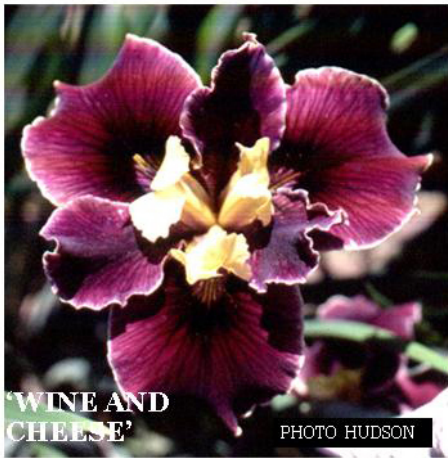




The Review

The Group for
Beardless Irises
Issue No 3 Autumn 2006



I. hartwegii australis

Photos: Richards

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News from the Editor

Unfortunately Raymond is not well and is unable to write for us this time which is a great pity because his letters are always interesting to read. Sadly he was unable to go to Sikkim in spring last year to see *Rhododendron griffithianum* in flower in its natural habitat. Looking through Newsletter 43 one day I saw he went to the Tsari Valley in 1999 but the Chinese authorities would not allow the party to enter this sacred place for Tibetan pilgrims, after the Indians had detonated an atomic device. History repeats itself in a different way.

No-one has applied yet for this rare job opportunity of Secretary of the Group for Beardless Irises. It is unpaid with no recognised days off and no paid holidays. I can't understand why it doesn't appeal to someone! Just no martyrs these days.

We have a new writer on Louisianas. I'm choosing the word 'writer' carefully because Jane says she is writing as someone who grows them but is not an expert. I say 'yet'. Growing is knowing and nothing is better than actually getting your hands dirty with soil and plants

This Review has lots of interesting material about PCIs, the Pacific Coast Iris which, as the name suggests, come from the west coast of America. The three main states where these species grow abundantly are Washington, Oregon and California. American growers and hybridisers are trying to stretch these boundaries to grow them successfully in areas both to the north and south. It is an interesting subject for us because the weather can be similar to ours and they should be fairly easy in many parts of Britain given a few essential growing requirements. Although we are a lot colder than at sea level in California, the species are usually to be found high up at the edge of the forests.

The photographs on the inside of the front cover give some examples of the way that the hybridisers in America are going. The AIS 2006 Award for the Sydney B Mitchell Medal went to Joe Ghio with 'Cozumel', a very vibrant gold PCI with heavy maroon veining and frilly edges on both the Ss and Fs producing a striking flower. From the yellows to the blues and 'Air Show' hybridised by Lois Belardi was the runner up. This is another heavily frilled flower in strong colours with distinctive veining. Very beautiful too. 'Wine and Cheese' and 'Santa Rosalita' rightly received Awards of Merit. These have the same tendency to more depth of colour radiating out from the signal area and less individual pattern producing a more striking flower which appeals to me.

I would like to say a special 'Thank you' to Jody Nolin who was so helpful in emailing me photos and articles that I wanted to read. Jody is the Editor of the Almanac: Society for Pacific Coast Native Iris (SPCNI). This is the year of the PCI in the *Review* and it was great to feel the enthusiasm that Jody has, not only for the American Group, but also for ours. Included are new articles written recently by growers here and from PCI country; some older ideas which seem as relevant today as they did then and the inevitable problems and their remedies. PCIs have been notorious for being difficult but all the solutions should be found in this *Review* or at least it should provoke a bit of healthy discussion.

I would also like to thank Jennifer Hewitt for giving her time and patience to proof read this Review for me. I owe her a new red pen!

The enclosed CD of photographs and articles.

On the CD this time are included many photographs of the PCIs from the Wisley Trials. Unfortunately due to a communication error many of the PCIs were lifted and discarded and we haven't been able to add them to the sales of the Spurias. There are also extremely good photographs of Spurias from the Trials. We would like to encourage a new feature of members' photographs of irises and gardens; your own gardens or ones you have visited. It is your chance to say it with flowers. They can be accompanied by an informative few words or an article. It would be an excellent way to get to know each other and how your garden is growing. It is an inexpensive way of sending colour photographs for everyone to enjoy.

Look for Alun's photographs of the Ensata Trial - Seedlings in Alkaline Conditions. There is a report from him discussing how it has gone so far. We would be very pleased if anyone who has naturally alkaline soil conditions could like to take part to compare results with him. Anyone with these conditions can get seed from Alun to start the experiment. We haven't included very much on the irises that prefer wetter situations this time but will explore more of them in the next edition. Galen Carter from Rowden Gardens, nr Tavistock in Devon is still able to provide helpful information about the laevigatas for anyone looking for this. We would appreciate any photographs for the *Review* next year.

Anniversaries are in the air and it is the 30th anniversary of the forming of the Group which was then called The SSJ; The newsletter of the Siberian, Spuria and Japanese Iris Group but which included all the other apogons. Many of you will have kept your allegiance to the Beardless Iris Group from the start and deserve congratulations on your membership. Many of us will just wish we had been aware of its existence and had joined all those years ago.

OFFICERS and REPRESENTATIVES of the REGIONS

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Volunteers needed for other Regions.

Treasurer's Report - Alun Whitehead

The figures for 2005 are given below.
Income and Expenditure for 2005

INCOME

Subscriptions	234.48	
Donations	10.40	
Seed Sales	137.85	
Plant Sales	153.50	
Interest		1.03
Sub-total		537.26

EXPENDITURE

Spring Newsletter 2005		-150.06
Review 2004		-39.21
Net change in Funds		347.99

At December 31, 2005 the balance at HSBC was £ 1,479.66

As for the 2004 Report, these figures are again flattering as the cost of the 2005 Review of £188.71 will be taken into the 2006 figures. Also not shown, is \$50 received to cover a subscription and donation which was held in cash at the end of 2005.

It is a bit early to prophesy the outcome for 2006. The sale of the BIS plants from the Wisley trials raised £222.50 of which we retain 25%. This was a very good total considering the small size of our group and allowed us to pass on £166.87 to the BIS. A big thank you to all those who took advantage of the offer. Of course, for those with any space there is a new offer on the BIS website, a list of the spurias available is given later. The year is likely to show that the subscriptions and income will cover the cost of the Newsletter and the Review. The chance to renew the subscription for several years has been taken up by many with the 3-year subscription being the most popular.

The only downside to report is our lack of progress with membership. This is hardly surprising as the group does not take a prominent position and therefore the vast majority of people are unlikely to have heard of the BIS, let alone our subgroup. It is very difficult to publicise effectively. Advertising tends to be very expensive and can be completely ineffectual. The websites still provide the cheapest method of getting exposure. We now have much better resources due to a few more years' experience and the kind assistance of Alison Cundy of the RHS Trials Office, so it should be possible to put forward a much improved website. I will be proposing that the Group should resume funding for this in 2007. However, a website by itself is not a panacea. The plant markets are changing and we, like everyone else, will need to stay alert to best meet the challenges and opportunities as they arise.

2007 SUBSCRIPTIONS ARE NOW DUE

Please send cheque, **£4.00 for U.K. & Europe; £4.50, elsewhere** payable to: ***The Group for Beardless Irises*** in respect of your subscription 2007 to: **The Membership Secretary, GBI, Aulden Farm, Aulden, Leominster, Herefordshire, HR6 0JT.**

If more convenient you can pay 2 or 3 years' subscription in advance

Please include your name, address, telephone number and email address. We will publish a list of members periodically. Please indicate if you would prefer that your details are not included.

BIS Late Spring Show/RHS Open Day

Anne Blanco White

This was a first-off affair of a type in which the BIS has never before been involved. The RHS thought it would be a good idea to have a serious iris event and laid on lots of advertising in advance. It does seem to have been very successful. The general idea was to lay on an introduction to irises and even to have irises on sale which is something we aren't generally allowed. So, the RHS mounted a stand with leaflets and a CD display of the various irises in the Trials to give some idea of the work they do with these plants and the support they give growers. The Show was backed up by commercial stands from Aulden Farm, Broadleigh Gardens, Claire Austin Hardy Plants, Iris Garden, Kelways and Sissinghurst Irises which had a splendid show of colour though mostly of pogons. Sales do seem to have been quite good. And, of course, there were informative exhibits of irises in art, books and the wide uses of orris in commerce. The decorative exhibits were good; really the standard does seem to be improving from show to show.

Naturally, most of the plants on the show benches were pogons as this time of year is a bit betwixt and between for beardless plants, but there were one or two interesting exhibits. Broadleigh Gardens had some PCIs though there were none on the benches. Still, there were some Evansias such as *I. confusa*. Some spikes of *I. 'Grazyna'* raised quite a lot of comment – it is a good blue – and there was a possible *I. japonica* imported from a nursery in China. An *I. lactea* var. *chrysantha*, spikes in a vase, was effective, but the exceptional one was *I. tectorum* 'variegata'. Sidney Linnegar had been growing this plant for some twelve years and this was the first time it had flowered which just shows that patience is very necessary for some irises. All the same, to have kept it going so long does him great credit because this species will succumb to virus infection at the first opportunity. There was, too, a piece of *I. ruthenica* which is a gorgeous blue.

Now, it's an interesting problem as to whether or not the rest of the irids count as beardless irises or not, but they don't seem to have beards and some of them are astonishingly iris-like. There weren't many: a nice vase of *Gladiolus tristis*, some *Melaspheerula ramosa* with flowers very like those of the *Angustifolium* group of

Sisyrinchiums. And some spikes of *Hesperantha falcata*. The trouble with this plant, as you would expect from its name, is that it opens its flowers after 6pm when they are beautifully scented. How do you organise its life style so that it will open in the morning? And can this be done anyway? Possibly the sort of treatment given to chrysanthemums so that they will flower out of season would help since just bringing to the show at the last moment could mean that it wouldn't have time to revert to proper behaviour. Anyone care to try? It would need a lot of thought and patience.

BIS Summer Show

Even after the glories of the Late Spring Show, this was a really good display too with the benches well filled. And to crown it all the Romney Towndrow and the Hewitt Trophies went to an LA 'Dural White Butterfly'. It was a magnificent spike though, typical for an iris, after the hot spell just before the Show it faded out overnight. This did cause a certain amount of bewilderment amongst the visitors, but I think we were able to explain satisfactorily. There were clearly going to be flowers around again on the Monday.

Unfortunately, the heat wave had depleted the beardless entries with a poor display of sibiricas though 'Shaker's Prayer' stood out and the colour range of the others was wider than usual. Similarly for the PCIs though again the colour range was good while a really unusual exhibit in the Species class was a pot of *I. chrysophylla* with several flowering spikes. Also in the species was a nice exhibit of assorted apogons together with a spike of *I. pallida*.

A recent development is what I can only describe as a 'garden' class - Division 1, Class 1, for the Insole Cup. This is for three spikes of different bearded irises plus three blooms of different bearded irises all supported by six spikes of beardless irises in two varieties in separate vases. These exhibits, of which there were several, were very effective and helped to show visitors that several varieties of irises can be grown in the same conditions.

The irids were represented by *Libertia grandiflora*, *Tritonia coccinea* and an unidentified form of *Sparaxis*. The class was infiltrated by a spike of 'Holden Clough' which is a respectable iris.

There was one minor complication in the "beginners' class". It is difficult for a really young contestant to appreciate that an adult may be just as incompetent when it comes to exhibiting for the first time! The disagreement was settled amicably, but it is something for show secretaries to bear in mind.

Pseudatas and modifications to the cultivars of *I. ensata*.

You have all, I hope, read Hiroshi Shimizu's article about the 'Eye Shadow Iris' in the 2002 BIS Year Book and looked at the photographs of some of his introductions. Now we have further modifications. The colour range in ensatas is pretty wide, but Japanese growers wanted yellow shades as well and the only way to get these was by using *I. pseudacorus*. This wasn't so very difficult in itself though it is not surprising that only some forms of pseudacorus would work successfully and even then the plants were sterile. So our old friend colchicine was brought in again to make the plants tetraploids so that they could be hybridised with each other which would make embryo culture unnecessary. One of the problems with wide crosses has been that the

second and later generations showed a marked tendency to return to the original pod parent. Well and good: with any luck this tetraploiding will work effectively over future generations without the seedlings favouring the original pod parent and so establish a new iris species. Evolution occurring in irises as you watch - just as it has done in the agricultural world.

But this isn't enough for the Japanese growers – they want some more interesting shades such as the orangey-brown of *I. fulva*. (And there are interesting possibilities from the bearded irises.) This is a trickier operation because the Louisianas are only distantly related to the Laevigatae while *I. ensata* and *I. pseudacorus* are fairly closely related within the Laevigatae. Really wide crosses are not easy to achieve. What the biotechnologists are trying to do now is to effectively graft *I. fulva* or, indeed, a bearded iris cultivar, onto *ensatas*. This is known as somatic hybridising and is a very tricky process, but it can work and some of the plants will grow. All the same, there is still the Holy Grail of the iris world to be discovered – a truly red flowered iris. The pigments generally found in the Genus are the Carotenoids b-carotene, lutein and neoxanthin which are present in *I. pseudacorus* while Anthocyanins such as cyanidin, delphinidin, malvidin, peonidin, petunidin, occur in all the blue-purple-reddish laevigatae. There is no trace at all of pelargonidin which could offer a true bright red. Keep watching, though – the biotechnologists are working on it.

Ref: Eye Shadow Iris. Hiroshi Shimizu. *2002 Iris Year Book* pp.104/5, 109
Advances in Breeding of Japanese Garden Iris. Tsutomu Yabuya, Noriko Yoshiharo, Kouichi Inoue, Hiroshi Shimizu. *Floriculture, Ornamental and Plant Biotechnology* vol.1, 2006

The London Season

Luckily we started the year with a good deal of rain and in general the weather was dull and cloudy which meant that the growing season started fairly late. The Evansias did well and as the rain was more intermittent during their flowering season there has been a reasonable seed set. The foetidissimas though seem to have been on strike since I brought them up from Sussex. It is probably inevitable that the run-of-the-mill plants have set seed well, while only one plant of my specials has done nicely. All my sibiricas were in need of TLC though one plant did adequately while the spurias did surprisingly well, but reckoned that the serious drought which had set in by the time they were raising their spikes justified not setting any seed.

The real fun started in late August after some rain returned to the area and it became possible to persuade a fork into the ground. A lot of plants had to be dug up, potted up and transferred to a new garden. And at my age they've got to get into the swing again pretty quickly. I don't like the look of the new soil and I think I'll add some nice mycorrhizals and see if that helps. There's going to be a problem saving rainwater too because you can't tap the down-pipes of a five storey block of flats. Well, it's all good fun and I just hope for plenty of winter rain.

Anne is the Ensata Specialist. If you have any queries write to or email Anne with the questions. Her addresses on page 3. Anne is still our secretary but must give up the position very soon. Would anyone be available to take over, please?

Louisianas - Jane Cole

I have volunteered to write on Louisiana Irises, not as an expert, but as someone who is growing them experimentally.

I first saw them in 2001 in Mt Toma Botanic Gardens in the Blue Mountains, Australia. It was a couple of years more until I realised what they were. I bought the book on Louisianas and discovered I had been growing one for years.

I. brevicaulis had been thriving under a Victoria Plum tree. It nearly died when I moved house, it hated the alkaline soil and diminished to two small pieces. It recovered when potted up and is now back to a sizeable clump.

My next Louisiana was 'Black Gamecock' from Claire Austin. Then, of all things, Louisianas were on offer from Thompson and Morgan! This got me off to a good start, but realising they were not going to grow in my garden, I grow them in large plastic tubs with a reservoir in the base. How are they doing? They are delightfully thuggish, increasing rapidly and producing a lot of leaf. 'Black Gamecock' has been split into two tubs and a piece given away. They spent the winter in a frost free greenhouse, except for half 'Black Gamecock', *I. brevicaulis* and *x fulvala*, which were in an unheated greenhouse. All have survived well. They are now (May) out on a sunny patio and showing buds.

I would be interested to hear of other people's experiences with Louisianas. I have since discovered several people grow one or two. They are a well kept secret.

Please get in touch with Jane to discuss your interest in Louisianas.

Mrs P J Cole, 27 Woodbury, Lambourn, Hungerford, Berks RG17 7LU

Hybridising Beardless Irises - The way ahead

Philip Allery

I cannot recall any previous period during my thirty years' membership of the BIS when it has been so difficult to comment on the future of hybridising beardless irises. Changes in lifestyle, both housing, family income and recreation, have resulted in a tendency for smaller gardens which with modern designs leave far less space than seedling trials normally require to give informed selection for introduction. Family activities have also changed, with more opportunities for holiday travel abroad and less time given to the home garden routine which was in effect a stress relieving therapy. We now appear to have little time to pause and reflect on the life we lead.

Add to this accelerated global warming with its imponderable impact on seasonal weather conditions and we are facing a challenge which calls for a careful analysis and re-think of our future hybridising aims.

With domestic and social change very evident and global warming now an established fact of life is it not time we all gave serious thought to producing cultivars resistant to the growing conditions we may expect to experience?

The concern this year has been the extreme variation in weather conditions

from month to month. Having accepted that hybrids are generally hardier than their species counterparts decide on your plan of action during autumn and winter months and spend time choosing potential parent plants with excellent pedigrees. In due course ensure that they are given ideal growing conditions and TLC throughout their growing season. One precautionary step we can take in future seasons is to collect and store dry pollen from selected plants as it matures. Carefully store or freeze it depending on the immediacy of its planned use, but do not collect it or use it in a damp state.

I am not despondent because despite these uncertainties there are so many exciting new avenues to explore. Interspecies hybridising has reached such a point that new areas of work merit our involvement. How far can we progress with different species and their cultivars? Tony Huber of Canada has shown what can be achieved with *I. versicolor* crosses with *I. ensata*, one of my current interests and work with Louisianas is another.

Sharon Hayes Whitney of South Harpswell, Maine is producing shorter Japanese Irises; Dr Tomas Tamberg of Berlin and Willy Hublau of Belgium, both staunch supporters of the BIS and this Group, are introducing many attractive new cultivars. This is to name a few more prominent hybridisers at random. There are many more, some of whom I have had the pleasure of meeting.

In conclusion I offer a few suggestions, none I fear original. With smaller gardens it appears obvious that the taller cultivars might benefit from a reduction in height. In some circumstances a slight loss of delicacy in bloom or structure of the plant may be justified to gain resistance to more severe weather conditions by conversion of diploid plants to the tetraploid state. This is a point to be watched when selecting parents, but both must have the same chromosome number. Alternatively is it possible to breed more beardless irises which are suited to indoor cultivation? The answer lies with you.

Members with young children will find that in an excursion into the wider world of Iridaceae of which the Iris comprises the largest genus and possibly the most complex, they are likely to discover additional plants which younger members of their family will find attractive and easy to cultivate, e.g. *Belamcanda chinensis*; *Dierama pendulum*; *Libertia grandiflora*; *Schizostylis coccinea* and the common forms of *Sisyrinchium*. They will delight you all in their profuse bloom and readiness to set seed.

Your officers have much more experience of some of the fourteen series of beardless irises than I have so I have invited them to add their comments.

I plan to prepare a report on germination of hand pollinated seed of *I. lactea* x various spuria cultivars donated by Dr Charles Jenkins of Arizona very shortly and will contact members who have taken part in this exercise. Above all "have fun" and enjoy your garden. With best wishes for 2007.

Philip would like to keep in touch with all friends old and new to discuss cultivating his favourite flower—the beardless iris. Phone him 01922 459397 or email Philip at philip.e.allery@btinternet.com or write to him at 199 Walsall Road, Aldridge, Nr Walsall, West Midlands WS9 0BE.

Ensata Lime Experiment - Progress report

Alun Whitehead

When we left this experiment in the spring newsletter, five mushroom containers had been filled with composted green waste to which the following quantities of garden lime had been added.

The containers below are named similarly on the accompanying CD.

Garden Lime - gms	Equiv per sq. metre - gms	
A	475	6783
B	250	3570
C	875	12495
D	300	4284
E	775	11067

The packets of garden lime used were labelled 53% Calcium Oxide and suggested that 550g should be applied to correct very acid soil and worked into the top 4" (10cm) of soil. The compost in the containers was about 3" deep. As you can see from the table, the rates applied to the 9"x12" containers (22.5 x 30 cm) were of an order at least 6 times greater than this and at the most extreme 22 times greater. From the photos on the CD, you will see that it was only batch C at this extremely high lime content that has so far shown the clear signs of lime intolerance which were expected. Batch E shows some yellowing of the leaves but the plants have grown evenly.

Let's go back and see what has happened. After sowing, the containers were moved to a bench in a polytunnel and watered regularly. Our water is about neutral (pH 7.0). So a question arises, can ensatas tolerate lime if the irrigation water is not limy? It was very noticeable that the seedlings in C started to show signs of poor growth relative to the other containers during the hot July when it was difficult to keep the pots in the polytunnel watered. Initially, I thought container C had become too dry and moved it to make sure that the sprinkler was giving it its fair share. So did the alkalinity rise when the compost was drier? Another question arose; was the lime being washed out of the compost? The sprinkler system works by giving a very gentle rain for an hour at one o'clock each morning during hot spells (if only Nature could learn this habit!) If the lime was being leached from the containers, I would have expected a little white stain/deposit underneath them: none was present. It is very hard to determine the actual pH of the current compost. The digital meter I have rarely shows any reading other than pH 7.0 even in extreme cases and I have never found one to work reasonably. With universal indicator paper it is a matter of determining between different shades of dark green and this can be tricky. If you water the compost to get more moisture on the paper and a better reading, you end up with the reading for the added water and not the compost.

So what is the next step? You will see that there is some slight yellowing of the leaves in all the containers (not just C & E) and this is due to the reduction in watering in the polytunnel. Watering at this time of year is only done occasionally. To ensure that the containers don't dry out completely (it can happen when some plants are kept under cover), I have left them outside to enjoy a few days' rain. There is no point pricking out this size of plant which is about to go dormant. Accordingly, they will be left to the spring. Once new growth starts, a selection of the seedlings—mainly from C

& E— will be transferred for growing on in a similar mixture. It could be that the reaction to lime may affect them over the winter and that they will not survive. However, I feel that the larger seedlings are probably past the stage of relying on the nutrients in the seed capsules to sustain their growth and that there must be a good possibility that they have acclimatised to their growing media. Time will tell. I would especially like to see the results for PCI seed treated in the same way.

Southeast Report - Olga Wells

As our editor asked for writings themed on PCIs, my piece will be rather short this autumn and won't add much to what was said last year. Two hot dry summers and not much rain during the winter in between have affected my own PCIs rather disastrously. Even those still grown in pots and therefore getting some water have not thrived all that well. The ones planted in light shade in the garden have dwindled back, since the plants providing the shade have sucked every bit of moisture they could out of the soil. 'Big Money' still holds its own and does pretty well considering the conditions but it is growing at the edge of a path and no doubt gets its roots underneath and enjoys any run-off that is to be had.

Some of the plants in the Wisley Trials were not looking too good either but those that had flourished flowered pretty well but then they did receive waterings by the gardeners there.

Up on my neighbour's allotment it was quite a different story. He has long established clumps of PCIs, some of them grown from seed and some were ex-trial plants. They grow in a border shaded by small fruit trees and a blackberry. The soil is heavier; his is clay-based rather than a sandy loam such as mine. Both his and my soils are more or less neutral but the extra water-retention properties of the allotment have obviously agreed with his PCIs. If and when I plant any more at home I shall, along with the compost, add some water-retaining crystals. I have tried this before with Siberians and it does seem to help quite a bit. One of his seedlings was selected for trial and when I dug it up during the first week of October there was some new root growth but not a great deal. Since that time we have had a great deal of rain and warm temperatures so maybe the PCIs everywhere will have a chance to catch up. Someone I know who gardens on Bagshot sand dug up his PCIs in the spring, contrary to popular advice, potted them and stood them in shallow watering trays where they proceeded to grow healthy root systems. Whether he then planted them in the autumn I do not know.

Briefly, with regard to some of the other beardless I grow, the spurias that flowered last year failed to do so this summer and vice versa. It would appear that the dry seasons are not allowing them to put on enough growth to make them flower well every year but they manage it in alternate years at the moment. Some of the Siberians on the allotment did well. Newly planted large clumps in the garden had to have cans of water thrown over them periodically in order to keep them from keeling over. A visit to Wakehurst Place at ensata time meant we saw some lovely Japanese irises growing as they should, in a boggy dell. Well worth the journey to see them.

Pacific Coast Irises - Philip Jones

Due to illness the last year has been rather a lost cause for gardening and for other things. I have moved from Birmingham to St Mary's Monastery, Kinnoull, Perth, just above the famous Branklyn Gardens. Those of you who have visited the gardens will appreciate that this is a very good move for a plant lover to make.

My irises made the move north at the beginning of October and now reside in part of the monastic vegetable garden. The brother gardener put them at the very top of a slope so they could be well drained. And this reminds me to remind everyone how important drainage is for Pacific Coast Irises. Recently I was asked why these irises never survive for some very talented gardeners. Is there some mysterious disease that they succumb to? I cannot find any mention of diseases in the important books on these irises by Cohen and Lenz. It seems to me that drainage is the main issue here. I believe that the reason I have never had a problem with Pacific Coast Irises is because I have always liked to grow lilies and most lilies have roots below the bulb and also on the stem immediately above the bulb. So there may be something like six inches of soil between the top of the bulb and the surface and even below the bulb we are looking for good drainage. My natural tendency has always been to heighten the flower beds and I also put quite a lot of compost from horse stables spread over the surface in spring. I think that while this helps to retain moisture it also opens up the soil so it does not clog.

My first Pacific Coast Irises were planted in 1978 at the foot of a yew tree hedge in Chawton, Hampshire, and grew happily there for many years. This must be a dry and acid spot but some still survive even after attempts were made to transplant them.

Some years ago I mentioned that I had divided irises and gave them to about ten people and that few of these irises survived. This was a very wet winter when The Organic Gardens east of Coventry lost a number of trees due to flooding. The finger of suspicion, therefore, points to bad drainage.

I like to grow other things among the irises like tall grasses, dierama with the thistle foliage of certain forms of eryngium beneath, and, of course, some lilies. These flower later than the irises. Many lilies are rather temperamental and for various reasons - e.g. slugs - may not survive but the irises should flourish.

The only other matter I have to report is that I have received recently a packet of seed from Joseph Ghio's nursery which I ordered early in the year. I thought my order had gone astray but I think he must only send out seed that is fresh. However, it is like a new beginning. The irises I have now are the remnant of all that I have grown in the past. Rather than trying to cross plants it struck me it is also important to begin again with a new range of colours and forms - Pacific Coast Irises have such a wide variety. I would be surprised if all these hybrids survive here because some of the species that do not do well here may be part of the hybridising process in the west coast of America. However, I am confident that in two years' time something that has not been seen before will be growing on the upper slopes of our vegetable garden.

Philip is the PCI Specialist. Please write to him for any help with growing these beauties. Fr Philip Jones, St Mary's Monastery, Kinnoull Hill, Perth, PH2 7BP.

Picking Parents with Potential - Jennifer Hewitt

If you haven't already been grabbed by the lure of creating your own unique irises, then maybe 2007 will be the time to start. Looking at your plants as they begin to flower, you may think that putting pollen from A onto the stigmas of B would be a bit of fun and if you get a seedling combining the best qualities of each, it will be something you'd like to have, whatever anyone else may think of it. Go ahead. The main reason for hybridising is that it's something you enjoy doing, and there is nothing like seeing your own seedlings blooming for the first time. Beginner's luck may be with you. Fame, though probably not fortune, may result, but while we'd all like to raise a plant that gains the highest awards, we go on making crosses because we are curious. And optimistic!

In fact, with beardless irises the scope is tremendous, as there are so many different groups and some have hardly been tried. Moreover you're almost certain to get some good garden plants. When you want something a bit more special that forward planning becomes helpful, if not essential, but from the very beginning it is worth thinking about your selection of parents so as to try to avoid disappointment.

Just to start with one criterion: 'good garden plants'. It hardly needs saying that they are healthy, grow without a lot of cosseting and increase at a reasonable rate or better, and produce plenty of flowers. You will probably have colour preferences and may think of these first, but don't overlook other qualities of potential parents. It is unfortunately true (most of us have to learn the hard way) that poor characters are more readily passed on than good ones but of course the goodies do win too. So don't put together, for example, two weak growers. If they have lovely flowers but struggle to stay alive, find a really strong grower with some points in common as a partner for each weak one, don't expect to realise your aims in the first generation but plan for intercrossing the seedlings, or back-crossing to the strong parent, and you may regain the colour you're trying for.

Colour is a lottery, to an extent, because of the mixture of genes especially in groups which have been much worked on. Crossing two irises in the same colour range may not give you 100% in that range; what's in the parents' ancestries? Red + white will give you pink in your paintbox, but crossing a red iris with a white one will probably give you a red or two, possibly a white, and the majority will be violet – unless pink happens to be lurking as a recessive character in both parents but even so pinks will be in the minority at best. You can find out more about dominant and recessive genes in iris literature, though information about most beardless is scarce as far as I know, and I can't tell you whether what is written about bearded also applies to beardless. I feel it *should* be the same for all. Is there a member who can write for the next *Review* and enlighten us?

So ideally top of the list are two healthy, vigorous plants which flower freely. Then think about the form of the flowers, and go for your own preferences. If, for example, you like siberians with lots of smaller flowers, go for them, but if you're aiming for average height you will really need 2/3 terminal buds and 2 on each branch (2 of those would be good) to make a good show and have garden value: also, falls need to arch downwards and have reasonable breadth so plenty of

colour is visible from a side view, and the stems must be tall enough to carry all this and give a well-proportioned plant. But if you want to produce plants for the front of the beds, say 6-18inches/15-45cm. (and we could certainly do with more of them), 2-3 terminal buds may be enough as long as there is a generous supply of stems on an established plant, and flaring or only slightly arching falls would be more suitable on plants mainly looked at from above.

Rather similar criteria apply to Japanese Iris (*I. ensata*) cultivars, whether your preference is for 3-fall, 6-fall or multi-petalled flowers. They already come in a range of heights though I think there are few, if any, really short ones (please write to the editor if I'm wrong). However, I feel the flower sizes may be too large to make elegant dwarf plants, so it could be interesting to try downsizing flowers as well as stems. A group where shorter ones would be welcome is the spurias – there are a few, and *Iris kerneriana* is valued for its 24 inches/61 cm. height with flowers in good proportion. Most modern cultivars seem to be much taller than this so would be placed towards the back of a planting of mixed perennials and the flowers need to be large enough to make their impact from a distance. Shorter ones would need to be looked for and crossed together if the aim was front-of-the-border plants. *I. graminea* var. *pseudocyperus* at 12 inches / 30 cm could be a useful shortie. A random thought: I wonder if anyone has tried to get the lovely greengage scent of *I. graminea* combined with the height of var. *pseudocyperus*? Those of us with creaky knees would be grateful not to have to bend so low!

Pacific Coast Irises are very rewarding for their readiness to grow in most conditions other than alkaline ones. There is scope for selecting parents with some tolerance and working to increase this which would widen their appeal further. The same is true for Japanese Irises; a topic well covered in the Autumn 2005 issue of The Review. There seems to be a tendency for new PCIs to have only terminal flowers (again, I may well be out of touch on this) and of course their short stature favours this. Using *I. douglasiana* to provide more flowers on longer, branched stems would probably lengthen the flowering period, but the stems would also need to be strong enough not to flop onto the soil.

Repeat blooming and remontancy (the period between first and later blooms is shorter in repeaters) can show up in most beardless groups. Having worked on this with no success in a cold garden, I've had the pleasant surprise of a couple raised with no reblooming in mind doing just that in warmer places. I suspect there may be more irises that could be used for this trait than are currently classified as such, but do take the conditions in your garden into account.

If the fancy takes you to cross two irises from completely different groups, seeds will probably be few but the results can be interesting to say the least. They will very likely be sterile and therefore a cul-de-sac if you are using diploids. To progress you will probably have to produce tetraploid forms with 4, not 2, sets of chromosomes, by treating seedlings with colchicine. This is advanced stuff and not for most of us, and sterile plants do have some advantages: they may well have hybrid vigour and won't seed about, both of which can make them valued garden plants.

To sum up, having decided on the group or groups you want to work with, assess potential parents for health and vigour to give yourself the best chance of

raising worthwhile garden plants. Then select from the best seedlings for colour and form, height, branching and all round desirability. They will probably give you clues for later generations, whether to intercross them or bring in characters from outside, and every year should bring you renewed pleasure.

Something to remember, if you are embarking on this for the first time, is that most beardless irises are very easily pollinated by insects because the style arms, and therefore the stigmas, lie close to the fall hafts. It doesn't need a large bee to collect pollen en route to the nectar and then deposit it on the stigmas of the same and other flowers. So open the buds by hand when they're almost ready to unfurl and remove the falls. Also collect pollen by taking the anthers while they're still closed (no pollen grains visible) and let the sacs open gently in a dry, not too hot, place. Then apply it to the stigmas, the little triangular flaps beneath the style crests, when they have curled down slightly to expose their sticky upper surfaces. Dry, not too hot, days are the best; don't waste time and pollen when the weather is wet.

You can get a start by getting seed offered through the GBI or BIS, choosing parents which you hope carry the characters you are aiming for. As most is open pollinated the pollen parents aren't known but may well be good and you will have seedlings to look forward to before your own crosses start to bloom. It is amazing to think how much is contained in a single seed, and fascinating to find out.

Jennifer is herself a very accomplished hybridiser and our Sibirica Specialist. Jennifer also proof reads and deals with the registration of irises, not to mention her other duties with the Hardy Plant Society, so she doesn't have a lot of spare time. However she is still pleased to help our members with any queries if you write to her at 'Haygarth', Cleeton St Mary, Cleobury Mortimer, Kidderminster, Shropshire, DY14 0QU. Please include a SAE.

American Hybridiser - Sharon Hayes Whitney

Sharon served her apprenticeship with the famous hybridist and grower Currier McEwen, making planned crosses particularly with ensatas. An experiment that was started when Currier was still alive was the Deep Freeze Project. One of the main objectives was to improve the hardiness of ensatas while helping to provide Russian growers with more modern cultivars. The seed was collected by Nina Alexeeva from various locations in Russia and sent to Dr. Waddick who generously shared it with a few growers, one of them being Sharon who lives in Harpswell, Maine, and two others that she knows are also helping with the experiment—Phil Cook from Vermont and Jill Copeland from Michigan (cold zone 5).

Plants grown on from these seeds will be evaluated as a potential source of new genetic material for the Deep Freeze Project. In 2007 selections and crosses will be made with modern hybrids. If anyone is interested in helping with this experiment, please let Sharon or Alun know and Sharon is happy to supply seed next year for the 2007 seed exchange.

Sharon says "We hope to continue to move some of these genes into the modern hybrids. I made some interesting crosses this season. Because of the wet weather, I had the best luck with the ensatas that repeated because August and Sept were so much drier and sunnier than June and July."

Look for her photographs on the CD taken by her husband, Don Clifford and David Heuss her brother-in-law. Also look for 'Gingham Geisha' just introduced by Dennis Hagar. Sharon's website address is www.earthheartgardens.com

Can We Change Our Parents? Alun Whitehead

Perhaps it is in the desperation of youth or in rebellious adolescence that such a thought might occur. It occurred to me somewhat later in life and at Wisley of all places sparked by an article I had read in *Spuria News* (Summer 2006) by Jim Hedgecock. Towards the end of the article, Jim discussed the Crow Wing curse. It sounds more like something from a vintage horror movie rather than something affecting *spuria* cultivars.

Jim Hedgecock pointed out that 'Crow Wing' was a popular older, dark *spuria* which had been used in breeding. Unfortunately, it was not a good grower, slow to clump and this trait has been passed on to its descendants. Its registration details are:

CROW WING

(W. Ferguson, R. 1971). Sdlg. 71-7-D. SPU 40" (102 cm) L.
Dark red-brown-black self; small signal. Redwood Falls x unknown sdg.
Ferguson 1972.

A trial of *spurias* ended this year at Wisley and I thought it would be interesting to consider the effect of the curse. Firstly, let's start with a success: the irresistible 'Falcon's Crest'.

FALCON'S CREST

(B. Charles Jenkins, R. 1989). Sdlg. C17-75. SPU 41" (104 cm) M.
"S. brown; F. yellow, edged brown, brown lines converging toward signal area. Highline Honey X Crow Wing. Shepard Iris Garden 1995. "
You will find a photo on the CD, but Clive Russell who stocks this iris can not meet the demand it generates because it is slow to clump. You will have to talk nicely to him! However, all plants survived, flowered well and deservedly received an AGM.

The next was the deep chocolate brown 'Mary's Beau Brummel'; another plant which is a show stopper. Unfortunately, one of the three plants had died, another was showing very weak growth and the third did have a few flowers, but it was not a good garden plant.

MARY'S BEAU BRUMMEL

(E. McCown, R. 1985). Sdlg. 80-15. SPU 36-48" (91-122 cm) M.
"Ruffled deep brown, no visible signal. Adobe Sunset X Crow Wing.
Cordon Bleu Farms 1986. "

It has been given the benefit of the doubt and is expected to be replanted from fresh stock in the new trial.

The final two irises, 'Gold Mania' and 'Missouri Iron Ore', died out completely.

GOLD MANIA

(B. Blyth, R. 1989). Sdlg. S265-2. SPU 42-45" (107-114 cm) M.

Pure rich gold. Niswonger 14-78: (Ferguson dark sdlg. x Butter Paddle) x Niswonger 14-77: (Ferguson dark sdlg. x Crow Wing). Tempo Two 89/90

MISSOURI IRON ORE

(O. D. Niswonger, R. 1996). Sdlg. SP 5-94. SPU 42" (107 cm) M.

"S. dark purple, infused red; style arms purple, infused red brown; F. red brown, infused purple. Mary's Beau Brummel X Sultan's Sash. Cape Iris 1997."

We can't say definitely that it was due to the curse as other factors may have been in play and in both cases 'Crow Wing' was only one of the grandparents. However, it is suggestive and it would be interesting to hear how well these irises are growing elsewhere. For us at Aulden, 'Gold Mania' is continuing to grow well – fingers crossed!

The ease of checking the 'Crow Wing' offspring was made easier by the iris register being on line at www.irisregister.com. The registration details given in italics above were downloaded from there in seconds. I would like to thank all those who made this happen. If you are looking to research parentage it is invaluable. There is an annual fee of \$10 for using the facility. The details for some of the older cultivars are still missing and so for this reason and for someone who only wants to check an odd detail, Jennifer Hewitt, the UK registrar, will no doubt remain their first port of call. For those interested in Spuria cultivars, the Spuria Iris Society in the States has produced an Illustrated Checklist. We are obtaining a copy for our library, so please contact Brita, our librarian, if you would like to borrow it.

The Spuria Specialist is Alun who also has many other jobs but he is keen to help any members with any problems with their Spurias. You can email or write or telephone him. Addresses at the front.

Details of the spurias available from the Wisley Trial are given on the next page.

SPURIA TRIAL

Trial no	Cultivar	Breeder	Description
34	Barbara's Kiss	E. McCown	Reg. 1981 37cm S. violet (RHS 1 Opb 4/10) lightly streaked pale yellow; F. strong violet bordering orange yellow signal, veined brownish purple; ruffled.
3	Belise	Simonet	Reg. 1964 90cm blue-lavender self.
21	Belissinado	G. Corlew	Reg. 1988 86cm S. medium violet, veined deep violet; F. yellow, lighter toward edge, heavily veined deep violet, slight deeper yellow signal.
6	Driftwood	Walker	Reg. 1956 137cm chocolate-brown, with golden-yellow flush at base of S. and yellow glow radiating from a central deep-yellow stripe on falls which replaces the beard.
23	Evening Dress	Joseph Ghio	Reg. 1983 102cm S. blackish blue purple; F. blue purple with black sheen and slight yellow underglow at styles.
20	Frigiya	Georgi Rodionenko	Reg. 2001 110-125cm S. white; style arms pale yellow; F. white, narrow pale yellow centre stripe.
19	Kaibab Trail	F. Wickenkamp	Reg. 1984 94cm dark red, large full yellow signal.
32	Spuria Li-lacina		Reg. 1882 violet-blue with yellow signal
35	Lucky Devil	Joseph Ghio	Reg. 1987 91cm deep blue purple with black sheen.
29	Missouri Orange	O. D. Niswonger	Reg. 1998 107cm golden orange, F. with deeper golden orange signal.
28	Missouri Rainbows	O. D. Niswonger	Reg. 1996 102cm S. and style arms medium blue; F. medium blue, paling and becoming white at edge of yellow blaze.
30	Rivulets of Pink	O. D. Niswonger	Reg. 1995 107cm pinkish mauve, F. overlaid yellow in centre.
39	Sdg LG5056		100cm S. creamy-white, F. golden yellow.
15	Shelford Giant	Sir Michael Foster (1913)	200cm S. cream F. yellow with creamy edge.
14	Sunny Day	H. P. Sass	Reg. 19311 00cm bright yellow.

Plants for sale from the Trials at Wisley.
Iris available @ £3 each plus the actual cost of postage.

Please contact Alun Whitehead for further details or simply send him your order. Typical postage will be 8 plants for £5.00 and other numbers pro-rata. The descriptions shown are taken from the iris register.

As a brief aide-memoire spurias enjoy a well prepared sunny flower bed with reasonable drainage (incorporate as much well rotted compost as you can manage). They are meant to prefer alkaline soil, but do not let that put you off trying them if your soil is acid. The bearded irises are generally adaptable and without better knowledge, it seems a reasonable assumption that the spurias should also be as accommodating. Older ideas that they were likely to be poor flowerers in the UK are being dispelled. At Aulden we even grow one under the gentle shade of an apple tree with good results - so don't be afraid to experiment—these are generally very robust plants.

A short mention should be made about the photographs from the Wisley spuria trial. As you will see, this year a few cultivars went prematurely dormant—even whilst they were flowering. These are the straw coloured leaves. If this happens to you—current advice is to refrain from watering and trim the leaves to improve appearance. This is the first time it has happened at Wisley. Several rhizomes were checked and found to be healthy (photos on CD), but, the root growth was poor. Was it the dry winter? The spurias' growth cycle starts in autumn and anecdotal evidence is that they possibly enjoy a good soaking from autumn through to spring. The only occurrence at Aulden which is similar is when *Iris orientalis* (syn. *Iochroleuca*, the old-fashioned cottage favourite) was growing in unimproved clay. During a dry summer after a few years of good performance, it showed similar stress and never came back. The explanation at Wisley is likely to be more complex—the soil is certainly much better and it didn't stop them flowering. All the rhizomes lifted from Wisley for sale are healthy and growing strongly in their pots.

From the aesthetic point of view, the photos show that the spuria flowers are held high up on the taller varieties with plenty of foliage below. In a border, these are more suited to the back or middle with their bases screened by smaller plants. A dramatic effect can be obtained by coming face-to-face with a tall spuria at close quarters, but many of these will need their foliage trimmed after flowering in late July—so the resulting 'gap' needs some thought.

Because of their cycle, the spurias are best planted whilst the ground remains moist and there is still plenty of time to establish before they go dormant. Ideally autumn planting is preferable, but sometimes the ground is not prepared and over-wintering in pots and early spring planting has produced similar results.

Do have a go and let us know how you get on.

SEED LIST 2006 Alun Whitehead

First let me thank Philip Allery for organising the seed list for the last 2 years. His enthusiasm for the beardless irises is truly encouraging. I am sure that he will still be delighted to hear from you.

We are very fortunate in having the benefit of Jeff Dunlop and Tony Huber who have a great deal of experience in raising plants from their own crosses. You have the opportunity to share in their work – the only thing that we would ask is that you give feedback through the Review. This way we can all gain from the knowledge and it is a way of saying thank you to them for their generous support.

Whether you want to raise new irises or stock the garden with attractive flowers it is good to try something a bit different. The raiser of seeds always has an advantage over someone reliant on existing cultivars – like *Astrantia* 'Hadspen Blood' – just right to fill a missing colour gap in the borders. One feature which appeals to me is the planting of a Harmony Bed. The idea first came when I saw several sibiricas of similar small size and habit like 'Mrs Rowe' and 'Enid Burgoyne' planted near one another. I thought what a good picture they would make all together – all of similar size and shape – but all with subtle differences. As a seed raiser, you have the opportunity of creating your own Harmony Bed. The seedlings from a cultivar usually vary but still retain sufficient characteristics to show their common origin. By careful roguing, you can create your own subtle composition.

Thank you to all the donors who support the scheme and to those that participate. Happy sowing.

SEED LIST AUTUMN 2006

THE GENUS IRIS: SUBGENUS LIMNIRIS: The Beardless Irises

SERIES TRIPETALAE

06/001 *setosa* (ex SIGNA 01-Q353 - from 'Arctic Rebloomer') JN US

SERIES SIBERICAЕ: 28 CHROMOSOME HYBRIDS

06/002	x 'Lake Seneca'	JN	US
06/003	x 'Lilting Laura'	JN	US
06/004	x 'Mabel Coday'	JN	US
06/005	x 'Melton Red Flare'	TH	UK
06/006	x 'Oban' (TET)	TH	UK
06/007	x 'Purple Sand'	JN	US
06/008	x 'Silver Edge' (TET)	TH	UK
06/009	x 'Soft Blue'	AW	UK
06/010	x 'Where Eagles Dare'	JN	US
06/011	x 'Ami No Kaze'	SHW	US
06/012	x 'Gossamer Breeze'	SHW	US
06/013	x 'Little Centennial'	SHW	US
06/014	32" yellow x 18" yellow (TET)	JBD	US
06/015	'Dirigo Lavender Fountain' x 'Charming Billy'	JBD	US
06/016	28" rasp. pink x 34" lavender	JBD	US
06/017	24" rasp. pink x 'Impression'	JBD	US
06/018	'Dirigo Lavender Fountain' x 'Impression'	JBD	US
06/019	28" red x 'Kiss The Girl'	JBD	US

06/020	28" red x 28" rasp. pink	JBD	US
06/021	x mixed	PA	UK
05/008	x 'Little Blue'	AW	UK
05/010	x 'On and On'	AW	UK
05/012	x 'Snow Prince'	AW	UK
05/014	x 'Swank'	AW	UK
05/084	x 'Dark Desire'	AW	UK
05/086	x 'Nottingham Lace'	AW	UK
05/087	x 'Shaker's Prayer'	AW	UK

SERIES CALIFORNICAE - HYBRIDS

06/022	red/white forms	PJ	UK
06/023	blue	PJ	UK
06/024	red	PJ	UK
06/025	violet	PJ	UK
06/026	white	PJ	UK
05/089	mixed forms and colours	PA	UK

SERIES LAEVIGATAE: HYBRIDS

06/027	<i>ensata</i> x 'Aldridge Visitor' 6f	AW	UK
06/028	<i>laevigata</i> x 'Colchesterensis' 6f (few)	AW	UK
06/029	<i>ensata</i> x 'Darling' 3f	TH	UK
06/030	<i>ensata</i> x mixed	TH	UK
06/031	<i>ensata</i> mixed (3 & 6 falls species type white with light blue rims and wash.)	JN	US
06/032	<i>versicolor</i> ex HA-28	THuber	Canada
06/033	<i>versicolor</i> x 'Islands Cheer'	THuber	Canada
06/034	<i>ensata</i> mixed	PA/NPUK	
06/035	<i>ensata</i> 'Dirigo Pink Milestone'	SHW	US
06/036	<i>ensata</i> 'Dirigo Red Rocket'	SHW	US
06/037	<i>ensata</i> 'Easter Pastel'	SHW	US
06/038	<i>ensata</i> 'Ogi No Mato'	SHW	US
06/039	<i>ensata</i> 'Oregon Marmalade'	SHW	US
05/028	<i>ensata</i> mixed	AW	UK
05/033	<i>ensata</i> 'Gracieuse' 3f	AW	UK
05/101	<i>ensata</i> 'Crystal Halo'	AW	UK
06/040	<i>laevigata</i> (ex seedlings of 'Nuresagi')	PA	UK
06/041	<i>laevigata</i> (ex seedlings of 'Regal')	PA	UK
06/042	<i>versicolor</i>	PA	UK

SERIES SPURIAE - SPECIES & HYBRIDS

06/043	<i>klattii</i> (Ex SIGNA 01-M215 ex hort St Petersburg via Rodionenko and Waddick Lt blue to white)	JN	US
06/044	x 'Arts Alive'	AW	UK
06/045	x 'Betty Cooper'	AW	UK
06/046	x 'Blue Lassie' & x 'Red Oak' mixed by accident— Oops!	AW	UK
06/047	x 'Cinnabar Red'	AW	UK
06/048	x 'Clara Ellen'	AW	UK
06/049	x 'Color Focus'	AW	UK

06/050	x 'Custom Design'	AW	UK
06/051	x 'Eleanor Hill'	AW	UK
06/052	x 'Highline Amethyst'	AW	UK
06/053	x 'Highline Halo'	AW	UK
06/054	x 'Imperial Bronze'	AW	UK
06/055	x 'La Senda'	AW	UK
06/056	x 'Lenkoran'	AW	UK
06/057	x 'Missouri Autumn'	AW	UK
06/058	x 'Redwood Supreme'	AW	UK
06/059	x 'Speeding Star'	AW	UK
06/060	x 'Sunrise in Sonora'	AW	UK
06/061	x white seedling	AW	UK
06/062	x yellow & white cv. – 5 buds	AW	UK

SERIES ENSATAE

06/063	<i>lactea</i>	THuber	Canada
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INTER-SPECIFIC GROUP

06/064	02-72 from <i>biversata</i> 'Tenue Royale' x <i>virginica</i> . 'Southern Wanderer'	THuber	Canada
06/065	<i>biversata</i> 06-20 dwarf 25cm – Falls red, Stds pink, stylearms white	THuber	Canada
06/066	<i>biversata</i> 'Laurentian Sunset'	THuber	Canada
06/067	<i>biversata</i> 'Tenue Royale' x <i>versicolor</i> 'Krieghoff'	THuber	Canada
06/068	<i>biversata</i> (<i>versicolor</i> MR03-13 x 'Belle Promesse')	THuber	Canada
06/069	<i>hookeri</i> x <i>ensata</i> F3	THuber	Canada
06/070	x 'Jenny Joy' (x <i>robusta</i>)	JN	US
06/071	x 'Labraska' (<i>hookeri</i> x <i>setosa</i> 'interior')	THuber	Canada
06/072	<i>shrevei</i> x <i>robusta</i> 96-48	THuber	Canada
06/073	(<i>shrevei</i> x <i>pseudacorus</i> sdg select 00-014) x <i>ensata</i> mxd pollen	THuber	Canada
06/074	<i>versata</i> from 98-038 E x <i>ensata</i>	THuber	Canada
06/075	<i>versata</i> 98-85 4N Tetra	THuber	Canada
06/076	<i>versata</i> 4N Tetra	THuber	Canada

SERIES HEXAGONAE - HYBRIDS

06/077	x 'Bayou Bandit' – very very few	AW	UK
06/078	x 'Black Gamecock'	JN	US
06/079	x 'Cajun Sunrise'	JN	US
06/080	x 'Our Dorothy'	JN	US

OTHER IRIDACEAE

05/099	<i>Libertia grandiflora</i>	PA	UK
05/083	<i>Schizostylis coccinea</i> – salmon pink shade	PA	UK

Seeds are 50p per pkt. (includes postage)
Or 10 pkts for £4.00 (includes postage).

Please send your order on the enclosed form to Alun Whitehead and make the cheque payable to **“The Group for Beardless Irises”**. If members do not wish to have “substitutes”, a **“Not to exceed”** cheque is preferable. See seed order form.

Overseas members - please send your order and pay with a future subscription. If you live outside Europe, please check that you meet your country's import requirements.

Orders will be filled as they are received. Any seed in short supply will need to be “rationed”. Unless otherwise specified the seed offered has been collected in 2006. No responsibility can be accepted for the results as seeds are received from many different sources and it is not always possible to check naming accuracy. Please note that cultivars do not come true from seed and cannot be called by the parent's name no matter how similar they may look. Vegetative propagation is the only method of acquiring a named cultivar.

Please order by number and retain the Seed List for reference: some seed may only be identified by the number on the seed packet. Please list substitutes if acceptable, or tick the box if you do not wish any substitutes. All seed is obtained from members and sometimes the quantity is very small but we are delighted to receive all contributions large or small. Please send any amounts of spare seed next year.

Seed Donors

T Huber from Canada

(JBD) Jeff Dunlop - US

(JN) Jody Nolin - US

(SHW) Sharon Hayes Whitney - US

(AW) Alun Whitehead - UK

(PA) Philip Allery - UK

(PJ) Philip Jones - UK

(TH) Tricia Howard - UK

(NP) Norman Payne - UK

Very many thanks to all the seed donors for the time you have spent collecting, cleaning and then sending the seed for the seed exchange. It not only helps to raise revenue for the Group funds but more importantly it gives everyone the opportunity to raise new plants for their gardens or for them to use in future hybridisation.

Iris hartwegii australis as Parent

Richard C. Richards

Several years ago some wise guy suggested that the use of *I. hartwegii australis* as a parent might add some cold tolerant genes to PCI hybrids. The reasoning behind this suggestion was that, while this species is the southernmost species of PCI, being confined to Southern California, it is a species occurring in the mountains from 5,000 to 7,000 feet, where it gets considerable cold and snow in the winter. It survives that cold and snow. So it must have some cold hardy genes in its makeup.

The wise guy who suggested this was I.

I. hartwegii australis (*I. h. a.*) is not an easy species to use in hybridizing. Because of its location where spring comes late by Southern California standards (PCI bloom peaks in late March or early April in most of So. Cal., while *I. h. a.* blooms in early to mid June), attempts at hybridization with it involve the use of very late-blooming clones if local crosses are attempted.

The iris itself is a challenge for even professional botanists to grow outside its native range, so it is not likely to adapt to conditions in the gardens of Southern California or elsewhere. It may live for a year or two, long enough to produce a bit of pollen if the grower is lucky. What a magnificent challenge for those who like challenges, magnificent or otherwise! But very few accepted the suggestion, and nothing really happened.

It occurred to me that if this was such a magnificent challenge, and I was living in Southern California within forty or so miles of the stands of the iris, I ought to put my tweezers where my mouth is, so to speak, and try the cross myself. Me and my big tweezers.

In June of 2004 I gathered some pollen from the native stands, and brought it back to my garden. Only very late PCI clones were still providing an occasional flower, specifically 'Blue Sage' and 'Orchid Resprite' (O.R.). I set a pod on the former, and two pods on the latter, despite the lateness of the season. That fall I planted the seeds and in the spring I lined out the seedlings. The sole seedling of the cross of 'Blue Sage' x *I. h. a.* promptly died. But of the forty or so seedlings I lined out under shade cloth from the O.R. x *I. h. a.* crosses, one bloomed. It looked suspiciously like *I. h. a.*, not surprising at all.

A note on 'Orchid Resprite', the successful pod parent. This iris has a long bloom season in Southern California, starting often in late February and obviously going into late June. I grow a number of clumps of it, so I usually have bloom pretty much throughout this long period. It is mostly if not completely *I. douglasiana*, from selected clones including 'Orchid Sprite', and the form is mostly old-fashioned *I. douglasiana* narrow flower form. But it's a growing fiend.

As for *I. hartwegii australis*, it does not really clump in its native range, but sprawls out with a loose structure involving foliage that at best is half-erect. Not your ideal garden plant, even if you can induce it to hang around in your garden long enough to bloom.

This spring of 2006, most of the seedlings, now nice tidy little clumps, bloomed. They were all clumps, not sprawls. I have no idea if they are cold tolerant, since we don't get cold. It is rarely down to freezing in my formerly citrus producing area. But I did get some interesting unexpected results.

Aside from the fact I got a relatively large number of seedlings that were alive and mostly thriving in the second year, some unanticipated traits showed up. Most of the seedlings had good stems that held the flowers up. *I. h. a.* does have pretty good stems in wet years, but tends to sprawl in dry years. And I already mentioned the clumping phenomenon, another delight.

I got a fairly wide range of colors considering that 'Orchid Resprite' is lavender with a pinkish influence, and the *I. h. a.* pollen was from lavender clones. One surprising seedling was a color-enhanced version of O.R. Since O.R. was blooming a few feet away, I did not have to depend on my memory to know the colors were definitely O.R. coloration, but so much clearer and sharper. Indeed, most of the seedlings had much more vivid colors than *I. h. a.*, though most were in that color range. Most form was classic *I. h. a.*, narrow and charmingly wild-flower-looking.

Another surprising feature was late bloom. I should have expected that, but I had not thought about it. Because O.R. can bloom so late, I am not sure what the influence is here, but it would not surprise me if I have some seedlings that bloom in June every year. The next few years will tell. If the trait perseveres, there will be some late blooming clones to extend the PCI season. Put those alongside the very early-blooming clones that are being used in hybridizing by several other hybridizers, especially Garry Knipe, and we may be looking at six months a year of PCI bloom in some climates. I, for one, would love to look at that every year.

I am now in the process of attempting to establish whether these seedlings can survive. All my seedlings are subjected to watering once to twice a week, a procedure that causes traditional PCI growers to weep uncontrollably. Too much water, they say. No, I say. The PCI need to be able to stand up to heat and water, which the average gardener will give them in the difficult, interior climates of Southern California and indeed the whole Southwest. Plus the weather cooperated magnificently with 22 straight days of over-100-degree temperatures. That's much more excessive heat than we usually get.

Some of the seedlings are becoming permanently deciduous, but no more so than from other crosses not involving *I. h. a.* I do test seedlings with a certain kind of delicate brutality.

This last June I revisited the stands of *I. hartwegii australis*, which the Society had visited in a trek in 2002. In that visit few flowers were found since the area had been ravaged by several successive years of drought. But this last June, after several years of good rains, I found a hundred or so flowers in each of the areas where we had found one or two in 2002. The transformation was startling.

I collected some pollen to use back in my garden, where there were two flowers of 'Gravitas', blooming late. It has not done that before for me, but I have had it for only a couple of years. I set one pod, which produced thirty or so seeds. These will

be planted in the fall. It will be interesting to see what 'Gravitas', with its much broader form and different range of color, can do with *I. h. a.* pollen as an influence. So far 'Gravitas' has survived, and even thrived, in my difficult interior climate, as long as it gets considerable shade.

I'm not counting seedlings before they hatch, but I am intrigued.

This article has been reprinted from the American publication "**Almanac**", Society for Pacific Coast Native Iris, Fall 2006, Volume XXXV, Number 1, with kind permission from Richard Richards, the author and Immediate Past President of the Society.

If anyone is interested in joining the Society, please contact the Secretary-Treasurer, Terri Hudson. The annual sub is **\$8.00 + \$4.00** for overseas. Can also be paid triennially by Cash or Credit card online.

Send to **Terri Hudson, 33450 Little Valley Road, Ft. Bragg, CA 95437. Tel (707)964-3907. e-mail: irishud@earthlink.net**

If anyone would like to purchase a CD of over 280 PCIs compiled by Ken Walker the cost is \$ 9.00. Please email Terri at the above address.

An excellent way to keep up to date with new and old PCI cultivars.

Want some more specialised PCI seed source? Look up the Almanac for 2006 There are well over a hundred different seeds to choose, from garden hybrids open pollinated to hand crossed specials and wild collected species. You couldn't find a wider variety of specialised seed. The seeds are inexpensive and easily paid for by credit card once you are a member or pay everything at the same time by credit card.

Extracts from Successful PCI Hybridisers, Past & Present Mrs Marjorie Brummitt

"The possibilities for raising new cultivars are plentiful and I suggest that all of you can have a go. All you need is a little space to raise seedlings, to cross together those that you fancy and to select the best all the time.

PCIs are my special pets. There are a dozen or so species in this section, some have long wide foliage and stems which are branched, giving a succession of blooms to each stem, but with an abundance of stems to a clump which make a garden display over a decent period. Some are dainty plants with very fine foliage and rather smaller blooms.

Most of the species are worth a place in the garden but some of them only last a few years and then seem to pine for their native haunts and fade away. The species all intercross with each other freely, and so it gives the hybridist an easy opportunity to increase their vigour, improve the colour range, the form and substance of the blooms. It is easy also to some extent to control the growth of the plants. For instance, if two fine-leaved species, such as *innominata* and *fernaldii* are crossed the resulting seedlings will be fine-leaved plants suitable for the rock-

ery or alpine house, with dainty flowers in the colours from cream to yellow. The weakly seedlings will have died leaving sturdy plants which will thrive. Crossing *douglasiana* with *innominata* produced medium-sized foliage, the fine leaves of *innominata* reduce the wide leaves of *douglasiana*, making plants suitable for a border, and some of the stems have more than two blooms; a case for selection.

For the herbaceous border, the large leaves of *douglasiana* and *munzii* hybrids held their own amongst the other plants and usually have well-branched stems. The *munzii* species is not quite so hardy, but crossed with *douglasiana* it is almost indestructible, 'Rio Tulare' raised by Dr. Lee Lenz being a good example. It is one of the first to bloom in our garden and one of the last to finish, but it is a coarse plant. Dr Lenz's 'Pacific Splendor' is a forerunner of the wide-petalled round flowers in this country. I had the plant for a few years but it did not thrive here and died out, but I have many crosses from it, 'Banbury Princess' being one of them. And so there is plenty of scope for adding variety to these dainty irises."

Mrs. Marjorie Brummitt was one of the first hybridisers to continually produce many good cultivars and to show her PCI hybrids. Using mainly *Ii. douglasiana* and *innominata* she will be remembered for all the Banbury series some of which are still available today. In 1976 she won the British Iris Society's Dykes Medal for her hybrid 'No Name', a pretty soft yellow.

Bob Wise

Bob had exhibited TBs for over 40 years before becoming interested in PCIs. In 1986 he crossed plants from his garden with some of the named cultivars he had got from Marjorie Brummitt. With these he added a plant of Joe Ghio's called 'San Lorenzo' which had well-branched stems bearing large flowers but they insisted on lying along the ground. He said "I aimed to produce good branching on well proportioned plants"

"The resulting plants were a vast improvement on 'San Lorenzo' - some of them had good branching with up to five flowers per stem, and six seedlings were selected for trial at Wisley by the Joint Iris Committee. I was pleased with the quality of the plants and the small amount of space needed to grow them, which encouraged me to continue my breeding". Bob had been striving for strong branching and increasing the buds per stem to which all hybridisers attach great importance once they have started to achieve good results with flowers.

He called his series 'Pinewood' after the nearby film studios and had great success with them at the Trials. Unfortunately he is no longer with us to continue his hybridising work but some to look out for are 'Pinewood Dazzler', 'Elegance', 'Prelude', 'Amethyst', 'Poppet', 'Charmer' and 'Pinewood Sunshine'.

Lady Christine Skelmersdale

A name which one always associates with PCIs is Lady Christine and Broadleigh Nursery and all her many introductions prefixed 'Broadleigh'. There is a new one named in honour of her daughter-in-law Fenella which will be launched next at Chelsea.

"My interest began almost by mistake. Getting plants ready for Chelsea is always a nightmare and Lady Drewe of Broadhembury grew masses along the edges of her rhododendron beds in her garden in Devon and as they flowered at Chelsea time we

used to go and cut the flowers. As interest from our customers grew so we began to separate varieties and by the late 70's we bought her stock and started breeding in earnest.

Our flowers tend to be rather 'old fashioned' as we do not concentrate on flower shape or size but on general habit and floriferousness. We sell them as excellent and rewarding garden plants, not so much exhibition/competition plants. Many of the plants chosen for trial at Wisley have spectacular individual flowers but lack impact as garden plants. We look for large flowers with clear colours that complement our range and that flower for a long time, with the flowers held well above the foliage."

Peter Maynard is our present day hybridiser of interspecific crosses and the photo on the front cover shows the direction he is going and the extensive variation in colour and pattern he has achieved to date. He is always aiming for more flowers and more branching.

Joe Ghio. There are many more PCI hybridisers but not so many who have been interviewed about their future visions. However one who has produced an incredible amount of beautiful PCI hybrids is Joe Ghio.

"What is the Future of the PCN?" Joe's vision for the immediate future is to continue to produce clearer and better colours following the present day trends. He would particularly like to see more pink, a brighter red and the rarer blue flowers. "Multi-colored flowers with an array of rainbow blendings, wide signals, and a variety of veined patterns will be created. The stems will become ever more sturdy, and branched, even candelabra-branched! The plants and foliage will be starchy and low growing, so the blooms can be held well above the leaves"

"An increase in adaptability to climates outside the Pacific Coast will be accomplished if people outside this range do serious breeding to adapt the Californicae to other environments".

And then there is the endless number of 'resistances to', the cold, hot and humid climates, and disease among others. Genetic engineering will eventually become more affordable and it will be used to change all sorts of characteristics.

Something to be remembered. 'Cozumel' this year's winner of the Sydney B Mitchell Medal and the runner-up 'Santa Rosalita' were both introduced by Joe Ghio in 1996 which was ten years ago. Things can happen very quickly in some ways but it is nice to see that good garden-worthy plants can last for many decades.

Amos Perry crossed the species line with the first Cal-Sib and in 1927, 'Margot Holmes' received the Dykes Medal. Unfortunately it is not easily found today. This was a cross between *Ii. chrysographes* and *douglasiana*. The fact that the PCIs and the sino-siberians both have 40 chromosomes means that they can be crossed relatively easily. Work is progressing in this area, notably by Tomas Tamberg in Germany and Peter Maynard in the UK. In fact the front cover shows one of Peter's tetraploid seedlings (GBS 103). It is a very large topic and we will attempt to cover the subject of interspecies crosses in greater detail in a future Review.

Characteristics of PCI species

Most hybridisers suggest making at least one parent a modern cultivar.

Garry Knipe, Cupertino, CA. "The idea is to combine the cold hardy *I. tenax* plants with the improved flower size, form, color, and patterns of the modern hybrids".

John White, central Maine, reports his best success with seed having *I. tenax* as one of the parents. So, this hybridising strategy with *I. tenax* appears to show some merit.

Lewis Lawyer already has flowering for 2 - 2.5 months but he uses *I. douglasiana* to create later blooms and extend the season even further. He has been known to have *douglasiana* flower in June.

I. purdyi can also produce later flowers and *I. munzii* is also late flowering but is not the hardiest species.

I. chrysophylla is not the most valuable to use as a parent but it does have very long and feathery style crests which look like birds in flight.

I. douglasiana is found along the coast and inland where it has naturally hybridised with other species some of which have been given names e.g. Thompson's iris and Marin iris from the area. This iris is used extensively as a parent because it is a strong grower and crosses easily; one for the beginner to use. Some other good named ones to try; 'Amiguita', a blue bi-tone with a purple signal spot; 'Canyon Snow', an all white; 'Harland Hand', purple, with a long blooming season; and 'Mendocino Banner', white, purple veins and contrasting purple style crests.

Colin Rigby thinks that *I. innominata* is a good plant to use as a parent with its neat clump forming habit and evergreen leaf growth. It has an abundant number of flowers on each plant and has been used to produce innumerable hybrids over the years.

Richard Richards has an article about *I. hartwegii*, earlier in the Review.

Munz's iris, *I. munzii*, grows very slowly but it is tall, straight, strong and stately; features much appreciated when horticulturalists look for desirable characters for hybrid crosses. It also has the purest 'blue' among PCIs.

Ivor Knowles, a former president of the BIS between 1973—1975 wrote an article outlining certain criteria that plants should have before being offered for sale. "They should be fully hardy, with upright flower stems each carrying 4 buds or more per stem, heads held above the foliage, medium to large flowers, with wide falls and significant standards." He received an Award of Merit and the Hugh Miller Trophy for 'Blue Ballerina', a hybrid of a non-bearded species. It is still available today.

And one for the bees. There have been thousands of successful crosses made, the progeny of which have been used and reused as parents but 'Arnold Sunrise' was one that was a bee pollinated hybrid, found by Barbara Corneille in her garden in Arnold, Nottinghamshire. It was given a First Class Certificate in 1981 by the Joint Iris Committee. This is one big success for the bees.

From the Almanacs

Fall 1995 and Spring 1996

PCI Seed Germination

The germination of PCI seed has been given a bad press and several people have done extensive experiments to find successful ways to achieve good germination. Gene Loop did controlled tests for several years to provide more accurate results. He wanted to find the optimum temperature for the highest percentage of germination on hybrids and species seed. All the following - *douglasiana*, *innominata*, *macrosiphon*, *munzii*, *chrysophylla*, and *tenax*, had on average between 80 - 90% germination rate when planted at 50° F (10 °C). Both temps over 70° F (21 °C) and low/freezing temperatures produced little or no germination. After the cool temperature to start the process which can be as quick as 21 days then ideally warmer temperatures will start to encourage growth. This fits in with the conditions where PCIs grow naturally. (He suggests you could use a larder fridge to start germination for 3 weeks and then remove to a warmer room but not to use a colder refrigerator for a prolonged spell).

However, every rule needs an exception and it was found that seed could be stored frozen so long as it had not started the germination process! This was found out from tests conducted by Lewis Lawyer who was still in complete agreement with the earlier results of Gene.

Another problem - seed can be delayed for a year or more by a condition which he calls "hard seeds". These are hard, thick or oily seed coats which stop the absorption of water; they usually take up to 50% of seed in any pod. To sow this seed normally it is necessary to either chip the seed coat or soak for 1-2 days in regularly changed water and sowing wet otherwise seed with hard coats will take another year before germination.

In nature, some seed will have hard coats to delay the whole crop from germinating at once, in case of adverse weather conditions - either too hot or too cold. Recommended Compost - 3/4 oak leaf compost and 1/4 peat.

Seed Sowing - Adele Lawyer: Almanac Fall 1998

PCIs are generally found growing wild in lightly wooded areas, with well-drained, gritty soils with a slightly acidic pH. They thrive in long hot summers but tolerate rain and snow cover and some frost, in winter.

Seed Germination: Plant seeds in a good, moist potting mix which should be fast draining with a pH of 6.5—7.

Plant seeds so that you can separate and remove individually.

Keep in a cool area at about 50° F.

Seed will not germinate at temperatures above 70° F.

No freezing is necessary but outdoor temperatures should be beneficial. Germination should take about 2 months. Transplant when the seedlings are 3—6 inches tall. They transplant well as seedlings, but only when actively growing as adults. They grow best in filtered shade or morning sun. Most hybrid seedlings will bloom in the second spring. Species can sometimes take longer.

Cultivation from the Experts

Almanac Spring 2006

David Pertenski from Bothell, Washington asked some well known iris growers to answer questions about their cultivation methods. Growers included Jean Witt, Carla Lankow, Debbie Cole and Fran Hawk, familiar names to us. David also asked a garden designer and two nurserymen. Washington, the furthest state to the north that species grow wild, is the nearest to our own.

Do you trim off old leaves?

They all agreed that cutting off dead leaves is beneficial to curtail hiding places for slugs and allow air and sun to the crown. Most agreed they did this in February/March just before the new growth starts in the spring, cutting low or to ground level or even mown down.

Do you fertilise?

Generally most growers use a slow release fertilizer, low in nitrogen, probably 5:10:10 applied in early spring. It is always essential to use a good free draining mix with plenty of grit added. If a mulch is to be applied it may necessary to up the quantity of nitrogen to compensate for likely loss by the decomposing material.

Do you divide /transplant in the Spring/Fall?

Spring is recommended because there is increased light and warmth to stimulate growth of roots and leaves. Fall transplanting can leave new divisions sitting in dark, cold wet soil which encourages rotting and disease. Most growers wash soil off the roots and replant immediately so that the roots never dry out.

A summary

PCIs in the Pacific Northwest seem to do best when grown on exposed slopes, with reduced water, limited fertiliser, if at all, and minimal transplanting. They are good for less active gardening.

How much sun? John White, Maine, thinks sun for 3/4 of each day.

Lewis Lawyer and the optimum time for transplanting. Jury is still out.

Washington could be spring; the fall in California; and in Wales, September. Lewis always transplants in late fall partly because a lot of his hybrids are munzii-derived clones which do not transplant well before November/December. They move best after they have produced new white roots and started to send up new fans with their own tiny roots.

August, September and October have all been mentioned as suitable times to transplant in Britain but is it as easy as that? Does it depend on the weather before and after the transplant takes place? Should more guesswork be given to what the following weather pattern will be? And does it depend on the species? Any answers?

The GBI library has the booklet by Victor A Cohen entitled "A Guide to the Pacific Coast Irises" which has good drawings with descriptions and the various sources of all the species. Please get in touch if you would like to borrow this. No charge to borrow but postage appreciated. It may have the answers.

Almanac, Spring 1990

Dr Virginia Winkler from Illinois wrote an amusing if heartfelt article for the Almanac in Spring 1990 about her difficulty in establishing divisions of PCIs. She had been trying for umpteen years using many plants and every form of plant psychology she could think of to overcome the problem. Eventually advice was sought from the experts.

Bob Ward, Little Rock, Arkansas thinks that if the PCIs had been mulched and protected from the freezing weather and drying winds Virginia would have had more success. Bob wrote the article on winter kill and recommends up to 12 inches mulch of pine needles to give as much protection as possible. *

“PCIs are root sensitive and it is difficult for divisions to survive”.

“What is Winter Kill? It starts with a prolonged period of very low temperatures which freezes the soil. Then, as the soil begins to thaw out, the root system of the Californicae which can best be described as “fleshy”, suffers damage. Also in this process the fibrous roots are damaged, especially when soil moves about from freeze to thaw several times during the cold season. Eventually the fibrous roots die, cutting off all nutrition to the plant. For several weeks or months the plant appears healthy, but only reveals the true results during the spring season.”

Quote from Bob,

“How does one learn to grow the Pacificas? Do like Moses! Go up into the mountains, and see them bake in the sun and grow in ‘cement’ soils. Then come down from the hills, go home, and do likewise!”

Bob Ward became President of the Society for Pacific Coast Iris in the Fall, 1995.

Lewis Lawyer was the Almanac editor at the time and his theory was also “winter kill” which is something we could very well experience here. He did not really have any experience of ‘winter kill’ because Oakland was never cold enough for his plants to suffer.

Panayoti Kelaidis, Denver, Colorado, can only establish divisions of PCIs if they are potted into “optimum soil conditions of fibrous, gritty loam with acid pH”. They are “kept in a cool greenhouse over winter where they generate a mass of roots” and by the following May they are planted out. They all “prefer at least a half day’s sun and a light mulch of pine needles and porous, acid humusy loam”. “Plants grown on a gentle northfacing slope without too much tree root competition, deep root run, and dappled shade appear to be almost eternal”. He has practically no rain between September and April but heavy frost every night.

Dr Richard Kiyomoto, from New Haven, CT. He thinks the main problem is transplanting bare rooted plants. He has a lot of experience moving bare rooted plants and feels “it is not due to disease but is more a physiological reaction”. He thinks that the plants suffered from damage to the roots probably due to freezing and thawing of the roots before they could become established. He also feels that many PCIs are inbred and so do not have the vigour of crosses made by hand, which introduce genes from other species or cultivars. Suggested trial would be to produce crosses which have some known hardy species in them.

Roy Davidson, Bellevue, WA. Establishing plants in northern climates is not likely to be successful if they are transplanted in autumn before their roots have produced a lot of healthy white root. The plants will also put out fat healthy white roots in the spring and this is the best time to transplant.

- *Keep your pine needles from the Christmas tree to use as a mulch for the PCIs.
- Are you (Alun) still going to lift, divide and replant in Autumn after the evidence above?
- Do we have any members' opinions on these recommendations?

Problem of the Future?

Some problems never change

And some just don't go away

But some are new and are they here to stay?

Not if I can help it now that you all know about it too.

Scorpions have been seen in Devon and the West Country and have you heard the cicadas in the undergrowth where you live? Bugs are on the move and the PCI borer moth is spreading its wings from California outwards. It is to be hoped we don't have any here yet but the PCI borer is a menace in California and can totally kill a large clump of PCIs.

This borer has previously been recognised as invading seed pods and only eating seed, but it is now attacking leaves and rhizomes showing a new characteristic. The adult moth is a night flier with slim wings and body in a burnt sienna colour and a golden iridescence 1-1.5 inches long. Generally, most lay their eggs in spring on the flowers or leaf tips. The larvae emerge when the flowers are in bloom and one interesting fact is that they are cannibalistic and by the time they work their way down to the rhizome there is usually only one large grub left. However another grower from California reported several grubs in and around the top few inches of soil of each plant.

The leaves turn a shade of yellow, unlike the tan or brown of ageing senescence, and the affected plant dies. The first indication of trouble is a small hole at the growing point or the base of the flower. Yellowing follows and the leaves pull away easily. There is tunnelling in the stems and a caterpillar will be found. Originally it was only able to be identified after metamorphosis had taken place in September. It was identified as the same cream coloured nocturnal moth, *Amphipoea americana* var. *pacifica* responsible for the larva which eats seeds within the pods of the PCI. It is not the same moth, *Macronoctua onusta*, which attacks the TBs.

The most likely season would be an early warm one between April and May. Keeping a watchful eye out for any early signs would be the easiest cure but an insecticidal spray in early spring, when the larvae emerge, could also be used.

Fall Transplanting and Soil Mix

Ryan Grisso, El Sobrante, California

Transplanting:

Often I hear of people not having the best success rates when transplanting the Pacific Coast Iris in the fall so I thought I would write down a few steps that I take to increase my transplant survival percentage. First thing I do when receiving rhizomes from others or dividing my own, is rinse and clean the rhizomes thoroughly, while always keeping the roots wet. If the rhizome doesn't have white roots growing yet, I keep them in a bucket of water (changing the water every day) until they do grow, which usually takes anywhere from two weeks to two months, or longer. After the roots appear and the rhizomes have been cleaned, I prepare a Subdue* drench solution, usually at a rate of 5-6 drops per gallon. The rhizomes are soaked in this solution for approximately 15 – 20 minutes. (Subdue can be very costly and some think that the pathogens can easily adapt and reduce the effectiveness, although I have not seen this problem yet. I have also recently seen Subdue available in a granular form that can be mixed in with the soil and appeared to be a little less expensive. Remember to always follow the directions for use when using any of these mentioned products.)

Once the soak is complete, I plant the rhizome in a one or two gallon pot**, depending on the size of the division (pots are cleaned in a bleach or Physan solution, usually 1 part per 10 parts of water). I water the plants with the Subdue drench solution, usually, plus I add another drench product to the mix called Fosphite, a phosphorous acid based fungicide aimed at boosting the plant's immune system against the pithium and phytophthora diseases. Alliette, another phosphorous acid based fungicide, could also be used as a "sprench" instead of the Fosphite. [There are also other products out in the market that I have used to help control these pathogens sold as Rootshield/Plantshield (soil drench or granule) or Soilguard.]

Growing these recently transplanted iris in containers allows me to quarantine them from my own garden and enables me to better control problems that may arise during the transplant and initial growth phase. I quarantine them for around 6 months and I try to plant them out into raised beds after bloom, usually May or June. The plants will usually put on substantial increase if planted from a one-gallon pot into the ground in late spring. When dividing my own clumps nowadays, I usually plant them directly into the raised beds.

This transplanting procedure seems like a lot of work. However, I put in this extra effort because I feel that Pacific Coast Iris are extremely vulnerable during the transplanting period, especially if you add the shipping time into the equation. These are not bearded iris and a little transplant "babying" is necessary to ensure a good percentage of survival. I know some say that ones that don't grow well aren't worth having, but even the "good growers" have problems during transplanting.

Soil Mix

After going through many different soils, I am now almost solely using a mix from a local Bay Area soil company, which they call the "Ultra Potting Mix". This mix consists of coconut coir, sand, scoria and some other minimal additives. I then add

10-15 percent of a very small-grained fir bark, EB Stone "Sure Start" fertilizer, a 5-20-10 general slow release fertiliser, superphosphate, and sulphur granules. The fir bark and sulphur granules are added to acidify the soil. Be careful not to add too much sulphur granules as it may drop the pH too low over time (sulphur granules are not an instant acidifying agent). This mix has been working well and producing very prolific clumps. The coconut coir is an environmentally friendly substitute for peat moss and seems to hold water very efficiently and the sand allows excellent drainage, which is the most important factor. This is an excellent container soil mix and I am now using it in all my raised beds.

If anyone has any questions, or would like to know my sources for the products mentioned, feel free to email me anytime at ryangrisso@msn.com

I have been in contact with Ryan to ask his permission to reprint this article and to query the strength of the chemical he used as a drench. Ryan hopes our members would find his article interesting. He no longer uses as many chemicals as he recommended above. I have made enquiries and 'Subdue' is marketed here by a company called Fargro tel. 01903 721591.

***A 1 gal pot is slightly larger than a 4 Lt. pot.*

How Small is Small? Alun Whitehead

The question of dividing PCIs keeps cropping up; whether it is from visitors to the garden or even strangers phoning from out of the blue. There seems to be a bit of a jinx with the plant and I wish I could even begin to understand what is going on. Unfortunately, that will have to be for a later article if I ever find out or hopefully there is someone better to write it?

The current consensus is that the best time to divide is when the new roots start to grow with the autumn rains. A few gardeners say that they divide in June or July and find this works. "If a large enough piece is taken with the accompanying soil, the plant won't even know that it's been moved!" This might work for the individual, but to make the plant more readily available, a better propagation method is called for. This is not just a commercial consideration as many of us have seedlings which we would like to share if we found a surer method of division. To make a start, I split a piece of 'Floating World' in late June just before that scorching July. I broke it into seven pieces labelled A to G. These varied in size between one and four fans. As you will see from the CD, there was not much root with the rhizomes and D especially was the sort of division that should go straight to the compost heap. These were potted in 9cm and 1 litre pots depending on size and transferred to one of our sand beds where they could be kept watered with some of our other stock. The compost used was our usual peat, grit and bark mix which is reasonably well drained and slightly acid.

As I write this, it is now mid October and the results? You can decide. The potted plants are shown on the CD. All have new roots and new shoots just showing; well established except for poor old D. But even D survived and whilst a bit loose in the pot, the new shoot and roots were there, though it is questionable whether he will survive the winter. So from this single test, it seems that small can be very small for a division still to take, but other trials will be needed before a fuller picture emerges.

Are PCIs prone to Disease? The following excerpts are from the article that was reprinted in the *Fall issue of the SPCNI Almanac 2006*, originally printed in the *Fall Almanac 1986*. We would like to express our thanks for permission to reprint these excerpts here. Lewis and Adele have done extensive experimental work on this subject and I have tried to produce information which I hope will be of value to members, now and in the future. Movement of plants and changes in weather patterns could bring pests and diseases on a wider scale. We would like to hear if anyone has seen any similar signs in their gardens.

Diseases of the Pacific Coast Iris

Lewis Lawyer

There are three diseases of the Pacific Coast Iris which occur in our garden. The first is caused by *Sclerotium rolfsii* which is of relatively little importance here, having been sighted only once, but that could be a major problem under the right conditions. The second, we are calling "PCN Crown Rot", which is more or less important wherever PCNs are grown. The third, iris rust, is important, depending largely on the climatic conditions where they are grown and the degree of resistance or susceptibility of the particular cultivars in which the grower is interested.

Few people who have grown Pacific Coast Irises for a period of years have escaped PCN Crown Rot and the sad experience of watching a well-established clump of some prized cultivar suddenly start to die. Then, as you watch helplessly, the disease spreads across the clump, fan by fan, until the entire plant has departed to some iris heaven in the sky.

Our first planting of natives was made on October 18, 1975 and, largely through the generous help of Joe Ghio, our garden contained over 200 established flowering plants by the time of the National Convention in 1978. True, we lost a few plants at planting time but, once established, they grew like mad.

Despite the fact that from that time on, we grew between 150 and 200 established plants each year, we didn't experience any trouble or loss of an established clump until the spring of 1983 when a large plant of 'Native Music', planted in 1975, started to die. The disease spread rapidly through the main clump and by June it was too far gone to bloom. A division of the original clump that had been transplanted to another location a year later also died.

The sudden death of established plants of the PCNs has been fairly well accepted as a natural phenomenon of the species. I remember discussing the problem with Lee Lenz during a telephone conversation a couple of years ago. He confirmed that they had lost a few plants in the Botanic Garden at Claremont from time to time, but had not made any attempt to identify the cause since the occurrence was so sporadic. Then he went on to say that the Pacific Coast Iris are such prodigious seed producers in their natural habitat that the loss of some of the older plants would be of minor consequence to their survival as a species. I remember thinking that this was an astute observation and suddenly realizing that it was only man's involvement with the plants that gave any importance to the disease. It is only after man has developed and selected a specific clone which he wants to perpetuate, that death becomes a serious problem. We will discuss two diseases which are involved: "Mustard Seed Disease" caused by the fungus *Sclerotium rolfsii*, and a

more serious problem which, because of its nature, we are calling “PCN Crown Rot Disease”, caused by a pathogen or pathogens not yet fully identified.

In the 12 years that the SPCNI Almanac has been published, there have been 3 references to this disease problem, two by Richard Richards of Southern California, and one by John Weiler of the San Joaquin Valley. Richards says, “Some clones of the *Californicae* appear prone to mysterious ailments not yet understood. They occasionally suffer from some sort of fungus . . .”. Then, in an article “Hot and Wet”, Richards expands on the theory that “the problem” is intensified when you have to irrigate in hot climates such as in Corona, where he lives in Southern California. John Weiler, in the Spring issue, 1984, in an article titled “*Californicae* in the Central Valley”, writes: “Still, a third factor which may be the most important in success or failure, is water in the garden (sic)”. He goes on to say that despite the fact that these irises grow without apparent water in their native habitats, they will not survive without some water in his area. Nor will they stand excess water. He continues: “Such specific requirement for water during the summer months is known for many other plants . . . In some cases, intolerance to summer water may be traced to one or more water molds which multiply rapidly in moist soil during warm weather. Particularly devastating is the mold *Phytophthora* . . . He then points out that the fungicide Subdue is recommended for the control of such organisms.

Now to get on with our own experiences in our relatively cool-weather climate in the Oakland hills of the San Francisco Bay area. In the fall of 1976 the cultivar ‘Ficus’ suddenly turned brown. There were no visual symptoms except for a brown rot where the leaves joined the crown, but when we placed the plant in a moist chamber for a week, *Sclerotium rolfisii* (Mustard Seed fungus) developed. This is the only PCN plant in our garden which has ever developed *Sclerotium rolfisii*, but Joe Ghio and others have experienced trouble with this fungus.

It is important to note that when we dug the diseased ‘Ficus’ plant, there were no visible symptoms of *Sclerotium rolfisii*. The typical symptoms of “mustard-seed” – like sclerotia which are so prominent on a diseased tall bearded iris plant – were absent, and it was not until we had placed the plant in a moist chamber for several days that sclerotia developed. This was also true of a diseased plant which we received from Joe Ghio for diagnosis some years later. Adele was able to identify the fungus microscopically, but there were no sclerotia on the plant, even after several days in the moist chamber. We have been told by others that they have seen sclerotia forming on diseased PCN plants, but we can testify that they are not always apparent. This brings up the danger of treating for a disease before a reasonably positive identification has been made. The chemicals used in the treatment of *Sclerotium* and *Rhizoctonia* can be quite different from those used for the control of water molds, and if used incorrectly, may even intensify the problem.

I have often pondered about the origin of this particular infestation. As with all my seedling plantings, the plants were rather closely spaced: 6 inches apart, in rows 12 inches apart. Yet, in the original planting, there was no evidence of spread from plant to plant. All the deaths were sporadic, as if each was a primary infection of its own. I have always thought that this infection came from some lily bulbs which had been purchased from a nursery in Oregon and planted in the area two years earlier.

Actually, the real question is not the origin, but why it has caused us so little trouble in view of the broad distribution of water molds. Water mold organisms are so widely spread throughout the world that it is a wonder we can plant anywhere without getting into trouble. Fortunately, most of the time they maintain a balance with other organisms in the soil and don't build up to the numbers required for invasion of our plants. As we shall see, however, once that critical balance has been surpassed, invasion is just a matter of course.

The rapid spread of the disease by rain washing lends support to our present belief that one or more water mold fungi are involved as pathogens. The spores of these fungi are produced by the millions and are motile in water. With the PCNs, therefore, we have an ideal condition: a host plant which is highly susceptible, the spores of the causal pathogen being produced in great numbers on a nearby diseased plant, and the water to spread them across the surface of the planting.

We want to emphasize that all the severe problems we have experienced with the disease have occurred when we were purposely doing something wrong in an attempt to obtain information about the problem. The fact that we purposely left dead plants in place as inoculum sources, and deliberately replanted in infested soils without taking any precautions, are not recommended agricultural practices. On the bright side, however, we have not yet experienced any lateral spread of the disease where we have immediately removed the plant and treated the areas.

Another factor contributing to the spread of the disease in our garden may be our automatic sprinkler system. Situated as we are, on a hill, there is no possibility of furrow irrigation. Nor has drip irrigation been satisfactory in our gravel: it just goes down and disappears somewhere. Depending on the amount of overlap of the large 'rain bird'-type sprinklers, certain areas in the garden get as little as a half inch and others as much as a full inch of 'rain' with each sprinkling. Left to themselves, the sprinklers are activated every 7 days, but unless the weather is extremely hot, we usually delay them manually for up to 10 days.

In no way are we going to give up the convenience of this system which allows us to be away from home for a month at a time, and go back to hand-watering our three-quarter acre property. Nor are we about to give up the other 90 percent of our garden plants which are non-iris and which require the water. In truth, I think the PCNs like the water, too. I don't think I have seen a planting anywhere that grows any better than ours.

Actually, we don't really know how much the sprinkling is affecting the disease; we can only surmise. Except for that one heavy rainfall, over which we had no control, we have seen no evidence of spread by water. We have good evidence that the disease spreads from plant to plant through root contact, however, and the presence of water around the roots should contribute to this type of spread.

Now, to be fair, we will give equal time to the other side of the question. Plants growing wild along the coast and on the coastal side of the inland hills get unbelievable amounts of 'drip irrigation' during the foggy summer mornings. I'm not sure how much dew forms on the plants in the Sierra foothills, but there you seldom, if ever, find them growing in the full sun. They are unknown, and evidently can't even survive in nature in the really dry interior valleys and hills. In my case, we are blessed with a second sprinkler irrigation system which covers the periphery of our

yard where the azaleas and rhododendrons grow, and this system is set to deliver about a quarter inch of 'rain' every single night. One sprinkler inadvertently covers a small area of about 10 cultivars that had received about a quarter inch of 'rain' every night for 10 years, and was the only area in the planting where no disease occurred.

Rust is the only other disease occurring on PCNs in our garden and is caused by a fungus, *Puccinia*, usually *Puccinia iridis*. It is an important disease in many locations where PCNs are grown, especially along the coast. Degree of susceptibility is genetically controlled; therefore selection for resistance is the most sensible method of control. Natural resistance in PCN species and cultivars varies from plant to plant, ranging from highly susceptible to near-immune. Most plants of the coastal species, which have had centuries of natural selection pressure in an environment favorable to rust, are highly resistant. We have found most *Iris munzii* clones from the dry Sierras, where there is no natural selection pressure, to be highly susceptible. We have evidence, however, that this is not always the case.

Our garden is an ideal environment for rust. We live in a relatively cool and moist area, and we overhead sprinkle. When we brought *munzii* pollen home from the Sierras and crossed it to some of our relatively resistant *munzii*-derived material, certain of the resulting lines were so infected with rust that every plant died back to the ground. Other lines, depending on the *munzii* pollen used, were relatively resistant, and the population included individual plants with no trace of rust. Dr. Lenz says he has never seen rust in his dry Rancho Santa Ana plantings, but some of his selections are quite susceptible, while others are resistant. Strangely enough, his 'Sierra Sapphire', a pure *munzii* selection, is quite resistant here. We saw rust in Thornton Abell's garden in coastal Santa Monica, yet, despite this selection pressure, some of his part-*munzii* clones that are growing in our garden are as susceptible as anything we have seen. Other Abell selections, however, are near-immune. Joe Ghio says that rust didn't occur in his PCNs the first several years he grew them, but then gradually increased. I have the feeling that this timing coincides too well with his introduction of *munzii* pollen into his breeding program to be ignored. Most of his introductions, however, involve primarily coastal species and are highly resistant in our garden.

We are in a quandary! Well over half the PCNs in our garden are *munzii*-derived. Last year rust was responsible for the weakening and eventual death of one of the Thornton Abell clones in our garden. Other clones, desirable for our breeding, are highly susceptible and become weakened by the disease. Despite all this, we have been reluctant to spray, when one of the primary objectives in our breeding program is selecting for resistance.

This year, for the first time, we are selectively spraying with Plantvax*. Spraying has not eliminated the rust on highly susceptible plants, but none have died back to the ground the way they did last year. By this selective spraying, we enable the highly susceptible seedlings to grow normally until they flower. At that time we can discard them; but we may discover some intensely blue, beautifully formed flower that exists within the susceptible population. Subsequent crossing can reduce or eliminate the rust and, hopefully, retain the positive features of the plant.

*Some of these proprietary fungicides are not available in Britain. Some equivalent would need to be used.

Longstock Park – a photographer’s paradise.

Alun Whitehead

I was driving along the A-road at about 45mph; not a particularly fast speed but I was in a line of traffic with cars a bit too close in front and a little too close behind for comfort. It is always slightly harder when you are driving alone without a navigator and trying to read all the road signs. I was on the look out for one saying Longstock and suddenly we rounded a bend and there it was. The car ahead immediately signalled left and so did I to the amazement of the car behind. I swung off onto a small bridge following the car in front and was on the road to Longstock. It is funny but this split second decision affected how I felt about Longstock Park later that day as I was driving away.

It was a very warm Sunday in the middle of June and I had left Jill to manage our stand at the Gilbert White’s plantfair. I was continuing our search for gardens which use a good representation of irises and Longstock has a reputation for being a first class water garden, so I had made the drive with high hopes. The garden is owned by the John Lewis partnership and kindly opened under the National Garden Scheme for charity. In fact the ladies on the gate proudly announced that it was Hampshire’s highest contributing garden. I can understand why.

The garden lies on the River Test and the first part is a series of interconnecting islands with water running past. Connecting the islands are a variety of different bridges. The garden then goes into light woodland with plenty of rhododendrons for spring interest. I concentrated on the enchanting waterscape. There is something magical about water in a garden and these low islands with all their bridges allowed you to get very close to it. A couple of the plank bridges will probably even allow you to slip in if you forget to look where you are going. An occasional large fish could be seen. The water was not very deep; about 3 feet and the clarity allowed you to see the bottom easily. The plantings along the water’s edges tended to be quite large natural-looking drifts on a similar scale to that used by Beth Chatto.

Gardens come in various different flavours. The extremes can be typified on the one side by Sir Roy Strong’s provocative comment: “I feel that flowers in a garden are a sign of failure”! Can you imagine the tangible silence which followed when he said this at an NCCPG lecture we attended. But for Sir Roy with his garden of almost ‘theatrical stage sets’, design, layout and structure are important. At the other extreme are beds of interesting plants but without any co-ordination or backbones to the plantings and often a comment is heard: Is it a garden or a collection of plants? In truth neither of these extremes exists in reality, but some gardens do get close. In a similar way the visitors to gardens have been categorised by Mirabel Osler as gawpers and gapers; the one bent low reading the plant labels and the other gaping at the broader picture. Again we all tend to do a bit of both, but often we lean to one side or other.

So which type of garden is Longstock and who will appreciate it. The garden is well maintained with large plantings which give a very picturesque effect. So the scenes are very appealing and a frequent click of cameras could be heard as I

walked around. The downside of such planting is that there were only a limited number of varieties used and few labels. The irises on display were good well-grown specimens, but alas the names could only be conjectured. Being the middle of June, the sibiricas were almost over except for a fine clump of a dark blue with pendant falls. However, the ensatas, laevigatas and relations of pseudacorus were showing their best. Ferns, primulas and rogersias gave a terrific backbone to the well thought out planting. One of the ensatas was similar to one we received under the name of 'Darling' (not registered) with three falls and of a pale mauve pink which contrast well with the darker petals as they emerge. A 'Holden Clough' type of yellow and brown was planted by a pink *Primula pulverulenta* and the contrast surprisingly seemed to work on that bright sunny day. *Iris laevigata* 'Variegata' was planted along one of the water courses, but there was plenty of clear water remaining so that it added to the picture rather than dominating it. The other iris which was at home in the water was 'Gerald Darby' or similar. The black flower stalks could be seen, but the leaves were green. It was too late in the year for the purple leaf bases to still be showing. One effect I especially liked was the use of hemerocallis coming through a clump of ferns. This works as a waterside planting, but may be more difficult in the average garden. The garden at Longstock Park is a picture and well worth seeing for that alone. The accompanying CD has a few photos to whet the appetite.

Let's now go back and see how the earlier quick decision affected things. The turning for Longstock I took was not the usual turning, but one which led through the village of Longstock itself. However, prior to that the road crosses the River Test at a lower stretch. Again we see the crystal clear water sweeping around and past grassy islands. Though almost no ground can really be considered natural in the UK – man has intervened in even the wildest spots – this 'natural' part of the river was beautiful in its own way and must be a very valuable habitat for wildlife. Now Longstock Park, the garden, was created over a period, first by the taking of gravel from the river by the owners of the estate. After the estate changed hands in 1914, the new owner's son decided to make a feature of the lake created by the dredging. However, the current layout of the garden is mainly due to John Spedan Lewis who acquired it in 1946. He was responsible for its extension and creating the many intricate shapes of island. However, as I left the garden to return to Jill (who was doing the work) I could not help feeling that the garden had used a very natural and beautiful spot over time and by several hands to impose an artifice, beautiful though it was in its own way. Perhaps I am not explaining this well. If someone takes an ugly barren site and produces an oasis, everyone will be happy and appreciate their skill. I find the ethics of taking a naturally beautiful part of the country to form a garden very questionable. But these are modern considerations and they should not be allowed to ruin a visit to what is one of the most enjoyable gardens. Why not visit and decide for yourself!

Longstock Park Water Garden, Longstock, Stockbridge, Hampshire SO20 6JF
www.longstockpark.co.uk

A Bit of Stress; The Scottish Angle

Brita Carson

Someone said that a little bit of stress is good for you. Well I'm still waiting for the good bit. I had been pounding away at the computer when I thought of a short-cut for which I would need another USB port. There were a couple of leads that I wasn't using at that moment. When I removed one, attached to it was a minute, though obviously essential, part of the motherboard who then took out her spite on me and went totally dead. I had spent most of the day on only two files which were still open. These were, of course, the contents of this *Review* and the finished cover straight out of Photoshop.

At the repair shop there was expensive news and there was some possible good news. The first was a suggestion that it might be as expensive to buy a new computer as to carry out repairs and the second was that probably most of the data could be saved and transferred to my recently purchased external hard drive. As for the files that had been open only time would tell. At that time they were, of course, "experiencing a high volume of work" and I would have to join the queue. The sign on the desk warned that repairs could take up to a week. My face must have visibly aged, because the young man behind the counter suddenly mellowed and promised to transfer as much as he could once I had taken in my new hard drive.

So perhaps the 'good bit' just costs money and you are so relieved to have your work back you gladly pay for it and, anyway, it is a new shiny computer, with a nice new shiny monitor, wireless mouse and keyboard.

However, there have been some really tangible 'good bits' this year; at last, visiting and meeting 3 iris enthusiasts who all love PCIs and grow them successfully. The first visit was to Margaret Criddle and her garden in Burgh le Marsh, a pretty little town, on the east side of the country which should be drier and sunnier than up here in the wet west. Apart from irises we have a common interest in Clivias and Margaret has, among many others, two enormously crowded, full pots of Clivias in two different shades of delicate soft yellow which were just at their peak of flowering. Most of the others had been put out to summer pasture after flowering.

Margaret spends as much time as possible in her beautiful garden working on spring bulbs, plants, shrubs and fruit trees as well as irises. My husband whispered to me that he couldn't see a weed but then there were no spaces for weeds to grow. Since our visit she has completely redesigned part of the garden and has been digging and moving anything which moves. Margaret has another soft spot for the tricky Louisianas, encouraging them to grow in the little pond that she has well sheltered by one wall of the house. Not the easiest of species in our climate; in fact a real challenge.

Margaret's PCIs are all from Joe Ghio seed which he sent her years ago. After losing many of them in slightly alkaline soil she has transferred them all to large, wide shallow patio containers which are easy to fill with ericaceous compost, perlite and grit and she starts them off with a fertiliser which is not too rich in nitrogen.

But I was too late for the ensata show down south last summer, and I got it all wrong again this year and no PCI was in flower after such a prolonged cold winter.

Next day we met Geoff Wilson in Louth, Lincolnshire who had no PCIs in flower for me either. But his Arilbreds were just starting to flower and I was able to see how and where they are grown. Geoff wrote an article in the 2005 Year Book on sowing seed and rearing Arilbreds. No mean feat in our climate. These little blighters, like the PCIs, are very picky about drainage, sunshine, winter chill, potting medium. So why am I hooked on these beauties with their distinctive signal patch? Why do we all love to grow the difficult types? Do we lack specific genes ourselves when we aren't content to enjoy an easy life?

But the best way to learn is to look round Geoff's greenhouses to see pot sizes; medium mixes; how close together pots can be placed; what height the spikes are going to be; and the how and when to water. I could have stayed there, happily, for the next month, watching them all come into flower. And Geoff's PCIs would have flowered for me too. I think he takes after his plants these days. They tell him what they want and he fusses over them, not just in any old growing conditions, but the very best M & S (muck and soil) conditions that they like! One result of all the TLC is pictured on the inside back cover. I was lucky enough to come home from Geoff's with 3 healthy plants, all seedlings from Joe Ghio seed. Geoff has told me since our visit that he lost a lot in pots from the "winter kill" symptom. Look for notes on '*winter kill*' page 32.

The third iris enthusiast, another GBI member, is Father Philip Jones who writes for us about his PCIs. His other interest is the Lily which, he explains, also enjoys both a sloping site and/or raised beds. Father Philip has moved to Perth, to St Mary's Monastery which is described as an example of neo-gothic revival of the 19th century. This description sounds rather scary when, in fact, it is a beautiful building set majestically amongst old trees. The Monastery stands half way up the mountainous Kinnoull Hill and Philip's irises are planted in the vegetable garden just below. How do I know it is so steep? Because you can't see the top of Kinnoull from the Monastery. How do I know it's only half way up? Because I had to climb up the other half to see the spectacular view from the top. Father Philip practically runs up to the top two or three times a week. No wonder he looks so fit.

Perth is very near here so what a bonus that Philip has come to live in Scotland because I hope to nip up there to see every one of his PCIs as they come into flower. He has been asked to donate some to the famous Branklyn garden, a stone's throw away and has already given them some of his precious lilies, so the two seem fairly symbiotic especially when Branklyn has part of the National Collection of lilies. Hopefully all his PCIs will flower and flourish and he can spread the word that Scotland is a great place to grow irises.

P.S. Margaret has included some seed in the BIS seed list from her own seedlings of Joe Ghio seed.



Sdg GBS
105 TN31



Sdg and photo by Philip
Jones



Sdg 7-98
TN25



Sdgs and
Photo by
Margaret Criddle



Floating
World TN11



Photo by
Brita Carson



Fine Line TN10



Sdg SA 03-1 TN37



Sdg G 9-1 TN39



Ring o'Roses TN9



Sdg GBS 14-03 TN29



Peacock Pavane TN12