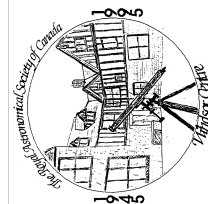


## Member Astrophotos



Top: Full Moon by Nancy Ng. Bottom: Heart and Soul Nebula (IC1805 & 1848) captured by Brian Simpson with ASI1600 camera and 200mm f/5.6 lens in a 4 hour and 12 minute combined exposure through Ha, OIII and SII ZWO filters.



# Aurora



Volume 45, No. 5

The Royal Astronomical Society of Canada - Windsor Centre

February 2020

## Flyer

### Next Meeting

Tuesday, March 17, 2020  
7:30 p.m.

at

[Ojibway Park Nature Centre](#)  
5200 Matchette Road

Speaker: TBA

Topic: TBD

### Upcoming Events

**Planet Grouping with the Moon:** On the morning of Wednesday February 19th Mars, Jupiter and Saturn will be joined by the crescent moon (near Jupiter) forming a line over the "Teapot" in Sagittarius.

**Saturn and the Moon:** On the morning of Thursday February 20th Saturn will be 1.7 degrees to the North of the crescent moon.

**Daylight Savings Time:** Returns on Sunday March 8th at 2:00 a.m..

**Planet Grouping with the Moon (part 2):** One lunar cycle later than the February 19th event on the morning of Wednesday March 18th Mars, Jupiter and Saturn will be joined by the crescent moon (below Jupiter and Mars) to the East of the "Teapot" in Sagittarius. The entire grouping should fit into a wide binocular field.

**Spring Equinox:** Spring officially arrives for the Northern hemisphere at 11:50 p.m. EDT on Thursday March 19th.

## Monthly Meeting Minutes

January 21, 2020

The monthly meeting of the **Royal Astronomical Society of Canada - Windsor Centre** was held at the Ojibway Park Nature Centre.

Windsor Centre **President, Randy Groundwater** chaired the meeting. Randy called the meeting to order at 7:30 p.m. and welcomed members and guests to the Ojibway Park Nature Centre.

Randy invited members to review the **minutes of the November 19, 2019** meeting which were printed in the Aurora newsletter. A **motion to accept the minutes** of the November 19, 2019 meeting was made by Susan Sawyer-Beaulieu and seconded by Dave Panton. **MOTION CARRIED.**

**Randy** provided an overview of the meeting and introduced **Monica Schartner-Hansen**. Monica shared a story regarding the return of the **eagle woodworking project** which is a replica of the Apollo 11 logo. Her son, **Jeremy** created the **piece** and sold it at the ArtSpeak event last November for \$500 and donated the money to RASC. The eagle was unknowingly **purchased by a close family friend** and was returned to them as a gift.

### Main Presentation

The January meeting traditionally is a movie night and **National Geographic, "One Strange Rock", Season 1, Episode 2** was the feature for the night.

Escaping Earth – One day we will have to **leave our planet** which is literally bursting with life. Extinction of life on Earth means building a colony somewhere else. To put Humans on another planet **involves risk** but would **benefit the whole species**.

Before leaving the Earth, we will have to **solve the risks involved**. There are **health risks** involving bacteria and physical restraints. On board a spaceship you are weightless. On Earth gravity pulls on us with a force of 1G. Weightlessness in space makes you feel nauseous. The **human body needs gravity**. It tells you which way is up. It also defines the **size of the heart, muscles and skeletal growth**.

If humans want to survive, they will have to **overcome exposure to radiation** from the Sun.

The most reasonable place to **colonize would be Mars**. Travel to Mars takes 9 months where you would be **living in a dome**, entirely trapped and confined with other people. Will they stay friends? Think of how much trouble you would have to go through just to go for a walk. You would be isolated **from your family and friends never returning to Earth**. Stress affects how you feel and perform.

### How hard will it be for humans to leave Earth?

The **50/50 draw was won by Greg Mockler** who donated it back to the club.

With 2020 being our clubs **75th anniversary** **Mike Mastronardi** discussed some of the ideas we are considering to **celebrate this important year**.

## Director of Observing Report

**Nancy Ng** was welcomed to the floor. She opened the **Director of Observing** report with a chart showing the **full moons occur closer to the beginning of the month** this year as compared to last year when they were in the middle of the month.

- February 9<sup>th</sup> is the next full moon called the '**Snow Moon**'. October has two full moons, the second one known as '**Blue Moon**'.
- **Venus** is the star of the show for the past month and a half. Tonight, it is at 30 degrees by our next meeting (Feb 18) it will be at 38 degrees and will be at its' highest March 24 at 43 degrees. Will be at its brightest on April 27<sup>th</sup>.
- February 27 and 28 the **crescent moon joins Venus** after sunset.
- February 11 **Mercury is at its' greatest elongation** at 16 degrees but is so close to the sun it may not be seen.
- By our next meeting on Feb. 18, **Jupiter will be our Morning Star** and Venus is in the evening sky.
- January 27 **Venus** will be in extreme **conjunction with Neptune** at 6:30. They will be **7 arcminutes apart**.
- **Mars** rising at 4:30, Jupiter joins at 7:00 however the sun will outshine it right now. **Mars will be occulted by the moon on February 18<sup>th</sup>**.
- Betelgeuse is acting radically lately. **Betelgeuse is dimming**, October it had a 0.5 magnitude on December 21 it was 1.5 magnitude. Not the brightest star in Orion. Betelgeuse is the alpha star
- February 17 and 18 **Jupiter and Saturn** will be visible before sunrise behind Mars.
- By the next meeting the constellations will move 30 degrees to the west. **We have lost Aquarius completely and Leo is joining us**.
- On March 18<sup>th</sup> Jupiter, Mars and the Moon are very close with Saturn off to the side. If the sky is clear it will be a great sight at 15 degrees above the horizon. All visible until 7:10 when the sun will rise.
- **Nancy showed pictures** from various members, **her own, Steve M, Susan, Mike M, Randy and Art Rae's**.
- Nancy closed with the **Cat's Eye nebula in Draco** constellation.

Randy informed us of the **telescope at the back which was donated by Jennifer (from Ojibway)** to be used as a fundraiser.

**Reminder:** Astro Luncheon at **Skippy's Restaurant** every second Wednesday of the month, at noon Located at 954 University Ave West, Windsor.

**Randy** thanked everyone for coming out to the meeting and reminded everyone that the **next regular membership meeting** would take place on **February 18th, 2020**.

**Meeting adjourned at 9:23 p.m.** January 21, 2020.

Recorded by Sandy van Gaalen, RASC Windsor Centre