

# STARDUST

Newsletter of the  
Royal Astronomical Society of Canada  
Edmonton Centre



March 2022

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*M31 in Andromeda. Image by Abdur Anwar. C11 EdgeHD with Hyperstar v3 (focal length 560mm), ASI1600MM camera with ZWO filters and filterwheel, EQ6R mount Guided with 60mm guidescope. Captured in [NINA](#), stacked and processed in [Pixinsight](#). Total combined exposure time 4 hours 18 minutes.*

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Council Positions	Name	email @ edmontonrasc.com
Honourary President	Doug Hube	
President	Tom Owen	president
Past President	Geoff Robertson	past_president
Vice President	Jay Lavender	vice_president
General Secretary	Sukrit Ahluwalia	secretary
Treasurer	Florin Sabac	treasurer
National Council Representative	Alister Ling	national_rep
National Council Representative	Sharon Morsink	national_rep
Public Education Director	Clayton Knoll	public_education
Fundraising Coordinator	Luca Vanzella	fundraising
Councillor	James McNeice	councillors
Councillor	Mike Szelewicki	councillors
Councillor	John Woolley	councillors
Internal Communications Officer	Michael Ward	internal_communications
Observing Group Director	Jon Stolte	observing_group
Membership Secretary	Sharon Morsink	membership
New Member Advisor	Murray Paulson	new_member_advisor
<b>Appointed Officers</b>		
Dark Sky Preserve Coordinator	Geoff Robertson	dsp.coordinator
Equipment Director	Kent Martens	equipment
Library Coordinator	Mark Zalcik	library
Public Relations Officer	Geoff Robertson	public_relations
Social Media Director	Bruce McCurdy	socialmedia
Stardust Editor	Michael Ward	editor
Loaner Program Coordinator	James McNeice	rentals
Volunteer Coordinator	Clayton Knoll	
Web Site Coordinator	Ryan May	webmaster

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Edmonton, AB, T5J 1B9  
Canada  
**RASC Observatory** 780-452-9100 x2249  
**at TWOSE**

**On the web** <https://edmontonrasc.com>  
<https://www.facebook.com>  
<https://twitter.com/EdmontonRASC>  
<https://www.youtube.com/user/edmontonrasc>  
<https://groups.io/g/astro>

**Stardust submissions:** Submit articles **by email** to the editor (see above). **Please include STARDUST or RASC in the subject so your email doesn't end up in the spam bin.** Submission **deadline** is the 2nd Sunday before the monthly meeting; see following page for dates. Any standard document file type is acceptable (MSOffice, OpenOffice, LibreOffice, et al.) but **plain** text is preferred. **Do not layout and format your article.** Your labour will only be discarded. Submit clearly identified images/graphics as **separate files**, do not embed them in the document; indicate captions and references to them within the text. **Do not consider your article successfully submitted until you receive a confirmation email from the editor.**

**Regular Meetings** are held monthly (see below) from September to June at 7:30pm in [TELUS World of Science, 11211 – 142 St.](#)

**Admission is free, and everyone is welcome** to attend, member or not. Follow the signs from the main entrance.

**Edmonton Area Astronomy Discussions**

To subscribe, visit <https://groups.io/g/astro>

**Council meetings** are held monthly (see below) from September to May at 7:15 in room 5-003 of the [CCIS\\* Building](#) on the U of A campus. Any RASC Edmonton member may attend.

\* Centennial Centre for Interdisciplinary Science

**ALL PUBLIC MEETINGS ARE  
ON-LINE  
UNTIL FURTHER NOTICE**

## MEETINGS

			What's Up?	Obs Group	Astro Café	Intro Stars
2022	Regular Mtg	Council Mtg	 <b>Wednesday Meeting Series</b> 			
Jan	10	24	5	12	19	26
Feb	14	28	2	9	16	23
Mar	14	28	2	9	16 AI	30
Apr	11	25	6	13	20	27
May	9	30*	4	11	18	25
Jun	13	—	1	8	15 AI	22
Jul	—	—	6	13	20	—
Aug	—	—	31	10	17	—
Sep	12	26	—	14	9,21	28
Oct	17*	24	5	12	19 AI	26
Nov	14	28	30	9	16	23
Dec	12	—	—	14	21 AI	—

\* Indicates date bumped because of statutory holiday

AI = Astroimaging Community Café

## Black Nugget Lake Observatory (BNLO) Site by Warren Finlay

From mid-October through to the end of April, RASC Edmonton Centre members have exclusive access to a dark sky observing area behind locked gates at Black Nugget Lake Park south-east of Tofield. This observing site, a gravelled field about 70 m square with three 110 V outdoor power outlets, can be used by authorized RASC Edmonton Centre members for personal astronomy. There is a berm to the north shielding the field from the adjacent road and golf course operation, and there are trees and slopes to the east and west shielding the site from prevailing winds. To obtain authorization to use the observing site, familiarize yourself with the BNLO Access Policy and Rules of Conduct and follow the instructions at:

<https://community.edmontonrasc.com/?q=members-area/bnlo>

Also on site is the Barry Arnold Memorial Telescope (BAMT), a fine 46 cm (18 in) f/4.33 Dobsonian telescope on a

Poncet mount, for use by authorized RASC Edmonton Centre members. To obtain authorization to use the BAMT, familiarize yourself with the BAMT policies and procedures and follow the instructions at:

<https://community.edmontonrasc.com/?q=members-area/bnlo>

The RASC Edmonton Centre Black Nugget Lake Observatory Committee has nearly completed construction of a 32" telescope inside a domed observatory that will soon provide awe-inspiring views, including a heated Visitor Centre to warm up in. A brief historical overview of BNLO is presented by Warren Finlay at the June 2021 Regular Members' meeting, starting 6:45 on the YouTube link

<https://www.youtube.com/watch?v=E3ZvW-0T4ns>

## RASC Edmonton Centre Casino by Luca Vanzella

**Casinos are the Centre's main source of revenue that powers our astronomy programs (see below).** Our next casino is scheduled for **Fri-Sat, May 27-28, 2022**. We need **42 volunteers** to work it. Please consider working the casino so that funds continue to be available to power our astronomy programs.

### When:

Fri, May 27, 2022

Sat, May 28, 2022

### Where:

Pure Casino Edmonton  
7055 Argyll Road

### Who:

42 volunteers needed

### Positions:

General Manager, Banker, Cashier, Chip Runner, Count Room Supervisor, Count Room Worker

### Shifts:

#### Day 1 - Fri, May 27, 2022

Day Cash Cage: 9:00 AM - 7:00 PM

Night Cash Cage: 6:15 PM - 4:00 AM

Count Room: 11:30 PM - 3:30 AM

#### Day 2 - Sat, May 28, 2022

Day Cash Cage: 9:00 AM - 7:00 PM

Night Cash Cage: 6:15 PM - 4:00 AM

Count Room: 11:30 PM - 3:30 AM

To volunteer, contact [fundraising@edmontonrasc.com](mailto:fundraising@edmontonrasc.com) with your first and second choices for: position, day and shift.

### Please note:

- **Volunteers must be fully vaccinated** and must have **valid proof of vaccination** as defined by the Government of Alberta at <https://www.alberta.ca/covid-19-public-health-actions.aspx>. Proof of a negative test result is not sufficient to volunteer.
- If requested, the RASC Edmonton Centre will provide a volunteer with one N95 mask.
- Pure Casino Edmonton is operating in accordance with Alberta's Restriction Exemption Program.
- See: <https://www.purecasinoedmonton.com/health-safety-protocols/>





### RASC Edmonton Centre programs powered by casino funds:

- Operation and maintenance of RASC Observatory at TWOSE
- Operation and maintenance of Black Nugget Lake Observatory (BNLO)
- Purchase and maintenance of equipment in the telescope loaner program
- Guest Speakers at Regular Meetings
- Guest Speakers at the Northern Prairie Star Party
- Guest Speakers at the Beaver Hills Dark Sky Preserve Star Party
- Expenses for the Northern Prairie Star Party
- Expenses for the Jasper Dark Sky Festival
- Renting a storage locker
- Insurance for equipment in the storage locker and at BNLO
- Student bursaries to attend the U of A Space Camps

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### President's Report by Tom Owen

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#### Looking Back

This month marks the 90<sup>th</sup> anniversary of the founding of the RASC Edmonton Centre - a remarkable accomplishment. How many organizations can boast that they have been in existence for 90 years, and all that time run only and continuously by volunteers?

For most of us who are amateurs, astronomy begins, and remains in large part, an individual pursuit. It usually begins with a small telescope and some eyepieces, given or purchased. We figure out how to set it all up, and aim it at the moon. It is but one eye at the eyepiece; in the solitude of the dark, the emotional impact is direct, and private. And yet for 90 continuous years we and those before us have been inspired to make a community: to share our knowledge and experiences with each other and the

#### Looking Ahead

Throughout the course of the pandemic, Council has visited and revisited the prospect and timelines for resuming in person interactions, whether they be meetings or public outreach. Obviously we are closer now than we have been in the two years since the pandemic began.

But caution remains the watchword for Council. First, we are mindful of the fact that our membership demographic is skewed to, shall we say, mature individuals. Second, there is always concern that the virus may not have gotten the memo that the pandemic is on the decline.

We certainly don't want to go to the considerable effort of opening up again, only to have to shut down because the summer was not the "best".

So at this time we are tentatively looking at September for

public; to fulfil the mission statement of the Royal Astronomical Society of Canada, even before it was put down on paper.

It is worth repeating it here:

*To enhance understanding of and inspire curiosity about the Universe, through public outreach, education, and support for astronomical research.*

At the March 14<sup>th</sup> Regular Meeting **Franklin Loehde** will be presenting a history of the Edmonton Centre. Congratulations, and many thanks to him and the other long time members of the Centre for the gift of their time and efforts to further the mission of our Centre.

the return to TWOSE for in person regular meetings. We will revisit the issue yet again in May.

But when we do resume in person meetings, we do plan on also making them simultaneously virtual. "We have the technology".

And we expect that in the fall there will be more and more requests for us to resume in-person public outreach.

In that regard, if you would like to offer your services, we invite you to contact Clayton Knoll, our public education director and volunteer co-ordinator, at [volunteer@edmontonrasc.com](mailto:volunteer@edmontonrasc.com).

We need you! **Without you, there is no Centre.** The good times have been rolling for 90 years. Let's keep it going.

Clear skies!

## SAVE THE DATE - CAMPSITE RESERVATIONS

Summer campground reservations in Alberta opened on March 1, including for the Black Nugget Lake Campground that is operated by Beaver County

<https://www.beaver.ab.ca/tourism/campgrounds/black-nugget-lake>

This is the location of our annual Northern Prairie Star Party (NPSP) and the Black Nugget Lake Observatory (BNLO).

The 2022 NPSP dates are **Tuesday, September 20 to Sunday, September 25**. We are moving ahead with plans for onsite talks and seminars – we will have more details next month.

As we did last year, we have booked the northern part of the campground for use by our members and potential NPSP attendees during that time. This will give you a great opportunity for dark sky astronomy with others who share the same interest.

**If you are interested in using one of the sites during the reserved time**, please email us NPSP coordinators at [npsp@edmontonrasc.com](mailto:npsp@edmontonrasc.com) indicating the dates and site preference. We will allocate them on a first-come, first-served basis and follow up with you regarding payment. Last year, all sites used by members were paid for by them at the rates charged by the campground (\$36 for powered and \$30 for unpowered sites plus booking fee and GST).

For reference, the map of the sites is found on the Black Nugget Lake Campground site at: <https://www.beaver.ab.ca/public/download/files/200189>. Those we have booked are:

- (1) Powered sites Group Site 8 and Sites 90, 91 and 92 (for five nights Tuesday, September 20 through Saturday, September 24), and
- (2) Unpowered Sites 88, 89, 93, 94, 95, 96, 98, 99, 100, 102, 106, 107, 108, 110 and 112 (for five nights Tuesday, September 20 through Saturday, September 24).

If you are planning to be out there before or after these days, you are responsible for making those reservations yourself.

If you have questions or require more information, please contact us via email at: [npsp@edmontonrasc.com](mailto:npsp@edmontonrasc.com). We look forward to hearing from you!

Rick and Susan Bramm, Coordinators  
2022 Northern Prairie Star Party  
RASC – Edmonton Centre

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## Favour from the RASC Family by Alister Ling

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### Who do you call? RASCals!

Yes, I make mistakes too, and this one was pushing a good but low-end scope past its operating parameters.

I have brought this extremely portable, kid-friendly mini-Newtonian to outreach events for nearly a decade, to show parents concerned about committing a serious amount of money that they can still solidly hit the mark for satisfying a youngster or shoehorning it into limited camping space.

My problem occurred because I swapped out the 20mm low-end eyepiece for a decent 32mm Plossl to give the view a punch. But too many people tried to push the focus in more than was possible. Eventually the metal pinion gear stripped the threads of the rack, to the point where the focuser no longer scrolled up and down. It turns out that the focuser housing also holds the secondary mirror in place as a unit so I could not simply swap out the focuser.

Like many, I hate throwing out an otherwise functional item because no one sells a \$5 replacement part. I knew the 3D-printing world had become quite the darling child for making parts, and that our Edmonton Public library does 3D printing free for cardholders. But I couldn't convince myself to commit the many dozens of hours figuring it out, surely I could "call a friend" who knew what they were doing.



**Fig 1.** For less than \$100 CAD, a fine entry level instrument: the Celestron Firstscope

Suddenly there was an article in SkyNews about Blake Nancarrow hacking telescope parts (July-August 2021, "Hacking Your Scope"; not available on-line). I contacted him, explained the situation, and he said he would give it a go. Part of my "sell job" was that I couldn't be the only one with this problem, and when finished he could either post it on the net for others to use or recoup a small fee printing it for others.

It turns out that calculating the thread spacing and asking the system to produce a series of "triangles sticking out of a column" is not a walk in the park. Blake enlisted a buddy Steve McKinney to help, and after a few iterations, they nailed it!

Ideally, the "transporter" method was to send me the design and I would print it here, but with COVID, and me having to learn how to engage the library system, we went old school with Blake printing it and snail-mailing it via Canada post.



*Fig 2. Blake Nancarrow's 3D-printed part next to my original.*



*Fig 3. The 3D focusing tube with its integrated rack is installed on the Firstscope.*

Blake was very generous in offering to swallow the "sticker shock" that I didn't sign up for, \$30 for the part and postage, but I could not let that go. At one-third my other option of replacing the entire scope, this was a great deal! True to the "all in the family" philosophy of the RASC, Blake told me "I had to start all over but that's a good thing, I've learned lots." And that's how I approach the scope-help that I give newcomers out there: I spend extra time researching how to solve a problem, but I've learned something that will make the next scope-help easier. And just

maybe, I've planted the seed for sprouting that newbie into the next generation scope-helper or outreach volunteer.

But that's not the end of the story! If I simply use my 32mm Plossl again, stripped threads are in my future. So I asked our email astro group if anyone had a 20mm Plossl for \$50, and Bob Drew answered "I've got one, buy me a coffee and it's yours."

I love our RASC family!





# Space Themed Artistic Works

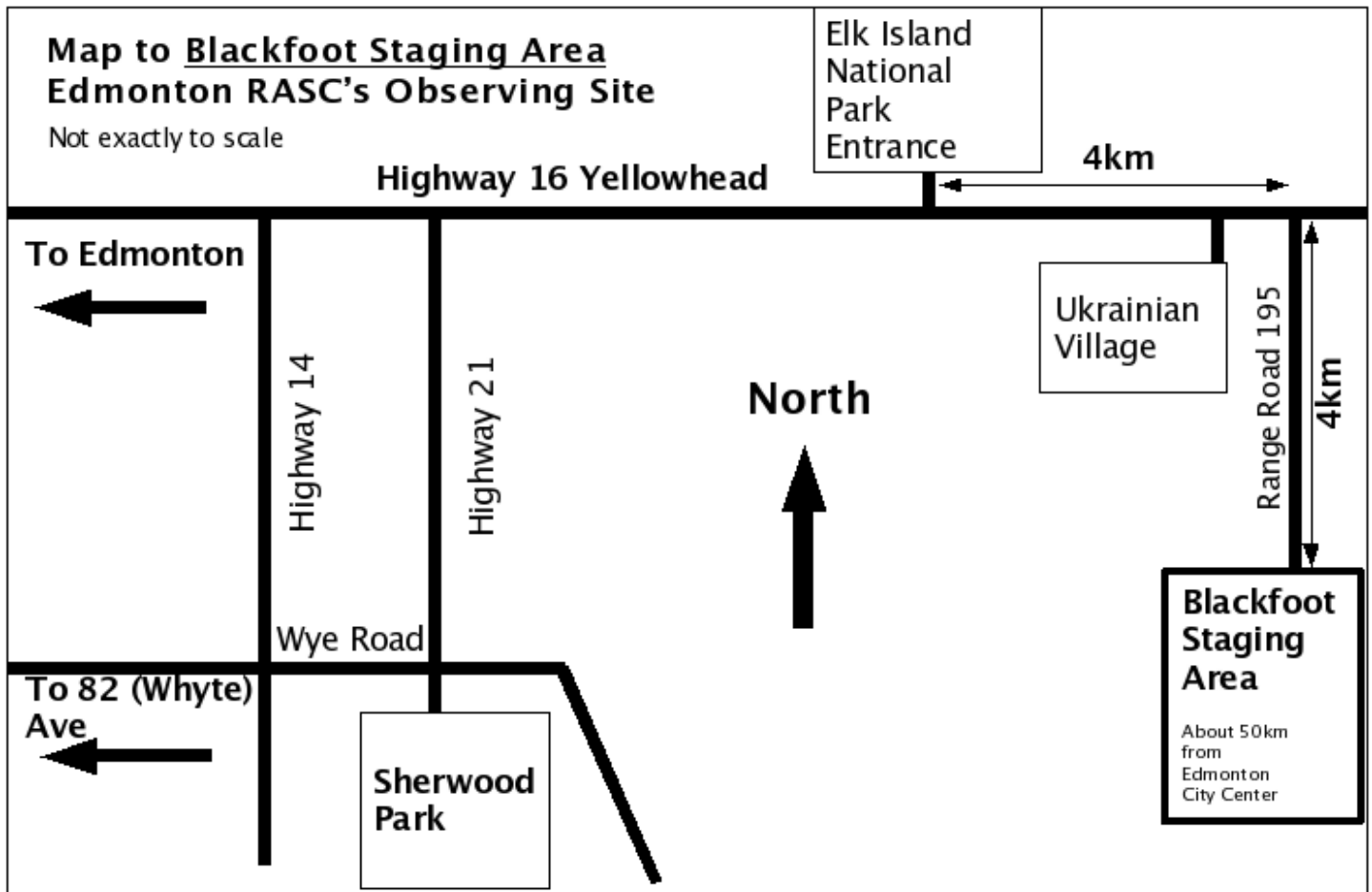
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