

President's Report

Les Nagy

May 6th was a great day. It was Astronomy Day!

International Astronomy Day has been celebrated since 1973. Its a great way to spread the word of science and astronomy and maybe turn a mind towards more positive things. Information and the originators of this event can be found at <http://www.astroleague.org/al/astroday/astroday.html>.

Our observatory property was host to 13 hrs of fun, sun, and skies. The gates were opened around noon and soon after the place was busy with people setting up telescopes. Its been a while since the observatory was this busy, mainly because of all the cloudy weather we have had. The mosquito trap has been doing wonders in keeping those pests down too!



During the whole day, cookies, chips and drinks were made available to all, courtesy of the Hamilton Centre. In all, more than 50 people visited the observatory and actually looked through telescopes! Most of those who attended were members but there were many new visitors to our site and they all seemed to be delighted with the views of the sun during the day, and with the wonderful views of the planets and deep sky objects during the dark.

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Centre BBQ

Everyone is invited to share in this fun filled evening. The Observatory is hosting an evening of lots of food (courtesy of Mark Kaye – the extraordinary chef). He will provide the hamburgers, hotdogs and condiments. Bring your own drinks, deserts, etc. It is always a great day in any kind of weather. Looking forward to seeing you all there. If clear, lots of observing into the night.

SCHEDULE OF EVENTS

Hamilton Steam Museum
located at **106 Parkwood
Crescent, Hamilton, ON
L8V 4Z7**, hosts our *General
Meeting on the 1st Thursday
of each month at 8:00 pm.*

July

*14 (Friday) – BBQ @
observatory @ 5.00pm*

September

*7 General Meeting
14 – Board Meeting
place TBA*

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.*

YOUR BOARD OF DIRECTORS

President - Les Nagy - 905 388 1011 – [president\(at\)hamiltonrasc\(dot\)ca](mailto:president(at)hamiltonrasc(dot)ca)
Past President – Steve Barnes – [sbarnes\(at\)worldchat\(dot\)com](mailto:sbarnes(at)worldchat(dot)com)
Telescope Scheduler – Steve Barnes – [sbarnes\(at\)worldchat\(dot\)com](mailto:sbarnes(at)worldchat(dot)com)
Treasurer – John Williamson – [John.Williamson\(at\)sympatico\(dot\)ca](mailto:John.Williamson(at)sympatico(dot)ca)
Secretary – Victor Grimble – [secretary\(at\)hamiltonrasc\(dot\)ca](mailto:secretary(at)hamiltonrasc(dot)ca)
Recorder – Roger Hill – 905 878 5185 – [Roger.Hill\(at\)simpatico\(dot\)ca](mailto:Roger.Hill(at)simpatico(dot)ca)
Director at Large – Ken Lemke – [klemke\(at\)worldchat\(dot\)com](mailto:klemke(at)worldchat(dot)com)
Orbit Editor – Ev Rilett – 905 319 8864 – [erilett\(at\)cogeco\(dot\)ca](mailto:erilett(at)cogeco(dot)ca)
Curator – Mark Kaye – 416 885 6134 – [Mark\(dot\)Kaye\(at\)simpatico\(dot\)ca](mailto:Mark(dot)Kaye(at)simpatico(dot)ca)
Observatory – 905 689 0266

LIST SERVERS

Check out our newest addition of communications. We have a **new website** found at <http://www.hamiltonrasc.ca/new> . Also, we have a new forum linked from the new homepage including an interactive calendar which members can contribute to, found at the following: <http://www.hamiltonrasc.ca/forums>
Les Nagy will be making improvements to their appearance and function as the weeks go on.

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/rascclist.htm>

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 a board member to find out more. Your help is always welcome.

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.

DO YOU WANT A KEY FOR THE OBSERVATORY

- If you are a Key Holder please make sure you get your new key from John Williamson.
- If you are interested in becoming a key holder, you must be a member in good standing for one year, sign a release form and take a short Observatory Security Training evening.
- Please forward any questions you may have to Board Members.

President's Report Cont'd



Not only did we have a fun day with observing, socializing and eating, but some of us got some help with needed tweaks and repairs to our telescopes. This is one of the big benefits of being a member of a club like the Hamilton Centre. You can't get this kind of help by browsing the Internet. Sure you can get information, but you can't beat experience and helping hands when it comes to things like this.

Some of the visitors didn't like cookies or chips, so they found their own food.



For me personally, Astronomy Day was the most fun I have had for a long time. It was really wonderful to spend a day with friends at the observatory and to actually just do nothing but soak up the sun and skies.

Happening at the Observatory

The crew at the observatory on a maintenance day taking a well deserved break. Take a trip to the observatory and see all the changes that have taken place. The "Seven Sisters" will be the most obvious thing you may see. There has been a lot of cleanup and general maintenance on the buildings. Some members have worked very hard making sure the place is kept up and instruments protected. The work has only just begun. A steady state.



From The Editor

Ev Rilett

What can be said. Astronomy Day at the Observatory was a great success. It began with a mostly clear sky for the afternoon and pristine skies for the evening and night. The event opened at 1.00 pm and during the afternoon, only a few from the public showed up and were treated to the sun, a tour and good conversation. The real success of the afternoon was the number of members that showed up. Many of the regulars were on hand to host the day, but also quite a few who had never been to the site before or only a handful of times. They got to know their way around the site and what the centre has to offer them. Not only in the way of facilities, but also in the learning end of things.

The evening brought quite a bustle of activity. Many visitors came through and we had constant tours and viewing on the go. Saturn, Mars, Jupiter and of course the Moon all made for a huge awe struck crowd. There was one child approx 8 years old who was really glued to the eyepiece and mentioned a couple facts about Saturn and Jupiter, so I asked where he'd learned this. He told me from reading and that he had a telescope. I asked him what kind and he replied "a 6" f8 newtonian reflector." I gasped. "Me too!" I said we needed members like him and he told me he was a member. I was totally amazed. I hope he's able to come out now and then. His knowledge was most impressive.

One member **Steve Sawyer** came out in the afternoon with his family. They had a good time and Steve returned in the evening with his new LX200 which he'd never used before. Colin helped him set it up and show him how it worked. He got some observing tips from some of the seasoned observers and had a fabulous time. He stayed for comet Scwachman Wachman. I venture to say we'll be seeing him more often. I certainly hope so.

For my part being able to instill some enthusiasm in our guests and new members is always a thrill. Hearing that "WOW!!!" and seeing bright eyes (believe me they can be seen in the dark or at least sensed) is one of the most rewarding aspects of astronomy.



A totally successful day.

Remember that as a member, this is your observatory and only you can get the most out of it. It makes a wonderful backyard. Wishing all of you a terrific safe summer & fun holidays with lots of good observing. See you in the fall.



A reminder to all members that the Hamilton Centre has a library. Located at our Powis Observatory, the centre's library is loaded with a lot of great astronomy books. Just recently we recieved more books thanks to a generous donation made by Stephen A. Bayzik. The library is free to use and borrow from for all members, so come out and enjoy it.

John Williamson

M51 - It is a composition of 30 x 30" at ISO's 400, 800 and 1600. Stacked and rotated with images plus, my Canon 300D and a RCX 10"
Photo by Andrew J. Blanchard

AND NOW . . . A VERY SPECIAL ANNOUNCEMENT

MARK KAYE has deservedly won the National Service Award for his outstanding contributions to astronomy. Here is a copy of the letter of recommendation written by Roger Hill. Enjoy and be proud.

Mark Kaye Service Award Nomination Letter

The Hamilton Centre of the Royal Astronomical Society of Canada would like to nominate Mr. Mark Kaye for the Service award. Not just for outstanding service to the Hamilton Centre, but to the Society as a whole.

About a decade ago, Mark Kaye showed up at a Hamilton Centre meeting. He introduced himself to several people, as his wife and his young family had recently moved back to southern Ontario. He was 'shopping around' for an RASC centre, as there were several within driving distance of where he had moved to. His reputation had preceded him, his name was recognized and fortunately for the Hamilton Centre, Mark decided to join. This reversed a minor trend, since Alister Ling and Peter Ceravolo were lost to Edmonton and Ottawa, respectively.

In the intervening years all members of the Centre have come to know Mark Kaye quite well. He is a modest and unassuming fellow, which, considering his accomplishments, is quite a feat. He has served on the Board of Directors of the Hamilton Centre every year he has been eligible, as National Representative for many of them, and President for three consecutive years.

Each year, Mark hosts two barbecues. One is held at his cottage near Kingston, and the other is held at the Hamilton Centres Observatory. In the case of the latter, he organizes the entire event, donating meat and buns, and ably manages to cook for dozens of people. His well-traveled meat thermometer is always at the ready, on guard protecting all! The event has become a fixture on the Centres calendar, and despite some atrocious weather over the years, is always well attended.

One of his most visible accomplishments, though, is that he helps run the RASCList. As one of the moderators, he does such a superb job that only occasionally does the list get off-topic. It is to his eternal credit that most people know the line has been crossed just before Mark steps in! Considering the varied personalities of the people across Canada, he accomplishes this task with a deft and sure touch. He also manages all of the Centres lists, the Board list, the announcement list, and the general chat list.

Mark has given more talks to more Centres than anyone who is not an RASC President. By now, most people who have attended Centre meetings across Canada have had a chance to see slides of his cottage near Kingston, one of the few buildings anywhere with a telephone pole through the bathroom. An 'outside the box' thinker, we have all been entertained by tales of LEDs throughout his cottage that indicate whether the roof on his rooftop observatory is open or closed. He has little thought of trying to keep his devices and good ideas to himself, and shares freely all the tips and techniques that he has created over the years to make the observers life easier. Not content to merely pass on his own ingenuity, Mark is also very quick to point out where he picked up a good idea, giving credit where credit is due.

As Hamilton Centre President for three years, Mark had to steer the Centre through it's share of problems. It's not necessary to go into them here, but his common-sense was appreciated as tempers flared and discussions got heated. That same attitude was enormously helpful in getting the healing process started. In the final year, the Centre applied for, and received, a major grant from the Ontario Trillium Foundation. Regardless of any personal feelings, there is no doubt that without his calm and steady hand on the tiller, the project would not have gone any further than being a minor footnote in the history of the Hamilton Centre.

Mark's organizational and motivational talents aside, he is a master of construction and repair. As an example, he took an old 10" mirror in an ancient rickety mount and turned it into a fine classic Dobsonian. The scope is built like a tank, and is an absolute joy to use. Marks attention to detail and skill turned an unused liability into one of the Centres most useful telescopes.

Each year, Mark changes the locks at the Hamilton Centres observatory. He ensures that we have enough keys to hand out to those who need them. When we ran into some difficulty with vandalism, he ensured that the gate could be locked, too. During this time, he would be one of the first on-site, trying to repair the damage, cleaning out the locks that had been siliconed or epoxied, and helping to put together the video surveillance system.

Mark Kaye would be an asset to any Centre in the country. The Hamilton Centre is truly fortunate to have him as a member. There is no doubt that the Centre, and the Society as a whole, would be a much poorer place without him.

For these, and many other reasons, the Hamilton Centre would like to submit Mark Kaye for consideration to receive the Royal Astronomical Society of Canada's Service Award.

Sincerely, and on behalf of the Hamilton Centre,

Roger Hill

Former Hamilton Centre President and Service Award recipient, 1999.

{The president of RASC, Peter Jedicke was at our June General Meeting and re-read the nomination letter as if seen by National's eye's and awarded Mark with a beautifully inscribed medallion. Congratulations Mark on a well deserved honour. I'm sure I can speak for everyone in the centre on the pride we all feel for you on receiving this prestigious award. Ev Rilett}

[Can Elephants Help Us Speak to the Stars?](#)

Astrophysicist to Gauge Elephant-Speak

Dr. Laurance R. Doyle

Here is an interesting article from Africa and my coach when Andria and I climbed Kilimanjaro a few years back. I am sure Eddie won't mind if we reprint it.- Andy Blanchard

What do you get when you combine elephants, astronomers and extra-terrestrial beings? Just possibly, the key to understanding languages of the universe. I am an astronomer working at the SETI Institute, where we try to find radio signals from intelligent species elsewhere in the universe. It's All about Communication. All animals communicate. We have discovered that there is even a way to measure the information they convey to each other. It's called "information theory," and it was developed by a mathematician named Claude Shannon in the 1940s, when he was charged with the task of quantifying the information being sent via telephone. Information Theory measures how much info is transmitted in terms of binary units called "bits."

Underwater Chat - In a study with two colleagues of mine, Dr. Brenda McCowan and Sean Hanser of UC Davis, I applied this mathematical system to dolphins by measuring how much information they were whistling to each other. We recorded sonograms of dolphin whistles and measured the complexity. We could only measure what the dolphins could be saying rather than what they were saying. The dolphin whistle communication system was amazing, showing a structure similar to the syntax in human languages. We learned that baby dolphins babble just like baby humans before learning to mimic adult dolphin whistles. We also discovered that dolphins have a system as complex as human speech.

The Pachyderm Potential - To complement our dolphin data, with the assistance of Eddie Frank of Tusker Trail, we will be recording elephants in East Africa. Eddie Frank will be leading the expedition. Elephants are an excellent example of a large land mammal that has a complex social structure. (Some linguists think human social complexity led to human communication complexity.) Recording elephants could help us understand their behavior, and consequently it may even help us figure out what they're saying.

From Sea to Shining Stars - If we get a signal from intelligent species elsewhere in the universe, we will need to measure its complexity using Information Theory before we can hope to translate it. We will be able to apply the same mathematics to measure how our earthly complexity compares to an advanced extra-terrestrial civilization.

We're All Hitched - John Muir, the founder of the Sierra Club, said, "When you go to study something, you'll find it hitched to everything else in the universe." Who knows? An East African expedition with Tusker Trail to listen to elephants may actually help us talk to intelligent beings from the other side of the universe some day.