

Canadian Prairie Lily Society

Newsletter

March 2005

Number 107

CPLS Plots and Volunteerism by Art Delahey

Your Society operates three sizable lily plots to propagate bulbs for fall membership and general public sales and the spring Gardenscape Show. These sales are the major source of revenue for the Society. They provide the funds for two University of Saskatchewan scholarships plus one bursary and one scholarship at Olds College, Alberta to outstanding horticulture students.

While the bulbs keep showing up for the various sales very few of our members really know what goes into their development, or where the plots are located. Unfortunate, because each plot has some history and some specific purpose, and offers visual treats in blooming season.

CPLS's plots began with the passing of Mr. Andy Dingwall who had previously exhausted all space on his city lot for lilies and set large numbers of many varieties into a garden setting at the farm/residence of M/M D. McKercher. Andy passed those lilies along to the late Shirley McKercher so CPLS could care for the plot and realize the wonderful annual yield of good Asiatic varieties. This plot of twelve rows and 75 feet long is currently completely filled with asiatics, a few L.A hybrids and some martagons.

When Canada Agriculture offered to let CPLS take control of many lily varieties being grown at the Indian Head Experimental Farm we jumped at the opportunity. Many of the varieties were old standards dating back to Preston, Patterson, Skinner, Wright and other early hybridizers. Having dug the bulbs we

found that we would have difficulty in putting them all in the McKercher plot. What to do?

Contact was made with Dr. Jim Smart, one of CPLS's members, who had a farm south of Saskatoon on Victor Road just west of Hwy 11 featuring some unused sheep corrals. Excess bulbs were planted in close rows within these corrals and, with the excellent fertilizer donated by many sheep over many years, growth was spectacular. The shortcoming was the abundance of seeds from every weed ever to have grown in western Canada!

About the same time we had an offer from the U.ofS. Horticulture Department to transfer any lily bulbs from the Patterson Gardens on their property to another site where they were setting up a new Horticulture Research centre. Most of these bulbs originated as part of Dr. Patterson's hybridizing work but had become overgrown with grasses and weeds. One of our members, Dr. Paul Stevens of the Animal Science Department, took responsibility for locating, developing some weed control and identifying many of the lilies. When they were relocated into the new site (just off 14th Street between Preston and Arlington Avenues) the bulbs became the nucleus of our Heritage Garden. Our objective was to find as many of the introductions of western Canadian hybridizers as possible and set them out in grouping of each hybridizer. We have been somewhat successful in acquiring varieties and less fortunate in having them thrive. The site is open to the westerly winds, is on top of a small rise and therefore doesn't retain

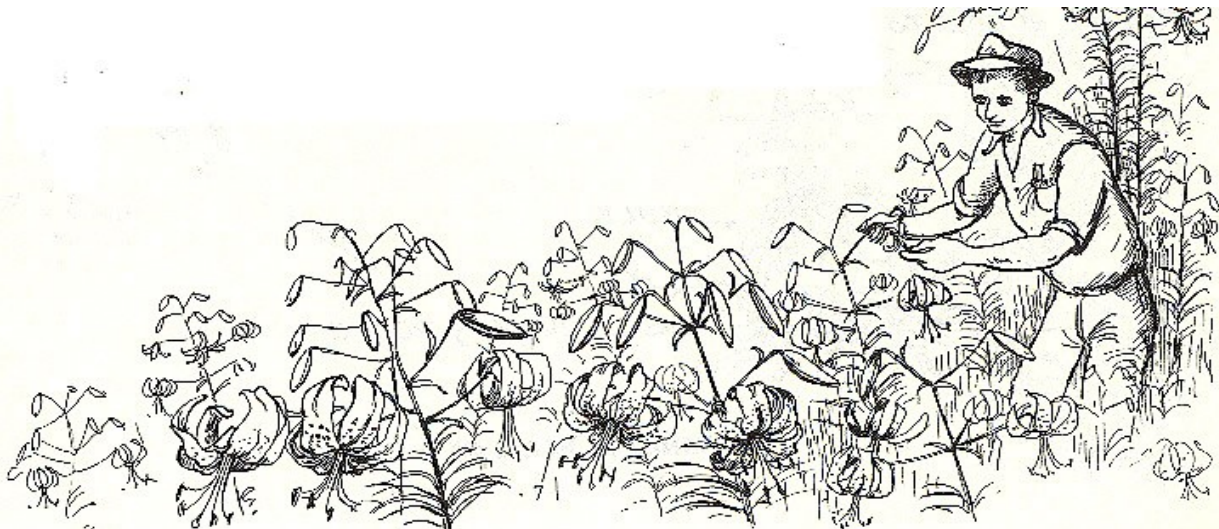
much snowfall. After disastrous losses in the winter of 2003-04 we installed snowfences for this winter with obviously better results.

Having three production plots in three locations gives us some protection from natural setbacks like frost, hail and even deer. But it means a bit of specialization is required in their maintenance. Since we are duty-bound to apply good husbandry to the plots three of our older (oldest?) members have assumed responsibility for the upkeep of one plot each. This involves a trip with hoe in hand about every two-three weeks, depending on rainfall, to disrupt the latest flush of weeds. Initially this was a major undertaking as all plots featured many weed varieties, some of which were difficult to eradicate. For several years we resorted to spraying weed-specific herbicides to greatly reduce the weed count, and lately pre-emergence herbicide has been applied in the fall with good results, reducing the workload to an hour or so per visit.

While the three caretakers do their best to keep the plots looking neat, thanks must also go to a few members who contribute time and effort in weeding during the summer, digging and packaging bulbs in the fall and helping at the two major sales. But we need more members to step up and assume some of the

load. Our three plot caretakers are getting a bit long in the tooth and one has to question how long they will be able to hold the fort. The success of our scholarship programs depends entirely upon the bulb production from these plots, and without proper maintenance it is highly likely that we would be asked to move. While the load is not heavy it does require a bit of dedication to regular visitations, transportation, and minor exercise involving a hoe. And what better place to commune with Nature than amongst the gorgeous displays of lily blossom? Your help, to whatever level you can commit, would be welcomed. Help your Society, contribute towards Horticulture education, enjoy lots of fellowship and learn a bit more about lily culture at the same time. How about it? Can you lend a helping hand?

A volunteer form is included in the mailing please fill it out and mail it to Stan Dunville



President's Message

Spring is just around the corner. As I write this message the sun is brightly shining but several feet of snow still cover the garden. We have had lots of snow this winter and probably a bit more to come, it is Saskatchewan and late February! This still gives us time to contemplate what we will do this spring and summer in the garden (contemplating is easy on the back).

This is the centennial year for Saskatchewan and CPLS will be celebrating it in two ways. First we have helped to sponsor a book on the Prairie Lily - *Lilium philadelphicum* co-authored by Anna Leighton and Bonnie Lawrence. Our second way to celebrate the centennial was suggested by Diann Putland (CPLS director/member) - CPLS should register a lily to honour the centennial. Diann has a lovely unnamed lily hybridized by Bert Porter some years ago and suggested this lily to commemorate the centennial. Art Delahey and Diann Putland will be working on this project and the lily should be available in the Fall Bulb Sale

There are two important events coming up in Spring 2005 for CPLS members:

The **CPLS Annual General Meeting** will be held on Tuesday, March 22 at 7:30 P.M. at the Dutch Growers Garden Centre, 685 Reid Road, Saskatoon. There will be a brief meeting to take care of the Society's business. Our speaker following the

business meeting will be a Dutch Growers Consultant. The topic will be "**What's New in 2005 - Perennials & Oriental Lilies**". Mark this date on your calendar! See you at the meeting!

Gardenscape'05 April 1,2,& 3 at the Prairie Land Exhibitions Site provides us with an opportunity to make people aware of our Society as well as answer questions about lilies and raise some money for our scholarship program through the sale of bulbs. For the first time CPLS will have Oriental Lily bulbs for sale. If you have some time to spare April 1-3, please consider helping out at our booth. Our **contact** person for Gardenscape'05 volunteers is Bob Caldwell at 374-2873.

As we move towards spring and summer Society events come to life - Annual General Meeting, Gardenscape, Lily Plot Maintenance, Annual Lily Show and Fall Bulb Sales. Each event requires the participation of as many members as possible. Without your participation these events cannot take place. Your executive would greatly appreciate your setting aside some time to help out. It's fun, a great way to learn more about lilies and general gardening!

2005 Annual General Meeting

SPRING FLING 2005 ANNUAL GENERAL MEETING

TUESDAY, MARCH 22, 2005 AT 7:30 P.M.

AT

DUTCH GROWERS, 685 REID ROAD, SASKATOON.

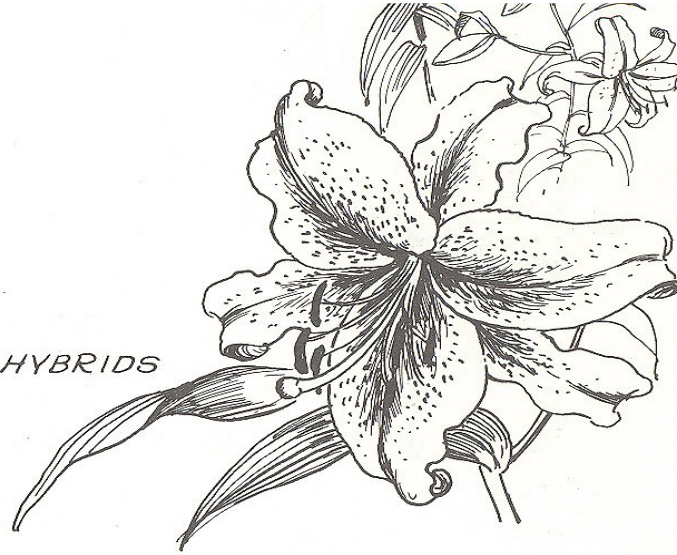
SPEAKER: DUTCHER GROWER' CONSULTANT.

" NEW PERENNIALS & ORIENTAL LILIES in 2005"

All members are Welcome. Bring a friend.

Coffee & Goodies will be Served

AURATUM HYBRIDS



Oriental Lilies in Zones 2 and 3a

On several occasions we have tried different varieties of Orientals planted into the ground early in spring. They would grow well and bloom in late September if the frost did not get them first. The next year they would not emerge at all, or a small stem would surface but not bloom. We concluded that the Orientals were not hardy enough in our zone.

As we continued to research growing Orientals, we discovered that they were indeed hardy to our zones of 2 and 3a. However, we were not successful because our season is not long enough for the bulb to replenish its self [for] the next season.

To begin to growing Orientals, purchase several bulbs of different varieties from a reliable source. Individual bulbs are planted in two-gallon black plastic pots such as are used in garden centres for roses and small shrubs. These are used for size, durability and ease of handling. Larger pots would even work better if one has the space and the strength to bring them out of the garden in the spring. The bulbs are planted about four to six inches deep in a mixture of one-third garden soil, one-third garden sand and one-third peat moss. As the stems emerge and are growing, they are fertilized with a 20-20-20 all purpose water soluble fertilizer with each watering, using about one-quarter to one-half teaspoon of fertiliser per two gallons. Each lily is water daily, preferably in the early morning and possibly later as needed in warmer weather. The pots are set out in a southeast location in the garden receiving the early

morning sun and going into shadow by 3:00 P.M. Therefore, the black pots do not get overheated in late afternoon.

Once all the flowers are spent that part of the stem is clipped to prevent the formation of seed pods yet leave enough greenery to generate energy to replenish the bulb. The pots are then moved to a cooler, shadier area of the yard. Here they receive sunlight for a very short period in the early morning, and the some sun from about 4:00 P.M. to about 8:00 P.M. They are placed behind some containers of annuals; thus keeping the bulbs in the black pots cooler. Lily bulbs kept in black plastic pots in the full sun for the whole summer will overheat, and perhaps not thrive the next year. The bulbs are left to mature in this location for the rest of the summer. They are no longer fertilized but kept moist. these pots do provide enough drainage in heavy rainfalls.

The stems are cut off in late September, once they start to yellow and have had a frost. The pots are dug into a south exposure garden near the end of October. To decrease some of the mud in early spring, each pot can be placed in a plastic grocery bag, leaving the surface uncovered. A trench is dug, just deep enough that the surface of the pots will be about two or three inches below ground level. The location of each pot is marked with a stake just at the periphery of the pot. By doing this we can stagger the digging up of different varieties in the spring if we do not want several pots of

one variety to bloom at one time, or we would like to exhibit a variety in a show. The pots are then buried in the soil, with the soil heaped up about three to four inches above the surface of the ground. This method is sufficient to overwinter the lilies as this area usually has a snow cover of two to three feet. If we had less snow and still expected our freezing temperature, then we would recommend a higher mounding of ground on top of the pots or bury the pots deeper.

We can get bulbs growing in the spring, thus providing the growing season that the need to completely replenish the bulb in the fall.

Several pots are dug out at the end of March. If we want to stagger the blooming period, the rest are dug out by the middle of April. By this time the snow has melted in this area. If it has not, then we have the stakes and our map showing the location of each pot. A shovel is used to pry up the pots. They usually pop out quite easily from the still frozen ground. If it is a sunny warm day, the pots are left to thaw in the west patio for a few hours. They are then brought in and put on newspapers on the basement floor in a temperature of about 20 degrees C. It takes them about two days to thaw out completely. They are checked and watered when needed. Stems start to surface in about a week. We do not worry if the stems do not appear at the surfaces for three weeks, because we have been rewarded with extra sturdy stems from these pots. As soon as a pot is showing growth, it is brought into the family room and placed in front of the patio windows. At this point turning the pots each day is important so the stems grow straight, especially if they are intended to be exhibited in a show. Again, if it is important that the stems be straight, they can also be staked, as they grow taller. Once the temperature outside during the day is about 8 degrees C or higher, the pots are placed outside in their growing location, and then put in the garage for the night. In our zone, this usually happens about the middle to the end of April. Therefore, the pots are not in the house for long periods of time. From early May the pots can be left out for the night unless there is a warning of frost. This year we needed to extend this period slightly due to our cold spring. By the middle of May the lilies are about 18-24 inches tall. We have now reached full cycle. The lilies bloom in this location from early July to the first week in August.

We are very pleased with the success we have had in overwintering Orientals year after year. We first tried

with 'Star Gazer' in 1994. It has overwintered for five years, with three stems and usually 10 buds per stem.

Last year we tried this method with *L. speciosum* var. *rubrum*. Some growers in this zone have had success planting it directly in the ground. We planted one bulb in the ground and one in a pot. Both are now growing. It will be interesting to note when each blooms and matures, and which thrive the following year. Another lily grower in zone 2a north of Edmonton, tried this method last fall with 'Marco Polo', 'Star Gazer', 'Berlin', and 'Arena'. This year she reported that she had 100 per cent survival using this method.

Is this a lot of work and fuss? The little extra time it takes to take care of these pots and bury them is well worth it. We would recommend this method for anyone who loves Orientals and wants to overwinter them without a greenhouse, or a cold room or keeping them in the refrigerator. [ED: this article was abridged from "A Simple Method of Successfully Growing Orientals in a Colder Zone" by Emmett and Marie Wenger, Edmonton, Alberta. It first appeared in the North American Lily Society Quarterly Bulletin, vol. 53, No.3, 1999.]

EDITOR'S COMMENTS: After reading many articles on growing Oriental lilies the above article by Emmett and Marie Wenger was the most useful for those of us who live in colder areas, don't have greenhouses, cold rooms etc. As mentioned in the article the bulbs are hardy enough but they don't get sufficient time to replenish themselves after blooming late in the season, thus by getting an earlier start and blooming in late July-August the bulbs can stock up nutrients for another go next year. This is "doable" and I am going to try it this year. By more good luck than management our yard fits the requirements described in the article. The raised gardens used for vegetables should work well as winter storage sites. This may give rise to a follow-up article for Spring 2006. On further reading about Oriental culture GOOD DRAINAGE was strongly emphasized and ACIDIC SOIL conditions are preferred (this is easily done with amending the soil and fertilizing with a product like 'Miracid'). CPLS will have some oriental bulbs for sale at GARDENSCAPE'05 so you can try this method too and send in your results for that Article in Spring 2006! Sharing information makes us all better growers and makes our gardens blossom.



Are there different possibilities to hybridizing ?

by Jim Sullivan

Over the past few months I have been giving some serious thought to my lily hybridizing and more specifically my hybridizing goals. I have come to the conclusion that as far as the Asiatics hybrids are concerned I have found myself doing a little floundering these past few years. By the latter I mean not looking for something different-- what I would call a break through in my hybridizing program. Perhaps I have been content with reinventing the wheel in different colours and in some cases simply duplicating that which already exists. Now, having admitted this to myself, I believe a serious hybridizer should be looking for that breakthrough be it in different forms to the flowers or perhaps in some cases simply the number of flowers per stem. Different colours or patterns would also be welcome.

Some of these breakthroughs or mutations, which can be seen today, are the brushmarks, the Tango pattern of spotting, and perhaps the appearance of the

bicolours and tricolours. Dr. Patterson's use of *Lilium cernuum* in his hybridizing program was certainly a breakthrough as far as introducing a range of Asiatic hybrids in pink and whites into the gardens of many. As far as form, I have to say I cannot think of any that I would describe as a "breakthrough", unless of course the doubles are included although double *L. lancifolium (tigrinum)* hybrids have been known for some time. I know Fred Fellner is working with 'Baby Pink Bells', a lily with flowers having a down facing open campanulate form. It would indeed call this a breakthrough and would very much appreciate seeing this form in other colours.

I am not saying that these breakthrough seedlings will just appear in the final form. Hybridizers must have a keen eye and be able to detect in some cases very small differences or changes from the normal form, colouring, or spotting patterns--something that sets the seedling apart from the "normal" or existing

characteristic of lilies.

There are many characteristics of the Asiatic hybrid that could be enhanced and be seen as a breakthrough. Some of these would be size of overall bloom, length and width of the petals, length and number of papillae on the petals, overall form of the flower i.e. rounded petals, trumpet shaped flowers, ruffled edged petals, and dark reverse of the petals and, of course, the as yet unknown. Yes, some of these characteristics are seen in a subtle way in some Asiatic hybrid lilies available today, but have not yet been exploited by hybridizers. By exploited, I mean taken to a point where the form or colour has been developed by hybridizers to an extent that it could be seen as a breakthrough. An example could be a line or group of Asiatic hybrids that exhibit a range of colours on the face of the flowers but notably possess dark backs to the flower. Another example would be a group or line of lilies with quite ruffled petals.

I know hybridizers in other areas, such as daylily hybridizing, have different forms and colours than

Jim's Letter to Fred Fellner

Hello Fred.

I thought I would jot down some of the ideas on the term "latent gene". I have just finished talking to a geneticist I know up at the University of Saskatchewan. When I asked him if he could define the term latent gene for me it kind of set him back on his heels so to speak. It is a term that is used rather loosely and in reality does not have a specific definition. However, I explained the circumstances surround the appearance and characteristics of 'Baby Pink Bells' and whether the latent gene factor could be responsible for the appearance of such a lily. He said in this circumstance any number of things could account for the appearance of such a lily --ranging from simply a recessive gene, which was expressed through methods used in the hybridizing program--backcrossing, inbreeding, etc. which could have eliminated an inhibitor gene for example. Another circumstance which could account for this is a case of aneuploidy not as we often think of it, but in this case the clumping or sticking together of number of genes within the chromosome.

I told him that I had tried to look up the term latent gene on the internet and kept coming up with it in

those found in the species or the older initial hybrids. I think that the Asiatic hybrid lily is wide open to changes that would be welcomed by the gardeners as well as the florist, even though with regard to the latter most amateur hybridizers assume they are hybridizing for the garden exclusively

Sub editor's note: Jim and I had a lengthy telephone conversation regarding one of Fred Fellner's hybrids. The discussion centered on questions of mutation and of recessive genes. I had worked, after receiving my B.Sc., with a genetic scientist at CDA in Brandon and had taken a genetic course in graduate school. The questions posed by Jim were exciting but without direct answer as the information available to Jim was not complete. The conversation ended with the idea that the Fellner seedling was displaying recessive characters. Jim followed up our conversation with a conversation with Jerry Rank, a professor in the Biology Department, University of Saskatchewan. The results of that conversation appear in the letter below. (E.A. Driver)

connection with viruses. In the case of some viruses they can lie dormant until influenced by environmental factors. An example of this would be cold sores, which can appear after exposure to ultraviolet light and are caused by a herpes virus. In this case the replication of the genetic material of the virus is enabled by the environmental factor of ultraviolet light in the form of sunlight. The genetic material is therefore considered to normally be in a latent or dormant phase.

I don't know if one can ever say exactly what caused the appearance of 'Baby Pink Bells', but I guess you could definitely say it was the outcome of some genetic change as the result of your hybridizing efforts or simply a spontaneous mutation.

I hope this sheds some light on your question of the term latent gene and whether it was involved in the appearance of 'Baby Pink Bells'.

Jim.

Coming events.....

MARCH 22, 2005

CANADIAN PRAIRIE LILY SOCIETY: Annual General Meeting & Spring Fling! will be held on Tuesday March 22 at DUTCH GROWERS GARDEN CENTRE LTD, 685 REID ROAD, SASKATOON. The meeting will begin at **7:30 p.m** sharp. There will be a short business meeting followed by a speaker. The speaker will be Dutch Grower Garden Consultant and talk about new perennials for 2005 and Oriental Lilies for the Garden. Do not miss the meeting it will really get you ready for spring and the coming gardening season! All members are Welcome. Bring a friend.

APRIL 1,2,& 3 2005

GARDENSCAPE'2005: Saskatoon's Annual Spring Gardening Show will be held at the Trade Centre Building - Saskatoon Prairieland Exhibition, Saskatoon, SK. CPLS will be taking part in this annual event. This year CPLS will be featuring 'Oriental Bulbs' in our sale. Volunteers are needed to help with our booth. If you can help please contact: Bob Caldwell, 374-2873.

From the Editor's desk.....

YOUR NEWSLETTER NEEDS NEW FRESH ARTICLES FROM ITS MEMBERS! MANY OF YOU ARE VERY ACCOMPLISHED GARDENERS WITH A WEALTH OF KNOWLEDGE TO SHARE. SOME OF YOU MAY BE NEW TO GARDENING ESPECIALLY WITH LILIES AND HAVE DIFFERENT METHODS YOU USE TO MAKE YOUR GARDEN GROW. WITH A MIX OF OLD AND NEW YOUR NEWSLETTER CAN THRIVE. LACK OF PARTICIPATION WILL SEE THE NEWSLETTER EVENTUALLY DISAPPEAR. PLEASE GIVE SERIOUS THOUGHT TO SUBMITTING AN ARTICLE FOR YOUR NEWSLETTER WITHOUT THEM THE NEWSLETTER CANNOT EXIST.

Any article submitted will be considered for publication, please include your name and a complete address. Newsletter **DEADLINES** are February 15, May 15, August 15 and November 15. So get pen to paper, fingers to keyboard and send your words to :

Mail to: **CPLS NEWSLETTER EDITORS**

**Margaret/Ed Driver
182 Dore Crescent
Saskatoon, SK, Canada
S7K 4X7**

e-mail: mlily@sk.sympatico.ca