

*The
Siberian
Iris*



Spring 1994

THE SIBERIAN IRIS

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SPRING 1994

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Front Cover:

Siberian irises grace a poolside planting at the Michigan State University Horticulture Demonstration Garden.

Photograph: Bob Hollingworth

FROM THE PRESIDENT'S DESK

I would like here in a personal way to pay tribute to the memory of Harry Foster of Wales. Along with Jennifer Hewitt, Harry has been immensely important in increasing the role of Siberian irises in the British Iris Society. What impressed me most about him, however, was his great personal friendliness and charm.

We first met Harry and Maureen as they were setting up entries in the iris show of the British Iris Society at the Royal Horticultural Society Hall in London. Twice we were privileged to visit their garden and home in Crickhowell, and once Maureen prepared the nicest, most elaborate afternoon tea that I have ever experienced. Although we met only a few times and corresponded occasionally, we have thought of the Fosters as good personal friends and Harry's untimely death leaves us with a deep sense of personal loss. We wish the best to Maureen as she carries on her work with irises.

On a happier note, we are making progress in rejuvenating the round robin program. Let us know if you are interested in participating, and we will get you started. With our membership numbers there should be enough involvement for several robins to be flying. This is a good way for new members to get their feet wet. And a hearty welcome to all of you who are new members. I was pleased with the long list in our last issue.

Here at home we have had a colder and snowier winter than we've experienced in the past few years. We're hoping it stays that way until real warm-up time -- with none of those springtime-in-winter days to confuse our garden plants. But it won't be long now until time for garden visiting, convention attending, and other iris activities. May your year be a good one; I hope to see many of you at one place or another.

Hal Stahly

Be sure to join us at the AIS Convention in Portland, Oregon for our society's meetings.

Siberian Society Board Meeting:
Saturday May 21st, 4:00 pm - 6:00 pm

Siberian Section Meeting:
Sunday May 22nd, 3:00 pm - 4:00 pm

BEWARE OF ALFALFA HAY FOR MULCH

By Shirley Pope _____

You may remember that in my article Growing Siberians (T.S.I., Spring 1993, p.3) I mentioned that we had decided to try mulching a few rows of Siberians with alfalfa hay. Here is the promised report.



Fortunately I inspected the irises in the very early spring, immediately after the snow and ice disappeared. The hay had begun to rot and was a black, slimy mess. We removed it immediately and used left-over oat straw as a replacement. Because the irises were still dormant no damage was done.

Later we spread the alfalfa out to dry, so that it could be ground up for walkway mulch. Instead of grinding beautifully like straw, it twisted around the cutter wheel like heavy twine.

So, when mulching our newly planted Siberians, we will use pine needles until our supply is depleted, then finish with oat straw.

1993 REGISTRATIONS AND INTRODUCTIONS

AT THE BALLET (Calvin Helsley, R. 1993).

Sdlg. 93-1, SIB, 28" (71cm), M. Ruffled lavender-violet (RHS 85C), 3/16" lighter (85D) edge, veined and dotted slightly deeper overall, brown in throat; lavender-violet (85D) styles. Temper Tantrum X Silver Illusion.

BEAUTIFUL FORTY (Tomas Tamberg, R. 1993). Sdlg. SSTT39. SIB (40 chrom.), 28-36" (70-90 cm), M. Near white, uniformly veined darker. SSTT9: (Mirza Citronella x unknown) X SSTT20: (*I. clarkei* x unknown).

BENNERUP BLUE (Dorothy Rogers, R. 1993).

SIB, 38-40" (97-102 cm), EM. Rich cobalt blue; pale blue style arms. Sdlg. purchased from Sunny Border Nurseries in CT of unknown parentage. Caprice Farm Nurseries 1991.

BERLIN LANCE (Tomas Tamberg, R. 1993). SIB (56 chrom. tet.), 36" (90 cm), M. S. white; F. white, yellowish throat. C. McEwen sdlg. x (Wide White x unknown).

BERLIN LITTLE BLUE (Tomas Tamberg, R. 1993).

Sdlg. 8371. SIB (28 chrom.), 21 1/2" (55 cm), M. Light blue self. SSTT152: (white sdlg. x blue sdlg.) x Berlin Delft.

BERLIN PURPLE WINE (Tomas Tamberg, R. 1993). SIB (56 chrom.), 36" (90 cm), M. S. wine red; F. velvety wine red, bluish hue on signal area. 8256: (Lake Niklas x (Cambrita x Tealwood)) X Teal Velvet.

BERLIN RUFFLES (Tomas Tamberg, R. 1993).

Sdlg. 8256-2. SIB (56 chrom. tet), 39" (100 cm), M. S. mid-blue; F. velvety mid-blue; ruffled. Lake Niklas X 7643C: (Cambrita x Tealwood).

BERLIN SKY (Tomas Tamberg, R. 1993). Sdlg. SSTT182.

SIB (56 chrom.), 29 1/2" (75 cm), M. Light blue, darker blue in center of flower. Cambridge X SSTT108: ((Tycoon x Limeheart) x Limeheart).

BIG'S CHILD (Tomas Tamberg, R. 1993). Sdlg. 8414-2. SIB (56 chrom. tet.), 36" (90 cm), M. Mid-blue self. Dear Dianne X SSTT183: (Cambridge x ((Tycoon x Limeheart) x Limeheart)).

BRIDAL JIG (Martin Schafer/Janet Sacks. R. 1993). Sdlg. S86-45-1. SIB, 35" (89 cm), M. White with small crescent-shaped deep yellow signal; white style arms; slight fragrance. S83-2-1: (Sky Mirror x George Henry) X Creme Chantilly. Joe Pye Weed's Garden 1993.

CAITLIN'S SMILE (J.W. Waddick by Kevin Morley, R. 1993). Sdlg. M/T91A. SPEC, 33" (84 cm), VVE. S. blue-violet (darker and richer than RHS 89C) veined dark blue-violet (richer than 90A); mid blue-violet style arms, blue ridge; F. blue-violet edge, lighter blue-violet in center (lighter than 89B) veined dark blue-violet (richer than 90A), white flush radiating from signal, signal yellow in center, bronze on sides, veined dark blue-violet (90A).
I. typhifolia sdlg. X *I. typhifolia* sdlg.

CARMEN JEANNE (Calvin Helsley, R. 1993). Sdlg. 89-5. SIB, 28" (71 cm), EM. S. violet-blue (RHS 89C); blue-violet (89C/D) styles; F. violet-blue (89B), large white signal changing to gold in throat, large white spot on reverse; heavily ruffled; slight sweet fragrance. Mabel Coday X S. Varner S060.

DIMITY BUTTERFLY (Lorena Reid, R. 1993). Sdlg. opG88-1G. SINO-SIB, 40-48" (102-122cm), M-L. S. white, feathered with light blue-lavender lines; white style arms, blue-lavender midrib and tip; F. white with light blue-lavender line pattern, large dark navy violet butterfly signal centrally marked with yellow rays. Butterfly Mode X unknown. Laurie's Garden 1993.

FESTIVAL PRELUDE (Calvin Helsley, SIB, R. 1992). Helsley 1992.

FORNCETT MOON (J.P. Metcalf, R. 1993). Sdlg. FOR/1. SIB, 30" (75 cm), M. White with vivid yellow (RHS 13A) signal. Cambridge x unknown. Four Seasons 1985.

GLAS-Y-DORLAN (Harry Foster by M. Foster, R. 1993). Sdlg. R82. SIB (tet.), 32" (81 cm), M-VL. S. dark violet-blue (RHS 96A); very feathered light blue style arms shading to orchid; F. dark violet-blue (96A), edged silver, kingfisher blue flash from signal over most of F., white and gold signal; lightly ruffled. Harpswell Happiness X Dear Dianne.

HARPSWELL MOONLIGHT (Currier McEwen, R. 1993). Sdlg. T(6) 84/103A. SIB (tet.), 28" (70 cm), EM-LM. S. white; 1 1/2" tufted white styles with pale yellow (RHS 4D) midrib; F. creamy yellow (4C) edged deeper (4A), greenish yellow (154C) veins, rich yellow (12A) signal. T(5) 79/174(4): ((Harpswell Hallelujah x sib) x Dear Dianne) X Ivory Cream. Seaways Gardens, Eartheart Gardens 1993.

JATINWANE (Calvin Helsley, R. 1993). Sdlg. 93-5. SIB 30" (76 cm), LM. S. blue-violet (RHS 92A); red-violet styles (87A), blue-violet (92A) midrib; F. darker blue-violet (94B), small white signal veined blue-violet (94B). Wing on Wing X Mabel Coday.

KINGLY WHITE (D. Steve Varner, R. 1993). Sdlg. 9060. SIB, 30" (76 cm), M. Ruffled white self. King of Kings X 5200: ((Steve x Au Sable River) x Ode to Love). Illini Iris 1993.

LEE'S BLUE (John Coble & Robert Bauer, R. 1993). Sdlg. S85C-2. SIB, 30" (76 cm), M. S. light blue with some violet shading; styles light blue with darker blue midrib; F. medium light blue ground (91A), veined darker blue (94A), large white blaze around yellow signal; ruffled. S82C-2 X blue seedling.

LITTLE MOO (Ruby Buchanan by J. Wood, SIB, R. 1992). John Wood 1993.

LOFTY ELEGANCE (John Wood, SIB, R. 1992). John Wood 1993.

MAGENTA MOMENT (Calvin Helsley R. 1993). Sdlg. 88-1. SIB, 36" (91 cm), M. Lightly ruffled magenta red, very

slight white signal. Pink Haze X "Corey's Pink". Helsley 1992.

MATENE (Frances Love, R. 1993). Sdlg. G.W.92/11/5. SIB, 23" (59 cm), M-L. S. purple; F. purple with white ray pattern, lavender signal with purple midrib, fluted. Unknown parentage.

MAURICE POPE (John White, R. 1993). Sdlg. 2. SIB, 36" (91 cm), E-M. S. dark violet (RHS 86A); red-violet (83C to 77A) styles; F. dark violet (86A) with greenish hafts, white signal. Janet K. Merrill X Shirley Pope.

MESA PEARL (John Coble & Robert Bauer, R. 1993). Sdlg. S85B-1. SIB, 30" (76 cm), L. S. pale lavender (RHS 76C) veined blue (104C); near white styles with turquoise midribs; F. pale lavender (76C) with darker veins and lighter edge, small cream signal streak. S82F-21: (Temper Tantrum x unknown) X Esther C.D.M.

NOEL AIDAN (Harry Foster by M. Foster, R. 1993). Sdlg. R51. SIB (tet.), 36" (91 cm), M-L. S. very bright deep ultramarine blue (RHS 95A); violet-blue (90A) style arms, violet (87B) in heart; large and ruffled crests; F. same as S. with very prominent silver edge, small white signal; ruffled. Harpswell Happiness X Dear Dianne.

OVER IN GLORYLAND (R. M. Hollingworth, SIB, R. 1992). Windwood Gardens 1993.

PATIO ROSE (Louise Bellagamba, R. 1993). Sdlg. PR-91-S. SIB, 29" (74 cm), M. Mauve-rose with violet vein in center of F. Augury X unknown. Bella Vista Garden 1993.

PAUSBACK SIBTOSA (Tomas Tamberg, R. 1993). SIBTOSA, 36" (90 cm), M. Light blue self. (Cambridge x Cambridge) X *I. setosa*.

PIEDMONT BLUE (John Wood, SIB, R. 1992). John Wood 1993.

PRUSSIAN BLUE (Tomas Tamberg, R. 1993). SIB (56 chrom. tet.), 33 1/2" (85 cm), M. S. deep blue; F. ruffled

velvety blue. Germantet One X Blue Burgee.

ROSY OUTLOOK (Calvin Helsley, R. 1993). Sdlg. 88-6. SIB, 28" (71 cm), E-M. S. rosy red (78B); rosy red (78b) styles, violet (88B) midrib; F. rosy red (77A), blue-violet (88A) flush around the signal; pale yellow (13D) signal turning darker (13b) in throat. Unknown parentage.

SASSY KOOMA (Currier McEwen, R. 1993). Sdlg. M84/100. SIB (dip.), 18" (46 cm), M. S. white with light yellow midrib; F. creamy white (RHS 10D) with slightly darker (10c) crimped edge and veins, bright yellow signal; ruffled. Baby Sister X Ruffled Velvet. Seaways Gardens, Eartheart Gardens 1993.

SENECA BLUE ROSE (Dana Borglum, R. 1993). Sdlg. D-4-33-2. SIB, 31" (79 cm), M. Wide blue-purple. Gulls Way X Violet Swirl.

SENECA CLOUD PUFFS (Dana Borglum, R. 1993). Sdlg. D-4-33 or 36. SIB, 32" (81 cm), M. Wide white. Gulls Way X Outer Loop or Violet Swirl.

SENECA EGRET COVE (Dana Borglum, R. 1993). Sdlg. D-4-36-3. SIB, 33" (84 cm), M. White; feathered style crests. Gulls Way X Outer Loop.

SENECA FEATHER DANCER (Dana Borglum, R. 1993). Sdlg. D-4-36-2. SIB, 28" (71 cm), M. Feathered light blue, veined darker; aqua styles; F. light sky blue, darker veining at hafts, slightly ruffled. Gulls Way X Outer Loop.

SENECA NIGHT SKY (Dana Borglum, R. 1993). Sdlg. D-4-33-1. SIB, 32" (81 cm), M. S. blue-purple; aqua styles; F. dark blue-purple, white haft markings. Gulls Way X Violet Swirl.

SENECA RED STARBURST (Dana Borglum, R. 1993). Sdlg. 87-J-051. SIB, 31" (79 cm), M. S. red-maroon; F. same, gold hafts turning to white, then pinkish, pronounced purple veining. Seed from SIGNA. Dutch X unknown.

SENECA SKYLITES (Dana Borglum, R. 1993).

Sdlg. D-4-36-4. SIB, 32" (81 cm), M. S. light hazy sky blue; light aqua styles; F. light hazy sky blue with darker center. Gulls Way X Outer Loop.

SILBERKANTE (Tomas Tamberg, R. 1993). Sdlg. 8414-1. SIB (56 chrom. tet.), 29" (75 cm), L. S. dark blue; F. dark blue, wide white edge. Dear Dianne X SSTT183: (Cambridge x ((Tycoon x Limeheart) x Limeheart)).

SPRINKLES (John Coble & Robert Bauer, R. 1993) Sdlg. S85-B-4. SIB, 32" (82 cm), LM. S. lavender (85C) with distinct peppering around edge; pale lavender styles edged darker, turquoise midrib, crests peppered dark lavender (88B); F. lavender ground (85C) evenly sprinkled violet-lavender (88B), lighter toward edge. S82F-21: (Temper Tantrum x unknown) X Esther C.D.M.

SWEET SUCCESS (D. Steve Varner, R. 1993). Sdlg. 3150. SIB, 22" (56 cm), M-L. Royal purple, signal area veined gold. Belfast X Foretell.

THAT'S MY BABY (Robert Hollingworth, R. 1993). Sdlg. 84U2B18. SIB, 21" (53 cm), M. Heavily ruffled deep red-violet, inconspicuous white dashes in signal area. Lady Vanessa x 82K4B1 (sib).

THREE QUARTERS (Tomas Tamberg, R. 1993). SIB-TOSA (tet.), 39" (100 cm) M. Mid-blue self. Lake Niklas X Starting Sibtosia.

TIMPCALS (Tomas Tamberg, R. 1993). Sdlg. SSTT268. CAL-SIB (tet.), 28" (70 cm), M. S. beige; F. light rose-violet, signal area veined yellow. 8300: (Starting Calsibe x (Yellow Chrys x *I. innominata*)) X blue Calsibe hybrid of unknown parentage.

UEBER DEN WOLKEN (Tomas Tamberg, R. 1993). Sdlg. SSTT174. SIB, (28 chrom. dip.), 33" (85 cm), M. Light blue self. SSTT108: ((Tycoon x Limeheart) x Limeheart) x Signals Blue.

WAVERLY DEBUT (John Wood, SIB, R. 1992).
John Wood 1993.

WHERE EAGLES DARE (Calvin Helsley, R. 1993).
sdlg. 89-3. SIB, 41" (104 cm), M. S. dark blue-violet (89C);
dark blue-violet (89C) styles; F. dark violet-blue (89B)
veined darker (89A), white signal turning gold in throat and
veined dark violet-blue (89A), large white spot on reverse.
Mabel Coday x S. Varner S060.

WHITE PRELUDE (Currier McEwen, R. 1993).
Sdlg. T(7)83/9. SIB (tet.), 36" (90 cm), VE-VL & RE. S.
white; F. creamy white with fine yellow veins extending
from yellow (RHS 12B) signal to edge; ruffled and crimped.
Again X (T(2)75/4(8): (Welcome Return x Soft Blue tet. sib)
x T(5)75/90(8): inv. Fourfold White, Lavender Light,
McGarvey pink sdlg.). Seaways Gardens, Eartheart Gardens
1993.

*Siberian Irises - Resemble an ornamental grass
with the bonus of beautiful flowers.*

Paul Black's Mid-America Garden catalogue

AIS AWARDS FOR 1993 CONTINUED

(See Fall 1993 issue of TSI for 1993 AM, HM and Morgan-Wood Medal winners)

HIGH COMMENDATION - Congratulations to:

Bauer/Coble	S85-HREB	6 votes
	Lee's Blue	6
Hollingworth, R.	84U2B18	5
	(That's My Baby R. '93)	
Schafer/Sacks	S86-8-2	11

(ED: I know it was a busy weekend at our first Siberian Convention but also a grand opportunity to see new seedlings. We had at least 50 judges present - and some of you are in for a wiggling! Three hybridizers gardens on tour and only four seedlings worthy of an HC? Please give our hybridizers more encouragement.)

EXHIBITION CERTIFICATES - Congratulations to:

Francis Brenner	F5-6-7
Harley Briscoe	86-1A
Dale Hamblin	9206
Calvin Helsley	9-5
Robert Hollingworth	85G3A2
Walter Kotyk	W89-3K
Lorena Reid	8S72-2G
	8S88
Sacks/Schafer	S88-6-1
	S86-20-1
	S86-14-1
	S90-58-2

BEST SHOW SPECIMEN - Congratulations to:

EXHIBITOR	SPECIMEN	SHOW
Gene Kozak	Lavender Bounty	Grand Rapids MI
Donna Aldridge	Dancing Nanou	Kansas City MO

IN MEMORIAM

CHARLOTTE WITHERS

Charlotte Withers passed away on November 25th 1993, Thanksgiving Day, in Lakeland Florida. Charlotte was a charter member of the Society for Siberian Irises and its first secretary, serving from 1961 to '64. She was Vice President in 1965, President from 1967 to 1970 and served as co-editor of TSI with Peg Edwards for ten years.

Our Florida Iris Society (F.I.S.) was formed in 1980, I was the President and Charlotte our first and only secretary-treasurer. She was my great friend and promised that as long as I was President she would stay with F.I.S. I had to resign in 1992 due to illness and in November 1992 with much regret we had to disband.

Charlotte was very faithful to her church and an asset to any group of which she was a member. She will be missed by her many friends.

Marjorie Starkey

(When I received Marjorie's letter, I read some of the old issues of T.S.I. to find out a little more about Charlotte. She was obviously instrumental in the early success of SSI, serving in many capacities including two presidential terms as there was no vice president to succeed her. Here is an excerpt from her president's letter in the Fall '69 issue of T.S.I., written after the Milwaukee AIS Convention. You may judge how close we have come to achieving the goals she articulated 25 years ago. ED.)

We had a well attended Siberian Section meeting with over seventy five in attendance. I had listed 10 points which we should keep in mind to improve our Society. These included such items as a full-time editor for our newsletter, more articles for the AIS bulletin, slides of the newer Siberians for our slide set, cooperation with our Seed and Pollen Chairman, more hybridizers and DEFINITELY

MORE commercial outlets for the newer Siberians, more cooperation and activity in our Robins and of course, Siberian classes should be written into more Flower Show schedules. Publicity is also an area where we could expand and develop. And last but certainly not least, more members and more activity by those we have. One obligation of our membership is an active participation in the organization. Don't just "go along for the ride" or the wagon won't go very far or fast!.....

Charlotte Withers (TSI, Fall 1969)

HARRY FOSTER

The death in early April 1993 of Harry Foster leaves a deeply felt gap in the world of irises, especially among those of us interested in the sibiricas, and in the British Iris Society (BIS) which has benefited greatly from his ideas and his committed support of many aspects of the society.

Attending his first iris show was a memorable experience and Harry was attracted to the cultivars of *I. sibirica*. He decided he must join his wife Maureen, a keen TB grower, in growing and showing irises but that he would concentrate on sibiricas, thus avoiding direct competition but also sharing an interest which was important to them both.

Hybridizing soon attracted him and his own account of his aims and progress (in the *Iris Year Book* 1991) makes fascinating reading. He registered 25 Siberians between 1986 and 1992, and Maureen registered two in his name in 1993.

Harry won many BIS awards including the Pilkington Award in 1992 for his support of and work for the British Iris Society. A number of his Siberians gained BIS Seedling Commendation and/or Selection for the Wisley Trials. **Oban** and **Jac-y-Do** won an Award of Garden Commendation in 1993.

The motto of Bretton Hall College in Yorkshire where Harry did his teachers training is "*Qui no ardet, non*

incendit"- "He who is not himself enthused, cannot kindle others". If ever a man had the ability to kindle others, it was Harry Foster. We will miss him very deeply.

Jennifer Hewitt

SYMPOSIUM ON REMONTANCY IN SIBERIANS

I decided to feature remontancy in Siberians in this issue of TSI for various reasons, but the most compelling one was concern at seeing one of our cultivars listed in a perennial catalogue as blooming well into July. This was a Midwestern nursery and knowing that rebloom is a very iffy occurrence for us, I thought we should explore the phenomenon of rebloom to make sure we fully understand what we mean by it and if it is generally achievable. You will find a variety of opinions in the following articles, each one thoughtful and articulate. I am presenting them, largely unedited, so that you may reach your own conclusions. ED.

AN HISTORIC NOTE ABOUT REMONTANCY IN SIBERIAN IRIS

By Currier McEwen_____

I must start by saying how glad I am to see remontancy being given a featured place in this issue of The Siberian Iris. Ever since my interest in them began in 1973^{1,2} it has been hard for me to understand why it took so long for Siberian iris enthusiasts to become seriously interested in remontancy. Perhaps one reason was a lack of understanding of how remontancy behaves in Siberians and the failure to recognize it. Certainly it has been around a long time. **Snow Queen**, collected in Japan by Peter Barr in 1900 has sometimes rebloomed for me and is listed in the 1991 Cumulative Check List of Siberian Irises as a "repeat bloomer", but I do not know when that feature was recognized in it. Since it is a native *I. sanguinea* there must be other *sanguineas* and hybrids going back to those early days that have the trait.

The first one that I am sure was recognized as remontant by its hybridizer was **My Love**, registered in 1949 by Elizabeth Scheffy. Sarah Tiffney kindly checked old Scheffy catalogs for me and found that the first listing of it noted that it rebloomed. Obviously Marjorie Brummitt recognized the trait when she registered **Violet Repeat** in 1967 and Jean Witt when she registered **Echo Two** in 1974. Another excellent repeater of that period is Fred Cassebeer's **Placid Waters** but I have been unable to find any evidence that Fred recognized that virtue in it and I believe that he selected it in 1962 solely because of its lovely flower.

My own interest started in 1973, but without realizing it, my first cross to produce rebloomers had been made the year before when I noted two seedlings in bloom after all the others had finished. The idea that they were blooming a second time never occurred to me; I thought they were just very late bloomers. However, that was a desirable feature so I crossed them. Those two were sister seedlings (68/78A and B) from a cross of my seedling 64/72 by **White Magnificence**.

In 1973 when the 68/78 seedling bloomed again I was, of course, alert to them and watched them closely. To my surprise I observed that after a normal, but rather early period of bloom they sent up new scapes after a week or two and bloomed again. In 1971 I had obtained **My Love** - not because I was looking for a rebloomer but because it came as a gift. It too bloomed in 1973 and I realized that my seedlings were behaving like it. That was exciting and I decided at once to make remontancy a serious hybridizing goal.

The germinated seeds from the cross I had made in 1972 of 68/78 A and B had been treated with colchicine. Of the 26 that survived, several bloomed in 1974 but did not repeat. In 1975 seven did not bloom, probably from the effects of the colchicine, but 19 did, and of those 10 bloomed a second time and abundantly. Crossing the best of those resulted in more than 80% with the repeat blooming trait.

Before leaving the story of these early repeaters I must return to the forebears of 68/78 A and B. The pollen parent, **White Magnificence** has been an occasional repeater in our garden. I am confident that the pod parent, 64/72, was a repeat bloomer also. It no longer exists but in the notebook in which I keep records of my seedlings I find the note made in 1967 "the last in the garden in bloom (July 9th) and it was early also". I am ashamed to say that was five years before I became conscious of the capacity of Siberians to have a second period of bloom. I should have recognized it then.

Let me now turn to the topic of choice of terms for remontancy in Siberian irises. In 1982 in a conversation with Bee Warburton she made the point that the term rebloom was a poor one to use with Siberian irises because people were accustomed to the term being used with Tall Bearded irises in which second bloom does not occur until the fall, and therefore it was confusing. I agreed heartily. I had already learned from several of my friends to whom I had given **Soft Blue** and **Welcome Return** that they were disappointed because there had been no rebloom that fall. I had to explain that the plants had rebloomed but it had been two months or more earlier. Bee and I decided that repeat bloom would be a better term for remontancy in Siberians as it was descriptive and its use would help emphasize the great difference in the time of occurrence of the second period of bloom in Siberian and Tall Bearded irises³. Subsequently, again after consultation with Bee, I wrote an article regarding the different types of repeat bloom in Siberians, dividing them into five categories. These are:

1. The great majority that lack the ability to repeat.
2. Occasional repeaters, which do not repeat every year and, when they do, usually send up only a few scapes.
3. Reliable repeaters, which repeat faithfully and abundantly each year if growing well.
4. Preferential repeaters, in which second bloom is better than the first.
5. Continuous bloomers, which continue to send up scapes without pause⁴.

Over the years since that article appeared I believe these various categories have been rather widely adopted.

I am sure my own experience and that of others makes clear that repeat bloom in Siberians (and also in Japanese irises) is genetically controlled; but that is not the whole story. I believe Siberian irises that lack the gene or genes for repeat bloom cannot repeat even though they are perfectly grown. On the other hand, a cultivar with the genetic ability to repeat will not do so unless growing well under favorable conditions. Even preferential repeaters may skip a year after being transplanted. Similarly, reliable Japanese iris repeaters planted in slightly alkaline soil have bloomed but have not repeated⁵.

Judy suggested that I include a list of my Siberian repeaters.

Reliable and Preferential Repeaters

Diploid:

Chartreuse Bounty, Lavender Bounty, Lavender Light, On and On, Soft Blue.

Tetraploid:

Again, Blue Encore, Ever Again, Exuberant Encore, Harpswell Prelude, Lucky Lilac, Tiffany Lass, Welcome Return, White Encore, White Prelude.

Occasional Repeaters

Diploid:

Butter and Sugar, Dreaming Yellow, Early Bluebird.

Tetraploid:

Fourfold Lavender, Harpswell Happiness, Outset, Shirley's Choice.

References

1. McEwen, C., Reblooming Siberian Irises. *The Siberian Iris* 4(2): 20-21, Fall 1975.
2. McEwen, C., Experience with rebloom in Siberian and Japanese irises. *Bull AIS* no. 233, 73-77, 1979
3. Warburton, Bee, Siberian repeating. *TSI*, 5(6): 7-8, Fall 1982.
4. McEwen, C., A choice of terms for remontancy in Siberian and Japanese irises, *TSI*, 5(7): 8-9, Spring 1983.
5. McEwen C., Performance of Japanese irises in soils of different pH. *The Review*, 16(2): 1-4, 1979.

SIBERIAN REBLOOM IN BRITAIN

By Jennifer Hewitt _____

Judy has asked for a few lines on this subject in the hope that a report of good rebloom in cool and moist conditions will show that it is something we can expect to enjoy. Well, I'm sorry but unless I have completely unrealistic ideas as to the amount of rebloom experienced in other countries, I have to say that on the whole we don't have good rebloom, at least among Siberians. Some growers do succeed pretty well with bearded irises in sunnier and drier gardens than mine where drought can be a bigger problem than lack of warmth. And I am convinced that a certain amount of warmth is necessary. combined of course with sufficient moisture, if irises are to rebloom.

This is not to say that reblooming Siberians fail completely in Britain, and we do appreciate what we get. Also, I may be short on information. The Remontant Group of the British Iris Society is at present rather dormant due to ill health and other demands made on the faithful few. Our newsletter was a very important way of exchanging information and without it I cannot be sure that Siberians aren't reblooming merrily all over the country - but I think a whisper or two would have come my way.

My conviction about the need for sufficient warmth as well as moisture has to be based mainly on the experiences of the two people who grow (or grew) most Siberians and are (were) most enthusiastic about reblooming ones - Harry Foster and myself. The Foster garden in Wales, where Maureen is continuing to grow both TB's and Harry's Siberians, is, like mine, on heavy clay. It is slow to warm in spring and quick to cool in autumn. But while mine faces north-east and is 1000 feet above sea level with a hill behind it cutting off yet more sun, in Crickhowell the garden faces more or less south at about 400 feet. It often gets dry in summer even though Wales is supposed to be wet, whereas mine very rarely gets seriously dry. Harry had far more success with rebloom than I did, with varieties such as **Harpwell Happiness** and **Dreaming Yellow** producing repeat bloom which they have never done for me.

The two which have rebloomed fairly consistently here are the tetraploids **Exuberant Encore** and **Welcome Return**. They generally produce more, but short, stems in May-June and fewer but taller, branched ones in July-September. I was beginning to believe them to be consistent until 1993 when I had not a single repeat spike. The 1993 summer was overall very wet (after a wet, if mild, winter) with only rather brief dry and sunny spells. More significantly, I think, the summer of 1992 was similar if not quite so wet and cool. What happens one year does I'm sure, affect performance the following year especially in our variable climate. Culture must also be a factor and I must admit some failings in that area; the irises do get fed but are probably overdue for replanting as time and energy ran out.

The other most reliable remontant is the 40-chromosome **Echo Two** but it keeps trying to bloom out, making little increase each year. And every so often, (as in 1993) it takes a complete year off.

Two British originations, **Coquet Waters** and **Violet Repeat**, ought to be better suited to our climate but both tend to flower only once a year. This is more often in autumn than in summer and if there is no summer bloom they can bloom from August onwards but if they manage two bloom

periods, the autumn one is late and so gets finished off by frost in October. **Violet Repeat** is a far from strong grower and often does not flower at all. **Coquet Waters** is more vigorous and more often blooms twice but never very generously.

In the last two years I have been able to distribute **Welcome Return** and **Exuberant Encore** to a number of BIS members and I am hoping to hear reports of their rebloom performance in other areas when they are established. And in 1993 **Exuberant Encore** and **Reprise** (which has not so far rebloomed here) were planted in the sibirica trial at the RHS Gardens, Wisley. This is a much warmer garden on light soil, with high standards of cultivation and irrigation. It will be very interesting to see how they perform.

Other Siberians have produced occasional rebloom here and elsewhere and if my experience is not totally encouraging, I do feel they will succeed in cool and moist climates providing conditions are a little warmer than mine.

SIBERIAN REBLOOM IN MASSACHUSETTS

By **Marty Schafer** _____

1993 was a great year for repeat bloom in Siberians. In our Carlisle, Massachusetts, garden the usual gang did it again. They put on as brave show in the unbearable heat of July as they had in the cooler days of June. **George Henry** and its children **Reprise** and **Springs Brook** led the way and a number of George's grandchildren filled in the gaps. One of the prettiest, a yellow amoena, still known by its number, won best seedling at our Japanese show on July 10th. In addition to the regulars, all of our occasional repeaters threw up late stalks. Some like **Mad Magenta** were very strong and beautiful. Many other plants that have never repeated before did it too. Two seedlings of *Iris typhifolia* sent up a couple of extra bloom stalks. **Sailor's Fancy** put on an acceptable display. **Devil's Dream** and **Roaring Jelly** bloomed more heavily the second time around than the first, and one pink seedling ("Pleasures of May")

bloomed from May clear through to the middle of August.

I heard about prolific performances by **Reprise** in Washington State and about how **Devil's Dream** caused visitors to an Oregon garden to "complain" : "is that thing still blooming? There were also rumblings from Iowa that **Spring's Brook** had impressed daylily people as a tall blue companion to the flowers of their fancy. Unfortunately amid all these happy reports there are parts of the country where there is rarely any repeat bloom.

So what is going on here? What is this phenomenon of repeat? Why does a plant put on a second floral display and why does it happen in some parts of the country and not others? Are there conditions of climate or soil that foster repeat? Are there any varieties that repeat everywhere? Some of these questions will have to be answered by scientists but some can probably be answered by us Siberian growers if we coordinate our observations. (More about that later). I'll take a stab at some of these questions right now. Since I'm not a scientist, I can speculate wildly on the little information that's available. For the most part this speculation only raises more questions.

When I first began to grow Siberians I thought that repeat bloom occurred mainly in places with long moist springs and cool summers. Those are the conditions Currier McEwen has on the coast of Maine and he was one of the earliest to publicize repeat. Inland Massachusetts, where I live, rarely has cool summers and only a few of Currier's irises repeated here. **Chartreuse Bounty** and **Lavender Light** were reliable. **Lavender Bounty** was only occasional and the rest rarely repeated. I thought it must be too hot here. Then Bee Warburton (even more inland than I am) came up with **George Henry** and **Reprise**. Nevertheless, if we had a cool summer and the Siberians repeated as usual, we continued to say, "must be the cool summer". But 1993 forced us to reconsider, because it was hotter and drier than most summers and we still had outstanding repeat.

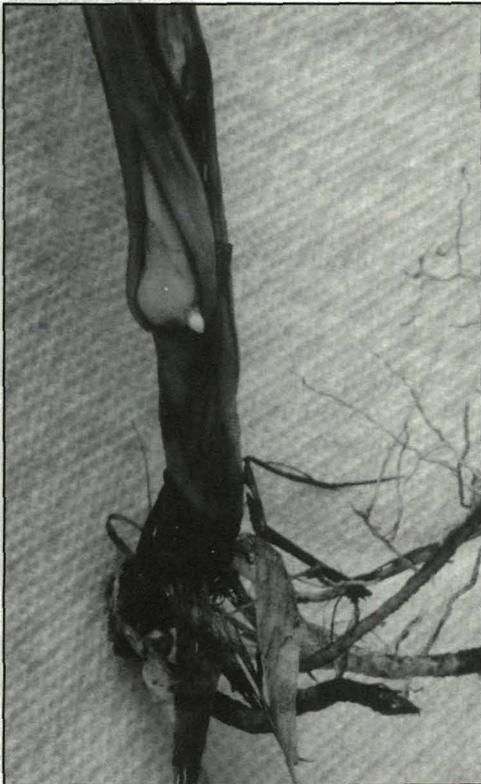
How confusing! Do some irises repeat because of cool weather and some repeat because of hot weather? Or is the

trigger a more complicated set of circumstances? Or is it totally unrelated to weather, having to do with soil conditions - acidity, mineral content, etc....?

We also need to consider what effect repeat bloom has on plants. How does the plant physically do it and will repeat cut into future bloom? A non-repeating Siberian sends up its flower stalk on the central fan with five or six increase fans on the sides. Under normal conditions most of those side fans become next year's bloom stalks. That's how Siberian clumps get so big so fast. However, in normal Siberians bloom stalks don't make vegetative increase. A bloom stalk's function is to produce pollen and seeds and then its done. The side fans produce next year's increase. But what about repeaters? The first time I took a division from a clump of **Chartreuse Bounty** (in August), it had all bloom stalks and no increase fans. Its central fan had put up the first bloom stalk and the five increase fans turned into the repeat bloom stalks. That was nice for the gardener, but what about next year's bloom? How is the clump going to increase in size? Much to my surprise, the following year, the remaining clump of **Chartreuse Bounty** bloomed once and then again, just as usual. A possible answer to this mystery came last summer during dividing time, after our heavy repeat season. We noticed on one almost "bloomed out division", small increase "buds" on the second set of bloom stalks. I assume (or hope) that these will turn into vegetative increase this next spring. This is not ordinary Siberian behavior but by doing it the plant would manage to avoid bloom out. Still, many questions remain. Will this growing point actually produce a bloom fan and increase fans and will they bloom next year? That would mean one fan produced two bloom stalks in two years, plus vegetative increase (plus repeat). Does the plant ever run out of energy? Does it need more frequent division than other Siberians or division at a different time of year? Will a plant, divided in August or September with only repeat bloom stalks and vegetative "buds" reestablish itself when replanted or can it only be divided successfully in the spring when these buds are in active growth? Do the different types of repeaters - occasional, reliable, preferential and continuous - accomplish their repeat in different ways or

simply at different rates? An examination of our current knowledge about this subject raises more questions than answers.

I believe that two things need to be done. First we have to have people make careful notes about repeat bloom. Where does it occur and where not? What are the average climatic conditions before, during and after first bloom? Which varieties have the capacity for repeat, how old must the clump be, and how many stalks are there on the second bloom compared to the first? What have you seen to



Siberian Repeat
Bloom Stalk with
Increase

Photo:

Schafer/Sacks

indicate how the repeaters produce extra bloom stalks and increase? This may take a few years to figure out because conditions can change drastically from year to year, Remember, plants must be in place more than a year before they are likely to repeat. If people will observe their plants and send me their notes, I would be happy to organize the information for TSI.

The second suggestion I have is for hybridizers to breed specifically for repeat in their own area of the country. One approach might be to start with those that already repeat locally (however unreliably) and those that are known to repeat in more than one area (e.g. **Chartreuse Bounty** and **Reprise**). Don't expect to see repeat stalks the first year your seedlings bloom. Breeding for repeat requires leaving plants in place for a second season. While a flower may not be good enough to save on its own, if it is a strong repeater it would make a good parent just for that feature.

Siberian enthusiasts will certainly relish repeat. In a time of year dominated by flat daisy forms and nearly flat lily forms, Siberians could provide relief from monotony with their exciting three dimensional shapes. Repeat bloom may also shift the balance from indifference to delight in our flower by the gardening public. What more could they want to contrast with the hot colors of summer than the cool blues and deep purples that Siberians manage so easily? The reactions I've had from nurserymen and gardeners to the fact of repeat bloom has ranged from surprise and shock to wild enthusiasm. Nurserymen can't wait to get their hands on stock and start selling it. Gardeners can't believe that they've never heard of or seen Siberian iris repeat. They are dismayed that it's being kept such a secret. The lid is coming off. We need to know more so that we can communicate with the outside world about who, what, where, when, how, and (for us) why?

A WORD ON REBLOOM FROM VIRGINIA

By Clarence Mahan _____

I have only one Siberian that has sent up a late stalk more than once, and that is the old, but lovely **My Love**. Bee Warburton's **Reprise** is the only Siberian that has given so-called preferential rebloom more than once in my garden. A few others have sent up a late stalk once over many years of growing them.

The evidence I have seen has left me unconvinced that there are any reblooming Siberians. I know, however, that many people have bought so-called reblooming Siberians only to be disappointed, and even angry. Even when the description of the "reblooming Siberians" is qualified or the term "preferential rebloom" is used, the public tends to be misled.

What the evidence leads me to believe so far is that some Siberian cultivars are susceptible to delayed bloom caused by some of their stems being set back by cold spells. In northern climes, this occurs with some frequency with some cultivars. In areas where late freezes are not so common, i.e. mid-Atlantic and the South, it is very rare for stalks on any cultivars to be delayed by the cold.

I know no one wants to mislead people, but the description of some Siberians as "rebloomers" or "preferential rebloomers" does have this effect. I could not even begin to estimate the number of people who have complained to me about buying irises and expecting rebloom, only to get none.

On the other hand, I do not doubt for a second that people who live in upstate New York or Wisconsin get late bloom stalks much more frequently than I do, and that some varieties, those most susceptible to delay caused by late freezes, send up these late stalks more often than others.

Still, I am willing to be convinced that my current conclusions are wrong. I wish there were evidence that "rebloom" in Siberians is real but so far I haven't seen

it. Suky and I so love Siberian irises that we would grow them even if they bloomed every other year ... so the lack of real rebloom doesn't cause us any great concern.

NOTES ON REPEAT-BLOOMING SIBERIANS IN THE MIDWEST

By **Bob Bauer** _____

Siberians don't seem to repeat bloom as readily in the Midwest as reports indicate they do in other sections of the country. Repeat bloom is used here in the very loose sense that they bloom a second time after a period of having no bloom. There are no true rebloomers (plants blooming on the current year's increase fans) that I am aware of in the Midwest. We have noticed a rare bud attempting to struggle out of a stubborn fan near the base of the plant at the end of summer. But it certainly doesn't happen to many plants of a variety, nor is it noticeably consistent from year to year. These notes will be limited to reporting varieties that repeat bloom after a period of rest of several days to two weeks.

My Love (Scheffy '49) is an old favorite that opens its light blue flowers very early in the spring and reliably blooms a second time two weeks later with taller bloom stalks and about as much bloom as the first. It is a reliable repeater in most parts of the country. **Reprise** (Warburton '87) has usually repeated bloom here, although with a fewer number of stalks, but with enough to make it an excellent garden plant. When its last bloom is fading, the second wave of emerging bloom stalks can be seen down in the foliage of the clump. **Springs Brook** (Warburton '88) and **Dancing Nanou** (Miller '83) repeat occasionally here, but not reliably so. **Lavender Bounty** (McEwen '81) is probably best described as a continuing bloomer because a few blooms continue weeks after its very early first bloom. Many other varieties, reported as being repeaters, throw up an occasional stalk in some years, but not others; likewise, some varieties not reported as repeaters will have a single bloom later in the season, but such an event would not prompt me to report it.

We do have a seedling, S85-HREB, which received an HC in 1993. I hope it received attention on the merit of its first bloom since it certainly did not rebloom in 1993. It has, however, rebloomed every year in the past and we will continue to watch its performance.

It was interesting to note this last season that in a row of 100 Siberian *I. typhifolia* seedlings, three of the plants sent up bloom stalks three weeks after peak bloom and one of those plants had three or more stalks nearly two weeks after that. *I. typhifolia* bloomed 2-3 weeks earlier here than other Siberians, and the last flowers were pollinated with a sibirica seedling that normally blooms very late. It will be interesting to find out when the seedlings of this cross will decide to bloom.

Siberian irises are a valuable garden and landscaping plant and a second period of bloom enhances their value. It is not clearly understood why they do not perform reliably in the Midwest. Siberian bloom can be affected by the condition of the plant the previous year. Perhaps our hot summers are the problem, but I haven't been able to make a correlation of a good repeat bloom season with the previous summer.

SIBERIAN REBLOOM IN NORTH CAROLINA

By Katharine Steele _____

In response to Judy's request for input on Siberian iris repeat bloom, I turned to notes recorded by me a few years ago. Our peak bloom is early to mid-May.

Repeat bloomers worth noting on June 1st through June 12th were: **My Love** (Scheffy '49), **On and On** (McEwen '77), **Ruby Wine** (Hager '67) and **Sea Shadows** (Brummitt '64). Repeat bloom on **My Love** consisted of seven nice stalks compared to 35 initially and **On and On** with best repeat of 11 compared to 17 initially. Actually **On and On** doesn't totally stop blooming so it really does live up to its name.

My Love is early and starts to bloom here at the end of April. Conditions have to be favorable for repeat bloom to occur here in North Carolina; sufficient rain, fertilizer and a well established clump. I don't always have repeat bloom but if anything repeats **My Love** will be one of them.

I sometimes refer to repeat bloom as a encore. Just when we are saying goodbye to the bloom season there, growing several inches taller than the spent bloom stalks and seed pods is the surprise of a few fresh stalks. I value these in the garden and as cut flowers.

*(Katharine noted in her letter that **Legacy of Love** her first registered Siberian cultivar, an elegant silvery lavender-blue much admired at the Siberian Convention, has shown a tendency to keep on sending up bloom stalks extending the season by a week or two. In fact if the name had been available it would have been called "Lasting Love". She also noted that although she grows many modern Siberians none of them have repeated for her. Ed.)*

NOTES ON REBLOOM FROM OREGON

By Tom Abrego _____

Our experience with rebloom in Siberians has been very limited. Ellen and I were trying to determine why we have seen so little rebloom in our garden, when there is so much talk of it elsewhere. We've grown a number of Siberians which have been registered and generally acclaimed as rebloomers, but have not seen it ourselves. We think we have figured out why this is. In the past our ability to water our Siberians was somewhat limited, so what water we had we put on our growing fields (always one year old plants). Our established display beds would be watered in the spring, before bloom, but we'd let them dry out in the summer (maybe 1-2 inches per month). Now we have had all of our display on irrigation since last year and I believe we will now begin to see some rebloom.

Regarding specific varieties, **Lavender Light** has been one

that has rebloomed relatively consistently (maybe about 70% of the time). **Lavender Light** is usually the first Siberian to bloom for us, usually a week or two before the others, and then the repeat bloom is normally 5-6 weeks later. The repeat bloom is normally fuller (more, bigger flowers) than the first.

Reprise has also rebloomed for us the last two years. Its first bloom is not as early as **Lavender Light's** and the second bloom is a little earlier than **Lavender Light's**. **Over in Gloryland** rebloomed for us last spring, the first spring we have seen it bloom. It bloomed all season long to begin with, and then towards the end of our *Spuria* bloom we noticed it was blooming again. We don't know if this is what to expect with it.

Now that we have a good irrigation system and we can give all our Siberians the water they need throughout their growing season, it will be interesting to see if our rebloom increases significantly.

TRACING THE ELUSIVE PEDIGREES

By Mike Lowe _____

First, a confession - I have not observed true rebloom in Siberians here in Virginia. However repeat flowering, two to five weeks after the main spring flush of bloom, is a continuing feature of our Siberian planting. **My Love**, **Lavender Bounty** and **Reprise** are three of the cultivars that exhibit this tendency strongly. All can be thwarted by vagaries in weather. Nearly always, repeat bloom takes place on well established, large clumps growing in a location that has not raised iris for several years.

Much earnest, near-sighted, peering at the origin of repeating stalks has taken place in our garden. I can attest to the fact that fans putting up late stalks are almost always buried deep in the heart of a bushel basket sized clump. I have never experienced the slightest doubt that I

was looking at a fan which had emerged last season, overwintered, passed through the normal bloom time barren and thrown a stalk 2 to 5 weeks after all others had performed. Maturation rates of new increases nearly guarantee the validity of this scenario. I have yet to find a fan with a normal spring bloom stalk and a repeat stalk. Commercial gardens that routinely line out a repeating cultivar and then closely examine all repeating fans could provide interesting information on the above speculation. For a decade, I chased down pedigrees by hand in an attempt to understand the origins of rebloom in irises. Tiring of that drudgery, I wrote a computer program that can 'look-up' pedigrees. I have traced pedigrees on approximately 55 Siberians that have been reported to exhibit repeat bloom.

Two interesting items emerge: First, one would immediately believe that **Snow Queen**, passed down through **Gatineau**, must be the genetic "Roots of Rebloom." I, in fact, wrote this article with a triumphant declaration that I had "winnowed out the ancestors of repeat bloom." A worm of doubt surfaced when I remembered a prominent irisarian who had proudly declared that he had found the common ancestor of TB amoenas when in fact, he had found the common ancestor behind all TBs. This gave me pause. I then did the onerous work of randomly selecting and researching pedigrees in an equal-sized, non-repeating, control group of Siberian irises. A major surprise was that **Snow Queen** appeared behind a larger percentage of non-repeating Siberians than repeaters! Scratch one theory.

Item two: the nonappearance of **My Love** (Scheffy '48) in the control group prompted a deeper look. This iris is in the background of almost all of Currier McEwen's repeaters. It did not appear in any other hybridizers repeating cultivars. Widening the search, I checked the pedigrees (thanks to Howard Brookins!) of all registered Siberians. The only use of **My Love** was in iris produced by Dr. McEwen. I believe that a significant opportunity for repeat bloom has been missed by Siberian hybridizers in this instance.

Some Siberian irises have demonstrated a proclivity to

produce a few out-of-season blooms within a large clump. In our garden we have observed the sporadic appearance of 2" to 4" bloom stalks on several cultivars in July, August and September. These are unable to fully open as they are usually buried in the center of the clump. It would appear that Siberian hybridizers have available an inherent trait that allows some cultivars to delay maturation and produce bloom on a small number of fans exceptionally late in the season.

I would suggest an interesting and worthwhile project. Briefly stated, the goal would be to establish a group of Siberian irises that flower consistently, well after the normal Siberian bloom season ends. Initially, all effort should concentrate on pushing the 'normal bloom' of this group later and later into the season. In the warmer areas of the country, this "late" bloom would have to occur in the cooler fall months. No attempt would be made to obtain two bloom peaks.

I suggest that cultivars exhibiting strong repeat tendencies (for example: **My Love** and **Reprise**) be lined out such that at least 50 fans are planted with enough separation so that each fan can be easily observed. A large, established clump of each test iris should also be available. All fans that show late (repeat bloom) should be selected and replanted; 'normal-season' blooming fans would be discarded. Crosses should be attempted on these selects that exhibit a tendency towards late season bloom.

This is the barest sketch of a complex program - the important idea is to develop Siberian cultivars that shift the bloom season as late as possible with no effort to obtain two bloom periods. A clump of Siberian iris in full bloom in the late summer and fall would be a valuable addition to the perennial plant world.

HYBRIDIZING THOSE OTHER SIBERIANS

By Carla Lankow

The forty chromosome Sino-Siberian subseries consists of eight species, two of which *I. phragmitetorum* and *I. dykesii* are probably not valid. *I. phragmitetorum* is known only from one herbarium sheet from a collection in 1925. The original collection site in a swamp in southwest China has now been overrun by nearby Kunming City. It is a very rare iris if it still exists. *I. dykesii* which was found in Dykes' garden after he died, was probably a hybrid when it was named. This leaves us with six valid species. *I. forrestii* and *I. wilsonii* are light yellow and provide this color in their hybrids not so easily obtained in the twenty eights. *I. clarkei*, *bulleyana*, and *delavayi* are mostly blue-purple in color but *I. clarkei* and *I. delavayi* give us one or two branches. *I. chrysographes* comes in a range of colors from near black to dark purple to a rich wine-red usually with a few gold lines on the signal.

When we compare what we are now growing as Sino-Siberian species with the original descriptions and with Dykes' plates we find that in the case of *I. bulleyana* and *I. clarkei* there is little or no resemblance. The same is true of most of the clones of *I. delavayi* that are in the trade at present. However seed of a collected plant of what appears to be true *delavayi* growing at the Berkeley Botanic Garden was collected and distributed by Dr. James Waddick. Plants of this "Berkeley" *I. delavayi* are now available through some specialist growers. We still have clones of *I. forrestii*, *I. wilsonii* and *I. chrysographes* that at least appear to be close to true species.

There are two reasons for the difficulty in maintaining true species in this group. The first being the ease with which they hybridize with any other member of the group. Self sown seedlings with hybrid vigor often crowd out the parent plant and if similar in form and color go unnoticed and are then passed on as "species". The second reason there are so few pure species clones of the Sino-Siberian is that most of these irises were collected by the great plant hunters

around the turn of the century. Because China was closed to the outside world for so many years we have had no new plant material from the original collection sites. Thus all we have are the original clones many of which have been lost or replaced by hybrid offspring. With more access to China, collecting trips by Jim Waddick, an expedition by the Royal Botanical Gardens at Edinburgh and Kew and the Royal Horticultural Society, we now have fresh seed from China. As plants from these seeds bloom taxonomists may be able to better define this group of irises. All this is of great interest to taxonomist and species buffs but gardeners have different reasons to be fascinated by these irises.

To gardeners this group provides a variation in color and pattern not found in the twenty-eight chromosome garden Siberians. When crossed the Sino-Siberian hybrids display a wide array of patterns such as plicatas, amoenas, all-over patterns of dots or lines, mid stripes on the falls or standards contrasting styles and large contrasting signals. Because two of the species, *I. forrestii* and *I. wilsoni* are yellow this color as well as a good red from *I. chrysographes* are easily obtained. Occasionally what are termed "albinos" show up in the seedling patch when the top layer of purple or blue is eliminated leaving only the underlying petal color. This is usually white or yellow, but Lorena Reid has bloomed several soft orange ones (TSI, Vol. 7, No. 5, Spring '92). Add to this the variation in flower form and you can see the possibilities are endless.

With all this potential why have so few hybridizers worked with the Sino-Siberians? Probably the reason is that many people believe they only grow well in limited areas. The Sino-Siberians come from cool, moist mountain areas, they should be quite cold hardy and I think they can be grown in much of the United States if two requirements are met. They must have acid soil and plenty of water. They grow naturally in almost boggy conditions and mulching to provide a cool root run or planting in partial shade would be beneficial in hot summer areas. I doubt they would be successful in the dry hot Southwest.



Lankow Sdlg.
85 X 117:
Light violet-blue
standards with white
rim. Light violet-
blue falls with
violet veining.



Lankow Sdlg.
87 X 128:
Dark velvety-purple
with a gold star
blaze.



Sdlg. 9040-31-A
Light violet-blue
with darker violet-
blue style arms.
Falls light violet-
blue with darker
violet arrow down
the center and a
prominent yellow
blaze.

Photos: Carla Lankow

Many growers have introduced a few Sino-Siberians but at present Lorena Reid is the only other U.S. hybridizer working seriously with this class of iris. She has several recent introductions such as **Dotted Line** and **Dimity Butterfly** that show great advancement in the field. Many of the early introductions were from open pollinated seed and few hybridizers have attempted to develop breeding lines.

In my own work with the Sino-Sibes I have attempted to start some breeding lines but because we are so close to the species there are still a large number of odd color breaks. Crosses are pretty unpredictable. But for the same reason, when things go as planned progress is rapid. Some of my goals, of course, are to eliminate some of the species faults. The shorter species only have two terminal buds and to get branching and a higher bud count *I. delavayi* or *I. clarkei* must be used. Unfortunately these often give tall floppy stalks with small flowers. Better proportion and stronger stems are a must. Foliage and plant vigor need to be improved also. The graceful natural form of upright or angled standards and pendant falls is pleasing, however the Sino-Siberians tend to have pinched and reflexed falls. These do not display the color and pattern well and need to be considered a serious fault. I am also trying for a branched, good textured yellow. A red iris is every ones dream and like the Louisianas the Sino-Sibes have a pigment for a color close to spectrum red. I have been getting some good reds but we have a long way to go. One exciting event in the seedling patch was the appearance of a variegated leaved plant. It was grown from seed field collected in China. It has been growing for me for three years now and is an attractive plant. I moved it last fall and now I am anxiously awaiting for signs of new growth - I'm nervous. Of course I have a lot of 40's that don't show new growth yet but I worry a lot.

Hybridizing the Sino-Sibes is an exciting project that often leads to the second phase. The next step is to cross them with the Pacificas to create Cal-Sibes. These sterile hybrids may be our only way to allow people in harsher climates to grow the somewhat tender Pacificas. I have had

reports from people in Canada that indicate that in many cases the Cal-Sibes can be grown where neither of their parents will thrive. Since Cal-Sibes are sterile we only have one try to create a good iris. We must have good Sino-Siberians to combine with the newer Pacifica hybrids.

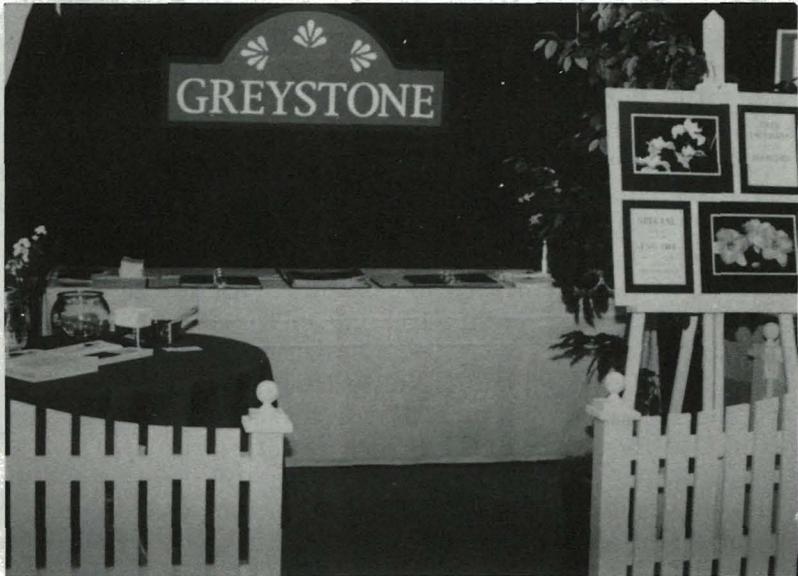
Many of these problems were met and dealt with by hybridizers many years ago when they began work with the twenty-eight chromosome Siberians. These challenges only make the hybridizing the Sino-Sibes more interesting and I would encourage you to join us in a bit of pollen dabbing on those "other Siberians".

A NOTE ON VARIEGATION

I included the information about the variegated plant because I thought it was of interest, although Carla has since told me that the plant did not make it through the winter. You would think that with the number of Siberian seedlings being grown both 28's and 40's we would see more variegated plants showing up. The one that we have in our seedling patch mentioned in TSI, Spring 1992, still exists although it has no future as a garden plant. Each spring it produces several nice variegated fans along with some green ones. As summer progresses the green fans grow apace and the variegated ones brown and shrivel up. Then the whole process repeats the following spring. ED

PROMOTING SIBERIAN IRISES IN THE 90'S

By Linda Lehman



After several years of growing and selling daylilies we decided that we needed to extend our season of bloom with another perennial flower. In an attempt to find something to complement our business Borbeleta Gardens suggested that we try Siberian irises. Although we knew little or nothing about them the name sounded great and we ordered a substantial quantity from several growers. That spring when the flowers opened for the first time it was hard for us to believe that plants so beautiful had not received wider exposure.

The first year that we offered Siberian irises for sale our advertising efforts barely evoked a response. Much to our dismay we sold very few plants that spring. We realized the tremendous market potential but agonized over the lack of interest. It seemed to us that we needed to devote our efforts in the area of promotion and that the sales would

follow. Later that season when our customers came to the farm to pick up daylilies we tried to make sure everyone went home with at least one Siberian iris to try in their garden. Although our efforts began to pay off we couldn't continue to give away plants and stay in business. The harsh reality of a negative cash flow prompted new strategies.

The following season we launched our campaign to educate the consumer and with the generous support of Klehm Nursery we were able to put together descriptive lists and a collection of professional quality photographs to use as a visual aid in a fund raising auction sponsored by Madison (WI) Public Television Station WHA-TV. In exchange for a donation of gift certificates our business received air time each day during the seven day event to showcase our farm and the flowers we grow. The viewer response was excellent and the gift certificates brought us many new customers! With increased traffic it became evident that we needed display beds to keep people out of our fields.

Each year during peak bloom we take truckloads of cut flowers and potted plants to sell at the Madison Farmer's Market. The rewards have been gratifying. With increased interest, several garden centers and landscaping firms have asked to carry our product.

This year we will continue our efforts to bring the world of Siberian irises closer to the public. In February we participated in a Garden Expo sponsored by the Wisconsin Gardener and WHA-TV. Photo albums of Siberians and daylilies kept a captive audience during the entire event. We are anxious to try new ideas and have many plans for the upcoming season. Our garden will be featured in Farm Trails, a cooperative effort to promote rural tourism, we will continue to donate plants to public gardens and host special events at the farm.

Promotion and education must be an ongoing process. With the great advances in Siberian iris breeding the time has come to bring our flowers to the forefront of modern perennials. Lets not hide our candle under a bushel.

NEW MEMBERS

An enthusiastic welcome to our 71 new members. Wow! They represent 30 states and the District of Columbia plus Canada, England, Germany and Japan. Howard Brookins our membership chairman tells me that many people are renewing before their reminder post card is sent out, which of course, is a great help to him. If you all renew, our membership will be over 700!

New members are:

- Applegate, Robert V. & Gorham, Debbie L., 18353 S. Grasley Rd. Oregon City, OR 97045
Barker, John C., 1021 North St. Apt. 1, Lake Geneva, WI 53147
Belding, Reba M., 1232 Sunhill Rd., Birmingham, AL 35215
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Carmona, George, N2216 Pammel Pass E., La Crosse, WI 54601
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Christo, Catherine A., Mt. Diablo Iris Soc., 1311 W. 14th St., Benicia, CA 94510
Christopher, Joe, Region 24 RVP., 910 Calvert Rd., Cullman, AL 35055
Earhart Gardens, Nellie Clifford, Box 847, South Harpswell, ME 04079
Cox, Barbara, 1609 Acoma Pl., Ponca City, OK 74604
Cox, Vicky, 1205 S. 18th St. #2, Renton, WA 98055-3540
Desert Iris Patch, 1555 Ridgeview Dr., #189, Reno, NV 89509
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 IL 61486
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 MA 01002
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 St., Sioux City, IA 51104
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 63122-6734
 Lineberger, Everette, 2460 Compton Bridge Rd., Inman, SC
 29349-8489
 Lundahl, Thomas A., 7308 Schram Dr., Papillion, NE 68128
 Lundberg, Laura, 8896 Maureen Cir., Prior Lake, MN 55372
 Luttrell, Pam, 4315 Pleasant Valley Rd., Chantilly, VA 22021
 Martz, George, Vogelsangstr. 51, Stuttgart D-770197
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Hagen Reed, Cathy, Region 12 RVP, 1584 Meadow Moor
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Reilly, Faith, Mesilla Valley Iris Society, 960 Maple St.,
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Rena, Mrs. Hubert, 4313 Lake Villa Dr., Metairie, LA 70002
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Way, Friendship, MD 21794
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Young, June, Kiln Cottage, 33 Park Hill, Wheatley, Oxford
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THE LAST WORD

"Gardening is one of the rewards of middle age, when one is ready for an impersonal passion."

May Sarton in Plant Dreaming Deep

Gardening is a passion; a way of life, a microcosm of one's own life with its triumphs, disappointments, surprises and mysteries. Never boring and endlessly challenging. Our own gardens have progressed over the years from pocket handkerchief size to the five acres we now have and will no doubt decrease again with advancing years. But in the meantime what fun it is. At the moment the garden is blanketed under several inches of snow and the temperatures are around zero degrees Fahrenheit. So what greater pleasure than to curl up in front of the fire, surrounded by garden catalogues, shopping for the best deals on familiar plants or perhaps taking a chance on an unfamiliar one which might become a garden treasure.

I was thrilled at the positive response from our members to the increased amount of color in our Fall '93 issue. Many of you took the time to write and I am very grateful. The greatest challenge in providing color is getting hold of quality photographs for the separations. We will keep working at it.

In 1993 the total of Siberians ever registered passed the thousand mark. A far cry from the Tall Bearded total which can reach that number in one year, but a milestone nevertheless. Does anyone grow them all?

We are hoping for a good showing of Siberian guest cultivars in Oregon at the AIS Convention. We also hope to see many of the Calsibes and 40 chromosome Siberians mentioned in Carla Lankow's article. Have your cameras at the ready.

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