

FROM THE EDITOR

Ev Rilett

As the summer approaches look to the Summer Triangle and take notice of Delphinus, the re-assuring dolphin. To find Delphinus in the sky, find the Summer Triangle, Vega-Deneb-Altair. Draw an imaginary line from Deneb to Altair, and look just to the left of the Summer Triangle, closer to Altair. There you will see a small diamond shape, with a tail...Delphinus!

The Dolphin is referred to very often in the ancient myths because it formed attachments to man and because it would gather in schools when music would be played on the beach. The quintessential marine symbol, the dolphin appears in very ancient myths as mediator and peacemaker among both gods and men. These qualities were attributed to the dolphin because it almost always appeared after the passage of storms.

This is the story of Arion, son of Poseidon and the nymph Oneaea. He was a famous musician (writing the music of the Dionysian rites) and poet. As a young man, he had a protector, Periander, and with his help, he convinced the king of Corinth to give him a ship with which to travel to Taenarus in Sicily, where he'd been invited to participate in a music competition. He not only won first prize, but his new admirers lavished him with gifts that made him a very wealthy man. So wealthy in fact, that the sailors and captain of the ship decided to kill him for the riches. He knew his death was certain and so asked to die as a bard (Celtic Minstrel). His wish was granted.

He dressed in a tunic of gold and purple cloth, with jewelry around his arms; a lyre in his left hand and an ivory plectrum in the right, he went to the prow of the ship where he sang his last sweet passionate song to the sea. When he finished his song he threw himself overboard and the ship rapidly sailed away.

His music had been heard beneath the sea and a school of dolphins came to the surface, gathered him up and riding on one was carried back to Corinth. The dolphin ran aground and died, despite all Arion's attempts to push it out into open sea. Delighted with the return of his protege, Periander erected a monument in honour of the saviour Dolphin. The swiftness of the dolphins had him returned before the sailors, and when they told the King that Arion had stayed in Sicily because he'd enjoyed himself so much, Arion appeared in their presence and the sailors were all crucified in front of the monument.

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YOUR BOARD OF DIRECTORS

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Observatory – 905 689 0266

<u>SCHEDULE OF EVENTS</u>
<i>Hamilton Steam Museum hosts our General Meeting on the 1st Thursday of each month</i>
MAY
<i>05 – General Meeting</i>
<i>12 – Board Meeting @ Observatory</i>
<i>14 – BANQUET @ Paradiso in the Village Square in Burlington</i>
<i>20 – Sidewalk Astronomy @ Spencer Smith Park in Burlington @ 9.00 pm</i>

**HAMILTON CENTRE 4th ANNUAL BANQUET
FEATURING – JOHN NEMY**

**"Alien Worlds: The
Search for other Earths"**

Additional presentation:
The Stargazers Too

Saturday May 14, 2005
Tickets \$47.50

Astronomer & futurist John Nemy, presents a dynamic visual and musical look at the search for extrasolar planets.

"Humankind's perspective of its existence here on Earth keeps changing faster than we can comprehend. In the past decade a fundamental question since the beginning of time has been answered, solar systems other than our own do exist."

"Astronomers are more certain than ever that planets like our own exist in the universe. Now they just have to find them. More than 130 planets have been discovered around "sun" like stars and the search continues. Instruments and state of the art technology is being used by astronomers to search for earth like planets, John's presentation travels to Hawaii and Chile to find out more."

Additional presentation: **The Stargazers Too**

In Nemy's shows, he links humankind to the stars. Images from some of the best high altitude observing sites from around the world are accompanied by live narration, instrumentation and music from Nemy's latest CD "SKY".

LIST SERVERS

There are two list servers available for members to receive and contribute with informative conversation. Our local centre list. Get in touch with Mark Kaye (see Board of Directors List) and he will sign you up.

There is also the national list. Members must go the national web page to sign up for. <http://www.rasc.ca/computer/rasclist.htm>

MONTHLY SWAP MEET

Feel free to bring in any astronomical items you no longer need in your collection. It might be just what someone else is looking for. A table will be set up each month for items to be swapped that evening. So, clear out that closet space and make room for some new, slightly used astro ware.

Sidewalk Astronomy

Spencer Smith Park
In Burlington
@ 9.00 pm

- Friday May 20
- Friday June 17
- Friday July 15
- Friday August 12
- Friday Sept 9
- Friday Oct 7

Always a good time had by all. Members and guests alike. Many people pass through and are able to share an experience for the first time. Bring a scope if you have one or just bring yourself. Everyone can help. Hope to see you there.

A NEW LOOK FOR OUR WEB SITE – ANY IDEAS. A NEW FRESH LOOK IS IN THE AIR AND OUR WEBMASTER, SCOTT BARRIE IS LOOKING FOR IDEAS. THIS SITE IS FOR EVERYONE. LET'S MAKE IT SOMETHING SPECIAL. Contact Scott at [scottbarrie\(at\)homerom\(dot\)ca](mailto:scottbarrie(at)homerom(dot)ca) or call him at (905) 693-1469.

Observing Opportunities

Ken Lemke

It appears as if the warmer weather has finally arrived, and hopefully we will be blessed with many clear evening skies. While, I normally focus on objects in the evening sky, there have been a number of naked eye sunspots lately and I would encourage you to observe the sun periodically (using a proper solar filter, of course). It is interesting to watch a small sunspot come into view on the eastern limb and grow into a massive naked eye object over the course of a number of days. The sun is our closest star and one on which you can observe the constantly changing surface details.

Some of the events to observe in May and early June are:

* On the 12th, observe a waxing crescent Moon with the soft glow of earthshine on the balance of the disk. Always an enjoyable sight.

* On the 19th, about one hour after sunset, look above the southern horizon for a conjunction of Jupiter and a waxing gibbous moon.

* On the 31st, about one hour before sunrise, there will be a conjunction of Mars and an almost third quarter moon.

Look in the ESE.

* June 6th - new moon

* June 7th, about 30 minutes after sunset (in WNW) you can spot Venus about 6 degrees to the left of a thin waxing crescent Moon.

* Asteroid Ceres is "sailing" across the top of the Constellation Libra during May and June. Finder chart can be found on page 56 of the May issue of Sky and Telescope.

* Towards the end of May, Venus will be visible about 10 degrees above the Western horizon. It will continue to be with us for a while and is worth observing regularly and watch the planet go through various phases.

* There are numerous opportunities to observe double shadow transits on Jupiter during May, and I would refer you the 2005 Observers handbook (page 89) or any of the major astronomy magazines.

* On May 23/24, the Moon will occult Antares, unfortunately, we are too far North catch much of the event.

An activity I enjoy on these moderate, bug free evenings, is to sit in the backyard on a clear evening and see if I can pick out the constellations, and then do some exploring with binoculars. On many occasions, I've spotted something that I wanted to examine with my telescope on the next clear evening. It was a very pleasant and relaxing way to end a day. Enjoy the Night Sky



Photo by Colin Haig

Trillium Observing

Colin Haig

April 8th, the night before our Messier and Movie event, Bert, Carlos, and I were up at the Powis Observatory. You missed out on a spectacular evening. Although the parking lot is a bit wet (spring thaw not entirely done yet), everything else was great.

We had an opportunity to try out the new Trillium scope, and it is very impressive. Following the new colour-photo manual, its a straightforward process to get it up and running. The only tricky part is de-bagging and re-bagging the scope with the desert storm cover. That really needs 2 people to get it back in place.

Before it disappeared into the trees, the Trapezium in M42 made its debut, before I backed off to lower magnification. Zoomed out, it was easy to try for the fainter bits of nebulosity. Gossamer trails lead off from the edges of the nebula, and its dull haze in smaller scopes was positively amazing. No dark adaptation required!

Next it was on to Saturn, then Jupiter. Saturn was high in the sky, heading west, and the Cassini division was easily seen, with faint yellow/cream banding visible on the planet itself. Jupiter's moons continued their dance as their master climbed higher in the sky, skimming the tree tops.

I adjusted the secondary focus slightly to give more range on the manual rack and pinion, allowing for a broader range of eyepieces to be used without messing about. We were then able to dive in for greater detail on the equatorial bands, looking for Bert's elusive dark spots. Nothing was obvious tonight, but some definite greyer colour in the south.

Next along was M44, the Beehive cluster. It simply doesn't fit the field of view of the instrument, but was a pretty site through the finder scope. Using the finder's illuminated reticle

gives you a sense of scale, but remember to power it off when done!

Next in line, was NGC2392, the Eskimo nebula, that faint, small planetary with the brighter centre and distinct ring of fur around its face. Secretly, we all were hoping to say goodbye to the eskimo, with its connotations of snow and ice that we've suffered through all winter. With averted vision, details start to leap out. Yet if you stare directly at it, the edges disappear, leaving you with a sense it shrank suddenly. Its very faint and quite compact, but quite enjoyable.

Next around the sky was NGC2420, a tiny and relatively unremarkable open cluster in Gemini. I've never seen it, so thought it might be worthwhile. It wasn't. Moving on, it was time for another nearby object, the planetary nebula PK208+33.1 Perek and Kohoutek (of comet fame) developed an extensive catalog of these celestial donuts, the remnants of exploded stars, often illuminated by the remnants of the stellar core. They've been immortalized with the designation "PK" on the front, followed by galactic latitude and longitude. Personally, I find the PKs are a treasure trove waiting to be discovered. Unfortunately, this one is elusive, and I can't report seeing it. But The Sky 6 software insists its right there near Delta Cancri.

So, from disappointment to elation, with M67 being a spectacular open cluster, looking wonderful in a wide field eyepiece. Clear colour differences were visible, with the bulk of the cluster being young, hot blue stars, and a few dull red ones, which are likely older, foreground stars, in the vicinity.

From here, on to a couple of dull open clusters, NGC2678, 2664. And then on to another spectacular object, M3, the globular cluster with the very dense, bright core. The 16" RC really brings out a sense of depth, and reveals the stars clearly in the center of the object.

The next stop on our unplanned sky tour was M104, with its long, extended shape very obvious. The club's 17.5" newtonian is good, but the Trillium scope makes this galaxy outstanding. Even though it was relatively low in the sky, it was still distinguishable. M61 is another galaxy a short slew away, but was very faint in comparison. To me, it appeared like a figure 8 on its side, with a brighter center between two lobes. I think this one is worth imaging to account for the effect.

Perhaps we can snag this one soon.

Virgo is host (or hostess?) to a whole range of galaxies, and Messier's number 49 appeared much brighter than neighbouring M61, likely because it is an elliptical "E"-type, instead of an "SBbc" barred spiral. I lingered a while on this one, before moving to M90. Edwin Hubble's taxonomy of galaxies classifies this one as a "SBab".

Next in our random walk about the universe was another faint barred spiral galaxy, M91 also known as NGC4548. Here I reflected on what "NGC" was all about. This is Dr. J.L.E. Dreyer's compilation of many astronomical objects, bringing together a very rich collection of clusters, nebulae, galaxies, and a few oddballs or erroneous items. The NGC or "New General Catalogue" isn't all that new - it goes back to 1887 when it was first published. To put that in perspective, the club's Clacey scope was made in 1882, so you can bet Hamilton Centre founders were observing before this list came together! His updated Index Catalogs (IC) were published in 1895 and 1907, spanning the formation of the Hamilton Astronomical Society (1901) which later joined the RASC as the Hamilton Centre in 1909.

Con't on page 4

Trillium Observing Cont'd

The French astronomer Charles Messier left us with his list of objects, and that seemed to me high time to go back to the scope, with M87, M88, and M89 all targets. The first and last are both elliptical galaxies in Virgo. The spiral galaxy M88 didn't look like much to me. Another gem was M84, also an elliptical. From here I was on the M58 which reminded me of M91. M59 and M60 followed, with M60 being the brightest of the lot. M98 was very stretched out as far as this evening's galaxies go, and the big scope makes this much more satisfying. I logged M99 as "blobbish", M100 as "smaller", and M85 as much brighter than the previous three. The globular cluster NGC4153 was very compact. Open cluster Melotte 111 was very much a finder object, and globular M68 was still down in the murky skyglow from Hamilton. Messier 5 was stunning, perhaps one of the best globular clusters I've seen.

Messier 51, the whirlpool galaxy was looming overhead, and the big scope made it easy to pick out its component pair NGC5194, 5195 which appear to be cosmic dance partners. M63 didn't merit a note in my log, but M94's bright dense core was worth of attention. Faint and fainter buddies M105 and M109 were easy. M40 was the two star nothing that I'll always

PUBLIC EDUCATION

Public Education is very important at the Observatory. Among other events, our Centre is involved with Girl Guides, Scouts, and other groups interested in a guided tour of the night sky. We generally give a brief discussion, a slide show or other visuals, and then a tour outside with two or three different scopes. This gives the guests a chance to decide for themselves which type of telescope they like best.

It is wonderful to see the look on a child's face the first time they look through a telescope. Also, if you know of a group that may be interested in an evening under the stars call for a booking.

Call Patricia Marsh @ gassmann@mountaincable.net or a board member to find out more. Your help is always welcome.

suspect marked the home of a comet the Messier missed. By midnight, M13 and M92 in hercules were making their way up the sky, and 13's massiveness was balanced by its mates more compact nature. Bert chimed in with a few more objects he wanted to see, and by far the best was NGC4631, a huge, edge-on spiral galaxy neither of us recollected seeing before. We went back to M91 for comparison, and then on to NGC4571 which was a faint neighbour, also missing from both our lists of previously observed objects.

Finally, we wrapped up with another peek at Jupiter, ruler of the planets, and ended our observing at about 12:25am on the 9th. A big thank you needs to go out to all the people who helped make this spectacular night of observing possible, including our friends of the Ontario Trillium Foundation. Also, a special thanks to the clever person who attached the white nylon rope to the top dome door rope, as this made the close-up process simpler and faster. Happy Observing!

THE HAMILTON CENTRE OBSERVATORY: **From Highway 6 North of Hamilton.**

*Take Concession 7 East eastbound, cross Centre Road.
Continue on 7E, keep going past railroad tracks, to near end.
Observatory driveway is on the right just before the stop sign.*

From Mississauga or Milton.

*Britannia Road past Highway 25, Guelph Line, Cedar Springs Road to End.
South 1 Block on Milborough Townline to Concession 7 East.
Our gate is on the south side of the last lot (south west).
The observatory phone number is (905) 689-0266.*

LOANER EQUIPMENT

Thinking of buying your first telescope but wondering what kind to get? Try a beginner's night at the Observatory or ask Mike Spicer about his "loaner" 5" telescope which is easy to set up and very easy to use. Mike is offering newer members of the club one of these scopes to try out for a month or so. Mike also has an electronic eyepiece for video astronomy. Contact him at Mike Spicer – 905-388-0602

[DeBeneEsse2001\(at\)AOL\(dot\)com](mailto:DeBeneEsse2001(at)AOL(dot)com)



Photo by Colin Haig

Hamilton Centre, Royal Astronomical Society of Canada - Board Meeting

Thursday, February 16th, 2005 at the L. V. Powis Observatory, Flamborough, Ontario.

Board Members present:

Les Nagy	President
Roger Hill	Recorder
John Williamson	Treasurer
Mark Kaye	Curator
Ev Rilett	Orbit Editor
Ken Lemke	Observing Director
Victor Grimble	Secretary
Patricia Marsh	Public Education

Board Members Absent (with apologies):

Gary Colwell	Maintenance Director
Steve Barnes	Telescope Scheduler (Interim)
Colin Haig	Vice President

Guests:

Robin Allen, Darryl Maude, and Scott Barrie

The meeting was called to order at 8:08 pm. Motion 2005-02-16-A:

That the minutes of the January 13th, 2005 Board meeting be accepted, with the following amendment: Motion 2005-01-16-C, "That the lock be put back on and see lets see what happens." Should read "That the lock be put back on and see what happens" Moved by Roger Hill and seconded by Mark Kaye. The motion carried.

Directors Reports:

Recorder: Roger Hill had nothing to report.

Treasurer: John Williamson: Motion 2005-02-16-B: That the following people be accepted as full members of the Hamilton Centre: Brian Franks, Harvey Garden, Dave Gaylor, Hans Gokhruwala, Tim Rayner, Carl Russell, and Glenn Weston. Moved by Roger Hill and seconded by John Williamson. The motion carried.

Curator: Mark Kaye had nothing to report this month.

Publicity: Patricia Marsh noted that we will be hosting a group of Brownies, and she will need the slide tray. For the Mall display on April 16th at Limeridge Mall Community Booth (10 am to 4 pm), we have stuff from Sky and Telescope and Astronomy magazine.

Observing Director: Ken Lemke reported that the "Learn how to use your telescope" was a success. The Astrophotography workshop was cancelled and will be done on March 12th. Mike Spicer will do a Variable Star workshop on February 19th.

Vice President: Colin Haig was absent this month.

Orbit Editor: Ev Rilett stated that she needs articles and pictures.

Telescope Scheduling: Steve Barnes was absent this month.

President: Les Nagy reported that: 1) National Office sent a notice that waivers should be obtained from anyone whose picture is taken. 2) There has been no further contact regarding the trees.

Old Business: Les Nagy relinquished the chair. The board selected Roger Hill to chair and Mark Kaye to take minutes. Motion 2005-02-16-C: That Motion 2005-01-13-I regarding "The complaint against Les Nagy by Mike Spicer" be untabled. Moved by Ken Lemke and seconded by John Williamson. The motion carried. Motion 2005-02-16-D: That the complaint against Les Nagy by Mike Spicer was not a legitimate complaint. Moved by Mark Kaye and seconded by Victor Grimble. The motion carried.

Ken Lemke stated that at times the Board needs to do a better job of handling business between meetings and that the President needs to more clearly delegate this business.

The Secretary was directed to send a letter to Michael Spicer thanking him for his concern and that the board has handled the complaint at the February meeting.

Roger Hill returned the chair to Les Nagy, and Mark Kaye returned the job of taking minutes to Roger Hill.

Trillium Grant windup: All finances and expenditures are accounted for. Anyone who has put hours into Public Education in Hamilton or on the Trillium Scope should send this information to Victor.

There was a fair bit of discussion regarding the disposal of the remaining funds. Suggestions ranged from high-sensitivity television cameras to replacing the Dome with a roll-off roof.

CCD camera training: Motion 2005-02-16-E: That Steve Barnes be asked to set up training courses for the CCD camera. Moved by **Ken Lemke** and seconded by Mark Kaye. The motion carried.

Observing/movie nights: This year's Messier Marathon nights will be April 9th and March 5th. If the weather does not co-operate, a movie will be shown instead.

New Business: Scott Barrie reported that he had a copy to give to Colin Haig of "The Handbook for Not for Profit Organizations". Scott further stated that he wants to re-vamp the Centre's web site, and that he can also produce DVDs on how to operate the new scope.

GA: It was suggested that people might want to think about holding the 2009 GA at Tim Horton's Camp Onondaga.

Next Board meeting - March 10th, 2005, at the Leslie V. Powis Observatory.

Motion 2005-02-16-F: That the meeting be adjourned. Moved by Viktor Grimble and seconded by Roger Hill. The motion carried.

Respectfully submitted by Roger Hill, Recorder.

Hamilton Centre, Royal Astronomical Society of Canada - Board Meeting

Thursday, March 16th, 2005 at the L. V. Powis Observatory, Flamborough, Ontario.

Board Members present:

Les Nagy	President
Roger Hill	Recorder
Mark Kaye	Curator
Ev Rilett	Orbit Editor
Ken Lemke	Observing Director
Victor Grimble	Secretary
Steve Barnes	Telescope Scheduler (Interim)
Colin Haig	Vice President

Board Members Absent (with apologies):

Gary Colwell	Maintenance Director
Patricia Marsh	Public Education
John Williamson	Treasurer

The meeting was called to order at 8:08 pm. - The minutes for the February meeting were unavailable.

Directors Reports:

Recorder: Roger Hill had nothing to report.

Treasurer: John Williamson was absent this month

Curator: Mark Kaye had nothing to report this month.

Publicity: Patricia Marsh was absent this month.

Observing Director: Ken Lemke reported that the astrophotography workshop being run by Steve Barnes will be held on Saturday, March 12th. The April workshop will be on Collimating your Newtonian and Modifying your Dob.

Secretary: Victor stated that all Orbits have been mailed and all letters to newcomers have been sent. Colin is picking up the mail.

Vice President: Colin Haig noted that the mail he has is mostly for the treasurer. There was a (glowing) evaluation from the 4th Waterdown Brownies, who had a tour last month.

Orbit Editor: Ev Rilett stated that next Orbit deadline is April 1st. The email addresses will be fixed so they are not harvestable. As always, articles are needed.

Telescope Scheduling: Steve Barnes noted that only one request for telescope time has been received: for July 4th for Deep Impact comet event. A minor problem with the CCD camera will be rectified by SBIG soon.

President: Les Nagy reported that: 1) We have had one false alarm with the Alarm system.

2) There has been no further contact regarding the trees.

Old Business:

Trillium Grant Report: Grant has all the paperwork and the forms, and Victor stated that he believes that Grant has all the information needed to produce the report.

Banquet: The venue and speaker are booked. John Nemy has sent information to Steve Barnes. Tickets will be printed, and the cost will be \$47.50 per ticket.

CCD camera training: We may be able to start training within a week. Colin has started a superb manual on how to start up the telescope. A round of applause was offered to Colin for this.

Trillium and SX funds: Motion 2005-03-10-A: That we go ahead with the construction of a roll-off roof to replace the dome provided that the cost is less than \$3,000 Canadian.

Moved by Steve Barnes and seconded by Victor Grimble. The motion carried.

Mall Display: The Astronomy Day mall display will be on Saturday April 16th at Limeridge Mall. It was decided to hold further discussion via email due to Patricia being unable to attend.

GA: There was no further discussion this month.

New Business:

By-Law committee: Colin Haig, Victor Grimble and Ken Lemke offered their services for this committee. Submissions on ideas for changes were requested.

Security system: A method of avoiding false alarms will have to be found.

Speakers: Speakers for the next few meetings are needed. Some ideas were tossed around, but it was decided to hold discussion on email about this.

Work Party: Shingles are needed on the roof of the Chilton Building, and the outhouse. A new combination lock for the front gate is needed. The work party should take place on the weekend of Saturday, April 30th and Sunday, May 1st.

Next Board meeting - April 14th, 2005, at the Leslie V. Powis Observatory.

Motion 2005-02-16-B: That the meeting be adjourned. Moved by Steve Barnes and seconded by Mark Kaye. The motion carried.

Respectfully submitted by Roger Hill, Recorder.