

SPECTRUM

Northern Cross Science Foundation Newsletter

July, 2018

Looking Up

July 5, Thursday

General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m. - Main Program

Business Meeting Follow

July 20, Friday

Public Viewing

9:00 p.m.—11:00 p.m.

Harrington Beach State Park

July 21, Saturday

Public Viewing

9:00 p.m.—11:00 p.m.

Harrington Beach State Park

July 21, Saturday

Public Viewing

9:00 p.m.—11:00 p.m.

Pike Lake Campground

July 19, Thursday

Board Meeting

7:30 p.m.

House of Jeff Setzer

July 26, Thursday

NCRAL 2020 Meeting

7:30 p.m.

House of Mike Borchert

August 2, Thursday

General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m. - Main Program

Business Meeting to Follow

August 4, Saturday

Public Viewing

9:00 p.m.—11:00 p.m.

Pike Lake Campground

Facebook Jeff Setzer

If you are not currently on Facebook, you've no doubt at least heard a lot about it in the news recently. Social media is the millennial way of communicating, and us older folks are pretty taken with it, too. Facebook is the most popular social media network, linking HALF A BILLION people worldwide. Despite this, it's easy to use Facebook for narrow pursuits, such as keeping up with astronomy news.

You make an account with Facebook, and then you "friend" people you know. Several NCSF members are on Facebook, so those might be good places to start. You can also follow "Like" (follow) pages, which are like mini-blogs of public figures, companies, and organizations. The NCSF has a Page that's Liked by nearly 500 people at the moment. Companies like Celestron and Astronomy Magazine have thousands of followers. Groups are a third kind of entity on Facebook, and you can think of these as private discussion areas. NCSF has one for NCSF members specifically.

When you "Friend" people, "Like" pages and "Join" groups, you then get all of the new posts created by these entities on your "news feed." This means when you log into Facebook on your computer, or open the app on your mobile device, you see personalized news that you can read, react and reply to. I am a member of 65 groups, and get information about all kinds of observatories, amateur astronomy groups, and astronomers (professional and ama-

NightWatch—A brief book review



NightWatch by Terrence Dickinson is a book every amateur Astronomer should have on their bookshelf. If you buy no other reference book than NightWatch, you will have all you need to embrace the hobby. The fourth edition was updated for

use through 2025.

The first three editions of **NightWatch** sold more than 600,000 copies, making it the top-selling stargazing guide in the world for the last 20 years. The key feature of this classic title is the section of star charts that are cherished by backyard astronomers everywhere. Each new edition has outsold the previous one because of thorough revisions and additional new material.

NightWatch has been acclaimed as the best general interest introduction to astronomy. The fourth

edition has improvements over the 3rd edition in every chapter, including:

teur). If something is happening in the astronomical world, you'll see it on Facebook long before it appears in a magazine! I follow inspiring amateur astronomers such as David Eicher, Robert Reeves, Damien Peach, and Pranvera Hyseni — who lives in Kosovo!



Our own club Page has the latest information about our events, including go/no go information. With Facebook, it's easy for me to update hundreds of people in seconds by posting to our page from my mobile phone; it's even easier than sending an email. Since people can Share all the posts they see in the News Feed, announcements and pictures from our events can be shared with thousands of people (someone shares our post with their friends, and their friends share again, and so on). I would consider Facebook to be our primary means of communication with the public at this point, and if you want in — Like Us On Facebook! Go to www.facebook.com to get started, and feel free to ask me for help if you're new to social media.

edition has improvements over the 3rd edition in every chapter, including:

- The famous charts, ideal for stargazers using a small telescope or binoculars
- A complete update of the equipment section, including computerized telescopes
- An enlarged photography section, including how-to instructions for using the new generation of digital cameras for astronomical photography, both with and without a telescope
- The tables of future solar and lunar eclipses, planetary conjunctions and planet locations, updated through 2025.

The current edition includes star charts for use in the southern hemisphere. There are also dozens of new photographs throughout the book that show the latest thrilling discoveries made by current space observatories and probes.

June Meeting Minutes

By Kevin Bert

The June 2018 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 8:05pm and welcomed 22 members and guests. Jeff then asked for standard reports.

Treasurer Gene Dupree tells the membership that the checking balance is \$12,905.99 and the Observatory balance remains at \$418.49.

Secretary Kevin Bert reports that the membership roster was enclosed in the Spectrum. Kevin asks all members to look over to ensure your own details are correct. Under Astronomical League news the 2018 National Convention ALCON will be held in Minneapolis on July 11th through 14th. Many well known speakers and activities are planned. For details visit the link astro-league.org.

Observatory Director Dan Bert was not in attendance but Kevin was happy to announce that Dan and Laura were proud parents of their first child on June 5th. Kristi-

na Grace Bert was 6 lbs. 14 oz. Contact him to congratulate him or to sign up for a scheduled PVN night as a leader or assistant if it is clear on your calendar. Kevin says the kiosk sign is looking good next to the Observatory thanks to Jeff Setzer.

A follow-up on May 27th Astronomy day was lead by Jeff Setzer. The street Festival in Port Washington had a steady flow of people but was closed early due to waves of showers. About 75 people attended the evening activities at Harrington Beach under bright moonlight.

Under new business an observing report was given by some of the members stating that Jupiter's Great Red Spot was very prominent and the major planets were well placed over the summer for public viewing.

Jeff noted the public viewing nights for June at Harrington Beach on the 15th and 16th. Pike Lake has one on the 16th too. The NCRAL meeting is open to all members and is at Rick Kazmierski's home on the 28th. Sun-Day on Saturday's member's event is on the 30th. July 12-15 is Wisconsin Observers Weekend in Waupaca.

With no further business Jeff closed the meeting at 8:45 pm.

Some Deep Sky Photos

By Mike Borchert

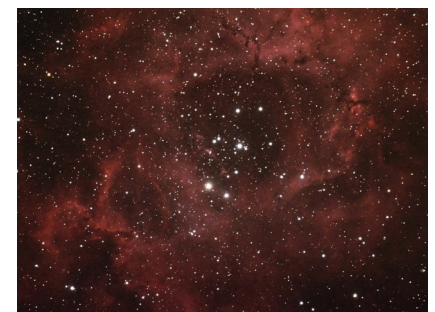
I have been lucky enough to spend some time with a vey patient fellow club member who has walked me through the steps of attaining some deep sky pictures. Ernie Mastroianni worked with me on two separate evening to attain images of Messier object M81 & M82, along with the Rosette Nebula NGC 2238.

I believe this is going to take a few more trials before I can launch on my own, but the bug has bitten me. I think it is best to break getting these images down into smaller bite-size pieces and focus on those areas, as the right time presents itself. First the weather has agreed with picture taking, the moon is subsiding, and the equipment is not in use.

We wake up the 5" refractor and check out the alignment. Ernie opens up his software "PHD" to guide the 5" using its piggy-backed guide scope. Next we mount a CCD imager, or camera where the eye-piece would go on the guide scope as well as the main 5" refractor. With PHD, we see on our computer screen, the tracking star that we will use to communicate through the PHD software to the 5" scope and keep it tracking perfectly. Remember we are looking at Galaxies some 5 million light years away. We pick a guide star, and the 5" is off and tracking.

Next we open the astrophotography software, Nebulosity, and hook up software to the second or other CCD imager to the 5" refractor. Through Nebulosity, we take a couple of practice exposures to assure the camera is in focus. Once this is done Nebulosity programs the 5" CCD imager to take the number, length of exposures, and speed of exposure that we think we want to attain a final finished picture. The software and camera start working together and before long the exposures are recorded in a raw format. We take some additional flat, light and dark frames to help Nebulosity do its job.

Now it is time to go home and let my software do the rest of the work. At home, I use nebulosity to "stack" and filter the exposures. Photoshop Elements does the rest. Now it's going to take some time to refine the process, soon I will want to do it by myself, and in the dark.



NGC2238 Photo by Mike Borchert

Harrington Beach Imaging Report *By Ernie Mastroianni*

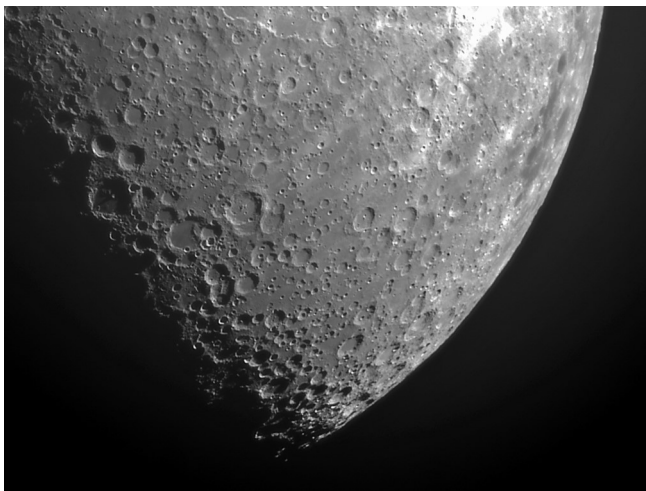


Photo by Ernie Mastroianni

realignment of the mount, which should make it easier for telescope operators on public viewing nights.

One surprise - the new restrooms at Harrington Beach are done, complete with a very bright entrance light at the doors. Though the light does not shine directly into the parking lot, it does illuminate the new building, which in turn produces a bright glare that covers the entire area. This picture shows the glare of the restroom and the moon and Jupiter in the background.

The overcast and rainy weather kept any attempts at deep sky imaging at bay in June. I made one attempt on June 20th at the Plunkett Observatory under a waxing gibbous moon, but a thick layer of clouds prevented any possible deep sky imaging effort. But a short clearing allowed me to make this image of the heavily-cratered region of the moon's southern highlands through the 5-inch refractor, using an Imaging Source web camera and 200 fairly steady frames. And enough bright stars emerged through the murk to make a six-star



July General meeting

Astronomy 101 - Kevin Bert

"Eyepiece Field Orientation"

The June class is The Universe Sampler chapter 7 "Eyepiece Field Orientation." Did you ever hear someone say, why is the moon upside down? Different types of telescopes and accessories produce a view that is often backwards to others. This chapter hopes to clear up some of the confusion.



The Constellation of the month; **Hydra**

Main Program - Gene DuPree

"Chicago Backstage Pass"

Have you ever been on the main floor of a museum, observatory, or planetarium and thought, "I wonder what goes on behind those doors?" Well, with the new Astronomy Backstage Pass: Chicago DVD, you can finally get your own private tour through four of the finest scientific facilities that the Chicago area has to offer.

Features **Adler Planetarium**, **The Field Museum** of Natural History, Fermi National Accelerator Laboratory (**Fermilab**), and, of course, the historic **Yerkes Observatory**.

May Public Viewing Events

Harrington Beach June 15

By Jeff Setzer

On Friday, June 15, Nolan Zadra assisted me in opening the Observatory for our scheduled event. We started at 9pm, and about 30 people were able to view Venus through the ES127 refractor and Jupiter through the 20-inch reflector. Threatening weather moved in quickly from the west, and severe thunderstorm warnings came up on our mobile phones, so we quickly brought in the signs, closed up the observatory and everyone scurried away by the time we left at 9:40pm. Driving home, the storm did indeed hit, with torrential rain, thunder and lightning. At least some people got in good planetary views before the sky fell apart!

Harrington Beach June 16

By Kevin Bert

Rick Wandsnider assisted me in opening the Observatory for the June 16th Public Viewing Night about 8:00 pm. The skies were overcast while the skies started to darken. There were several people milling around as we talked astronomy and hoped for a break in the clouds. A crescent moon occasionally peaked through the western sky and a dozen people had a chance to make out a few craters in the Panaruskys around 10:00 pm. All visitors cleared out shortly after as the clouds persisted. As we were getting ready to close things up for the evening we noticed the stars of the Big Dipper were shining overhead. We picked up Arcturus in the 20-inch to show any other visitors that might show up. The clearing continued to expand and Rick and I were able to view a few deep sky objects near the zenith. Jupiter never made an appearance in the south. Too bad the clearing did not start earlier as no others came out to view. After we closed up at 11:00 and made our way to the parking lot nearly half the sky was clear. We hope that next time things will clear in our favor.

Pike lake June 16

By Charlotte DuPree

This event was reported a wash out do to weather and clouds.

July Planets By Gene DuPree

Hi Sky watchers, another month is here and Venus is almost at half phase.

Mercury is visible in the early evening this month.

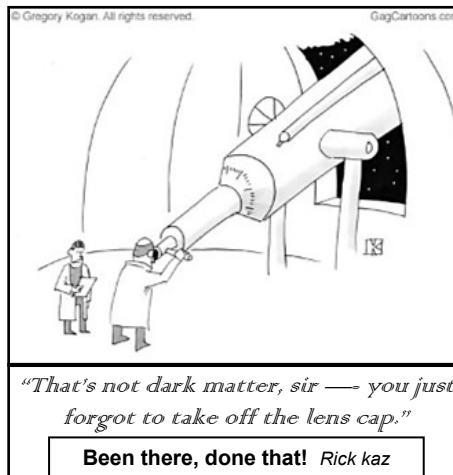
Jupiter is still putting on a great show. Watch the GRS and the moons, and the many orbital changes they go through every night.

Saturn is everyone's favorite planet to see, and show to the public on viewing nights.

Mars is next to come up in the east, but get out early because the best views won't last long because of Mars orbit to earth.

Pluto comes up just before Mars. But don't spend a lot of time looking for it. There is not much to see if you do.

Uranus and Neptune are early morning rises, just wait for fall.



"That's not dark matter, sir — you just forgot to take off the lens cap."

Been there, done that! Rick kaz

Related Info

Leaders for Public Viewing

July 20, Friday

Harrington Beach State Park

Leaders Needed

July 21, Saturday

Harrington Beach

Leaders Needed

July 21, Saturday

Pike lake

DuPrees

August 4, Saturday

Pike Lake

DuPrees

ALCON

July 11 - 14

Minneapolis/St. Paul, Minnesota

Minnesota Astronomical Society

alcon2018.astroleague.org

Star Parties 2018

Pre-WOW

July 7—11

NCSF—Jeff Setzer

WOW

July 12 - 15

Hartman Creek State Park

www.new-star.org

Northwoods

August 17 - 19

Hobbs Observatory

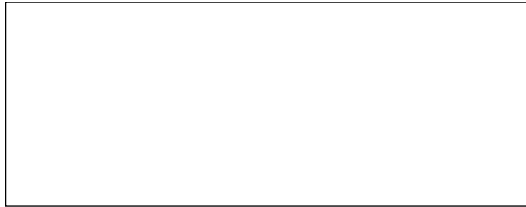
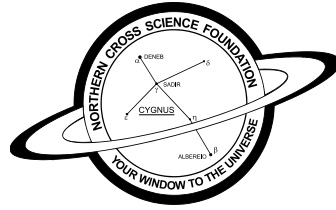
Beaver Creek Reserve

Fall Creek, WI.

www.cvastro.org



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2018 Sun-Day on Saturday Follow-up

By Kevin Bert

It was a real cooker at this year's June 30th Sun-Day on Saturday. Clear hazy skies with temperatures in the upper 80's along with high humidity. The shade was a welcome area to congregate and socialize with a nice breeze to keep things comfortable. A little time was however spent applying sun screen and viewing the sun with three telescopes. No sun spots were seen on the blank disc through Kevin's solar Dobsonian and Chris Grenda's refractor. The Coronado's H-Alpha view had one small faint prominence to offer that was easily overlooked. Rick Wandsnider was taking mental notes on the scopes setup for use at an upcoming Boy scout outing. Over a dozen members were in attendance over the course of the day. Steve Schowalter came by motorcycle but most by car. For Jeff Setzer a new car at that. I am amazed what features are offered now days. Many members had their first look at Dan and Laura Bert's recent addition to the family, Kristina. I would like to thank all those that participated in this year's event and look for more clear but comfortable temperature conditions next year.

SPECTRUM

Published by the Northern Cross Science Foundation, Inc. A non-profit organization based in South-eastern Wisconsin.

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



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

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:
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