



Regulus



The Newsletter of the Kingston Centre of the Royal Astronomical Society of Canada –Aug 2005

Coming up... RASC Regular Meetings

Friday August 12

Members BBQ at Mark Kaye's
No meeting at Queens in August

Saturday September 9 7:30 pm

Queen's University
Stirling Hall Theatre D
Members night

KAON Public Observing

Queen's Observatory
Ellis Hall

Saturday Aug 13 9:00 – 11:00

Saturday Sep 10 9:00 – 11:00

AstroYak

Friday August 26 7:00 pm

Friday September 23 7:00 pm

at the home of Kevin Kell and Kim Hay.

Members Observing

Aug 5 or 6 – Camden Lake

Sept 4 – NIRVANA

Sept 30-Oct 2 Fall 'n Stars



Volunteers for RASC-KC events, take heed and celebrate with me. No longer will you have to answer silly questions like... "who are you?", "What are you" or "can you read my palm?". Yes that's right, we now have one of those professional outdoor vinyl type signs with real grommets! The banner looks great. Look for it at public events for quite some time.



The RASC 2005 General Assembly was held in Kelowna BC. Activities included a tour of the DRAO. See Leo Brodeur's recap of the GA on page 3

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President's Tid Bits

By Kim Hay

Sitting here looking at a blank screen trying to come up with something to say for this upcoming issue of Regulus, is really tough this month.

In the past I have talked about upcoming events, what we as a Centre have done and have asked what you the member would like us as a Centre to do.

Over this last weekend we had our monthly Astro Yak and an Executive meeting at our house. The business of the Centre got done, with some encouraging ideas for the future, and we were all pleased with how quickly the meeting went, but I sat back and just looked around and listened both on Friday and Sunday.

We have a great bunch of individuals that care about this Centre, and not all who care about the Centre are on the Executive. We have a great bunch of volunteer's for our Centre and this is proven over and over again, at every event we have done in the past, and I hope the ones we will do in the future.

Though at times, we have conflicting dates and times for some of our events, and we cannot always pick a perfect day or time for everyone for everything we do, the main thing is that when we do get together we enjoy each other's company. We are astronomers, members of a fantastic Centre but mostly, friends. We share a great passion for the night sky and have lots of other interests as well. I am proud to be a member of the Kingston Centre. I appreciate all the work that everyone has done, because that is what makes our Centre strong.

You are probably wondering, so where is all this going?

Well, its just one way to say "Thank You" to every member our Centre. It's all about you, the members, the Centre, the friendships. If you

have not come out to enjoy one of the Saturday night KAON or members observing sessions, Astro Yak nights or Star parties, come out and see what it is all about.

Have a great summer, and we all look forward to hearing of your Summer Time Observing fun at the September meeting. If you can't make it in person, then perhaps you will share it with us in a note to Regulus.

Thank you all, for being such great members, and volunteers, you are all the best!



Observational Astronomy for the Novice Course

The RASC Kingston Centre will be offering a course in beginning astronomy this fall. The objective of the course is to introduce members and others to the wonderful world of astronomy. No previous experience is necessary – we'll cover all the basics. Based on the "New Observers to Visual Astronomy" or N.O.V.A. course, we will cover such topics as

- How to Observe
- Motions of the sky and seasons
- Maps, distance, position and brightness
- Telescope types and using them
- The Celestial sphere and deep sky objects
- Moon and eclipses
- Solar system
- Stars

The course will be Tuesday nights, September 13th to November 8th from 7:00-9:00. Cost is \$125, which includes One year RASC membership, Beginners Observing Guide and course materials. At the conclusion participants should qualify for the "Explore the Universe" observing certificate (if they did their homework!). For more info or to register for the course, email the Kinston centre at [kingston \(at\) rasc \(dot\) ca](mailto:kingston@rasc.ca), or leave a message on the centre phone line at 613-377-6029.



Members Observing Dates

Ken Kingdon

August - Observing at Camden Lake

It's a busy month, so we will simply have a single night at Camden Lake, on the clearest of either: Friday August 5, or, Saturday August 6th.

Time: plan to arrive on-site between 7 - 8PM. Mosquitos should be finished - but "the wise" will bring repellent anyway.

Directions to the Camden Lake Wildlife Area: From the Hwy. 401 (exit #599) at Odessa, drive north all the way (20 minutes) on County Road #6. Proceed through Yarker, and stay on CR#6 through Colebrook north on CR#6 (ignore the Centennial Park Road) to the hamlet of Moscow.

Another 1 km north of Moscow brings you to Card Road. Turn left (west) onto Card Road and stay on it for 3 km to its western terminus in the big parking lot just past the farm bldgs. You can setup scopes on the grassy portion of the parking lot along the north side.

September - Labour Day Weekend trip to Nirvana

This is the best accessible observing site in Eastern North America - and right in our backyard.

Dates: the long weekend from Friday Sep. 2 to Monday Sep.5.

Directions: from Hwy 401 at Napanee, drive north 1-hour on Hwy 41 to civic #19213, which is about 10 minutes past Bon Echo Prov. Park. Turn east (right) onto the gravel road called the Irving Lake Airstrip Road. After a bridge look for an obvious "Y" in the road. Take the right branch up a small grade, proceed 100 meters onto the abandoned runway, then drive 400 m to its southern end. Park and set-up on the west side, OFF of the abandoned airstrip.

- stay for one or more nights. Many Ontario/Quebec observers will also be there, some for just the "big night" Saturday.
- daytime dining just 2 km south on Hwy.41 at

the Moosehorn Restaurant. Don't miss their great breakfast each morning 9 AM.

- camp fires are not permitted at Nirvana, and there are no public washrooms.

- camping is best done at nearby Bon Echo P.P. If desired, motel accommodations can be arranged at the Swiss Inn in Denbigh (website <http://www.swissinn.northcom.net/> or phone 1-800-844-0284

October - Mars Observing at Lemoine Point Conservation Area

During all of this week, Mars gives its best view for the next 13 years. Don't miss this fine opportunity!

Dates: the first clear night beginning Monday, Oct.24 through to Sunday, Oct.30.

Time: at 7pm in the South Parking Lot of Lemoine Point C.A.

Directions: proceed south on Bayridge Drive to its very end at Front Road. Turn west (right) onto Front Road, and proceed past the Airport almost 1km. At the very end of Front Road, turn right into the Conservation Area, and proceed 300m to the South Parking Lot.



2005 General Assembly Leo Brodeur



Champagne bottle over looking Okanagan Lake at the entrance to the Pyramid Winery

Set in the beautiful Okanagan Valley, this years GA was a wonderful gathering. Many people from across the various RASC Centres made the journey to the annual meeting. The weather was

nice, warm but not too hot and with only a day of scattered showers. Kelowna is set in the centre of the wine growing and lake region of interior British Columbia. The snow capped mountain vistas greeted us each morning and the sunsets on the lake were a lover's delight. Our visits to the local wineries to sample the various wines were memorable and great fun. We had many great presentations and talks and I have highlighted only three below.

This year the speakers were from various disciplines and locations. Our honorary President, David Levy gave a wonderful talk on the role of astronomy in English literature. I am always intrigued by the references to the night sky that have been made by so many great writers over the centuries. The vivid expression of their writings and tapestry of words are truly awesome and inspiring to the astronomer and romantic at heart. That David presents with such reverent devotion to detail belays his great passion for life and man's pursuit to describe it in the written word.

We were also treated to a wonderful presentation by Jack Newton on his latest exploits with his CCD camera and telescope. I cannot imagine seeing with my own eyes such beauty as the Milky Way in the southern sky.



Jack Newton and Andreas Gada at the DRAO

Truly the call to see the southern sky in all its breath taking glory must stir even the most placid heart to undertake the pilgrimage to the south. Once again, GA attendees were treated to a tour of the Newtons' home by Jack and Alice as they

so graciously did at the 1998 Victoria GA. A breathtaking location, amazing home theatre with surround sound, and I mean "sound", and his dome with the latest CCD equipment. Their location in Osoyoos on the western slope of Anarchist Mountain can only be described as breathtaking. The view north up the valley towards Mirror Lake and south into the USA was outstanding! The ever wonderful hosts, their hospitality and Jack's patience at the scope, were most appreciated by the many people that made the trek. The view of Saturn in daylight (3PM) was inspiring.

Not to be forgotten was the journey further up the mountain to see the beautiful majesty of Ahja and Jackie Segal's home. Perched hundreds of feet higher up the mountain from the Newton's home; we were treated to food and drink by our most gracious hosts as we stared speechless at the view. Their retirement home was beyond description with one side of the house facing the valley virtually all in glass. To say that we couldn't get enough of the view would be an understatement! Add to this a custom built, 'state of the art' observatory and telescope, one truly had the impression that you were in "heaven". Ahja is actively pursuing his passion of supernova search using his fully automated remote observatory, truly impressive work by a most talented astronomer.



Jamie Matthews hams it up for the camera

Last but not least was the presentation by Jaymie

Matthews (aka Sponge Bob) for the Ruth Nortcott lecture. He is an engaging speaker with incredible wit and a flair for the unexpected he kept us laughing throughout a most engaging presentation on M.O.S.T. The Micro variability and Oscillation of Stars (MOST), micro satellite is an incredible program that has produced results beyond expectations and within budget. The science being performed by this newest generation of satellite, a first for Canada and the world, is cutting edge and one for which we can only wait to here more from. A party animal, Jaymie happily shared his latest discoveries and great stories to all throughout the night right up to departure time the next morning, 6AM!

Another highlight was the trip to the Dominion Radio Astrophysical Observatory (DRAO) just south of Penticton near White Lake. Located in a secluded valley the facility boasts a 7-antenna radio telescope array that produces wide-angle pictures of the sky in the radio portion of the spectrum. The array is moveable and allows for large parts of the sky to be covered in fine detail.

As well we had a tour of the Canadian Large Adaptive Reflector (CLAR) currently under trials. Using a helium filed balloon their goal is prove the feasibility of suspending a focus platform above a series of 4,000 independently moveable receivers (300m diameter) to collect radio waves. If successful the concept would be used to create the square kilometer array. We wish them luck on such an ambitious project!

The entire weekend was a resounding success made possible by the tireless efforts of the Okanagan Centre members. Gracious hosts with limitless effort and enthusiasm we were truly spoilt with the beauty of the valley and its great people! I left the GA invigorated by the beauty of the valley and inspired by so many great people eager to share their passion for the night sky in all its glory and majesty.



July meeting of the RASC Kingston Centre

Kevin Kell

Our guest speaker Richard Schmude drove into town late Thursday night after a drive up from Buffalo. He stayed here in Yarker and headed off doing tourist stuff Friday and we all met up for Dinner at Kelseys on Princess Friday night. It was a small turnout for dinner (6 people) and we headed off for the meeting. Again a small turnout (10? 15?) until Brian Hunter brought in a wayward class of summer students (20? 25?). Richard is a dynamic teacher to say the least. Grabbed *everyone's attention*, no one nodded off, all positive feedback to every answer from the audience, including the really really bad questions. His photometry work is fascinating and he was inspiring enough to get people talking about helping out.



Richard Schmude fields a question during the July meeting

Richard got a small twee bird wrapped gift, a book of historic Kingston, we went to break and the kids left. The wine was a "Get Smashed Chardonnay" 2004 (a tribute to Comet Tempel 1) which was won by Fred Barrett. We raised another \$13 Friday night for the Banquet.

Ken followed up with 12 images in the what's up in the sky session, we ran through observing reports and headed home.



Sky is the Limits Festival

Susan Gagnon.

Photos by Kevin Kell

On July 9th, Kim, Kevin, Hank, David R., Steven H., Leo, Ken and Susan attended the annual Sky is the Limit Festival, a very popular



Susan and Hank setting up at Sky is the Limits

March of Dimes fund raiser. We have been setting up a booth for info and scopes for solar observing for several years now and it is always a good chance for Centre publicity.

The weather was unusually uncooperative with heavy rain in the am. Many of us did not see the sun until almost 2 pm. We also found ourselves somewhat isolated geographically from the other participants. We were the only group set up north of Bagot St. which runs through City Park, and activities usually scheduled right on the street in front of us were relocated.

When the rain let up enough to set up scopes we amused ourselves with a nice photo of a galaxy attached to the backstop across the field. Once the sun came out we were off to the races. Terry and Melissa from Queen's came by in the afternoon with the new Coronado. Several good photos were taken at the eyepiece with digital cameras.

Despite a slow start we had well over 100 visitors to our booth and scopes. We had lots of

shelter from rain and sun and many freebies were given away. There was a solar system puzzle for the kids to do, and a spot the meteorite test.



Solar Observing sign – in the rain!

Amazingly enough, most people do not confuse chocolate covered almonds with meteorites.

With a good supply of safety pins and tape we also seemed to beat the wind factor. It was great to get out and compare our scopes with the Hydrogen Alpha, there were 3 prominences that were quite large and easy to see in the blood red field.

Thanks to all who participated. It was a good event- even though we are still cleaning the face paint off of our eyepieces!



Belleville RASC and Bon Echo Provincial Park

Doug Angle

The Belleville Astronomy Club, now the RASC Belleville Centre, has been going to Bon Echo Provincial Park for a weekend every year. They have invited the Kingston Centre to participate, and I went along this year for the second time. I went a day early, camping at the Hardwood Hills campground, then joined the Belleville group at the group camping for the weekend.

Thursday the weather was cloudy, but warm. Bon Echo is a great park for all sorts of summer activities. We canoed the lake, and spent a lot of

time swimming. There are also many hiking trails, but we didn't partake this year. Friday, we met up with the Belleville group, and relocated to their group campsite. We relaxed and chatted,



Belleville RASC members relax and discuss plans for evening observing

commenting on the clouds moving by and the thunder rolling in the distance, when suddenly, without warning (aside from a half hour of thunder!) the skies opened up. We made a mad dash to get everything covered. Joe Shields ended up in his van with 3 large dogs. The water ran over the ground in sheets, coming down faster than it could soak in. The rain didn't last, but the clouds did, and so no observing Friday either.

Saturday we fared a lot better. It was a hot and sunny day, and the group split up to enjoy their particular interests. The evening remained clear, and we went to one of the beaches to observe. This area shows on light pollution maps in the gray, meaning virtually unaffected. In fact the famous "Nirvana" observing site is only about 5 miles north of the park. However, this night the transparency wasn't that great, and I recorded the limiting magnitude at about 5, only slightly better than home.

There was great interest in finding Pluto that night. Joe Shields tried in vain with his 10", and a couple of other members with smaller telescopes, also to no avail. I did find it in the 24", but it was very faint even then. I also observed the Lagoon and Trifid nebulae, globular clusters M4, M22 and NGC6638. One of my

personal favourites is B86 - the Inkspot. NGC6520 is a nice open cluster that provides a convenient marker right at the edge of this dark nebula. The fact that the nebula is right in the densest part of the Milky Way makes it a stunning contrast to the 10-to-the-large-number of stars also visible in the same field with my 31mm Nagler.

NGC 457 is a beautiful open cluster in Cassiopeia. It is called the Owl Cluster, because it looks just like an owl with outstretched wings. M27 and M31 rounded out the evening, then we packed up about 2:00 a.m. Sunday was time a rather slow day of packing up for another year. Of course we see our friends from Belleville at Fall 'n Stars, Starfest, and other activities throughout the year, but I found this was a special time to relax and share in camping and observing. Thanks to our friends in Belleville for the invitation.



Our Fiftieth Anniversary Tour of Holleford Crater

Leo Enright

On Saturday afternoon, July 16th, an enthusiastic group of a dozen people, composed of Kingston Centre members and their guests and friends, took part in a tour of the Holleford



*Leo Enright at the Bronze Plaque inside the
Holleford Crater*

Meteorite Crater. I was pleased again to lead the group in exploring this significant astronomical,

historical, and geological site, and to help the participants become familiar with the events that occurred there a half-century ago. I called it our “Fiftieth Anniversary Tour,” not because I have been leading groups to the location for that long – I have been doing it for somewhat more than thirty years – but because it was exactly fifty summers ago that the Holleford Crater’s “discovery process” was launched. Though the weather was warm and somewhat humid, the skies were completely clear for our tour, and the



Ken Kingdon takes some pictures at the apparent edge of the crater. The actual crater is about 20 metres below the current ground level at the edge, and 200 metres at the centre

rain that came in abundance later that night did not appear until well after we had left the Verona restaurant where some of our venturers shared a hearty dinner after the tour had ended.

As was pointed out at the beginning of our tour, it was in June 1955 that the Dominion Observatory’s search of aerial photographs was undertaken under the able direction of Canada’s Dominion Astronomer, Dr. Carlyle S. Beals, a daunting search of 200,000 photographs that identified the Holleford feature as a possible astrobleme and led directly to a geological investigation at the site and subsequently to the three forms of geophysical studies that were also completed at the site in the summer of 1955. The generally positive conclusions of these studies pointed the way to the ultimate study, the diamond drilling program, that was eventually begun at the site in 1956 and completed in 1957.

Though there were many aspects of the investigation of the Holleford feature that were having their fiftieth birthday, for me personally this tour also marked the twenty-sixth anniversary of two significant tours I had given of the crater. It was the twenty-sixth anniversary



The cap from drill hole #1. Earlier seismic and gravimetric tests supported the impact crater hypothesis, which was confirmed through the drilling program. The bit at hole #1 jammed and broke, and still remains 1128 ft down.

of the July 8th, 1979 tour when I showed David Levy, then a Queen’s University graduate student and fellow Kingston Centre member, and two other Centre members through the crater on their first trip to the site. On August 4th, less than a month later, I also gave a tour to David and his Montreal Centre friend, Constantine Papacosmas, both of whom had participated in our Kingston Centre mall display the previous day, and both of whom later that year presented to our Centre the original 10" telescope (built by Constantine and David) that we promptly named in honour of Dr. Douglas. Though it has seen some modifications in the intervening quarter-century, this Douglas Telescope remains a cherished possession of our Centre.

Several years ago, before he passed away, Professor Ed Kennedy, a past President of our Society, visited the Kingston Centre and spoke to us about the importance of keeping alive the memory of those whose considerable accomplishments had been recognized within our Society. He was referring to people like Dr.

Peter M. Millman, a universally recognized authority on meteorites and craters and whose encouragement of the photographic search program led to the positive identification of the Holleford site, and to Dr. C. S. Beals, the leader of the entire investigation at Holleford, and to Dr. Douglas, whose achievements in astronomical research are known to some of our members. I hope that tours of this nearby crater, which can be undertaken relatively easily by our Centre members, are assisting us in doing what Professor Kennedy suggested.



Dieter takes a break at drill hole #1.

I find it gratifying to note that new members of the Centre choose to join in such a tour and are indeed pleasantly surprised to learn that so much significant astronomy and geology “happened right here”. Equally gratifying is the fact that long-time members of the Centre who have “done the tour” on previous occasions are there again, as some were on July 16th, to review and confirm their knowledge, to glean a few more details, and to gain a better appreciation of the “Holleford event of a half-billion years ago.”

To those who were unable to join the tour of July 2005, I would encourage you to consider joining the “Fiftieth Anniversary Tour of Holleford”, if we choose to have one to mark the events that

occurred at the site in 1956 or 1957, or even if we choose to do one again later this year.



Fall n Stars
Kevin Kell

Fall n Stars is our annual star party hosted with the RASC Belleville centre. This year the event will be Sept 30 to Oct 2, and we will be at the Vanderwater Conservation Area once again.

We will have observing sessions both Friday and Saturday, along with speakers, swap table and several other events.

Registration forms will be available at the regular meetings, and on-line soon.

The Kingston Centre of the RASC

Newsletter Submission Info:

I can take most common formats, although I prefer plain text. Pictures should be sent as image files in attachments separate from the articles.

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Deadline for the September issue is **August 19**

Subscriptions: Members of the Kingston Centre receive *Regulus* as a benefit of membership.

Advertisements are free to members of the Centre. Commercial advertising is \$20/quarter, \$40/half page, \$100/ full page and should be in electronic format.

Contributions are more than welcome.

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Kingston Cosmic & Events Calendar

by Kim Hay

For more information, refer to the RASC 2005 Calendar, or the RASC 2005 Observers Handbook, available from Kevin Kell, or from National Office. Also see <http://www.rasc.ca/kingston>

Date & Time	Events
Aug 4-5	Members Observing at Camden Lake. Directions on page 3
August 4-7 Thursday-Sunday	Starfest, Mount Forest ON www.nyaa-starfest.com
August 4-7 Thursday-Sunday	Saskatchewan Star Party, Cypress Hills, SK. duke.usask.ca/~ges125/rasc
August 4 Thursday	Farthest Lunar Apogee of 2005 & New Moon 23:05
August 5-6 Friday-Saturday	Stellefane Convention, Springfield, VT, www.stellefane.com
August 8 Monday	Venus 1.0° to left of Moon best SW of North America Neptune at opposition
August 12 Friday	Persied meteor Peak 1:00 pm.
August 12 Friday	First Quarter Moon 22:38
August 12 Friday	Markfest- BBQ on Loughborough Lake. See the web for directions in the members only section http://members.kingston.net/rasc/securemenu.htm
August 13 Saturday	KAON Observing Session- Ellis Hall Queen's Observatory 9:00-11:00 p.m. for more information visit http://members.kingston.net/rasc/pubobs.htm
August 19 Friday	Full Moon 13:53
August 23 Tuesday	Mercury at greatest elongation W (18 □)
August 26 Friday	Astro Yak at the home of Kevin Kell & Kim Hay visit http://members.kingston.net/~rasc/indexsec.htm for directions
August 26 Friday	Last Quarter Moon 11:18 Moon 1.0° S of the Pleiades 3 am
August 31 Wednesday	Uranus at opposition
Date & Time	Events
Sept 1-4 Thursday	Alberta Star Party www.syz.com/rasc/asp.htm
Sept 2-4 Friday	Nova East Starparty halifax.rasc.ca/ne

Sept 2-5 Friday - Monday	Members Observing - Labour Day Weekend trip to NIRVANA see http://members.kingston.net/securemenu.htm for more information and directions
Sept 3 Saturday	New Moon 14:45
Sept 6 Tuesday	Jupiter 2.7° N of Crescent Moon 9 pm
Sept 9 Friday	Regular Meeting Stirling Hall Theatre D 7:30 p.m. <i>"Members Night"</i>
Sept 10 Saturday	KAON Observing Session- Ellis Hall Queen's Observatory Afternoon- Solar Observing 2:00-4:00 pm 9:00-11:00 p.m. for more information visit http://members.kingston.net/rasc/pubobs.htm
Sept 11 Sunday	First Quarter Moon 7:37
Sept 17 Saturday	Full Moon 22:01 Saturn 1.2°S of the Beehive Cluster 6 am.
Sept 22 Thursday	 Fall Equinox 6:23 pm
Sept 23 Friday	Astro Yak at the home of Kevin Kell & Kim Hay visit http://members.kingston.net/~rasc/indexsec.htm for directions **Special Night** BBQ to celebrate the Equinox. Time 6:00 pm to 10:00 pm.- Bring a salad or desert to share. Burgers, Dogs, and Drinks provided.
Sept 25 Sunday	Last Quarter Moon 2:41
Sept 30- Oct 2 Friday-Sunday	 <i>Fall'N' Stars 2005</i> Star Party hosted by RASC Kingston & Belleville Centre's see www.rascbelleville.ca/fallinstars for more details- get your registration forms at the Kingston Centre August BBQ and September Meeting, or visit the Fall N Stars url.

For all other Star Parties for the Summer and Fall Season visit

http://www.telusplanet.net/public/fenertyb/sp_list.htm

WebSite Passwords for Member-only areas: