

THE SPECIES LILY

The Newsletter of the
Species Lily Preservation Group
Affiliated with The North American Lily Society



Cardiocrinum giganteum

Autumn, 1999

SLPG GOALS

- * Growing as many species as possible, especially those rare and in danger of extinction
- * Making excess species bulbs available to members
- * Collecting, preserving, planting, growing and distributing species seed
- * Collecting all possible information on each species: its habitat, distribution, cultural needs, etc.
- * Disseminating cultural information on each species
- * Assembling a slide and photo record of all species lilies
- * Identifying areas where specific species grow and seeking protection for these areas

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Notes on Species That Have Been Grown Successfully in the First Three Years

Edward A. McRae

Sandy Oregon

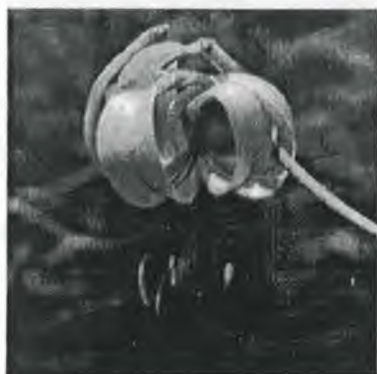
The proper storage of seed is critical for the successful growing of the majority of lily species. Following drying and cleaning, the seed must be packaged and stored at low temperatures until planting. The ideal location is to store the seed in the freezer section of the refrigerator: large quantities of seed in plastic sacks, smaller quantities in manila envelopes before being placed in plastic sacks for protection against moisture. This storage procedure will ensure that the seed remains fully viable and in peak condition until sowing time.

The following Asiatic species have epigeal (immediate) germination and we have obtained excellent results from sowing the seed in early spring, either in a cool greenhouse or outdoor beds, the latter only being used when larger quantities of seed are involved. The seedlings are harvested late in the year, packed in sphagnum peat moss and stored in coldrooms (34° F is ideal) until the following spring. In late spring plantings (late April through early May) the coldroom temperatures are reduced to 30° F to prevent sprouting. The seedlings are then planted in rows or beds for two seasons.



• *L. amabile*. This species and its varieties are strong and easy to grow, producing long, narrow bulbs with excellent root systems. The seedlings have been unusually uniform with slight variations in flower color and spotting pattern.

- *L. amabile* var. *luteum*. This lovely variety has been just as strong as the type, perhaps even stronger. The color is in two shades: bright lemon-yellow and golden-yellow. The spotting patterns vary and despite close scrutiny, we have found no unspotted forms to date.



- *L. cernuum*. *L. cernuum* has shown remarkable variations in spotting patterns and color intensity, with flowers varying from a rich lilac-rose color to almost pure white. The most interesting observation is the fact that flowers vary from unspotted to having speckles and blotches. It seems apparent that the speckle patterns, now very popular in Asiatic hybrids, originated mainly from this

species. *L. cernuum* also exudes a delightful spicy fragrance.



- *L. concolor*. The early-flowering forms of this species were grown in earlier years. Although we have grown these earlier forms successfully, the quantities have been small compared to the later-flowering form. This form flowers at least a month later and is by far the most vigorous form of *L. concolor* we have seen. The variations in color and plant habit – pedicel length, length and density of leaves, flower color and spotting patterns – have

been fascinating. In all the Asiatic species we select for sturdy plants, attractiveness, not too dense foliage and a good-looking inflorescence which is not too crowded. We have preferred shorter pedicels, but this may be a question of taste!

- *L. dauricum*. This species has immediate hypogeal germination and can be grown most successfully with other Asiatic species.



Photograph by Stephen Haw
The Lilies of China, opposite p. 80

The *dauricum* flowered at Lava nursery at least one week ahead of *L. pumilum*. The color variations are enormous. The flower color varied from soft, golden-yellow through orange to warm red; bicolors were also noted. Variations were also noted in flower form, the flowers varying from flat to tulip-shaped; spotting patterns were equally variable. The plant habit was more uniform with a high percentage having pubescence on leaves and buds. The Golden Chal-

lice Strain produced in earlier years at Oregon Bulb Farms were golden-yellow forms of *L. dauricum*. Produced from two parent clones, the strain was especially appreciated for its early-flowering habit. The seed parent was named 'Golden Wonder,' an excellent, stately, virus-tolerant clone. This variety would still be invaluable in producing not only superior forms of *L. dauricum*, but also earlier-flowering Asiatics.



- *L. davidii*. This species has shown remarkable variation in color intensity and spotting patterns. We have found the unspotted forms especially attractive. The remarkable vigor of this species suggests that it would succeed in a wide variety of climates and soil conditions. The selection of sturdy plants is especially important, nor do we want those that produce a floppy inflo-

rescence. Plants showing foliage with lesser density are also preferred. This is especially important when one considers botrytis infection.



• *L. lankongense*. *L. lankongense* has grown strongly at Lava Nursery. The stoloniferous habit has, however, limited the production of larger-flowering stems. An excellent planting will flower in rows in its second year 2000, giving us an opportunity to study color, spotting variations and plant habit in greater detail. Hopefully, we can find plants with limited stoloniferous habit! *L. lankongense* is surely one of the loveliest of all the lily species, its spicy fragrance adding to its unlimited charm and attractiveness.



• *L. pumilum*. This species shows enormous variation in color intensity, pedicel length, plant height, length and density of foliage and even degree of fragrance. The species is by far the easiest to grow from seed, producing bulbs larger than your middle finger in one season in sown in early spring. Bulbs in their second growing season produce multiples of flowers. In selecting, we have looked for plants two to three feet tall with sturdy habit, shorter pedicels, and a foliage of medium density. Flowers with

highest color intensity are preferred; fragrance was not consid-

ered. The same notes apply to the two varieties of *L. pumilum*, 'Golden Gleam' with orange flowers and 'Yellow Bunting' with lemon-yellow to golden-yellow flowers. *L. pumilum* var. 'Yellow Bunting' has consistently flowered earlier than the type with seedlings from several sources showing a much shorter habit than what we see in populations of *L. pumilum*. The color has varied from bright to soft lemon-yellow through golden-yellow. A number of seedlings in one population showed anthers that never dehisced, most unusual in such a population.

The Asiatic species mentioned all prefer a sunny location with excellent drainage as excess moisture following flowering causes bulb decay, especially with *L. cernuum*. All seem remarkably hardy. The field-grown bulbs of all the Asiatic species survived an early December frost at Lava Nursery when temperatures dropped well below zero. They have all readily produced large quantities of fertile seed using selected forms. Their high fertility makes it essential to segregate varietal forms from the type, especially when natural pollinators are plentiful. We have hand-pollinated the yellow forms of *L. amabile* and *L. pumilum*, opening the flowers and preventing further pollination by placing aluminum foil caps over the stigmas immediately after pollination.

I would encourage hybridizers to use these lovely species and their variants to produce strong, unique and charming garden lilies, especially *L. amabile luteum* and *L. pumilum* 'Yellow Bunting.'

- *L. martagon* and *L. martagon* var. *album* were sown in flats in late August 1996 and placed in a cool greenhouse where the soil was kept moist at all times. The flats spent the winter in a cold frame, which was covered with glass and well-ventilated. The flats were returned to the cool greenhouse in early March, where they soon germinated, producing true leaves. Growth was excellent with most seedlings producing three to four leaves during their first season. In early September the flats were taken to the field where the seedlings were planted in



beds. This hand planting may seem tedious to many; nevertheless, it proved very worthwhile with many European and North American species. The seedlings were carefully removed from the soil with their leaves still attached and carefully planted in well-prepared beds. We especially noted the excellent root systems. The seedlings remained in the same growing location for two more seasons, where they flowered profusely in their third year (1999).

- *L. tsingtauense* received identical treatment to that of *L. martagon* and *L. martagon* var. *album* with excellent seedlings flowering in their third season. It is interesting to note that from one flat of *L. martagon* var. *album* over 200 seedlings were transplanted.



- *L. pardalinum*. The same procedure used with *L. martagon* was followed with several North American species with *L. pardalinum* being the strongest and most successful. *L. pardalinum* showed considerable variations in plant habit, but lesser variation in flower form, size, color and spotting patterns. The seedlings carried an average of five flowers in their third year.

- *L. parryi*. A large population of this lovely, charming and delightful species flowered at Cebeco Lilies in 1998. The seed had been stored under freezer conditions for well over thirty years; despite their age, excellent germination was recorded.



Photograph by Jeff Johnson

We were intrigued by the seedlings when they reached maturity, their beauty being truly breathtaking. The huge variations in the population were fascinating, but despite these variations, we never doubted that all were forms of *L. parryi*. Their height varied from eighteen inches to five feet, all plants displaying alternated leaves. Despite close study, we found no seedlings showing a trace of whorled leaves.

The color found in the seedlings was in two tones: bright lemon-yellow and golden-yellow, the two colors being found in close to equal proportions. The spotting patterns were truly fascinating and varied from unspotted to copiously spotted. Many flowers were found with attractive blotches and speckles. The fragrance found in this species was delightful. Bulbs of this population were offered to members in the fall of 1998. We are anxious to learn how they performed in different climates and soil conditions.



• *L. leucanthum* var. *centifolium*. We have grown the Chinese trumpet species under identical conditions to the Asiatic species, the first year under greenhouse conditions or outdoor beds, followed by one or two growing seasons in the field. Huge bulbs are naturally produced if grown for a third year. Sturdy plants with attractive foliage have been selected as parents. An attractive inflorescence with flowers of superior flower form, substance,

pure white color and dark reverse have been preferred.

- *L. regale*. This species is surely the easiest to grow from seed and has been reported dependable in a wider variety of climates than most trumpet species and hybrids. It is interesting to note that *L. leucanthum* var. *centifolium* came through the December freeze at Lava Nursery beautifully, yet *L. regale*, growing in close proximity, seemed to suffer. The soil conditions may have been a factor, the seedlings being grown in virgin soil, where some of the topsoil was more shallow in places.



Photograph by Charlie Kroell

- *L. henryi*. Grown under the same conditions as the trumpets, this species is just as vigorous. The sturdy plant habit is especially important in *L. henryi* as many of the seedlings produced plants with floppy heads. The flower size and color was less variable. The clone of the species *L. henryi* 'Carlton Yerex' has an especially sturdy habit and we have used it as the seed parent to produce superior seedlings. The two pollen parents were the sturdiest forms we could find in the seedling population. *L. henryi* 'Carlton Yerex' is well over forty years old. It was selected by Carlton Yerex, an early pioneer in trumpet lily hybridizing, and named in his honor.

Plants of the clone were tested in forcing trials at Cebeco Lilies in spring 1999 where they showed no visible symptoms of virus infection.

The Oriental species have all been grown under identical conditions for the past three years. The seeds have delayed hypogeal germination and are sown in August of each year in a mixture of

moist sphagnum peat and vermiculite. The seed is thoroughly mixed through the media before being placed in well-ventilated plastic sacks. The sacks are then placed in boxes and incubated for a minimum of three months at approximately 65° F. The tiny bulblets must be plump, well formed and have excellent roots before being placed under cold conditions over winter. The pre-germinated seeds are sown under greenhouse conditions in April of the following year. The treatment is then identical to Asiatic and trumpet species: one year in the greenhouse followed by two in rows or beds under field conditions. Excellent sized bulbs are then produced.



Both photographs
courtesy of
B&D Lilies

• *L. auratum* var. *platyphyllum*. Most will be familiar with the enormous variations found in this species, especially in flower form, spotting, color patterns and intensity of the gold band. We prefer the unspotted forms with rich gold bands and superior flower form. All, however, are beautiful. We are especially interested in seedlings without spots and a clear red band. The large populations grown at Lava Nursery in 1999 were especially strong and beautiful. We paid special attention to study plants with out-facing flowers in addition to the characteristics mentioned.



• *L. speciosum* var. *rubrum*. These species seedlings resulted from crossing two excellent clones selected from the species *L. speciosum* var. 'Uchida' and *L. speciosum* 'Shooting Star.' They are now in full flower at Lava Nursery (September 10, 1999) and show remarkable uniformity, especially in intensity of color.



Photograph courtesy of
Ed McRae

• *L. rubellum*. Along with *L. dauricum*, this species flowered one week ahead of *L. pumilum* at Lava Nursery. This alpine species is delightful and our one criterion during parent selection was vigor. A few with a greater color intensity were selected later. The bulbs of *L. rubellum* produce strong basal roots and being alpine in habit are naturally smaller at maturity than other Oriental species. They naturally prefer a sunny location.

We continue to isolate the species from any known virus carriers. We also plan to produce the majority on an annual basis from seed. It continues to be encouraging and we strive to offer a few new species every year. Meaning populations of *L. primulinum* and *L. wardii* have grown profusely in 1999.

Membership Information

Canadian dues are \$9.00 per year or 3 years for \$25. United States dues are \$7.00 per year or 3 years for \$20. Memberships may be renewed by contacting our membership chairperson

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Past Issues of the Newsletter Available

Contact editor Barbara Small to purchase past editions of the newsletter:

Spring 1999	\$3.00	Spring 1997	\$6.00
Spring 1997	\$3.00	Autumn 1998	\$6.00
Autumn 1997	\$3.00		

Member Comments on Species Lilies

Compiled by Darrel Roeder
Weyerhaeuser, Wisconsin

I would like to start this off by thanking all the member/growers who took the time to fill in the comment sheet and return it. This is a very important part of everyone learning the needed requirements for growing species lilies. This report centers on the fall sale of 1997 with the growing season of 1998. There were reports returned for eighteen types of lilies from all over the North American continent and England with USDA zones ranging from zone 2 (Saskatchewan/Minnesota) through zone 9 (California).

The most notable comments for the successful people in zones 2 - 6 was the fact that they did not water the plants; they let it happen naturally. There were of course exceptions to the rule, but for the most part irrigation was handled by nature. It appears that most losses or lilies that did not bloom were associated with over-watering. Zones warmer than zone 6 agreed watering was best done when the lilies were dry. This is to say when the surface of the growing medium was dry. Of course this would vary from year to year with conditions. The growing season in Wisconsin in 1998 was exceptionally dry, so that we sometimes needed to water several times a week. One member in California reported good results with lilies potted and watered via a drip system.

Everyone agreed that the soil needed to be amended with higher humus content, compost and peat being the most used addition. Some made their own growing mediums depending on their soil type by adding sand or pea gravel to assist in drainage. Some even added slow release fertilizer, such as Osmocote, with no noted significant results.

The next point of importance was the amount of sun. Most lilies seemed to do the best in full sun, six to eight hours or more. There were several members who reported planting in shade. Some faired well, but a larger number had trouble with losses or the lilies

not blooming, relating back to the damp conditions without the sun to dry things out.

There was one member who reported trouble with voles or gophers attributing to his losses and one other who had planted the lilies in the regular garden and attributed the losses to too much competition.

Now some notes on individual species. We'll start with what appears to be the worst case, *L. lankongense*! Thirteen members reported trying to grow this lily and it appears to be a real troublemaker! We received reports from all the different zones and it appears to have done its best in zones 5 and 6. In all the other zones, including England, one of the several bulbs planted would make an appearance, and if they did appear* most failed to bloom. This one lily appears to be the one exception to the natural watering rule. Most of the best results were reported by giving it additional doses of water.

The next worse case is *L. cernuum*. This species also had thirteen members report back on its growth. Most of the trouble seemed to have happened in zone 5, and much of the trouble appears to be water related. Some of the other members outside of zone 5 reported trouble when water was provided in addition to natural rainfall. So it would seem best to amend the soil to assist in drainage with this species.

L. pumilum and all its variations would also seem to benefit from amending the soil to assist in drainage, especially in the more northern climates, as would *L. amabile* and its varieties.

The overall winners from the reports are *L. concolor* and *L. speciosum* var. *rubrum*. They had the best numbers turned in and reported back as being overall successful this growing season. The other species that received mention, *L. amabile* and *L. amabile* var. *luteum*, did well for the most part although several members reported a no bloom condition. *L. auratum* var. *platyphyllum*

growers reported overall good success except for one member who had one of three not show. *L. leucanthum* growers reported good success stateside and exceptional results in England. We also received one report on each of the following, and they were reported as a success in this season: *L. bulbiferum* var. *croceum*, *L. henryi*, *L. henryi* var. *citrinum*, *L. superbum* and *L. wilsonii*.

One member also reported some additional comments on several West Coast species. He said the following did well in California provided they were kept dry after July: *L. kellyanum*, *L. maritimum*, and *L. pitkinense*.

So in review here are the best growing practices for the available species lilies.

- Amend the soil with compost, peat, or leaf mold.
- Make sure the planting site is well drained; amend with sand if needed.
- Zones 2 - 5 are best going with the Mother Nature watering plan, with the exception of *L. lankongense* which fared better with more watering.
- Zones 6 - 9 need a watering schedule set up to avoid over-watering.
- Planting in full sun was the best in all zones.
- West Coast Species should be protected from moisture after July.

Welcome New Regional Memberships

Several regionals have now joined the Species Lily Preservation Group.

Canadian Prairie Lily Society
New Zealand Lily Society
Sacramento Sierra Lily Society
South Saskatchewan Lily Society
Wisconsin Regional Lily Society

Treasurer's Report

Don Egger, Treasurer

INCOME

Dues 1999	\$500.00
Dues Past Years	\$2,118.70
Auction in Chicago, 1999	\$1,875.00
from Bank of America	\$10.00

Total Income **\$4,503.70**

EXPENSES

Spring 1999 Newsletter	\$655.32
Postage for Spring 1999 Newsletter	\$193.88
Framing of Prints for Auction in Chicago, 1999	\$100.79

Total Expenses **\$949.99**

Total Income	\$4,503.70
Total Expenses	\$949.99

OVERALL BALANCE **\$3,553.71**

Thank You Judith Freeman

Judith Freeman of The Lily Garden has donated a computer to the Species Lily Preservation Group and even offered to teach us how to run the machine! In addition, she has donated high quality bulbs of *L. amabile*, *L. callosum*, *L. cernuum*, *L. concolor* and *L. dauricum*. These are all planted in the new field at Parkdale.

Thank You Wisconsin Regional Lily Society

The Wisconsin Regional Lily Society has donated \$250.00 to the Species Lily Preservation Group. The money will be used to make copies of species slides.

Thank You Royal Horticultural Society

The Royal Horticultural Society's Lily Group Newsletter No. 50 gave our Species Lily Preservation Group quite a write up! Thank you, editor Tony Dickerson!

**CONSTITUTION OF THE
SPECIES LILY PRESERVATION GROUP**

Adopted at the annual meeting of the Group
July 1999 at Chicago, Illinois

ARTICLE I. NAME

The name of this group shall be the Species Lily Preservation Group.

ARTICLE II. DURATION

The duration of the Species Lily Preservation Group shall be perpetual.

ARTICLE III. PURPOSE

The Species Lily Preservation Group shall be operated exclusively to promote the preservation and distribution of *Lilium* and closely related species, especially those threatened or in danger of extinction.

ARTICLE IV. MEMBERS

The members of the Species Lily Preservation Group shall consist of such classes and shall have such privileges as shall be stated in the bylaws of the group.

ARTICLE V. DIRECTORS

The affairs of the Species Lily Preservation Group shall be governed by a board of directors consisting of not less than three nor more than six directors. The directors shall be elected in the manner prescribed in the bylaws of the group, but the minimum and maximum number of directors specified herein shall not be altered except by amendment to this constitution.

ARTICLE VI. INITIAL DIRECTORS

The three individuals whose names and addresses appear below shall serve as the initial directors until the fourth annual meeting of the group when their successors shall be elected in the manner prescribed in the group's bylaws.

Edward A. McRae, Sandy, Oregon
Barbara M. Small, Fair Oaks, California
Julius Wadekamper, Parkdale, Oregon

ARTICLE VII. NOT-FOR-PROFIT CHARACTER

The Species Lily Preservation Group is not organized and shall not be operated for pecuniary gain or profit. No part of the net earnings, if any, of the group shall benefit any private individual. Upon dissolution of the group, all of its assets, if any, shall be distributed exclusively for charitable or educational purposes to the North American Lily Society, Inc.

ARTICLE VIII. AMENDMENTS TO THE CONSTITUTION

This constitution may be amended at any annual meeting by a two-thirds vote of the members present provided that such amendment(s) shall have been submitted to the membership in writing at least thirty days prior to the meeting.

Bylaws of the Species Lily Preservation Group

SECTION I. MEMBERSHIP

ARTICLE I.

Any person interested in supporting the purpose of the group is eligible for membership. Applications for membership in the group shall be presented to the membership chairman in writing, accompanied by the required dues. Membership may be in the name(s) of one or more individuals who reside at a common address.

ARTICLE II.

The Species Lily Preservation Group shall be affiliated with The North American Lily Society, Inc.

SECTION II. ELECTED OFFICERS

ARTICLE I.

The officers of the group elected by the members shall consist of a president, vice-president, a secretary and a treasurer or a combined secretary-treasurer.

ARTICLE II.

The president shall coordinate and direct the affairs of the group in accordance with its constitution and bylaws. The president shall preside at all meetings of the group. The president shall appoint all standing committees and such special committees as may be deemed necessary. The president shall be a member of all committees of the group except the nominating committee.

ARTICLE III.

In the absence of the president, the vice president shall perform the duties of the president.

ARTICLE IV.

The secretary shall keep the records of the group, keep the minutes of the annual meeting, and conduct correspondence relating to the interests of the group.

ARTICLE V.

The treasurer shall account for all monies of the group and pay all bills which have been approved by the president. The treasurer shall submit an audited financial statement to the annual meeting.

SECTION III. CONSERVATIONIST

ARTICLE I.

The conservationist shall be appointed for an indefinite term by the board of directors at its annual meeting.

ARTICLE II.

The conservationist shall grow and distribute species lilies with an emphasis on those

listed as being threatened or endangered, consistent with the goals of Section III, Article III below.

ARTICLE III.

The conservationist shall meet the guidelines set by the board of directors and run operations under the budget approved by the board. The conservationist shall present a copy of the year's proposed budget to the board of directors at least one month before the annual meeting.

SECTION IV. BOARD OF DIRECTORS

ARTICLE I.

The board of directors shall consist of four (or three if the secretary-treasurer is combined) elected officers, and three to six members who shall be elected by the membership of the group at their annual meeting.

ARTICLE II.

The board of directors shall consider proposals made to the group and make their considered recommendations to the members at the annual meeting. Proposals may be made by individual members through the president or secretary of the group.

The board of directors shall determine guidelines for the conservationist and approve the conservationist's budget yearly.

It shall also be the responsibility of each director to further the interest of the group locally by securing memberships and by suggesting means whereby the group interests may be improved locally. The directors will meet before the annual meeting at the time and place specified. Members in attendance shall constitute a quorum and decisions may be reached by a simple majority of those present.

SECTION V. ELECTION OF OFFICERS AND DIRECTORS

ARTICLE I.

The officers of the group shall be elected at the first annual meeting of the group and at the annual meeting in every second year thereafter, and they shall hold office from the close of the annual meeting at which they are elected until the close of the annual meeting two years later.

ARTICLE II.

The elective members of the board of directors (normally one or two each year) shall be elected at the annual meeting and shall hold office for three years from the close of such annual meeting. Any member being elected to complete an unfinished term shall serve only until the end of the term of the director replaced. A director who has served one full term may not be reelected for another term as director until one year has elapsed.

ARTICLE III.

The nominating committee shall present a slate of names for election to the offices and directorates of the group at the beginning of the annual meeting. Care should be taken

to give regional representation. The consent of each candidate shall have been secured prior to the presentation of such slate. Nominations for any office and for vacancies on the board of directors may be made from the floor of the meeting at any time during the presentation of the slate or at the proper time previous to the election. Consent must have been obtained previously for any nominee not present at the annual meeting. The election shall take place at the end of the annual meeting.

ARTICLE IV.

When needed, a nominating committee of three members shall be elected to present a slate of officers at the following annual meeting. The president shall select the chairman of the nominating committee from among the three members elected.

ARTICLE V.

A quorum at a regularly called annual meeting shall be ten members.

SECTION VI. FINANCIAL MATTERS

ARTICLE I.

The fiscal year of the group shall extend from January 1 through the following December 31.

ARTICLE II.

The board of directors shall determine the group's dues.

ARTICLE III.

The names of all members whose dues have not been paid by April 1 shall be dropped from the rolls of the group. Final notices of arrears shall be mailed to delinquent members at a convenient time between February 1 and March 15.

ARTICLE IV.

The president shall appoint someone to audit the books for the ensuing two years not later than three months after assuming office, preferably from among the members of the group. This person shall sign the statements from the treasurer before they are presented to the group for approval at the annual meeting.

SECTION VII. MEETINGS

ARTICLE I.

The time and place of the annual meeting shall be designated at the annual meeting of the North American Lily Society, Inc. In the event of changed circumstances or conditions, the board of directors may adjust the time and place of such meetings as may be necessary.

SECTION VIII. APPOINTMENTS OF COMMITTEES

ARTICLE I.

The president shall appoint such committees as are necessary for the group's business. Among the appointed committees are membership and publications.

ARTICLE II.

The membership committee shall receive dues and keep track of all memberships.

ARTICLE III.

The publications committee shall assume all responsibility for publishing all publications of the group. The committee may, however, delegate responsibility for minor publications as they deem expedient.

SECTION IX. AWARDS

ARTICLE I.

The group may provide suitable awards for outstanding contributions to the genus *Lilium*, outstanding contributions to the group, and suitable recognition for meritorious exhibits.

SECTION X. AMENDMENTS TO THE BYLAWS

ARTICLE I.

These bylaws may be amended at any annual meeting by a two-thirds vote of the members present provided that such amendments shall have been submitted to the membership in writing at least thirty days prior to that meeting.

Minutes of the Membership Meeting Chicago Botanic Garden, Chicago, IL, July 8, 1999

The 1999 membership meeting of the Species Lily Preservation Group was called to order at 4:35 p.m. by President Edward McRae in the auditorium of the Chicago Botanic Garden. President McRae welcomed the members to the meeting.

President McRae noted that the Species Lily Preservation Group has a membership of 224 members and three lily societies are also members of the group.

President McRae made special mention of Julius Wadekamper's leadership and encouragement in the formation of the Species Lily Preservation Group.

A proposed slate of nominations for the board of the Species Lily Preservation Group was presented as follows: President: Ed McRae, Vice President: Barbara Small, Secretary: David Sims, Treasurer: Don Egger, and Directors: Jim Doherty, Calvin Helsley, Woody Imberman and Barrie Strohmman.

President McRae noted that a report about the SPLG had been given to the board of The North American Lily Society at their board meeting earlier in the day. There are now two shade houses at Lava Nurseries. *L. alexandrae* will be given out for testing around the country at no cost to members of the SPLG.

President McRae thanked the NALS Research Group for its support, the Seed Exchange for seed and the Royal Horticultural Society Lily Group for seed.

President McRae showed slides of species lilies that will be available to members in the fall of 1999 as follows: *L. amabile*, *L. alexandrae*, *L. auratum*, *L. callosum*, *L. canadense rubrum*, *L. candidum*, *L. cernuum*, *L. concolor*, *L. davidii*, *L. henryi* 'Carlton Yerex', *L. leichtlinii*, *L. longiflorum*, *L. leucanthum*, *L. martagon*, *L. martagon album*, *L. pardalinum*, *L. pumilum*, *L. pumilum* 'Golden Gleam' and 'Yellow Bunting', *L. dauricum*, *L. rubellum*, *L. regale*, *L. speciosum* and *L. tsingtauense*. Bulbs should be planted immediately upon receipt. The current pricing of three bulbs for \$10 will need to be changed to more accurately reflect production costs.

Robert Livingston showed slides of species lilies growing in the Humboldt and Siskiyou Counties of California. He showed slides of *L. parryi*, *L. rubescum*, *L. washingtonianum*, *L. wigginsii*, *L. kellogii*, *L. bollanderi*, *L. columbianum* and *L. occidentale*.

Barbara Small asked interested people to see Maureen Barber about joining the Species Lily Preservation Group. Barbara Small pointed out to those in attendance that colored original drawings of Ginny Howie would be auctioned off to support the SPLG color fund at the NALS Research Auction.

Barbara Small noted that the proposed constitution for the Species Lily Preservation Group had been published in the Spring 1999 Newsletter. She thanked Ed McRae, Don Egger, June Taylor, Linda Darnton and Maureen Barber for assisting her in the preparation of the proposed constitution which was based upon the NALS constitution.

Barbara Small went through the constitution point by point where changes needed to be made to the draft constitution as noted below.

- * Remove the word "Draft" from the constitution.
- * Remove the square brackets and the words "or [June 2000 at Portland, Oregon]" from the heading of the constitution.
- * Under ARTICLE III. PURPOSE, add the words "and closely related species, nomocharis, fritillariae, etc." after the words "Lilium species."
- * Under ARTICLE VI. INITIAL DIRECTORS, remove the square brackets around the word "fourth" and delete "[fifth]."
- * Under SECTION III. CONSERVATIONIST, ARTICLE I., delete the words "[yearly] or [" and the square bracket after the word "term."
- * Under SECTION VI. FINANCIAL MATTERS, ARTICLE I., delete the sentence in square brackets beginning with the word "Note."
- * Under SECTION VI. FINANCIAL MATTERS, ARTICLE IV., delete the words "or treasurer."
- * At the end of the constitution, delete the paragraph and heading requesting comments.

It was moved by Kay Briggs and seconded by Warren Summers that the constitution as discussed and with the changes as noted be accepted. The motion carried.

Ed McRae noted that Derek Fox, an authority on species lilies, was not in good health. Ed McRae congratulated David Sims on his recent marriage. He noted that the 2000 NALS show would be in Portland, Oregon, and it is hoped that a trip for SLPG members would be arranged to Lava Nurseries. Ed McRae requested reports from members who had bought and were growing species lilies.

Ed McRae reviewed the nominations submitted for the board of the Species Lily Preservation Group. He asked if there were any other nominations. A discussion ensued about the terms of the initial directors and whose term was for one, two or three years. Maureen Barber and Frans Officer volunteered to become directors, thus increasing the number of directors to six from the proposed four and thereby allowing two directors to retire each year. [It was not determined at that time what term each director was serving for. A nominating committee was not constituted at this meeting. An auditor was not appointed at this meeting.]

It was moved by Jack Gagnon and seconded by Kay Briggs that nominations close and the amended slate be accepted as presented. The motion carried.

President McRae asked if there was any other business. Frans Officer asked members to save and send seed to the Seed Exchange of NALS.

There being no other business the meeting adjourned.

Respectfully submitted by
L. Maureen Barber
Secretary Pro Tem

SLPG General Report, July 5, 1999

Edward A. Mcrae, Sandy, Oregon

The raised beds have been completed in the second of two shade houses at Lava Nursery at a cost of \$795.69 (\$652.79 for lumber, \$142.90 for labor). The soil mix will be delivered to fill these beds by the end of July.

The following species will be offered to members Fall 1999. All are in their second season in either rows or beds. Bulb quality should be excellent.

<i>L. amabile</i>	<i>L. henryi</i> 'Carlton Yerex'	<i>L. pardalinum</i>
<i>L. auratum</i> var.	<i>L. leichtlinii</i>	<i>L. pumilum</i>
<i>platyphyllum</i>	<i>L. leucanthum</i> var.	<i>L. regale</i>
<i>L. callosum</i>	<i>centifolium</i>	<i>L. rubellum</i>
<i>L. canadense</i> var. <i>rubrum</i>	<i>L. longiflorum</i>	<i>L. speciosum</i> var. <i>rubrum</i>
<i>L. cernuum</i>	<i>L. martagon</i>	<i>L. tsingtauense</i>
<i>L. concolor</i>	<i>L. martagon</i> var. <i>album</i>	

We have a considerable number of smaller bulbs of *L. alexandrae*. I would suggest that these bulbs be offered to members for testing at no cost. This species was reported to have survived several winters in Albany, NY, at below zero temperatures.

A considerable number of special seedlings were lost last year due to unexpected 7 degree below temperatures experienced at Lava Nursery in December 1998. The seedlings were still in trays, which made them more vulnerable. There were no losses recorded in the open fields. Pocket gophers also caused damage to our Western American species; they devoured a considerable number of bulbs during the winter months.

The species group continues to enjoy the help and cooperation of Cebeco Lilies, Fairdale Nursery, Lava Nursery and Willowood. Without their help, little could be accomplished.

We continue to benefit from the hard work and dedication of Vice President Barbara Small. Her excellent bulletins are deeply appreciated and enjoyed by members.

We have recently been given a computer by Judith Freeman of The Lily Garden. She has even offered to teach us how to operate the machine! This will be very valuable in our record work and, hopefully, will eliminate the need for endless files.

We need more members to be directly involved, especially in establishing contacts worldwide. I especially appreciate the support of the research trust, NALS seed exchange and the RHS Lily Group.

Lilies and "Related Species"

Barbara M. Small, Fair Oaks, CA

During the membership meeting for the Species Lily Preservation Group in Chicago of this year, Michael Homick suggested that our group should also cover "related species." The idea was heartily approved by the members present and everyone seemed pleased with the addition of these plants. But what, I wondered, are they? I had flowered *Cardiocrinum giganteum* and *Fritillaria persica* – both of which promptly died after blooming – but beyond that my knowledge was scanty at best. Thus I began a journey into plant classification, but the more research I did, the more I realized that even the professionals disagree!

Hortus Third,¹ for example, states that the lily family (*Liliaceae*), mostly composed of herbs from bulbs, corms, rhizomes or tubers, includes about 240 genera and perhaps 3,000 species. The list of cultivated genera begins with the Arabian bulbous herb *Albuca* and concludes with the bulbous or rhizomatous bulb *Zigadenus*, many of which are poisonous. In between lie such joys as asparagus as well as many plants that we, as "true" liliophiles, have spent our

lives explaining away: *Colchicum*, *Hemerocallis*, *Hosta* and *Liriope*.

The Internet yielded equally puzzling and conflicting reports, but in general, researchers seem to have been refining the *Hortus III* list throughout the years. The Norton-Brown Herbarium at the University of Maryland lists 86 genera in 1991.² But by 1996, R.K. Brummitt³ had narrowed the list to eleven genera under *Liliaceae*, with five extra synonyms.

The Internet also gave me some great personal contacts who most obligingly answered my questions. First was Ellen Dean, Director and Curator of the University of California at Davis Herbarium. She checked the university texts and found equally confusing information. The most recent publications available to her, however, included *Calochortaceae*, *Melanthiaceae*, *Smilacaceae*, *Alstromeriaceae*, *Colchicaceae*, *Trilliaceae* and *Uvulariaceae*.⁴ Finally, Dr. John G. Conran from the Department of Environmental Biology, University of Adelaide, Australia informed me of the most recent accounts of the relationships in the family.⁵

LILIODEAE

The Tribe Lilieae

Lilium, *Nomocharis*, *Northolirion*, *Cardiocrinum*, *Fritillaria*

LILIODEAE

The Tribe Tulipeae

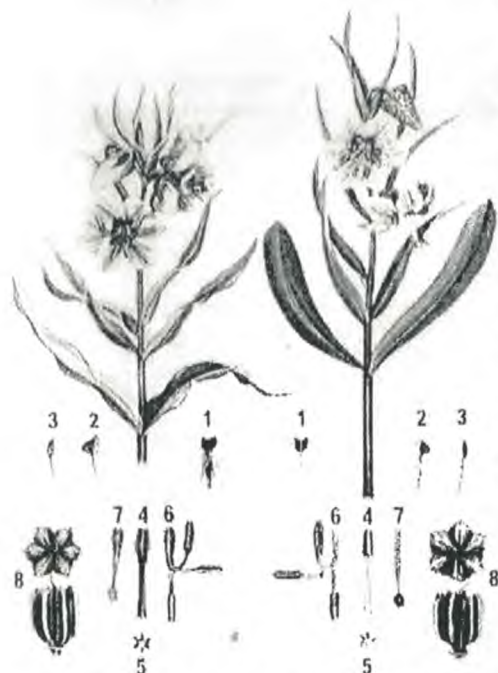
Tulipa, *Gagea*, *Lloydia*, *Erythronium*, Sub-tribe *Medeoloideae*
Medeola, *Clintonia*



Erythronium hendersonii,
reproduced from *Curtis's Botanical
Magazine*, Vol. 114, t. 7017.

Should we limit our "related species" list to the four genera under the tribe *Lilieae* — *Nomocharis*, *Northolirion*, *Cardiocrinum* and *Fritillaria*? The Royal Horticultural Society includes several "related species" in their *Lily Yearbooks*. For example, the 1958 *Lily Yearbook*, in addition to four articles on *Fritillarias*, reports the lily group discussion of June 18, 1957, concerning the genus *Erythronium* — the various species, hybrids, cultivation and propagation. One accompanying illustration (figure 28, opposite page 96) depicts *E. hendersonii* — with dainty lily-like flowers. Surely, in the eye of the novice, such a charming species must be more "closely related" to lilies than the Crown Imperial *Fritillaria*.

But there is no mistaking the close relationship



Two Afghan *Fritillaria*s: *Fritillaria ariana* (left) and *Fritillaria gibbosa* (right) from a painting by Paul Furse

of the Afghan *Fritillaria ariana* and *Fritillaria gibbosa* pictured in the Royal Horticultural Society 1966 Lily Yearbook (Figure 20, opposite page 112) which, interestingly enough, also includes articles about *Muscari* and *Allium*.

By 1968, the Royal Horticultural Society's Lily Group Yearbooks had covered such diverse bulbs as *Erythronium*, *Nomocharis*, *Trillium*, *Cardiocrinum giganteum*, *Galtonia candicans*, *Streptopus simple*, *Zigadenus elegans*, *Stenanthium*, *Yucca*, *Colchicum Merendera* and *Calochortus*.

What are lilies' "closely related" plants? My journey of discovery has given me a great appreciation for some of these plants which I had never even known existed. What a joy to

view photographs of the dainty *Fritillaria recurva* on the internet and note its similarity to both *Lilium grayi* and *Lilium parvum*. I suspect the answer to the question will depend not so much on specific taxonomy as on the interest of the members of the Species Lily Preservation Group. I, for one, welcome them all!

1. *Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada*. Initially compiled by Liberty Hyde Bailey and Ethel Zoe Bailey. Revised and expanded by the staff of the Liberty Hyde Bailey Hortorium, Cornell University. Macmillan, 1976, p. 658.

2. *Family Synonymy from Indices Nominum Suprageneri corum Plantarum Project*. <http://www.inform.umd.edu/PBIO/crofamsyn/Liliaceae.html>

3. *Vascular Plant Families and Genera*. The Royal Botanic Gardens, Kew. <http://ibs.uel.ac.uk/scripts/dg/kew.pl?page=list1&family=Liliaceae>

4. Dahlgren, R. et al. *The families of the monocotyledons*. Springer-Verlag, Berlin. 1985.

5. Tamura in Kubitzki K., ed. *The Families and Genera of Vascular Plants*. Vol. III, *Monocotyledons. Liliaceae (except Orchidaceae)*. Springer-Verlag. Berlin, 1998, pp. 343-353.



Lilium rubellum

Photo courtesy of Ed McRae



Lilium cernuum



Lilium leucanthum var. *centifolium*