

Vol. 14 Issue 2

Spring 2013

# H O R I Z O N

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



*'X' Marks the Spot!  
Can you find it?*

*Lunar X*

Imaged using a C9.25 and a QHY8 CCD camera on  
April 17, 2013 from  
DeepSkyEye Observatory.

Photo by Tim Doucette



**EVENT HORIZON**  
**Astronomy in New Brunswick**

SRAC/RASC Centre du NB Centre  
Réunion / Meetings

**When: June 1, 2013 13:00**

**Where: Kouchibouguac Park  
Outdoor Theatre**

**When: June 15, 2013 13:00**

**Where: UNB Fredericton  
Forestry-Earth Science Building  
2 Bailey Drive, Room 203**

**When: September 21, 2013 13:00**

**Where: Moncton (Location TBA)**

**When: October 19, 2013**

**Where: Fredericton  
Wu Centre, UNB Campus**

[www.nb.rasc.ca](http://www.nb.rasc.ca)

NB Astronomy Clubs  
Réunion / Meetings

**William Brydone-Jack Astronomy  
Club (Fredericton)**

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

**When: June 11 at 19:00**

**Where: Fredericton, UNB Campus  
2 Bailey Drive, Room 104**

[www.frederictonastronomy.ca](http://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 maybe observing.

**When: June 8 at 19:00**

The SJAC meetings are normally held on the first Saturday of the month at Rockwood Park Interpretation Centre.

[www.sjastronomy.ca](http://www.sjastronomy.ca)

**Find us on...**

**FACEBOOK**

<https://www.facebook.com/RASC.NB>

**TWITTER**

<https://twitter.com/rascnb>

**Star Parties 2013**

**Kouchibouguac National Park  
May 31 - June 1**

**COW Mactaquac Provincial Park  
July 12 - 14**

**Mount Carleton Provincial Park  
August 2 - 4**

**Fundy National Park  
August 30 - September 1**

## President's Report

by Curt Nason

As of May 13 our Centre membership stands at 66, including two new members. Welcome to Jolene LeBlanc in Kingsley and Amelia West in Saint John! Since the last newsletter, Daniel LeBlanc has completed 15 years as a member. Also renewing since the last newsletter are Rosanna Armstrong, Daymon Baker, Marilyn Bregg, Peter Jensen, Eloi Lanteigne, and Clifford MacKenzie. Thank you all!

Spring is usually a busy time for public outreach and this year the trend continues. Centre outreach events reported since March are (date, number of public participants, event):

October 13, 2012, a sky tour for 15 people in Bathurst

March 12, a presentation to 17 Physical Geography students at Simonds High School in Saint John

March 12, a badge presentation for 22 Guides and leaders in Rothesay

March 18 a presentation to 154 grades 3-5 students at Donald Fraser Memorial School in Plaster Rock

March 19, a badge presentation for 24 Guides and leaders in Saint John

March 21, a presentation to 18 students at

Simonds High School in Saint John  
March 21, presentations to 120 grade 7 students at Steenberg Primary School in South Africa

April 11, a presentation and solar observing for 23 grades 7-8 students at Fundy Shores School in Dipper Harbour

April 14, a presentation for 6 members of the Norton Young Naturalists Club

April 17, sidewalk solar / night observing for 69 people in Saint John over four sessions

April 19, a presentation for 27 people at the Expo Art & Nature event in Notre Dame

April 20, 25 visitors to an Astronomy Day display at Lancaster Mall in Saint John

April 20, observing for 15 people at Rockwood Park in Saint John

April 21, solar observing and a presentation for 12 members and parents of the Norton Young Naturalists Club

April 30, a presentation and observing for 33 people at Rockwood Park in Saint John

May 7, 55 people visited a STEM Expo display at Barnhill School in Saint John

May 7, solar observing and a presentation for 28 people at Rockwood Park

May 8, solar observing and a presentation for 10 people at the Crescent Valley Resource Centre in Saint John

Other events include a STEM Expo at

Bliss Carman School in Fredericton on March 16, and Earth Hour displays and observing on March 23 in Fredericton.

Significant changes are being made to the governance structure of our National Society to comply with the Canada Not-for-profit Corporations Act, which came into effect in 2010. Rather than vote for an Executive, we will elect Board members, and the Board will select the Executive from within their ranks. All RASC members vote individually (and likely electronically) to elect the Board. The current Executive will become Board members during the General Assembly in late June, and elections for three other Board members will be held prior to the GA.

The Centres' National Reps will compose a National Advisory Council to make recommendations to the Board. Some membership types will be dropped and a Family membership will likely be introduced. These changes will have minimal effect on our Centre, other than a need to revise our By-Laws within a year. See the Members section of [www.rasc.ca](http://www.rasc.ca) for more information.

Enjoy the summer star parties!

**2013 Star Party and Events  
Committee  
by June MacDonald**

The “Star Party Season” is upon us! The plans are in place with only a few final details to complete. We’re only two weeks away from our first observing weekend and although the weather is unknown, everything else is a go.

Kouchibouguac is our first beginning May 31, finishing on June 2. If you haven’t reserved a campsite, please do so now as campsites are booked up quickly there. We are using campsites 190, 191 & 194. Be sure to tell the park staff you are part of the RASC astronomers’ group.

Yvon Hachey will be giving a “What’s Up” talk on the Friday at 20:00 at the Outdoor Theatre (if it rains it will take place in the theatre at the Welcome Centre). There will be solar observing Saturday and Sunday and of course we’ll be using our telescopes and binoculars to share the night skies with any members of the public who join us on Friday & Saturday evening. After the public go beddy-bye, we will have the opportunity to stay up late into the wee hours, doing our own night time

observing and developing baggy eyes.

As there will not be a group supper on Saturday, don’t forget to make your own arrangements for that meal. Our May RASC general meeting was deferred until the star party, so that meeting will take place on Saturday, June 1 at 13:00 at the Outdoor Theatre.

We’ve put our request in for warmer weather and clear skies, but get out those rabbit feet, rosaries & horse-shoes just in case!

Don’t forget the dates for the other 3 astronomy weekends:

**COW (Mactaquac): July 12 - 14**  
**Mount Carleton: August 2 - 4**  
**Fundy: August 30 - September 1**

There will be a group supper at both the COW and Fundy Park on the Saturday evening. Each weekend will have solar observing and of course more baggy eye night time observing. Please book your campsites for all the parks ASAP and let them know you are with the astronomer group, so they we will put us all in the same area.

(Also, the parks want to know how many people are taking part.) We must make an application to the Dept. of Transport to get permission to use green laser pointers at each park, so if you plan to use a green laser pointer at any of the parks, please e-mail Emma ([emmamacphee@yahoo.ca](mailto:emmamacphee@yahoo.ca)) and provide her with your name, postal address & phone number (ASAP for Kouchibouguac).

Well, that’s it for updates. Our “constellation” of star parties is ahead of us, let’s get together and look up!

Your Star Party & Events Committee

June MacDonald  
Emma MacPhee  
Adrien Bordage  
Curt Nason (*ex officio*)

## Resurrection of an All Sky Camera

By Mike Powell

The Saint John Astronomy Club, at one time, had an All Sky Camera placed at the UNB Saint John Campus. This camera had been there for many years, but with the movement of staff and other changes at the University, the camera access had been lost and its use went to the wayside.

In early 2013, members of the SJAC decided to resurrect the camera and move it to a new spot, where there would be darker skies and easier access. Paul Owen of the SJAC, who lives in Hampton, offered the use of his backyard shed to mount the camera, and a place in his house to store the computer.

Volunteers Adrien Bordage, Peter Jensen, Mike Powell and Paul Owen then went to work installing the camera in its new home. Over the course of a week or so, the wiring was completed, the software and networking was installed, and the camera was placed in a new housing and installed on the side of the shed.

Thanks to the time and efforts of the SJAC members, the SJAC All Sky Camera is back in service.



### *The Crew!*

*Peter Jensen, Adrien Bordage, Paul Owen (SJAC) and Mike Powell*



### *It really Works!*

*Testing the internet remote control software to the all sky computer inside Paul's home.*

For more info on the North American All-Sky Camera Database see.  
<http://AllSky.ca/>

**Astronomy Book  
Review!**  
By Peter Jensen

**THE SKY'S DARK LABYRINTH  
TRILOGY**

THREE NOVELS BY Stuart Clark

From the web: "Stuart Clark is a widely read astronomy journalist. His career is devoted to presenting the complex world of astronomy to the general public. Stuart holds a first class honours degree and a PhD in astrophysics. He is a Fellow of the Royal Astronomical Society and a former Vice Chair of the Association of British Science Writers"

**2011 Book 1**  
*The Sky's Dark Labyrinth*

This first book starts in early seventeenth century Europe. It's the semi-fictional story of Johannes Kepler, Tycho Brahe and Galileo Galilei and the times in which they lived. Written in a novel format, this book brings to life their daily lives, the great risks they took to bring the truth of the cosmos to the world.

\* It was hard to put this book down, the intrigue and heresy persecution these astronomers faced was really brought to life. One word to describe this book: Gripping!

**2012 Book 2**  
*The Sensorium of God*

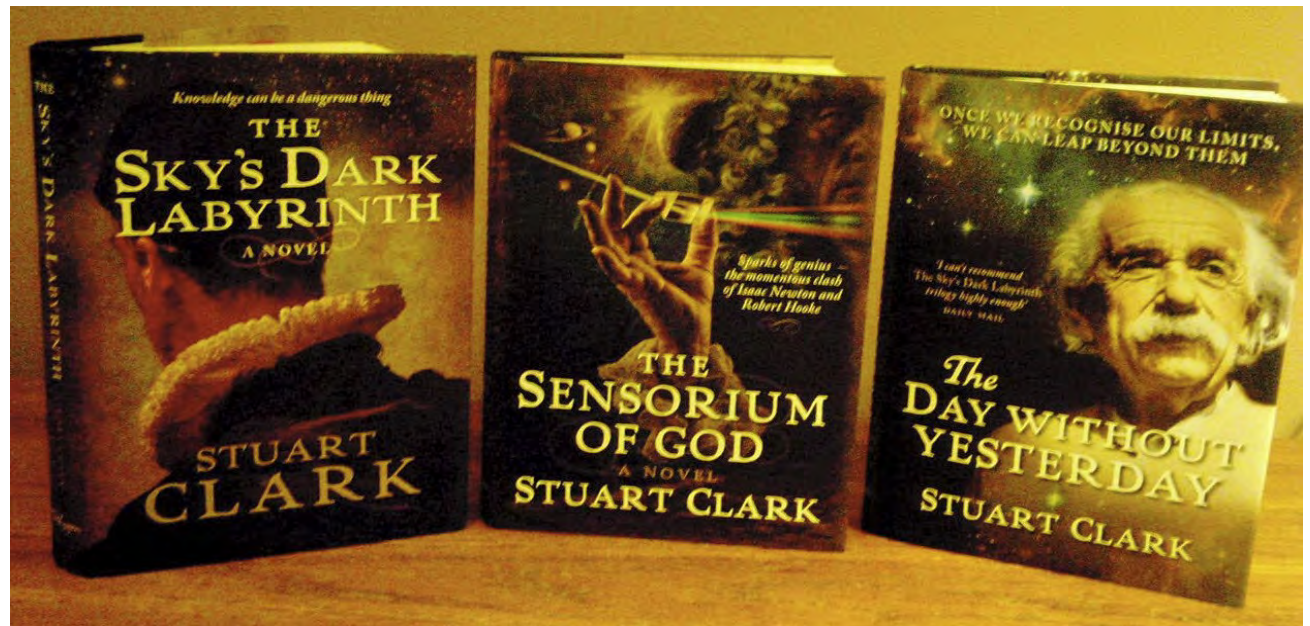
This second book starts in the late seventeenth century Europe. It's the story of Edmond Halley, Isaac Newton and Robert Hooke. The movement of the planets is still a mystery. These guys had great ideas and theories but also argued and held grudges.

\* This book was quite moving. To read about their personal lives as well as their great achievements makes the reader feel what daily life was like back in their day.

**2013 Book 3**  
*The Day without Yesterday*

This third book starts as Europe is going into World War I. It's the story of Albert Einstein and Georges Lemaître, a Belgian physicist. Einstein had quite an interesting life. As the war ended and he has proven his theories, he is now in the international spotlight. Lemaître thought about the moment when the universe came into existence.

\* I've never known much about Georges Lemaître. This book lets the reader understand the lives of these two great physicists.



## RASC NB Telescope Rental Information

The RASC NB Centre telescopes; namely the Coronado PST, the 8" Dob and any other telescope acquired by the Centre; may be borrowed at no charge by any Centre member in good standing under the following terms:

The normal borrowing period is approximately one month (i.e., between meetings), although alternative periods may be arranged through the Equipment Manager depending on demand and other circumstances.

A member may borrow only one telescope at a time unless there is no demand for the other for the period.

A member may retain a telescope for more than one period upon request, provided no other member has requested the telescope by the end of the period (normally, end of the Centre meeting).

Requests for a telescope should be made to the Equipment Manager at least three days prior to a meeting to allow for arrangements to be made. Normally, the telescope will be transferred at a meeting. If a member is unable to attend the meeting to return or obtain a telescope, that member should made arrangements for another

member to deliver or collect the telescope and inform the Equipment manager of the arrangements.

If the member is unfamiliar with the use and care of the telescope, that member has the responsibility to request training prior to accepting the telescope.

The member assumes responsibility for the condition of the telescope while in possession, and may be held responsible for compensation for the loss of or damage to the telescope while it is in their possession, as decided by Centre Council.

A member who does not abide by this policy may have borrowing privilege revoked, at the discretion of Centre Council.

A non-member of the NB RASC Centre may rent a Centre telescope at a nominal fee of \$10 per month under the following conditions:

The telescope has not been requested by a Centre member for that period.

A member who is familiar with the borrower shall act as a sponsor for the borrower, and shall assume responsibility for the telescope as per the terms for borrowing by a member.

The fee shall be paid in advance to the Centre Treasurer directly or through the sponsor.

## Astro Gear Spotlight! What's it used for?

By Peter Jensen



*Meade Series 4000 Plössl 9mm wireless Illuminated Reticle Eyepiece (1.25").*

These Plössl's were originally designed for guiding during long exposure astrophotography. I use mine for centering stars when doing a two or three star alignment on my go-to mount. With the illuminated double-crosshairs, centering stars is a snap!

## Astronomy Outreach in South Africa

By Marilyn Bregg

Astronomy outreach and spending winters in the southern hemisphere has always been on my bucket list.

This past winter was no exception. I wintered in Cape Town, South Africa and had the privilege of speaking to 120 grade 7 students at a primary school called Steenberg. These students come from sub-economic environments and in some cases have several obstacles to overcome.

My focus was essentially to impart an understanding to the learners of where they live in the universe, how and where stars are born and die, what galaxies are and how to find constellations in the southern sky. I selected this information to assist the learners in preparing for an Astroquiz, which took place in April.

These students have limited resources. Access to computers is a luxury. I had the privilege of sharing website coordinates with them and show-

## Steenberg Primary School



cased Hubble pictures. The learners were truly in awe. To date, 6 students were chosen to attend the Astroquiz and 4 have progressed to the second round. I was, as always, humbled by the experience.







## Summer STAR Party Events and DSP's

by Chris Weadick

The New Brunswick Centre of The Royal Astronomical Society of Canada has four official Star Parties hosted at the Provincial or Federal Parks. Three of the four Parks are designated as Dark Sky Preserves (DSP). Parks Canada has described the night sky as Canada's largest Natural Resource which must be protected and promoted by our National Parks.

As a DSP, the Parks must commit to protecting the nighttime environment from the effects of artificial lighting. Educating visitors about the ecological and cultural importance of dark skies are key elements of the DSP program.

Protecting the dark skylines of the Parks benefits stargazers as well as wildlife. Studies have shown that many of the biological and behavioural activities of plants, animals and insects that rely on night darkness to forage, breed and navigate are adversely affected by light pollution.

As a Dark Sky Preserve, the Parks offer present and future generations a chance to gaze upon the same stars seen by the Mik'maq, European explorers, and early settlers. In the summer, the Parks offer public astronomy programs and an interpretation program exploring the significance of the night sky, and the RASC NB Centre participates with each of the Parks on a weekend each year. The dates and locations for 2013 are:

May 31-June 2: Kouchibouquac Spring Star Fest III, Kouchibouquac National Park

July 12-14: COW Summer Stargaze X, Mactaquac Provincial Park

August 2-4: Mount Carleton Star Party, Mount Carleton Provincial Park

August 30-September 1: Fundy National Park StarGaze III

We encourage all members to participate in the summer star parties and support the outreach of the DSP initiatives.

If you have questions regarding Light Pollution, how you can help reduce Light Pollution, please contact our Light Pollution Abatement Chair Chris Weadick at [lpa\\_chair@nb.rasc.ca](mailto:lpa_chair@nb.rasc.ca).

# Dark-Sky Preserves and Urban Star Parks

by Chris Weadick

The RASC has developed formal guidelines and requirements for two types of light-restricted protected areas: Dark-Sky Preserves and Urban Star Parks. We are officially recognizing parks in Canada that apply for an official designation and meet these guidelines. Many parks across Canada have been designated in recent years - see the list below. If you have a favourite dark site, perhaps it could be designated by the RASC as a Dark-Sky Preserve or an Urban Star Park, so please let us know by sending us an email to Light-Pollution Abatement Committee Chair.



**Dark-Sky Preserve (DSP)**



A Dark-Sky Preserve is an area in which no artificial lighting is visible and active measures are in place to educate and promote the reduction of light pollution to the public and nearby municipalities. Sky glow from beyond the borders of the Preserve will be of comparable intensity, or less, to that of natural sky glow.



**Urban Star Park (USP)**



An Urban Star Park is an area in which artificial lighting is strictly controlled and active measures are in place to educate and promote the reduction of light pollution to the public and nearby municipalities. Sky glow from beyond the borders of the Reserve may be visible to observers within the area. The first USP was the Irving Nature Park in Saint John, NB.



## OBSERVERS' SCORECARD

	Explore the Universe	Messier	Finest NGC	I. William-son Lunar	Deep Sky Challenge	Dark Nebulae	Herschel 400	Levy Deep Sky Gems	Caldwell	Arp Galaxies	Abell Galaxy Clusters	Hickson
James Ayles	37											
Adrien Bordage	100											
Charles Doucet	110	110	110				65					
Ted Dunphy	102	110	110	51	10	8	265					
Colette Fortier	87	28										
Peter Jensen	50	89										
Don Kelly	110	110										
Danny LeBlanc		110	110				127		8	21	21	9
Emma MacPhee	78	110	110	5								
Curt Nason		110	110									
Mike Powell	70											
Detlef Rudolph	62											
Chris Weadick	71	26										
Daymon Baker		110	110						2			
Your name here!												

This section is intended to inspire our members to get out observing by promoting a friendly competition. To be included please contact the editor.

To submit any astronomy related articles, book reviews, observing sessions, member's scope pics, astrophotos, new equipment, etc. to me at [editor@nb.rasc.ca](mailto:editor@nb.rasc.ca) or [pejensen@nbnet.nb.ca](mailto:pejensen@nbnet.nb.ca).

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