

Report of the CASCA Education & Outreach Committee, December 2007

Submitted by Jayanne English, Committee Chair.

Committee Membership:

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Martin Connors (2004-2007, 2007-2010), Dennis Crabtree (2006-2009), Michael De Robertis (2005-2008), Bill Harris (2005-2008), Jim Hesser (ex-officio; 2007-2010), Ray Jayawardhana (2007-2010), Robert Lamontagne (ex-officio), Nathalie Martimbeau (2006-2009), Peter Martin (ex-officio), John Percy (2005-2008, past-chair), Joanne Rosvick (2005-2008); Carmelle Roberts is the Board Rep, and Mohaddesse Azimlu is the Graduate Student Committee rep.

John Percy continues to act as liaison with Heather Theijsmeijer. See attached letter.

The membership has communicated via a 3 telecons since June (minutes taken by Theijsmeijer) and a TWIKI is being managed by Rosvick. These have been successful.

CASCA 2008 Meeting in Victoria, B.C.:

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The education session will focus on informing astronomers on how to do outreach during IYA 2009. English has informally approached Peter Calamai, an award-winning science writer at the Toronto Star, to be the guest speaker. He expects to be available and may be able to attend while enroute to a previous commitment via Vancouver, potentially reducing airfare costs. In addition to airfare he will need accommodation support. If there is a strong press release component, and the Star thinks the material is very interesting, accommodation costs may be reduced. Nevertheless it would be best if the meeting organizers, and/or the CASCA Board, prepared for a non-optimal scenario with respect to funding this speaker. Also the conference fee should be waived and a banquet ticket provided.

Additionally we plan to encourage participation in the EPO session by the RASC and FAAQ amateur astronomy societies; the IYA Steering committee will encourage them to each send one representative who can talk about their strategies for IYA 2007 activities. It has been suggested that a 10 minute plenary talk be provided for each representative. That is, Calamai would speak for 30min and 10min for questions, then the FAAQ representative and the RASC representative would talk for 10min each. We understand that the 1/2 hour portion after Calamai's talk may be hard to organize as a plenary session but we will suggest it to the LOC.

International Year of Astronomy:

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Jim Hesser has been serving as Single Point of Contact (SPOC) person for the IYA Canada Committee (IYACC). He has provided a detailed report to the EPO Committee and the Board on the activities since the Kingston AGM; his report should be consulted regarding IYA activities.

An Ad Hoc CASCA subcommittee, led by Jayawardhana, examined whether a lectureship, similar to the CASCA-Westar lectureship, would be appropriate for IYA 2009. The subcommittee was enthused and made strategic recommendations. While no one on the CASCA EPOC can be identified to organize such an endeavour, a small list of potential organizers has been passed on to the IYA Steering Group. The CASCA-IYA lectureship report is attached below.

IYA Fundraising:

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At the June 2007 Board meeting, the CASCA EPOC was directed to explore contacts for professional fundraisers. Carmelle Robert discussed our situation with an administrator at Laval University and discovered that university public affairs departments could not participate in our fundraising. We received quotes for writing fundraising applications from a Winnipeg company and from an independent fundraiser, Kim Breland. The CASCA Board recently contracted Breland to write fundraising applications in support of the Galileo Moment ("look through a telescope") project. The main goal is to raise funds for an "executive officer or assistant" to support the volunteer SPoC.

The IYA programming committee defined the priority projects to a certain degree in September. The articulation of the projects still

need to be refined. While this makes it a challenge to hire a professional outreach consultant to determine cost of these programming ideas, budgets for specific activities, methods of counting people who look through a telescope, and other metrics would be exceedingly helpful for the fundraiser. (The fundraiser would develop the over all budget, including operating funds.) Mortfield is experienced in astronomy EPO and could provide insightful directions. It is English's intention to draft a letter and contract for Paul Mortfield, probably before the Christmas break, so that he can contribute to the Galileo Moment endeavour as soon as possible.

Other Fundraising:  
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Percy, with input from Hesser and English, and an intern have created a document "Canadian Astronomy Education and Public Outreach: IYA and Beyond" to present to potential sponsors. This document is in support of IYA 2009, the CASCA Education website, and the proposed AstronomyCanada.ca website. This document has been completed Dec. 2007. This report would not be a substitute for writing grants to specific organizations since submissions required specific packages.

From our personal experience in attempting to raise funds, we have found that potential sponsors would like to talk to professional astronomers who they happen to know. Therefore English is developing a website to provide information to the CASCA community; it will simply have a list of resources such as the unofficial budget for AstronomyCanada.ca and the document mentioned above. A notice will go out on the CASCA exploder as soon as the latter is available on the website.

Additionally we would like to raise funds within the CASCA community. In the new year Percy and Rosvick intend to create a flyer which can be distributed with membership applications.

AstronomyCanada.ca:  
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One of the things that will make this website unique are illustrations and diagrams that explain concepts and phenomena that are associated with the astronomy images and articles. Students from the Ontario College of Art and Design, in an astronomy class taught by Robin Kingsburgh have sought out some Canadian research and are producing illustrations. This can serve as a pilot project for acquiring material for AstronomyCanada.ca. Their course terminates in December 2007.

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REPORTS  
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Press officer's report: Robert Lamontagne  
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I attended CASCA's annual meeting in Kingston. Aside from the usual prizes and awards press release that I prepared and were issued by the Society, four other scientific press releases were prepared and distributed during the meeting. Although the number of releases is small, ALL were picked-up by several media (see the included file). A "grouping" strategy for releasing these news items appears to be more efficient than distributing a single press release once in while. The style and wording of a press release, as described in the guidelines appearing on CASCA's website, are also very important.

In preparation for IYA2009, Scott Young and I (IYA2009-Communication working group) are preparing guidelines for preparing and communicating press releases during 2008 and 2009. I'm also drafting up a list of local contacts across Canada that media people might talk to whenever a there's a newsworthy events related to IYA2009.

J. Matthews press release:

<http://www.cbc.ca/technology/story/2007/06/11/science-super-earth-ubc.html>

<http://www.cyberpresse.ca/article/20070607/CPSCIENCES/706070618/5143/CPSCIENCES>

<http://www.thestar.com/News/article/223607>

<http://www.astrobio.net/news/modules.php?op=modload&name=News&file=article&sid=2359&mode=thread&order=0&thold=0>  
<http://www.physorg.com/news100590794.html>  
<http://thetyee.ca/News/2007/05/11/NewEarth/>  
<http://www.astronomy.com/asy/default.aspx?c=a&id=5619>  
[http://media-newswire.com/release\\_1052019.html](http://media-newswire.com/release_1052019.html)  
<http://www.centauri-dreams.org/?p=1298>  
<http://www.scienceticker.info/2007/06/08/langweiliger-stern-bessere-chancen-fuer-leben/>

A. Moffat press release:

<http://www.spaceref.com/news/viewpr.rss.spacewire.html?pid=22806>  
<http://news.sawf.org/Health/38264.aspx>  
<http://www.starstryder.com/2007/06/07/most-massive-star-ever-weighed/>  
<http://www.keralanext.com/news/?id=1025936>  
<http://www.astronomy.com/asy/default.aspx?c=a&id=5620>  
[http://dsc.discovery.com/news/2007/06/07/heavystar\\_spa.html?category=space&guid=20070607114500](http://dsc.discovery.com/news/2007/06/07/heavystar_spa.html?category=space&guid=20070607114500)  
<http://www.scienceticker.info/2007/06/07/astronomen-finden-schwersten-stern/>  
[http://www.futura-sciences.com/fr/sinformer/actualites/news/t/astronomie/d/decouverte-de-lettoile-la-plus-massive-jamais-observee\\_12051/](http://www.futura-sciences.com/fr/sinformer/actualites/news/t/astronomie/d/decouverte-de-lettoile-la-plus-massive-jamais-observee_12051/)

C. Willott press release:

<http://www.astronomy.com/asy/default.aspx?c=a&id=5631>  
<http://asia.spaceref.com/news/viewpr.html?pid=22807>  
<http://www.msnbc.msn.com/id/19094136/>  
[http://www.space.com/scienceastronomy/070607\\_distant\\_blackhole.html](http://www.space.com/scienceastronomy/070607_distant_blackhole.html)  
[http://dsc.discovery.com/news/2007/06/07/quasar\\_spa.html?category=space&guid=20070607093030&dcitc=w19-502-ak-0000](http://dsc.discovery.com/news/2007/06/07/quasar_spa.html?category=space&guid=20070607093030&dcitc=w19-502-ak-0000)  
<http://www.zunya.org/news/spip.php?article309>  
<http://www.techno-science.net/?onglet=news&news=4159>  
<http://www2.cnrs.fr/presse/communiqu/1117.htm>  
[http://tempsreel.nouvelobs.com/actualites/sciences/espace/20070607.0850795/le\\_trou\\_noir\\_le\\_plus\\_lointain\\_jamais\\_decouvert.html](http://tempsreel.nouvelobs.com/actualites/sciences/espace/20070607.0850795/le_trou_noir_le_plus_lointain_jamais_decouvert.html)  
<http://www.science.gouv.fr/index.php?qcms=article,view,2631,view,159,2631,,,>

A. Ruitter press release:

<http://in.news.yahoo.com/070607/139/6gr16.html>

CASCA-IYA Lectureship Report: Ray Jayawardhana

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Summary of telecon on August 7, 2007

Participants: Jim Hesser, John Percy, Heather Theijsmeijer, Bill Harris, Robert Lamontagne, Ray Jayawardhana

The group is enthusiastic about the idea of a national lecture series during the IYA, and saw it as an opportunity to showcase Canadian astronomy research to a broad audience. We discussed models, such as the AAS Second Century and the CAP World Year of Physics series, as well as the CASCA Westar program. One thing that came up repeatedly was the need for and benefits of partnering with a wide variety of other organizations and institutions: besides the RASC and the FAAQ, other possible partners include regional science centres, the Origins, Perimeter and Royal Canadian Institutes (all of which hold regular public events), and distinguished lectureships at universities. It was suggested that musical or multimedia presentations could enhance the lecture events. Recognizing that public/school/star party talks do take place every year throughout

the country, we discussed what extra strength CASCA might muster to bring about higher visibility and impact for the IYA:

- CASCA should select a handful (6-10) of "star lecturers" for the IYA program, ideally high-profile Canadian researchers who are also excellent public speakers. Among the names suggested were Bob Abraham, Luc Simard, and Vicky Kaspi: the committee will continue to discuss these and other names. We felt the bar should be set high for the speaker selection.
- CASCA could try to identify a national media partner to promote the public events.
- There needs to be funds to cover speakers' travel costs (and honoraria?) and perhaps contribute towards a portion of the local costs, similar to what the Westar, Shapley and Second Century programs do. This will require fund raising.

In order to develop and implement these ideas, it is essential to identify a capable and willing coordinator, perhaps advised/supported by a few EPO committee members. Among other things, that person would be expected to proactively approach potential partner organizations and explore fundraising possibilities. There were no volunteers among us for this position! Committee members agreed to think about other possibilities over the next few days.

Report from CASCAedu Coordinator: Heather Theijsmeijer

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Outreach:

#### STAO Presentation

I presented a 1-hour lecture at the Science Teachers Association of Ontario 2007 conference, on November 16, entitled "Expanding Their Horizons: Connecting the Students to the Stars". The talk focused on Canadian astronomy resources for teachers, primarily the CASCA Education website, and associated programs (notably the Canadian Junior Astronomer Program and the CASCA-Westar Lectureship series). There were about 25 teachers in attendance, filling the room. However, between other conference attendees picking up the in-print resources, and the audience members taking extras for their colleagues, approximately 50 in-print resources were distributed.

Feedback on the talk was quite favourable: participants were asked to rate the usefulness of the session, the effectiveness of the speaker and the overall session. Of those who responded, 92% said that the talk was extremely effective, that they will be able to apply what was learned to either their classroom or their personal life, that the speaker was most effective, that the speaker was recommended for next year's conference, and that this session was an overwhelming success.

Also at the conference, I was able to meet with Margaret Kennedy of the National Research Council to discuss the upcoming IYA2009 plans, and how the NRC can contribute (specifically, through projects and Native sky lore). We will be in touch through e-mail to develop ideas and review materials.

#### CASCA Education Website

Recent updates to the website included the annual checking for dead links (and repairing them), updating some of the links, adding new articles and most notably, creating a more comprehensive Canadian Astronomy section of the site, which includes astronomer profiles (of past and present astronomers), history of astronomy in Canada, Canadian press releases, Canadian contributions to space exploration and Canadian facilities and instruments. There is also a guideline for teachers on how to use this information in their curriculum. I would like to add more astronomers' profiles to the site (particularly more female astronomers), and am in the process of collecting information to that end.

The website itself has seen 14,655 visitors to date, since being launched in April, 2003. The majority of visitors are North American (81.5%), with users in Europe visiting 4.4% of the time and users in Asia visiting 2% of the time. It is linked to by 51 separate websites (33 English and 18 French), such as the NRC, Canadian Teacher Magazine, and Planet Webquest. The pages which seem to be linked to the most are the science fair page, the careers page, the astronomer profiles pages, the "buying a telescope" page and the Astronomy Day page. The CASCAed website has also been highlighted as the looknorth.ca site of the day, the Internet Scout Project at the

University of Wisconsin, and has been featured on HelpTV as a homework aid (the video of this television clip is available on the website).

Since the Canadian Junior Astronomer Program was launched shortly after the introduction of the CASCA Education website, 88 students from 2 provinces have completed levels (60 at the star level, 27 at the nova level, and 1 at the supernova level). There is still demand for this program, including some requests from teachers in the United States.

Through the [cascaed@astro.utoronto.ca](mailto:cascaed@astro.utoronto.ca) e-mail account (which can be accessed from the website), I have received some feedback on the site, including suggestions for content, requests for CWL and Canadian Junior Astronomer Program, notices for upcoming astronomy events, requests from people wanting to use the information posted online, and even random questions (such as, "I saw a light in the sky - what was it?") or questions on where people can find more material on a certain topic.

#### CASCA-Westar Lectureship

Since March, there have been two CASCA-Westar Lectureship series. At the end of March, Doug Johnstone visited Castlegar, BC, presenting a talk on "A Star is Born! Shining Light on the Nebulous Past of a Celestial Miracle." In addition, Doug made presentations at the local secondary school and Selkirk College.

In August, Luc Simard visited the Saskatchewan Summer Star Party. Apart from his keynote lecture, entitled "Reaching Across Time and Space with the Thirty-Meter Telescope," Luc was on-hand throughout the star party to answer questions from amateur astronomers and presented a more informal talk on "Stargate Mauna Kea" in an open-air amphitheatre. Both Luc's and Doug's reports are featured in the Fall Equinox issue of E-Cass.

There is an upcoming CWL in Lethbridge, AB (Jaymie Matthews), and talks are in progress for possibly one in Kelowna BC, and Brandon MB.

Inreach:

E-Cass

Articles have been written for the June Solstice and the Fall Equinox issues of E-Cass, which included "Breaking the Teaching Barrier: Moving from Professing to Teaching", and "Using Powerpoint in the Classroom." I also coordinated collecting articles on the recent CWLs from Doug Johnstone and Luc Simard, and Education Notes in the June Solstice issue.

#### CASCA 2007

At the CASCA 2007 General Assembly, I presented a talk on "Breaking Down the Teaching Barrier" during the Education/Public Outreach session. The session seemed to be well-received, and was summarized in an article in the Summer Solstice issue of E-Cass. I also created a handout for the Graduate Student Workshop on teaching astronomy, which focused on on-line resources, such as the CASCA Education website, the Astronomy Education Review and Let's Talk Science.

Miscellaneous:

In September, I attended a workshop on Native sky lore, presented by the Rainbow District School Board and Science North. I spoke afterwards with the two co-presenters, and will be working with them in the near future regarding IYA2009 activities.

I have been in contact with Rita Gordon, of Gordon's Park on Manitoulin Island, part of which is a dark sky sanctuary. I will be speaking at the 2008 Manitoulin Star Party (August 8-12, 2008) on "Canadian Skies: Canadian Science." I will also be working with Rita on possible events for IYA2009.

Member's other activities:  
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Jayanne English continues to contribute to the IYA Steering group and to IYA conference posters. She gave 2 talks (Laval University and KeyCon science fiction convention) and 1 workshop (SA0fest, Quannah Tx) on image-making for the public.

John Percy's activities are wide ranging, including contributions to

education and teaching programs. He also continues to contribute to the IYA Steering group and to IYA conference posters. He led the production of the EPOC fundraising brochure and IYA stamp and coin projects. He continues to attend education conferences.

Ray Jayawardhana was a featured speaker at StarFest'07, Canada's largest star party, in August. He recently agreed to serve on the advisory board for the Galaxy Garden project (<http://www.galaxygarden.net>), a 100-foot diameter outdoor scale model of the Milky Way, mapped in living plants and flowers and based on current astrophysical data, located at the Paleaku Astronomy Center in Kona, Hawaii.

Joanne Rosvick is on the organising committee for the ASP meeting in June in St. Louis 2008. The focus is going to be workshops/demos on astronomy for the public, and specifically for IYA.