

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 42, No. 7/8

July/August 2011

Midsummer Solstice Party at the Tuomi Observatory



On June 25, 17 members and guests from the Saskatoon Centre met at the Tenho Tuomi and Garry Stone observatories for a Summer Solstice Star Party. The skies were not dark but the food and conversation were good. \$\$ was donated to the Bill Hydomako Sleaford Observatory Building Fund.

Photo by Tenho Tuomi



Saskatoon Centre
The Royal Astronomical Society of Canada
P.O. Box 317, RPO University
Saskatoon, SK S7N 4J8

WEBSITE:

<http://www.rasc.ca/saskatoon>

E-MAIL: jjswick@shaw.ca

TELEPHONE: (306) 373-3902

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To view *Saskatoon Skies* in colour, see our Website:
<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$80.00 /year

Youth: \$41.00 /year

Associate: \$33 /year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mark de Jong, or renew through the National Office and let Mark know that you did!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- The Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Telescopes
<http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at norj@sasktel.net.

U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

| | |
|------------------|----------------|
| January-February | 7:30-9:30 pm |
| March | 8:30-10:30 pm |
| April | 9:30-11:30 pm |
| May-July | 10:00-11:30 pm |
| August | 9:30-11:30 pm |
| September | 8:30-10:30 pm |
| October-December | 7:30-9:30 pm |

SASKATOON CENTRE'S MAIN OFFICERS:

President – Jeff Swick, 373-3902
Secretary – Ron Waldron, 382-9428
Vice-President – James Gorkoff, 644-1343
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

Newsletter Editor – Tenho Tuomi
Copy & Collate – Les & Ellen Dickson
Labels & Temps – Mark de Jong
Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at ttuomi@yourlink.ca – any format, but preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise indicated), provided that proper source credit is given. DEADLINE for submissions for each month's issue is the 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

LIGHT POLLUTION ABATEMENT
WEBSITE AT:
www.ras.sk.ca/lpc/lpc.htm

RASC CALENDAR OF EVENTS

| | | | |
|----------------------|--|---|----------|
| Aug 25-28 | Saskatchewan Summer Star Party – Cypress Hills Park | Rick Huziak | 665-3392 |
| Aug 25-28 | Spruce Woods Star Party – Spruce Woods Park, MB | http://winnipeg.rasc.ca/home/35-announcements/158-spruce-woods-star-party-2011 | |
| Sep 19 | RASC Executive Meeting - 6:30 pm, 175 Physics, U of S | Jeff Swick | 373-3902 |
| Sep 19 | RASC General Meeting - 7:30 pm, 175 Physics, U of S | Jeff Swick | 373-3902 |
| Sep 24 | Observers Group – Dusk, Sleaford Observatory | Larry Scott | 934-5801 |
| Sep 24-25 | Alberta Star Party - Starland Recreation Area, AB | http://calgary.rasc.ca/asp.htm | |
| Sep 27- Oct 2 | Northern Prairie Starfest – Black Nugget Lake, AB | http://edmontonrasc.com/public/nps.html | |
| Oct 17 | RASC Executive Meeting - 6:30 pm, 175 Physics, U of S | Jeff Swick | 373-3902 |
| Oct 17 | RASC General Meeting - 7:30 pm, 175 Physics, U of S | Jeff Swick | 373-3902 |
| Oct 24 | Observers Group – Dusk, Sleaford Observatory | Larry Scott | 934-5801 |

SASKATCHEWAN SUMMER STAR PARTY

August 25-28 at Cypress Hills Interprovincial Park

August 25 - Dedication of the new Cypress Observatory - Cypress Hills Provincial Park Dark-Sky Campground (old Horseshoe Campground). Friends of Cypress Hills will open the new observatory and Yurt classroom. 3:00 pm - General public welcome. BBQ to follow. MLA for Cypress Hills Wayne Elhard will be in attendance. Donations accepted toward observatory fund.

August 25 - Under the Living Skies Public Lecture: "100 Years of Citizen Astronomy through Variable Stars" - Dr. Aaron Price, AAVSO. Cypress Hills Provincial Park DSP amphitheatre. General public welcome. Free admission to the talk. 7:00 pm

August 26 - Solar Observing - Cypress Hills Provincial Park DSP Visitor's Centre. 11:00 a.m. = 12:30 p.m. Come see the sun through our safe solar telescopes! General public welcome. Free admission to starnight.

August 26 - Public Star Night - Cypress Hills Provincial Park DSP Dark-Sky Campground. 9:00 p.m. General public welcome. Free admission to starnight.

August 27 - Public Star Night - Cypress Hills Provincial Park DSP Dark-Sky Campground. 9:00 p.m. General public welcome. Free admission to starnight.



At the Tuomi Observatory Summer Solstice Star Party.
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Photos by Tenho Tuomi

Minutes of the Executive Meeting, June 20, 2011

by Ron Waldron

- 1 Meeting began at 6:30 PM
- 2 Approval of Minutes of May Executive Meeting – Moved by Rick Huziak, seconded by Norma
- 3 Treasurer's Report – nil report
- 4 SSSP – Rick Huziak reported that Registrations have virtually stopped due to the mail strike
- 5 Sleaford Report – Rick Huziak reported that the shifting of the school may be due to flooding. He is planning to open the door to the basement to have an inspection and assessment. It may need a sump pump. Renovations to the Warmup shelter will likely be resuming after the GA. Rick is planning to work on the 16" telescope repairs as well.
- 6 Other
 - ◆ Rick reported that the Grasslands Star Night has been expanded to include both July 30th and July 31st.
- 7 Meeting was adjourned at 7:20 PM.

 - ◆ There is a Star Night at Christopher Lake on July 16th. Details to follow.
 - ◆ There was discussion around the deterioration of the Sleaford School Building, and the purchase of a garage package for the site. No decisions were made regarding either, however a motion was put forward by Jim which reads "Jim and Rick draft a proposal to be inserted in the next newsletter proposing a site and garage package for approval by the membership at the September Meeting". Seconded by Norma. Passed
 - ◆ Ron Waldron indicated his disappointment with the Centre's decision not to accept the invitation by Relay for Life to take telescopes out this year. He made it clear that it was time that the Centre members started going to where the people are, instead of inviting people to special events.

Minutes of the General Meeting, June 20, 2011

by Ron Waldron

- 1 Meeting began at 7:30 PM
- 2 Approval of Minutes of May General Meeting – Moved by Darrel Chatfield, seconded by Tenho Tuomi
- 3 Tenho Tuomi and Gary Stone are inviting the club out to their observatories this weekend. Members are asked to sign up to indicate they are coming.
- 4 Sleaford Report – Larry announced the summer Observer's Groups are July 8th and August 5th.
- 5 School House Report – Rick Huziak – see Executive minutes
- 6 Chris Beckett presented Tenho Tuomi with the Isabel Williams Lunar Observing Certificate and pin.
- 7 Darrell Chatfield presented Tuomi with the Herschel 400-1 Observing Award.
- 8 Presentation – Ron Waldron gave a presentation entitled "Under South African Skies"
- 9 Presentation – Rick Huziak gave a presentation entitled "The 100th Annual Spring Meeting of the AAVSO"
- 10 Presentation – Chris Beckett of the Regina Centre gave a presentation entitled "Dark Nebula"
- 11 Meeting was adjourned at 9:45 PM



Noctilucent Clouds have been very visible this year on many nights.

Garry Stone photographed this one on August 2nd.

President's Message

By Jeff Swick

Sitting out on the deck in plus 30 temps this afternoon had me thinking back to our beginners night this past winter when the temps were in the minus 40's, what a province we live in.

It also had me thinking back to our June meeting where we were joined by Chris Beckett of the Regina center who spoke to our group about observing dark nebulae and you know that's what I'll be hunting at the Saskatchewan Summer Star Party in August.

Hats off to this year's chairman Rick Huziak and his crew for the work they have done this year navigating the challenges of the meadows upgrade and communicating these changes to our guests.

I know I'm looking forward to visiting with old friends and making new ones at SSSP. A BIG THANK YOU to all who give of their time to put this event on and also to all those who travel to our gathering year in and year out.

A special shout out to Roy from Edmonton who for the last few years has been treating Skooby the astro dog to his left over steak.

As I commented above about Chris Beckett visiting, he is also the National Chair of the RASC's

Observing Committee and was also in town to present our newsletter editor Tenho Toumi with a certificate to commemorate his completion of the Isabel Williamson Lunar Observing Program. This was a good night for Tenho as Darrell Chatfield also presented him with a certificate from the Astronomical Society of the Pacific for completion of their Herschel observing program

As I'm speaking of Darrell and SSSP, those of you who see him at SSSP are encouraged to have him tell you of a new astronomy filter that is so magical that it bears his name.

Yes folks....you must get him to tell about the famous Chatfield filter. He's a modest sort so if he says he doesn't know what you are talking about he just needs a little prodding is all.

Hey big thanks to Darrell as well because as you all know it is he that rounds up all these wonderful door prizes that he hands out at the star party. We appreciate his hard work and that also of the manufacturers, retailers and of course our SSSP vendors who donate gear and supply other gifts throughout the course of the year.

For Sale --- SkyShed POD XL3 (Personal Observatory Dome)

REDUCED \$1500, OBO.

---3 bays ---lots of room for a large telescope and equipment
---1 Bay Shelf (for a laptop) ---Midnight gray
---dome turns well ---everything stays dry as a bone
---can be set up on grass ---portable
---secured with lockable handle ---assembly/disassembly DVD available
---lots of support on the POD website
See www.skyshedpod.com

Call Constance at 306-343-7588 or email cgayle@sasktel.net.
If there is no answer, please leave a message and your phone number.



The Stars Come out at Danielson

by Mike Clancy



On Saturday 23Jul11 a group of us had the chance to give a binocular-oriented presentation to some of the patrons of Danielson Provincial Park. In attendance were Garry Stone, Les and Ellen Dickson, and Yours Truly! We'd arranged with the park for some advertising and agreed to set up at the overflow camp ground near the original swim beach by 2100hrs. The Dickson's were the first to arrive and Les was well on his way to assembling his 12.5" Dob while Ellen had her 80mm refractor at the ready. I brought my 15x70 Celestron binoculars and my 90mm Mak travel scope while Garry brought his motorized 8" Schmidt-Cassegrain and one of the local campers had brought their Meade "go-to scope" so we had quite an assortment of viewing instruments. It was a fine, soft evening with squadrons of hungry dragonflies doing their best to keep the armada of mosquitoes at bay, and several families of camping children made our acquaintance during the setup phase. I gave an impromptu rendition of "Swamp Witch Hattie" while we waited for the skies to settle down, and handed out some of the materials left over from the IYA era. We had 20 or so people in attendance overall, all of whom greatly enjoyed the appearance of Saturn (our first "Star"), particularly in Garry's scope. One after the other the stars of the Summer Triangle popped out and we began to lead our group through some of the summer skies' great sights. About 2230 hrs or so we noticed an extensive Noctilucent Cloud band had developed covering pretty much the entire North horizon, with a lot of "fish-scale" or "lace" patterning evident. Garry got some excellent pictures of the event (included here) while I did my level best to explain the significance of these beautiful objects to our audience.

They seemed more interested in finding the Andromeda Galaxy, the Perseid Double Cluster, the Hercules cluster, and views of the Ring Nebula in Lyra. They particularly enjoyed watching Capella change colors as well as the particularly pretty double star known as Albireo in Cygnus. By now the green laser was becoming quite useful in showing our audience how to find these objects, and by 2300hrs or so we were working our way from the Big Dipper all the way down to Sagittarius, star-hopping to find all these celestial sights with their own instruments. Of note were the young family from el Salvador who were spending their first summer in Canada camping at Danielson; they were delighted to find someone to help them learn a sky so different from that seen in their home country. We closed up our scopes and departed just before midnight, promising to gather the next weekend at Douglas Provincial Park for another fine show. All in all the evening was a success although the proximity to the lake caused us some trouble as the water reflected more light than I'd expected, and the dropping temperature that accompanies night meant substantially more problems with dew than I'd thought. Furthermore, there were no washrooms or toilet facilities at the overflow campground so folks had to drive their children over to the nearby (500m or so) boat launch for the "evening constitutional" as it were – this meant more traffic and more lights than generally preferred but what can you do? Next year we'll perhaps set up over at the trailhead to the Trans-Canada Trail instead!



Photos by Mike Clancy

Grasslands DSP Public Star Party July 28-30

by Rick Huziak

We had two astronomers from Saskatoon and a dozen from Regina do outreach at the Grasslands National Park Dark-sky Preserve on July 28, 29 and 30. The weekend went very well. The star parties, for convenience, were held at Two Trees trail on the very edge of the park, where the 20 streetlights of Val Marie (7 km away) and a few farm lights exterior to the park are on the horizon. Despite this, the sky is still awfully dark here!

On Thursday evening, a few members of the Regina Centre took the evening to continue training Grasslands interpreters on the use of their telescopes under the stars. Then they observed until the wee hours.

On Friday, we had the first of two public star nights; 41 attendees in a clear Bortle 1 sky. We had 13 telescopes handy. Chris Beckett (Regina) did a nice naked-eye star walk. The star party went from 9 p.m. until midnight, but we continued observing until 3 a.m. The Park had a nice event tent set up with coffee, hot chocolate and baked goodies so that we could take breaks and get re-caffeinated.

On Saturday, Chris Beckett, Darcy Kozoriz (Regina/SaskPower) and I gave talks at the Val Marie theatre then we did the second official star party with 59 attendees, and 9 scopes. Saturday weather did not cooperate to start, with the edges of thunderstorm cirrus coming through for 2.5 hours (just cirrus, no rain), so I did a laser star walk through holes in the cloud. But it cleared at 11:30 p.m. and we entertained the stragglers until 3 a.m. A good word here for Grasslands: the interpreters, who were not astronomers before the Oct. 2, 2009 dark-sky preserve designation, have now learned their telescopes and might put a few of you to shame for their sky knowledge! They worked hard every second of the star party, and were, with us astro-stragglers, the last to leave the grounds, still going full guns until 3 a.m.! Caitlin Mroz, their outreach leader, bagged over 10 Messiers in her spare time (not that she really had much).

All nights were filled with amazing views of the summer Milky Way and her wealth of beautiful clusters and nebulae. We also saw scads of meteors; some early Perseids, but mostly sporadic meteors at a

rate of 5 to 10 per hour that you will see in a near-perfect sky! We also had a bit of aurora both Friday and Saturday night. (I will be back in the park on August 13th to do a full moon Perseid interpretive session as part of a cultural and natural heritage and ferret-spotting night at Belza campground.)

Next year, the location changes from Two Trees Trail to the new campground (c/w cookhouse/event house) between the Belza campground and Larson's (deserted) ranch, 25 km out of Val Marie. This is smack dab in the middle of the darkest part of the park - no lights closer than 25 km and where the Milky Way casts your shadow on the ground. The new cookhouse will have minimal, motion detected, timered, fully-compliant lighting with a light curfew earlier in the evening. Its design is such that all lighting is subdued and fully within the eves or rafters, and the building was situated between two bluffs that fully hide the building and any stray light from the rest of the park. It will be likely that any campers using the campground will also have a light curfew.

I should also mention that the park has a dark-sky display and brochures in their Interpretive Centre in Val Marie (just outside the park) and are working on DSP signage for within the park at the campgrounds. They bought two 10" or 12" telescopes and co-train with the Cypress Hills DSP (provincial) staff and the Regina RASC volunteers. They also installed "terrain viewing" telescopes on concrete pads in two locations in the park, but they can be turned skyward at night, up to about a 35-degrees altitude. They also have a dark-sky partnership with the Village of Val Marie, where a multi-use square (with either fully-compliant lighting or no lighting) will be built for extra Park/Val Marie programming. They also have dark-sky partnerships with TransCanada pipelines (regarding a compressor station at the edge of the park) and with one surrounding RM regarding exterior lighting practices. Val Marie is also working toward replacing their drop-lens cobras as soon as they can, and have a chance to be Saskatchewan's first dark-sky village as soon as next year, maybe officially. The Crossing Resort, 5 km south of Val Marie and just outside of the park (2 rentable rooms and about 20 campsites) practices dark-sky lighting – i.e. it gets dark, they keep their lights off unless a client drives up, then they turn the lights off as soon as they can. They also

convinced their neighbour one km NE to replace his barrel farm light with a shielded one. The Park and partners are pretty hyped about their designation.

Grassland National Park DSP is a prairie grass badlands park containing the Frenchman River Valley. It is remote; used mostly for hiking and has minimal

facilities. It contains bison, deer, antelope, rattlesnakes, lizards, prairie dogs, black-footed ferrets, burrowing owls, dinosaur bones, cacti, and dozens of flowering plants. It is hot, high and dry, though this year it was nice to see some actual new green growth in the deep valleys of the park! For more information, see:

<http://www.pc.gc.ca/pn-np/sk/grasslands/index.aspx>
<http://www.pc.gc.ca/pn-np/sk/grasslands/ne/ne6.aspx>
<http://www.sasktourism.com/whats-happening/sasksecrets-newsletter/november-2009-sasksecrets/dark-sky-preserves>
<http://www.industrymatters.com/news/industry-awards-and-recognition/canadas-newest-dark-sky-preserve>
<http://www.pc.gc.ca/pn-np/sk/grasslands/natcul/natcul6.aspx>
<http://media.sasktourism.com/story-ideas/whats-new/grasslands-dark-sky-preserve>

ICEHUNTERS: WEBSITE CHALLENGES PUBLIC TO FIND ICY WORLDS IN OUTER SOLAR SYSTEM

[News Release From Southern Illinois University]

A team at Southern Illinois University Edwardsville has developed a new website, IceHunters (<http://www.icehunters.org>), to challenge the public to discover Kuiper Belt objects in the outer solar system. It is hoped that among the myriad of new objects found by IceHunters there will be an object (or maybe even objects) with just the right orbit to carry it on to a rendezvous with NASA's New Horizons spacecraft. Scientists have calculated where in the sky an object moving toward a potential meeting with the New Horizons spacecraft should currently be located, and

they have used some of the largest telescopes in the world to image this region. Now, those images are provided to the public for searching via IceHunters.

The IceHunters website was developed by SIUE assistant research professor Pamela L. Gay and website developer Cory Lehan. "Projects like this make the public part of modern space exploration," says Gay.

"The New Horizons mission was launched knowing we'd have to discover the object it would visit after Pluto. Now is the time to make that discovery, and thanks to IceHunters, anyone can be that discoverer." Along the way they will discover large numbers of variable stars, asteroids, and other KBOs.

"Using just about any modern Web browser, users can circle potential KBOs and mark with a star the locations of asteroids," says Lehan. "The website is filled with examples to help get people started. Anyone should be able to take part -- no Flash required."



Starry Nights, Summer and SK Parks

by Mike Clancy

Another fine evening in one of our beautiful provincial parks was spent star-gazing with the public. This time it was on July 30 at the Douglas Provincial Park with Garry Stone, Tenho Tuomi and myself showcasing our wonderful dark skies. We arrived in the park at the playground chosen for its low-light conditions about 2030 hrs and set up our scopes: our 90mm Maksutov-Cassegrain, Garry's 8-inch Schmidt-Cassegrain and Tenho's 8-inch Newtonian. My portable table was covered with free astronomy-related material as well as the IYA handouts and collectibles. We found out the park had advertised patrons to gather beside the concession-side dining shelter so Anna walked over to find two families waiting for us (there was a Rider game on so only a few fathers came by). When they arrived at the observing site shortly after 2100hrs I gave an introductory speech after which Tenho showed off his Buzzard Coulee meteorites and demonstrated the differences with "meteor-wrongs". I then recited "The Cremation of Sam McGee" and "Swamp Witch Hatty" as we waited for the stars to come out. While all this was going on Garry had found Saturn in his scope and we began the evening's viewing with that wonderful sight, after which the Summer Triangle was up and we got going with the binocular-oriented tour of the night sky.

As we started one lady asked how long the presentation would last to which Anna replied "As long as you want – we'll stay until the last patron leaves!" That lady was our last patron, taking her children back to their beds near midnight. She was particularly interested in finding the Little Dipper as she'd been confusing it all her life with Cassiopeia! In all we had about 40 – 45 people attend the presentation with one small group of teen-aged girls



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among the last to arrive. They might have departed their campsite without discussing it with parents as one mother showed up about a half-hour later, quite unhappy with the lasses for their indiscretion; she was more than mollified once she found out what was going on and was captivated by the sight of Capella changing colors in my 15 x 70 binoculars – she ran off to get her own set and came back to "See what else she could find"! Small boys in attendance were particularly happy with the green laser; I found I was explaining the same star-hopping techniques repeatedly, I suspect just so they could see the beam reach out to the stars!

As always we enjoyed fine views of the Perseid Double Cluster and the Mirfak star field, the Andromeda Galaxy (a bit later in the evening before it was well-defined), Albireo in Cygnus, Antares in Scorpio, the Ring Nebula in Lyra , M13 in Hercules, M101 in Ursa Major (well done Tenho!) and Capella in Auriga. I invited those with binoculars to observe the "steam above the teapot" for all the fine Messier objects in that interesting region of space and I showed folks how to find the Coathanger Cluster. We were also treated to several meteors including one pronounced fireball and an Iridium flare passage so it was quite an interesting night to say the least. The only trouble we had was waiting for the night skies to "calm down" as the day had been very hot so it took longer to equilibrate. Overall it was a success and the people who attended were most appreciative (particularly the one lady whose binoculars I repaired with duct tape!); I'm sure we'll be back to Douglas Provincial Park next year: the skies are clear and dark, the people receptive, and the park staff supportive!



Left – Mike at the handout table.

Right – Garry Stone's C8

Photos by Tenho Tuomi

The 100th Spring Meeting of the AAVSO

by Richard Huziak (AAVSO – HUZ)

The 100th Spring Meeting of the American Association of Variable Star Observers (AAVSO) ran from May 21 through May 23 in Boston, Massachusetts. The AAVSO meeting was the front end of a much larger conference of the American Astronomical Society (AAS) that run until May 26th. Registering for the AAVSO meeting (at half the cost of the AAS registration) gave AAVSO members full access to the AAS meeting. I guess membership does have its privileges!

I flew out of Saskatoon on May 19 so that I'd have some extra time to explore Boston before the conference. But the first plane never left the gate (busted) and I was rebooked on a flight to Edmonton a few hours later, only to fly over Saskatoon three hours later on my way to Montreal. A severe headwind made that plane arrive a half-hour after the connector flight to Boston was to leave, but as luck would have it, that flight was delayed by 3 hours, so, in the end, I arrived in Boston at 10:30 pm instead of 3:30 pm.

Boston has a good subway system, so staying 8 stops south of the Westin Copley conference center wasn't a big deal. It only took 21 minutes to get from my hotel to the conference each day. Oh yeah, did I mention? On a hunch, I decided to confirm my hotel booking a week beforehand, and they couldn't find me! Thus, with Red Sox and Bruins games in town, and 1300 astronomers already booked into the two conference hotels, I had to scramble to find a place to stay; enter the Ramada. I managed to book a Thursday, Friday, Sunday and Monday at a Ramada near the Field's Corner subway stop. Several miles south of the conference. I was hoping that once I got there the hotel could find me a Saturday night, or I'd just have to stay up on Saturday in a 24-hour drinking binge. As it turned out, the hotel came though, saving my liver from further pickling.

The conference started on Saturday afternoon, with the AAVSO membership meeting and the first paper session. The session include great talks on RR Lyrae stars, semi-regular stars, MOST observations of variables in the Orion Nebula, a call for observations to confirm "quark supernovae" and several others.

Turnout to the meeting was very light; we had only 40 participants registered. This was by far the lightest AAVSO meeting I have attended. There are likely two factors that contributed to this: the hotel costs were horrific - \$279 per night (the "conference rate") and that the 100th Annual Fall Meeting of the AAVSO, the official 100th year celebration, will be held in October (in a less expensive location). But small did not make the meeting any less interesting. Canadians were well represented, including me (Saskatoon), David Lane, Dan Majeass, Dr. David Turner (all St. Mary's

University), John Percy (University of Toronto) and Gary Billings (Calgary).

On Saturday night, the AAVSO banquet was held at the AAVSO headquarters in Cambridge. 80 people attended the banquet, since it included AAS board members who had arrived a few days early to conduct their business meetings. So we had a great time sipping wine and hob-knobbing with professional astronomers. After all, this was really a joint meeting, and one purpose of it was to introduce the AAS to what the AAVSO could provide. (We can provide real-time monitoring of variable stars in support of professional observing missions).

Sunday consisted of two more paper sessions including a paper on how 10 AAVSO members did photometry on an 18th – 19th magnitude variable in the Andromeda Galaxy. That variable was the first extra-galactic Cepheid variable discovered by Edwin Hubble in 1923, and the star provided a means to measure the "Hubble Constant", or the distance to M31, and thus setting the first calibrated distance scale of the universe. It is amazing that amateurs today with 12-inch backyard telescopes and a CCD camera can do the same work today as Hubble could do in 1923 with the 100-inch Hooker telescope! The AAVSO was called upon to monitor the light curve of the Hubble's variable M31 V1 so that the in-space Hubble telescope could be scheduled to make observations of the variable at maximum and minimum brightness as a Hubble legacy project. The project succeeded, and the result was issued as a press release during the AAS meeting! The afternoon session included fascinating talks on four famous women in astronomy: Anne S. Young, Annie Jump Cannon, Dr. Helen Sawyer Hogg and Dorritt Hoffleit.

But by the end of Sunday, I knew something wasn't quite right. I took the subway home, skipping the AAS Opening Reception and all their good food, and spent the next 20 hours in bed (and nearby) suffering from food poisoning, or maybe a similar flu. Although I missed the morning paper session, I managed to crawl out of bed and attended the afternoon invited speaker session. At the session, five professional astronomers who had used AAVSO data in their projects gave very informative talks. These astronomers are our best allies, and they vowed to spread the word about the useful work we feel we do at the AAVSO. By the time the AAVSO portion was over, the AAS meeting was in full swing, so I attended a great lecture on using data from the Kepler telescope mission to confirm astroseismology on sun-like stars, including their evolved red-giant cousins.

Monday night concluded with a tour of the AAVSO headquarters. I had never been there before even though I

have contributed observations since 1976. We got to see their new offices that used to be the *Sky & Telescope* building. (S&T's new office is about a kilometre away). There is quite a bit in the area. The Harvard Smithsonian Observatory (now the *Center for Astrophysics*) is 1 kilometre east, and another kilometre east of that is Harvard University.

The AAS conference was very impressive. The 130-page bound program we received is daunting to thumb though.

And with 1300 AAS members attending, the place got crowded quickly, though some AAS meetings have up to 3000 attendees! There are many hundreds of papers being presented on virtually every topic in astronomy and astrophysics, including many great seminars for educators. But sure enough, despite the overwhelming booths by Apogee, Sofia, Hubble, ALMA, James Maxwell Telescope and so many others, plus hundreds of posters to go through, my head was completely full. I left the conference early and flew home on Tuesday. That was the plan anyway.

RASC National Council Meeting NC112

by Richard Huziak, Saskatoon Centre Rep.

July 1, 2011, 10:00 am – 3:00 pm
University of Manitoba, Winnipeg, Manitoba

The following article is a summary of National business discussed at the Winnipeg General Assembly and focuses on items that are important to the Saskatoon Centre.

Changes to the *Canadian Non-for-profit Corporations Act* are expected to be enacted this fall by the parliament of Canada, requiring that National clean up their constitution to the new rules, and all Centres will have to do the same within the next two to three years. Classes of membership (including family and associate) and rights and privileges will be affected and may be pre-described to some extent by the government.

A special downloadable copy of David Lane's *Earth Centred Universe* will be sent with the 2012 *Handbook*. It includes all of the databases from the *Handbook*. There is preliminary work stated to evaluate if the *Handbook* could become a successful e-publication.

National membership service levels have been improved with a 24-hour turnaround on inquiries due to office improvements led by Executive Director Deborah Thompson and her team. Deborah is also working aspects on the *Strategic Plan*, including increasing membership, now at 4127 members.

The National Council voted to designate the Irving Nature Preserve in Saint John, New Brunswick as an RASC Urban Star Park. This is the first RASC-

designated Urban Sky Park. The park is 600 acre (243 hectare) in size.

The *Isabel Williamson Lunar Observing Certificate* has been altered to remove the 36-hour crescent moon observations since it is an easy observation and retain the optional 24-hour moon as a challenge. (24-hour moons will be virtually impossible from Canada for the next several years.)

Roland Dechesne stated that the Membership and Promotion (MAP) Committee would like to provide the service of creating and advising on Centre social media applications including refining Facebook and Twitter. A goal would be to have these pages more officially representative of RASC activities. The RASC also now has a You-Tube channel. RASC-related videos will be added.

The 2012 General Assembly will be at the University of Alberta, Edmonton, June 27 – July 1. There are no takers for the 2013 GA. The 2014 GA will be held at Pearson College in Victoria, BC.

This report summarizes issues that may be of more direct interest to the Saskatoon Centre and is by no means a complete report of the many topics discussed. Full minutes of the meeting are available on the National web-site under the Members-only section. Mark de Jong braved the first half of the council meeting as an observer; brave man!

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, or 35 Binocular objects, or Explore the Universe and earn great OBSERVING CERTIFICATES!

MESSIER CLUB

Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander,
S. Ferguson, D. Jeffrey, D. Chatfield,
B. Christie, K. Noesgaard,
M. Stephens, B. Hydomako, T. Tuomi,
L. Scott, G. Charpentier, B. Johnson,
M. Clancy, L. Dickson, B. Burlingham

| | |
|------------------|-----|
| Norma Jensen | 108 |
| Kathleen Houston | 106 |
| Ron Waldron | 105 |
| Wade Selvig | 75 |
| Garry Stone | 57 |
| Barb Wright | 40 |
| Wayne Schlakohl | 36 |
| Ellen Dickson | 34 |
| Jeff Swick | 24 |



FINEST NGC CLUB

Certified at 110 Objects:

R. Huziak, D. Jeffrey, G. Sarty,
D. Chatfield, T. Tuomi

| | | |
|--------------------|-------|-----|
| Larry Scott | Done! | 110 |
| Scott Alexander | | 97 |
| Norma Jensen | | 36 |
| Sandy Ferguson | | 23 |
| George Charpentier | | 13 |
| Mike Clancy | | 7 |

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

M. Stephens, T. Tuomi, M. Clancy,
R. Huziak, K. Maher

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

M. Clancy, T. Tuomi, K. Maher,
B. Gratias

| | | |
|-----------------|------|----|
| Wayne Schlakohl | Done | 55 |
| Sharon Dice | | 31 |

The Messier & Finest NGC lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available on the National website.

On-line Messier and Finest NGC lists, charts and logbooks – check out:

<http://www.rasc.ca/observing>

On-line Herschel 400 List – check out the official site at:

<http://www.astroloegue.org/al/obsclubs/herschel/hers400.html>

The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

Copies of the Isabel Williamson Lunar Observing Program Guide can be purchased at meetings.

Program details can be found at: <http://www.rasc.ca/williamson/index.shtml>

Observers Group

by Larry Scott



We made it out to Sleaford on July 2nd, 9th and 30th with several members attending each night. On the 2nd and 9th the long evenings of summer lent themselves to some very productive lawnmowing and not much observing. By the 30th I could say we had finally left midnight twilight behind for another year. The dark skies were a treat after the last two months.

Comet Garradd is brightening now and is starting to show a little tail, should be very nice and well-placed for SSSP. Now if we can just get one good, hard frost to kill the mosquitoes.

Moonless evenings start around August 23rd and continue to September 4thish. (Notice the genuine scientific terminology).