The Siberian Iris

Spring 1996

Bob and Judy Hollingworth
124 Sherwood Rd. E.
Williamston, MI 48895
(517) 349-8121

WINDWOOD
GARDENS

SIBERIAN IRIS INTRODUCTIONS FOR 1996

BAND OF ANGELS. Tetraploid. 31". M-L.
Tetraploids from Forrest McCord x Strawberry Fair Sib.
Angels appear in broad, tailored robes of mid-blue/purple with a clear creamy band around the margin. Set off by a large light yellow blaze this is a showy flower with good clump effect. Excellent spear foliage. 1 branch with 3-4 buds. Very fertile and crosses readily with most other tetraploids. $35

FLUTTER BY BUTTERFLY. Diploid. 32". M.
Parents include Kenabee, Steve Varner, Superego, Anniversary, Pink Haze and Fairy Dawn.
Clouds of smallish well-ruffled flowers in clear mid-blue have a bitone effect because of lighter blue standards and style arms. A neat white signal sets of the semi-pendent falls. Blue-green upright foliage. 1-2 branches and 4-6 buds. Overall a most pleasing and harmonious garden effect. $35

Please write for a list of previous introductions. Strawberry Fair is available at $40.

THE SIBERIAN IRIS

VOLUME 9, NUMBER 2 SPRING 1996

Front Cover: Siberians in a Graceful Flower Arrangement

Photo and Arrangement: Anna Mae Miller

FROM THE PRESIDENT'S DESK

That was not a nice winter at all. Long, cold and dry for us. Not so dry for the folks to our south and east who got most of the snow, but just as long, I'm sure. Probably only the Siberians loved it. Now the anticipation born of spring is here, and Judy and I certainly have something special to look forward to. It promises to be a busy year for us since we just bought an old farm house nearby with 12 acres of land. The "kids" get to live in the house and we will move the iris operation over to the new place gradually over the next few years.

We have the convention in Massachusetts to look forward to. And Currier McEwen's book, which is now ready. In fact it will be available at the Convention at a considerable discount with the added inducement that Currier will be there to autograph copies. Unfortunately, unless someone steps forward fairly soon we will not have another Siberian Convention to anticipate in 2000 or 2001. As the folks in Massachusetts would tell you, there is plenty of work and some nervous moments in putting on a convention. Things happen. Though you may court Perfection, she will not be won. But planning a convention is exciting and the rewards are significant and lasting. Anyone feeling lucky out there?

Some of us have the SSI Board meeting at the convention to look forward to. OK, I admit it. This won't be a riot of excitement, but we would like to see you there and we do welcome your ideas on how we should be running things. It is at 2:00 pm Friday, June 14 and is open to anyone.

In closing, I would like to say how sad it is to lose another extraordinary irisarian in Bee Warburton. She is remembered in this issue by people who new her better than I, but I well recall her hospitality and encouragement and her immense knowledge of, and feeling for, irises. Wise, capable, generous. Irreplacable.

Bob Hollingworth

1995 SIBERIAN REGISTRATIONS AND INTRODUCTIONS

(from the AIS Registrations and Introductions in 1995, compiled by Keith Keppel, Registrar-Recorder.)

ANGLESEY (Harry Foster, SIB, 1986). V.H. Humphrey 1995.

BERLINER WEISSE (Tomas Tamberg, R. 1995). SIB, 28" (70cm), M. White self, wide form. (Wide White x unknown) X Creme Chantilly.

BERLIN SKY (T. Tamberg, SIB, R. 1993). V.H. Humphrey 1995.

BOOP EYES (Lorena Reid, R. 1995). Sdlg. 90S16-8F. SIB (sino-sib), 30-36" (76-91 cm), ML. S. and style arms medium lavender; F. medium lavender, large white signal bordered navy, with black lines at top in throat. Sino-sib sdlg.: (Beautiful Forty x unknown) X Butterfly Mode. Laurie's Garden 1995.

BRIAN RAY (Clyde Hahn, R. 1995). Sdlg. 92-1-C. SIB, 27" (69 cm), M. S. light purple; F. bright purple, white signal veined light purple; slight sweet fragrance. Parentage unknown. Hahn's Rainbow Iris 1995.

BRYNMAWR (Harry Foster, SIB, R. 1989) V.H. Humphrey 1995.

BUTTER AND CREAM (Currier McEwen, R. 1995). Sdlg. T(8)-87/175. SIB, (tet.), 30" (75 cm), EML. S. pale yellow (RHS 4D), edges deeper (4C); style arms creamy yellow (10D), deeper (10C) on midrib and outer third; F. rich yellow (12B), deeper crimped edge (12A), paling with age (10D) except at edges; hafts yellow green (154A); ruffled. T(7)-84/118(1): ((Ruffles Plus sib x Happy Event) x Happy Event) X T(7)-84-106-(11): (Ivory Cream x T(3)-79/126-(1): inv. Dreaming Yellow seedlings).

CAESAR'S NEPHEW (J. Owings Rebert, R. 1995). Sdlg. SR-2. SIB. 32" (81 cm), M. Mid violet self, F. with white blaze, gold haft. Caesar's Brother X unknown.

CAMBROSA (Jean Witt, R. 1995). Sdlg. 94-03-ZY. SPEC-X, 23" (58 cm), M. Medium clear blue, F. with golden yellow signal rimmed white; style arms medium blue; S. short, spoon - to paddle-shaped. Cambridge X *I. setosa* "Alaska Blue".

CHANDLER'S CHOICE (Currier McEwen, SIB, R. 1994). Earthart Gardens, Seaways Gardens 1995.

CLEETON DOUBLE CHANCE (Jennifer Hewitt, R. 1995). Sdlg. F812/C8. SIB (40 chr.), 42" (107 cm), ML. S. cream, faint violet speckles; F. cream, veined and speckled light violet, signal cream veined dark violet; style arms cream, reddish tinge along midrib. Cleeton Moon X yellow sdlg.: (possibly *I. delavayi* x unknown).

DUNKLER WEIN (Tomas Tamberg, R. 1995). Sdlg. SSTT 266. SIB (tet.), 31" (80 cm), M. Deep wine red, F. velvety. Wine red McEwen sdlg. X converted seedling: (Apfelblute x Wine Wings).

ELINOR HEWITT (Jennifer Hewitt, SIB, R. 1992). British Iris Society 1995.

EMMA RIPEKA (Frances Love, SIB, R. 1990). Frances Love, Lynette Black 1995/96.

GERMANTET ONE (Tomas Tamberg, SIB, R. 1993). V.H. Humphrey 1995.

GLASLYN (Harry Foster, SIB, R. 1990). V.H. Humphrey 1995.

HARPSWELL LOVE (Currier McEwen, R. 1995). Sdlg. T(6)-83/206. SIB (tet.), 29" (73 cm), ML. S. and style arms pale greenish yellow (RHS 1D), aging to white, style arms with white tufts; F. white, greenish yellow veining to tips, crimped yellow (7D) edges aging cream, signals bright

yellow (7A); ruffled. Ivory Cream X T(5)-79/174(3): (Lady of Quality x Dear Dianne).

HARPSWELL SNOW (Currier McEwen, R. 1995). Sdlg. T(8)-84/54. SIB (tet.), 34" (85 cm), M. S. white; style arms white, crests feathered; F. white, small greenish yellow (RHS 2C) signal hidden under styles. T(7)-81/99(10): (Variation in Blue sdlg. x Marshmallow Frosting) X T(5)-79/221(1): ((Cambridge x Wing on Wing) x T(4)-76/25, inv. Fourfold White, Pirouette).

HIGH DI (J.T. Aitken, R. 1995). Sdlg. 88 S-1-D. SIB (tet.), 48" (122 cm), ML-VL. Dark blue purple, F. with small white signal and faint white rim. High Standards X Dear Dianne. Aitken's Salmon Creek Garden 1995.

IN HER GLORY (David Silverberg, R. 1995). Sdlg. 89-43F. SIB, 31-33" (79-84 cm), M. Cream, aging white, F. with sunny yellow throat and veining; style arms feathered. Percheron X Creme Chantilly. Abbey Gardens 1995.

ISLA SERLE (Harry Foster, SIB, R. 1991). V.H. Humphrey 1995.

LEGACY OF LOVE (Katharine Steele, SIB, R. 1992). Draycott Gardens 1995.

LEO HEWITT (Jennifer Hewitt, SIB, R. 1994). British Iris Society 1995.

LITTLE BLUE SPARKLER (Sarah Tiffney, R. 1995). Sdlg. TS80-2. SIB, 27" (69 cm), EM. S. violet blue (RHS 93C), faint darker (93B) veining; style arms violet blue (93C), darker (93B) midrib, edges and crest; F. cream, deeper violet blue (93A) veining, center line and edging; slender fountain-effect foliage. *I. sibirica* sdlg., sib to Snow Prince.

LLANGORS (Harry Foster, SIB, R. 1989). V.H. Humphrey 1995.

LLYN BRIANNE (Harry Foster, SIB, R. 1986). V.H. Humphrey 1995.

LOU ANNE (Ruth Wilder, R. 1995). Sdlg. WW2. SIB, 36-38" (91-97 cm), M. Pale pink edged white, edging on F. 1/4" wide. Pink Haze X Pink Haze sdlg.

MARY LOUISE MICHIE (Anna Mae Miller, R. 1995). Sdlg. 85.20.24. SIB, 32" (81 cm), EM. S. lavender (RHS 84C), shaded pink; style arms white, flushed pink; F. darker rose lavender (77B). Aqua Whispers X Lavender Bounty.

MCKENZIE VIOLET (Lorena Reid, R. 1995). Sdlg. DL opG91-5F. SIB (sino-sib), 36" (91 cm), ML. S. medium violet; style arms light violet, pale midrib; F. medium violet, signal near-black with single white center line. Dotted Line X unknown. Laurie's Garden 1995.

NORTHERN PINK (Tomas Tamberg, R. 1995). Sdlg. SSTT 359. SPEC-X (tet.), 31" (80 cm), M. S. pale lavender pink, small; F. lavender pink. Converted sdlg. Tetra-Sibtosa V: (Pink Haze x lavender *I. setosa*) X converted sdlg. Tetra-Sibtosa IV: (Pink Haze x lavender *I. setosa*).

OBAN (Harry Foster, SIB, R. 1989). V.H. Humphrey 1995.

PACIFIC RED VELVET (Lorena Reid, R. 1995). Sdlg. cs9-11-1E. SPEC-X (cal-sibe). 18" (46 cm), E. S. and style arms very dark red violet; F. velvety very dark red violet, signal of broken white lines rimmed black. Enbee Deeaych X Bubbly. Laurie's Garden 1995.

PLEASURES OF MAY (Marty Schafer/Janet Sacks, R. 1995). Sdlg. S87-9-5. SIB, 30" (76 cm), EML. S. white, tinted lavender (RHS 69D); style arms white, few light violet flecks; F. light violet (85C), small white signal veined light violet. Lavender Lights X Mad Magenta. Joe Pye Weed's Garden 1995.

PLISSE (Tomas Tamberg, R. 1995). Sdlg. 87141E. SIB(tet.), 35" (90 cm) M. S. deep blue; F. velvety deep blue, white hairline edging; ruffled. (Lake Niklas x SSTT 183: (Cambridge x SSTT 108)) X Silberkante.

PONTYPOOL (Harry Foster, SIB, R. 1990). V.H. Humphrey 1995.

PRIDE IN BLUE (Currier McEwen, R. 1995). Sdlg. T(6)-83/94. SIB(tet.), 28" (70 cm), EML. S. light blue (RHS 100D), midrib darker blue (100A); style arms light blue (101D); F. light blue (100D), few veins (100C), darker shoulder markings (96C), white signal. T(5)-78/103: (((Sally Kerlin x Cambridge) x Silver Edge) x Signals Blue sib) X T(4)78/51(2): (Signals Blue sib x Harpswell Haze).

PRIMROSE CREAM (Primrose Upward by Jennifer Hewitt, R. 1995). Sdlg. PU/1. SIB, 18" (46 cm), M. Small tailored white, F. with deep primrose yellow hafts and central veins. Parentage unknown. Cotswold Garden Flowers 1993.

RASPBERRY RAINBOW (Chandler Fulton, R. 1995). Sdlg. 7GT-5. SIB, 29" (73 cm), ML. S. light lilac red (near RHS 77C) veined blue; style arms lilac red, aqua rib; F. outer third raspberry pink (81B) blending to sky blue (97A) center, with bright yellow (7A) signal narrowly rimmed white; buds deep violet (89A); ruffled. 84G-4: (Butter and Sugar x Sparkling Rose) X 84G-4.

ROSSANDEL (Jennifer Hewitt, R. 1995). Sdlg. RQ2. SIB, 35" (88 cm), M. S. old rose pink (near RHS 78B); style arms rose pink, paler at edges, midribs violet; F. deeper old rose pink (78A), small white signal. Rose Quest X unknown.

ROYAL DOLLY (Lorena Reid, R. 1995). Sdlg. St9-8-5J. SPEC-X- (sibtosa), 18-24" (46-61 cm), M. S. light pinkish violet; style arms pale lavender; F. dark maroon, gold signal in throat edged white, closely lined very dark red violet; spatulate falls. Polly Dodge X *I. setosa alba.* Laurie's Garden 1995.

RUFFLES (Clarence Mahan, R. 1995). SIB, 26" (66 cm), M. S. campanula violet (RHS 86B/C); style arms with deep blue purple midrib; F. campanula violet, signal yellow green in center, turning to white; F. with flared twist. Laughing Brook X unknown.

SCHWEFELBLUETE (Tomas Tamberg, R. 1995). Sdlg. SSTT 278. SIB, (tet.), 43" (110 cm). M. S. white; F. sulfur yellow. 8378 yellow tet: (white tet SSTT 177: (McEwen white tet x

Tamberg white tet) x converted yellow sdlg: (Dreaming Yellow x Dreaming Yellow)) X Dreaming Orange.

SENECA BLUE ROSE (Dana Borglum, SIB, R. 1993). Borglum's Iris 1995.

SENECA CLOUD PUFFS (Dana Borglum, SIB, R. 1993). Borglum's Iris 1995.

SENECA STORM CLOUDS (Dana Borglum, R. 1995). Sdlg. D-4-33-3. SIB, 28" (71 cm), M. Dark blue purple self. Gull's Way X Violet Swirl.

SIBCAL BEAUTY (Tomas Tamberg, R. 1995). SPEC-X (tet.), 24" (60 cm), M. S. medium red violet; F. velvety deep red violet. 84-24 dark violet: (Starting Calsibe x converted near black calsibe sdlg.) X converted tet. sino-sib seedling.

SILVER RINGS (Jennifer Hewitt, R. 1995). Sdlg. T872/3. SIB (tet.), 36" (91 cm), M. S. mid violet blue (RHS 93B), edged white; F. mid violet blue edged white, with white plicata markings, white sunburst signal extending over half of blade. Hoar Edge X Reddy Maid.

SLIGHTLY ENVIOUS (Anna Mae Miller, R. 1995). Sdlg. 85.17.2. SIB, 32" (81 cm), ML & RE. S. and style arms creamy white, green lines; F. creamy white, yellow sides and haft area, definite greenish cast. 79.16.1: ((67.8.U: (Mountain Lake x unknown) x Jimmy's Gem) x Wing on Wing) X Butter and Sugar. Abbey Gardens 1995.

TEMPLE TALK (J. Owings Rebert, R. 1995). Sdlg. FY-12. SIB, 45" (114 cm), M. S. pale blue, light blue veining; F. medium violet blue veined darker, shoulders yellow and tan, beige to light tan signal veined light violet. Orville Fay X unknown.

TEMPLE TAPESTRY (J. Owings Rebert, R. 1995). Sdlg. P-123. SIB, 40" (107 cm), M. Deep violet blue, F. with yellow and tan shoulder markings, white signal lines. Vi Luihn x unknown.

THAT'S MY BABY (Robert Hollingworth, SIB, R. 1993). Windwood Gardens 1995.

TRIM THE VELVET (Martin Schafer/Janet Sacks R. 1995). Sdlg. S86-8-2. SIB, 40" (102 cm), M. S. rich blue purple (slightly redder than RHS 89A); style arms same, small; F. rich blue purple, white wire rim, small white signals veined blue purple; lightly ruffled. Forrest McCord X Springs Brook. Joe Pye Weed's Garden 1995.

TSUNAMI (Marky Smith, R. 1995). Sdlg. 90-58S. SIB, 34" (86 cm), EM. S. blended medium blue; F. darker blended blue (RHS 96A/B), tinted turquoise below green double-U signal; ruffled. 87-01S: (Cambridge x Anniversary) X Jaybird.

WALL STREET BLUES (J.T. Aitken, R. 1995). Sdlg. 89 S-1. SIB (tet.), 36" (91 cm), M. Mid blue, minimal lighter signal area. Harpswell Happiness X Dear Dianne. Aitken's Salmon Creek Garden 1995.

ZAKOPANE (Cy Bartlett, R. 1995). Sdlg. HHBR. SIB (tet.), 34" (86 cm), EM. S. deep blue purple; F. very deep violet purple, very small greenish brown signal; lightly ruffled. Harpswell Happiness X Berlin Ruffles.

Corrections of Previous Registrations

(From 1995 AIS listing).

FISHERMAN'S MORNING (James Copeland Sr., SIB, R. 1994). Correction of introductory date: Ensata Gardens 1994.

GLOW OF HAPPINESS (Anna Mae Miller, SIB, R. 1994). Correction of parentage, 79.16.1: (75.24.26: (67.8U: (Mountain Lake x unknown) x Jimmy's Gem) x Wing on Wing) X Butter and Sugar.

Howard Brookins, while updating the Siberian checklist, found that the following cultivars had been omitted from the R and I listings in TSI in previous years:

HUIA (Currier McEwen by Mrs. F. Love, R. 1991). SIB, 6 1/2" (15 cm), M. Blue-purple. Unknown parentage.

GERMANTET ONE (Tomas Tamberg, R. 1993). Sdlg. SSTT166. SIB (56 chrom. tet.), 31 1/2" (80 cm), M. Deep blue self. Laurenbuhl X unknown.

MIKIKO (Tomas Tamberg, R. 1993). Sdlg. 8406-1. SIB (28 chrom. diploid), 31 1/2" (80 cm), M. White self. Sdlg. X Creme Chantilly.

NAVY TRIM (Calvin Helsley R. 1993). Sdlg. 91-7. SIB, 30" (76 cm), E. Blue-violet (RHS 96D) edged and lightly veined navy blue (89B), white signal veined blue (89D); violet -blue (97B) styles, darker midrib. Mabel Coday X Varner S060.

SUGI URI (John Wood, SIB, R. 1992). John Wood 1993.

TROIKA (Nora Scopes, R. 1993). Sdlg. 10LC8. SIB, 38" (97 cm). M-L. S. light blue-mauve; F. deep purple, upper part gold, veined brown. Floating Island X Silver Edge.

GLOW OF HAPPINESS (Anna Mae Miller, R. 1994). Sdlg. 85.17.18. SIB, 30" (76 cm). M and RE. S. white with light yellow lines; white style arms with cream cast; F. light yellow (RHS 9C) with darker yellow lines in center and haft area. 79.16.1: ((67.8.U x Jimmy's Gem) x sdlg.) X Butter and Sugar. Ensata Gardens 1994.

ROBINS UPDATE

From Dale Hamblin

Thanks to the great response that we had from our insert in the Fall '95 issue of TSI, I have been able to regenerate a couple of robins and start several new ones. At present we have two growers' robins, a hybridizers' and an international hybridizers' robin. We are also hoping to start a 40 chromosome Siberian robin.

There is still room in a few of the robins:

1. A Growers' Robin - open to all interested persons

2. The Hybridizers' Robin - open to all, both beginners and advanced hybridizers. We have a core of experienced hybridizers so this is a great chance for novices to glean valuable information and form friendships with their more seasoned counterparts.

3. The International Hybridizers' Robin - requires a more advanced level of hybridizing knowledge.

4. The Forty Chromosome Siberian Robin - open to all interested people.

If you would like to be a member of any of the above or have any questions related to Siberian robins, please write me at:

152 Idlewild
Mundelein
IL 60060

or phone: (708) 949-6822

SOME COMMENTS ON THE RATING SYSTEM OF SIBERIANS AS REPORTED BY CAROL WARNER AND JIM WILSON (TSI SPRING 1995)

By Julius Wadekamper

(SSI Chairman of Judging Standards)

I fully agree with Carol and Jim that the plant habit of Siberian irises is of utmost importance for as they say we have the plant in the garden for 150 days without any bloom. The grasslike effect of the Siberian plant complements perfectly the emphasis on grasses in the garden today.

Some considerations should be taken into account. For one, a plant should not be judged on less than a three year old clump. I've seen significant changes on some Siberians after they've become established. A lower rating early on might do lasting damage to a cultivar.

Secondly, the area of the country where the plant was rated should be clearly stated. It might be of benefit to divide the country into sections for rating purposes. Then there should be at least three ratings from different gardens in that area, five would be even better.

A third consideration should be weather conditions in a given year, with attention given to significant factors such as irrigation, fertilization, late frosts, drought, etc.

Perhaps something like the following could be discussed at a meeting to establish guidelines:

PLANT VIGOR AND CLUMPING:

5 - Plants that form neat clumps in a three year period, with no middle die out.
4 - Slower clumping habit.

3 - Slow to form a desirable clump.
2 - Hollow centers on mature clumps.
1 - Refusal to grow well at all.

HABITS:

5 - Neat clean upright foliage.
4 - Slightly arched foliage which does not bend or crease.
3 - Heavily arched foliage and foliage that bends or breaks to a significant extent.
2 - Horizontally displayed foliage to an undesirable degree.
1 - Very sloppy, messy foliage undesirable in the garden.

FLOWER HABIT:

5 - Well-branched flowers held above the foliage.
4 - Foliage extending 1 or 2 inches above the flowers as they bloom.
3 - Flowers 3 or 4 inches down into the foliage.
2 - Flowers very poorly branched and blooming more than 6 inches down in the foliage.
1 - Extremely poor bloom sometimes occurring at ground level.

The AIS rating system would still be in effect and valid especially for the flowering characteristics of the plant. The rating system suggested by Carol and Jim is certainly helpful for landscape purposes throughout the year.

SYMPOSIUM ON TETRAPLOIDY IN SIBERIANS

It is just over 25 years since the first tetraploid Siberian was offered for sale, so this seems a good time to review the subject of tetraploidy in Siberians and speculate on the future. Following are thoughts from three leading tetraploid hybridizers on the past, present and future of 56 chromosome Siberians. Ed.

The Story of Tetraploidy in Siberian Irises

By Currier McEwen

It is appropriate to start this discussion of tetraploidy in Siberian irises by reporting how it began. In 1954, almost by chance, I started growing tall bearded irises (TB's) and daylilies and very soon began to hybridize them. Reading about David Hall and Orville Fay and growing their outstanding introductions had made me eager to meet them. Both lived in the suburbs of Chicago, and a medical meeting in that city in May 1960 provided the opportunity. Phone calls led to invitations, and I made most memorable visits to their gardens. They could not have been kinder to this rank beginner, explaining their hybridizing goals and even giving me pollen to use on my return home.

The visit with Orville Fay was especially thrilling because it included taking me to his basement where he showed me hundreds of small daylily seedlings growing in flats under lights. These, he explained had been treated with colchicine with the purpose of doubling their chromosomes. Colchicine, derived from the autumn crocus, has been used as a medicine since the days of the ancient Greeks. It has particular value in treating acute attacks of gout. As a rheumatologist, I had used it in the treatment of

many gouty patients, but this capacity to affect the chromosomes was new. I was fascinated and decided then and there that this was for me.

Before continuing this account of Orville Fay's pioneering work and my own efforts, it will be useful to turn to a still earlier period. Prior to about 1900, all cultivated tall bearded irises (TB's) were diploid, but about that time several species growing wild in the eastern Mediterranean area proved to be tetraploid. These began to be interbred, and by some fortunate chance, crosses of diploids resulted in polyploids, presumably from failure of reduction of chromosomes during meiosis. Because these, and tetraploid forms of other flowers occurring in nature, showed some features superior to those of the diploid forms, botanists began efforts to induce tetraploidy experimentally. Many different measures were tried without success until, in the early 1930s, a Belgian scientist tried colchicine and it worked. This discovery led immediately to treatment of various plants with colchicine. Irises were not among these because TB's were the chief ones grown and there were already many tetraploids resulting from natural crosses as noted above. Daylilies were treated by Dr. W. Quinn Buck of the University of California College of Agriculture in 1945 and by Dr. Hamilton Tribe at the Plant Industry Station in Beltsville, Maryland four years later. Both men were interested scientifically rather than in obtaining improved cultivars and their resulting seedlings attracted little attention. The turning point came with Orville Fay. He had been hybridizing daylilies and TB's for a good many years, was seriously interested in genetics, and had basic training in chemistry and cytology. Above all, he was impressed by the improvements that tetraploidy had brought about in TB's and was confident that similar advances could be achieved in daylilies. He had the good fortune to be joined by Dr. Robert A. Griesbach, a young man who had recently received his Ph.D. in botany at the University of Chicago. Bob Griesbach was also an ardent gardener, but had little space. I had a number of visits with both men but never thought to ask which of the two originated the idea of their great colchicine project. I suspect it was mutual. At all events, it proved to be a

superb collaboration.

By the time he and Griesbach launched their major program with colchicine, Orville Fay had already introduced many outstanding TB's and daylilies (all together, he received four Dykes Medals and four Stout Medals!). The work with colchicine was limited to daylilies because tetraploidy already existed in the TB's. In fact, Orville did treat a few tetraploid TB's, but the resultant polyploids (presumably octoploids though their chromosomes were never counted) had such firm substance that the scapes were deformed and the buds could not open properly, so that trial was abandoned.

By the time of my visit in 1960, Orville was well advanced in his work with the daylilies. My own meager hybridizing program was very nearly limited to TB's and daylilies, but I did have a few Siberians and Japanese in which tetraploids had not then been known to occur in nature. Subsequently, what appear to be naturally occurring polyploids (presumably tetraploids but chromosomes have not been counted) have been reported in both Siberian (2) and Japanese (3) irises.

I will not describe the details of methods of using colchicine here. I will, however, explain that two types of methods were being used in daylilies. Fay and Griesbach used a method involving tiny, newly sprouted seedlings (4). In the other, the so-called clonal method, a plant at the stage of early maturity is cut off just above the meristem, a small cup is scooped out in the remaining stump, and colchicine solution is placed in the cup (5). I have used the germinated seedling method chiefly but had success also with the clonal method in the case of daylilies. To my surprise, my attempts over a three year period to use the clonal method with Siberian and Japanese irises all failed.

On my return home after my May 1960 visit with Orville Fay, I still had some Siberian iris seeds that I had not had time to plant before leaving for the meeting in Chicago. Orville had given me a small amount of colchicine, and with that I made my first attempt to obtain a tetraploid Siberian.

There was a single partial conversion, for in 1962 when those treated seedlings bloomed, one proved to be a chimera (a plant with some cells diploid and some tetraploid). On my return home in 1960, my own Siberians were starting to bloom, and I made many crosses to obtain seeds for treatment in 1961. That has continued each year even to now, although in recent years I have used colchicine very little with the Siberians because tetraploids are now available in essentially all colors and patterns. I must acknowledge the help I was given in 1962 by Fred Cassebeer and his son. I wanted 500 to 1000 seeds from some of Fred's outstanding plants such as **White Swirl**. They kindly collected many "bee set" pods for me.

Although some additional chimeras appeared each year, when crossed, only the diploid pollen and egg cells "took" so only diploids resulted. It was not until 1966 that crosses of some chimeras succeeded in giving me fully tetraploid seedlings. Two of these were registered in 1969 and introduced in 1970, ten years after my start with colchicine. One, a medium blue flower, Orville Fay permitted me to named after him (see back cover). The other, a white was named **Fourfold White**. After that, it was easy because I could cross any chimeras with my known pure tetraploids and be sure that resulting seedlings would be fully tetraploid.

One of my problems has been that up to about 1984 I had only my own seedlings to work with, and even then when Bob Hollingworth's excellent tetraploids began to be available, they too at first were closely related to mine. Steve Varner's **Dance Ballerina Dance** had appeared in 1982 but it came from seeds I had given to him. In articles and talks on hybridizing I have emphasized the need to outcross with unrelated cultivars. Yet in my tetraploid breeding, it has been only in recent years that wholly unrelated cultivars have been available.

Before going on to other aspects of tetraploidy I must mention one other historical occurrence. In the 1960s that remarkable German hybridizer, Max Steiger, treated Siberian and Japanese irises with colchicine and named one of the

treated Siberians in 1964. It was derived from the 40 chromosome species *I. forestii* and he named it **Tetrafor.** Since it was an induced, first generation polyploid, it probably was a chimera. At all events it, like most of Steiger's cultivars, was lost during his long terminal illness. It was not registered. To my knowledge, Steiger was never able to work further with it, and I fear it no longer exists.

Pros and Cons. Twenty-six years of experience with tetraploid Siberian irises permits a reasonably accurate appraisal of their good and poor characteristics. On the good side is their more dramatic appearance. Flowers are large, usually semi-flaring or well arched, segments are wide, and colors are rich. Leaves and scapes are somewhat greater in diameter than those of the diploids, but usually not taller. The leaves are also an attractive, rich shade of green. When special features such as ruffling and crimping are present, they are apt to be more pronounced than in their diploid relatives. Texture is attractive and substances strong, although the latter does not make them more durable than the diploids. An extremely valuable feature, I believe, is their capacity not only to help in the exaggeration of good features, but also in the creation of new ones. As a case in point, I would mention the extremely wide, tufted and feathered style arms that are appearing. The usefulness of tetraploidy in obtaining fertile interspecies and interseries hybrids is discussed by Tomas Tamberg in this issue. Of course, some of these features that I have mentioned as advantages may be thought to be disadvantages to others. Nevertheless, I can say with confidence that most visitors to our garden are immediately attracted to the tetraploids.

On the negative side, the greater substance can make the scapes more brittle. In some of the first tetraploids, the scapes tended to be too short, placing the flowers among the leaves. An attractive feature of many of the older diploid Siberians is their daintiness and ability to flutter. The ability to flutter is rarely present in tetraploids because of their strong substance. From the standpoint of the hybridizer, although tetraploids have the potential to introduce new features, they are distinctly less easy to work with. The percentage of successful crosses is lower than in

the diploids and, when successful, the number of seeds per pod usually is considerably less.

What of the Future? When tetraploids occurred in the TB's, they caught on immediately. In 1900, all known TB's were diploids; by 1940 about the only hybridizers still crossing diploids were those interested in flowers of the "historical" type and those working with medians, who wished to have small plants with small flowers. When the excellent tetraploid daylilies appeared after 1945, Orville Fay prophesied that the diploid hemerocallis also would become obsolete. That has not happened. Many excellent diploids and tetraploids continue to be introduced each year. Certainly in the case of Siberian irises, there has been no precipitous turn to them in the 26 years that they have been available. On the other hand, an increasing number of hybridizers are adding them to their breeding programs. Also, the number of awards won by tetraploids in recent years has been somewhat out of proportion to the number of diploids and tetraploids eligible. My own view is that there is an important place for the large, robust tetraploids, the big round modern diploids, and the diploids of a more dainty, traditional form. In a garden bed I believe each of these types compliments the others and adds to the interest and beauty of the total display. One of my concerns over the past 30 or so years has been that with the advent of the big, round, modern diploids and tetraploids, hybridizers might ignore working further with the older, traditional types of flowers. That would be a pity and fortunately has not completely happened. In short, I believe that the future holds a place for all these types.

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Tetraploid Siberians From A German Point of View

By Tomas Tamberg, Berlin

Max Steiger, the iris breeder from southern Germany who became famous for his CaRe-strain of Japanese irises (1), may have been the first German hybridizer to convert a Siberian iris to the tetraploid level; in 1964 he described the improved characteristics of an *Iris forrestii* he had made tetraploid by colchicine treatment (1). I found this development very interesting, however, since Max Steiger was a very shy distributor of his breeding products. All his achievements were lost when he died a few years later.

Tetraploid Siberians had nearly disappeared from my memory, when I noticed Currier McEwen's article on this subject, published in the British Iris Society Yearbook 1966 (2). Much in contrast to Mr. Steiger's short note, this article was a scientifically well-based and detailed description of how to double the chromosome set of an iris. My interest was immediately revived, and I decided to use the method with my own seedlings. I started in 1971, and since then we have registered the following nineteen tetraploid Siberians.

Breiter Start*	(1978), mid-blue.
Lichterfelde*	(1978), mid-blue, white lines on falls.
Wide White#	(1979), white.
Fanny Heidt	(1980), dark blue.
Zweites Hundert	(1984), light mid-blue.
Weisse Etagen	(1984), white.
Stout Darling	(1988), greyish mid-blue.

Viel Schnee	(1990), white.
Berlin Purple Wine	(1990), wine-red.
Berlin Ruffles	(1993), mid-blue.
Berlin Sky*	(1993), light blue.
Big's Child	(1993), mid-blue, large flowered.
Germantet One	(1993), deep blue.
Prussian Blue	(1993), deep, velvety blue, Fig.1
Silberkante	(1993), dark blue, white edge.
Berlin Lance	(1993), white.
Dunkler Wein	(1995), dark wine-red.
Plissee	(1995), dark blue, white edge.
Schwefelbluete	(1995), light yellow/white.

* First generation tetraploids.
# Periclinal chimera, genetically diploid.

With the exception of **Weisse Etangen**, all these cultivars either are, or contain our own conversions.

In 1972 Currier generously sent me some of his early tetraploid seedlings. Among them were two second generation ones. When I found the first possibly converted plants among my own treated seedlings, I was therefore, able to test them by using their pollen on proven tetraploids. The cultivars **Fanny Heidt**, **Weisse Etangen** and **Zweites Hundert** directly come from these crosses.

Another source of early tetraploid varieties was Eckard Berlin from southern Germany, who had started his colchicine treatments slightly earlier than I did. His varieties **Laurenbuhl** and especially **Niklassee** (Lake Niklas) were used in my breeding program. **Germantet One** is a cultivar derived from German conversions only.

Later on I used named varieties from Currier McEwen and more recently, those from Bob Hollingworth, as partners for my own conversions. The seedlings from crosses with Bob's varieties are still under observation.

In our breeding, we have always looked for seedlings with at least a touch of the classical Siberian shape (upright standards, semi-flaring falls), but the crop of this type was

low in number. Two seedlings are given as an example: white DBF 370 (Fig. 3) and blue DBF 326 (Fig. 4).

Since 1971 I have done some colchicine treatments of 28 chromosome Siberians every year, and conversions in all color classes have appeared. A conversion we have called "Big Potential" (Fig. 5), which is not yet registered, has proven to be a powerful parent for large flowered varieties. Most of the newer conversions have only been used for one or two test crosses and their genetic potential is still insufficiently explored. As an example DBF 313, shown in Fig.6, comes from two parents of Marlene Ahlburg's yellow "Welfen" line.

Temporarily forgetting my opinion that 40 chromosome Siberians should be placed in a separate series Chrysographes, I would like to add some notes on tetraploid Sino-Siberians. The real pioneer in this field is Eckard Berlin, who once had a group of a dozen converted seedlings in different colors. In addition to pollen he allowed me to take from exhibition spikes of this group, he sent me a black-violet seedling which I gave the garden name of "Eckard's Dunkle" (Fig. 7). For reasons which I didn't understand, Eckard did not get any second generation seed from his group of Tetra-Sino-Siberians. When I pollinated "Eckard's Dunkle" with pollen of my own Sino-Siberian conversions, I got some seeds yielding second generation plants with clearly tetraploid characteristics. Most of them were again of the dark violet color, but the plants were tall and vigorous and produced large flowers with nearly upright standards as shown by DBF 350 (Fig. 8). In the meantime I am growing a fourth generation of this type and some variations in color are beginning to appear. However, I am somewhat puzzled by the still rather low fertility of these hybrids.

Looking back on the results of our joint efforts with tetraploid Siberians we can ask three questions:

1. What Have We Achieved?

We have larger and wider flowers, strong ruffling,

stronger flower stems and wider leaves, deeper and more velvety colors. The availability of tetraploid Siberians has made hybrids groups like Sibcal, Sibcolor and 3/4 Sibirica/ 1/4 Setosa hybrids possible.

2. What Have We Lost?

We have nearly lost the classical shape of the Siberian flower as Currier forecasted in his B.I.S. article (1). Most tetraploid Siberians have to be admired from above and have limited garden effect from a distance.

The fertility of even advanced generation cultivars seems to be reduced compared to diploid cultivars (at least in my climatic conditions).

The floriferous lifetime of a clump seems to be reduced in many cases, due to the production of stronger roots, rhizomes and leaves. This leads to a higher frequency of replanting.

3. Where Have We Failed?

We have failed to develop and apply successfully a clone treatment method which would have enabled breeders to utilize the best diploid in "undiluted" form in the tetraploid breeding process. The success of such a method is demonstrated by the enormous speed of development of tetraploid daylily cultivars. Instead of this we are using seedlings of uncertain genetic quality as the source of our tetraploid breeding material.

We failed, perhaps for natural reasons, to induce the increase of the gene pool. That could have happened by merging the 28 with the 40 chromosome Siberians at the tetraploid level. Eckard Berlin claims to have some hybrids from crosses of the two tetraploid groups, but my own repeated efforts have never produced a single viable seed.

We failed to spread interest in our own conversion work and tetraploid breeding efforts to more than a handful of enthusiasts worldwide. The future of this fascinating field of breeding is, therefore, not yet safely established.

Fig. 1,

Prussian Blue

Fig.2,

Silberkante

Fig. 3,

DBF 370

Fig. 4,

DBF 326

Fig.5,

"Big Potential"

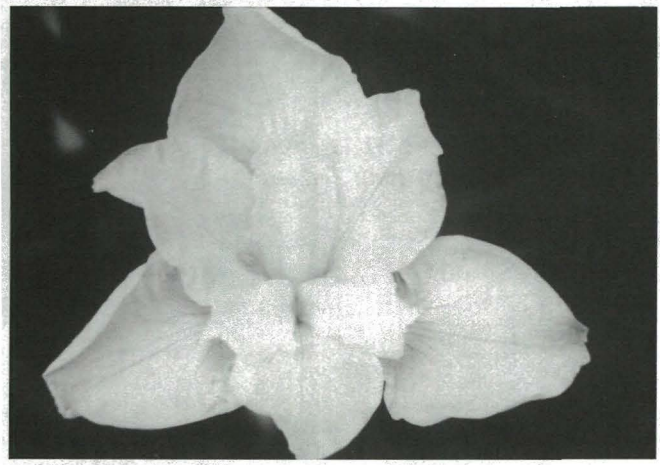

Fig.6,

DBF 313

Fig.7,

Eckard's Dunkle

Fig. 8,

DBF 350

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Double, Double, Toil and Trouble

By Bob Hollingworth

When I first became interested in breeding Siberian irises in the early 1970s, one of the primary goals was to explore doubling the normal chromosome number as a route to developing new and improved varieties. This appeared to be an exciting and achievable goal because of the success Currier McEwen had already attained with his earliest tetraploids such as **Orville Fay**, **Fourfold White** and **Blue Pennant**. It seemed preferable to develop tetraploid lines of my own rather than depend on those already established by Currier, since we would otherwise simply be following in the tracks of the master. So, I made my first colchicine treatments in 1974, the year after I made my first siberian cross. We had exactly three Siberians in our garden -- **Snowcrest**, **Halcyon Seas** and **Caesar's Brother**, so I got seeds (from bee pods) from several sources and treated them with colchicine as they germinated, based on the methods described by Currier.

Rather to my surprise, three or four years later I discovered that scattered here and there among these treated seedlings were tetraploid flowers, and, even more surprising, some of them looked pretty good! Luckily several were also reasonably fertile. These formed the first foundation for the tetraploid breeding program and I have only rarely gone outside our own induced tetraploids for parents since then. With three exceptions where Currier's tetraploids were included in the parentage, our ten registered tetraploids come from six diploid seed sources which were converted to tetraploidy with colchicine as shown in Table 1.

You can discover a couple of these earliest tetraploids in the parentage of some our current ones. Seedling 79F1, from **Dreaming Spires** x bee (J in Fig. 1), is one parent of **High Standards** and is further back in the parentage of several others such as one of this year's introductions, **Band of Angels**. Another (78G2; (Cambridge x bee), C in Fig. 1),

Table 1:

PARENTAGE OF REGISTERED TETRAPLOIDS (1996)

Ausable River x unknown:

---> (Forrest McCord) -s*-> A --> B --> Band of Angels

Cambridge x unknown:

-*-> C -S--> Windwood Spring
C -S--> Sunburst Blue
C -S--> D --> E --> Coron. Anthem --> Blueberry Fair
E ---> F ---> Shall We Dance
C ---> G ---> B ---> Band of Angels
C ---> H ---> Over in Gloryland

Dreaming Spires x unknown:

-*-> I ---> Wizardry
-*-> J ---> High Standards
J ---> G ---> B ---> Band of Angels
J ---> H ---> Over in Gloryland

Super Ego x Anniversary:

-*-> K --> E --> Coronation Anthem --> Blueberry Fair
E ---> F ---> Shall We Dance

Pink Haze x Wing on Wing:

-*-> L ---> F ---> Shall We Dance
L ---> Strawberry Fair
L ---> M ---> Band of Angels

Ruffled Velvet x Showdown:

-*-> Jewelled Crown --> Strawberry Fair
--> M --> Band of Angels
--> Coron. Anthem --> Blueberry Fair
-*-> N --> Over in Gloryland
-*-> O --> Blueberry Fair

Letters represent un-named cultivars
s=sib cross S=selfed *=colchicine conversion step

when selfed, gave **Windwood Spring** and started us on the "sunburst" pattern. In fact a sib of **Windwood Spring**, Sunburst Blue, was supposed to be the first of a line of "sunbursts" but it proved to be a reluctant increaser and was never introduced. Strangely enough, all later attempts to get seed by selfing 78G2 in the hope of getting a more vigorous sunburst seedling failed. **Windwood Spring** itself has been a reluctant parent for us and is not involved in later tetraploids (though it is a parent of Currier's **Harpswell Snowburst**), but a more obliging sib of **Windwood Spring** is involved in **Coronation Anthem** and **Shall We Dance**. Both 77F1 and 78G2 are involved in the background of **Over in Gloryland**.

Others that have proved useful in breeding are 80X2C11 (A) which has a clear cream/yellow rim round the margins of the falls (coming from **Forrest McCord** x sib, both of which have the same characteristic), and a well-branched white from **Super Ego** x **Anniversary** (K).

Another induced tetraploid (from **Pink Haze** x **Wing on Wing**), 81C2C5 (L), a lightish grayed-violet color with strongly ruffled falls was never overly impressive in itself, but has proved to be a great parent (**Strawberry Fair, Shall We Dance**). Unfortunately this one got misplaced somewhere in our move to Michigan, but its genes live on.

Perhaps the major boost came with the cross that gave **Jewelled Crown**. The background story on **Jewelled Crown** was told a couple of years ago in TSI when it won the Morgan-Wood Medal. Not only has **Jewelled Crown** itself been a superior parent e.g. **Coronation Anthem** and **Strawberry Fair**, but several other very fine converted tetraploids came out of that cross. In retrospect, one or two should also have been named and introduced. One, 82J2C6 (N), a lovely velvety deep purple, is a parent of **Over in Gloryland**. Another, 82J2C7 (O), is a sectorial chimera (it has both diploid and tetraploid shoots on the same plant). It has been quite stable, producing both ploidy levels ever since. This extravagantly ruffled, round, mid blue-violet flower is one parent of **Blueberry Fair**, a possible 1997 introduction.

In case all this seems just too easy, let me say that all has not gone according to plan. For longer than I care to admit I have worked to develop yellow amoena tets. Many promising crosses have been treated with colchicine. A number of conversions to tetraploidy have occurred, a few very appealing, though none remarkably yellower than the better diploids. Not one has ever yielded viable seeds in the next generation. Anyone working with tetraploid Siberians needs a good dose of persistence because many have low fertility. It took several years to get a cross to take on **Over in Gloryland**. I have a record of 28 failed crosses over 5 years on a large red induced tetraploid before I eventually got viable seed from a cross this year. Over the years, percentage success in making tetraploid crosses has not been over 25% -- and the number of seeds per pod is generally lower than in a diploid. This makes for great frustration because a planned line of breeding that looks promising is often inaccessible or dries up in midstream. The eager breeder of tetraploids also needs to recollect that, because tetraploids have four sets of chromosomes, recessive traits (those only expressed when no dominant gene is present) are much more difficult to bring out. Whereas one in four seedlings might show a recessive trait in a simple F1 diploid cross, the number is likely to be closer to one in 16 in a comparable tetraploid cross. In the simplest situation, the laws of chance indicate that you would need to grow 64 (4^3) diploid seedlings to see the combination of three recessive traits together in one plant if diploid, and 4,036 seedlings, (16^3) if tetraploid! In combination with low pod set and fewer seeds in tetraploid pods, these odds illustrate that you must plan breeding strategies very carefully to get to your objective -- and be lucky!

Here are a couple of unexplained observations while on this subject. Some years seem better than others in getting tetraploid crosses to succeed e.g. only five tetraploid crosses gave pods in 1994 (less than a 10% success rate), while in 1995, a comparable effort resulted in 25 different successful crosses (a bumper year when even the most intractable parents produced fertile seeds). The only reason I can offer for this is the temperature. Once the daytime temperatures rise into the 90s ($33^{o}C$) as they did in 1994,

very few crosses seem to succeed. Also some tetraploids seem to be fertile only with a limited range of others e.g. **Over in Gloryland** readily gives pods if set with **Coronation Anthem** but not with some other equally fertile pollen parents. So, if one or two crosses don't seem to take on a prized tetraploid, don't quit, try other combinations.

In the 25 years since Currier McEwen developed and introduced the first tetraploid Siberians the merits and potential of tetraploidy have become reasonably clear. As stressed by Eigsti and Dustin in their book on colchicine, "no tetraploid within a certain species may be expected to surpass the diploid in all respects." In the comparison with diploid Siberians, some things are neutral. Foliage may be broader than with diploids but tetraploids generally have foliage that is just as attractive as that of diploids. Vigor is not negatively affected. Some of our most aggressive growers are tetraploids. The major advantage of tetraploidy lies in the larger, brighter, bolder flowers. Disadvantages include a loss of some grace and naturalness that characterizes the smaller, more modest diploids. The shorter stems of tetraploids can be too short, leaving flowers hidden amongst the foliage. Lower fertility will be frustrating to the hybdridizer, but a boon to the gardener who has less to fear from the germination of bee pods and overgrowth of the original cultivar and to the plant which conserves the resources of seed production.

A controversial point is the flatter form of many tetraploids since the falls have heavier substance and tend to be held more horizontally. This is not universally true. Many tetraploids have falls that are held between the vertical and horizontal e.g. **High Standards, Harpswell Haze** and **Berlin Purple Wine**. And quite a few diploids have rather flat flowers e.g. **Windwood Serenade** and **Trim the Velvet**. However, many tets are quite flat and you do lose some distance impact but gain it close up as long as one can look down on the flowers. This concerns me less than some others. We readily accept Japanese iris which tend to be flat, and many daisies and clematis, to name a few other flatties. However, it is very desirable that we continue to develop many alternative forms including the classic one with

pendant falls and upright standards. It is clear now that both tetraploid and diploid Siberians have there own virtues and both will continue to gain the interest and approval of Siberian fanciers. Their properties are so different that they satisfy different needs in the garden. So far we have introduced 9 tetraploids and 12 diploids. I doubt if this balanced mixture of the two forms will change in the future.

What of that future? I can confidently predict that good yellow amoena tetraploids are coming soon (though not yet from our garden) and then, quite possibly, yellow bitones and fully yellow Siberians. Given another generation or two, tetraploids with very large signals on the falls that reduce the color to a band around the outer rim will arrive -- first in blue, then in red. A little further ahead we shall see tetraploid versions of the six fall pattern of Siberians. I predict that these will be very impressive. Going further out on this increasingly shaky limb, I believe that we shall also see some new color shades, particularly achieved by combining the standard blue and red-violet pigments with the strong yellows now routinely available (in diploids). These may be particularly striking in tetraploids. The direct conversion of existing superior diploids to the tetraploid state (rather than converting unevaluated and possibly inferior seedlings) would accelerate progress in tetraploid breeding and it will be interesting to see whether this can be achieved by colchicine or related treatments of Siberians in tissue culture. Since 1974, there has hardly been a year that I have not treated some new seedlings with colchicine, including this year. There are still some characteristics that need to be developed in tetraploids and I have no plans to stop doing conversion until they are realized.

Despite all its toil and trouble, tetraploid breeding with Siberians has been enormously satisfying to me, and, I believe, it has been quite successful in providing an expanded range of options to gardeners. I hope we shall see other people getting involved. It is encouraging in this regard to see such activity by Terry Aitken, whose **High Di** was a hit at the Portland AIS convention, and John White who has some fine things coming from **Golden Edge** x **Over in Gloryland**. Despite the fact that all three authors in this

symposium seem to have accumulated an advanced degree, it certainly doesn't take one to convert diploids to tetraploids using colchicine! In any case, so many worthy tetraploids are available now, that a good breeding program could be started without going through this conversion step at all. It's just waiting for you to give it a try.

If this discussion has tickled your fancy here are references for further reading:

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4. *McEwen, Currier: The Siberian Iris. Timber Press, 1996.*

IN PRAISE OF...REPRISE

By Andrew Wheeler (Massachusetts)

One of the irises that always catches my eye is **Reprise** (Warburton '87). The color is dark violet with slightly darker veining and dark violet standards with a hint of aqua. In the sunshine, these colors seem to have an extra bright vibrancy to them that adds to the showiness of the clump. Also, after the sun sets, **Reprise** remains iridescent in the twilight; the colors are quite intense. It stands out planted next to a violet pink variety, **Lady Lilac** (McEwen '91) in my mother's garden. I have it planted next to **Pleasures of May** (Schafer/Sacks '95). Its light violet-pink falls make it a great companion to **Reprise**. With enough water it will continuously bloom/rebloom until the Japanese irises begin. It looks beautiful in flower arrangements as well. I have used it on several occasions; it seems to go nicely with variegated hosta leaves or red barberry in Japanese style arrangements. It has excellent vigor, and the foliage is held nicely - it fountains just slightly. If you do not grow **Reprise**, try it. You won't be disappointed!

IN MEMORIAM - BEATRICE A. WARBURTON
November 6, 1903 - January 18, 1996

By Currier McEwen

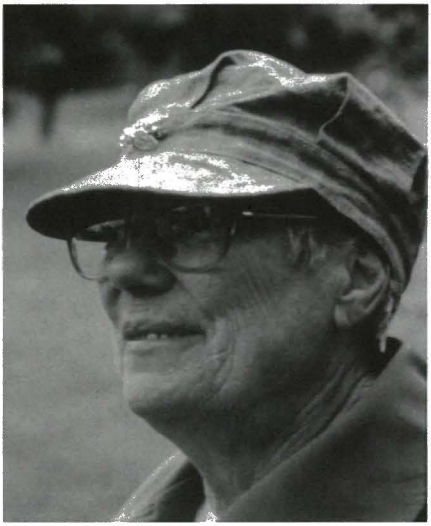

Photo (1979) by: Lee Welsh
(courtesy of A. M. Miller)

Our Society for Siberian Irises and the entire iris world suffered a sad loss on January 18, 1996 in the death of Beatrice A. Warburton, affectionately known as Bee everywhere in the world that irises are grown. Her death followed by five weeks that of her husband Frank. They had been married 71 years. Many people devoted to irises have been admired, and many loved, but surely few have been held in the rare combination of respect and love that Bee so richly deserved and received.

I am not sure when Bee's interest in irises started. She liked to tell of her love for a tall, blue bearded iris in her mother's garden. It was called **Princess Beatrice**, and as a little girl, she was sure it was named after her. In 1925 she married Frank Warburton, and after several moves they settled in 1948 in Westborough, Massachusetts on Frank's father's farm where they built their own home on what became Warburton Lane. As the home developed, Bee

started a rock garden for which, of course, she obtained small plants including some small irises. Apparently her interest in the medians began at that time. Her first crosses, involving pumilas, were made in 1954. Her achievements with the various classes of median irises are now a matter of history and quickly made her internationally known.

Bee's start with Siberian irises began in the late 1960's. Her first introductions, **Deep Shade**, **Shadow Lake** and **Stellar Blue**, were registered in 1971. Between then and 1985, when she made her last crosses, some thirty nine were registered. These included **Atoll**, the first with the "dappled" pattern, repeaters such as **Percheron** and **Reprise**, and lovely flowers in all the colors known in Siberians.

The range of her hybridizing interest was amazing, involving nine classes: MDB, SDB, IB, MTB, BB, Siberian, Japanese, TB's and species. In eight of these she received major awards including 80 HM's, 20 AM's and many medals. Impressive as these numbers are, however, they fall far short of measuring Bee's achievements. She was creative in many ways beside making crosses. Her quick, enquiring mind was constantly concerned with finding answers to problems and questions encountered in what for most of us would be routine garden activities. She had the true scientific approach in her research efforts. Her identification of the luminata allele at the plicata locus will serve as one example of her creativity and scientific capacity.

Bee's intelligence and readiness to help with all sorts of practical questions resulted in her advice being sought on many important organizational issues. Furthermore, in addition to the soundness of her advice, she had a natural gift for working with people and getting things done.

An excellent example of Bee's ability to get things going were the auction meetings that she started at Warburton Lane in 1972, which immediately became important annual events. To those who attended them, they will always be remembered not only as opportunities to obtain the best of each other's introductions and seedlings, but also as a chance to consider the society's affairs, discuss scientific topics, and

just enjoy the occasion and each other. Bee was the lovely hostess who made sure that her friends who helped, received the credit that was largely hers. Frank provided boundless quantities of his magnificent corn for lunch. The meetings were attended yearly by so many key members of the Society for Siberian Irises that, in essence, they served as annual fall board meetings.

Bee was a person treasured by many friends, (and indeed strangers) who came to her for advice and information. She was generous in helping all who came to her, even distributing pollen to beginning as well as established hybridizers. Quite naturally she was appreciated and honored by iris organizations as well. She received the AIS Hybridizers Medal in 1966, Distinguished Service Award in 1972, and the BIS Foster Memorial Plaque in 1975. The AIS Gold Medal, its most distinguished award, has been given to only eleven people. In 1984 Bee was the tenth person to be so honored.

Our Society for Siberian Irises owes much to Bee Warburton. Not only was she a charter member, but her wisdom helped guide the society in its formative days. As a hybridizer, she gave the world thirty nine beautiful named Siberians, and her generosity in sharing advice, pollen, seeds and seedlings has enriched the gene pool of many fledgling and mature hybridizers. In 1990 she was awarded the Distinguished Service Award by the society. In her wisdom as she became older and less well, she selected Marty Schafer and Jan Sacks, "the children" as she called them, to carry on her efforts. It is good to know that through them some of Bee's devotion and contribution to Siberian irises continues, and is expressed in their outstanding seedlings.

Bee liked to record her thoughts in poetry. One of her poems will end this memorial tribute to her.

If I were wise as God and patient as his saints,
I could sort you out, my little dream
From the brown and wrinkled hopes of life
Eternal in my hand, the iris seed.

You would wear a halo, or would shine
With fluorescent light: and when I put my finger
On you, you would quicken, radiantly blessing
All who saw, and so assuage my need.

By Marty Schafer

When I think of missed opportunities and ships that pass in the night, I think how lucky Bee and I were to find each other. When we met, I was struggling to find a sense of self-worth. Bee, who at 79 knew she was in her waning years of hybridizing, was hoping to find someone who would pick up where she was leaving off. Maybe she knew what was going on, but I didn't. First she took me through her seedling patch and carefully examined each plant and from where it came. A year later she set me aflame with a gift of Siberian seedlings. For a few years after that we had a Zen-like relationship. She gave me plants and books, and lessons on how to dig, plant, and map a quarter acre of nearly every kind of iris that grows in the northeast - beardeds, versicolors, Japanese, Louisianas, laevigatas, spurias, prismaticas, and thousands of Siberians.

After a while we'd sit in the shade of her two old apple trees that over-looked her seedlings and talked about things. Mostly we talked about hybridizing - the existence and possibilities of line-breeding, the importance of knowing the parents of seedlings, the desirability of using whites to clarify color, repeat recessive traits and transmit good shape, and the necessity of thinking about and building good plant habits. Underneath all the chatter, she taught me about continuity in the most casual way. One of the apple trees still had a swing hanging from a branch where her grown grandchildren had played. Scars where large limbs had broken and been cut off showed the age of the trees. Looking ahead, Bee and Frank had planted maple saplings to replace the apples when they were gone and to preserve the precious pool of shade where she rested in the company of visitors. She told me stories of all the great hybridizers she had known, created with, and fought with. There was

usually a twist of humor in her stories that helped me see them as human beings. Most importantly she had faith in me. She never gave me recipes for achieving success nor tried to make me breed her way. She was content to give me the tools and have me go on my own.

In later years after she stopped gardening I would go see her and show her slides of all the neat things I was making from her "children" and she would thank me profusely. All the while I was thinking, "Thank you Bee."

IN MEMORIAM -DOROTHY HAMILTON

It is with sadness that we note the death, on December 19th 1995, of another of our long standing members, Dorothy Hamilton. In 1962, Dorothy joined a Siberian robin, directed by Francis Brenner, who was at that time Siberian Robin Chairman. She later took over as director and was very proud that she was able to keep the robin in circulation from then until the present, a total of 25 years. Perhaps this is a record flight?

When I became editor of TSI Dorothy wrote to me with offers of support and encouragement. She was strongly in favor of having flowers printed in color in TSI and eventually saw this come to pass. She also supplied information from her robin for publication. Her most recent contribution to the society was the tabulation of the last two "favorite 15" ballots. She did an excellent job and enjoyed receiving the ballots and reading your comments.

Dorothy's daughter, Priscilla forwarded the robin to Dale Hamblin asking that someone take over the directorship and keep it flying. This, Francis Brenner, who stayed in the robin as a member, has agreed to do so.

FROM THE MAILBAG

Re. **Esther C.D.M.** versus **Gull's Wing**:

For me **Esther C.D.M.** grows beautifully and **Gull's Wing** hardly hangs on. I can't get **Gull's Wing** to bloom, so I can't compare flowers. Maybe we should remind members to compare their flowers and their plants during the 1996 bloom season.

McGarvey has two other Siberians that are almost identical flowers -**Roanoke's Choice** and **Maggie Smith**. **Roanoke's Choice** does repeat bloom a little and **Maggie Smith**, for me, is an inch or two taller. Otherwise, they are the same.

LAST WORD

If Winter should say, "Spring is in my heart"
who would believe Winter?

Kahlil Gibran (1883-1931)

Finally we are able to get into the garden and catch up on all the jobs left undone when winter made an early entrance in 1995. The most heartening observation is that our vole infestation appears to be over. Whether this is due to the fact that we put down poison for the last two autumns, to biological control, (our local cat population has increased to five - all are top-notch hunters), or to a natural dip in the breeding cycle, I don't know, but I am very grateful. Nothing is more depressing than lifting up a nest of chewed rhizomes from the middle of a Siberian clump and knowing that it will take three or four years for nature to repair the damage.

To the 196 registrants who are eagerly anticipating the Siberian and Species convention in Massachusetts: Have your cameras at the ready and an eye open for that unique shot! We hope to have similar color coverage in the Fall '96 issue to that which we had for the 1993 convention, and we will need good photographs.

NEW MEMBERS

We are delighted to welcome the following new members:

Bilson, Jack M. Jr. & Nancy E., 1632 Todd La. PO Box 544, Chester Springs, PA 19425
Bippen, Teresa M., 6053 Kerth Rd., St. Louis, MO 63128
Bolich, Barbara Zimpel, 601 E. Cloverland Dr., Ironwood, MI 49938
Brousseau, Margaret M., 28180 S. River Rd., Harrison Twp, MI 48045
Cory, M/M Patrick W. & Marge, 15753 NE 72nd St., Maxwell, IA 50161
Cothron, Annette, 1060 Taylor Branch Ln., Dixon Springs, TN 37057
DeLongchamp, Roger D., 181A Bowkerville Rd., Fitzwilliam, NH 03447
Dryden, Bruce, PO Box 92, Dobbs Ferry, NY 10522
Faith, Mr. M.D., 210 W. Pleasure, Searcy, AR 72143
Gajewski, Teri, Connelly Landscaping, 34925 Chester Rd., Avon, OH 44011
Graney, John R., 58 Main St., Le Roy, NY 14482
Greer, Dennis W., 5800 Stacey St., Bakersfield, CA 93313
Harvey, Serge, 1061 Chemin Terrebonne, St. Jean-Chrysostome, Quebec G6Z 2K9 Canada
Higginbothom, M/M Fren & Roberta, 3939 Walnut Ave. #181, Carmichael, CA 95608
Higgins, Mrs. Betsy, 608 Buena Vista Dr., Hendersonville, NC 28792
Hopkinson, Francis G., 34030 Orchard Ave., Creswell, OR 97426
Horinaka, Mr. Akira, Oide-Cho 9-31, Nishinomiya 662, Japan

Horner, Thomas J., 25706 Malchine Rd., Waterford, WI 53185
Hudson, M/M Jay & Terri, 33450 Little Valley Rd., Fort Bragg, CA 95437
Huntley, Jerry, RR 3, Canning, Nova Scotia B0P 1H0 Canada
Jackson, Ann C., 80 St. Helens Rd., Hawthorn, East Victoria 3123 Australia
King, Danika, 310 Grant, St. Clair, MO 63077
Lewis, Dianne A., 9321 Congdon Blvd., Duluth, MN 55804
Mackie, Stacie, 6 Warren Ct., Selbourne, MA 01370
Matoon, Mrs. Mary Liz, 1601 Orchard Ave., Moscow, ID 83843
Michael, Mrs. Cheri R., 3517 N. Oceana Dr., Hart, MI 49420
Misiaszek, Peter E., Quarters E, Bainbridge Rd., Newport, RI 02840
Myers, Joseph N., 1243 S 83rd E. Ave., Tulsa, OK 74112
Papale, Mark B., 80 W. Second St., Los Altos, CA 94022
Parent, Edward J., 1069 Tyler St., Pittsfield, MA 01201
Raymond, Margaret T., 353 Mix Rd., Chenango Forks, NY 13746
Robertson Jack C., 1327 Park, Grinnell, IA 50112
Rowse, Mrs. Dorothy, 12800 Ivy Rd. RR#1, Ladysmith, BC V0R 2E0 Canada
Speichert, C. Greg, Crystal Palace Perennials, PO Box 154, St. John, IN 46373
Sullivan, Jim, 313 Bate Cr., Saskatoon, Saskatchewan S7H 3A6 Canada
Vaught, M/M Norbert & Judith, 7004 E Greensburg Rd., Franklin, IN 46131
Walters, Mary, Walters Gardens, PO Box 137, Zeeland, MI 49464
Webb, Dr. Daniel G., 1654 Oxtail Way, Rockford, IL 61107
Woolsey, Kathy R., 961 Mooring Dr., Charleston, SC 29412
Zelasny, Mary Ann, 1171 Roxburry Rd., Keene, NH 03431

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FOR SIBERIAN IRISES

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15980 Canby Ave., Faribault, MN 55021

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P.O. Box 693, Newberg, OR 97132-0693

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16815 Falls Road, Upperco, MD 21155
(See ad. page 44)

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RR 1, Box 847, South Harpswell, ME 04079
(See ad. page 45)

ENSATA GARDENS, Bob Bauer/John Coble
9823 E. Michigan Ave., Galesburg, MI 49053
(See ad. inside back cover)

PUBLICATIONS

All back issues of TSI are $2.50 each if available. We no longer have copies of some of the early issues. Judging standards should be ordered from AIS. Checks made payable to The Society For Siberian Irises should accompany orders. Send to the Publication Office c/o Howard L. Brookins, N75 W14257 North Point Drive, Menomonee Falls, WI 53051.

JOE PYE WEED'S GARDEN, Marty Schafer/Jan Sacks
337 Acton Street, Carlisle, MA 01741

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2435 Middle Rd., Columbia Falls, MT 59912

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999 310th St., Atalissa, IA 52720
(See ad. page 46)

WINDWOOD GARDENS, Bob/Judy Hollingworth
124 Sherwood Rd. E., Williamston, MI 48895
(See ad. inside front cover)

YORK HILL FARM, (See ad. page 44)
18 Warren Street, Georgetown, MA 01833

SLIDES AND VIDEO

Two sets of slides suitable for a club program are available from Tom Abrego, 19105 N.E. Trunk Rd., Dundee, OR 97115. Tom also has a video tape of the Friday evening meeting at the 1993 Siberian Convention which includes the talks and slide presentations of Dr. Tomas Tamberg and Mr. Ho Shidara. This is also available for interested individuals and clubs. Please enclose a check made out to SSI. for $5.00 to rent either of these items.

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SOCIETY FOR SIBERIAN IRISES:

Membership is open to all AIS members in the United States and Canada, and to all iris fanciers elsewhere. Send your dues to the membership secretary, Howard Brookins at N75 W14257 North Point Drive, Menomonee Falls, WI 53051. Phone: (414) 251-5292.

Dues are:

Single Annual	$ 5.00	Family Annual	$ 6.00
Single Triennial	$ 13.00	Family Triennial	$ 15.00
Single Life	$100.00	Family Life	$120.00

The Siberian Iris is published twice yearly by the Society for Siberian Irises, a section of the American Iris Society. The editorial office is at 124 Sherwood Rd. E., Williamston, MI 48895. Deadlines for copy are February 15th and September 1st, but earlier receipt is appreciated. Reprinting is by permission of the author and editor with due acknowledgement.

Lorena Cronin

Need we say much more? Not to those who saw her at the first Siberian Convention in Michigan!

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Photographed in the Schreiner garden, 1994 AIS Convention.