants and shrubs. Most visitors were very impressed with the plant labels. Rounded black rocks lay at the base of each plant, labeled in white with the name of the variety or species. There was a wide lawn carpeting the entrance driveway into the garden, with garden beds scattered here and throughout. A long row of sweet peas had emerged, and the extensive dahlia area would be in bloom later in the season.

Going past the barn, greenhouse, and home, many of us wished we hadn't spent so much time in the front yard because

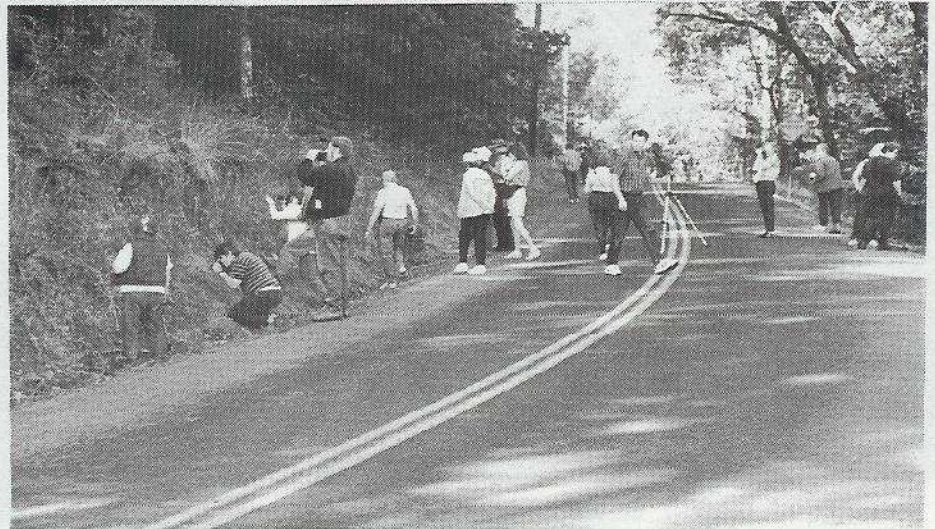
the spectacular setting from this section of the garden is outstanding. It slopes down to the broad river, and you can see beyond to green fields, farm houses, and hills far across the water. The Crugers have built terraces, steps, and a circulating stream and waterfall, all these with blooming plants clustered throughout the width of the property. A lawn extends down to the river. Everyone enjoyed this garden for the original design concept, imagination, and variety of plants involved. It was a treat!

Getting underway, our bus proceeded to the first stop. Man had some part in designing this, too, since it was the neglected area of a cemetery where *Iris tenax* had taken over the landscaping. It was our first view of this species which were in shades of light and dark purple here and throughout the Douglas County areas we would be visiting.

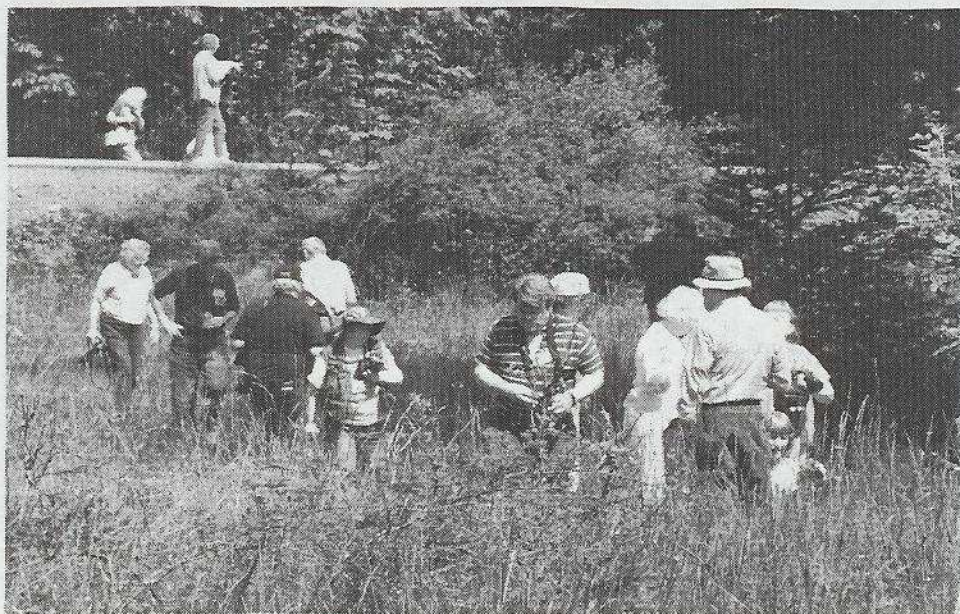
An Oak Hill Road location was our next stop where there were masses of tenax on a bank

by the side of the road. We were particularly pleased to witness the enthusiasm of the Bare family, from Nebraska, at the sight of such profuse bloom. They were successful in growing PCI in their climate until this year, when warm weather followed by cold greatly reduced the number of survivors. Here, everything looked so easy.

The Rock Creek Fish Hatchery, our next stop, provided the most extensive population of tenax of the morning; and in addition, as lesser attractions, we saw large fish spring up into the air to catch fish food in one of the fish tanks, and a rushing stream with rapids at the base of



We live dangerously



Looking for tenax treasures in the grass

a rocky cliff! There were two trails populated with tenax and a large meadow chuck full of them. Among this large population, we had a chance to compare the various intensities of color among the lavender and purples, the broad and slender petals, the ruffled and the plain, the signals of various shapes and sizes, and the presence or absence of border edging on standards and falls. Hybridizing is not the work of man, alone!

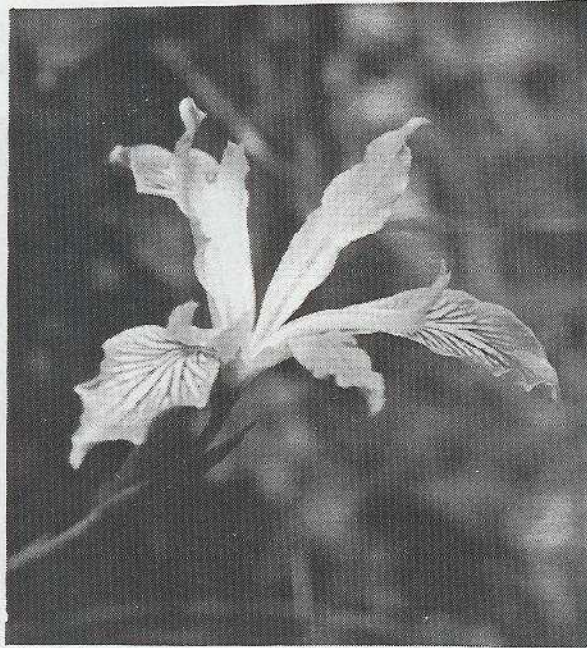
By then, it was time for lunch in a park nearby. There were picnic tables

and paths to explore, and here we took a picture of our group as a remembrance.

Seeing hybrids between *I. chrysophylla* and *I. tenax* was a new experience at our next stop. Most were white, some with tints of cream or violet. Some were shades of lavender. Their perianth tubes varied in length, their style crests rounded to long and narrow, and their spaths opened as with tenax, or closed in the manner of chrysophylla. Checking their intermingled morphology was interesting.



Cluster of tenax / chrysophylla hybrids and (right) a close-up of a tenax flower





After that, we stopped at a "Y" on Little River Road. The area visited was lower than surrounding levels, and with the added moisture, tenax grew taller than most we had seen; however, the enclosing grasses and other wild plants were also more lusty here so that good photographs were more difficult to achieve. We found some of the darkest purple here.

Our last stop of the day was on Jean Caldwell's property. The entire 20 acres of this property was pointed steeply upward from the driveway's beginning, and the bus could not transport us to the top because there was insufficient turning space at the top. This was a strenuous walk for many of us on a warm afternoon. Jean made a few trips in her car to take some of us up to the top of the hill. Although there were some tenax in bloom along the road up the hill, we had seen equally attractive specimens elsewhere. Jean's hospitality canceled out the negatives, however. When it was

time to say "Good-bye", she had prepared a delicious carrot cake and a container of ice tea, and she served them personally, attractively arranged on the bed of a pickup!

After dinner that evening we gathered for a meeting at which we viewed some slides by Roland Kenitzer of last year's mini-expedition to see *I. hartwegii* in the Sierra foothills. We also enjoyed a new perspective for reviewing the trip, videos of the day, produced by Carol and Doug Canning, and by Damon Hill.

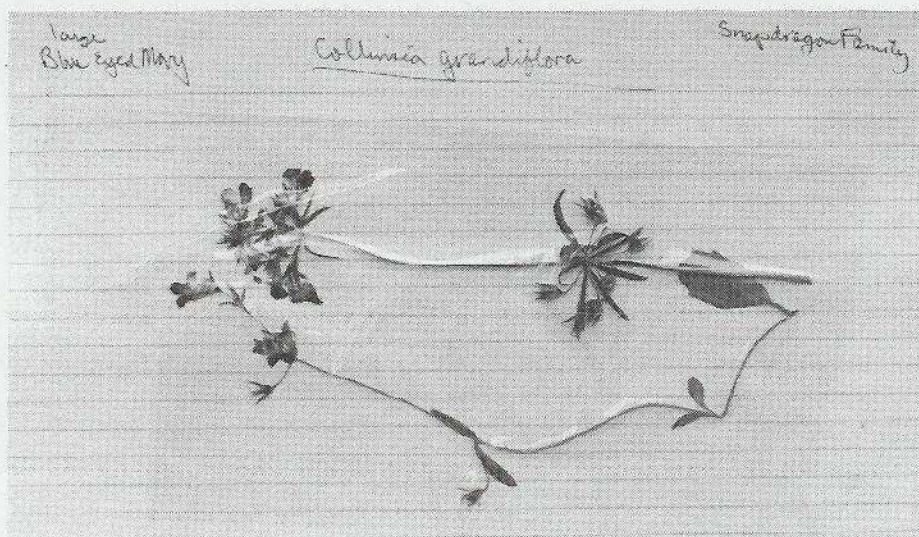
A special feature of this year's Expedition was the contribution made by Ted Kipping. Our tradition has been to have a botanist or a native plant specialist 'on board' to identify flowers other than iris with which we might not be familiar. Wayne Roderick initiated this practice on SPCNI's initial field trip 8 years ago, (also at Roseburg). He collected plants and told us their identity, usually while we were outside the bus. The flowers were also passed around from person to person



A bouquet of *Iris tenax*, gorgeous enough to take home.  
Photo by the Ralstons



Jean Caldwell's "Welcome Wagon"



One of Ted's cards, *Collinsia grandiflora*, approximately half size

between stops on the bus so that they could be examined more closely. Ted improved on this technique. He collected specimens at each stop; and as we drove on, he mounted each sample on a 5 by 7 card, labeled the card with the name of the species and its family and affixed it to the card with transparent binding tape.

They were circulated through the bus as each card was prepared. We have no excuse if we label our photographs incorrectly. These cards - 91 of them - are now in my possession, and the colors are still bright and clear 1 month after they were collected. The count is actually 90, because the mounted *Ticus sticus*, a tick



They must have found  
SOMETHING SPECIAL!



We'd better go see ---- Oh! it's one of those tenax - chrysophylla hybrids (Photo by Ralston)



Exploring a field of tenax / chrysophylla hybrids (photo by Ralston)

pulled from Mary Ralston's leg does not qualify as a botanical specimen. If you are interested in seeing the card collection write to me and we will loan it to you for the cost of postage.

DAY TWO There were only two stops on the second day. The first, at Camas

Summit, provided us with an opportunity to see ample quantities of *Iris chrysophylla*. And it was the participants who found the best and most numerous specimens by walking down the road and calling to others when they came upon special areas. The thickest clusters were

near an intersection about a quarter mile from the parked bus. A few of us went into the woods, where a luminous golden-pink light shone through the tree columns, bare--leaved until high above. The soft, spongy ground was carpeted with blooming Calypso orchids. It was a magical experience!

It was a long drive to China Flat. Our picnic spot was in the shade of trees, on the grass of a meadow decorated with daisies. The shade was wel-



Adele liked the flirty chrysophyllas



*Iris chrysophylla* flowering plants and lacy flower

come, since the sun was hot by afternoon.

And then we saw *Iris innominata*! The yellow-orange color was a smashing change from the purples and whites seen previously. There were many specimens

of this charming species on the banks of the road; and on a connecting trail, large groups of them, spread out into discrete open areas between trees and shrubs. Photographers were busy here and along the road. We also saw beautiful speci-



Picnic area at China Flat



*Iris innominata*, the aristocrat

mens of serpentine rock, the presence of which is an essential element to many of the floral species specific to the Siskiyou Mountains.

And then it was time to return to Roseburg and the end of another successful Expedition: Good weather, good bloom, and good friends!

Those participating were Garland and Dorothy Bare, Lincoln, NE; Rodney Meester (the Bare's 10 year old grandson); Carole Breedlove, Tacoma, WA; Carol and Doug Canning, Palo Cedro, CA; Don and Irene Clark, Boring, OR; Debby Cole, Mercer Island, WA; Claude and Joanne Derr, Estacada, OR; Bill and Jeanne Ferrell, Philomath, OR; Barbara Flynn, Redmond, WA; Ed, Elyse and Damon Hill,

Sebastopol, CA; Charlotte Keasey, Salem, OR; Roland and Diane Kenitzer, Port Angeles, WA; Ted Kipping, San Francisco, CA; George and Carla Lankow, Renton, WA; Lewis and Adele Lawyer, Oakland, CA; Gene and Joanne Loop, Walnut Creek, CA; Margaret Lundquist, Bothell, WA; Charles Meyer, Fresno, CA; Jane and Lew Micklesen, Seattle, WA; Will and Tracy Plotner, Molalla, OR; Ed and Mary Ralston, Pleasant Hill, CA; Richard and Marty Richards, La Mesa, CA; Colin and Teressa Rigby, Rochester, WA; Diane Whitehead, Victoria, B.C. Canada; Jean Witt, Seattle, WA.

Those who had to cancel because of illness shortly before takeoff were Kim Blaxland (PA), and Glenn Corlew (CA), whose company we missed.

## POST EXPEDITION EXPLORING

### *Elyse, Ed, and Damon Hill*

The 1997 Expedition was very enjoyable for all of us. We got some good photos and videos to enjoy in times to come.

While we were at the fish hatchery, one of the employees stopped us on the road and told us about some irises that were covering a whole hillside and gave us directions to the spot. So on Monday before we left for home, we struck out to locate them, armed with a County map generously given to us by Colin Rigby.

We were not disappointed. In fact, it

was a fantastic sight, with huge clumps of tenax blooming on either side of a ridge top! Judging by the size of the trees which had grown up, the area appeared to have been logged about ten years ago. The road is good, with gravel on it, and two places where a bus could easily turn around. There are no overhanging trees, and only one slight slide area down near a creek.

The directions given to us are: Go up Little River Road to the covered bridge; then continue to Jim Creek Road up to the first BLM road, (L27-3-N-1) where you turn left, and then turn right at the "Y". Returning from this special area, we took a picture of a Valley Banner type plant on Jim Creek Road.

Damon is determined to go up to collect seeds on the ridge in July, if he can get the time off from work; and we will send or take them to Colin.



Valley Banner-type flower found on Jim Creek Road. Photo by Hill

## MIXED CALIFORNIA IRIS SEED

*Diane Whitehead* Victoria, B.C.

There it sat among all the carefully documented seed packets - "mixed California iris". It had a lot more seeds in it than the pedigreed ones, but sometimes a lot of seeds demands more attention than one can give. Would these be worth the effort? Had they been collected by someone who loved every plant in the garden, or had some carefully-selected plants produced too few seeds to warrant separate packages? I took the chance.

Two years later, one of the plants flowered. Unexciting. Off-white. Oh dear. There were still thirty or more to flower the next year, and maybe they would be better. I potted up a couple and put them in a cold frame to see if they would flower soon enough for our usual April rock garden show. They missed that, but opened just in time for the University Gardens plant sale the first weekend in May.

One was the off-white of the year before, and I put it in the Natives section. The other - I could hardly believe what I saw when it unfurled the day of the sale. It was a sumptuous combination of wine and old gold. This plant was worthy of more than the crowded Natives section. I placed it between two young trees that echoed the colours of its flowers, on the Silent Auction table. In front of it I

placed a sign explaining that it was the only plant of its kind in the city, and whoever won the chance to buy it would be able to name it if they wished. Off I went to look after the Houseplants section. Every once in a while, a woman would come over to ask about the iris. Where had I got it? Didn't I have another piece of it at home? What was she going to do? She must have the iris, but someone else kept upping her bid, and perhaps the rival would have the lucky bid when the bell rang to end the auction. Whichever one was the lucky one paid \$34 for the plant.

A couple of weeks later the plants that had remained in the garden began to flower. One was a miniature dark purple, some had broad ruffled petals, and interesting blends of colours. A beige washed with faint purple bloomed for over a month. A wide-petalled ruffly one of yellow, off-white, and light brown with red veins, had a very slight scent. It was obvious that whoever collected those "mixed California iris" seeds had collected from some very special plants. Who was it? I asked, and fortunately the club member who had bought the seeds three years before had kept the name: B. Charles Jenkins.

## HOW DO YOUR IRIS GROW

*Compiled by Lewis and Adele Lawyer*

Response to our request for details on the performance of individual Pacifica clones was so good that we will have to divide the information into two successive issues of the ALMANAC. We have sorted the letters by geographic area. The earliest received from each area will be placed in this issue, those received latter in the next.

As might be expected, response was greatest from areas where the PCI are easiest to grow. We need more informa-

tion from those of you who perhaps are having difficulty, but where one or two varieties are hanging in there for you. This information may help others in similar circumstances. So if you have any added information, it is not too late to send it in.

Since no format was suggested, your replies came in several forms. We have tried to keep each individual style intact while conforming to a fairly uniform dissemination of the information.

## SOUTHERN CALIFORNIA AREA

We will start this summary of Pacifica iris performance with word received from Southern California, once the center of

the PCI hybridizing world. Furthermore, it is appropriate to start with one of the earliest California hybridizers, Marion

Walker of Ventura. Ventura and neighboring Santa Barbara lie in one of the best citrus-belt garden areas in the world, but perhaps a degree or two warm for some PCI.

*Marion Walker, Ventura, CA*

Marion writes that his stamina has greatly reduced his iris plantings.

"I used to have a three-acre planting, but now it is all in houses. We have a gardener to keep a few irises growing, but nothing like we used to have. Of my productions, OJAI is the only one that is still around."

I started thinking that since Marion Walker registered Ojai in 1959, that clump in his yard must have been there for at least 38 years. Checking further with some notes from Marion, the cross which he made between a Fred Danks seedling and Eric Nies' Amiguita must have been planted somewhere between 1953 and 1955, which makes the clump at least 52 years old. That certainly qualifies it as a reliable grower.

#### SAN FERNANDO VALLEY

San Fernando Valley is a section of Los Angeles County lying north and east of the Santa Monica mountains and the Hollywood hills which act as a deterrent to tempering sea breezes. Consequently its climate is a little extreme for most Pacific

cas, but ideal for seedlings or named cultivars selected in and for the area.

*Teresa Sage, Woodland Hills, CA.*

Unfortunately, I have only three named PCI's in my collection: CANYON SNOW, BIG MONEY, and MUNRAS. However I have a seedling grown from Ghio seeds which I have registered under the name of CALIFORNIA SKIES, but not yet introduced. This cultivar bloomed for the first time in 1990 and has been a heavy bloomer ever since. It transplants fairly easy if it is planted at the right time (late October / early November in the San Fernando Valley). Once established, it increases easily.

The balance of the PCI's I grow are partially from Ghio's, the SPCNI seed bank, and from my own garden. One cultivar that I particularly like is a tall plant with large turquoise flowers. This cultivar won the Best Seedling award at our show in 1996. In 1997 my entry of Canyon Snow won a blue ribbon and Best in Section award for the PCI's.

Generally I find that the seedlings are more colorful, with larger flowers and an abundance of ruffles.

Our weather in the San Fernando Valley this year has a lot to be desired. December, January, and part of early February brought about 16 inches of rain and nothing thereafter. Now we are sweltering in 96 degree heat!

### NORTHERN CALIFORNIA

#### ALAMEDA COUNTY

Alameda County fronts on the San Francisco bay and its climate is tempered by that large body of water. It is primarily a sedimentary water-front plain, but rises to wooded hills along its eastern border. Climate is near ideal for PCI's. Olive and George Waters live at the foot of the hills in Berkeley, and Adele and Lewis Lawyer in the hills above east Oakland.

*Olive and George Waters, Berkeley*

Irises have been treated rather haphazardly here of late: the garden was emptied of plants for serious soil renovation, and most labels were lost before the plants could be replaced. We mention by name those that retain an identity, but can only make general comments on the

others. Some Pacific Coast hybrids remain in pots, others are in ideal, well-drained soil with good exposure, or are fighting tree roots in heavy shade.

CANYON SNOW is still a firm favorite - - an aristocrat of the garden. It is free-flowering and its leaves stay bright and shiny.

UPPER ECHELON has captured our hearts with its medium-sized, well-shaped flowers of chestnut and yellow; they were among the first to appear and the last to bid the season farewell.

CUP OF TEA arrived here along with Upper Echelon, and the flower is similar to it in form, but slightly smaller and on shorter stems (8 inches instead of 10); its petal color is dusty yellow with brown veining. While Upper Echelon has flourished, Cup of Tea produces a slowly-diminishing number of flower stems.



PHILOSOPHY has sturdy upright flower stems, fat spathes, and huge, somewhat frilly flowers of rich purple. Its flowers this year, the first for us, were a great source of anticipation and amazement. Philosophy has a stance similar to that of Soquel Cove, and together they would make a fine pair. Our regret is that Soquel Cove, smoother and more elegant than Philosophy and a favorite in its time, vanished from the garden about five years ago.

NIGHT EDITOR, a dusky beauty always first of the season with its near-black flowers, is not to be blamed for prostrate stems; it performs in the shadow of *Garrya elliptica* and seldom sees the sun.

SIERRA DELL, the deserving 1996 winner of the Sydney Mitchell Award, never fails to command attention, not only that of delighted visitors, but ours too, despite familiarity. These bright blue flowers, smooth and elegantly poised, have no rivals in the iris garden.

Among those separated from their labels are several of the Banbury strain. They remind us of visits to Banbury, Oxfordshire, when Margorie and Leonard Brummitt were gardening there - - he breeding tall bearded irises and rare orchids, she breeding Siberian and Pacific Coast irises. Margorie's Pacific Coast irises are slim, smooth-flowered things that lack the bold assertiveness of Philosopher, but they survive where some others don't, and it would be an unfeeling gardener, and an unwise one, who dismissed them entirely in favor of today's broads.

We are anxious to identify an iris having ivory or pale cream flowers with purple veining on stems about 8 inches tall. It, too, has flourished with this past winter's rains, but does well most years. It is as much a favorite as Upper Echelon, but has been around so long that we risk taking it for granted. Check lists have been consulted, but are now so lengthy with similar descriptions that recognizing one flower among them is searching for a needle in a haystack.

*Adele and Lewis Lawyer, Oakland*

This year we grew 157 clones of named Pacificas, 68 selected clones from our own crosses, 287 unselected crosses, 27 species clones, and 37 pure species seedlings (now 2nd-year clones). Of these, by far the poorest growers were the species which

had been grown from seed collected in the wild where they had interbred for centuries. This weakness is very apparent in clones up to 6 years of age which are still just barely hanging on, and in the fact that less than half of the 37 species seedlings lived to see their second year. Interspecies crosses made by Gene Loop performed normally, even though both of the parents were weak, and several clones of species from garden-grown seed are growing like mad.

I don't know if others have found this to be true, but it does sound reasonable that plants from seed gathered in the wild where all the surrounding plants were related, would lack hybrid vigor. I remember that one of the two inbreds that produced Del Monte's prize sweet corn hybrid, was so weak that it was a major production problem. In our planting of named varieties and pure species, the difference was startling. At the end of the first year all the named clones had clumped with leaves a foot or so long while the best species plant had three 4" leaves.

Now for the best of the named clones. Right now I would have to say that CANYON ORCHID, Dodo Denney's cross between Canyon Snow and Abell and Lenz *munzii* material can't be beat in our garden. The rest of the best will be listed alphabetically.

AGE OF CHIVALRY (Ghio '92), AMI ROYALE (Luhrsen '57), CALIFIA (Ghio '70), CANYON SNOW (Emery '74), DEEP BLUE SEA (Ghio '92), FAIRY CHIMES (McCaskill '72), FAULT ZONE (Ghio '91), GOLD DUSTED (Jenkins '90), GREENAN GOLD (Meek '92), IN THE MONEY (Ghio '87), JEAN ERICKSON (Rigby '93), MANTRA (Ghio '93), NIGHT EDITOR (Ghio '86), PACIFIC RIM (B.Jones '91), SANTA CRUZ BEACH (Ghio '87), SEABRIGHT COVE (Ghio '93), SIERRA DELL (Lawyer '87), SOLID CITIZEN (Ghio '87), and TIDY WHITE (Hager '88)

#### CONTRA COSTA COUNTY

Contra Costa county lies mostly east of the Alameda County hills. It is a little colder in the winter and hotter in the summer, but still fairly compatible with PCI growing.

*Francisca Thoolen, Orinda, CA*

I wish that I could have received your card a month earlier, and I would have

taken notes. Unfortunately I did not take notes and although we had many blooms, the only one that stands out in memory is GORDOLA a petite (size) yellow which bloomed its little head off, yet still left increases for next year. Its leaves had no leaf spots in spite of the constant rain we had this winter and early spring. If it had a fault it was that the leaves were slightly taller than the bloom stems, but not enough to be objectionable from a landscape point. I could see it 50 feet away from the kitchen window. In fact I liked it so much that I ordered 5 more plants this year to add to my landscape bed.

My seedlings bloomed, and there were some nice ones, but selection will have to wait for my torn ankle tendon to heal.

### SONOMA COUNTY

The Coast Range areas of Sonoma and Marin Counties are ideal for the PCI, in fact you can find them growing wild over most of the range. The only place where you could be reasonably sure of not finding them is on the south slope of an open hill. Hal Mattos is on the eastern edge of this area and has experienced some difficulties, but Elyse Hill, in the center of things, is doing quite well.

*Hal Mattos* Petaluma, CA

Over a number of years prior to 1986 when we lived in Foster City, we grew a number of PCI's very successfully. In August, 1986, we moved to Petaluma and

### OREGON . WASHINGTON , AND BRITISH COLUMBIA

Five species of the PCI occur in Oregon, and one in Washington. Although none occur naturally in British Columbia, it is not impossible to establish them, especially in areas tempered by ocean breezes. By and large, western Oregon could be classified as near ideal, but with increasing difficulties as you go north into Washington. This year the entire region was drenched with all the spring rain that should have fallen in California. Eugene is about midway up the state on Interstate 5.

*George Gessert*, Eugene

I hope you're having a better season than we are. 1997 is shaping up as the worst year ever for bloom. I doubt that

in the fall of 1987 we planted several PCI's. Our soil here was very heavy adobe, and after adding a number of soil amendments I ended with a raised bed, 2' x 10' in which I planted both PCI's and Louisianas.

The first year the plants did quite well with some bloom, but by the following year most had died. These were replaced, and like the preceding plants, most died within the year. The Louisianas continued to thrive.

Dara Emery's CANYON SNOW grew well for me for several years. We had two separate clumps in different parts of the garden. One winter they both started their new growth, but within a week they shriveled up and died.

Over the years I have grown hybrids from Ghio, Lawyer, Wood, Weiler, Rigby, Marchant, and Lois Belardi. Currently I have two PCI's in my garden: Belardi's PACIFIC HIGH and her SEA GAL. I have grown both of these since their year of introduction, 1987 and 1994, and as of now both are doing well.

Who knows what tomorrow will bring.

*Elyse J. Hill* Sebastopol, CA

In answer to your request for an evaluation of Pacifica hybrids we grow in our garden, I would say the following are the most reliable: BIG WHEEL, ENDLESS, FORT POIN.

We've had good luck with these, and they do add a lot of color to the garden before the other irises start to bloom.

I'll be able to do much hybridizing. However, I have lost fewer plants than last year - only about a third, compared to half in 1995. The survivors of these two years of record rain should be tolerant to wetness.

I have grown many named hybrids, none of which have been given special care. If they thrive, great, if not I don't try to rescue them. I grow most plants in pots the first season, then transplant them into the garden where they have to survive heavy clay and partial shade. I have not kept records on all my named plants, but do have notes for All Around, Big Money, Black Eye, Canyon Snow, Charter Member, Cozumel, Del Rey, Escalona, Eye Patch, Fault Zone, Feature Attraction, Flamenco, Hands On, In the

Money, La Selva Beach, On the Wild Side, Pac 4, Pompanio, San Lorenzo, Sky Lash, Western Queen, Wilder than Ever, Wildest Imaginings.

For vigor, the two best are CANYON SNOW and WESTERN QUEEN. The least vigorous were COZUMEL and ESCALONA. Surprisingly, DEL REY, which is part munzii, did fine, and survived temperatures in the low 10s. In crosses with *I. tenax* it produces some true blue progeny.

For color and patterning, many of Ghio's introductions are excellent. Especially outstanding are PAC 4 (A Ghio reselect included as an extra), which has an amazing neon-purple signal, and WILDER THAN EVER, which has the most complex signal pattern I've ever seen. However, I don't like the ruffling on most Ghio hybrids - or on most other contemporary iris hybrids for that matter. There is no bigger iris cliche than ruffles. I try to breed ruffles out, but it is slow going. For form, Western Queen and Canyon Snow are superior to almost anything more recent.

In my breeding I am especially interested in vein patterns. For vein patterns, the most interesting parent of any named hybrids that I have used is ALL AROUND. It is a rather modest-looking plicata, and not vigorous here. When crossed with Valley-Banner type hybrids, it parents plicatas, but also plants with a range of unusual patterns for which there are no names. The most interesting progeny have extremely-thin, but intensely-pigmented veins.

Hybrids tend to grow better than species, except for douglasiana, which grows like a weed here. My most vigorous plants are my own hybrids between Western Queen, Canyon Snow, or various Ghio cultivars, and tenax-derived hybrids. The only exception to this is an extremely vigorous hybrid between Canyon Snow and a wild-collected innominata. I should name and introduce it, I suppose, since the flowers are extraordinary - pure white, covered with fine magenta veins. How does "Noam Chomsky" sound?

*Ruger Nekson*, Iris Country, Brooks, OR

It has been a wild and wet winter here, and the spring continues to be a little late and wet. I am not growing any of the new named things, but rather the vintage varieties. I have four varieties that are dependable every year, and these I would not like to be without. Ranked in the

order of best performance, they are: CANYON SNOW, POPPY, CRANDALL'S WHITE (a white seedling widely distributed in the Seattle area from Fred Crandall), and AMIGUITA. I had the latter in two places, and one of the two plants just up and died last fall for seemingly no reason. Canyon Snow is clearly one of the toughest, with consistent growth and nice looking plants. Not far behind is Phil Edinger's Poppy. Perhaps the nicest looking clump each year is Crandall's White. Its foliage is not as tall as Canyon Snow, and when at peak, the stalks are in better proportion to the plant.

*Kathy Millar*, Duncan, B.C.

We average about 40 inches of rain per year, with most of it falling in October and May. This year we broke the record in March and there's still lots of rain coming down. Minimum temperature is about 14 degrees, but every 10 years or so it can go down to zero. Maximum can get up to 100, but the average is more like 75 degrees.

My soil is sandy gravel and acidic (about pH 4.5). I add some dolomite lime each year, and mulch with shredded oak leaves. I usually use an 8 - 10 - 20 fertilizer applied in the spring. The beds get 3 hours of watering per week, except for the Ghio's which share the vegetable system so they get 3 hours twice a week. I use 50 percent shade cloth on one bed, and all the rest are out in the hot sun. I drench with Sevin to control the June Beetle larvae.

As to seeds, I just sow them in cell packs (about an inch square) into a soil-less peat mix and stick them outside for the winter. I think the germination is much better on fresh seed. I find it is easy to germinate the seed but difficult to keep the seedlings alive until they bloom, and even then they die.

I grow the following varieties:

DOROTHY V (registered by myself in 1991) from a seedling of a person in Victoria some 20 years ago. Nice big cream blooms, nice form and substance. Forms a fairly vigorous loose clump. Tough and transplants well. A survivor and a good bloomer.

VERA HAYES (registered by myself in 1990) from an unknown seedling. Small bluish-purple blooms, nice color, blooms prolifically and very vigorously. Vera Hayes forms good clumps and transplants well.

BIG WHEEL, EARTHQUAKE, FAULT ZONE, HERALD, SIMPLY WILD, and SIERRA DELL were planted out in 1992 after being overwintered in pots. These comprise about 40 percent of the original 1991 order from Joe. They are slow to increase, and Sierra Dell doesn't bloom every year. It also doesn't form a clump so I think there are only 3 fans! I did, however, gather seed and now have about 25 plants in 1-gallon pots that may bloom next year. Overall, Joe's plants took awhile to settle in, but now they probably need to be divided.

Nothing can beat the *I. douglasiana* and *I. innominata* species. They increase and bloom well. *I. tenax* persists too, and

### U.S., EAST OF THE PACIFIC STATES

Trying to grow the PCI in any geographical area of the United States other than the favored sections of the three Pacific states brings difficulties. Bob Ward, our President, has had more success than anyone I know, but not without a struggle and some well planned strategies. I can't help but think that, given the right approach, the PCIs can be developed to fit almost any climate. It's going to take lots of you, lots of patience, lots of time, and lots of seed, but plants have wonderful abilities to change genetically and adapt to whatever faces them. They have already adapted to elevations from 6900 feet in the dry Sierras to the salt sprayed edges of the Pacific. They already grow from the hot dry slopes of the Sierra foothills to the 100-inch rainfall slopes of the coastal mountains in Oregon. The one

### OUTSIDE THE UNITED STATES AND CANADA

Australia has many areas suitable for the growing of the PCI, in fact some excellent breeding material has come from exchanges between U.S. and English hybridizers and Australians such as Fred Danks, D. Hargraves, and Berry Blyth.

*Robyn Rohrlach*, Bowen Mountain, N.S.W.

Thank you for contacting me about my experiences with the PCIs. I have mainly grown the CA species, and what few hybrids I have grown over about a 25-year period, were all unnamed ones. The first would have been an *innominata* cross which came from the late Dr. Gordon Loveridge who was a species iris specialist

throws lots of seedlings. *I. bracteata* has survived, but I had to move them this spring so we will see. They are shy bloomers.

To conclude: Dorothy V and Vera Hayes perform the best, but Joe's are more exciting colorwise. I have a bunch of Joe's seedlings that are gorgeous, but still lose a few each year so can't say yet if any are reliable. I think a person has to test these iris for at least 5 bloom seasons before they can recommend them. My wild collected douglasianas and tenax are survivors, and the various *innominatas* that I have inherited over the years seem pretty tough. I would highly recommend them to gardeners here.

thing common to all the areas where they are native is the absence of summer rainfall. But don't be disheartened. The genes must be there, or at least willing to mutate. Maybe Bob has already found some of them.

*Bob Ward*, Little Rock

The following clones are growing well in my garden:

AGNES JAMES, BANBURY GNOME, BLACK EYE, BLUE SAGE, CALIFIA, CHIEF SEQUOIA, DAVID WARD, HONTA YO, SHAMAYIM, SUSIE KNAPP, WOLKENTANZ, VALLEY BANNER SEEDLINGS, BANBURY GNOME X AGNES JAMES SEEDLING,

*I. bracteata*, *I. chrysophylla*, *I. douglasiana*, *I. innominata*, *I. macrosiphon*, and *I. tenax*

in New South Wales for many years. I grew various others from seed, mainly from SIGNA, The British Iris Society, and other private sources. At one stage in the early 1980's when I lived in South Australia, I purchased a few of Barry Blyth's registered ones from Tempo Two Nursery, but they were unsuccessful.

During my five years in Yackandandah in north east Victoria, from 1990 to 1995, I had some unnamed hybrids of uncertain parentage in colors which ranged from dusky pinks, mauves, violets, browns, and several yellows. I was about to order some registered varieties when my husband was transferred here in September, 1995. Over the past 19 months

or so, I have been establishing a rather challenging half-acre, sloping site into some semblance of a garden. My current collection of the Californian iris tribe is now made up of seedlings, mainly species, and the handful of seemingly-inevitable nameless crosses.

Most of these are making slow progress, as the soil is poor and rains have been erratic to say the least. I'm not sure the climate here will suit them in the long term. Those I've attempted to grow in pots and transplant in spring, have mostly rotted out, especially those from named hybrid parents. Species have fared somewhat better, and I now have seedlings of the following: *Ii bracteata*, *douglasiana*, *fernaldii*, *hartwegii*, *innominata alba*, *macrosiphon*, and *purdyi*. Some of these, were sowed directly into the soil, which seems to be more successful.

I have on order a number of named hybrids of both Australian and U.S. (Ghio) origin. I will be happy to keep you informed on how they perform for me.

PCIs have not been sold in Australia in the general nursery trade to any great degree over the years. Tempo Two Nursery (Barry Blyth) registered a number of PCIs in the late 1970's and early 1980's and offered them for sale for a few years in his catalog. Problems with rust disease caused him to abandon them and stay with the more popular TBs, spurias, and Louisianas. He gave his stocks to Iris Acres Nursery in south Australia, and they now have a fairly extensive list for sale. Red Hill Iris Nursery in Victoria sells named varieties in pots at the nursery, and bare rooted by mail order. I think this business has been in operation since the early 1990's. I am enclosing lists for these two nurseries. They may give your readers added information regarding what PCIs are growing here.

#### RED HILL IRIS FARM

Victoria, Australia

ALBERTON, BENDIGO, BIG MONEY, BIG WHEEL, BOGONG, BOTTOM LINE, BUNYIP: CALIFORNIA MYSTIQUE, CAMPAIGNER, CHELSEA, CHIMINTA, DEEPENING SHADOWS, DORRIGO, ECHUCA, ENDLESS, FLOTILLA, FRANKSTON, GLENGARRY, GOING WEST, GO WILD, GRAND DESIGN, HASTINGS, JAMIESON, KIEWA, LEONGATHA, LONG SHOT, MIRIMAR, MONTARA, MORESCO, NAGAMBIE, NAYOOK, NEERIM, ORBOST, PAJARO DUNES, QUEEN CALIFIA, ROARING

CAMP, TANJIL, TONGALA, UVAS, WAR-RAGUL, WHITE SAILS, WILD PARTY, WISH FULFILLMENT, WONGA, ZAYANTE CREEK.

#### IRIS ACRES

Meadows, South Australia

Most of the above, plus: ALDINGA, BENALLA, ECHUNGA, KANGARILLA, KUITPO, MEADOWS MAGIC, MITTA MITTA, MOANANA, NGKITA, NOARLUNGA, SMOKY BANDIT, WILLUNGA, YANKALILLA, YA-ROONA, and YUNDI.

Most of these are introductions of Ivar Schmidt, who, with his wife Carol, manage Iris Acres. They are mostly named after South Australian towns.

Like Australia, much of England is well-suited, or fairly easily adapted, to the growing of PCI, and substantial pioneering breeding work was done by English hybridizers and gardeners.

*Pauline Brown*, Westcott, England

Firstly, I should say that in general, the Pacifica hybrids are among the most critical of iris to get established and growing well in their first season. This is especially true if they come to the U.K. from the U.S. This may be due to the length of time the plants spend in transit, coupled with the timing of their shipment and arrival dates. Here, September is normally the magic moment to lift, divide, and replant them, although I have from time to time carelessly heeled in rows of Arnold Sunrise and various seedlings in cold and wet Octobers and Novembers. Wouldn't you know that they did better than those carefully planted at the 'correct' time and in 'ideal' conditions!

Generally it is difficult to provide just the right amount of moisture required to get them going without going over the top and causing them to rot during establishment.

The species grow extremely well, producing lots of good foliage and flowers; whereas the innominata-type hybrids are the most difficult, although they do produce good flowers despite their scrappy foliage.

I have found that the British-raised hybrids do best for me, namely: AMETHYST CRYSTAL, ARNOLD SUNRISE, BANBURY FAIR, BLUE BALLERINA, KATINKA, PURPLE DREAM, PINWOOD AMETHYST, PINWOOD CHARMER, PINE-

WOOD POPPET, PINEWOOD SUNSHINE, and POPINJAY, but also QUINTANA and the Cal-Sib GOLDEN WAVES.

Ed note: I have always puzzled over the British considering September to be the 'magic' time for transplanting Pacificas. Here in my California garden they wouldn't be ready for at least another month. Maybe Pauline has discovered something.

European climates are not as hospitable to the PCI as are many of the zones on the British Isles. Winters can be compared to those in the central and eastern regions of the U.S., and success will not be attained until some persevering irisarian in one of those climate zones finds a genetic combination that will thwart the cold. It seems that an *Iris tenax* infusion from a cold natural habitat in Washington would be a good starting point, and several of our members are already preceding on that assumption. Jean Peyrard is trying to short-cut that method by selecting seedlings from good garden types, a method we have enthusiastically supported in our recommendations. His TROPEZIENNE, registered in 1995, is a good example of what can be accomplished by selecting where it is to be grown.

Jean Peyrard, Seyssinet, France

I have grown since 1986 a lot of named varieties and species with few successes. Named varieties have come from Joe Ghio, and the travel time is 4 to 5 days. They arrive in October when the weather is often cold and the transplanting difficult. Until now I have lost 2/3 of the plants.

Actually, I have: BLACK EYE, CHIEF SEQUOIA, IT'S WILD, NAPA VALLEY, SAN LORENZO VALLEY, and SEE THE LIGHT since 1995, and WILD TIME since 1990. The growth is poor and the stems are short, but the flowers are marvellous, good substance and long lasting as cut flowers.

I have some seedlings from Ghio seeds, and I have selected and registered an orchid-pink one under the name TROPEZIENNE (Peyrard '95). It was introduced last year (1996) by Lewisia, a nursery specializing in American perennials. My goal is to get hardy plants for my climate. This climate is continental, warm and often dry summer and cold and snowy winter. The soil is rich in clay, and a little acid.

All the species are grown in pots, and until now only *I. tenax* have bloomed - - and died. Tender species are protected in winter under the basement where there is no frost, but no water.

## MAIL ORDER PCI SOURCES

Aitken's Salmon Creek Gardens, 608 NW 119th St., Vancouver, WA 98685. Hybrids of Aitken, Jones, Ghio.

Bay View Gardens, 1201 Bay St., Santa Cruz, CA 95060. (Joseph Ghio). Mostly his own hybrids.

D & J Gardens, 7872 Howell Prairie Rd. NE, Silverton, OR 97381, (Duane & Joyce Meek). Meek, Ghio hybrids. List: Self addressed stamped envelope.

Stockton Iris Gardens, P.O. Box 55195, Stockton, CA 95205. (Abe Feuerstein). Color catalog. Vern Wood's hybrids.

The Iris Gallery, 33450 Little Valley Rd., Fort Bragg, CA 94537. (Jay Hudson). Extensive hybrid collection, all hybridizers. Catalog \$1.00.

Millar Mountain Nursery, 5086 McLay Rd., R.R. 3, Duncan, B.C., Canada. Kathy Millar.

Iris Acres, P. O. Box 248, Meadows, SA 5201, Australia. (Ivar Schmidt). Ivar Schmidt hybrids.

Otepopo Garden Nursery, Private Bag, Herbert, North Otago, New Zealand. (Gwenda Harris). Unnamed seedlings at the present. Species in plans.

V. H. Humphrey, Westlees Farm, Logmore Lane, Westcott, Dorking, Surrey RH4 3JN England. Wise's 'Pinewood' hybrids. Catalog: Self-addressed, stamped envelope.

Broadleigh Gardens, Barr House, Bishop Hull, Taunton, Somerset TA4 1AE, England. 'Broadleigh Hybrids'. Catalog: Self-addressed stamped envelope.

Lewisia, Le Maupas, 05300, Lazer, France (J. L. Latil). Carries CA species and, so far, only, one hybrid: Jean Peyrard's TROPEZIENNE.

# GERMINATING SEED IN A COLD-WINTER CLIMATE

John White, Maine

Following is the chart on my germination trial on Pacific Coast iris seeds. The seeds were planted January 28 and placed in a cool room (average 52°F) for 35 days. They were then placed in a warm room (70 - 75°). First emergence occurred on March 8, and most had emerged by March 25 or about 45 days after planting. Seeds of the first 8 lots were scarified by shaking vigorously for a couple of minutes in a small box lined with coarse sand paper. The bottom 2 lots from Jean Witt were not scarified. The chart shows the number of seeds planted, the number germinating, and the percent germination..

SEED GERMINATION RESULTS			
Source	seed	Germ	Percent
Amiguita	37	26	70
Idylwild	25	21	84
Roaring Camp	12	8	67
XP325 (96 080)	90	67	74
<i>I. tenax</i> (96 121)	24	3	12
<i>I. tenax gormanii</i> .	85	37	44
<i>I. tenax</i> X <i>innom.</i>	68	27	40
<i>I. tenax</i> (96 117)	102	3	3
Mixed Var (J.Witt)	85	32	38
Same colch (J.Witt)	60	22	37
TOTAL	588	226	38.4

It does not seem to me that scarification made much difference when looking at the percent emergence of the various lots of seed. I don't know why; but it appears that the named varieties on the chart had much better germination than the species, and they are quite vigorous. Plants coming from the seed of XP325: Late Doug X XP251 (seed exchange lot 96080) are the most vigorous plants.

I think the longer time in the cold room, compared to my last years test, was beneficial. Maybe 40 days would be even better. I know Gene Loop considered that germination was probably complete in 20 days, but there is a difference between germination and emergence.

So I have about 226 seedlings to line out in the spring. We are having a very late, cold, and wet spring this year, but I should be able to plant these seedlings by May 20, or soon after.

I had only one PCI bloom for me in 1995, a NIGHT EDITOR seedling, but it did not survive the next winter.

I went into this winter with 50 PCI seedlings lined out last year, plus 7 plants which survived the 1995-96 winter, none of which bloomed. Of these, there are 6 or so tenax among those lined out last year that look as though they survived this past winter. Its too early to tell about last season's other seedlings.

## LET'S SEE WHAT WE KNOW

Lewis Lawyer, Oakland, CA

John White's article, above, concerns a subject of prime importance to most of us: what is the best way to germinate PCI seeds. The subject is covered further, on page 25, and we have supporting data from Duncan Eader and others.

We can not stress too emphatically that Gene Loop's controlled-temperature tests showed that PCI seeds germinate best if kept moist at temperatures approximating 50°F. He also showed that fluctuating temperatures which averaged close to 50°F were just as good, although not any better. That is all we have to do! - keep the seeds moist at temperatures averaging 50°F for at least 20 to 30 days.

Here in California, all we have to do is place them out doors and keep them continuously moist. Our winter climate takes care of the rest. Those of you who live in Ecuador will have to devise a way to keep them cooler, perhaps refrigeration, but be aware that we have shown that keeping the seed continuously at temperatures very close to freezing for more than 10 to 20 days can kill them. Those of you who live in harsher climates, as does John White, will have to find an area where the temperatures average close to 50°F while your seeds germinate.

Remember, approximately 50°F and continuous moisture.

## UPDATE ON THE LATES

Lewis Lawyer, Oakland CA

You're not the only ones who experienced an unusual winter this year. By January 25, we had received 22.81 inches of rain, 4 inches more than our normal season total. Then the rains quit, and for three months, including our normally wettest part of the year, we had no useful rainfall.

With the lack of clouds came the heat, 8 record-high days in succession and a few other record days scattered here and there for good measure. Pacifica bloom season, which actually started a little late, caught up with itself in a rush of bloom, and many plants were blooming as much as 21 days earlier than expected. Peak bloom on our named Pacificas occurred 15 days early, on March 31, with 459 open flowers. By normal peak-bloom date of April 15, bloom count had dropped to 312 and 3 blooms were already open on the 'lates'. Peak bloom on the 'lates' occurred May 7, with 98 open flowers. At this time there were no flowers left on the named Pacificas, but 4 flowers were still open on our munzii-derived seedlings.

One flower on one clump of the 'lates' was still open yesterday, June 13, but I think that is the end. Last year peak bloom was May 20 and last bloom was July 7.

Although the 'lates' were 15 - 20 days earlier than they were last year, they still fairly well fulfilled their function of extending the season. The photograph, below, of a section of the 'lates' was taken on May 7, the day we left for the SPCNI Expedition, when only 4 open flowers remained, widely-scattered through all the extensive non-'late' plantings.



XP325 clones, May 7, 1997

## ALFALFA MEAL

We received a letter from a member in Colorado inquiring about the use of alfalfa meal, pellets, or hay in the garden. Alfalfa, like other legumes: peas, beans, vetch, etc. is an organic source of nitrogen, just as bone meal is an organic source of phosphorus. These amendments act as "slow-release" fertilizers because their nutrients are unavailable to plants until broken down by bacteria in the soil

to a usable inorganic form such as nitrate or phosphate. I have not used alfalfa because of its higher cost per unit of nitrogen compared to inorganic forms, but if any of our readers have found it to be beneficial please let me know, or write directly to our enquiring member:

Kenneth C. Martin  
9595 N, Pecos, Space 138  
Thornton, CO 80221



# SEEDLING PRODUCTION GUIDELINES

## POLLINATION

Pollination should be done as quickly after the flower opens as possible, preferably in the morning before bees are too active. If pollination is done for a genetic study where measurements and counts are to be made, both the female and male flowers should be protected from insect intrusion from prior to opening to the time pollen transfer is completed. The female flower should be further protected 3 or 4 days after pollination. For ordinary seed production, the degree of precaution is optional, but in any event, to reduce selfing, the anthers of the pod flower should be removed prior to depositing pollen from the male flower. Pollen transfer can be by brush or by rubbing the anther against the stigma.

As soon as the pod is well formed, the sheath which surrounds it should be pulled down to reduce aphids and molds which develop in the crotch.

## SEED

Ideal time for harvesting is about the time the pod starts to split open. This is also close to the time the seeds spill out, so pods should be checked daily. Pods can also be wrapped with cheesecloth to catch any seed which spills.

Hard seeds are a normal occurrence in PCI. These seeds, ranging from 10 to 40 percent of the total, will not germinate the first year, but will usually germinate the second year if held over. To date, no preplant scarification method has been shown to alleviate this problem.

## PLANTING, GERMINATION, SPROUTING

People have devised all sorts of complicated ways to germinate PCI seed, in plastic bags, in little cups, or on paper towels. You can use any method with which you are comfortable, but no method has yet been proved better than planting in pots in a mostly organic planting medium such as can be purchased in a garden supply store. I use a home-made mix consisting of 1/3 sphagnum peat and 2/3 oak leaf mold fortified with a high-phosphorus complete fertilizer. This mix is not sterile, and perhaps a purchased sterile mix would be better.

Container size is somewhat optional, but PCI roots grow lengthy enough to consider 5 to 6 inch depth as minimum. Optimum covering depth is between 1/4 and 1/2 inch, deep enough to keep the seeds continuously moist until germination is complete.

Gene Loop's accurately-controlled germination tests (ALMANAC fall, '94, '95) show that PCI seeds germinate (sprout) best at temperatures around 50°F. Germination will not occur in temperatures above about 70°F, and is slowed to a halt around 32°F. Seed can withstand freezing (32°F) for longer than 20 days or so. No pre-plant treatment (freezing, refrigeration, etc.) has proved to be beneficial.

Ideal temperatures for germination occur out doors during the winter in most areas of the three Pacific states, but must be provided in harsher climates. This can be done (John White, ALMANAC page 23) by keeping them for a month or so in any space where temperatures range between 35 to 65° and which average somewhere near that optimum 50°. Seeds will complete germination at these cool temperatures in as little as 30 days, but should then be moved to a warmer regime to accelerate emergence and growth. Plants will take from 40 to 90 days from planting to emergence, depending on temperatures prevailing after germination.

If several seeds are planted to a pot, the roots become entangled and must be carefully teased apart. We have always done this by dipping the root ball in water, but last year we did it with no washing, and had 100 percent survival of the replants. Duncan Eader recommends SUPERSOIL because of its ability to release the tangled roots when placed in a pan of water.

The seedlings can be moved to larger (5" to 8") pots where they will bloom, or can be lined out in the garden. We line out, 6 inches apart, in rows 1 foot apart in a garden soil containing 1/3 sphagnum peat by volume, usually in May or June. It is essential for the soil to be adequately settled around the roots; therefore plants should be well-watered individually at time of planting.

## NEW MEMBERS and ADDRESS CHANGES

<p>Anderson, Audrey 2921 Grizzly Drive, Ashland, OR 97520</p> <p>Rancho Santa Ana Botanic Garden 1500 North College Ave. Claremont, CA</p> <p>Carneal, Violet &amp; Ryland 206 Jett Drive Fredericksburg, VA 22405</p> <p>Clark, Don &amp; Irene 15225 SE Orient Drive, Boring, OR 97009</p> <p>Cobbledick, Bruce A. 6340 Crown Avenue, Oakland, CA 94611</p> <p>Corzine, Lavonna R. 30950 Aurora Del Mar, Carmel, CA 93923</p> <p>Elliott, Jack Coldam, Little Chart Forstal, Ashford, England</p> <p>Greenberg, Richard 1300 E. Union, Apt. 1, Seattle, WA 96122</p> <p>Idris-Duncan, Beatrice 22370 Indianola Rd. NE, Poulsbo, WA 98370</p> <p>Clara B. Rees Iris Society 368 Dawson Drive, Sanra Clara, CA 95051</p> <p>Johnson, Jennifer 141 Rosemont Avenue Modesto, CA 95351</p> <p>Leung, Horace 10010 Groomsbridge Rd. Alpharetta, GA 30202</p>	<p>Lindley Library, c/o Helen Ward, 80 Vincent Square London, SW1P 2PE, England</p> <p>Low, Laurie 1812 Nephi Drive, Fairfield, CA 94533</p> <p>Martindale, Donna 6666 Dusty Trails, Vacaville, CA 95688</p> <p>McCullough Avis 6789 De Anza Avenue Riverside, CA 92506</p> <p>Meador, Yvette P.O. Box 332 Applegate, CA 95703</p> <p>Nielsen, Jon 1039 N.E. 94th Seattle WA 98115</p> <p>Reilly, Rodger &amp; Mary Lee 328 Lincoln Ave. Alameda, CA 94501</p> <p>Sartor, Nancy 2035 Fairmont Drive San Mateo, CA 94402</p> <p>Thompson, Gerald A. 19361 Shadow Hill Drive, Yorba Linda, CA 92886</p> <p>Valentine, Dr. &amp; Mrs. D. L. 1750 Woodard Road, Elma, NY 14059</p> <p>Wilson, Anne 14459 Muriel Drive, Moreno Valley CA 92553</p> <p>Young, Hal 288 Whitmore St. #303, Oakland, CA 94611</p>	<p style="text-align: center;">NEW ADDRESSES</p> <p>Derr, Claude P.O. Box 924 Estacada, OR 97023</p> <p>Haley, Bob &amp; Aleah PO Box 7365 Vallejo, CA 94590</p> <p>Iwane, David 215 13th Ave. E., #302, Seattle, WA 98102</p> <p>Kirk, Anthony &amp; Mela 204 Sommerville Road Chehalis, WA 98532</p> <p>McNames, Keith M. 7711 Pries Drive NE Salem, OR, 97303</p> <p>Olson, Marti 14403 24th Ave. SW, Seattle, WA 98166</p> <p>Rohrlach, Robyn 373 Lt. Bowen Drive Bowen Mountain N.S.W Australia</p> <p>Schieber, Gilbert 2125 N.90th Street Seattle, WA 98103</p> <p>Shotts, Florence P.O. Box 495, Sky Forest, CA92385</p> <p>White, John W. 193 Jackson Hill Rd. Minot, ME 04258</p>
--	--	---

### SPCNI TREASURER'S REPORT, 1996

**BALANCE Jan 1, 1996      \$5,271.54**

<b><u>RECEIPTS</u></b>			<b><u>DEBITS</u></b>	
	Dues	1,516.00	ALMANAC Spring, 1996	743.02
	Dues Through AIS	107.00	ALMANAC Fall, 1996	685.67
	Sales of Cohen Booklets	100.00	Secretary - Treasurer	156.09
	Sales of Lenz Booklets	98.00	SPCNI Expedition 1996	50.91
	Sales - Back Issues Almanac	149.50	Supplies	4.48
	Sales- Check List	168.00	Publication Reprints	105.16
	Seed Sales	292.50	Mitchell Medal	16.30
Deposits for SPCNI Expedition 1996		360.00	Seed	19.40
Interest on Checking Account		62.07	PCI Book	121.69
	Donations	12.50	Slide Shows	5.00
	Book Fund	501.50	Check List	313.76
	Slide Show	7.50		
Expedition '97 Deposits Fwd to 1997		-360.00	Corporate Costs	10.00
	<b><u>Total Annual Receipts</u></b>	<b><u>\$3,014.57</u></b>	<b><u>Total Annual Debits</u></b>	<b><u>\$2,231.48</u></b>

**BALANCE Dec. 31, 1996      \$6,054.63**

## REGISTRATIONS AND INTRODUCTIONS, 1996

**COSMIC GLOW** (Vernon Wood, R. 1995).  
Stockton Iris Gardens 1996.

**COZUMEL** (Joseph Ghio, R. 1996). Sdlg. PF-188M. 13" (36 CM), EM. Bright ocre gold; F. with maroon signal, veins extended outward. Eagle Eyes X PH-266K: (Las Lomas x Aftershock sib). Bay View 1996.

**DOROTHY ROBBINS** (Brian Price, R. 1996). Sdlg. BPP 92/C/3. 15"(38cm), M. S. near white; F. pale lavender, radiant yellow heart. Sdlg. inv. Ghio line X Little Tilgates.

**EASTER EGG HUNT** (Joseph Ghio, R. 1996). Sdlg. PE-187-A3. 13" (33cm), M. Orchid pink self: F. with yellow line signal. Charter Member X PG-185 pink: (PI-MIX-Y, unknown, x PI-MIX-A, unknown). Bay View 1996.

**GORDOLA** (Joseph Ghio, R. 1996). Sdlg PE-172-J2. 13" (33cm), L. Pure gold self. PG-153G: (PI-211J: (Black Eye sib x (Los Padres x (Elberta Peach sib x San Tomas sib))) x PI-205-M2: ((Ignacio sib x (Rincon sib x Reflecting Pool)) x (((Big Wheel x ) Pacific Moon x California Native)) x Montara sib) x San Gregorio)) X Spanish Don. Bay View, 1996.

**GREETING CARD** (Joseph Ghio, R. 1995). Bay View 1996.

**HIGH WINDS** (Joseph Ghio, R. 1996). Sdlg. PE-212-P2. 14" (36cm), L. S. white; F. white, lined and dotted light blue, yellow dime signal. PG-204-R2: (Sierra Dell x Age of Chivalry) X PG-132-N2: (Westerlies x Sierra Stars). Bay View. 1996.

**LADY AUTUMN** (Norma Barnard, R. 1996). Sdlg. NB-91-31-PE-RE. 14" (36cm), M & RE. S. and style arms red-purple, lighter toward center of bloom; F. darker red-purple, gold signal with purple edge and white halo, white rim at tip; ruffled. Parentage unknown; seed from Sharon McAllister.

**LADY JEWELL** (Norma Barnard, R. 1996). Sdlg. NB-94-1P. 14" (36cm), E. S. warm cream, purple midrib and rays on inner surface; style arms warm cream, lined purple; F. cream, lavender center wash, yellow signal with purple halo, purple

rays radiating toward cream rim; lightly ruffled. Lacylady X Lacylady

**LIGHTNING SPEED** (Joseph Ghio, R. 1996). Sdlg. PE-172-H2. 13"(33cm), EM. Solid deep gold; style arms buff gold; F. gold, heavily lined and patterned henna, gold hairline edge. Sib to Gordola. Bay View, 1996

**OPULENCE** (Elaine Bessette, R. 1996). Sdlg. PCXB 93-07. 17" (43cm), ML. S. tapestry rose (RHS 1820), veined rosewood (187B), 1/32" pale cream (lighter than 19D) edge; style arms creamy pale yellow (19D), tips and crests washed pale tapestry rose; F. deeper tapestry rose (182C), darker (184B) central pattern wash, dark rosewood (187A) veins, 1/32" pale cream edge, green (147C) central streak. PCXB-91-23, from sdlg. of unknown parentage X unknown.

**PET NAME** (Joseph Ghio, R. 1996). Sdlg PE-176E. 12" (31cm), ML. Tawny peach self, F. with yellow halo signal. PG156-K2: (PI-211J: Black Eye sib x (Los Padres x (Elberta Peach sib x San Tomas sib))) x PI-MIX-R, unknown) X PG-177-M2: (PI-MIX-A, unknown x Valet sib). Bay View, 1996.

**PINEWOOD DAZZLER** R.A.Wise, R. 1996). Sdlg. 8/94. 12" (30cm), M. S. chrome yellow (RHS 14D); F. buttercup yellow (15B), yellow signal. Pinewood Sunshine X unknown.

**PINEWOOD ELEGANCE** (R.A.Wise, R. 1996). Sdlg. 11/96. 18" (45cm), L. S. purple; F. deeper purple, edged lighter, yellow signal. 17/92: (Arnold Sunrise x Pinewood Amethyst) X Idylwild.

**PINEWOOD PRELUDE** (R.A.Wise, R. 1996). Sdlg. 1/88. 12" (30cm), L. S. Smoky pinkish mauve, F. with yellow signal. San Lorenzo X unknown.

**RASPBERRY DAZZLER** (Vernon Wood, R. 1995). Stockton Iris Gardens 1996.

**REGAL CLASSIC** (Vernon Wood, R. 1995). Stockton Iris Gardens 1996.

**ROMAN FESTIVAL** (Vernon Wood, R. 1994). Stockton Iris Gardens 1996.

SANTA ROSALITA (Joseph Ghio, R. 1996). Sdlg. PD-264K2. 13" (33cm), EM. Apricot ground, washed and lined rose overall, rose halo on all petals, rose signal. PF-188-O: (Eagle Eyes x (Las Lomas x Aftershock sib)) X PG-172A, Charter Member sib.

SEEING YOU (Nora Scopes, R. 1996). Sdlg. PC 107. 13" (33cm), M. Blue lavender, F. with round white central spot. Parentage unknown.

SKY COVER (Vernon Wood, R. 1995). Stockton Iris Gardens 1996.

TRANCAS (Joseph Ghio, R. 1996). Sdlg. PE-202-C2. 13" (33cm), E. Smooth parchment pink, F. with soft mahogany signal, yellow center spear. PG-185Y: (PI-MIX-Y, un-

known x PI-MIX-A, unknown) X PG-172A: (PI-MIX-pink, unknown x Herald). Bay View, 1996.

TROPEZIENNE (Jean Peyrard, R.1995). Lewisia 1996.

TULUM (Joseph Ghio, R. 1996). Sdlg PE-196-B2. 14" (36cm), EM. S. rusty red; F. rusty red overlay on apricot base, violet red signal. PG-1771-M2: (PI-MIX-A, unknown x Valet sib) X PG-193-L2: (Herald x Valet sib). Bay View 1996.

ULTIMATE SUNTAN (Joseph Ghio, R. 1996). Sdlg. PF-188N. 14" (36cm), EM. Golden orange, overall red wash and veining; F. with red black signal. Eagle Eyes X PH-266K: (Las Lomas x Aftershock sib). Bay View 1996.