

# SPECTRUM

Northern Cross Science Foundation Newsletter

February, 2020

## Looking Up

### February 6, Thursday

#### General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m. - Main Program

Business Meeting to Follow

### February 8, Saturday

#### Ski & Hike

6:00 p.m. - 9:00 p.m.

Pike Lake Beach Area

### February 20, Thursday

#### Board Meeting

7:30 p.m.

Home of Jeff Setzer

### February 27, Thursday

#### NCRAL Meeting

7:30 p.m.

House of Rick Kazmierski

#### Note

### No March General Meeting

### March 5, Thursday

#### NCSF Annual Banquet

Social Hr - 6:00 p.m.

Dinner - 6:30 p.m.

#### Libby Montana

5616 W. Donges Bay Rd

Mequon

(See Page 3)

### April 2, Thursday

#### General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m. - Main Program

Business Meeting to Follow



## NCRAL 2020 - Join the Fun

Want to meet like-minded people in the field of astronomy? Make sure you have the dates May 1 & 2, Friday and Saturday, saved on your calendar.

This is your chance to attend an astronomy convention without having to travel too far. Amateur astronomers of all experiences will be there. Your club, NCSF is hosting the event and will be held in Port Washington this year.

Looking for something to energize your interest in astronomy? There will be interesting speakers from around the country giving talks for 2 days, guaranteed to be of interest for all levels of experience. Amateur astronomers for the North Central Region will be there to share your questions and ideas. Food will be provided as well as a Keynote speaker at dinner on Saturday evening.

This is a big event for the club, one you will not want to miss. Any questions, please contact Mike Borchert or Jeff Setzer, via email (see club newsletter) or at a future meeting. *Mike Borchert*

## NCRAL Udate: Registration is Live.

After months of work, the NCRAL VISION 2020 convention website is live! We have a complete website including online registration and payment, as well as a downloadable PDF packet for those who would like to go the "print out and mail" route.

Event-branded apparel is also set and ready for ordering, both online and via the mail-in packet. The Foundation makes \$5.00 from each purchase, and as they are all color-embroidered items, we think we'll do well with that as an extra fundraiser.

Our committee's next tasks include fleshing out the activities, solidifying the schedule, and acquiring door prizes.

What can YOU do to help? Register for the convention! The more people we get signed up early, the better off we will be. Head to our website ([www.ncsf.info](http://www.ncsf.info)) to reserve your seat! *Jeff Setzer*

## New Spectrum Editor *by Rick Kazmierski*

After 12 years and 144 issues as your Newsletter Editor, I am excited to announce that with the March, 2020 issue I will hand off this responsibility to NCSF member Ernie Mastroianni.

Mastroianni is a long-time journalist, working 19 years as a photo editor at the *Milwaukee Journal Sentinel* and for 10 years at *Birdwatching* and *Discover* magazines. He grew up in Kent, Ohio and began his career in 1974 as a staff photographer for the local daily newspaper. He earned a B.A. in journalism at Kent State University.

In addition to editing and shooting photos, he's written major science stories for the *Journal Sentinel* and *Discover* magazine. He's filed stories from observatories around the world, including the test bed for the Ice Cube neutrino detector at Amundsen-Scott South Pole station, the Gemini and Keck observatories in Hawaii, the LIGO gravity wave detector in Louisiana, and the venerable Yerkes observatory here in Wisconsin. He was the first newspaper photojournalist to transmit deadline photos for immediate publication from the South Pole.

He's been an active amateur stargazer since the mid-1960s, an NCSF member since 2003, and hosts public observing nights and astrophotography sessions at the Jim and Gwen Plunkett observatory. Since his retirement from *Discover* in 2019, he's looking forward to spending more time under clear dark skies.



*Ernie Mastroianni, Newsletter Editor effective March, 2020.*

[ernie.mastroianni@gmail.com](mailto:ernie.mastroianni@gmail.com)

## January Meeting Minutes

By Kevin Bert

The January 2020 Business meeting of the Northern Cross Science Foundation was held at the GSC Technology Center in Germantown. President Jeff Setzer called the meeting to order at 8:00pm and welcomed 20 members and guests. He reminded members that the sun is pushing higher and higher each day and warmer weather will be here before you know it. In particular the NCRAL convention which is right around the corner. Jeff then asked for standard reports.

Treasurer Gene Dupree tells us that there is a balance of \$11,333.20 in the regular account with a balance of \$394.18 in the Observatory account.

Secretary Kevin Bert reports that the membership remains unchanged and encouraged members to get their dues in soon. He announced that ALCON 2020 will be held in Albuquerque New Mexico on July 16-18. Telescope making will be highlighted at this convention with an ALCON Junior family conference in conjunction with the main convention. Sales of Astronomical League calendars will be used to reduce the cost of the 6-inch telescope kits from e-scopes and components from Teeter's Telescopes.

There was no observatory report.

Jeff Setzer tells us that the Board of Directors had a meeting to elect officer positions for the 2020 year. All positions remain the same. Gene Dupree Treasurer, Kevin Bert Secretary, Joyce Jentges Vice President, and Jeff Setzer President.

Jeff mentioned that NCRAL convention participants will be set up to use Paypal when they register and in the near future it can be used for NCSF membership and renewals.

With no more new business Jeff reminded members that the public viewing schedule is finished for the year. The upcoming events for 2020 start in January with a telescope viewing night on the 18th at Horicon. The Ice Age Center has a Ski and Stars night on February 1st. Pike Lake has a Ski and Stars viewing event on the 8th of February. The Sheboygan Swap & Sell will take place on March 21st.

With no further business, Jeff closed the business meeting at 7:20 pm.

## Moon occults Mars February 18 *by Ernie Mastroianni*

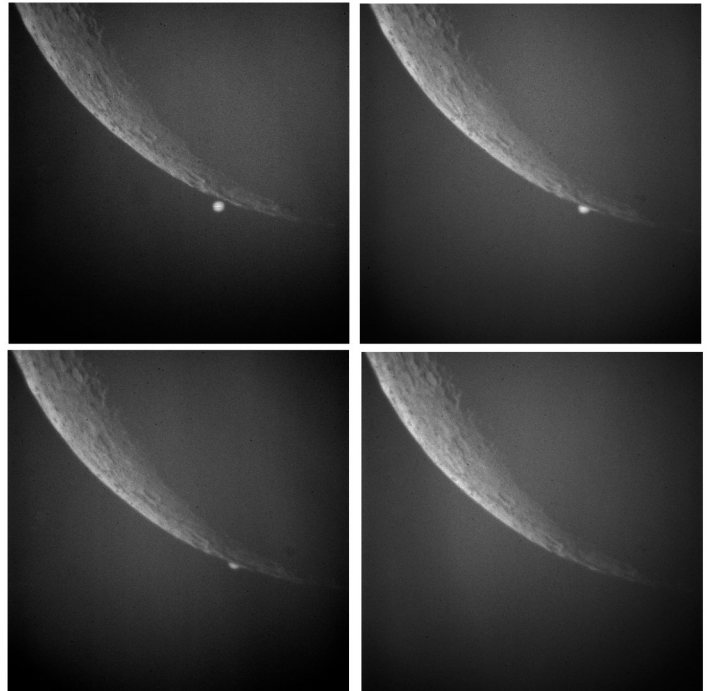
Although this year's Mars opposition isn't until October 13, its pre-dawn occultation by the moon on February 18 offers observers an early excuse to view the red planet in action. Though Mars will be just 5.4 arc seconds across, it will take about 20 seconds for the moon's motion to completely cover the planet after first contact. On this day, the moon is a waning crescent and Mars will vanish behind its sunlight side.

From Southeast Wisconsin, the pair will be low, just 17 degrees above the southeastern horizon when the occultation starts at about 6:07 a.m., so you'll need a location that offers an unobstructed view. Sunrise starts at about 6:45. Also keep an eye out for Jupiter and Saturn, which will line up below and to the east of the Moon and Mars.

If you don't freeze, stick around for the show's second half. At about 7:32 a.m, Mars will reappear from behind the moon's dark side. The emergence could be visible through a telescope, despite being awash in early daylight.



A frame grab from the Stellarium program shows how Mars will appear in relation to the Moon's limb a few minutes before the February occultation.



This sequence shows the daytime occultation of Jupiter on November 9, 2004. The images, taken with a digital SLR and an 8-inch Newtonian, were contrast-enhanced in Photoshop.

For comparison, I viewed Jupiter's occultation by the crescent Moon at 10 a.m. on November 9, 2004. I recall being surprised at how clearly I could see the planet and its cloud belts. And it was fun to see (through the telescope's eyepiece) the relative motion of the moon to Jupiter. But Mars will be magnitude 1.4 on that morning and much dimmer than Jupiter at minus 1.5 when it was occulted, so Mars will be harder to see. Will its smaller diameter make its surface bright enough to shine through the morning light? It will be a novel observing challenge to find out.

Note: Observing data was obtained with the programs Stellarium and Sky Safari. Occultation times can vary by seconds or even minutes depending on your location in SE Wisconsin.



## February General Meeting

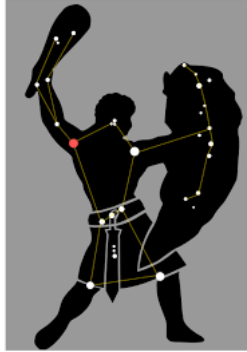
### Astronomy 101 *by Kevin Bert*

#### "2020 Planets"

The February class will look at the planets for 2020. Join Kevin Bert to see when optimum times occur for viewing along with other special alignment events.

Constellation of the Month:

### Orion



### Main Program

#### "From Servant To Astronomer: The Story of Caroline Herschel."

Join me as we learn about the life of Caroline Herschel, sister of famous astronomer William Herschel. This is the story of a young woman who was destined to be a servant, but became the world's first female astronomer.



## Related Info

### Leaders for Public Events

#### February 8

Pike Lake

Gene & Charlotte DuPree

### Star Parties/Conferences

#### NCRAL 2020

May 1-2

Port Washington Country Inn and Suites

Hosted by Northern Cross Science Foundation.



### January Public Events

#### **Horicon Marsh January 18, Ski & Hike** *by Gene R. DuPree*

There was a large crowd, again, this year for the 10th annual ski and hike. It was estimated around 650 visitors. We had lots of questions about the finding of new planets, and the dimming of Betelgeuse. Some people think that scopes cost lots of money, so that is why they don't have one. We handed out our business cards to the people, so they can see the new schedule, when it gets posted online. And answered questions to the ones that were interested about the club. It never cleared, and the wind was too bad even if it was clear. There were lots of rosy cheeks, on the people who passed through on their way back from their hikes.



#### **February 2020 Planets** *by Gene R. DuPree*

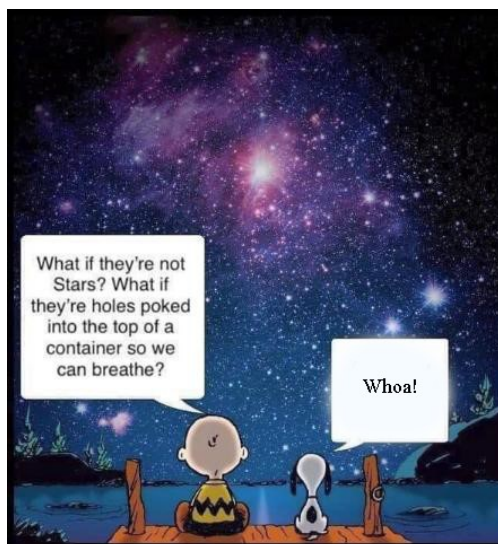
February starts with Venus, the major planet to watch, in the evening sky. Have you spotted it at sunset? On February 10, Venus and Mercury can be seen 40 Minutes after sunset, 24° apart. The last days of February offers a Venus, Uranus and Moon line up. The mornings of February 18 to 20, Saturn, Jupiter, Mars, and Moon will line up, 40 minutes before sunrise.

### NCSF March Annual Banquet

The annual club dinner will be held at Libby Montana, on Thursday, March 5th. It is located in Mequon, 5616 W. Donges Bay Rd., near 57th St. I hope you were able to find the on-line menu and the prices, if you wanted to take a look beforehand. Arrival is 6:00 pm and ordering dinner around 6:30 pm. This is a gathering to meet club members, and you may bring a guest.

If you plan to attend, the deadline for reservations is Thursday, February 20. You can call and leave a message, 262-675-0941. Or email [grdupree@charter.net](mailto:grdupree@charter.net)

We hope to have a good attendance this year. Thanks



### W.O.W.

(Wisconsin Observers Weekend)

June 18 –21, 2020

Hartman Creek State Park

[WWW.new-star.org](http://WWW.new-star.org)



### Northwoods

August 21-23, 2020

Hobbs Observatory

Beaver Creek Reserve

Fall Creek, WI.

[www.cvastro.org](http://www.cvastro.org)



## 2019 Board of directors

**President - Jeff Setzer**

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**Vice-President - Joyce Jentges**

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## **SPECTRUM**

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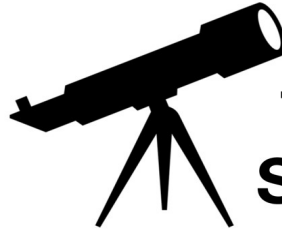
NCSF is a member of the North-Central Region of the Astronomical League.



NCSF supports the *International Dark Sky Association*



This Issue, along with back Issues of SPECTRUM, can be found on the NCSF Web Site.



# 13th Annual Swap 'N' Sell



Sponsored by Sheboygan Astronomical Society  
Saturday, March 21, 2020  
Aviation Heritage Center  
Sheboygan Airport  
N6191 Resource Drive, Sheboygan Falls, WI 53085  
9:00 am to 2:00 pm

Join us as we celebrate the 13th Anniversary of our annual Swap-n-sell event. Got some astronomical stuff (scopes, eyepieces, books, etc) laying around that you want to get rid of?

Here's your chance! Bring unwanted astronomy items to sell or swap with other amateur astronomers.

This is a great opportunity to meet and greet fellow amateur astronomers.

### Special Events

Astronomy Presentations:

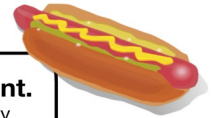
- Jeff Setzer, Northern Cross Science Foundation
- Astronomy Quiz, hosted by Sheboygan Astronomical Society
- Virtual Reality by Jim Welisek, Northeast Wisconsin Stargazers

### Door Prize

Meade Series 50009-element XWA20 mm eyepiece  
Value \$500. Donated by [wiaastro.com](http://wiaastro.com)

**Brat Fry will be held during the event.**

Sponsored by Sheboygan Astronomical Society



Terms are cash, check or swap.

The Sheboygan Astronomical Society is not responsible or will not be held liable for any dealings which do or do not occur.



### Monthly Meeting Information

7:00 p.m. Astronomy 101 Mtg.  
7:30 p.m. Main Program  
Location at the -

GSC Technology Center

W189 N11161 Kleinmann Dr  
Germantown, WI 53022

**Spectrum Newsletter**  
5327 Cascade Drive  
West Bend, WI 53095

Please send your Questions,  
Suggestions, Articles, and  
photos to:  
[rickenkaz@charter.net](mailto:rickenkaz@charter.net)