



February 2018 - Volume 13, Number 2

We welcome your comments on the *Bulletin*.  
Email them to the Editor, David Garner at  
[bulletin@rasc.ca](mailto:bulletin@rasc.ca)

► [News @ RASC.ca](#)

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## News from the Society Office

by [Randy Attwood](#), RASC Executive Director

Please note that the RASC Society Office will be closed on **Monday, February 19** for **Family Day**.



Celebrate with the RASC!

Get your 150<sup>th</sup> gear and [support the RASC today!](#)

### Skyhound Offer

We are very pleased to announce that Skyhound, the developer of the excellent planning software SkyTools, is extending a special offer to RASC members. SkyTools version 3 Standard or Professional Edition will be available at 40% off the regular price. See the April 2015 Journal for a review of the application. Keep an

eye on our web site for more and developing information. Feel free to contact Blake Nancarrow at [blaken@computer-ease.com](mailto:blaken@computer-ease.com) if you have any questions.

## **Annual Report 2017**

A note to Centre Treasurers and Secretaries: please note the deadline for reports to the AR2017 is **2018 February 28**. Please send Treasurer reports to Julia Neeser [mempub@rasc.ca](mailto:mempub@rasc.ca) and Secretary reports to James Edgar [jedgar@rasc.ca](mailto:jedgar@rasc.ca)

## **2018 Election of Board of Directors - Call for Nominees**

by **Robyn Foret**, RASC 2nd Vice-President

Three (3) Board of Director positions, each being a 3-year term, are open for election at the General Assembly.

Nominations for the RASC Board of Directors is open through 2018 April 30, and we encourage all Members in good standing consider a role on the Board. The 2018 Board of Directors will be announced at the 2018 General Assembly in Calgary.

Candidates' requirements are stipulated in **Policy G9: Society Nominations and Elections** of the Policy Manual. The Policy Manual is available in the Member's-only section of the website here: [RASC Policy Manual \(www.rasc.ca/rasc-policy-manual\)](http://www.rasc.ca/rasc-policy-manual).

For more insight into the effort and commitment expected of Board members, feel free to reach out to the Nominating Committee Chair, Robyn Foret who can be reached at [arforet@shaw.ca](mailto:arforet@shaw.ca) or 403-803-1075.

## **General Assembly 2018**

by **Robyn Foret**, RASC 2nd Vice-President

The 2018 GA will be held in Calgary, June 28 through July 2. With the Society celebrating its 150th and the Calgary Centre celebrating its 60<sup>th</sup>, 2018 will be a very special GA.

Accommodation is at Hotel Alma on campus at the University of Calgary. An upscale euro-style hotel, Alma offers 2-bedroom student quarters, standard hotel rooms and 1-bedroom suites. Overflow accommodation is in Student Housing, so book early to secure your optimal room at Alma.

A western-style barbeque at the U of C's Rothney Astrophysical Observatory informally kicks off the GA on the 28<sup>th</sup>. Great speakers, opportunities to take an Alan Dyer workshop or a tour of the Cross Conservation area, a Social to meet up with RASC friends old and new, a Big Reveal on Friday night, a Stampede Breakfast, incredible poster and paper presentations, the Hogg Lecture, the actual General Assembly, the RASC 150 celebrations, the Banquet, and optional visits to the KT Boundary / Dinosaur Provincial Park / Royal Tyrell Museum, and a Martian landscape will all make this a very special GA that Members and their families can enjoy.

In the spirit of the West, and espousing our Western values and hospitality, you will be well cared for. Airport pick-up and drop off, a comprehensive meal plan and comfortable accommodations are ready for you.

Registration is limited so visit our web site and register soon. You don't want to miss this GA. Web-site will be live and registrations will open soon.

P.S. If you're planning an extended trip, the Calgary Stampede begins on July 6. Imagine a wonderful GA followed by a visit to Banff and Lake Louise, horseback riding on Moose Mountain then Yaa-Hoo along with the Calgary Stampede.

## **RASC 2018 – Calgary Centre**

### **Call for Paper and Poster Presentations**

by **Judy Sterner**, Chair, Paper and Posters sub-committee, Calgary GA 2018

We invite you to submit a proposal for a paper or a poster to be presented during the 2018 General Assembly in Calgary. We are celebrating 150 years of the RASC and 60 years of the Calgary Centre, so presentations with a historical focus are particularly apt. The abstract deadline is April 30. You will be notified by May 20 if your paper or poster topic has been accepted.

Further details regarding abstract submission and on paper and poster sessions will be posted on the GA 2018 website. Paper length will be in the 15 - 20 minute range. Posters should fit a 4 x 4 foot (120 x 120 cm) board.

Contact: Judy Sterner  
Chair, Paper & Posters sub-committee Calgary GA 2018  
([judy.sterner@gmail.com](mailto:judy.sterner@gmail.com))

## Call for Images 2019

by [Paul Gray](#), Editor, *Observer's Calendar*

Astronomical images and sketches of all types are invited for consideration for publication in the 2019 RASC *Observer's Calendar* including: deep sky, wide field, solar system, astronomical sketches and dramatic astronomically themed landscapes.

Images can be prime focus, piggyback, eyepiece projection, or fixed tripod; and recorded on a digital/CCD camera, film, or webcam. Submitted images must be of sufficient quality and resolution to reproduce well at 9.5" x 12" and must be compatible with the "landscape" orientation of the calendar images. Generally, this will mean a resolution of at least 3825 x 3028 pixels for the print ready tiff. We will also consider making a quilt or mosaic of lunar/planetary webcam captured images (so as not to over magnify an individual image for publication).

If you already have a gallery of images on your Web site, send me the link, but **please also direct me to your recent favourites**. Both well-known and obscure objects are published in the calendar, so to avoid having the same objects used too often, I will be screening for those that may have appeared in the past 3 years.

Please email submissions to me at [Paul Gray](#). While I have a bottomless email box, it's best to send me jpegs first. If your image is selected, we will request a full resolution tiff version. Full resolution tiffs will be required for use in print. The deadline for submissions is 2018 March 31. If you have any questions, please don't hesitate to contact me at the above mentioned email address.

## Imaging the Skies Contest

by **Eric Briggs**, RASC, Toronto Centre

Celebrate The Royal Astronomical Society of Canada's 150th Anniversary by joining our Astrophotography, Sketching and Creative Works Contest.

We are particularly eager to have young people and newcomers to Astronomy be part of this project. We encourage you to get outside and do some observing of daytime and nighttime skies during 2018. Record your observations either with photography or in some other creative way, such as drawing, sketching, painting, or quilting, for example.

There are two streams to enter:

- Astrophotography and Sketching at the Eyepiece.
- Creative Works for all other media: painting, drawing, printmaking, textile art, stained glass, collage, mixed media etc.

You can self-select as **Novice**, **Intermediate** or **Experienced** for skill level.

Submit your entries anytime during 2018. Vote for your favourite images in all the categories. Winners will be chosen by public voting and an RASC judging panel at the end of the year.

There are no big, expensive prizes but the "fame and glory" will be there along with some RASC recognition.

Additional information can be found at: <http://imaginingtheskies.ca>

## Observing News

by **Dave Chapman**, Chair, Observing Committee

In January, RASC awarded the Explore the Universe observing certificate to Simon Poole (Calgary). Let 2018—the RASC 150th Anniversary Year—be the year that each of us completes or starts an observing program. Can we issue more observing certificates in 2018 than any previous year?

Centres should consider bulk-buying the revised Explore the Universe Guide, 2nd Edition, in order to arrange a good price for their members. Contact Julia at the Society Office ([mempub@rasc.ca](mailto:mempub@rasc.ca)). By a show of hands, Halifax Centre easily found enough interested buyers to order a box of 20. New material includes all-sky star maps and a special Moon map for the EtU program. Nomenclature and observing details have been harmonized between the EtU Guide and the EtU observing program itself, although the required observations remain the same ([www.rasc.ca/explore-universe](http://www.rasc.ca/explore-universe)).

So far, 25 of 28 RASC Centres have confirmed their participation as Local Certification Centres for the Explore the Universe certificate and pin (see [www.rasc.ca/participating-centres](http://www.rasc.ca/participating-centres)). We will be contacting the following Centres soon: Kingston, Niagara, and Windsor (unless you contact us first at [observing@rasc.ca](mailto:observing@rasc.ca)).

On Twitter, please follow @RASC using the hashtag #RASCobserving for announcements of earned observing certificates and special observing opportunities. You may visit the RASC Facebook Page at [www.facebook.com/theRoyalAstronomicalSocietyofCanada](http://www.facebook.com/theRoyalAstronomicalSocietyofCanada) (Facebook membership not required for viewing).

## ***Observer's Handbook News***

by **James Edgar**, *Observer's Handbook* Editor

The *Observers Handbook* is now fully indexed on the NASA ADS site as a searchable database. It hadn't been updated since 2003, but all titles since then now have the Table of Contents fully indexed, by Section title, Author's name(s), and Page reference.

To access the database, go to

<https://ui.adsabs.harvard.edu/#search/q=bibstem%3A%22obha.book%22&sort=date%20desc%2C%20bibcode%20desc>

The assigned publication name is "obha.book".

## Chinese New Year

by **Roland Dechesne**, Chair, Membership and Development Committee

Chinese New Year is the most important of the traditional Chinese holidays and thus a large swath of the Canadian population is gearing up for a significant event. It turns out that the timing of the New Year is astronomically-based as the underlying calendar is a luni-solar one, and the upcoming event is commonly called the "Lunar New Year." Much like Christian Easter, which is tied to Moon phases and the annual (solar) year, the date of the Chinese New Year shifts back and forth within a defined range of days. Find out more with this printable brochure:

[www.calgary.rasc.ca/downloads/Chinese\\_New\\_Year\\_bilingual\\_formatted.pdf](http://www.calgary.rasc.ca/downloads/Chinese_New_Year_bilingual_formatted.pdf)

As the Chinese New Year starts with a new Moon, it can be ideal time for RASC outreach events featuring the dark sky – why not schedule a public observing session featuring this cultural theme, or participate in a local Chinese New Year celebration? Even without an active participation in a local Chinese New Year's event, supplying a stack of brochures can be an excellent way to promote the RASC to a significant part of the population.

Additionally, useful sky maps, suitable for a display, that link Chinese star patterns in the sky to western constellations can be found here:

[http://cdn.shopify.com/s/files/1/0118/6582/files/STAR-MAP-OF-NORTHERN-AREA.jpg?5849\[cdn.shopify.com\]](http://cdn.shopify.com/s/files/1/0118/6582/files/STAR-MAP-OF-NORTHERN-AREA.jpg?5849[cdn.shopify.com])

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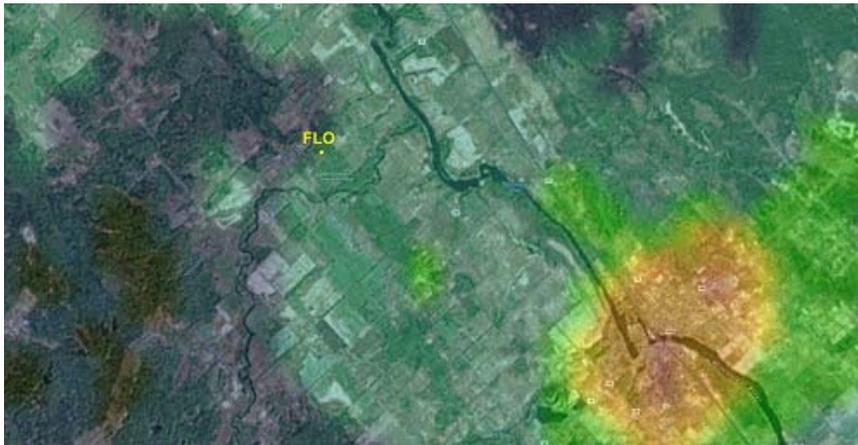
## Building Awareness of Light Pollution

by **Robert Dick**, Chair, LPA Committee

Robert Dick, the LPA Committee Chair delivered a presentation to an over-flow crowd of conservationist and Ecologists of the Mississippi Valley Field Naturalists,

and the public. He spoke about the how light impacts the flora and fauna of rural and urban areas. He concluded with suggestions on what the audience and can do to reduce the impact of artificial light. Ecology and wildlife are popular topics. We can attract many more people through environmental titles than would a talk about astronomy.

This area is of particular interest to Robert and the Ottawa Centre because their Fred Lossing Observatory (see image below) is in the area. Not only might these presentations protect the skies above the observatory but will raise awareness across the region so all astronomers and stargazers will benefit. The time for action like this is before there is a problem.



### Public Education

Robert Dick will be presenting two courses in the Learning In Retirement series at Carleton University. These 6-week courses (2-hours per week) will cover both astronomical and light pollution topics. The first will be in the Early Spring session: Worlds in Points of Light (<https://carleton.ca/linr/early-spring-2018-session/#light>), which will explore what we can learn at various levels of observational sophistication. And in the Late Spring Session: Biology of Darkness (<https://carleton.ca/linr/late-spring-2018-session/>), which will present the biological and behavioural impacts of light at night (the science of scotobiology) and the thresholds below which it has very little impact (the RASC Guidelines for Outdoor Lighting).

Although these are not available for distance education, perhaps similar courses are offered in other cities. Or, knowledgeable members could propose similar courses to school boards, colleges and universities in their area.

### Dark Sky Responsible Lighting Course

Several members combined their skills to present a Dark Sky Responsible Lighting professional development course at the Yukon College in Whitehorse, Yukon on January 24.

This was the initiative of Forest Pearson and the Yukon Centre. The course was delivered by Forest locally with Robert Dick, Charles Ennis, and Peter Hiscocks all delivering course content remotely through the College's internet-based video conferencing service.

This half-day course was designed for engineers, architects and building owners. It was advertised as a professional development opportunity through Engineers Yukon. The course introduced light pollution and why it is important, human vision, lighting and safety, responsible lighting design, dark sky preservation and lighting specification, and lighting audits.

The course was fully booked with 12 participants including the City Engineering and two others from the municipality, a representative of the local electrical utility, Yukon Government employees, the Yukon Environmental Assessment Board and a couple of private individuals. Course feedback was overwhelmingly positive with many students commenting they enjoyed the remote delivery from the experts across the country. Given the success of the course, Yukon College's Continuing Education department is inquiring as to when the course can be run again.

For more information on this course contact Forest Pearson at [fkpearson2002@yahoo.com](mailto:fkpearson2002@yahoo.com)

## Montreal Centre Upcoming Events

by **Carl Jorgensen**, Secretary, Montreal Centre

Friday, February 2, 7:30 – 11:00 pm: Montreal Centre Members Arbo Clubhouse at the Morgan Arboretum , 150 Chemin des Pins, Sainte-Anne-de-Bellevue.

Saturday, February 10, 7:30 – 11:00 pm: Montreal Centre Members Arbo Clubhouse at the Morgan Arboretum .

Monday, February 12, the Public Event Lecture by Richard Leveille Ph.D., Geosciences Dept., John Abbott College “Was Mars Ever Habitable? Five Years of Exploration by the Curiosity Rover”.

Friday, February 16, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum.

Saturday, February 24, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum.

## 10<sup>th</sup> Anniversary of the RASC Sunshine Coast Centre

by **Charles Ennis**, Past President, Sunshine Coast Centre

2018 marks not only the sesquicentennial of the RASC, but the 10th anniversary of the Sunshine Coast Centre, and the 30th anniversary of our Sunshine Coast Astronomy Club in British Columbia.

At the monthly meeting on 2008 April 25, 20 years after the founding of the original club, the Sunshine Coast Astronomy Club became the 29th Centre of the Royal Astronomical Society of Canada.

By May 2016, the Yukon Centre joined the RASC, which meant our Centre was no longer the newest Centre of the RASC. Nor were we the smallest any longer; with 75 members, we have become a mid-sized Centre. We're all looking forward to the next decade with the RASC.

## The Art of Reverse Observing: Collinder 135

by [Dave Chapman](#), Chair, Observing Committee

A few years ago at the Winter Star Party in the Florida Keys, I invented an astronomical pastime I call "Reverse Observing." Instead of making a plan of objects to search for and then trying to find them in my optics, what I do is sit in my chair and casually scan the heavens in rich Milky Way areas, and see what comes up in my binoculars. If I find something interesting, I look it up in a star atlas or (more usually) in Sky Safari on my mobile device. It is amazing what you can "discover." To put icing on the cake, you can have a nearby friend with a Go To telescope at the ready to dial in the object and follow up with a telescopic view. In my case at the time, that friend was Greg Palman, our Halifax Centre member from Maine, who has a lovely AstroPhysics refractor. Boy did we have fun!

This January, on vacation in Cuba, on the south coast between Santiago and Guantanamo, I was enjoying the very dark skies to the south (away from the garish resort lights, anyway) and I "discovered" a nice little open star cluster (mag. 2.1) well below Sirius in the constellation Puppis: Collinder 135. It only seems to have a handful of stars in a triangle shape, but one of them is Ahadi, or  $\pi$  Puppis (mag. 2.7), a beautiful orange star that provides most of the cluster's light. The image below was compiled by me from 8 tracked sub-exposures using a 300-mm zoom lens on my Canon SL1, which provides a diagonal field of view of about  $5^\circ$ , matching the view in my Canon 12x36 image-stabilized binoculars. I enjoyed many similar moments, but this one sticks in my memory, and I have a lovely image as well.



## **Thank You to our Sponsors!**

by **Julia Neeser**, RASC Marketing Coordinator

The Royal Astronomical Society of Canada has a unique partnership with our friends in the astronomy industry. We are now offering companies the distinction of becoming a sponsor of the RASC, Canada's pre-eminent amateur astronomy organization. This offer is available only to those industry leaders who recognize the value in being associated with the amateur astronomy community.

[www.rasc.ca/rasc-sponsors](http://www.rasc.ca/rasc-sponsors).



## What's New in the Sky

Members are encouraged to check out the [Northern Skies](#) section of the RASC website. Thanks to Gary Boyle for keeping us all in the know.



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