

Saskatoon Skies

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

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To view *Saskatoon Skies* digitally, see our website:
<https://saskatoon.rasc.ca/newsletters.html>

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MEMBERSHIP? JOIN TODAY!

Regular: \$96.00 /year

Youth: \$52.00 /year

Family: \$90.50 + \$41/additional adult + \$21.10/additional youth

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. Members are encouraged to renew early to avoid disruption in publications. Renew through the National Office at <http://www.rasc.ca/join>.

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
- Journal of the RASC (electronic format)
- borrow the Centre's projector to give astronomy outreach presentations – contact Les Dickson at astrochem@sasktel.net
- rent the Centre's Telescopes <https://saskatoon.rasc.ca/telescopes.html>
- use of the Centre library
- SkyNews Magazine (bimonthly)

SASKATOON CENTRE'S MAIN OFFICERS:

President – *vacant*

Vice-President – *vacant*

Secretary – Rick Huziak

Treasurer – Donna-Lee May

National Council Rep – Les Dickson

Canadian Tire money - Darrell Chatfield

If you cannot attend a meeting but would like to donate your old Canadian Tire money please to assist with club purchases, email Darrell at novachat@sasktel.net.

NEWSLETTER INFO

Newsletter Editor – Colin Chatfield

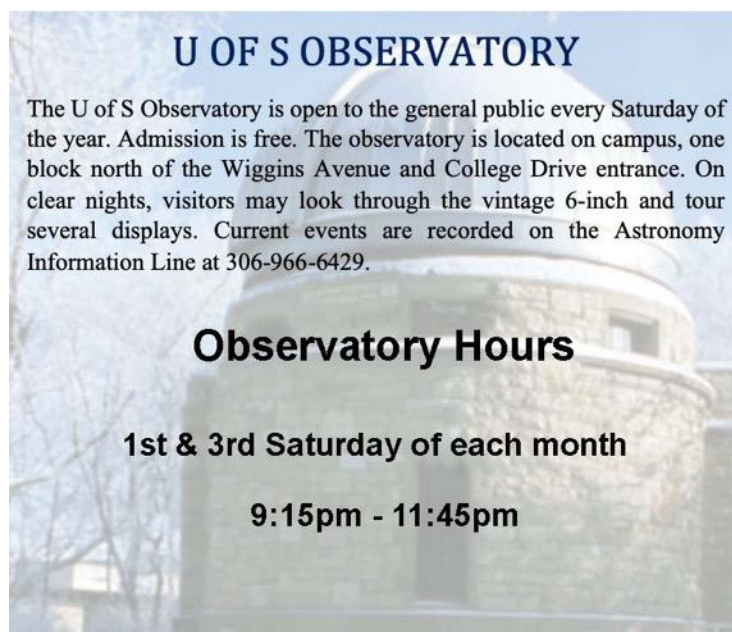
Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting/Content Editor – Gord Sarty/Tenho Tuomi

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. Submissions should be sent by e-mail to the editor at colcha@gmail.com in MS Word or text format. Images (new or old): any format, less than 30MB, sent by e-mail as attached files. Send any articles of interest to the night sky or astronomy. **Deadline for submission of all articles for an upcoming issue is the first Friday of each month!**

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. Saskatoon Skies accepts commercial advertising. Please email the editor at colcha@gmail.com for rates. Members can advertise non-commercial items for free.



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 306-966-6429.

Observatory Hours

1st & 3rd Saturday of each month

9:15pm - 11:45pm

Hours subject to change, so check below for more info -

Website - <https://artsandscience.usask.ca/physics/facilities/observatory.php>

Facebook - <https://www.facebook.com/usaskobservatory/>

RASC CALENDAR OF EVENTS & MEETING INFO

| | | |
|----------------|--|-------------|
| Sept 19 | RASC Saskatoon Centre General Meeting | Les Dickson |
| Sept 24 | Observer's Group - Sleaford Observatory | Larry Scott |

Observer's group viewing starts at dusk at the Sleaford Observatory dark site. Get there early and set up for a great night of observing! Members and their guests only.

For a complete list of club events, please visit: <https://saskatoon.rasc.ca/activities.html>

September RASC General Meeting

for all members and guests

Join us on September 19th, 2022 at 8:00PM (Executive meeting at 7:00pm)
Webinar (info below)

7:00pm - **RASC Executive Meeting** (Members may attend the executive meeting as observers if they wish)

A Zoom registration link and phone-in numbers will be emailed to Members.

After that, the procedure to register and join the meeting is the same as for the webinar (explained below).

NOTE: links to register to attend the webinar will be emailed out as well so we know who is planning to attend. After registering, an email invitation will be sent with a link to join via computer or a number to phone in. When joining via computer, participants will have to first download and install the Zoom app, if they have not done so already.

8:15pm - **Main Program - "Spruce Woods Provincial Park - Canada's 27th Dark-sky Preserve" - Rick Huziak.** Rick will show pictures from the Winnipeg Centre's 2022 Spruce Woods (Manitoba) Star Party and the certification of Canada's 27th dark-sky preserve on September 4th. Rick & Donna-Lee attended the star party with Rick acting as the National LPA Rep for the signing.

"What's Up This Month" - Colin Chatfield & Tara Magee

ALWAYS NEED MEETING SPEAKERS

Rick Huziak

Hi everyone. The title of this article is *Always Need Meeting Speakers*. I titled the article that way because I always need meeting speakers. Right now, we need speakers for 10-minute slots for months May and June. Please volunteer to talk about your favourite topic. I already have main program speakers for these months.

Online meeting attendance is also pretty low for a club that has over 80 members. Online meetings are being held because of COVID, but our attendance is actually less than in-person meeting attendance before COVID. Online meetings attract between 12 and 18 people even though attending is technically easier, avoiding travel and parking. Current online meetings also fulfill an initiative we had previously discussed: transmitting in-person meetings to be on-line for members that are simply too far away to attend.

So, back to speakers. I am now looking for speakers for the fall, starting with the September meeting. If you do something “astronomical” over the summer, such as visit an observatory, do some astrophotography, participate in outreach, clean your mirror or read a good astronomy book, please make your experience into a talk for your club!

rickhuziak@shaw.ca

MINUTES OF AUGUST MEETING

Rick Huziak

Minutes of the Special Executive Meeting RASC Saskatoon Centre Monday, August 8, 2022 - 7:30 pm - Online (ZOOM)

Attending: Les Dickson, Rick Huziak, Tenho Tuomi, Patricia Gakis, Ron Waldron, Darrell Chatfield, Colin Chatfield, Tara Magee. **Absent:** Donna-Lee May (sick)

1. Call to order 7:32 pm – Rick Huziak
2. Old business/ Committee reports
 - **Insurance claim** update for Sleaford shed break-in – Darrell Chatfield – status of claim.
 - Shed is fixed by Co-op. (Darrell & Colin attended.)
 - Kevin (adjustor) stated to send in bills. Shed should be 100% covered materials/labour.
 - Darrell – please send emails to Donna-Lee for documentation.
 - We do not have a police report – have case number. Can get report.

- Deductible will be deducted from total.
- Darrell funded \$2200 to Co-op – submit receipts.
- **Purchase of replacement snow blower** – Darrell Chatfield. Insurance offering \$2700. (We have a \$1000 deductible on our policy covering the entire claim.)
- Mini Tune may have a snowblower for comparable cost – Darrell.
- **The riding mower needs carburetor servicing** –
 - Small mowers serviced by Mini-Tune for 3-year maintenance cycle. Carburetor to be reinstalled ~Aug. 10 – Darrell.
 - Receipts to Donna-Lee. (~\$25 carburetor service.)
 - Darrell will build a ramp for the mower to preserve the weather seal.
- **Provincial registration status** - Donna-Lee May - Province is reviewing; has been re-submitted.
- Discussion on **Criminal Records Checks (CRCs)** for members – Done through City Police and not RCMP - Patty Gakis.
 - Rick will update a letter and provide to Patty. Free to “wait” for the check or \$10 to process on line. Patty will go through the process to test how it works.
 - Receipts to Donna-Lee, please.
 - Patty requests a list of people who will do outreach, what scopes they have, if they will do talks and if they have CRCs.
- **Summer Activities - Patty Gakis**
 - Aug 13 at **Pike Lake** – Rick, Donna-Lee, Colin & Patty will do.
 - **Sleaford Open House date** – Patty Gakis – **Oct 1.** (6d moon, sunset 6:43pm; twilight 7:56 pm). Confirm with Larry & Daryl Janzen.
 - Will need advertising – posters (Geo Charpentier?), Facebook, social media advertising, media, our Activities Page, camera seller places, U of S.
 - Members arrive by 6 pm.
 - Car caravan – meet at Field House? Public meets - 7 pm at Field House. Who leads this?
 - Coffee / Tea / Treats?
 - Talks / talks for back-ups – volunteers: TBD
 - Hand-outs, membership forms? Back page to QR form?
 - Grass to be cut ... hopefully riding mower, or RM if necessary.
 - Other activities – North Battleford – mid August? - Patty
- **Social Media** review – Patty Gakis
- Facebook is being handled by Colin Chatfield.
- Patty Gakis requests the current **Instagram account** that refers to the RASC be closed and it be reopened by Colin and Patty to better represent the RASC. Colin

has access to Instagram. Looking at **Twitter** (since it is under Tim's email.) Will report in future.

- **Needs new signing authority for cheques** – Donna-Lee May. **Completed** – Les Dickson added as a signing authority.
- **Assets list to be updated & valued** – Donna-Lee May – Members asked to report any assets. Donna-Lee will accumulate the list and properly value the assets with depreciation as required.
- New asset donated 8" telescope at Observatory – need to record the assets.
- Serial numbers of all equipment to be recorded (including maintenance equipment at Sleaford.)
- **Need an article announcing October elections in the September newsletter** - Rick Huziak – Rick will write. Patty is not running for Activities.
 - o Phoning tree?
 - o Target specific members? Deal with member concerns.
- **National Council report** – Les Dickson. National membership fee increases as of Jul 1. Webpage/newsletter update? Les will provide new numbers.
 - o Next NC meeting in early Sept.
- **Cancellation of telephone land line at Sleaford** – Daryl Janzen/Darrell Chatfield. Has been removed. Do we have or need any documentation – no – U of S contract. Ask Daryl J. regarding the phone "release".

3. New Business

- **Meeting Room 175 Physics booked** by Daryl Janzen for 2022 – 2023.
 - Send Tenho new dates for Activities Page - Rick
- **Should / Can RASC resume in-person meetings** for the 2022 – 2023 season – Daryl Janzen looked into University of Sask policy: currently no limits on classes and no masks.
 - o Wait until more infection results are available. Defer decision to new Executive in November. General feeling is we will not be back in person before Jan or Feb.
- **Canadian Tire Money** – are we still collecting this? CT Point program is now on-line so can't collect. Darrell C has some CT cash on hand to use for Sleaford.
- Old CT Money can still be donated – Colin can reword in newsletter.

4. Call to adjourn –. Moved: Les Dickson. 9:20 PM. Carried.



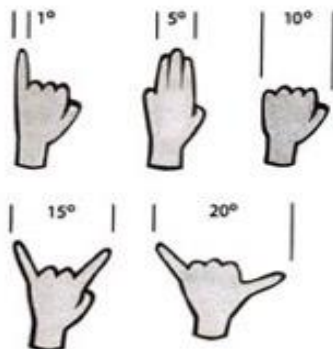
Photo of Tenho Tuomi's camper under the Big Dipper at SSSP 2022 in Cypress Hills

SEPTEMBER NIGHT SKY EVENTS AND INFO

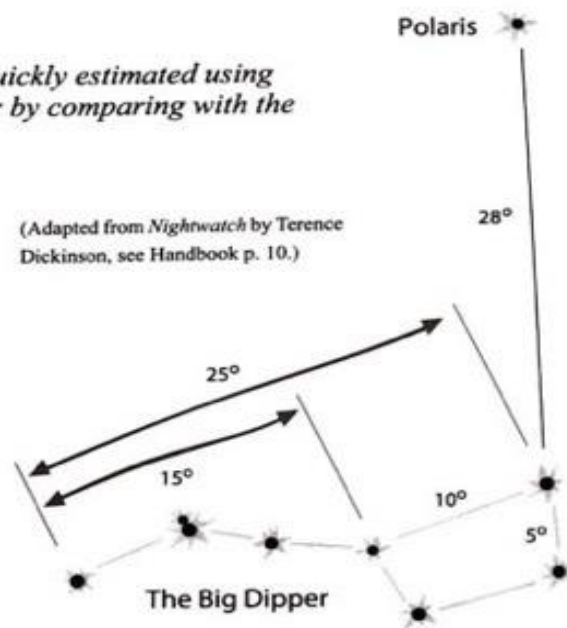
Images on the next few pages taken with permission from the 2021 Observer's Handbook. It can be obtained by joining the RASC here <http://rasc.ca/join> or ordered from <https://secure.rasc.ca/Portal/Shop/RASC/Store/StoreMain.aspx?Category=CURRPUB>

HANDY SKY MEASURES


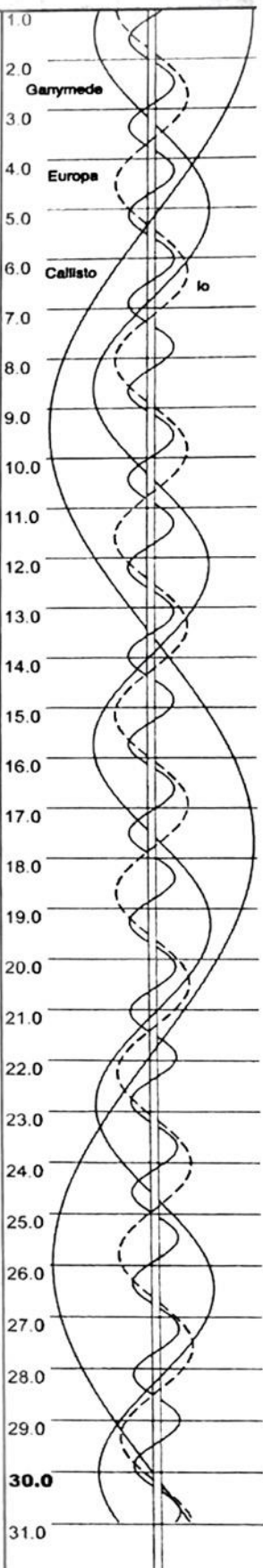
















Angular measure in the sky can be quickly estimated using the fingers of an outstretched arm, or by comparing with the star separations in the Big Dipper.



(Adapted from *Nightrwatch* by Terence Dickinson, see Handbook p. 10.)



RASC OBSERVER'S HANDBOOK 2020

| Time (UT) | | | SEPTEMBER EVENTS | | Jupiter's Satellites | |
|-----------|----|-------|--|---|----------------------|--|
| d | h | m | | | West | East |
| Thu. | 1 | | |  | 1.0 |  |
| Fri. | 2 | | |  | 2.0 | |
| Sat. | 3 | 18 04 | Algol at minimum | | 3.0 | |
| | | 18 08 | first quarter |  | 4.0 | |
| Sun. | 4 | | Venus at perihelion | | 5.0 | |
| Mon. | 5 | 1 | Venus 0.8° N of Regulus | | 6.0 | |
| Tue. | 6 | 14 53 | Algol at minimum |  | 7.0 | |
| Wed. | 7 | 17 | Juno at opposition | | 8.0 | |
| | | 18 | Moon at perigee (364 492 km) |  | 9.0 | |
| Thu. | 8 | 11 | Saturn 4° N of Moon | | 10.0 | |
| Fri. | 9 | 11 42 | Algol at minimum |  | 11.0 | |
| | | 20 | Mercury stationary | | 12.0 | |
| Sat. | 10 | 9 59 | full Moon |  | 13.0 | |
| | | 19 | Neptune 3° N of Moon | | 14.0 | |
| Sun. | 11 | 15 | Jupiter 1.8° N of Moon |  | 15.0 | |
| Mon. | 12 | 8 31 | Algol at minimum | | 16.0 | |
| Tue. | 13 | | Mercury at greatest heliocentric lat. S |  | 17.0 | |
| Wed. | 14 | 23 | Uranus 0.8° S of Moon, occultation† | | 18.0 | |
| Thu. | 15 | 5 20 | Algol at minimum |  | 19.0 | |
| Fri. | 16 | 23 | Neptune at opposition | | 20.0 | |
| Sat. | 17 | 2 | Mars 4° S of Moon |  | 21.0 | |
| | | 21 52 | last quarter | | 22.0 | |
| Sun. | 18 | 2 09 | Algol at minimum |  | 23.0 | |
| Mon. | 19 | 15 | Moon at apogee (404 555 km) | | 24.0 | |
| Tue. | 20 | 8 | Pollux 1.9° N of Moon |  | 25.0 | |
| | | 22 58 | Algol at minimum | | 26.0 | |
| Wed. | 21 | | |  | 27.0 | |
| Thu. | 22 | | | | 28.0 | |
| Fri. | 23 | | Zodiacal light vis. in N lat. in E before morning twilight for next two weeks |  | 29.0 | |
| | | 1 04 | Equinox | | 30.0 | |
| | | 7 | Mercury in inferior conjunction |  | 31.0 | |
| | | 19 47 | Algol at minimum | | | |
| Sat. | 24 | | |  | | |
| Sun. | 25 | 21 54 | new Moon (lunation 1234) | | | |
| Mon. | 26 | | Venus at greatest heliocentric lat. N | | | |
| | | 16 36 | Algol at minimum | | | |
| | | 20 | Jupiter at opposition | | | |
| Tue. | 27 | | | | | |
| Wed. | 28 | | | | | |
| Thu. | 29 | 13 25 | Algol at minimum | | | |
| Fri. | 30 | | | | | |



SLEAFORD OBSERVATORY UPDATE

Darrell Chatfield - Sleaford Site Coordinator

SLEAFORD SHED CLAIM UPDATE:

On **August 3, 2022**, our storage shed finally got repaired after the Jan. break-in. The repair guy from the Co-op was out there by the time Colin and I arrived to do some work. After the double door system arrived, it was installed properly. The Co-op man said this door system was better built than the original one. Good to hear!

RIDING MOWER:

With the mower being delivered to Sleaford by Ron and Mike back in the fall of last year, it was time to check it out to see how it worked.

June 11/22 - Mike and his neighbour went out and replaced the throttle cable. It was determined that the carb needed fixing.

Aug. 10/22 - Colin and I went out and installed a new the newly cleaned carb, and a new gas line filter, which worked. We finally removed the 3 blades, and we took off the blades on 2 out of the 3 other push mowers.

Aug. 14/22 - This was a big day at Sleaford! Colin and I did such things as changed gas lines; installed the blades; cleaned plugs; fixed the park brake linkage; inflated 1 tire; installed the new air filter, etc. Colin and Tara cleaned the underside of the deck.

Aug 20/22 - Replaced 1 deck spindle and removed the other 2.

Sept 3/22 - Another successful work day. We were able to change 2 deck spindles and install new casters and bolts. I designed and built a platform in front of the new shed door system, and we re-attached the original ramp I built in 2013. This gives the riding mower more room to come in/out of the shed without damaging the threshold weather seal. We got the mower out of the shed for a test run, which was very successful!



There is going to be a procedure sheet in the shed regarding mower start up and moving it to and from the shed.

SLEAFORD GENERAL

Aug 3/22 - Colin and I cut grass around the storage shed with the 2 push mowers.

Aug 10/22 - Trimmed around the shed

Aug 14/22 - Tara Magee did a great job of trimming around the site that included our old dome location, and around the school house. All 3 of us cut grass with the push mowers.



Sept 3/22 - We swept out the shed as much as possible. We also reattached some loose metal flashing on the S and W sides of the storage shed. Inside the shed we were able to close up a gap between the new door and the framing with steel wool and spray foam. Two mouse more traps were also set out.



Well, that's the big Sleaford report for now. I really appreciated the help my son Colin gave, as well as Tara. There are still some items to work on, but those will have to be done at a later date.

Thank you for now,

Darrell Chatfield, Colin Chatfield, and Tara Magee



Group photo from SSSP 2022 by George Charpentier

OBSERVERS GROUP COORDINATOR(S) NEEDED

Larry Scott

The Saskatoon Centre of the RASC is seeking one or more volunteers to take over the Observers Group Coordinator/Yard Monkey position currently held by me (Larry Scott). This position has many perks - fresh air and exercise in beautiful surroundings; works in close proximity to many bird species, butterflies, racoons, deer and gophers; the appreciation of your fellow club members; free parking; and more! Below is a list of opportunities for energetic club members that need to be passed on or not as the club sees fit.

If possible I would continue doing this for years but I'm planning a move in a few years and simply won't be here. My hope is to give the club time to consider its options and that I can pass on some tips to whomever(?) comes next.

Observers Group Coordinator

- Set schedule for Observers Group based on dark skies(new moon) and not on a long weekend.

(Also Messier Marathon)

- Interpret weather reports to base a go/no go decision the day of Observers Group and notify club members.

Yard maintenance

- Mow grass or blow snow as required so yard is useful and combustibles near buildings are kept to a minimum.

- Care and feeding of snow blower and lawn mowers. ***Important***

Key Master

- Give tours of Sleaford to club members and hand out keys to the kingdom.

Sleaford Open House

- Set a date

- Nag George for posters.

- Distribute posters

- Nag everyone to show up.

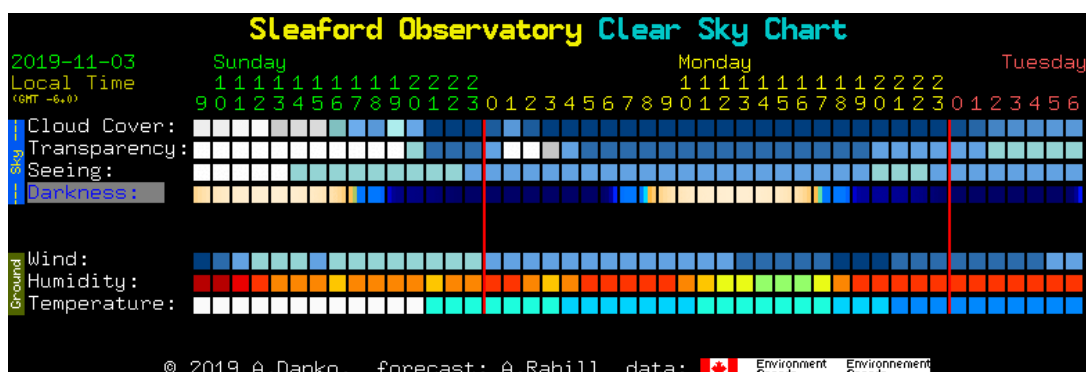
Starting in 2006 I began hosting Observer's Group meetings and as the years went on I accumulated some other responsibilities as listed above. Not sure if everything will be picked up by the members but I am hoping someone will step up to host the Observers Group and assist with these other responsibilities. Cheers for now, hope to see some of you out at Sleaford before I'm gone.

CLEAR SKY AND WEATHER INFO

To find clear skies, visit the Clear Dark Sky website -

<https://www.cleardarksky.com/csk/>

Once there, one can enter your location to find clear skies. The chart will appear as follows:



Environment Canada provides weather information for astronomy -

www.weather.gc.ca/astro



Saskatchewan Light Pollution Abatement Committee -

<http://myotherlife.net/slpac/>



www.darksky.org

PIKE LAKE PERSEID OUTREACH

Rick Huziak with photos from Patricia Gakis

On August 13th, just a night after the Perseid Meteor Shower peak, we did an outreach program at Pike Lake Provincial Park. Because the shower coincided with an almost full moon and the 13th meant that we were going to be at “1/2-maximum” rates and declining, the prospects of seeing meteors in any great quantity was low, but there is always an opportunity to do something else that is fun and educational. So, I decided to open with a talk called “Meteor Showers, Fireballs and Meteorites”, where I could talk about the difference between comet particles that don’t create meteorites and asteroids that do. Because the sky was clear, but not yet completely dark I started off with the 30-minute presentation and then passed around a Whitecourt iron and a Buzzard Coulee stony meteorite, emphasising that these would be the oldest objects they would ever hold, each being about 4.3-billion-years-old; about 100-million years older than the Earth itself.

We had a good crowd of about 45 people of all ages; “We” being Patty Gakis, our Events Coordinator, who set the program up with Pike Lake and Colin Chatfield and Tara Magee who seem to be our always-there outreach helpers! After the talk, we all moved outdoors and began to watch for meteors. Knowing the shower was going to be “minimal”, I had previously planned to do a laser-guided naked eye star-walk. As the star-walk continued, we did see the occasional Perseid. The crowd was fun and enthusiastic. It was a beautifully clear and warm night and we spent the next hour chatting about the sky with all four of us answering their endless questions and curiosity. One nice thing is that Parks pays the club to do this type of programming. **A quick word about laser use:** Transport Canada now prohibits the general use of lasers, but the RASC has special permission to use lasers for public education, provided the lasers are <5-mw in brightness, that they are being used for a registered educational event, and that outreach leaders and the required spotter are trained and certified in safe use with proper documentation on hand (a valid membership card and a letter from Transport Canada) in case the police decide to drive by to investigate. If you want to use your laser, then you will need to follow current TC laws and be trained by our Centre.



SASKATOON CENTRE OCTOBER 2022 ELECTIONS

Rick Huziak

Notice of the October General Meeting and Election of Officers of the Saskatoon Centre of the RASC

The October 17th Elections meeting will be an on-line Zoom meeting. One month's notice of the Election (AGM) meeting is required for members. As a result of the on-line meeting, we really need members to step up and attend virtually **and to volunteer for the positions we need filled**. Most critical are President and Vice-President, for without these positions filled, we are going to struggle as an organization.

Here is a summary of some of the positions and the current occupants. All positions are open for nomination and renewal for the 2022 – 2023 season and are one-year positions except for the President, Vice-President and the inherited Past-President which are two-year positions to improve continuity. *In the list below, vacancies and people wishing to turn their post over are indicated in blue italics*. If a name appears without comment, that person is willing to retain the position (as of Sept. 2), but all positions are open for challenge and election. All positions are also subject to review by the incoming Executive Council. The positions below do not include Committees, which are appointed or extended by the Executive yearly after the election.

It is quite possible that members will receive a call from our ad-hoc Nominating Committee, who will check if you can take a position and answer your questions.

National Executive Positions

President – *Vacant (2-year term)* – Runs the Centre meetings and coordinates and directs the general affairs of the Centre guided by our Constitution and National norms. The President is generally the contact and spokesperson for the Centre, unless delegated.

Vice-President – *Vacant (2-year term)* – Assistant to the President and assumes those duties in the absence of the President. This is expected to be a “grooming” or “learning” position and a step up to President in two years.

National Council Rep - Les Dickson – Represents the Centre at the National Council meetings quarterly, either in person or virtually. Is expected to express Centre concerns to National and to relay National news to the Centre. In-person travel to the meetings and General Assembly (not fully required) is reimbursed.

Secretary - Rick Huziak – Records the Minutes of the Executive and General meetings of the Centre, maintains the centre records, manages the Centre mailbox, maintains the document archive and writes the National Year-end Report.

Treasurer - Donna-Lee May – Manages the financial affairs of the Centre, keeps the financial books, issues and receives payments, interfaces with the bank maintaining accounts and investments, interfaces with the Provincial Government for not-for-profit status registration, creates balance sheets, income statements and the year-end statement for the Centre and the Provincial Government. Maintains all records for insurance purposes such as premium payments, processing of all insurance claims, obtaining event certificates and all other documents pertaining to insurance. Maintains all records of the SSSP, all payments, invoices, and other documentation pertaining to the SSSP.

Support Positions

Past President – Ron Waldron - Inherited position after being President. Is an advisor to the President.

Librarian/Archivist - Darrell Chatfield – Maintains the library of the RASC (located in the basement of the University Observatory.)

Activities Coordinator – *Patty Gakis (Interim coordinator - wishes not to continue)* – plans, books and manages outreach activities of the Centre and reports those plans to the Executive for approval. Solicits help in conducting outreach activities and assures proper permitting and insurance is in place, as applicable.

Newsletter Editor - Colin Chatfield – Solicits articles and speaker/meeting information for the newsletter, edits and publishes the Saskatoon Skies newsletter on-line monthly from September through June, and once or twice over the summer as requested. Arranges for upload of the newsletter to the Centre website.

Web Master - Andrew Kostiuk – Maintains the Centre website and uploads content on demand.

Web Content Writer – Tenho Tuomi – Assures the content of the Centre website is current and accurate and uploads content changes or clarification on demand.

Sleaford Maintenance Coordinators - Darrell Chatfield, Rick Huziak – Coordinates maintenance of the Sleaford buildings, equipment, and grounds to assure the site does not deteriorate faster than it should. Conducts repairs and maintenance as required but can also solicit help as required or arrange for contractors on approval.

Observers Group Coordinators – *Larry Scott and vacant (wishes to turn the position over as soon as possible. Can be one or two coordinators.)* – Arranges dates of Centre observing nights monthly and the fall Sleaford Open House. Generally, goes to the Sleaford Observatory to open and close up for observing nights and has traditionally arranged for snow removal and grass cutting as required, though these tasks can be delegated. Trains new Sleaford users and issues keys to Sleaford to qualified members.

Speaker Coordinator - *Rick Huziak (would like to turn position over)* – Solicits speakers for the Monthly General meetings for September through June. Speakers are announced in the Newsletter and Activities Page. Provides (external) speakers with compensation per the approved budget, as required.

Membership Coordinator - Mark de Jong – Interfaces with National RASC to maintain the accurate listing of Centre Members and their status.

Telescope Rental Coordinators - Ike Thiessen and Ron Waldron – Maintains the rental telescopes, loans the telescopes, and receives payment for the loaner telescope use.

Meeting Room Coordinator - Daryl Janzen – Assures the in-person meeting room (175 Physics) is booked for the monthly meetings.

Photographers - George Charpentier, Mike Dolan – Photographically record the events and activities of the Centre and supply the Centre with photographs for general use.

Social Media Coordinators - Colin Chatfield, Patty Gakis – Create content and maintain the Centre's Facebook, Twitter & Instagram pages.

Observing Certificate Coordinator - Darrell Chatfield – Certifies that observers have completed the requirement of Observing Certificates and provides completion certificates for the observers, interfacing with National observing programs where required.

Board of Directors - Assures the Centre is operating within their Constitution and that this is being conducted with good intention and good faith. Provides guidance where required if of questions of operation and governance arise. *(An additional person can be added.)*

Les Dickson, Norma Jensen, Ron Waldron and Tenho Tuomi.

BOOKS FOR SALE

All books are in either new, or like new condition. Retail price in brackets. Please email at novachat@sasktel.net or text/call 306-222-0515 if you want a particular book to make arrangements. All books being sold by Darrell Chatfield.

| | | | |
|---|--------------------------|-----------------------|--------------------------|
| “Deep-Sky Observers Handbook” | Volume 1-5 | Enslow-Lutterworth | \$40.00 |
| “International Encyclopedia of Astronomy” | 1987 | Patrick Moore | Color \$10.00 |
| “Backyard Astronomers Guide” | T. Dickinson & Alan Dyer | 2008 | Color \$25.00 |
| “Atlas of Deep Sky Splendors” | 1978 | H. Verhenberg (50.00) | B & W \$22.00 |
| “Amateur Astronomers Catalog of 500 Deep Sky Objects” | Vol 1 | 1980 | B & W R. Morales \$15.00 |
| “Observing the Constellations” | 1989 | J. Sanford | Color charts \$10.00 |

TREASURER’S REPORT

Donna-Lee May

Year end is approaching quickly and I will need to have all of the financial transactions for 2021 - 2022 year in by mid-September so that I can complete the books for both the Centre and for SSSP. If you have any receipts that you need payment for or need to invoice for anything, I will need to know with plenty of time before September 30th. Please remember that I need original receipts from both Centre activities and SSSP. If you have any questions, please email Donna-Lee May at d1m3star@telus.net.

LIGHT POLLUTION NOTES - JULY/AUGUST 2022

Rick Huziak

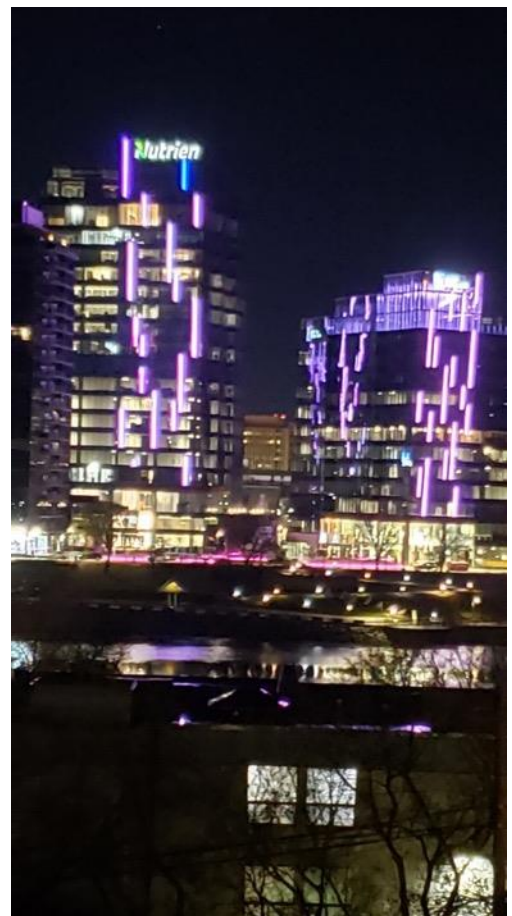
Astro-tourism – In mid-June I was interviewed by a consultant for *Sask Tourism* to look at recommendations to promote and improve dark-sky tourism in Saskatchewan. Dark-skies have been a promotional theme for more than a decade, especially in southwest Saskatchewan since that area contains the Grasslands, Old Man on His Back and Cypress Hills Dark-sky Preserves. Although I can’t get into specific details of the consultation, the main themes I portrayed were:

- Official recognition in the form of legislated protection of the DSPs, dark skies, and control of light pollution had to be addressed by the provincial government since there is little point in promoting a program that can be destroyed with any new development that loves to be really bright at night.
- That the development of facilities in the form of a dark-sky hostel or hotel for Astrophotographers, visual observers and night naturalists could be a good idea, similar to SW USA dark-sky communities, and would likely be viable since the dark skies of the SW Saskatchewan area are recognized worldwide, at least by those who understand darkness.
- That recent changes by Sask Parks with respect to the Regina-centred *Visitor Experience* changing Interpreter duties and not recognizing the success of the Cypress Observatory was counterproductive to the astronomy program and reduced attendance to this otherwise successful program.
- That money had to be put into local tourism staff that could then operate dark-sky programs in the area; just advertising in a brochure just is not good enough.
- That the *Land of Living Skies* trademark really needs to clearly, and seriously, emphasize “a big sky, magnificent sunsets, and *the other 12-hours where darkness should be honoured*.”

Sask Tourism at SSSP – Interviews for Sask Tourism continued with a visit by Matt Duguid at the Saskatchewan Summer Star Party. Matt hung around the star party to check out what astronomers and dark-sky tourists do at night and conducted interviews with Alister Ling (Edmonton RASC), Alan Dyer (Calgary RASC) and me. In the dark-sky theme, Matt was prepared with a red filter floodlight for the camera. We

each did 10- to 15-minute interviews with the intention to edit the comments into short snippets suitable for social media pages that Tourism is planning. I was delighted that Alister and Alan stepped up so quickly (each with 3-minute notice) and must have done a great job, since Matt did long interview with them. I am quite interested in what the result will be.

More on Highrise Lighting at River Landing – a new round of complaints started up in June regarding the LED light bars on the RBC & Nutrien towers at River Landing being very bright. From a short round of emails, we learned that the lighting had been



“negotiated” between the City and the building owners to be limited to one-third the maximum brightness of the bars in response to last year’s complaints. We also learned that the City was considering “doing something with” the Dark-sky Policy, though a project had not been funded or defined. We’re not really sure what that means, but at least they are thinking about the use of the term “dark-sky compliant”, even if it is not well-defined within the City, nor followed by all departments.

Programming at Cypress Hills Dark-sky Preserve – Aside from the comments above regarding changes to the interpreter rolls, though the centralized *Visitor Experience*



actually reducing the hours at the Cypress Observatory, the July Park calendar shows over a dozen nights in July where the observatory will be open to the public, and a similar schedule will appear in August, culminating with the large public star nights put on in conjunction with the SSSP. The Park has apparently been able to shuffle staff to cover the demand for this program.

On July 2nd, I did a Dark Skies talk at the amphitheatre (with an audience of 52) and following the talk I helped out at the Observatory open house. Head interpreter Chelsea Cox, first-year interpreter Hannah, and I, handled a crowd of almost 200 people who came out to see the observatory even though the sky was cloudy! Chelsea did an awesome light pollution talk while I toured over a dozen groups into the observatory dome. After the crowd left, the sky cleared (doesn’t it always?) and Chelsea and I had a chance to train Hannah in “the Ways of the Sky”. She was a good understudy!

Jimmy Pattison Children’s Hospital – A few years ago as construction of the Children’s Hospital was being completed, we were alerted to enormous glare that was coming from the area of the old Emergency entrance at the Royal University Hospital and the new Children’s Hospital parking lots and ramps. Saskatchewan Health had several LED floodlights installed on most corners of the third or fourth stories of the existing University Hospital buildings, and as always, these were installed as slanted several thousand-watt flood lamps illuminating everything – roadways, the parking lots, the sides of buildings, and shining into all the windows of the Children’s Hospital. Our first thought was, “How are the sick children supposed to sleep?” Years ago, before the Children’s Hospital was even a dream, and when I was a patient on the 4th floor of the University Hospital in the cardiac ward (for a cut foot, since there were no other beds!), I could not sleep because of an earlier set of awful floodlights in the parking lot. But often patients are too sick to complain about the lights that keep them awake!

The whole issue, though, is that the University grounds, the roadways, the Pattison Children's Hospital and the parking lots were *already designed with awesome full cut-off (FCO) dark-sky compliant lighting!* The architects and planners had already done that! Then Saskatchewan Health came along after the Pattison Children's Hospital was almost completed and installed the floor lighting "to improve the sense of safety." Not that there was any previous safety issue and that the lighting wasn't already perfect. Someone just wanted it brighter, and apparently enormous "glare" was the way to go it. There came a furious exchange of emails and letters to and from the SLPAC to Sask Health pointing out the hypocrisy of the Hypocritic Oath and bad design that would disrupt the health of sick children, and the pointless use of glare, wasted energy and bad design to change excellent lighting into horrible lighting. Sask Health did agree to look into the issue at the time.

I am happy to say that after 4 years, at least part of the issue has been resolved. Sask Health has removed the useless floodlights in the east parking lot and this allows the excellent FCOs in the lot to do their job and for the Children's Hospital lights on that side to remain uninvaded. Unfortunately, the floods remain at the West windows, the roadway and new Emergency entrance. It is probably time for another letter.

OBSERVING CERTIFICATES AND CLUBS

RASC OBSERVING PROGRAMS AND CERTIFICATES

The RASC offers four observing certificates for **members** who observe all objects in each of the following observing lists in this chapter:

THE MESSIER CATALOGUE (p. 314)

THE FINEST NGC OBJECTS (p. 318),

THE DEEP-SKY CHALLENGE OBJECTS (p. 322),

DEEP-SKY GEMS (p. 324).

See www.rasc.ca/certificate-programs for details and contact the RASC Observing Committee Chair at rasc.ca/contact/observing for further information.



The RASC also offers the **Explore the Universe Certificate** for novice observers (who do not have to be RASC members), the **Explore the Moon Certificate** for beginning members, and the **Isabel Williamson Lunar Observing Certificate** for intermediate to advanced members. In addition, **Astroimaging certificates** are available for those members with a photographic bent. See www.rasc.ca/astro-imaging-certificate

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, 154 Sky Gems 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. Chatfield, T. Tuomi, L.
Scott, G. Charpentier, B.
Johnson, L. Dickson,
B. Burlingham, Norma Jensen,
Donna-Lee May*

| | |
|-------------------------|-----|
| Ron Waldron | 108 |
| Marcel Müller-Goldkuhle | 94 |
| Wade Selvig | 75 |
| Wayne Schlapkohl | 43 |
| Ellen Dickson | 34 |
| Graham Hartridge | 9 |

CHATFIELD BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

T. Tuomi, R. Huziak

| | |
|---------------|----|
| Jim Goodridge | 12 |
|---------------|----|

FINEST NGC CLUB

Certified at 110 Objects:

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

| | |
|--------------------|-----|
| Larry Scott | 110 |
| Scott Alexander | 97 |
| Norma Jensen | 83 |
| Sandy Ferguson | 23 |
| George Charpentier | 13 |

EXPLORE THE UNIVERSE

Certified at 55 to 110

Objects: *T. Tuomi,*

| | |
|------------------|----|
| Wayne Schlapkohl | 55 |
| Jim Goodridge | 35 |

ISABEL WILLIAMSON

LUNAR OBSERVING CERTIFICATE

Certified at 140 Objects:

T. Tuomi, N. Jensen

EXPLORE THE MOON CERTIFICATE

T. Yaworski

HERSCHEL 400 CLUB

Certified at 400 Objects:

*R. Huziak, D. Chatfield,
T. Tuomi*

| | |
|-----------------|-----|
| Gordon Sarty | 251 |
| Scott Alexander | 117 |
| Larry Scott | 45 |
| Sandy Ferguson | 18 |

HERSCHEL 400-II CLUB

| | |
|-------------------|-----|
| Darrell Chatfield | 400 |
| Tenho Tuomi | 378 |
| Rick Huziak | 246 |

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

| | |
|-------------------|-----|
| Tenho Tuomi | 150 |
| Darrell Chatfield | 70 |

The Messier, Finest NGC and David Levy's Deep-Sky Gems lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available here <http://www.rasc.ca/explore-universe>

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

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

On-line Herschel 400 List:

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

Binocular List is at: https://www.usask.ca/rasc/Chatfield_Binocular_List.pdf

"Isabel Williamson Lunar Observing Program Guide":

<http://www.rasc.ca/sites/default/files/IWLOP2015.pdf>

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