BULLETIN OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

May 2013 - Volume 8, Number 5 **David Garner, Editor**

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

A **PDF** version of the *Bulletin* is available here.
A **Web-based** version of the *Bulletin* is available here.

Editor's Notebook by David Garner

May's Sky

According to the 2013 *Observer's Handbook*, Mercury will reappear in the evening sky by May 18th. For a very interesting observation, look for Mercury, Venus and Jupiter in the western evening sky within 3 degrees of one another during May 25, 26 and 27. Saturn will be visible most of the night whereas Uranus and Neptune can be found in the early morning eastern sky. The next full Moon occurs on May 25th (UT). Don't forget to check out Gary Boyle's **Northern Skies** for complete details.

News @ RASC.ca

2013 GA!

by **Dave Gallant**, Thunder Bay Centre, 2013 GA Chairman

Register now for 2013 GA in Thunder Bay, ON
The Thunder Bay Centre would like to encourage everyone to sign up for the GA by going to http://www.rasc.ca/events.

We have a good program planned out that is sure to please. Don't forget to come early to participate in Dennis Mammana's photo night sky workshop, or to stay for the day of tours and see all the natural wonder that Northwestern Ontario is known for.

Board Elections

by **Chris Gainor**, RASC 2nd Vice-President, Chair of Nominations Committee

As of NC131, the proposed By-Law #1 under the CNCA is now on-line at RASC By-Law # 1.
One important aspect of By-Law #1 is a requirement for the members to elect a Board of Directors. Because the new By-Law will take effect after the Thunder Bay GA in June but the first full board won't be elected until a year later, National Council at the meeting on March 23 set up a Board Transition Committee to elect an interim Board at the upcoming GA.

The board that will govern the RASC in 2013-2014 will consist of the members of the RASC executive plus three board members who will be elected in an election process that is now under way. The nominations deadline for these three board positions is May 31, and the election will take place in June.

We are looking for members who are interested in running for these three board positions.
To find out more information about this election, especially if you are interested in running for the board, visit www.rasc.ca/elections, or contact Chris Gainor, Chair of Nominations Committee.

New Associate Editor-in-Chief for JRASC

by **Colin Haig**, RASC 1st Vice-President

We are pleased to announce the new Associate Editor-in-Chief of the Journal of the Royal Astronomical Society of Canada, Nicole Mortillaro, effective as of Astronomy Day 2013.

Nicole holds a Bachelor of Applied Arts in Journalism from Ryerson University. She has over 10 years of professional editing experience for educational texts and historical books, contributes to social media, and has created on-line content for the RASC web site.

We extend our congratulations to Nicole and ask our members and supporters to provide her many years of writing, ideas, and top-quality research to JRASC.

Asteroids with a Canadian Connection

by **Eric Briggs**, Toronto Centre

A few new asteroids have been named to the List of Asteroids with Canadian Connections:

http://www.rasc.ca/content/asteroid-100940
(100940) Maunder = 1998 MM47

Discovered 1998 June 28 by E. W. Elst at the European Southern Observatory.
Edward Walter Maunder (1851–1925), a British astronomer, was the driving force in the foundation of the British Astronomical Association. He is well-known for discovering a prolonged minimum in solar activity from 1645 to 1715, corresponding with lower than average European temperatures.
Mr. Maunder was elected a Corresponding Fellow of the Astronomical and Physical Society of Toronto on 1894 January 23. His correspondence extended as far as participation in the Labrador total solar eclipse expedition of 1905 August 30, when he and his wife Annie were invited as guests of the Canadian government.

MPC 83583

http://www.rasc.ca/content/asteroid-204786
(204786) Wehlau = 2006 KU131

Discovered 2006 May 25 by P. A. Wiegert at Mauna Kea.
William Henry Wehlau (1926–1995) was an American-born Canadian astronomer who pioneered the field of stellar surface mapping using observed rotational variability of surface abundances and magnetic field strength. He served on the Board of the Canada-France-Hawaii Telescope from 1974 to 1985.
MPC 83584

http://www.rasc.ca/content/asteroid-233472
(233472) Moorcroft = 2006 KB143

Discovered 2006 May 25 by P. A. Wiegert at Mauna Kea.
Donald Ross Moorcroft (b. 1935) is a Canadian physicist who did much to advance the field of radar backscatter from the auroral E-region ionosphere. He was the Chair of the Department of Physics of the University of Western Ontario from 1989 to 1998.

MPC 83584

These are listed on the Web site, www.rasc.ca/canadian-asteroids.

IAU Office for Astronomy Outreach

by **Randall Rosenfeld**, RASC National Archivist

In recognition of the growing importance of education and public outreach, the International Astronomical Union (IAU) (http://www.iau.org/) has recently established an Office for Astronomy Outreach (OAO) (http://www.universedowntoearth.org/), run by International Outreach Coordinator Sarah Reed, formerly Executive Director of the World Space Week Association. Ms Reed is also now editor of the peer-reviewed journal Communicating Astronomy with the Public (CAP) (http://www.capjournal.org/issues/13/).

The OAO aims to be "a hub for coordinating public outreach activities around the world".
It will be worth visiting the OAO website in the coming months as more resources, communications options, and projects are unveiled.

RASC Honorary President Wins AAS Education Prize

by **Randall Rosenfeld**, RASC National Archivist

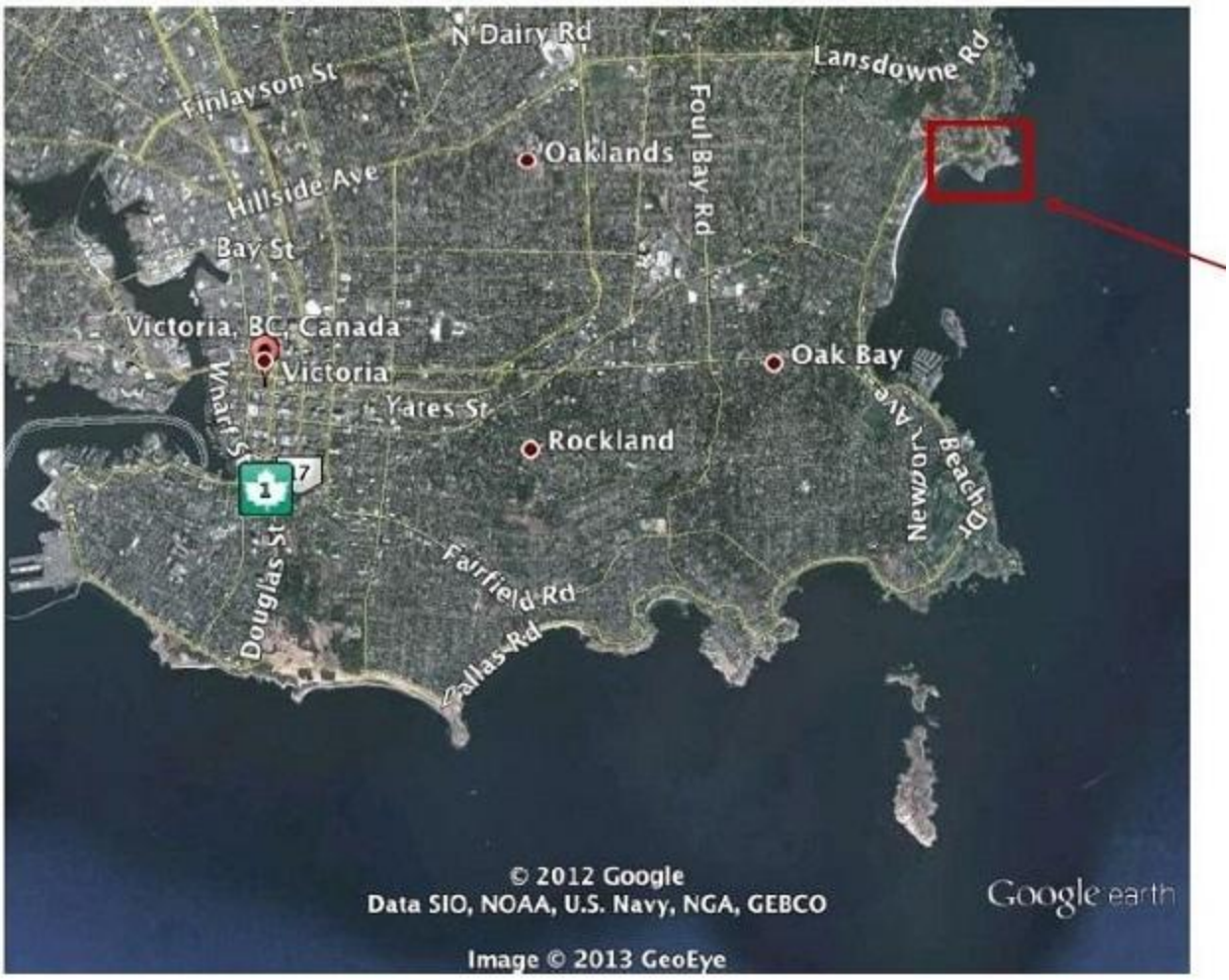
The 2013 recipient of the American Astronomical Society's (AAS) Education Prize is incoming RASC Honorary President Prof. John R. Percy. The AAS Education Prize acknowledges outstanding contributions to the education of the public, students and the next generation of professional astronomers.

Previous winners include Owen Gingerich, Frank D. Drake, and Fred Hoyle and Carl Sagan (both won the predecessor Annenberg Prize). Prof. Percy is clearly in good company, and we congratulate him on his latest honour. Among his many other awards Prof. Percy won CASCA's inaugural Quilak Award in 2012, and the International Astronomical Union (IAU) named minor planet 32208 Johnpercy (2000 OR7) in his honour.

Canada has a second Urban Star Park

by **Robert Dick**, RASC Light Pollution Abatement Committee

Canada has a second Urban Star Park. The latest Urban Star Park (USP) is Cattle Point east of Victoria on Vancouver Island. This 30.6 ha area is a nature preserve on the shore of the Haro Strait in the north and Strait of Juan de Fuca to the south.
For twenty years the Victoria Centre has been conducting annual public outreach events at the site.



Does your Centre have a favourite and easily accessible site? Look around and propose that your Centre nominate a USP close to your home.

The Globe at Night

by **Roland Dechesne**, RASC National Light Pollution Abatement Committee

The Globe at Night (http://www.globeatnight.org/) is a citizen science project that allows people from around the world to gauge the brightness of their nighttime skies via simple constellation comparison charts. Canadian amateur astronomers have already submitted data from the earlier dark-of-the-Moon observing windows, but there is still one more observing window coming up. It starts April 29 and runs to May 8. The Spring constellation, Leo, will be your target. Data submission is through the web site in English (http://www.globeatnight.org/webapp/)), ou en francais (http://www.globeatnight.org/fr/webapp/).

David Levy Speaking Tour

by **Randy Attwood**, Past President, Mississauga Centre

The National Society Public Speaker Program was set up to encourage our Centres to organize and host public talks and presentations, by speakers from outside their local area, about astronomical and related topics.

This spring, eight centres will participate in a rare speaking tour by RASC member David Levy. A longtime observer and author, David has been observing for most of his life, has discovered 22 comets, written 34 books and is an RASC Chant Medal recipient.
The dates are as follows:

• May 31 Ottawa

• June 1 Montreal

• June 3 Kingston

• June 5 Toronto

• June 6 Kitchener-Waterloo

• June 7 Mississauga

• June 8 Hamilton

• June 9 London

The Public Speaking Program is sponsoring David's travel to/from Canada as well as some of his travel within Canada. Centres are sharing in the total costs of his lodging.

Across the RASC

RASC Hamilton Centre Hosts AstroCATS

Canadian Astronomy Trade Show

May 25/26, Oakville, ON

by **Gary Bennett**, Hamilton Centre, Membership Director

Saturday May 25: 10:00 AM – 6:00 PM
Sunday May 26: 10:00 AM – 4:00 PM

Location:
Sheridan College – Athletics Centre
1430 Trafalgar Road
Oakville, Ontario

The first show of its kind in Canada! It is a bona fide trade show with 2 full days of exhibits, seminars, and 2 Keynote Speakers (Terence Dickinson and Jim Fitzgerald). A great family outing for beginners and experienced alike! We expect to see a few new product unveilings and some dreamy door/raffle prizes.

For more details, seminar schedule, ticket prices (save $ with on-line purchase), etc., visit www.astrocats.ca.

Ottawa Centre Presentations on YouTube

by **Charles O'Dale**, Ottawa Centre

You can find them here: http://ottawa-rasc.ca/wiki/index.php?title=Ottawa_Centre,_RASC_Presentations.

The Dragon's Mouth

by **Dave Gamble**, RASC Okanagan Centre

First, it was the elusive "X" on the Moon. Now it is a "Dragon's Mouth". While testing a telescope on April 22, I happened to check out the 12-day-old Moon and something on the lower part of the terminator caught my eye. It looked like the jagged crown of a crater just catching the light.

Conditions were favourable enough to increase the power to 405x and I was fascinated to find a small pattern of bright hilltops that one could imagine was a mouthful of very bright teeth, thus the Dragon's Mouth descriptor. This remarkable object really stood out.

As distinctive as the effect was, the impression at the eyepiece was that it would be a very ephemeral event. No problem, the Moon age at the time of the observation was 12 days 19.166 hours… just a matter of revisiting it the following month in hopes of getting an image.

The true state of affairs was explained by veteran lunar observer Alister Ling in Edmonton who noted that "colongitude is a better guide than age for replicating shadows, since age is Earth relative and colongitude is Sun relative." Alister also noted that the changing solar latitude influences the play of shadows. Obviously much will depend on how subtle the lighting effect is and how much tolerance it will allow for the various parameters.

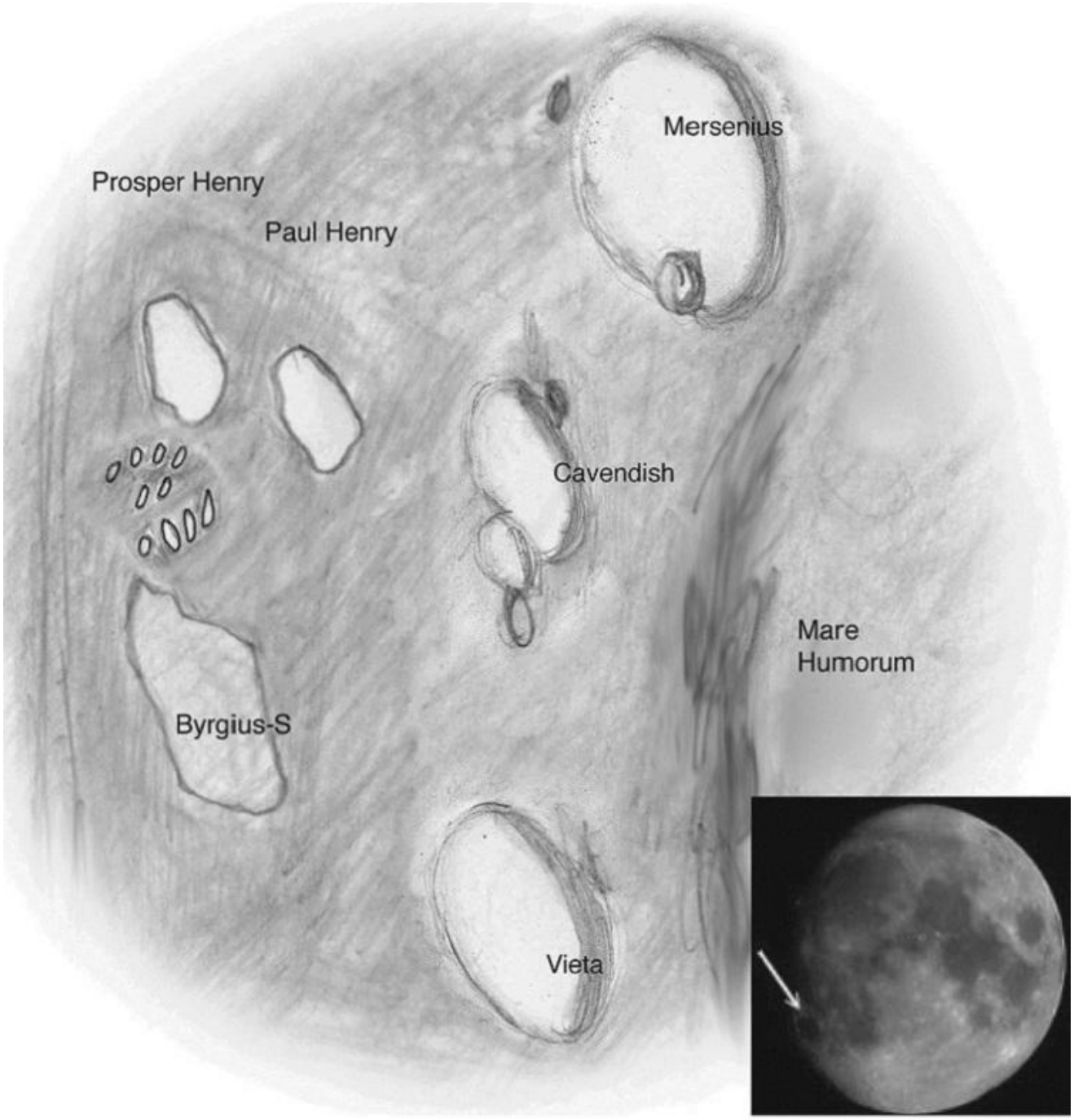
We would like to invite others to join the hunt for the "Dragon's Mouth." Alister determined that the colongitude at the time of the observation was 61.7 and he calculated colongitude timings for the coming months. The May event will not be favourable since the event occurs during mid day with the Moon not due to rise until early evening. In June however, the colongitude time for the Okanagan Valley will be at 20:32 PDT on Thursday, June 20. This time can be extrapolated for other Canadian locations, providing the potential for a wide swath of observations, hopefully many of them under clear skies.

The question is, what formations could give rise to this lighting effect? The accompanying drawing from a rough sketch done at the eyepiece gives the general location and layout of the scene as viewed at 405x. In fact, the "Dragon's Mouth" may be found to be a bit smaller formation than illustrated, and in this case there would be more room between Prosper Henry and Byrgius-S for it to nestle in.

From the rough drawing, Gary Seronik in Victoria suggested the hilltops looked to him like they might be due to the partly degraded rim of Byrgius B. Alister Ling was able to locate a number of horizontally lit photographs of the area, though he noted we were missing a lot between colongitudes 61.3 and 72.

Despite this he notated several suggestive possibilities on two photos which can be viewed in the special gallery I have set up on the Okanagan Centre RASC Zenfolio site here:
http://rascoc.zenfolio.com/p386519967

It will be intriguing to track it down. It would be appreciated if observations etc. could be forwarded to myself at Dave Gamble and to Alister at Alister Ling.



Bulletin Photo of the Month

Full moon over Wellington, NZ.

by **Denis Dean**, Toronto Centre

The video was taken by John Butler in New Zealand.

This stunning video is one single real-time shot, with no manipulation whatsoever. The camera was placed on a hillside over 2 kilometres from the Lookout point, and was shot with the equivalent of a 1300mm lens.

The amount of planning, trial and error, and luck that went into this are mind blowing. He has been trying to capture this for over a year with many failed attempts.

I honestly can't say enough good things about this video - from the magnitude of the visuals, to the intimate stories playing out with the people, to the sheer humbling nature of seeing the awe-inspiring reality of this giant rock in the sky that we so often don't stop to appreciate.

https://vimeo.com/58385453 (sound on)

The Sky this Month

What's New in the Sky

Members are encouraged to check out the **Northern Skies** section of the RASC Web site. Thanks to **Gary Boyle** for keeping us all in the know.

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