The Siberian Iris

Spring 1993

SIBERIAN IRIS CONVENTION

EAST LANSING, MICHIGAN

June 11-13th 1993

The Iris Connoisseurs of Michigan group invite you to the first ever Siberian Iris Convention and we are excited about being hosts to Siberian lovers from all over the country and abroad.

Registration will include a Friday night get-together, Saturday bus service to the five host gardens and a Jim Copeland "Famous Fish Fry" lunch, Saturday evening banquet, Sunday buffet breakfast, judges' training and barbecue lunch.

Registration fee: $105. Refunds cannot be guaranteed after May 1st. Registrations limited to 200 people on a first come basis. Partial registrations are available.

Paul and Carol Morgan, Registrars
G1384 Westwood Drive, Flint MI 48532-2665

Make checks payable to Iris Connoisseurs of Michigan.

THE SIBERIAN IRIS

VOLUME 7, NUMBER 7 SPRING 1993

Front Cover: "Iris Siberica-hybride". Water color by Otto Ludwig Kunz (1904-1985): Copyright Stahle and Friedel, Stuttgart. Courtesy the Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburg, PA.

FROM THE PRESIDENT'S DESK

Here we are thinking about iris bloom and the coming Siberian Convention, and we just had our coldest day in the past twelve years. This winter in Michigan has so far been more nearly "normal" than has been true the past few years. For us, I think, that's good news -- no prolonged warm spells in January or February, getting plant growth started, followed by bitter cold that zapps things. Let's hope now that spring occurs on schedule and all the guests will be blooming when we meet in East Lansing in June.

One of our needs in SSI is a revitalized Robin program. Things have come more or less to a standstill, and I expect there are many of our members who would like to be in a Robin. There is a place for general groups, dealing perhaps with the basics such as culture, use in landscape, etc. There might also be persons interested in more focussed Robins, such as hybridizing or even more specifically the search for certain colors, patterns, forms, or other. Anyone interested? Let us know.

I'm afraid too often we might be interested in Robin correspondence but feel we are too uninformed to be able to contribute. These fears are really unfounded; most, if not all of us are amateurs and have a lot that we could learn. And Robins can be great learning opportunities.

We need a new Robin Director. Anna Mae Miller is unable to continue in the job to which she devoted much time over the past several years, even when she was SSI President. Will someone help us out? If you are willing to take on this responsibility and try to stir up some more interest, please contact me.

Hal Stahly

GROWING SIBERIANS

By Shirley Pope

I decided to begin this article by telling you what I did last for my Siberian irises.

When the foliage started to turn yellow and limp last fall from heavy frosts we cut the foliage off at ground level, bagged it, and removed it from our property. We never compost iris foliage. We hope to remove most borer eggs, any fungus, spider mites or other enemies of iris foliage. We smoothed the soil around the irises and spread a couple of inches of mulch. Pine needles are our first choice. We never have enough for all our irises so we've used oat straw and salt hay with good results. This fall we tried alfalfa hay on a few rows for the first time. I will let you know how it worked. We only mulch the Siberian irises to try to keep the soil from cracking and heaving from our warm days and cold nights, not to protect them from freezing. If the mulch is too deep it may harbor field mice. Old foliage flopped over heavy mulch makes a happy winter home for mice and the rhizomes are their food supply.

In early spring, we loosen the pine needles and spread a thin layer around the plants. We'll take up the straw and salt hay, put it through our grinder, then spread it among the irises for mulch. We intend to grind the alfalfa hay and use it around the irises as a mulch and soil conditioner. We've had good results with alfalfa pellets and feel the earthworms will work in the ground alfalfa hay. We hope to get double value for our money.

In the spring when new growth appears, fresh and clean through the mulch, we give them a feeding of liquid

fertilizer (5-10-5) or (5-10-10). This gives the irises a quick shot in the arm. We feed them again when the buds begin to appear deep down in the foliage and again just before the buds open. Because we've carefully prepared the soil with new loam, peat, rotted horse manure and any old mulch, we believe the soil has enough nutrients and organic material to sustain the irises without granular fertilizer mixes. Granular fertilizer does not break down well in our naturally sandy soil and the irises seem to suffer from want of food. The nitrogen feeding is kept on the low side for nice, but not rampantly overgrown, foliage.

After bloom all unwanted bloom stalks are cut down. Only hybridizer's seed pods should be left on the plants. Seed pods harbor *Orthocaeta dissimilis*, a fly whose larva, a small white maggot, destroys unopened flower buds. When the stalks are all cut away and any brown, damaged foliage is removed (this usually takes a few weeks), the irises are fed again for the last time, stimulating the rebloomers and helping the others produce increases and next year's buds.

We've discovered that lightly sprinkling corn meal around the irises will reduce the cutworm population. The corn meal swells up inside the gut and kills them. A fresh application is necessary after each watering or rainfall. We've also found that a light sprinkling of sifted wood ashes discourages slugs. The ash burns their slimy bodies. This also needs to be renewed after a wet spell. Both corn meal and wood ashes are environmentally safe. In fact, the wood ashes add trace elements to the soil. Diatomaceous earth sprinkled around the irises is also rough on the slugs but you must be careful not to breathe in this fine fossil dust.

Keeping the irises clear of old foliage and free from garden debris helps prevent borer infestation and botrytis. We usually spray once when the irises are about three inches tall, with a systemic insecticide (Orthene or Isotox). This usually eliminates any stray borer our neighbor's moths may have deposited, Then we keep watch, while walking through the gardens, for the tell-tale sign of a borer in the Siberian foliage. The leaves are so narrow that if a borer

chews down to the rhizome the center leaf will start to turn brown. Pull it gently, and if it moves, cut the fan at ground level and look carefully for any noticeable chewing at the cut. If you don't see any then you've got the tiny borer in the fan. I usually carry a bread wrapper in my pocket to collect any suspicious fans. Dig for them with a pocket knife if they've gone into the small rhizome, because they'll keep tunneling into neighboring rhizomes, eating and destroying them until they are mature enough to pupate in nearby soil.

We've found that trying to transplant Siberians right after bloom is very bad in our garden. It's usually very dry and hot at that time of year and the irises have expended all their energy during bloom. We feel they need a short rest, not a sudden move. Early spring seems to work best for us. As soon as the irises have begun growing we dig them, gently pull them apart with two spading forks back to back, and re-plant 3-5 fan divisions either in a new garden or in refurbished soil. Planting three divisions in a triangle makes an instant clump. The irises have a chance to root in before the summer dry heat and are well established for our severe winters.

When preparing a new garden it's best to dig out all the sod and grass roots and add compost, rotted manure and peat moss. Sandy soils should have plenty of organic matter to retain moisture. Hard clay soils should also be rich in organic matter so the roots can spread easily to obtain food and moisture. We recommend adding new soil along with the organic matter when re-planting an old Siberian garden. This will replace the trace elements that are much needed.

Soak the roots in water a few hours so the plant has all the moisture it needs to withstand the move. Dig a hole that is big enough to hold all of the roots, make a mound of soil and wet peat moss and place the rhizome on the mound spreading the roots downward. This should prevent air pockets. Air pockets under rhizomes are probably the largest killer of Siberian transplants. Firm the soil around the rhizome so that it is two inches below the surface and water well. Mulch with something to retain even moisture

during the rooting period and be sure the roots do not dry out.

Siberians can survive severe abuse but why bother to grow mediocre plants when with a little bit of food, water and care they can become the focal point of your garden. Planted alone, they will become a sea of beauty. In the perennial border, they are a wonderful addition either for bloom or foliage effect. I hope you all enjoy them as much as I do.

[ED: Photograph of Shirley courtesy of Howard Brookins.]

LETTER TO THE EDITOR

I am in the process of collecting seeds, seedlings and cultivars towards a goal of hybridizing to develop a color line of silvery-gray - pewter - charcoal toned Siberian diploids. If any of your readers can supply material that fits these criteria, I'd like to hear from them.

Jaren Stevenson
Route 3, Box 72-P
Davenport, WA 9912

REQUEST FOR SIBERIAN GUEST IRISES FOR 1996

The Iris Society of Massachusetts (ISM) will host the Second Siberian Iris Convention in eastern and central Massachusetts in 1996. We are now requesting guest Siberian and species irises for one master planting and four additional gardens. Following Michigan's successful strategy for the 1993 Siberian convention, we plan to handle guest plants by the following method:

1. Before shipping, hybridizers wishing to send official guest plants are to notify the 1996 Guest Iris Chairman - Barbara Schmieder, 556 Old Rd. to NAC, Concord, MA 01742.

2. Notification should be sent before July 31st, 1993 and include the name or seedling number of cultivars to be guested, the number of starts of each cultivar, and the approximate season of bloom.

3. The Guest Iris Chairman will then notify each hybridizer where to send their guests. When multiple starts of a cultivar are to be sent, hybridizers will be given the address of several gardens in order to maximize the chances of good bloom for the convention. With this direct mailing system we hope to minimize any losses and get the irises off to a good start.

4. Guests will be accepted from Aug. 1st to Sep. 15th 1993

5. Hybridizers from abroad will be notified of one address only for shipping irises. This is in order to minimize the cost of phytosanitary certificates and mailing.

The 1996 convention committee and tour garden owners will follow the statement of the Code of Ethics as printed in the AIS Convention Handbook. Official guest status will apply only to those plants which are mailed to the tour gardens by the above procedure, and whose plant information was sent by the hybridizer to the Guest Iris Chairman.

THE TWENTY EIGHT CHROMOSOME

SIBERIAN IRISES

By James W. Waddick

Siberian irises in gardens today are derived from a small group of species in the genus *Iris* in the series *Sibiricae.* These ten or so species consist of at least two distinct groups based on their chromosome complement. The larger group of species has a diploid (2n) number of 40 chromosomes. A smaller group of species has a diploid number of only 28 chromosomes. It is this latter group of three cultivated species that I would like to review for you. The species are *I. sibirica, I. sanguinea* and *I. typhifolia.*

Binomial nomenclature dates back to 1753 when Linneaus first published "Species Plantarum" which included a list of 18 species of *Iris.* The test of time has eliminated a few of these as invalid names and removed others from the genus *Iris.* Linnaeus included the European species *I. sibirica.* Note that although the name is based on the geographical region known as Siberia, the species and series name is correctly spelled without an "e" as in "sibirica".

Iris sibirica is designated as the "type species" for the Siberian irises within the genus *Iris.* This simply means that its species name is designated as a basis for the series names, *Series Sibiricae.* The natural distribution of species is somewhat problematical owing to two factors. First, some species have been cultivated for centuries (*I. sibirica* in Europe and *I. sanguinea* in Asia) and more than likely moved from their place of origin to other more distant locations; and second, early European plant hunters recognized the look of *I.sibirica* and incorrectly named related plants in foreign lands with this name. These errors have mostly been clarified in modern times, but a variety of alternate names still exists in the literature.

Iris sibirica:

The natural distribution of *Iris sibirica* is said to be Europe, Russia (east to Lake Baikal), and N. E. Turkey. I can find no record of its occurrence in Siberia. This kind of misnomer is common to early taxonomic literature. This species has a very large distribution and its exact boundaries are unclear. Lake Baikal is just north of Central China. *Iris sibirica* has not been confirmed as occurring naturally in any parts of China, yet a recent report suggests that this species may occur in extreme western China (Tibet) and possibly in northeast China (Inner Mongolia). If confirmed, these new distribution records would greatly expand the distribution of this species.

Iris sanguinea:

I. sanguinea was described in 1794, but the name *sanguinea* dates to 1813 when it was verifiably assigned to this species. The species has gone under a variety of names based on its confusion with *I. sibirica.* Its most common invalid names are *I. sibirica var. sanguinea, I. orientalis, I. extremorientalis* and *I. nertschinskia.* The living plant was introduced into Europe sometime in the mid-1800's. A collected white form known as "Snow Queen" was introduced around 1900.

Oddly, this is the Siberian iris that is actually native to Siberia. It ranges from central and southern Siberia through southern Russia to Eastern China, Korea and Japan. It may occur in and around the area of Lake Baikal and this site may be the only location where the two species coexist in nature.

Iris typhifolia:

The third species in this group, *Iris typhifolia*, was not described until relatively late, 1934, from a remote area of northeast China but eluded cultivation in the United States until introduced by Zhao and Waddick in 1989/90. Its

natural distribution is restricted to northeast China where it may overlap with *I. sanguinea.* Although there is no confirmed count of its chromosome number, crosses have already been successful between the 28 chromosome hybrids and unsuccessful with the 40 chromosome Siberians. I think it is reasonable to assume the 2n number is 28 until an accurate count has been made.

Hybridizing within this group of irises began as soon as *I. sanguinea* was brought into cultivation in Europe. Various collected forms of both species (*I. sanguinea* and *I. sibirica*) were crossed easily and a range of new colors was developed with great interest in the early decades of the 1900's. Addition of *I. typhifolia* has begun with the first flowering of this new species in the West. Because the three species are quite distinct, it is relatively easy to see the contributions of each species in modern hybrids. The first two species have been hybridized frequently, but some confusion exists over the contribution of each species and this confusion will only enlarge as stocks of "typical" or "wild collected" forms are diluted by unplanned bee crosses.

During the 1992 bloom season I observed bloom on plants from wild collected seed of the two Asian species and had access to material from the European species. It seemed timely to review all the distinctive similarities and differences into a single table for ease of identification and to recognize species contributions to modern hybrids.

From the species characteristics it is easy to look at modern hybrids and see at least some of their origins. Newer cultivars such as **Shaker's Prayer** and **Snow Prince** owe much of their heritage to *I. sibirica. Iris sanguinea* has influenced many modern cultivars such as **Aqua Whispers, Lady Vanessa, Regency Buck** and **Silver Illusion**. The influence of *Iris typhifolia* has yet to be seen.

It is of more than passing interest that colors of modern hybrids have been developed from wild blue-violet and white flowered forms to today's range of colors including "reds", pinks, lilacs and yellows. However less attention has been paid to patterns with only a relatively few cultivars

showing distinctive patterns of veins, spots, bicolors etc. A few cultivars have petals edged in pale "silver" and "gold". Some recent hybrids have accentuated the signal pattern to contribute to the overall floral effect such as **Demure Illini**, and **Sultan's Ruby**. Although attempts have been made to increase bud count, there are still few cultivars that have more than five or six flowers per spike and fewer still that have even three buds per placement or more than a spur and a branch; all this suggests a predominance of the heritage of *I. sanguinea.* I believe that since two of the species can, under good cultivation, produce up to ten buds then surely the hybridizer can increase this number further by selective crosses and keen observation.

Some attention has been paid to development of dwarf cultivars such as **Baby Sister** and those with miniature flowers such as **Snow Prince**. A few cultivars are reported to have an extended bloom season or repeat bloom. More attention needs to be paid to the species which bloom early such as *I. typhifolia* and those that bloom later, *I. sanguinea.* Many hybridizers have concentrated on flower texture, durability and substance.

What does the future hold for Siberians? I would suggest the return to, and addition of, some species crosses especially from new wild collected materials to add to the gene pool. Then selection for extended bloom, more flowers, new colors and patterns. Attention should be given to the year-round foliage characteristics to ensure a plant with lasting and attractive foliage and form in the garden. It has been repeated often that one of the main charms of Siberian irises is their variety of forms of flower, plant and season. Hybridizers should recognize and incorporate the full palette of the available gene pool. I hope that the species characteristics which follow help to pin-point the potential for even more and improved hybrids.

CHARACTERISTICS OF THE 28 CHROMOSOME SIBERIAN IRISES: *SUB-SERIES SIBIRICAE*

These numbers apply to diploid Siberians. Actual measurements may vary with cultivation and genetic background; consider the figures for comparison's sake only.

Characteristic	I. sanguinea	I. sibirica	I. typhifolia
<u>Foliage</u>			
Width	1/2-5/8" & wider*	1/4-1/2" & wider*	1/8-1/4" & wider*
Length	16-23"*	8-23"*	12-25"*
Shape	Flat, bent at tip	Flat, erect	Twisted, erect
Summary	Widest	Grassy	Narrowest
<u>Flowers</u>			
Shape	Wider than tall	Taller than wide	Wider than tall
Falls	Flaring	Pendant	Pendant
Size	Large	Small	Medium
<u>Stalk</u>			
Buds	2*	2-9*	2-7*
Branches	0	2-3	2-3
Pedicels	Equal	Very unequal	Very unequal
Flower Position	Just at top of foliage	Well above foliage	Well above foliage
Stalk	Same height as foliage	Distinctly taller	Distinctly taller

continued

Bracts

Length	Longer than flower	Shorter than flower	Shorter than flower
Color	Green often flushed red	Brown, papery	Pale green

Seed Pods

Shape	Elongated	Round/oval	Long
Length/width	3x	2x	4x

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*These figures may vary with cultivation.

A KEY TO THE *Subseries Sibiricae*:

1A) Bracts scarious, brown, papery (at least along edges) at bloom .....*I. sibirica L.*

1B) Bracts essentially green, may be marked or washed with red at edges of bloom 2

2A) Foliage relatively broad, flat, strap-shaped; usually 2 blooms on pedicels of equal length .....*I. sanguinea Donn*

2B) Foliage relatively narrow, twisted, erect; 3 or more blooms on branched scape with unequal pedicels .....*I. typhifolia Kitagawa*

[*ED:Eckard Berlin reported on the introduction of* I. typhifolia *to Europe in TSI, Vol. 6 (9) Spring '89*]

1992 REGISTRATIONS

AND INTRODUCTIONS

AINDLING GOLDAUGE (Artur Winkelmann, R. 1992). Sdlg. F2 N3 87. SIB/VERS, 23.5" (60cm), M-L. Dark violet, large yellow signal with thin white inner band. Neidenstein X unknown.

AINDLING LIBELLE (Artur Winkelmann, R. 1992). Sdlg. FWhN4. SIB/VERS, 23.5" (60cm). L. Violet self, yellow signal, veined white and violet; light violet styles; yellow foliage in spring. Fourfold White X Neidenstein.

AINDLING MORGENSTIMMUNG (Artur Winkelmann, R. 1992). Sdlg. F2N7 87Ha. SIB/VERS, 27.5" (70 cm), VL. Medium violet-blue self. Neidenstein X unknown.

AINDLING ROHRSAENGER (Artur Winkelmann, R. 1992). Sdlg. F2N16. SIB/VERS, 20" (50cm), E. Violet self, yellow-white signal; light violet styles. Neidenstein X unknown.

BLUE MOUND (Nadine Yunker, R. 1992). Sdlg. ST-1-6. SIB, 36" (91cm). ML. S. violet-blue (RHS 94B); F. same, greyed yellow throat with white at bottom. Dreaming Yellow X unknown. Yunker 1992.

BOLD BLAZER (Currier McEwen by Harry Kuesel, R. 1992). Sdlg. T2 69-68. SIB (tet.), 24" (61cm), LM. Bright violet-blue (RHS 93C) with prominent 5/8" circular white signal veined violet-blue. T1 61/Cas 2(1): (Violet Flare x unknown) X T1 61/Cas 15(5): (Pirouette x unknown).

BUTTERFLY MODE (Lorena Reid, SINO-SIB, R. 1991). Laurie's Gardens 1992.

CASCADE CREME (Lorena Reid, SINO-SIB, R. 1991). Laurie's Garden 1991.

CATHERINE HOWARD (Mary Tubbs, R. 1992).
Sdlg. H-DK. SIB, 36" (91cm), M. Mid-dark blue, blue signal. Unknown parentage.

CLASSIC WHITE (Michael Epp, R. 1992).
SIB, 22-24" (56-61 cm), M. S. white; F. white, yellow throat. Unknown parentage.

DORFFEST (Artur Winkelmann, R. 1992).
Sdlg. AW 8992. SIB (dip.), 31.5" (80cm), E-M. Velvety purple, white signal, flaring F. Ruffled Velvet X Fliederfee.

DOTTED LINE (Lorena Reid, SINO-SIB, R. 1991).
Laurie's Gardens 1992.

ELINOR HEWITT (Jennifer Hewitt, R. 1992).
Sdlg. RD8417/4. SIB (dip.), 30" (75cm), E-L. S. dark wine red (RHS 77A); F. blue- violet (88B) at center, changing to red-violet (81A) at edge, wine-red (77A) at tip, white signal, yellow near hafts. Rejoice Always X Pink Haze.

EVER AGAIN (Currier McEwen, SIB, R. 1991).
Pope's Perennials, Seaways Gardens 1992.

FESTIVAL PRELUDE (Calvin Helsley, R. 1992).
Sdlg. 89-2. SIB, 32" (81cm), E. S. dark violet (RHS 86A), edged violet (88B); violet (88B) styles with violet blue (98C) ribs; F. violet (88B), lightly veined and edged dark violet (86A), small white signal, gold in throat and under styles; lightly ruffled, slight sweet fragrance.
Mabel Coday X D.S. Varner sdlg.

FOREVER SNOW (Nadine Yunker, R. 1992).
Sdlg. St-1-3. SIB, 36" (91 cm), ML. White with yellow (RHS 7A) throat. Dreaming Yellow X unknown. Yunker 1992.

GOLDEN EDGE (Currier McEwen, SIB, R. 1991).
Pope's Perennials, Seaways Gardens 1992.

HARPSWELL CHANTEUSE (Currier McEwen, SIB, R. 1991). Pope's Perennials, Seaways Gardens 1992.

ILLINI VALOR (D. Steve Varner, R. 1992).
Sdlg. 3133. SIB, 31" (79 cm), EM. S. deep burgundy wine; F. same, veined blue-purple overall, blue-purple wash in center; ruffled; slight fragrance. Ruffled Velvet X Dutch. Illini Iris 1992.

JUNGER FALTER (Artur Winkelmann, R. 1992).
Sdlg. AW 92. SIB (dip.), 23.5" (60 cm), M-L. S. white; F. light yellow, fading to white; ruffled. Butter and Sugar X Zitroneneis.

LEGACY OF LOVE (Katharine Steele, R. 1992).
Sdlg. 861-12730. SIB, 20" (51 cm), ML. Silvery lavender-blue self; self style arms. Pink Haze X unknown.

LIGHTLY TOUCHED (Jean Peyrard by C. Hansen, R. 1992). SINO-SIB, Laurie's Garden 1992.

LITTLE MOO (Ruby Buchanan by J. Wood, R. 1992).
SIB, 10" (25cm), L. Violet-blue (RHS 94A) self. Unknown parentage.

LITTLE PAPOOSE (D. Steve Varner, R. 1992).
Sdlg. 3189. SIB, 20" (51 cm), M. Deep red grape, wide white signal; slight fragrance. Rare Jewel X Kismet. Illini Iris 1992.

LOFTY ELEGANCE (John Wood, R. 1992).
Sdlg. W-120-89. SIB (dip.), 30" (76 cm), M. S. lilac (RHS 76C), veined imperial purple (76A); lilac (76C) styles; F. imperial purple (76A), veined violet (88A). Pink Haze X Lavender Bounty.

OVER IN GLORYLAND (R. M. Hollingworth, R. 1992).
Sdlg. 85B3B10. SIB (tet.), 34" (86 cm), M. S. dark royal purple; F. velvety dark royal purple, cream blaze; ruffled. 82J2C6(T): (Jewelled Crown sib) X 81A3A4(T): (Dreaming Spires x unknown) x (Cambridge x unknown)).

PACIFIC STARPRINT (Lorena Reid, R. 1992).
Sdlg. cs86-27-G12-5. CA-SIB, 20-28" (51-71 cm), ML. S. mid-violet, edged lighter, royal purple midrib; ruffled mid-violet style crests; F. rich royal purple, black purple signal with white starprint pattern. Enbee Deeaych X Wild Party. Laurie's Garden 1992.

PIEDMONT BLUE (John Wood, R. 1992).
SIB (dip.), 28" (71 cm), M. Velvety violet-blue (RHS 93B) self. Big Blue X Tycoon.

RAGTIME DANCE (R. M. Hollingworth, R. 1992).
Sdlg. 88T2D1. SIB, (dip.), 29" (74 cm), M. Heavily ruffled medium red-purple self. 85B1B10: (Sweet Surrender sib) X 85C3A2: ((Pink Haze x Fairy Dawn) x (Super Ego x Anniversary)).

ROARING JELLY (Martin Schafer/Jan Sacks, R. 1992).
Sdlg. 86-36-1. SIB, 36" (91 cm), M. S. lavender-grey (RHS 85D) with diffused red-purple veins; style arms same, flushed blue-aqua; F. shaded and dappled throughout (overall effect is red-purple maroon), white signal with dark veining and dark blue flush. Warburton ARV82-31: ((Atoll x Ruffled Velvet) x Ruffled Velvet) X Springs Brook. Joe Pye Weed's Garden 1992.

SHADOWED EYES (Calvin Helsley, R. 1992).
Sdlg. 91-1. SIB, 27" (70 cm), M. S. light violet-blue (RHS 98D) flush at base; light blue (100D) styles with darker (100B) ribs; F. blue (98C) with darker blue shoulders on each side of large white signal; ruffled. Mabel Coday X S. Varner sdlg.

SHALL WE DANCE (R. M. Hollingworth, R. 1992).
Sdlg. 87N4C1. SIB (tet.), 31" (79 cm), L. S. very light blue; F. medium light blue-violet, veined deeper; ruffled. Harpswell Hallelujah X 85D3B1: ((((Super Ego x Anniversary) x Windwood Spring sib) x (Pink Haze x Wing on Wing)). Windwood Gardens 1992.

SIMPLE GIFTS (R. M. Hollingworth, R. 1992).
Sdlg. 87N2A12. SIB (dip.), 30" (76 cm). M. Tailored, extremely pale lavender-blue, small white signal; white style arms. 84V1A9: (Steve Varner x Windwood Serenade sib) X 84V1A12 (sib).

STRAWBERRY FAIR (R. M. Hollingworth, R. 1992).
Sdlg. 87Q6C5. SIB (tet.), 29" (74 cm), L. Heavily ruffled crushed strawberry pink, small white signal; light blue style arms. 81C2C5(T): (Pink Haze x Wing on Wing) X Jewelled Crown.

SUGI IRI (John Wood, R. 1992).
SIB (dip), 21" (53 cm), ML. Lavender (RHS 76B), veined darker (76A); lavender styles (76D). Unknown parentage but probably imported from Japan. Cook's Gardens 1980.

SWEET SURRENDER (R. M. Hollingworth, R. 1992).
Sdlg. 85A1B27. SIB (dip.), 34" (86 cm), E. Medium wine-red, white blaze; light blue style arms with red rim. 81A5C3: (7712: (Varner 062: Dreaming Spires x Tealwood) x Unknown) x Augury) X 83M3B8: (Pink Haze x Fairy Dawn). Windwood Gardens 1992.

WAVERLY DEBUT (John Wood, R. 1992).
Sdlg. W-115-85. SIB (dip), 26" (66 cm), EM. Red-purple (RHS 72A) self; lighter (72B) styles. Eric the Red X Polly Dodge.

WELFENBRAUT (Marlene Ahlburg, R. 1992).
SIB, 31.5" (80 cm), M. S. cream, F. light yellow; ruffled and waved. Welfenprinz X Welfenschatz.

WELFENGOLD (Marlene Ahlburg, R. 1992).
SIB, 31.5" (80 cm), M. S. pale yellow; F. full yellow; ruffled and flaring. Welfenprinz X Welfenschatz.

WELFENHERZOG (Marlene Ahlburg, R. 1992).
SIB, 31.5" (80 cm), M. S. white; F. yellow (RHS 9A/B). Welfenprinz X Welfenschatz.

STRATEGIES FOR HYBRIDIZING

By Marty Schafer

The seedlings that bloomed for the first time in the summer of 1992 have me very excited. One whole cross was so interesting that I saved every member. It is the next generation from my "Upright Styles" and that unusual feature has been passed on to some of its children. As hoped, the addition of **Sailor's Fancy** to the mix has improved the overall shape of the flower, but to my surprise and delight a great number of color patterns have emerged - blue standards and red falls, silvery purple selfs and pastel blues with rose blushing. The first bloom of these and other seedlings has me thinking about hybridizing. How can I best pursue the potential of these flowers? This is the goal of hybridizing - to discover variation, explore it, nurture it and magnify it. In thinking about the future, I realize that it is helpful to look into the past and figure out how I got here. Also, I want to remember and examine all the advice I have heard from experienced hybridizers. So my winter has been filled with thoughts and conversations of outcrossing, phenotype breeding, line breeding, sib and backcrossing etc. In the process I have found some interesting patterns in my own breeding and discovered lots of possibilities for the future of my seedlings.

There are two hybridizing tools which I have rejected and I think for good reason. The first is sowing bee pods. This may be an effective method of exploring species or near species, but is a very frustrating way to hybridize advanced generation hybrids like most named Siberians. The results give too little information. Half the history of the seedlings is missing and that presents serious limits to pursuing their future. If you are just starting out and want to grow seedlings, bee pods are one way to whet your appetite, but I encourage you to make hand pollinations. It will give your program much more power and give you many more possibilities to explore.

The second hybridizing tool which I do not use is selfing -

putting pollen from an iris onto itself. This procedure was highly recommended by some early hybridizers both as a method to determine immediately the pod and pollen fertility of a plant, and as a way to advance a breeding program by exaggerating a desired quality of the flower. I have only made a few self crosses but each time the results have been disappointing. The seeds sprouted poorly, the seedlings grew weakly, and there were no interesting features in the flowers.

So .... what is left? Lots!

Outcrossing is using two parents that are unrelated to each other. The most extreme kind of outcross is an interspecies cross such as *I sibirica* by the newly discovered *I. typhifolia.* However, it is also an outcross to mate two flowers that have basically different parentage - even if they both have a little **White Swirl** in their backgrounds as most modern Siberians do. As a tool or a strategy, outcrossing is useful as a place to begin. It is a place to start searching for new features and patterns or simply to explore the possibilities of combining two irises. Last summer I noticed that **Snow Prince** (Sarah Tiffney's albino *I. sibirica*) has among other wonderful qualities, yellow buds, and I thought "wouldn't it be great to have a plant and flower like **Snow Prince** but in yellow. A little yellow butterfly!" So I made a number of outcrosses - **Snow Prince X Butter and Sugar, Isabelle**, and a number of yellow seedlings, and (for no reason), **Springs Brook**. Because the plants are so unrelated almost anything can result when they flower, but I will be looking for the smallest and yellowest seedlings to carry on the next generation. And if anything else promising shows up, I won't ignore that either.

A variant of outcrossing is phenotype breeding, which ignores parentage and crosses flowers with similar features - light blue with light blue, pink with pink, large signals with large signals, rims with rims. I have done a little of this with neither outstanding nor disasterous results.

The results of outcrossing are not always positive. The flower forms of the parents may be so incompatible that

the children have ugly, twisted, awkward or dull flowers. I crossed **Snow Crest** with **Springs Brook** and **Dancer's Fan** with **Tealwood**. The seedlings grew like weeds and had great branching and bud count but the flowers were awful and had no interesting features.

As a tool outcrossing is not for refining form or enhancing a particular feature. If a great signal, color or shape emerges from an outcross, a second outcross may well suffocate that new feature. At this point I suggest a different strategy - line breeding. The theory behind line breeding is that crossing irises with common ancestors has the potential to strengthen a desired feature by massing or organizing the genes. Line breeding presents opportunities which with outcrossing are achieved mostly by luck. There are several approaches to line breeding - backcrossing, sibcrossing, and what I call cousin crossing - and this winter, for the first time, I am beginning to understand the different values of each.

Backcrossing is when a hybridizer crosses an iris with its parent or grandparent. A good example of this is Bee Warburton's **Atoll**. She outcrossed **White Swirl** with **Eric the Red**, then crossed one of those seedlings back on to **White Swirl**, then took one of those seedlings, crossed it back onto **White Swirl** and came up with **Atoll**. **White Swirl** is **Atoll's** mother, grandmother and great grandmother. In the process Bee created a marvelous base for future breeding. From **White Swirl**, **Atoll** has the potential of passing on to its children large flowers, two branches, vigor and excellent plant habits. **Atoll** also had a feature of its own - dark fall edges, perhaps the beginning of a future plicata. Bee did not continue to backcross **Atoll** to **White Swirl**. Instead she chose to outcross at this point. She had taken backcrossing as far as it needed to go.

Backcrossing may feel like a slow and incremental process but it can be very important preparation in the early part of a breeding program. Each backcross consolidates genetic material. The hybridizer's job is to shepherd that genetic material by choosing strong characteristics generation after generation. Vigor, foliage,

branching, bud count, form, clear color, and substance are some of the many qualities that the hybridizer concentrates into a breeding base. It might feel like the hybridizer is standing still but this is an illusion. At some point the base is strong enough and the hybridizer can begin to explore some of the variation that has appeared. This is where the strength of the base is proven. All of the genetic material that has been organized by backcrossing is like a strong current that flows through the future generations. As new genetic elements are added to the line, the consistency of good form, substance and plant habits should remain, and even if lost in one generation should be easily recovered in the next. The hybridizer can save a lot of time and trouble by starting with a good base. After building up the base the hybridizer is presented with other breeding possibilities - outcrossing or using the other strategies of line breeding.

The second type of line breeding is sibcrossing (sibling crossing) - mating children from the same cross. Bee Warburton's most succesful use of **Atoll** was to outcross it to **Ruffled Velvet** and then take those children and embark on a long series of sib crosses. **George Henry** was one of these children and when crossed with a sibling (ARV 80-28) produced **Springs Brook**. **Springs Brook** inherited repeat bloom and double branching from **George Henry** and large blue flowers from ARV 80-28.

I crossed **Percheron** with **Butter and Sugar** hoping to start a new line of large yellow flowers. I knew yellow was unlikely to show up in the first batch of children and it didn't. But I did get two seedlings that had large fuzzy, soft-yellow signals. One was blue-violet, the other red-violet. They were interesting but far from gorgeous. I crossed them with each other. Up until then I had never made sibcrosses because I was afraid they would be like self-crosses and produce weak plants, but the results were good. One seedling was greenish yellow indicating that a recessive feature like **Butter and Sugar**'s yellow coloring is recoverable in a sibcross. Most of the seedlings had stronger and larger strong yellow signals showing that sibcrosses can strengthen small variations. The best thing that happened was a surprise. It was a single seedling that

had pale purple falls with a visible layer of yellow under the whole surface of the falls. Naturally it was the one seedling in the cross that had some weaknesses in flower form and stalk strength. It has good breeding behind it and its children should improve quickly. I wonder if any other kind of cross could have given this result. I made a lot of sibcrosses this year on the strength of this one cross.

The last strategy for line breeding is what I call cousin crossing, and I discovered this winter that this is the strategy I use the most. "Cousins" may be all kinds of family relations. They could be aunts, first or second cousins, and even half-siblings or a combination of these. These relationships are a little more distant and can be a lot more complicated than parent-child or siblings. The parents of my seedlings, having come from such a well developed program as Bee's, are pretty closely related with three grandparents in common or many great-grandparents in common. My outstanding cross this year from "Upright Styles" X **Sailor's Fancy** is this kind of cousin cross. I traced its family tree and found **Percheron** appearing as grandfather and great-grandmother. **Atoll** and **Ruffled Velvet** each appeared five times and **White Swirl** made twenty two known appearances! I made the cross with "Upright Styles" as my primary goal. I wanted to retain the beautiful, floretted stylearms but I also wanted to see them on a flower with nicer form ("Upright Styles" has narrow, twisted falls) and perhaps with a nicer signal ("Upright Styles" has a very bright green UU signal). So I crossed it with the flower with the best form in my breeding program - **Sailor's Fancy**. The results were much more than I had anticipated. All of the flowers were large and full and had good form. Most had upright stylearms - at least to some degree. The signals are softer and lovely. In addition, however, the bitone-ness of **Sailor's Fancy** appeared in a number of the seedlings AND a series of color combinations I have not seen before in Siberians.

I might have backcrossed "Upright Styles" to **Percheron** or **Mad Magenta** or sibcrossed it. And that would have been one way to go. Instead I looked forward in my program to an iris with the same strong genetic base as **Percheron** and

Example of "Upright Styles", Sdlg No. S87-10-1

Mad Magenta, but incorporating the improvements of the last few years work. **Sailor's Fancy** is a great advance in form over **Percheron, Silver Rose, Mad Magenta** and **Springs Brook**. So instead of going back to the genetic base I went forward to the genetic base. In my mind, that is the key to cousin crossing - going forward. Of course, I didn't know that as clearly two and a half years ago when I made the cross as I do now. I was just going on instinct.

Not every cousin cross I have made has this exciting a result (I do think I hit the cousin crossing jackpot), but the basic principle still flows through the results. Cousin crossing has the same benefits as other kinds of line breeding and yet, it also moves forward from the best products of current breeding - not sideways or sibways or

backwards.

I've learned a lot writing this article. All of the breeding strategies are important and valuable throughout the life of the program. Outcrossing is a place to start and it can also change the direction of a line. Backcrossing will build a strong breeding base by using again and again a plant with superior qualities. It can also strengthen fledgling variations and occasionally will create new variations. Sibcrossing is a way to combine the best qualities of both of the original parents without either one of them dominating and like backcrossing it occasionally creates new variations. Cousin crossing capitalizes on line breeding work that has gone before. It takes advantage of the best developments of a breeding program.

I do not intend to belittle the value of instinct in choosing parents for breeding. I still believe it is one of the most important elements. And clearly, this discussion of breeding strategies is just a beginning and is in no way definitive. But I feel it gives me more tools to work with to understand what I've been doing and where I'm going.

FROM THE MEMBERSHIP SECRETARY

Howard Brookins

Please read your label on this issue carefully! Not only does it get your publication to you, it gives the status of your membership in The Society for Siberian Irises. If it reads 93 07 "Time to Renew" on the first line, it means that this is your last copy and it's time to renew to keep your membership active. No copy will be sent after that date, and if you renew after the next publication is mailed, you'll loose that informative issue. The difference between bulk mail and first class is around 64c per copy, which is an unnecessary expense for the society. If you renew when you receive your label showing its that time, it saves the membership secretary the time and expense of mailing a reminder postcard. Please help!

If you move, be sure to notify the Membership Secretary of EACH SECTION of AIS to which you belong. AIS does not have the facilities to pass on this information to all sections. When we mail bulk mail and you've moved, the Post Office charges us 30c to let us know, you do not receive your publication, the mail carrier get's a freebie (perhaps that's why we've had several mail carriers in AIS over the years!), and when a second copy is mailed first class, we're in the $2.50 range. Remember, a 19c post card saves you a lost issue, or the $2.50 to replace same.

Send all changes to the Membership Secretary, address in each issue. My phone number is also listed, so for a quick answer to any question, give me a call, after 5:00 PM. in the winter, after 9:00 PM. during gardening season.

NEW MEMBERS

An enthusiastic welcome to the following new members:

Aguirre, Penny, 2345 Decatur Ave. N., Golden Valley, MN 55427
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Baghdayan, Emmanuel, 55 Pennacook Rd., Tewksbury, MA 01876
Barker, Robert, 470 Ohmes Rd., St. Peters, MO 63376
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Bartholomew, Wanetta, Rt. 2, Box 663, Wolfeboro, NH 03894
Chalk, Ken, 4311 Sunstone Cir., Anchorage, AK 99516-2221
Cook, Philip, PO Box 338, Underhill, VT
De La Hayze, Jan, 22 Sersdam, Middleburg Y331 NT, Holland
Dobbs, Shirley, 52 Pleasant St., Vincentown, NJ 08088
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Gray, Mary, 329 Pelly N., Renton, WA 98055
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Martin, Paul R., 1633 S. Eaton St., Lakewood, CO 80232
McNierney, Edward, 54 Pleasant St., Groton, MA 01450
Miller, David G., 14425 W. 48th Ave., Golden, CO 80403
Nelson, Durell, PO Box 412, Nauvoo, IL 62354-0412
O'Malley, Claudia, PO Box 399, Duvall, WA 98019
Rae, Audrey, 2816 Charleston NE., Alberquerque, NM 87110
Rilleau Lynne, 5 Allerton St., Provincetown, MA 02657
Sibell Victoria S., 3619 Sheridan Ave N., Minneapolis, MN 55412
Spencer Graham, Croftway Nursery, Yapton Rd., Barnham, Bognor Regis, West Sussex, England P022 0BH
Stoll M/M Barrett & Lynn, Rt. 1 Box 227C, Atalissa, IA 52720
Trude Norma, Rt. 1 Box 50, Perry, KS 66073
Tucker, M/M Arthur & Sharon, 9 Wesley St., Camden, DE 19934
Tyson W.S., Rivendell Botanic Garden, PO Box 17, Beardstown, IL 62618-0017
Vaughn Juanita F., 202 Old Post Rd., Russellville, AR 72801
Wegener Shirley, 7556 North Boothe Lane, Rocheport, MO 65279
Wensveen John, 55 Alfred St., Brantford, Ontario N3S 5E8, Canada
Winkelmann Michael, 1314 Old Dutch Hollow Rd., Belleville, IL 62223

SNOW PRINCE

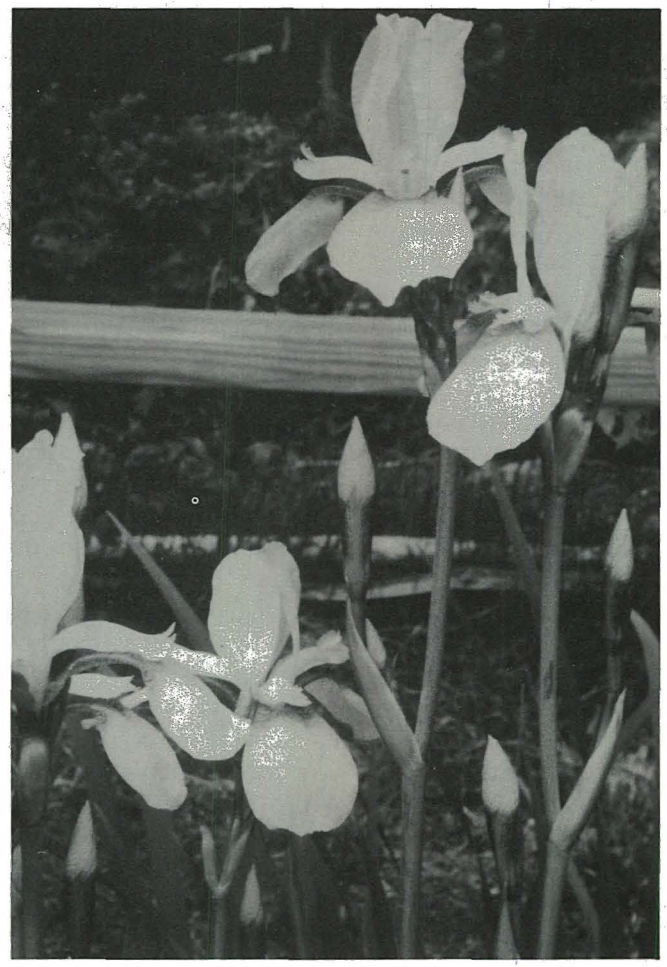
By SARAH TIFFNEY

Snow Prince is a selected white (albino) form of the species *Iris sibirica.* It has the typical *sibirica* characteristics of slender, graceful leaves tall branched stems, two to four buds per socket and delicate flowers with slender petals.

I have had a number of white *sibiricas* over the years. One was given to me by a friend who found it growing in her garden. Others I grew by self-pollinating a typical old blue *sibirica* clone called **Grandis**; obviously it was heterozygous, with a gene for white tucked away in it. A few appeared as random seedlings after old pods were not cleared away. In height they were rather short, but one was tall. **Snow Prince** is about medium height for the group. The flowers of all were similar creamy buds opening to ivory white flowers with slender graceful petals, with a little blue shading and light tan markings in the throats of the falls.

Our common garden Siberians came from crosses of the two 28 chromosome species, *I sibirica* and *I. sanguinea.* **Snow Prince** is typical of the color of *I. sibirica* albinos, but the albinos of *I. sanguinea* (if we may take **Snow Queen**, form collected in Japan about 1900, as an example) are different -they are crystal white. Of course the plants are different too - *I. sanguinea* has broader, stiffer leaves, with unbranched stems holding two flowers at about leaf-top level, each with broader, firmer petals.

There is an interesting thing about the white forms of these two closely related species. A good many years ago I crossed the two and got a row of blue seedlings. Self- and sib-crossing gave both blues and whites in the next generation. As I have said for years and years, these two whites are different. It is something about complementary genes, and it would be fun to pursue further if one had world enough and time.



In closing may I say that I am delighted to see that more people are appreciating the older, smaller, simpler things. The generous reception that has been given to **Snow Prince** and the triumph of **Shaker's Prayer** at the 1991 AIS Convention present an encouraging prospect for an increasing variety of irises in gardens of the future.

I should like to thank Shirley Pope for noticing **Snow Prince** and introducing it; without her interest it would still be languishing in a back corner of my garden.

Photographs of **Snow Prince** were taken in the garden of David and Barbara Schmieder by Jan Sacks.

[*ED. This article was first published in the Region One Bulletin, Spring 1992, and is reprinted by kind permission of the author, and the editor Jan Sacks.*]

AIS AWARDS FOR 1992 CONTINUED

(See Fall '92 issue for AM, HM and Morgan-Wood Medal winners)

EXIBITION CERTIFICATES - Congratulations to:

Kenneth Baier	8-11-40
Louise Bellagamba	S-191
Mr. and Mrs. Richard Butler	# 476
Larry Harder	81-1
Calvin Helsley	89-2
Currier McEwen	M84-100
Anna Mae Miller	87.17.2
Marty Schafer/Jan Sacks	S89-11-1, S89-15-1
Sarah Tiffney/Shirley Pope	92-BS
Jerry Wilhoit	90-JW, W-2

HIGH COMMENDATION - Congratulations to:

Bob Hollingworth 85B3B10, 25 votes (**Over in Gloryland**, R. '92)

*[ED: Hollingworth 87P1B6 was listed as having won an HC but in fact it was already introduced as **Coronation Anthem** (90) and received an HM in 1992.]*

BEST SHOW SPECIMEN - Congratulations to:

EXHIBITOR	SPECIMEN	SHOW
Rebecca Wong Dave Nitka	Sparkle	Shelburne Falls MA
Tony/Dorothy Willott	Fairy Fingers	Buffalo NY
Ronn Dunn	Percheron	Missoula MT
Sharon Gaffney	Atoll	Kirkland WA
Mt. View Iris Gardens	Shirley Pope	Portland OR
Mary Duvall	Sultan's Ruby	Palmdale CA
Virgil Bryant	Maranatha	Overland Park KS

FROM THE ARCHIVES

[*ED. The following article on Siberians was sent to me by Sarah Tiffney. It is so comprehensive and well written that we thought you would enjoy reading it despite (or perhaps because of) its age. Sarah included the following comments which I thought you would also appreciate:*]

" About '27-28 when I was still in high school I came across this delightful little book at the Atlanta Public Library, and it began my life-long interest and enthusiasm in all sorts of irises. Previously I had known only three TB's - a good lavender *pallida*, a white with a texture like wet tissue paper (I loved it anyway), and **Mme Chereau** which my grandmother had. The whole book was wonderful but the Siberians caught my fancy most, and I ordered two, **Snow Queen** and a good purple typical of *sanguinea* (then called *orientalis*) from Dreer's in Philadelphia. They had a medium blue, probably **Perry's Blue**, but I couldn't afford it. Later when more garden space was available I got more - but that is another story."

SIBERIAN IRISES - LATE MAY TO EARLY JUNE

(Reprinted from Iris in the Little Garden by Ella Porter McKinney, Little Brown and Company, Boston 1927)

It is unfortunate that *Iris sibirica*, one of the most adaptable of the Apogon tribe, in its many forms is not more grown in our American gardens. "Veritable fountains of grace," Mrs. Wilder calls them. They are the easiest of iris to please, and most floriferous. The colors range from white to deep violet-purple and to red-purple. Some of the pale blues and the clear blues like **Perry's Blue** are exquisite. The slender stems and the numerous flowers with the narrow grass-like foliage make them ideal for cutting. They range in height from twenty or twenty four inches to five feet, and the foliage is a valuable asset throughout the entire season. The beautiful structural effect of these irises is shown in frontispiece and in **Emperor** of plate opposite.

Botanists give to this type the distinction of being, perhaps, the oldest form of iris. It is widely spread throughout the center of Europe, but like *I. germanica*, which in origin knew not Germany, *I. sibirica* never saw Siberia[1]. It is confused with another plant *I. orientalis* found in Manchuria and Japan. Both are valuable in the garden, and the new forms now being introduced from crosses of the two plants are supremely lovely.

Cultivation and Situation. - The closely matted fibers of the root system about the thin rhizome indicate a moisture loving plant, but after establishment it will stand an astonishing amount of dryness, enduring without flinching the same conditions of soil in the gardens that are provided for the Pogoniris. While I use this type all about the garden, I am careful to avoid thin, dry places for it, and find that it accomodates itself to positions of shade, - high shade with good air drainage, - provided there are a few hours of direct sun and the soil is good. It will grow, but will not bloom in dense shade. It adapts itself admirably to conditions in the general hardy border, and should be left alone to make fine full clumps. Two years are needed for bloom at full height after transplantation, and a planting will continue to give bloom for many years if given a little care. *I. orientalis* Emperor, used as a sentinel at the end of a border of lower-growing plants, has been kept in fine vigor and within bounds for ten years by taking pieces off from the sides and filling the holes with rich compost. I also use bone meal and tankage - a valuable nitrogenous fertilizer much favored by rose growers in this community - to feed these irises.

The number of bloom stalks is sometimes truly amazing. A three- or four-year plant of *I. sibirica* Grandis will send up as many as fifty; with this drain, it is only kindness to feed liberally. A "wild" planting made from seedlings set twelve years ago is still in good health and gives free bloom. The only care it gets is the removal of large weeds, burning over at the earliest possible moment in March, both to clean quickly and to take care of any possible borer's egg, and a

[1] *Handbook of Garden Irises*, Dykes, page 92.

generous application of bone meal or acid phosphate with tankage raked in after burning. It is suggested by good authorities that bone meal be not used on these irises. I use it constantly in connection with material from the compost heap and see no bad effects.

Best Time to Transplant. - Late August and early September is, in my experience, the very best time. The details of propagation are those given for Japanese irises (page 63). Care must be taken to use no lime, and to set the crown two inches below the surface. Spring planting may be done, but is attended with risk of loss. Dividing and planting immediately after bloom as we do for the Pogoniris has, in my experience, been with entire loss in some instances. A friend sent me six plants of **Red Emperor** in early June. The journey was but two days from the digging. Every plant refused to grow. When **Emperor** was selling at a price equal to the hoard in the toe of the stocking, I thought to increase it rapidly, and divided it immediately after blooming. Some grew, but more died. I think I have never lost a plant, however small the division, when made in late August or early September.

Growing from Seeds. - Seeds form abundantly, because the garden plants are equipped for self-fertilization. In restricted garden space these may not be allowed to sow themselves about, because of the plague of young plants that spring up in the borders. Like seedling phlox, they do not yield readily to the finger pull, but need a little help with a fork. I allow the pods to remain for a while because I like them, but on some crisp cool day in early summer the stalk is snapped off at a point below the leaves.

So much for the riddance from chance seedlings; but in my iris-growing experience I have not had more pleasure in any adventure than from a few pods of *I. orientalis* Emperor and one pod from a cross of **Emperor** and **Snow Queen**, sown carefully in late October out of doors in a little stone-ringed spot. The plants appeared thickly the following spring and sixty were transferred to a nursery row. That was eight years ago, I am still selecting types from that row for special needs: a beautiful four-foot white, a dark violet

pygmy not over sixteen inches, a fine red-purple, an exquisite violet of thirty inches, one with erect foliage, another with flowing, another with very narrow and another with broader, one with dark green, another with paler green. Not one was exactly like either parent.

In the matter of foliage alone it is quite worth while sowing seeds to get types for all purposes in the garden. Unfortunately we do not always find these in the plants offered for sale. The upright sorts are more useful in the general border, where the lax-leafed tend to take too much space. This laxness, however, is much to be desired by pools and water margins, in association with erect-leafed sorts.

Among gardeners who are not specialists, but who like to know characteristic differences in the plants they use, confusion (which the catalogues do little to remedy) exists as to *I. sibirica* and *I. orientalis.*

I. sibirica has tall slender stems rising high out of narrow, grass-like foliage. From five to ten small flowers are carried on long pedicels which, with the rather lax foliage, give much delightful grace to the plant.

I. orientalis has broader foliage, stems that are near the height of the leaves, with two, sometimes three or four, flowers to the stem. These are larger than the blooms of *I. sibirica* and open from a week to ten days later - a point of importance in planning combinations. *I. sibirica* Lactea, the earliest to bloom in my garden, is fully ten days earlier than *I. orientalis* Snow Queen, the latest to flower.

Arrangement. - Because the time of bloom is that of the glorious bearded or Pogoniris, the *sibiricas* make charming additions to the late May and early June display. I like the taller ones used as sentinels here and there, and irregular masses of the violets and blues and whites against meadow grass. They seem particularly fitted to merge the dressed ground into the undressed. A certain flat red-purple seedling of erect foliage I use among pale pink peonies, and a fine type of the purple-violet *Sanguinea* rejoices in lemon

lilies growing behind it. A violet form is deeper violet because a pink columbine reaches through it, and both together thrive unbelievably with roots running well down by the corner of a cement cold-frame.

Some creamy whites make the dashing *umbellatum* lilies in front of them still more stunning. A tall pale blue at the end of a cross path, where the old hundred-leaved rose throws about its pink laden branches, is breath-taking. No garden should lack the grace of these irises in as many forms as possible. Like Sir Michael Foster, I would not be without any of them. The smallest garden should find room for **Snow Queen** and **Perry's Blue** or **Butterfly**.

Some Good Varieties

I. sibirica

Lady Godiva - white, softly suffused with lavender, very early.
Lactea - milky white, of great daintiness, three feet.
Distinction - pale violet, forty two inches.
Grandis - violet, will reach five feet in good soil.
Acuta - rigid, dark green leaves, pale lavender, twenty inches.

I. orientalis

Snow Queen - large, rounded, pure white, yellow blotch, thirty to thirty four inches. (Inferior seedling forms are sometimes offered.) Very free in bloom and fine. Foliage does not collapse so early in the Autumn as does the better known *Sanguinea* with violet-blue flowers.
Emperor - four feet, rich violet, large flowers, and comparatively erect foliage. Very rarely produces a third flower from a scape far below the terminal head. A cross between this and **Snow Queen** has produced plants with always four flowers, and in delightful shades of blue, as well as a white as tall as **Emperor**. It is interesting that in all chance seedlings or crosses of *I. orientalis* whites appear poor in form, while the blues and violets are

invariably good form, though some are more inviting in color.

Blue King - more than one form is offered in catalogues under this name. I have a very tall one, bought years ago from a firm now extinct. The foliage is rigid, dark green, and erect, the flower like **Emperor**, except hardly so large. The flower stems never fall to the ground as those from **Emperor** are inclined to do.

True Blue - a good clear blue and pleasing with **Snow Queen**-thirty inches.

Where *I. orientalis* and *I. sibirica* are grown together, beautiful results come from the seed. These frequently have the broader foliage of *I. orientalis* with its larger flowers, and add the height and greater number of blossoms characteristic of the sibiricas. They are of great value in the garden.

Perry's Blue, a clear turquoise that is irresistible, forty inches. Earlier than Snow Queen in my garden; foliage inclined to flop early in the Autumn.

Butterfly, porcelain blue, clear and lovely, will reach nearly five feet. Same season as above.

Skylark, sky blue of the same type as Butterfly. The flowers are good size and the falls carry a slender line of white on the edge.

Kingfisher Blue, is reported a very fine color and taller than **Perry's Blue**. I have not seen it.

I. chrysographes, I. wilsoni, I. forresti, and *I. delavayi*, allied species, are found under "Irises for Pools and Water Edges," Chapter X11.

Pests and Diseases. - I know of no disease. The worst (and only) pest is the iris borer, which works great ravage because of the scantiness of food in the thin slender rhizomes, necessitating wide forage. My method of curb - I believe I may say control - of this pest is given in Chapter XV.

LAST WORD

Friends, books, a garden, and perhaps his pen.
Delightful industry enjoyed at home,
And nature in her cultivated trim
Dressed to his taste, inviting him abroad -
Can he want occupation who has these?

The Task
(William Cowper)

The above verse expresses exactly my good fortune in being able to stay at home, tend the garden, enjoy iris friends, and edit TSI.

Spring 1993 marks the beginning of my seventh year as editor. It seems remarkable to me, since I still seem to be very much in a learning process. This time I am using Roman Proportional type face and a laser printer, I hope you like the change. I think it has a more professional look.

This is a busy and stimulating time for us, with the Siberian Convention imminent. Paul Morgan sent me the most recent registration list and it was a list of friends - what a marvelous thing to be able to invite all your friends for a weekend. Along with Siberian lovers from all over the US., Jennifer Hewitt from the UK., Tomas Tamberg from Germany, and Ho Shidara from Japan, all of whom have been contributors to TSI. but who I have never met, are coming. Tomas, an accomplished Siberian hybridizer and an international authority on the breeding of interspecific beardless irises, will be our speaker on Friday evening at the Convention and his talk is eagerly anticipated. There are still a few places left so come and join us, it's going to be a fantastic weekend.

ADVERTISING RATES

A source list for Siberians is printed in each spring issue of TSI at a cost of $5.00 per listing. Please send your check, made payable to SSI, to the editorial office at 124 Sherwood Rd. East, Williamston, MI 48895 by February 15th.

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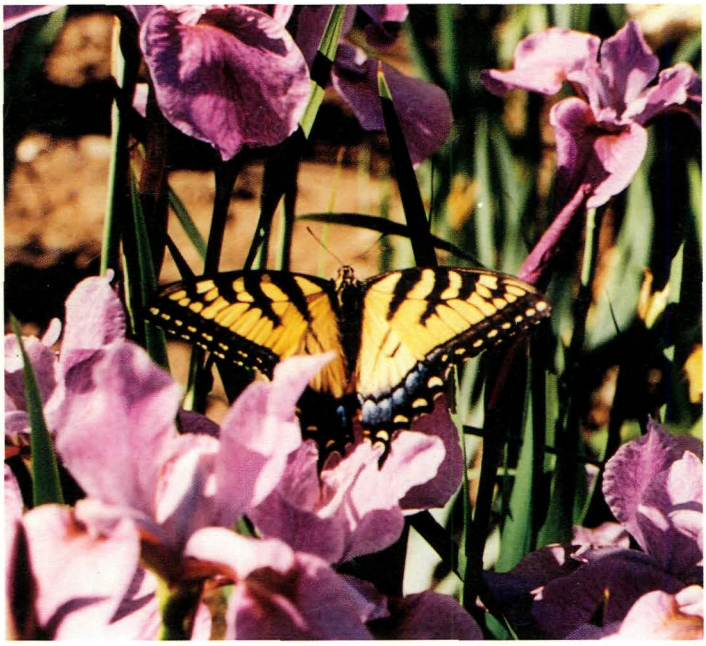
Dues are:

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. 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.

Back Cover: A Swallowtail graces the Siberian patch.
Photo: Anna Mae Miller



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