



**November 2018 - Volume 13, Number 11**

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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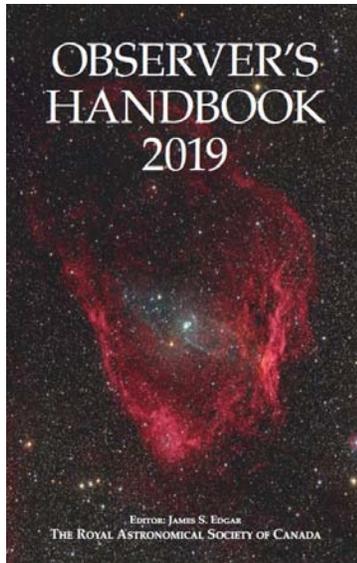
## News from the Society Office

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



**Observer's Calendar 2019** Editor: Paul Gray

A beautiful calendar showcasing RASC members' astro-images with information on what's up in the sky tonight. A perfect gift for the beginner and a must-have for the experienced observer. IN STOCK. [Available for order!](#)



## **Observer's Handbook 2019** Editor: James Edgar

The Observer's Handbook: a 352-page guide published annually by The Royal Astronomical Society of Canada, has come to be regarded as the standard North American reference for data on the sky. The Handbook material is of interest to astronomers, scientists, teachers, students, science writers, campers, Scout and Guide leaders, and interested readers. The Handbook forms the basis of many secondary and university astronomy courses, and it should be in every library. Also available: US Edition. [Order Here!](#)

### **Awards Deadline Reminder**

The deadline to submit award nominations is fast approaching.

Here is an outline of the awards and their criteria:

**CHANT MEDAL** The Chant Medal is awarded based on a significant body of work of lasting value to the astronomical community and is named after C.A. Chant, a noted astronomer at the University of Toronto who helped to found the David Dunlap Observatory there.

**KEN CHILTON PRIZE** Established in memory of Ken Chilton, this prize is awarded for a specific piece of astronomical research or work carried out or published recently.

**SERVICE AWARD** The Service Award, established in 1959, is awarded to RASC members who have made significant contributions at the National and/or the Centre levels.

**SIMON NEWCOMB AWARD** The Simon Newcomb Award was established in 1979 for excellence in astronomical writing by an RASC member.

**QILAK AWARD** Established in 2011, this award is intended to recognize individual Canadian residents or teams of residents who have made an outstanding contribution during a particular time period either to the public understanding and appreciation of astronomy in Canada or to informal astronomy education in Canada and to promote such activities among the members of the sponsoring organizations.

**FELLOW OF THE RASC** Established in 2013, this award is given to recognize long-term commitment to the Society.

Please note: the deadline for submitting awards is 2018, December 31 not November 30.

Nominations for awards should be sent to the Awards Committee at [awards20000@rasc.ca](mailto:awards20000@rasc.ca). For more information on the awards nominations, see [RASC Awards](#).

### **Youth Outreach Coordinator Hired**

I am pleased to announce that we have hired a new staff member at the RASC Society office: Jenna Hinds has been appointed Youth Outreach Coordinator. Jenna has a BSc from Mount Allison in Marine Biology and a Masters of Science in Science Communication and Public Engagement from the University of Edinburgh.

She has worked at the Ontario Science Centre for the past 2.5 years as a planetarium host, giving live shows on various aspects of astronomy.

Jenna's prime responsibility will be to engage young people across the country in astronomy programming. She will be working with Centres to assess existing youth programming and will review astronomy educational programs offered by

external organizations across the country. The top five to ten youth activities and best practices will be determined and shared nationally. Activities and resources will be posted on our website.

Creating a communications network with youth advocates in RASC Centres and other astronomy groups is an important planning component. In this way, Jenna will effectively share youth programming and resources with many groups serving children and youth.

The anticipated outcome is that hundreds of young people across the country will be newly introduced to the excitement and wonder of astronomy and become fascinated with learning how to navigate the sky. It's expected that many will join the RASC and that some youth will take their interest further and find future careers in science. We thank the Trottier Family Foundation for providing funding for this position for three years.

Please join me in welcoming Jenna to the RASC! Starting October 15th, she can be reached at [jenna.hinds@rasc.ca](mailto:jenna.hinds@rasc.ca) and phone: (416) 924-7973 Ext 4.

## Youth Outreach Update

by [Jenna Hinds](#), Youth Outreach Coordinator

Hello everyone! I am the new youth outreach coordinator working at the Society Office in Toronto. Over the last two weeks, I have had the pleasure of meeting and chatting with many of you. I intend to provide monthly updates on what I have been working on and will ask for your help from time to time.

I am putting together a Youth Committee consisting of youth members across the country. The goal of the committee is to give our youth members a stronger voice in the organization by discussing what engages youth and creating resources to support our youth members and meet their needs. The committee will meet by video conference once a month, and I hope to keep a discussion going indefinitely through whichever communication method is deemed most effective by the committee (email, Whatsapp, Facebook, etc).

**I am looking for candidates to appoint to this committee.** If you are a youth member and think that you would be a good fit for this committee, or if you know someone who would be a good fit, please email me at [jenna.hinds@rasc.ca](mailto:jenna.hinds@rasc.ca) with a short paragraph telling me why you think you or your recommendation would be a good candidate for this committee. Thank you for your help with this!

**What's Going On:** This past two weeks I have been contacting centres to learn about existing youth programming and ways that National can support this programming. I have received many recommendations. This month I am working on updating our Education/Outreach resources online. Keep an eye out on our website for these changes!

## **RASC Astrophotography Certificates**

by [James Edgar](#), Vice-Chair Astroimaging Committee

Astroimagers - earn a certificate while you learn your craft. You can apply for three different certificates: Wide Field, Solar System, and Deep Sky. A certificate suitable for framing comes with a showcase of your winning photos on the RASC Zenfolio site. Have a look at some of the certificate earners' great images at <http://rascastroimaging.zenfolio.com>.

Go to [www.rasc.ca/astro-imaging-certificate](http://www.rasc.ca/astro-imaging-certificate) for the different category requirements and submission details.

## **Hidden Minorities - Our Hidden Treasure**

by [Charles Ennis](#), RASC, 2nd Vice President

At the 2018 General Assembly in Calgary, Society director Heather Laird did a presentation: *Varieties of Female Participation in the RASC*. At the end of this excellent presentation the microphone was left open for anyone to come up and share their story. A number of women did so. Meanwhile, to save time, the organizers started the afternoon coffee break, and the audience quickly broke

down in to small groups all over the conference room chatting about this and that and largely ignoring the women at the microphone sharing their experiences. I went over to where RASC History Committee chair Randall Rosenfeld was standing and said: “I wonder how many people in this room realize how many minorities there *truly* are in this room?” Randall, who knows my background and knew exactly what I was referring to replied, “You should write an article.”

Those of you familiar with the popular planetarium software Stellarium should know that one of the options in that program is *Starlore*, which allows you to switch the constellations on your screen from the everyday “Western” constellations we inherited from Ptolemy et al to one of 24 views of the sky from other cultures from around the world and across history. These differing perspectives from cultures of different ages and places are the hidden treasure I referred to in the title of this article. Many of these wonderful and different cultural views giving us a fresh perspective of our universe in Starlore are from cultures hidden within our membership. Different cultures bring new ideas and perspectives to our Society which can help us to create new ways to enjoy our skies and innovative ideas to solve our problems. We’re only starting to scratch the surface in exploring these wonderful perspectives. The great work of the Halifax Centre has recently been pursuing in their study of the Mi’kmaq people’s lunar calendar is an excellent example of this.

Articles have appeared in Society publications in the past discussing issues involving women in the Society. It is sad to note that the only way I have of coming up with a percentage of women in the RASC is to generate a spreadsheet of current members and physically scan it to try to identify names that are female. I am limited, however, as many of the names listed come from unfamiliar cultures and are not recognizable to me as female names. My best guess from the latest spreadsheet is 19.5% compared to the figures from the UNESCO Institute for Statistics which shows that only 28% of the world’s researchers are women, so as a Society we’re behind.<sup>1</sup> We’ve recently had to deal with cases of harassment of female members and I know from my former career as a police detective that

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<sup>1</sup> UNESCO Institute for Statistics: <http://www.uis.unesco.org/ScienceTechnology/Pages/women-in-science-leaky-pipeline-data-viz.aspx>

such cases are seriously under-reported, especially if the environment in which these women find themselves does not make them feel safe reporting. We must fix this. Hard to do if we cannot even be sure precisely how many of our members are actually female.

And trying to identify genders other than male and female in that RASC membership spreadsheet is impossible. When people sign up as Society members we only capture their name, address, email, and phone number. The Society has never asked for a prospective member's birthday, gender, language, or any other details which would be useful in determining what the ethnic, cultural, gender, and religious makeup of our Society is. I can only guess from many of the names in that membership spreadsheet what the person's background could be.

Think defining gender is as simple as asking if a person is male or female? Did you know Stats Canada is now offering non-binary gender options in surveys? Did you know that 1.7 percent of human births might be intersex, including variations that may not become apparent until, for example, puberty, or until attempting to conceive?<sup>23</sup> How many of you out there realize that one of our Centre presidents is trans-gender? Its Vikki Zsohar, Yukon Centre. We should be celebrating this publicly!

Our Society has two Centres in Quebec. If you scan the list of RASC publications, you will find next to nothing published in the French language. French is one of the two official languages in Canada. We've got to do better than this.

How many of those members listed in that spreadsheet are really hidden minorities waiting for someone to notice them? Worse, how many of them are hoping that they will *not* be noticed because they fear the consequences? We have a duty as a Society to make them feel safe. How can we educate the membership about these minorities if we don't make any effort to discover who

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<sup>2</sup>Blackless, Melanie; Charuvastra, Anthony; Derryck, Amanda; Fausto-Sterling, Anne; Lauzanne, Karl; Lee, Ellen (March 2000). "How sexually dimorphic are we? Review and synthesis". *American Journal of Human Biology*. 12 (2): 151–166. doi:10.1002/(SICI)1520-6300(200003/04)12:2<151::AID-AJHB1>3.0.CO;2-F. ISSN 1520-6300. PMID 11534012. Archived from the original on 17 September 2015.

<sup>3</sup>Fausto-Sterling, Anne (2000). *Sexing the Body: Gender Politics and the Construction of Sexuality*. Basic Books. p. 53. ISBN 978-0-465-07714-4.

they are? How many of you know that one of the directors on the Society's Board is a Wiccan chaplain? That's me, and I'm quite open about it, but I know there must be other members of minorities within our ranks who aren't as willing to be public. I know what it's like to be a minority member. I spent my entire law enforcement career debunking myths and educating people to deal with the mass of hurtful misinformation on religions and cultures out there. I became recognized as an expert in crimes against minority religions in the end, something I certainly didn't expect to become when I started that career.

Dr. Rob Thacker recently pointed out to our Society's Board that CASCA had an Equity and Inclusivity Committee. Heather Laird and I seized upon this and took the concept to the October 2018 Society Board meeting in Toronto and our own Equity and Inclusivity Committee was created. The founding members of the E&I Committee are:

- Nicole Mortillaro (Unattached)
- Heather Laird (Calgary Centre)
- Vikki Zsohar (Yukon Centre)
- Charles Ennis (chair- Sunshine Coast Centre)

The Equity and Inclusivity Committee's mandate is to promote and develop ethnic, cultural, gender, and religious diversity within the Society through education and communications programs and publicize the diversity of the RASC to all its audiences. It is our intention to have this new committee:

- encourage the growth of diversity within the Society;
- educate members and Centres regarding issues involving minorities;
- represent the interests of minorities to the Board and the membership of the Society;
- act as a resource for information on minorities to Society members; and
- act as advocates to represent members of minorities and assist in mediation.

This Committee is a new concept for the RASC. We're reaching out to our membership to encourage members to join the Equity and Inclusivity Committee to help us achieve these objectives. We're asking members of minorities within the RASC to tell us their stories and share their problems so that we can help

them work towards solutions. If you're willing to help or you've got a story to share, please contact one of us.

Canada's multiculturalism is one of the best examples of cultural integration in the entire world. Canada has one of the largest immigrant populations in the world: one in every five Canadians was born outside of Canada: Every year 300,000 immigrants come to our country. This is one of the highest rates of immigration in the entire world. In 2017 the Fraser Institute ranked Canada as the 6<sup>th</sup> freest country on Earth. The RASC should strive to reflect this diversity by developing a welcoming culture based on integration. We need an RASC that looks like Canada: Our organization should represent a realistic sample of Canada's ethnic, cultural, and gender reality.

## **RASC-Eyes on the Universe for 150 Years**

### **RASC 150 Working Group**

by **Randall Rosenfeld**, Chair, History Committee

Our year of celebration of the sesquicentennial of the Society is entering its close. We hope you've been able to participate in the various activities and events exploring our 150 years of existence, and through those activities to introduce others to who we are, and to invite them to join us in exploring the Universe. Most of the RASC 150 activities are still running, and will have a legacy aspect beyond 2018 December 31. The programs can be found at [www.rasc.ca/2018](http://www.rasc.ca/2018). Why not join us for one (or all!) of our podcasts, or submit your astrophotography or other astronomical art to Imagining the Skies, or venture into the experience of observing circa 1868?

The RASC 150 Working Group would like to hear of the RASC 150 activities you and your Centre have engaged in, through brief written accounts of events you've organized or taken part in, local press coverage you may have received, or collaborations you've formed with other groups in your

community. By all means send images, or other electronic media if you have them (to: [rosenfel@chass.utoronto.ca](mailto:rosenfel@chass.utoronto.ca)). We plan on compiling these into a final report of the RASC's sesquicentennial year.

## **Governor General Julie Payette Becomes Patron of RASC**

by **Chris Gainor**, President RASC

The Governor General of Canada, Her Excellency the Right Honourable Julie Payette, has agreed to become Viceregal Patron of the Royal Astronomical Society of Canada.

Viceregal patronage is granted for the length of a Governor General's time in office. The first Governor General to be Viceregal Patron of the RASC was Ms. Payette's predecessor, David Johnston.

The RASC was granted its "royal" designation in 1903 by His Majesty King Edward VII.

"We in the RASC are especially gratified that Ms. Payette is serving as our patron, since we know her from her path-breaking work as a Canadian astronaut," RASC President Chris Gainor said. "Ms. Payette has done a great deal of work over the years promoting space science and astronomy with large numbers of Canadians."

Ms. Payette has also sent greetings to the RASC on the occasion of its 150th anniversary this year. Her statement will appear in the December 2018 issue of the *Journal of the Royal Astronomical Society of Canada*.

## **Reporting from Vancouver RASC**

by **Hayley Miller**, Vancouver Centre, Events Coordinator

The Vancouver RASC centre is very pleased to share that on Oct 12th to 14th, we held our first "Dark Sky Astronomy Weekend" at Manning Park Resort in beautiful British Columbia. And we are happy to report it was a HUGE success -- we had over 250 guests!

The event was hosted by Manning Park Resort and supported by our centre: RASC Vancouver as well as The Fraser Valley Regional Library, and Advantage Hope; an economic development and tourism agency in Hope, BC.

Manning Park Resort, located in the heart of the Cascade Mountains, is a recreational paradise, offering outdoor and indoor activities all year round. From hikes, ski lifts, kayaking, camping, fishing to an indoor pool, delicious food and drinks at their restaurant/bar and a friendly and experienced staff... there is always something to do at Manning Park Resort. We can now add Astronomy to this list.

Last spring, Manning Park Resort contacted RASC because they had noticed many of their guests had been asking if they had a telescope to observe the stars, which it did not. They realized there was a strong interest in their dark skies so they contacted our Vancouver Center and asked if we would be interested in planning an event to celebrate and take advantage of their beautiful night sky. With RASC knowledge of astronomy and the Cascade's world class lookout, we of course, jumped at the opportunity.

The first event to kickoff the weekend was "Astronomy 101." This educational talk was presented by our Observing Chair, Robert Conrad. Robert shared his knowledge and stressed the importance of planning/strategizing before going out to observe. Stellarium (online) and "old school" books with sky maps are some of the great tools Robert recommends to star hop and locate asteroids.

Following Robert's talk the guests headed to Windy Joes Field (a dark sky area close to the lodge) where telescopes were set up. We all felt fortunate that evening that the sky was clear and there was lots to see in the sky. Manning Park Resort made every effort to accommodate our dark sky requests by dimly lighting the path, and graciously offered to serve hot cocoa and provide a warming area. Although we could barely see the faces of the guests in the dark we could hear their excitement, many of them having their first observing experience. Some enthusiastic guests even began charting and star hopping. The itinerary the next day kept families with kids busy. Activities such as Arts and Crafts included: Solar Toss, learning phases of the Moon with Oreo cookies, star mobiles and alien

masks. The Spotify "SPACE" playlist for adults and kids as well as the RASC visuals such as banners and astronomy posters really contributed to the overall feeling that we were all there for the love of SPACE!

RASC's Webmaster Ken Jackson's Astrophotography session Saturday afternoon was also well attended. In fact, stunning images of the Milky Way that night are still being shared on social media. Later that afternoon, Robert Conrad's Advanced Astronomy workshop was also well attended and helped to better prepare those guests going up to Cascade Lookout that evening, which turned out to be another perfect night! Clear skies, mild weather, and at least a dozen telescopes! It even better than we could have imagined.

Other guests drove to Lightening Lake, a few minutes from the resort to listen to stories about the stars as well as observing with other volunteers that brought their telescopes. Sunday Solar Viewing at Lightening Lake was also a big hit and I personally didn't want to leave! We all agreed it was a great weekend one I will never forget!

We look forward to holding the event next year with dates tentatively set for 2019 October 18-20.

I am also attaching a link to some good press we received.

[www.nytimes.com/2018/09/03/travel/stargazing-trips.html](http://www.nytimes.com/2018/09/03/travel/stargazing-trips.html)

## **RASC Montreal Centre Upcoming Events**

by [Carl Jorgensen](#), Secretary, Montreal Centre

Saturday, November 3, 10:00 – 12:00 am: Members special movie event at CineStarz Cinema #6 at Cote Des Neiges Plaza. The special movie event is for members and their families only. We will present "Journeys on Mars 3-D" and "Shadow Chasers 2017: The Great American Total Solar Eclipse". Plus a feature presentation of the *Apollo* Moon Missions.

Saturday, November 3, 7:30 – 11:00 pm: Members offsite observing at Thompson Park, 726 Rue Main (weather permitting).

Wednesday, November 7, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Saturday, November 10, 7:30 – 11:00 pm: Members Offsite Observing at Woolly Woods 45 Rang Saint-Antoine, Saint Chrysostome (weather permitting).

Wednesday, November 14, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Centre. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Saturday, November 17, 7:30 – 11:00 pm: Montreal Centre's Annual General Meeting (members only) at the Montreal Aviation Museum, Sainte-Anne-de-Bellevue. The AGM is perhaps the most important meeting of the year, as it is time when members can voice their concerns and hear about the future path or direction their astronomy club is taking.

Wednesday, November 21, 7:30 – 11:00 pm: Members Library Clubhouse at John Abbott College room H355, 21275 Rue Lakeshore, Sainte-Anne-de-Bellevue. Presentation at 7:30 pm. Members only. Can borrow and return books. Talk with other members, show & tell, etc..

Saturday, November 24, 7:30 – 11:00 pm: Members Annual Holiday Dinner at Dunn's Delicatessen 11602 Salaberry Blvd. Dollard-des-Ormeaux. Come and enjoy the start of the festive season with your fellow RASCals.

Wednesday, November 28, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

## 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 charter 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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