

July 2018 - Volume 13, Number 7

We welcome your comments on the *Bulletin*. Email them to the Editor, David Garner at bulletin@rasc.ca

News @ RASC.ca

News from the Society Office

by Randy Attwood, RASC Executive Director

RASC Coin Announcement:



We wanted to say: Own an extra-terrestrial piece of our solar system—one that is potentially as old as Earth itself! One ounce Pure Silver Coloured Coin with Meteorite - 150th Anniversary of the Royal Astronomical Society of Canada - Mintage: 5,500 (2018). But, it sold out within 48 hours!

Founded in 1868, The Royal Astronomical Society of Canada (RASC) has nurtured the passion of astronomers while fostering the curiosity of anyone who has ever looked up at the stars and wondered what lies beyond. We are celebrating the 150th anniversary of the RASC with an awe-inspiring (and scientifically accurate) reverse design that adds a photo-realistic twist to the Society's sesquicentennial logo! To top it all off, the design includes an authentic meteorite fragment, which is a fitting tribute to the contributions of RASC members.

OUT OF THIS WORLD! Includes a real meteorite fragment on your coin! Order today!

www.mint.ca/outofthisworld/RASC



Mettez la main sur un parcelle extraterrestre de notre système solaire, qui est peut-être aussi vieille que la Terre elle-même!

Pièce colorée de 1 oz en argent pur avec météorite – 150^e anniversaire de la Société royale d'astronomie du Canada – Tirage : 5 500 (2018)

La Société royale d'astronomie du Canada (SRAC) alimente la passion des astronomes et la curiosité de quiconque a déjà observé les étoiles en se questionnant sur les secrets de l'Univers. Pour souligner le 150^e anniversaire de la SRAC, la Monnaie émet une pièce dont le revers phénoménal et scientifiquement exact reprend, dans le style photoréaliste, le logo spécial que la SRAC a créé pour souligner cet anniversaire. Et, cerise sur le gâteau (d'anniversaire!), le motif est rehaussé d'un authentique fragment de météorite. Voilà un parfait hommage aux contributions des membres de la SRAC!

Une pièce EXTRAORDINAIRE ornée d'un authentique fragment de météorite! Commandez dès aujourd'hui! Commandez dès maintenant!

www.monnaie.ca/danslesétoiles/SRAC

The Society Office will be closed Thursday, June 28 – Monday, July 2 for the RASC General Assembly in Calgary. Hope to see you there! Have a safe and happy holiday weekend!

RASC 2018 Stamp Announcement:





On June 29th at the General Assembly in Calgary, Canada Post unveiled two astronomy stamps. The stamps showcase the majestic splendour of two spectacular phenomena: The Milky Way and the Northern Lights.

The stamps depict astrophotos taken by two RASC members. Matt Quinn's stunning photo of the Milky Way was taken at Bruce Peninsula National Park in Ontario. Alan Dyer captured a magnificent image of the Northern Lights in Churchill, Manitoba. Both photographs were taken in 2016.

The cover of the booklet of 10 and the Official First Day Cover include decorative astronomy-themed illustrations – a satellite, a celestial body and an observatory,

a subtle tribute to the National Research Council of Canada's Dominion Astrophysical Observatory in Victoria, B.C., which celebrates its 100th anniversary this year.

Designed by Parcel Design of Toronto, the stamp includes metadata – the date and time the photograph was taken, coordinates and type of camera lens used for the photo – in special ink in the borders, making it visible only under a black light. Lines and names overlaid on the images highlight constellations.

The stamps, first day covers and souvenir sheets can be ordered from the Canada Post web site. www.canadapost.ca

RASC RoboticTelescopeProject:



We're celebrating and you're invited! As you know, the Royal Astronomical Society of Canada (RASC) is in its 150th year. In honour of its sesquicentennial anniversary, podcasts documenting the Victorian beginnings of the Society and construction of the first Canadian observatory have been produced and additional monthly episodes will be posted on the RASC website throughout the year. The Canadian Mint and Canada Post are issuing commemorative products and RASC is offering special anniversary hats, badges and clothing. A coast to coast National Star Party on September 15 will further commemorate this remarkable achievement.

We are proud to announce an exciting new initiative - the RASC Robotic Telescope Project!

The project needs your help – we're fundraising to purchase and run a remote, automated telescope housed in an observatory in the Sierra Nevada Mountains in California. At an altitude of 1,400 metres, the site has very dark, clear and steady skies. It provides over 200 clear nights a year which is much better than most areas in Canada.

An opportunity arose to obtain a 0.4m (16 inch) telescope that is already on-site. This will allow us to get up and running sooner. But there is a cost. The projected expenditure for this program including telescope and equipment purchase, annual site fee, maintenance and programming is \$100,000. This is a major addition that will benefit all members of the Society.

Access to a large telescope in dark skies all year round will provide us different ways to explore the Universe. Members will have online access to the telescope images and data through a program now being developed. We hope to offer members access to the telescope by the end of 2018.

How can you be a part of this adventure? Imagine taking astro-photos of fascinating objects and creating spectacular images at home. Team up for fun science missions that could include daily monitoring of a comet as it moves through the inner Solar System, supernova hunting, or just seeing how deep the telescope can go. You may want to participate in scientific research projects — which will include exoplanet searches, variable star observing or monitoring various events such as novae or close fly-bys of near-Earth objects.

The telescope will be a major addition to our public outreach program and will be used to inspire young people to study astronomy. Images from the telescope will also be used to promote the Society in the media.

We encourage all members to support this remarkable venture with a donation. Your gift to help launch the RASC Robotic Telescope will be greatly appreciated and a charitable tax receipt will be issued. We're excited about this project and

hope you will be too. We thank you for getting us here and need your support for this next leap forward.

Please contribute to the success of this project with your donation today!

Astrophotographers, Astrosketchers, and Proofreaders

by James Edgar, Editor, RASC Observer's Handbook and Nicole Mortillaro, Editor, RASC Journal

1. Attention all astrophotographers and astrosketchers!

The Journal Production Team is always looking for new images. What better forum than the colour pages at the Journal centrefold for your stunning images? Are you into sketching? Consider the two inside covers, dedicated to B & W images. Or, maybe you like the aesthetics of shooting in black and white. Send us your pictures. We especially would like to see more image submissions from the women in the Society -- bring them on! You can send images directly to the Editor-in-Chief, Nicole Mortillaro, at editor@rasc.ca
Submission details from the Journal Author Guide are:

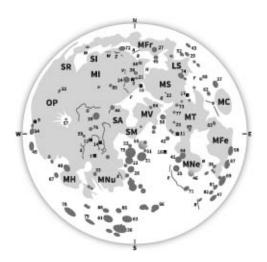
- Black-and-white images: greyscale tiff, jpeg, png, or bmp files at a resolution of 300 dots per inch or higher in their final published size. Note that most computer screens have a resolution of 72 dpi and that the illustration may have to be specifically configured for the *Journal*'s resolution.
- Colour images: a resolution of 300 dpi in RGB colour space. Please do not submit in LAB or other Web-based colours. Colour images are converted to black-and-white for publication in the *Journal*, but the colour is retained for the electronic copy.
- Vector images: must be in either Illustrator or Freehand eps format, or supplied as a PDF with all fonts converted to outlines. If the file cannot be submitted in the latter format, the author must supply a Mac version of the fonts. PDF conversion freeware is readily available on the web.

2. We need Proofreaders

If you are a word nerd, we want to hear from you. The *Journal* Production Team includes four proofreaders and we'd like a few more to spread the workload around. It isn't a tough assignment, and it only happens every two months. Let the Editor-in-Chief, **Nicole Mortillaro**, know that you're interested by dropping her a line at **editor@rasc.ca**

Observing News

by Dave Chapman, Chair, Observing Committee



In June of 2018, RASC awarded the following observing certificates: Explore the Moon—Telescope to both Robert McLean and Edward Essex of RASC Thunder Bay; Explore the Moon—Telescope to Charles Ennis of RASC Sunshine Coast; and Explore the Universe to Judy Black of RASC Halifax. In the first 6 months of this 150th Anniversary year, RASC has awarded 14 observing certificates—keep them coming!

In anticipation of this summer's close Mars opposition, a new page has been added to the Special Projects section of the RASC Observing web site www.rasc.ca/mars-2018-opposition. There you will find several downloadable resources on observing and drawing Mars, including a observing form, courtesy

of Denis Fell. We will be adding to those resources as items are produced.

On Twitter, please follow @RASC using the hashtag #RASCobserving for announcements of earned observing certificates and special observing opportunities.

Also, please let us know of RASC members earning observing distinctions from other societies. In June, Melody Hamilton of RASC Halifax earned the Southern Skies Binocular Award from the Astronomical League, based on her observations from Chile in April 2018.

Graphic License Plate Project

by Peter Jedicke, London Centre



Society members who live in Ontario are probably familiar with the specialty license plates available from the province's Ministry of Transportation. You might have seen personalized plates, where the owner of a vehicle chooses a unique combination of characters from the alphabet or digits. Another popular option is the graphic plates, which have the logo of an organization or something similar like a university. It is also possible to order a personalized graphic plate, although those come with a maximum of six characters (instead of eight). An organization can choose how to sell these to their members or even to the public at large, and the organization receives a small royalty for each sale.

Would you pay to have the RASC crest on your vehicle's license plate? It would

look something like the sample plate provided by the Ministry in this image. The cost would be \$83.40 for a graphic plate, and you would still have to pay for the actual vehicle license through the usual channels. Once you pay for a graphic plate, you get to keep it for as long as you want and won't have to pay the graphic plate fee again. Personalized graphic plates are also possible, but they cost \$337.65 and you have to confirm your choice with the Ministry directly.

If this interests you, reply to email address **ONTlicenceplate@rasc.ca** and I will track the response. We need a minimum of 200 orders and you will have to pay once we activate the project. The deadline is August 1, and with sufficient interest, the graphic license plates would be ready a few months after that.

CASCA Newsletter

by Eric Briggs, RASC, Toronto Centre

http://casca.ca/?cat=4

The June Solstice e-newsletter Cassiopeia from the Canadian Astronomical Society/Société Canadienne d'Astronomie has been published. This newsletter includes the first President's Message by incoming CASCA President Dr. Rob Thacker. This newsletter includes reflections on the annual conference in Victoria, B.C., and the 100th anniversary of the Dominion Astrophysical Observatory, first reactions after the end of Canadian participation on the WFIRST space telescope, and general issues affecting Canadian academic astronomers.

Ce bulletin comprend un résumé de la thèse "Étude sous-millimétrique de l'interaction entre le magnétisme et la turbulence dans les milieux interstellaires" pa Simon Coudé de l'Université de Montréal.

Montreal Centre Upcoming Events

by Carl Jorgensen, Secretary, Montreal Centre

Wednesday, July 4, 7:30 – 11:00 pm: Montreal Centre members Morgan Arboretum Conservation Centre , 150 Chemin des Pins, Sainte-Anne-de-Bellevue.

The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Friday, July 6, 7:30 – 11:00 pm: Arbo Clubhouse at the Morgan Arboretum. Observing afterwards (weather permitting).

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

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

Saturday, July 14, 7:30 – 11:00 pm: Members offsite observing at Woody – Woods, 45 Rang Saint Antoine, Saint-Chrysostome (weather permitting).

Wednesday, July 18, 7:00 – 9:30 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).

Saturday, July 21, 7:30 – 11:00 pm: Public Event "Mars Night" presentation on Mars 8:00 pm at the Morgan Arboretum. Observing afterwards (weather permitting).

Wednesday, July 25, 7:00 – 9:30 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).

Saturday, July 28, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum. Observing afterwards (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 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.













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.



The Royal Astronomical Society of Canada 203 – 4920 Dundas St W, Toronto ON M9A 1B7 CANADA Tel: (416) 924-7973, Fax: (416) 924-2911

Member Service: nationaloffice@rasc.ca

Visit Us at: www.rasc.ca

The *Bulletin* of the Royal Astronomical Society of Canada

is a benefit of membership in the Society.

© 2018 Royal Astronomical Society of Canada