



H O R I Z O N

LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA
New Brunswick Centre
THE ROYAL ASTRONOMICAL SOCIETY OF CANADA



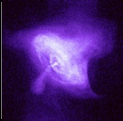
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Meeting Notes

2010 GA Wrap Up!

Astrophotos!

July/Aug /Sep 2010



SRAC/RASC Centre du NB Centre
Réunion / Meetings

Event: General Meeting
When: October 16, 2010 at 1:00pm
Where: Miramichi , NBCC
 Enter side door from parking lot and sign in at Security Desk and proceed to room.

Event: Monthly Meeting / Annual Meeting
When: November 20, 2010
Where: Saint John, NB
 Annual Meeting 10:30am
 General Meeting 1:00pm
 Location and Room To be Announced

William Brydone-Jack Unit (Fredericton)

A local group of members meet in Fredericton monthly for meetings and observing.

When: October 12, 2010 at 7:00pm and
November 9, 2010 at 7:00pm
Where: Fredericton, UNB Campus
 2 Bailey Drive, Room 203
www.frederictonastronomy.ca

Saint John Astronomy Club

Meetings consist of talks on constellations, the solar system and other astronomical topics, as well as Show & Tell, observing reports and Ask the Astronomer.

When: October 2, 2010 at 7:00pm
Where: See website for latest info on location
<http://sjacnb.tripod.com/>

Beauséjour Astronomy Unit (Moncton)

The Beauséjour Astronomy Unit is a observing unit of the RASC New Brunswick Centre. We meet various times monthly for observations. Our various observing sites include dark sky locations in the Indian Mountain area, Memramcook, Riverview and Barachois. We promote understanding of astronomy through public education and observing for the hobbyist and the public. For more information or call us at (506) 852-4567 or (506) 386-1516

www.geocities.com/beausejournb

Inside this issue :

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Editor's Report

By Paul Gray

It is finally here! Yes Horizon will hopefully be back on schedule now that summer, star parties, and the 2010 General Assembly are all a thing of the past. It has truly been a whirlwind of a summer for our centre and I can say I am very proud to be part of this New Brunswick Centre and all it has done.

To start I want to let everyone know once again that this is your newsletter. If you want to see it full of photos, stories or observing reports then please send them to me! Anything astronomical will be considered for the newsletter.

In the next issue you will find many photos as a recap of the 2010 General Assembly. Elsewhere there will be a brief report by me from the chair of the GA committee. A full report with our final financial numbers will be presented at a future meeting and will be included in a future Horizon.

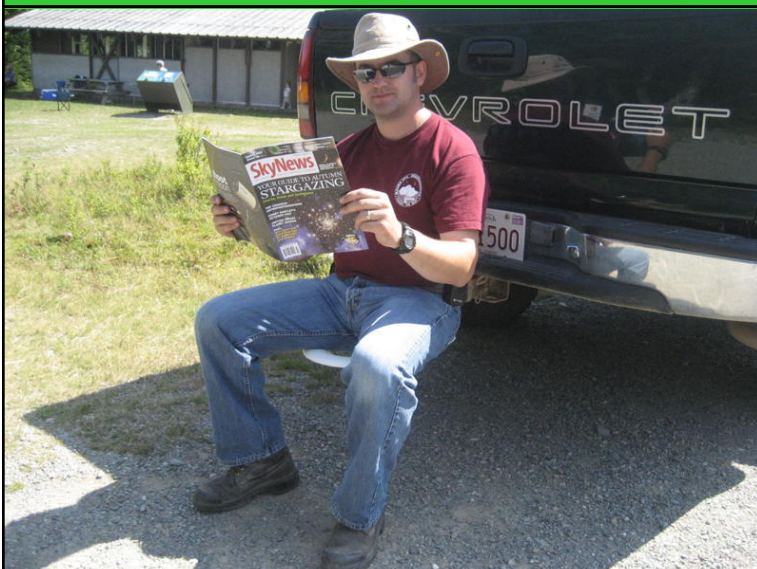
Clear skies!

Summer Milkyway

This months coverphoto was taken by Paul Gray during a summer family vacation to Tancook Island, Nova Scotia. Located 6 miles out of Chester the island has roughly 120 residents and very dark!

This photo is a single, 30 second exposure at ISO 1600 with a Canon Xsi. The sky is amazingly dark and after only minutes of dark adaption the Prancing Horse is easily visible to the unaided eye.

Snapshots from Around the Centre



Is that a trailer hitch Roger is sitting on? Hold on a minute, is he reading sky news?



Ahh it is a trailer hitch but one that has a purpose on those light night observing runs to dark remote locations!

RASC NB LIBRARY BOOKS

Available to members in good standing.

SRAC NB LIVRES DE LIBRAIRIE

disponible aux membres.

A Walk Through the Heavens

Milton D. Heifetz and Wil Tirion

A guide to stars and constellations and their legends

Agenda Celeste editor Damien Lemay

Douze mois de decouverte du ciel au Quebec,
mai 2004 - avril 2005 Softcover

Atlas of the Moon by Antonin Rukl

Hardcover , 224 pages

Discovering the Universe

Neil F. Comins and William J. Kaufmann III

480 Pages, with CD

Explorons l'astronomie by Mary Lou Whitehome

(Skyways, en français)

Looking Up by R. Peter Broughton

A History of the Royal Astronomy of Canada

Hard Cover , 288 pages

Many Moons by Diana Brueton

The Myth and Magic, Fact and Fantasy of
our Nearest Heavenly Body - 256 pages, soft cover

Seeing in the Dark by Timothy Ferris

How Backyard Stargazers are Probing Deep Space
and Guarding Earth from Interplanetary Peril

Hardcover, 379 pages

Sky Atlas Companion

Softcover, 281 pages

Descriptions and data for all 2700 deep sky objects
Atlas 2000. Second edition. Softcover

Skyways by Mary Lou Whitehome

Astronomy Handbook for Teachers

Softcover, 114 pages

The Meteorites of Alberta by Anthony J. Whyte

Softcover, 290 pages

Descriptions and stories about Alberta Meteorite Falls
First edition. Softcover

March Meeting Report

By June MacDonald

Our 2nd VP Marc opened the meeting, welcoming everyone & reviewing the agenda.

June gave a brief talk about a “Sky & Tel” article she read about merging galaxies. There is a small ancient (10 billion yrs. old) cluster of dwarf galaxies in the constellation Eridanus, approx. 166 million Ly away, which are colliding. Called the Hickson Compact Group 31 or NGC 1471, the fact that these galaxies are as old as they are and are just colliding now, is of great interest to astronomers. They know there is a merger occurring, because the velocity of the hydrogen gas that envelops the galaxies, is chaotic – as the galaxies merge, their gravities pull the gas in different directions. All this perturbation provides the fuel for bursts of star formation. There are many new stars in this group, very few old stars. Astronomers feel the outcome of the collision will be a single, elliptical galaxy. Also on show was a photo of the HUDF (Hubble Ultra Deep Field) pin pointing a small group of galaxies from the >500, that were born when the Universe was less than 1 billion yrs. old – approx. 800 million years, to be exact. There are galaxies that are bursting with star birth. The photo was taken with 800 exposures at 21 min. per exposure on average, over 11.3 days of exposure, through 400 orbits, between.

June reviewed of Sagittarius for constellation of the month. Sagittarius, known as the Archer, is best seen in August. It is a centaur (half man & half horse) pictured as an archer. There are a few stories attached to this constellation, one of which involves an illicit affair between a mortal man & Hera (wife of the king of the gods, Zeus) who produced a son despised by humans & gods, who lived in isolation on an island filled with horses & who produced offspring that were called centaurs – half man, half horse. The other tale is of a young man who was an accomplished hunter & lover of the arts, who had his image placed in the heavens in his honour. You can choose which story you prefer! The archer’s arrow is pointed at the scorpion, in revenge for the death of Orion, who was killed by the scorpion’s sting. Sgr has many beautiful objects to be seen, using anything from the naked eye to the largest of scopes. The asterism “the Teapot” is in Sgr. It is easily found in the southern sky, at its best in August around 9pm. The densest part of the Milky Way is seen through Sgr; the Sagittarius Star Cloud area is thought to be the most exquisite spot in the heavens. There are many Messier & NGC objects to be seen: M8, M17, M18, NGC 6818 & 6569 to name only a few. 14 of Sgr stars are known to have extra solar planets. The oldest star name in use belongs to the top most star in the handle – Nunki. It is taken from an ancient Babylonian city & is used only for Sigma Sgr.

There are also 3 meteor showers connected with Sgr.- June 8-16, June 1-July 15, as well as a daytime shower in Jan/ Feb. There is an area here called “The Arches”, which has many massive young stars clustered over an area 1 Ly in ra-

dius, which is the most compact cluster of stars in the Milky Way. The Galactic Center lies here, with a massive black hole at it’s center – Sag A* (star) This area is violently active, with a lot of star birth & death. It’s “rough in the ‘hood”.

Observing reports: Marc viewed Kemble’s Cascade & is busy following Peter’s program of capturing all the Messier objects he can using his binos. Adrien hasn’t been getting any action whenever he’s tried some solar observing so far this month - hasn’t seen 1 sunspot. On a positive note, he finished the “Explore the Universe” program. Chris, James & Ted saw what they thought was the Horsehead & a 24-36 hr. moon. Emma saw zodiacal light last week. Don was disappointed viewing Mars as he couldn’t make out details on the planet’s surface.

During Show & Tell June showed the 2 new books “History of Astronomy” & “The Secrets of the Universe”. Adrien showed everyone his new eyepiece. Tim was in the news again – a 2 page spread in “Sky News”, the May issue. Chris reported he had been speaking to Fundy Park representatives/outreach managers at the Fredericton market. Chris brought posters of the HUDF & gave one to someone from each of the cities.

Guy gave a presentation on the dangers of solar observing. Since the Sun is the closest star, we look at it a lot. However, while there are many things to observe with the Sun – eclipses, sunspots, solar prominences, & transits – there are also dangers to solar observing. We need to be aware that there is the risk of blindness (solar retinopathy) (viewing without filters or incorrect/ill-fitting filters), that they are preventable & how we can avoid these hazards. Many of the general public believe they’re protected because the sun is hidden. Education is the key to prevention. Careful set up, i.e. signage, secure placement of telescope, tripod, etc., proper use of filters & warning people to use caution are all ways accidents can be avoided. For example, if you don’t have a proper solar filter, to view an eclipse, you can safely use welder’s filter #14.

Paul showed some of his latest astrophotographs & gave another update on the GA planning. He showed the actual GA budget, which is looking good & mentioned that 39 had already registered, the St. Andrews tour was half full at 29, the Fundy tour had 26 signed up. The BBQ will take place inside Lady Dunn cafeteria hall due to liquor license restrictions. We will have a birthday cake celebrating our 10th anniversary at the BBQ. The registration desk will be open for 2 & 1/2 days, from 12 pm Wednesday until Saturday at 12pm, closing for meal times. There will be pick up transports available for Wednesday to Friday inclusive. There are 5 tours for the WBJO, one of which is now full. Calls are open for paper submissions. There are letters going out to local businesses as well as companies that sell astronomy equipment asking for donations for door prizes, etc.. Things are moving along well with everything. It promises to be a great GA & as the time draws closer, it is more exciting.

April Meeting Report

By June MacDonald

Peter welcomed everyone & reviewed the future meeting dates. He mentioned Nova East is Atlantic Canada's longest running star party & it is being held Sept. 3 this year in Smiley's Park in N.S.. He reminded the group that it is election year for RASC-N.B. & asked people to consider coming forward to participate in their Center. Peter also showed very briefly a few screen shots of the RASC-N.B. & National websites. He showed a few pictures of the renewed activity on the Sun – some sunspots; where for the last few years, there has been little or no action on the Sun. Now we can be on the alert for auroras. Peter reminded the group to be sure to read the interview Tim had in the April issue of Sky News magazine. He reported on the progress of the "Tour of the Messiers" he & some of the group are following. It can be difficult to get out there when life is busy, but especially when the weather doesn't cooperate. Doggone clouds & rain.

Curt gave the "What's Up" for April. There have been a few sunspots & a few instances of faint aurora. When looking through the northern section of our galaxy, it has much less dust, so you can see farther into the deep sky – into galaxy country. The moon will be near first quarter & Venus will be above M45 on Apr. 24, so there will be some great observing opportunities that evening if the weather cooperates. (Now we know at the time, there wasn't any cooperation from the cloud gods.) The day after first quarter moon, would be a good time to see the "straight wall" around 8pm, Apr. 22. The full moon on Apr. 28, is called the "pink moon". While there are other names for this moon, this name is because the pink flares are out in abundance at this time of the year. The moon will be above Venus May 6 & it will provide (weather depending of course) a great photo-op. Mercury is in inferior conjunction Apr. 28; Mars buzzes the Beehive mid April & is a distinct orange colour; Jupiter is low in the East in the morning; Saturn's rings are close to 1.7° by late May, so you might be able to see a few more moons due to the lack of glow from the rings. For those who are comet chasers, there are 3 to be on the look out for: 81P Wild 2 is at mag 9.5, C/2009 K5 McNaught & C/2009 R1 McNaught is at mag 8. April 22, the Lyrids meteor shower will be best around 3am.

Ted gave a talk on M51. He gave the group a bit of background on Vincent Van Gogh. Vincent was a painter & developed his own style of post impressionism, using thick applications of paint & distinctive brush strokes, also using lots of yellow in his paintings. He painted many scenes which included the night sky. Ted studied these & described what constellations/objects were in the paintings: Café Terris was in France, looking south & showed Scorpius & Jupiter; Starry Night on the Rhone included the Big Dipper & also had city lights in the picture, which were a new concept at the time; Starry Night was done from the asylum 2 years before his death & showed Aries in the bleak scene. M51 is in Canes Venatici; it contains Lacerta, which is a red supergiant. M51

has a "companion"- NGC5195, which is a galaxy that is actually passing behind M51. At the heart of M51, is a super massive black hole; it looks like there are 2 disks of dust.

In the observing reports: Ted got in a brief spell of observing before an early bedtime the evening before the meeting. David McCashion took a few pictures of the moon.

Show & Tell: Peter showed off his "Hubble 5 Star", which is a tool to help collimate a telescope; Don showed his new 20x80 binos from Celestron; Ted passed around his new astronomy activity book for kids, which also teaches as well as providing some fun games for kids to try. It is full of information, puzzles, crosswords, word finds, a maze, etc.. Chris found an LED 1.5 watt multi coloured light at Wal-Mart & suggested people not forget the interesting read in the article "Bring Back the Night", in the May issue of Sky & Tell. Roger showed everyone his "dovetail saddle" for his equatorial mount.

Emma gave a talk about "Doomsday 2012" & why we shouldn't be scared out of our underwear. You can check the website www.2012hoax.org, but yes, it is a hoax. The scare is centering on the apparent prediction of the end-of-times, when the Mayan (ancient Mexican civilization based in the Yucatan Peninsula & Guatemala & from which descendants continue today) calendar comes to an end, which is Dec. 21, 2012. The Mayans based their calendar on multiple cycles of time, the last of which is about to end. The Mayans counted their dates from a date that was of religious & cosmic significance for them, calculated the numbers & on Dec. 21 this year, their calendar will show a string of zeros, with nothing else to come after. People have connected this to a prediction of a "never before occurrence" of an alignment of the Sun, Earth, Galactic Center & the Ecliptic, as well as talk of Planet X coming out of nowhere & crashing into the Earth, annihilating us & the planet. However, there is no big alignment, the authors of the books got their calculations & their information wrong & there is no nemesis Planet X. So, keep up your credit card payments & make plans for New Year!

Paul gave a National Council meeting update re a fee increase of \$3.00 for this year, which will be voted on at the Annual Meeting in July, here in Fredericton. National is planning to hire an Executive Director to help with the burden of the large volume of work connected to running a large organization. He also informed the group of the award winners from our center to be announced at the GA this year: Curt will be given the Service Award; Ted, Don, Chris & Paul the Chilton award for their contributions to the IYA effort (Mary Lou's New Telescope, Star Finders & the Dark Sky Preserves) Paul also gave an update of the GA plans. Don showed the labels for the wine bottles – there are 5 in total, commemorating: WBJ Observatory, the GA logo, Hopewell Rocks tour, St. Andrews Fundy Boat tour & our own RASC-N.B. logo. All are very nicely done & will look great on the wine bottles. As of this meeting there were 64 registered. Rene Doyon will be speaking on the topic of Extra-Solar planets & how the James Webb Space Telescope (JWST) will help in their search.

OBSERVERS' SCORECARD

	Explore the Universe	Messier	Finest	I. Williamson Lunar	Deep Sky Challenge	Dark Nebulae	Herschel 400	Levy Deep Sky Gems	Caldwell	Arp Galaxies	Abell Galaxy Clusters	Hickson
Gerry Allian	101	93										
James Ayles	37											
Adrien Bordage	100											
Bob Crossman		110	28									
Charles Doucete	110	110	110				65					
Ted Dunphy	102	110	110	51	10	8	265					
Colette Fortier	87	28										
Paul Gray	97	110	110	46	31	20	238					
Peter Jensen	12	73										
Don Kelly	110	110										
Mark Laflamme	106	30	2									
Danny LeBlanc		110	110				127		8	21	21	9
Emma MacPhee	78	110	110	5								
Curt Nason		110	110									
Mike Powell	70											
Detlef Rudolph	41											
Chris Weadick	71	26										

This section is intended to inspire our members to get out observing by promoting a friendly competition. The left column includes our members who have reported their successes to the scorekeeper, Paul Gray. To be included please contact Paul Gray at: editor@nb.rasc.ca

SRAC/RASC Centre du NB Centre Executive / Exécutif

<i>President/Président</i>	Peter Jensen	president@nb.rasc.ca	
<i>1st Vice-President/-Président</i>	Curt Nason	firstvicep@nb.rasc.ca	506-659-6507
<i>2nd Vice-President/-Président</i>	Mark Arsenaull	secondvicep@nb.rasc.ca	
<i>Secretary/Secrétaire</i>	June MacDonald	secretary@nb.rasc.ca	
<i>Treasurer/Trésorier</i>	Emma MacPhee	treasurer@nb.rasc.ca	506-386-1516
<i>Past Pres./Président sortant</i>	Paul Gray	pastpresident@nb.rasc.ca	506-472-6978
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	James Ayles		
	Ted Dunphy		
	Chris Weadick	chris.weadick@gmail.com	506-457-0774
<i>Website Chair</i>	Tim Doucette		506-472-6978
<i>Newsletter Editor</i>	Paul Gray		506-472-6978
<i>Light Pollution Chair</i>	Chris Weadick		
<i>Equipment Chair</i>	Eldon Rogers		
<i>Library Chair</i>	Ted Dunphy		
<i>Education Chair</i>	Don Kelly		

Newsletter Submissions

Deadline for the next issue is October 10th.
Submit by email: snpgray at nb.sympatico.ca
1068 Kingsley Road, Birdton, NB. E3A 6G4

Visit our Website at
www.nb.rasc.ca

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www.yahoo.com