



Manitoba Orchid Society

For the Love of Orchids Newsletter

Next Meeting: 15 April 2012
Canadian Mennonite University, 600 Shaftesbury Blvd.
(SW corner of Shaftesbury Blvd. and Grant Avenue)
General Meeting: Conference Room,
Novice Meeting: Room C09

Novice Programme

To be announced
Starts at 1:00PM

Regular Programme

“Orchids of North America” presented
by Lorne Heshka.
Starts at 2:00PM

Plant sales by members are encouraged.

Bring Plants for Show & Tell




Goodies will be provided by Lilianne Foster, Leah Paluch, Ann Yewish and Wendy Chaytor.

Website: <http://www.manitobaorchidsociety.ca>

Executive email: president@manitobaorchidsociety.ca

Newsletter email: newsletter@manitobaorchidsociety.ca

Submission deadline 19 April 2012 for May 2012 Issue

<p>Correction for 2011 MOS Show Walter Regehr Trophy</p>	<p>The winning entry of the Walter Regehr trophy for “Best Miniature Species, Hybrids or Intergenerics” was Lepanthes elegantula 'Kyle's Crazy Kites' (AOS/AM/CCM) grown & exhibited by Kyle Lucyk. Outdated information was printed in the October 2011 newsletter.</p>
	<p><u>15 April</u> General Meeting: Orchids of North America by Lorne Heshka.</p> <p><u>27 May</u> General Meeting: Nina Rach from Houston, will speak on a yet to be determined topic. Note this is the fourth Sunday in May, a week later than usual, in order to avoid conflict with the long weekend.</p> <p>Novice Meeting: Swap & Shop.</p> <p><u>17 June</u> General Meeting: Ron Burch from Connecticut will be speaking on Cypripediums.</p>
<p>Show Theme contest extension</p>	<p>In case you overlooked entering the show theme contest at the show, you have been given an extension. April 9th is the deadline to get your entries in to Irene at blandry1@mts.net. Please remember to put “show contest theme” in the title. A reminder there will be prizes given for winning entries. There have been some great ideas, but you might have a better one!</p>
<p>Hearts & Flowers</p>	<p>Former member Violet Pelland passed away on February 24 at the age of 92. Her true passion was gardening and tending plants. The MOS extends its condolences to her daughter, Pat Turenne.</p> <p>The MOS extends its sympathies to Marina Yogendran and her family, on the unexpected passing of her mother-in-law.</p> <p>If you hear of any good/bad news regarding members or their families, please call Phyllis McCaskill and let her know.</p>
	<p>To the volunteers who made our 2012 show, “Orchids Forever”, so special. It could not have happened without you!</p>
 <p>Suggestion Box Help us help you</p>	<p>The Executive encourages all members to provide feedback, comments, suggestions by filling out a comment sheet available from the Secretary at all General Meetings.</p> <p>All signed comment sheets should be returned to any member of the Executive. They will be reviewed at the next Executive Meeting and you will be informed of follow-up action taken.</p>

2011/2012 Executive

Elected

President Joyce Jaworski
Past President Dave Moran
1st V.P. Kevin Duerksen
2nd V.P./Show Chair Rob Kato
Treasurer Fraser Cameron
Secretary Phyllis McCaskill

Appointed

Membership Gary Jaworski
Social Eva Slavicek
Public Relations Wendy Chaytor
Special Orders Darlene Stack
AOS/COC Rep Kyle Lucyk
Library Lilianne Foster
Newsletter Robert Parsons
Webmaster Robert Kato

Editor's Message

Robert Parsons

I hope everyone enjoyed the show. I always enjoy eavesdropping on the public while hosting in the show area and I heard many enthusiastic and complimentary comments about a job well done. My admiration for Elaine Moran and her crew knows no bounds. Every year, they bring forth an impressive display with the sum definitely greater than its parts!

I don't have any official attendance or sales figures yet, as I go to press, but this should be available by the April meeting. I hope to include all awards in the May newsletter, along with some photos. I have a few already, but am definitely looking for more and you may hear from me, as I twist a few arms. I will include a couple of photos of three of the AOS awarded plants in this issue. (Full names and points to follow in the next issue.)



Phalaenopsis Brother Spring Dancer '833' grown by Sylvia & Jacques Cahill

Photographed by Lorne Heshka



Psychopsis papilio 'Joyce Did It' grown by Joyce Jaworski
Photographed by Lorne Heshka



Paphiopedilum Frank Zettle 'Joan Lorraine' grown by Lorne Heshka

Photographed by Lorne Heshka

Dendrobium atrovioleaceum and its environment

By G. Hermon Slade

For as long as I can orchidaceously remember, *Dendrobium atrovioleaceum* has stood apart in my mind as an orchid of special charm. It is a plant which has presence and individuality. It is not one which conforms to the rules that would earn it horticultural certificates - they apply to Orchids which are either created round in shape or are the result of hybridists' sophistication in building up a flower round in form and toeing the party line of man-made judging rules.

Dendrobium atrovioleaceum is modest in colour, its background is that of the riper part of an Avocado pear, splashed with purple. Its sepals are triangular and, unlike many of its close botanical relatives, free from hairs. Like the petals, it is freely spotted with dull purple. The petals are



slightly more yellow than the sepals and are rhomboidal in shape which is one of the characteristics common to the *Latoureas*, a noteworthy section of the genus *Dendrobium* which includes *Dendrobium macrophyllum*, *D. spectabile* and about 25 other *Dendrobium* species. They too, are spotted with dull purple. The labellum is neither flamboyant nor gorgeous but is rather regal or even papal in that it is a fascinating combination of rich green decorated with pure Tyrian purple lines and spots. The inflorescences are erect and carry about seven flowers which are long-lasting and which display themselves in a graceful and modest way in that they present beauty when seen from above rather like a canopy, and charm when viewed from under when the full richness of the flower can be observed and yet, when viewed from a directly horizontal angle they appear almost as if they are flying.

This unique orchid has been known for 70 years - and yet it is one which has been singularly difficult to find in the wild. Of the many trips I have made to New Guinea, it has always been a hope and yearning to see the plant growing in nature. Although many other *Latoureas* have been brought back and appreciated as plants of much interest and horticultural merit, *Dendrobium atrovioleaceum* has remained a plant that eluded me.

In the "Australian Orchid Review" there have been several mentions of this species relating to its habitat. Its most famed habitat is Rossel Island at the extremity of the Louisiade Archipelago. When the Government made one of their occasional trips to the island, I found an invitation awaiting me to join the acting Government Botanist and keeper of the Lae Herbarium, Mr. Ted

Photo by Bill Lavarack, 'Dendrobium and its Relatives'

Henty, and Government Land Valuer, Mr. Peter McGowan, on a proposed visit there in November, 1965. The trip began in earnest in Misima, an island towards the end of the Louisiade Archipelago and which has the eastern-most airport constructed to date at Bwagaioia its principal European settlement.

We left Port Moresby at 8.00 a.m. by small plane and arrived at Misima in the early afternoon after several interesting stop's en route, including a refueling stop at the war-time base at Milne Bay. Arriving at Misima, we lost no time in an initial botanical examination of the local flora. We were given the utmost in help and hospitality by the local District Officer, Geoff Littler.

We noticed from plants in several gardens that *Dendrobium atrovioleaceum* is indigenous to Misima which probably accounts for its early introduction to horticulture as Misima was the centre of sizeable gold-mining operations at the turn of the century, and this required much timber to be felled to act as mine pillars. Consequently, *Dendrobium atrovioleaceum* must have been freely available. It was in Misima, later that day, that we saw our first specimen growing in Nature at an elevation of about one thousand feet - half way up a vertical trunk of a sizeable tree. After the short excursion we returned to dine with our hosts and that evening we saw the vessel which was to take us to Rossel Island; a 43 foot boat with native crew awaiting us for an early start in the morning. After a delightful dinner arranged by Mr. and Mrs. Littler, we retired aboard during a stiff southeasterly wind which, increased steadily overnight. This was at a time when the southeasterly should be giving way to the northwesterly as each is a Trade Wind and the changeover is in November from south-east to north-east and is usually associated with periods of calm. However, at the time when we set off in the morning it was anything but calm - the southeasterly was blowing at a steady 35 knots and the sea was as choppy as the English Channel.

We passed the Renard Islands in daylight and continued in the open ocean. It was singularly free from reefs considering the reef- infested sea in which we were traveling. At sunset we encountered the fringe-reef of Rossel Island, which extends well to the west of the island and by this time, the island itself, which rises to nearly 3,000 feet, was vaguely visible. In the brief twilight, we moved due-east keeping about 40 yards off the immensely long reef and in short time, a full moon provided adequate light to watch the reef which was made more visible by the heavy swell which billowed over it in a fury of foam and turbulence. At this stage, the ability of the native bosuns, of which there were four, produced a feeling of confidence in an otherwise rather awesome situation in that not for a moment did the speed of the boat slacken, despite its fifty foot or so distance from the Rossel Island barrier reef. The native crew watched the reef edge intently and by 8.30 p.m. the vessel was steered directly towards the reef and this created a sensation of nervous excitement which is one of the emotions which gives such a trip a unique and added pleasure in the end. We did what appeared to be a direct turn into the boiling and fearsome reef and in due course found that here was an opening, which only the trained eye of a man born and bred in the Coral Sea could perceive. Without reducing speed, we passed through the reef with waves breaking on each side and into the entrance, which was the width of a modern suburban road. At this moment the vessel acquired a peculiar motion as if we were sliding over some soft medium - lifting one minute, twisting the next, which provided an extraordinary appreciation of the nervous apprehension and excitement which every explorer must feel at various stages of his life.

The vessel turned sharply to port and then made, a "J" turn to starboard and we were quickly in water of extraordinary tropical calm. When we dropped within a few yards of the land, the coral sand fringed by coconuts was lit by the full moon as if it were fluorescent, so striking was the contrast between itself and the still, black water and the silhouette of the island against the brilliantly clear sky.

Next morning it was possible to look back and see the entrance through which we had passed and one could not, help but admire the navigational ability of the natives who had brought us in, in complete safety, through water described on the marine chart as "Full of shoals and many 'reefs'". Also, upon further observation, it became apparent that the strange "soft objects", which had created the unusual movement of the boat the night before, was due to the vortexes and currents caused by the high volume of water passing through the narrow passage. The reader can well imagine that where a reef surrounds an island like a fry-pan and where water constantly breaks on the edge and thus continuously flows into the centre, there is an incoming mass of water which has to find its way out and this, still picturing the fry-pan, would flow out through the handle. In the case of the reef, the water flows through one or more of the reef openings that is a consistent feature of every large coral reef.

Safely moored and thoroughly refreshed after a cool night of brilliant tropical beauty, we set out on our mission to one of the high peaks on Rossel which rises to about 2,500 feet. At first we rowed by dinghy down a small river inlet past native villages and found ourselves surrounded by a dense tropical mangrove area. We explored this by landing and wandering through the peculiar breathing roots which project vertically through the sand, watching thousands of crabs and those extraordinary amphibious fish, *Pteriophthalmus*, which spend most of their time out of water.

Orchids were quite abundant especially Dendrobiums of section Ceratobium with twisted "antelope" flowers. We were immensely delighted to find *Phalaenopsis amabilis*, in full flower half way up one of the mangrove trees growing on a vertical trunk with its leaves hanging quite pendulously. The Rossel Island *Phalaenopsis amabilis* has a much-branched inflorescence and produces flowers for months on end.

Leaving the mangrove area, we began a steady climb finding a veritable carpet of *Dipodium papuanum* growing in the ground, up trees, clamoring Convolvulus style, being in many places almost the sole ground cover. As we ascended, the trees became taller and the steamy lowland stillness was replaced by a cooler fresh sea breeze, delightfully refreshing. We were now about 600 feet up the mountain. We stopped to enjoy the view over the village and reef when, there only fifteen feet up on a *Dillenia* tree, were several fine plants of *Dendrobium atrovioleaceum*. They were not rare either, we collected about ten fine plants on one large *Dillenia*. We sought far and wide and quickly discovered that *D. atrovioleaceum* chose only those places with considerable and consistent air movement and about 50% light. Picture a site anywhere from 500 feet to 2,500 feet on a mountain side, open to the horizon in front with huge forest trees growing neither closely packed nor remotely isolated, but almost as in a parkland; the sea and coral reef ahead and a good 15 knot 75°F. sea-breeze blowing consistently: the very site I imagine many of us would choose for a dream home: this then is where we regularly found *Dendrobium atrovioleaceum*. It seems to be equally plentiful at 600 feet as at 2,500 feet, despite the cooler air at the mountaintop.

As we climbed the mountain, we encountered steeper and still steeper sides, until in the end we were climbing on all fours. Here in such rocky areas we found no *atrovioleaceum* but there were numerous Begonias, Impatiens, Macodes and such terrestrials growing on the rough and damp terrain, here too above 2,000 feet we found those lovely New Guinea crimson orchid genus including *Dendrobium lawesii* and scarlet Dendrobiums belonging to Sections Oxyglossum, Cuthbertsonia and Pedilonum, which are all characterised by their brilliant and long lasting flowers, peculiarly "New Guinea" in aspect. After the final, almost vertical climb, we emerged on a small plateau commanding a spectacular view over the entire island and its complex system of reefs. What brilliance, unbelievably clear air and cool steady breeze surround us! Green mountains and with little relief except where the rocky outcrops become vertical, was the distant view: delightful Selaginellas, tassel ferns, ribbon ferns,

orchids and gnarled trees were close at hand. Rhododendrons at such levels are no rarity in New Guinea and Hoyas are plentiful at all places and at all elevations. This genus of interesting and beautiful scandent plants seems ever at hand in New Guinea and its surrounding islands. Some Hoyas have star-like flowers, others are like sealing-wax in colour and texture, others are bell shape; this group includes some large size species of a delightful dusty pink hue, the flowers reaching well over an inch in diameter; which makes the inflorescence a spectacular thing indeed. Here we found those colourful New Guinea *Dendrobiums* with flowers nearly as big as the entire stem and leaf structure.

On the sizeable summit trees we saw *Dendrobium atrovioleaceum* facing the breeze and having scarcely a second without its stems swaying or nodding, so consistent are the trade winds in this area. No plant we saw was larger than a well-cultivated specimen, many of the new eyes and growths are attacked by insects so that scarcely ever a perfect plant can be found. Although the flowering season was practically over, the extreme durability of the flowers enabled us to acquire a few plants of superior size and horticultural merit. The Australian quarantine laws are so stringent that most of the plants we collected went to Europe and America where centres of botanical interest have received them with much gratitude. Let us hope the few plants permitted to arrive in Australia will provide seed material to delight the local orchid fraternity.

Now to return home with our collection. We left our Rossell Island coral haven, sailed due west to Sudest Island where we landed at Nepenthes Point, so named because of the immense number of Pitcher plants *Nepenthes mirabilis* there. These fascinating plants grow on the poorest of lateritic soils, which are almost brick-like in texture and hardness. Hundreds of dead and digested ants were in each pitcher and, to our amazement, each pitcher was the home of a mosquito larva colony. The particular mosquito belonging to the genus *Tripteroides*, breeds in Pitcher plants according to D. J. Lee, Entomologist, School of Tropical Medicine, University of Sydney. These mosquitos in their larval state are fully tolerant to the *Nepenthes*' digestive juices thus share the *Nepenthes* fare and enjoy a watery home protected from enemies in an otherwise arid area. *Spathoglottis* were plentiful in all the open grassland areas, surviving the grass fires, which, started by natives, regularly destroy all surface vegetable life. The corms must be quite fire resistant like the roots of the Kunai grass, as the plants grow freely together. We left Sudest and steered through a maze of coral reefs and islands, which makes the area one of the most shunned seas in the world for major shipping. Yet in the proximity of sea and land, of reef and ocean surface, was a world of marine richness which must one day become a place visited by thousands seeking sheer natural beauty which can be enjoyed in protection from the ocean waves by the ever present reef; the climate is tropical but not uncomfortable and the fishing and scenery are supreme.

We wended our way for six hours through a mere fragment of this marine paradise which permeates the length and breadth of the Louisiade Archipelago, before setting out through the outer reef into deep water and thence a five hour trip back to Bwagaoia and plane for Port Moresby and home.

It was *Dendrobium atrovioleaceum* which triggered the adventure and my sincere thanks are due to the Department of Administration, Territory of Papua New Guinea for their kind invitation to join the excellent company of Ted Henty and Peter McGowan, which made the trip one of the most pleasant and memorable I have experienced.

Originally from the Australian Orchid Review, September, 1967, and taken from the Central Vancouver

Your First Cross

In the mood for an adventure? How about one that provides a learning experience along the way? Would you like the thrill of seeing your own Phalaenopsis hybrid bloom for the first time? If so, it's time to take the plunge and make your first cross.

By Fred Bergman

Looking for a challenge? Have you considered making a Phalaenopsis cross? Well, you should. It will be one of the most rewarding experiences you will ever have.

I can attest to the rewards you get from hybridizing. The number of my registered Phalaenopsis crosses now stands at 214. I have also registered 101 Cattleya crosses and one Paph cross.

The adoption of CITES regulations has minimized the collection of wild plants. With collection minimized, orchid growers now obtain the overwhelming majority of plants from vegetative divisions or seedlings. Most plants on the market today are the product of meristemming. These are vegetative divisions produced from juvenile tissue. In addition, a limited number are produced by mature plant division, including cuttings, keikies, and stem props. To produce new and potentially improved plants, we must look to crosses.

Why consider creating your own

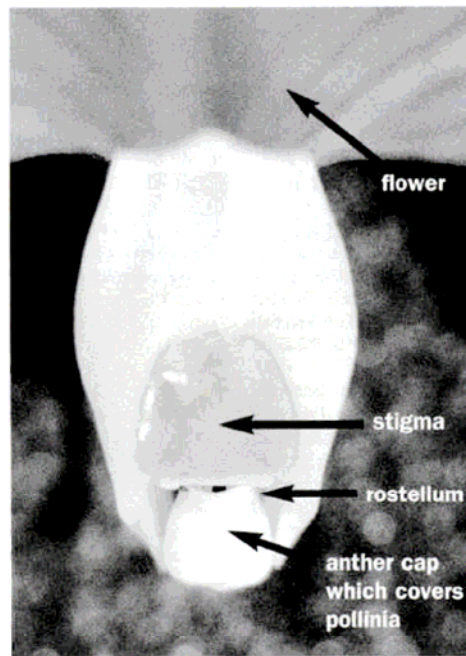


Photo by Fred Bergman

When making a cross, these are the pertinent parts of a Phalaenopsis.

hybrid? One good reason is to gain first-hand knowledge of the process. The thrill of seeing your own hybrid bloom is an even better reason. I still enjoy looking at my cross of Phalaenopsis Fred's Cardinal. The flowers are a good red color, and I enjoy the fact that I have the only ones.

When considering making a cross, let your imagination go free. The first step is to choose potential parents. The process of selecting parents depends on your reason for making the cross. There is nothing wrong with trying something "wild." However, on "wild" crosses expect many failures.

If the only reason you want to produce seed is for the experience, I suggest a cross with high potential. Phals are easy to cross and they grow faster than most orchids. If you cross lavender-lipped white Phals, there is a near 100 percent chance that you will obtain seed. A white-on-white cross will also usually produce seed. Crossing other types of Phalaenopsis like miniatures, reds, or yellows frequently requires making a number of attempts before you obtain viable

seed.

Novelty crosses are what I generally make. In 2009 I made 825 crosses, and by January 2010 there was one cross ready to sow and 205 seed capsules still on plants. I hope for seed from at least 70 of these capsules.

During the previous three years I made 2,065 crosses, but only 51 of them produced seed. Miniature *Phalaenopsis* crosses produce seed about 10 percent of the time, and efforts to produce a miniature Harlequin produced seed only once in 265 tries. The important thing is not to be discouraged when making crosses. The effort of making the cross shows which plants are fertile. Don't neglect to keep good notes on your attempts.

This is normally where advice is given about selecting plants as parents. My recommendation is that you read everything available on breeding and question everything. There is one thing I should point out – a fact that I missed for some time. There are several sources of genetic material in a cross besides chromosomes. This causes the capsule parent to have a greater influence on the makeup of the offspring.

The next step in making your cross is to collect the pollen. The pollen is placed on the selected seed capsule flower. Most the flowers of most genera contain both pollen and a stigmatic surface. In most, the pollen is two to eight waxy clumps while the stigmatic surface is a jelly-like filled depression just behind the pollen. The only exceptions I know of are found in *Paphs* and *Phrags* (where it is reversed) and in *Catasetum*, which produces separate male and female flowers. In the case of *Phals*, the pollen is sticky and the stigmatic surface is smooth and glossy. I normally use the whole pollen grain, but some breeders use a small piece, dividing the pollen with a sharp, sterile knife.

Normally, I demonstrate making a cross by removing a flower and going through the procedure. This allows me to turn the flower over and make the process clearly visible. Once after doing this, I received a distress call from a first-time hybridizer who had watched me. He showed me a dead, dried up flower and said that he cut the flower off the plant, just like I did. He had pollinated it, but nothing happened. Now, although I feel foolish, I always explain that the flower must be left of the plant.

My favorite tool for collecting pollen is a pair of small forceps. See the photo showing a *Phalaenopsis* pollinia and the stigmatic surface. The cap is removed, the pollen separated, and a pollen grain picked up using a blunted toothpick that has been wet with saliva. Saliva is used only because it is handy and makes the pollen stick to the toothpick. If the ovary (what some call the stem attached to the flower) turns yellow and dries within several days, the cross didn't take. Generally, if the pollen germinates, the flower parts dry out and the ovary remains firm, green and swells. On some *Phalaenopsis*, particularly yellows, the flower does not dry out, but thickens and develops chlorophyll.

The production of viable seed normally takes several months. Some orchids require nearly a year for a capsule to reach full maturity. The amount of time required to produce seed varies between orchid genera, and also within any given genera. For example, *Phalaenopsis* normally require six months to produce seed, but almost a year for most capsules to turn yellow and split. However, some capsules containing viable seed can turn yellow and split in as little as five months.

You can either plant seed from a green capsule, one that has started to turn yellow but remains intact, or one that has split open.

Different growers prefer different procedures, but both are used. If you allow the capsule to remain on the plant until it splits, be sure to remove the seed from the capsule and air dry it for 24 hours before storage. You must store the seed if it is not going to be sown immediately. Seed should be stored by placing it over a desiccant and then putting it in a refrigerator until sowing arrangements have been completed.

There are a number of firms that will sow your seed for a fee, or you may sow your own seed. I have been sowing my own seed since 1949. I prefer allowing a capsule to remain on the plant until it splits. My sowing system allows planting six crosses at a time. By letting the capsule mature and storing the seed, I can collect six crosses for a sowing. If you only want the experience of sowing seed, consider using the easy, low cost procedure described in *Orchids* (Bergman, July 2006). This does not describe how I sow orchid seed, but it is a procedure I developed that avoids the necessity for special equipment.

When plants are large enough to be removed from the flask (one year for most crosses if you don't re-flask), the key to success is growing the seedlings warm and humid. I use near 100 percent humidity at 90 F for the first year of growth. In my greenhouse, some crosses bloom in as little as three years after de-flasking. Even less time would be required in a warmer greenhouse, but mine is set at 68 F for six hours and 62 F the remainder of the day to reduce fuel costs.

There are many sources of information about sowing orchid seed, but some of the books on this subject are written by someone who has never sown seed. Some contain errors. I think that better information is available in any good book on bacteriology.

After you bloom the first plant of your cross, you may want to register it. Registering a cross is an easy process. Forms are available for downloading from the American Orchid Society web site, or directly from the Royal Horticultural Society. The most practical way to pay the registration fee is by using a credit card; the RHS accepts most credit cards. To register a cross, both parents must be registered or be a species. You should check to make sure the name you selected has not been used and the cross has not been already registered. Check the current volume of *Sander's List of Registered Hybrids*, use one of the available computer programs, or check rhs.org.uk/search for orchid registration. If all is clear, complete the form and mail it to The International Orchid Registrar. The full address for submission is on the back of the registration page.

It is possible to register an outstanding hybrid made by someone else. To do this, first select a name and obtain permission from the breeder. If the breeder does not answer your request, you can proceed with the registration after six months. I used this procedure after I had used an unnamed cross as a parent. Remember, both parents must be registered before a hybrid is named.

Have fun and good luck. ■

Fred Bergman's first contact with orchids came at the University of Missouri where was studying for a degree in chemistry. After graduation, he got a job at the Midwest Research Institute in Kansas City Missouri. He built his first greenhouse in 1956. He has been growing orchids for 61 years, and grows mostly Phals because they grow fast. He says that at 81 years old, that's important. For further information he can be reached at 9401 East 103rd Street, Kansas City, MO 64134, USA or www.fjbergman@hotmail.com

This article was taken from the newsletter of the Saskatchewan Orchid Society, Volume 29, # 1.

Note there are no minutes in this issue because the February meeting minutes appeared in the March issue and there was no March meeting.