

1. From where/what did your passion for Irises, specifically Reticulatas, develop?

Often hobbies develop as opposites: gardening is an opposite to sitting at a desk all day. It gives me a chance to be outside, move around, and enjoy nice weather. It's particularly exciting to see new things come into bloom. In the case of hybrids, you have no clear idea of what you'll get until it pops into bloom ...and there have been a number of wonderful surprises in recent years. At the same time, it's sad to lose things. That's a reality when you push the edge -- Mother Nature's natural selection.

I'm always striving for something new, in what I grow, in my knowledge about various facets, etc. Gardening can be quite interesting technically -- from genetics, to understanding what makes the colours we see, through to how to market plants successfully. Today I probably grow well over 250,000 bulbs; not all of which are bloom-size of course.

Back in May of 1979, while on vacation in Switzerland, I saw an amazing rainbow of bearded Irises. I had never realized such a range of colours were available. That prompted me to find out about the Canadian Iris Society, etc., where I quickly learned there are many different types of Iris -- from ones that come from desert-like conditions in Turkey and Israel; to water loving Japanese; to bulbous Dutch Iris; through to our North American natives, such as *Iris versicolor* which you'll find in cottage country. I grow a whole range of Iris, along with various hardy bulbs from Crocus to Trilliums, but my fascination is with Reticulata Iris, as well as Juno Iris.

What sets my hybridizing efforts apart from those of everyone else? If I had just worked with what was at hand all I would have is typical blues and purples. Instead I strived to get additional genetic material in from the wild. At the same time I did a lot of work with a diploid form of the lemon-yellow Iris *danfordiae* which I collected in Turkey. The risk there was I might simply end up with muddy yellow-blue messes. I was lucky. There are several high level genetic switches that allow the blue anthocyanins and yellow carotenes to be more carefully controlled.

To put my efforts into perspective: I make over 1000 crosses every year. About 45% work, yielding 10,000 or more seeds. The seeds take 6 days to plant by hand, with rows 3½cm apart and individual seeds separated by roughly 1 cm. A net of 20% will form bloom sized bulbs 5 years later. Although 5 years is a long time, in no time you have something new every year.

Typically the bulbs triple in total number. About 2 years after first blooming that year's planting needs to be lifted and replanted, so that the bulbs will continue to do their best overall. Basically the 20% Net germination allows the planting to be put back where it was, completely refilling the roughly 70 square feet. Ideally that space should be doubled the following year, then doubled the year after. As you can see the space requirement begins to grow substantially, as does the replanting effort.

I now have 4 Dutch bulb growers evaluating my hybrids. This is a process that takes at least 3 years. What I have done this year is re-doubled my efforts to see that each of the growers has several things I believe would be successful commercially. I am using the John Nash approach (movie: *A Beautiful Mind*). By working together with several growers we can be more successful than if I was to work with just one grower exclusively. Each is being given varieties different from the others, and which generally speaking, don't overlap with what the others have. It will be up to each grower to decide which ones they believe will sell well. Then they'll need to put their best foot forward and "make it so!"

This year I have started working with a lab in Holland. They are initially making small increases of 9 of my hybrids (100 to 250 of each). This will take about a year. The plan is once a grower commits to introducing a particular clone we will quickly build up a large number of bulbs. The exact number will depend on how successful he believes the clone will be, as well as how much money he's willing to invest.

I'm anticipating signing my first commercialization agreement in 2003 (next year), with initial introduction of the bulbs in 2005 or 2006.

2. When did you begin crossing Irises? And perhaps a brief outline of how that process works and evolves.

I've been hybridizing for more than 20 years. Early on I tried my hand at working with Daffodils and Bearded Iris, but there are a lot of other people working with them. Eventually I settled in on working with Reticulata Iris, and Juno Iris. For one thing Reticulata Irises are practically the first plants to bloom each year. Only *Galanthus* (Snowdrops) are earlier. So right as the snow is melting the Retics are starting to open (typically the last week of March). They last for just over 3 weeks. Soon after the Junos bloom; again lasting 3 weeks

3. What are some highlights/milestones of your career with Irises?

- 1) Collecting *Iris danfordiae* in the Turkey in 1985 (as well as a related unnamed species)
 - 2) Discovering my *Iris sopenensis* x *Iris danfordiae* hybrids were fertile in 1994
 - 3) Seeing 94-HW-1 for the first time in 1999.
- ...the next milestone will be signing a commercial exploitation agreement with a Dutch Bulb Grower -- which shouldn't be too far off.

There are several less ones:

- a) Meeting William van Eeden in 1986, prior to my second trip to Turkey
- b) Brian Mathew's proposal to have crosses between *Iris danfordiae* and *sopenensis* known as "x mcmurtriei". The "x" refers to hybrid
- c) Discovering my *Iris danfordiae* x *Iris Çat* hybrids were fertile.
- d) Meeting Dr. Rodionenko in 1995, at a species Iris convention where I spoke about Juno Irises
- e) First Test Agreement with a Dutch bulb grower signed in 1997
- f) Access to a lab for cloning my hybrids

4. What is your most proud accomplishment in relation to your Irises?

Opening up a whole new world for Reticulata Irises. That is indeed what I have done, and it is reflected in the title of my up coming article for the March 2003 Alpine Garden Society Bulletin: 'Reticulata Irises: A Whole New World'

5. How do Irises play a role in your daily life?

This is hobby gone overboard. I thought hobbies were something you did to relax. How's planting bulbs and seeds at 1AM by floodlight sound; when it's only 5°C out? There's virtually not a day that goes by without me doing something connected with this hobby.

6. Have you ever had a chance to cross your work (IMO) life with your passion for irises? (That may sound strange, but if there was a time it'd be a great hook)

There are perhaps two tie-ins. One is around my having a web site and the ties to my being a business analyst which these days deals a lot with the web. And the second is that I'm using the Interactive Barchart to evaluate various timing issues around cloning bulbs in the lab.

7. What are your long-term goals in terms of crossing/inter-crossing?

To develop beautiful new colours that were not possible before, which at the same time, do well in your and my garden for years and years. In this case it's a lot like piloting a huge cargo ship. It's 5 years later that I get to see the results of something I did this year. Fortunately I've been lucky, but it's also a matter of understanding what's happening in order to know which direction to steer.

8. Any anecdotes/memories?

Each one of the milestones has a story behind it...

Summary

The future is very bright indeed! Potentially half of the 80,000 seeds I've hybridized to-date will bloom within the next 5 years. Imagine what might be possible, given what I've achieved so far.

An article about my work to-date will appear in the March 2003 Alpine Garden Society Bulletin. For more information go to www.Reticulatas.com

I have had articles published in the following Journals

American Iris Society Bulletin

British Iris Society Yearbook

Canadian Iris Society Newsletter

New Zealand Iris Society Bulletin

Species Iris Group of North America (SIGNA)