

# SPECTRUM

Northern Cross Science Foundation Newsletter

May 2014

## Looking Up

### May 1, Thursday

#### General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m. - Main Meeting

### May 2 & 3 Friday & Saturday

#### Public Viewing

8:00 p.m.

Harrington Beach State Park

### May 5, Monday

#### Public Viewing

9:00 p.m.

West Bend Library

### May 7, Wednesday

#### CANCELLED

Bayshore Towne Ctr.

### May 17, Saturday

#### Public Viewing

8:30 p.m.

Pike Lake State Forest

### May 22, Thursday

#### Board Meeting

7:30 p.m.

Home of Jeff Setzer

### May 25, Sunday

#### Astronomy Day

#### Street Festival

Noon - 5:00 p.m.

Port Washington, WI

### May 25, Sunday

#### Astronomy Day

8:00 p.m.

Harrington Beach State Park

### June 4, Wednesday

#### Public Viewing

8:00 p.m.

Bayshore Towne Center

## April Lunar Eclipse... *What a Night!* By Rick Kazmierski

On April 14-15 we experienced our first total Lunar eclipse since 2010. Although early in the morning and the middle of the work week, it was ideally placed in our southern sky. At the NCRAL 2014 Conference two speakers really rekindled my enthusiasm for eclipses. Dean Regas spoke Saturday morning on eclipse chasing and I had a chance to talk to him on the drive to and from the airport. He is quite the enthusiast and never misses a chance to observe an eclipse, whether total or partial. After the April 15th eclipse, he e-mailed an eclipse photo and description of his trials to find clear skies that night. He ended up driving 250 mi. from Cincinnati to Effingham, Illinois and watched the eclipse from a Cracker Barrel parking lot! As the director of the Cincinnati Observatory, lunar eclipses are big events.



John Rummel, a Saturday afternoon speaker, spoke on wide-field photography of celestial & terrestrial events, including lunar and solar eclipses. Having had a chance to speak to John after the presentation regarding his time lapse images of lunar eclipses. I have photographed eclipses before, but always single moon images, never as composites or with landscape as a background. I felt ready to try something different.

John explained that his photos contained multiple images from the eclipse which using Photoshop, he was able to combine into one time-lapse photo. (He stated that "GIMP", the free imaging program available on-line, is capable of doing everything the "not so free" Photoshop program can do.) As I have had some experience with CUT & PASTE in Photoshop, the prospect of applying the technique to an eclipse really peaked my interest. I now had a plan for the coming eclipse.

Jump ahead to early Tuesday morning. April 15th and you find me in my backyard; Canon DSLR camera and Orion Short tube 80mm refractor in hand, anxiously awaiting the start of

Photo taken by Rick Kazmierski



the eclipse. The extended forecast all week prior gave little hope for clear skies, but being the optimist I am, I was willing to give up a night's sleep for the chance of success. I learned a long time ago that, "the only celestial event you are guaranteed to miss is the one you don't show up for!"

Sure enough, about 12:30 am the clouds began to thin, and by 1:00am the skies were clear! The eclipse was one of the brightest I can remember.

Photo taken by Nick Kazmierski



The moon in totality had a orange-red hue and hung nearly due South on the zenith. My Grandson Nick, NCSF member, called about 1:00am and we stayed on the phone until after mid-totally around 3:00am. Nick was also taking photo's (see above) *Continued on Pg 4*

## April Meeting Minutes

By Kevin Bert

The April business meeting of the Northern Cross Science Foundation was held at the Unitarian Church North. President Jeff Setzer opened the meeting at 8:55 pm and welcomed 20 members and guests. With the focus on the upcoming Astronomical League North Central Regional Convention, a very brief meeting took place. The 2014 membership roster came in at 62. Membership cards were available to those attending and remaining cards will be sent along with the next newsletter. There is a May 7th conflict at the Bayshore Town Center for our first evening viewing and will be canceled. Make note on the schedule sent in last Spectrum. The June 4th date will now start the year of sidewalk astronomy at Bayshore.

## Volunteer needed - 2nd Request

By Dan Bert

HBSP has secured from the friends group part of the funding to make and install 8 interpretive signs around our observatory. These signs will include basic astronomy info that visitors to the park can read to learn about the facility and the night sky.

The Park is asking for help from the NCSF to provide the info that would be on these signs. If you would be interested in helping with the signs please contact Dan Bert at 262-357-1973..

## Membership Roster

The insert in this month's Spectrum is the 2014 Membership Roster. It contains names and address information for all current members through 2014. Please check your personal data for accuracy and submit errors or updates to Secretary Kevin Bert at kevin.bert@hotmail.com.

## Membership Cards

Every year, dues paying Club members receive a new NCSF membership card. Show your support! Be a card carrying member of the Northern Cross Science Foundation.

If you didn't pick up your card at the April General Meeting, you will find it enclosed in this Newsletter. If you receive a digital copy of the Newsletter, you will get a separate mailing.

If you are a paid member and have not received a card by the end of May, contact Secretary Kevin Bert at kevin.bert@hotmail.com for a duplicate card.

## Observatory Director: Notes

Hello NCSF members, we are still looking for volunteers to help at the Jim & Gwen Plunkett Observatory for these upcoming events:

Friday May 2nd 8-11pm for a public viewing night: [Leader & Assistant Needed](#)

Anyone who has been trained to use the 20" and observatory may lead the event. However, prior training or experience is not required if you would assist the event leader. I encourage all observatory operators to volunteer to lead or assist in at least one event this year. Here's your chance!

The calendar for all observatory-only related events can be viewed on the following Google Calendar:

<https://www.google.com/calendar/feeds/dbert64%40gmail.com/private-f16fc6eb0250bc541a97cb5f42f152ea/basic>

Once there, click on the link Jim & Gwen Plunkett Observatory Schedule of NCSF at the top of the page for the calendar view.

If you would like to help run the observatory at these or any future events please let me know.

Thanks and clear skies!

Dan Bert

**262-357-1973** [NCSF Online](#)

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## Things to See In the May 2014 Night Sky

By Don Miles

*Mercury, Jupiter, Mars, & Saturn:* Mercury joins the evening group this month as it's now working its way around the "front" side of the Sun, and also trails the setting Sun. It will be at (-0.5 mag) by about mid-month, and at (1.3 mag) by the end of the month. Mercury reaches its greatest eastern elongation (the point where from our vantage point, it's as far behind the Sun as it will get before works its way back towards the Sun). It will set about (9:30/10pm), and is in the constellation Gemini. Jupiter is at (-2.0 mag), and up already as high in the sky as it will get as the Sun is setting. It remains in the constellation Gemini, and sets by about (1am/11:15pm). Mars would be the next planet to observe as it also is already up as the Sun is setting. It transits about (11/9pm), and is in the constellation Virgo and is at (-1.1 mag). Saturn (0.1 mag) is also rising as the Sun sets, and will transit by about (1:30am/11:30pm) in the constellation Libra. It will be an excellent object to view throughout the summer and into fall.

*Pluto & Neptune:* Pluto rises about (1:30am/11:30pm), at (14.1 mag), and still in the constellation Sagittarius. Neptune rises about (3:30/1:30am) in the constellation Aquarius, and at (7.9 mag). It's not that bright, but is getting easier to find as it rises earlier and earlier, so it's in much darker skies than just a month ago. It won't be until late August until it's at opposition, but views will only continue to get better until then.

*Venus & Uranus:* Both rise early in the morning, with brilliant Venus rising first at about (4:30/4am). It's at (-4.1 mag), and will stay at about this position and at the same distance from the Sun all month. It will work its way eastward thru most of Pisces, and will pass 1.2 degrees below (5.9 mag) Uranus on the night of the 16th. Uranus will rise about (5/3am), and is at (5.9 mag) in the constellation Pisces. The views of Uranus will also continue to get better as it (like Neptune) is rising earlier and earlier on its way to its opposition in early October.

*Moon:*

May 6th: First Quarter

May 14th: Full Moon

May 21st: Last Quarter

May 28th: New Moon

Special Events:

There is only one meteor shower this month, and that will be the Eta-Aquarids. They'll peak the night of the 5th. The source of this shower is Halley's Comet, and peak rates are typically about 60/hr. If you look for them after midnight, but before after about 2am, the Moon will have set, so the better time would be early Tuesday morning. These are known to have brilliant fireballs mixed in, leaving "smoke trails" as they pass.

There is a comet that should be worth watching, as it's fairly bright and visible all night long. That comet is Panstarrs, and it's in the constellation Ursa Major at about (8.0 mag). You don't need a telescope, and a pair of binoculars actually works better if you can steady them against something as you scan for it. The tail will be pointing SE away from the source.

## May General Meeting

**Astronomy 101** by Mickey Kazmierski

### Gazing at the Stars

Hear and see the highlights of this years NCRAL, hosted by the NCSF! NCRAL Chair Mickey Kazmierski will be presenting a summary of NCRAL 2014, including a highlight slideshow. The DuPree's request that anyone at the conference who won a door prize, please bring it along for show and tell. It would also be nice to see conference attendees wear any shirts of the event they may have purchased.



**Main Program** by Jack Heisler

### Where the heck are we?

Can the stars really tell us where we are? This question plagued sailors constantly and put their lives in danger for centuries.

The Royal Societies' 'Scientifics' and a few common "Mechanics" searched for answers to this question. Who had the best solution? Which group would provide the foundation for the most powerful Navy of the time? Would it be the Scientifics or the Mechanics? The answers to this question may surprise you! At the May meeting Jack Heisler will present "A brief discussion covering the foundations and history of celestial navigation."

Marine Chronometers will be displayed and their use will be briefly explained. It is, after all, in the stars..

### NCRAL 2014 April 4 & 5th

*Reported by Mickey Kazmierski*

When you see these people, pat them on the back, they did your NCSF Club proud!

Charlotte DuPree got our event "jump-started" by enlisting our Banquet Speaker, Dr. Barbara Becker, who also happens to be related to our own Gene DuPree Charlotte was now on a roll! She contacted author Paul Kinzer. And Professor Dawn Erb. Paul warmed our hearts by his stories of astronomy and children. Dawns presentation on galaxies, left some of us awe-struck. Charlotte could always be counted on to have "clear eyes" for re-evaluating any given situation. Charlotte, you rock!

Gail Sherman was in charge of registration. No easy task here. Setting up a database, keeping track of incoming registrations. She also communicated with all registrants a confirmation that we received their check and verified their orders. Keeping fees, t-shirts, photo's payments in order, data that would be needed for badges, spreadsheets and more.. A difficult task Gail. Well done!

Rick Kazmierski assisted in the registration endeavor in addition to getting us our Keynote Speaker, Dean Regas who was phenomenal! Remembering back when Jack Horkheimer had to cancel a few days before our event in 2008., Rick got into high gear trying once again to get our conference a "Stargazer" and it was so! Awesome Rick!

Dan Bert covered the accessories, t-shirts and cups. Sounds simple? No, it's a lot of work involved here. Sleuthing out multiple screen-printing companies, numerous phone calls, one on one, prices, quality, colors, sizes, deadline dates, order/delivery times. Dan had spreadsheets for us to view various company offers with their data, making it easy for the rest of the team to make decisions. Dan also,

worked on the organizational and judging aspect of the astro-photo contest. Fantastic job Dan!

Kevin Bert is the one responsible for our logo "Gazing at the Stars"! Team members gave different ideas, all great, but Kevin's was unanimous vote! Kevin also prepared the guidelines and rules for the astro-photo, sketching contest. Creatively, Kevin opened up this contest to more than telescope photographers. Cameras, and sketching brought in diversity. Kevin also tag-teamed with Jeff Setzer, leading the Friday night Conference session, "Astronomy Memories". Kevin and Jeff, as always, you two gave us everything you got and more!

Joyce Jentges procured information that would help our attendee's to be familiar with Pt. Washington. Joyce was "the" one in charge of getting that camera chip of the Group Photo quickly to the developers and back before the afternoon period and available to our attendees. Joyce, you were jet-propelled!

With a warm welcome, Jeff Setzer set the tone for Saturday's events. Jeff, master of ceremonies, a huge responsibility, introducing all the speakers, announcements, audience questions, Jeff kept everything moving like clock work. Being MC is a stressful job, but Jeff made it look easy, everything was flowing and Jeff did it and did it with panache! Kudos Jeff!

This team did exactly what it set out to do. Give everyone a comfortable venue, the very best of speakers, multiplicity with topics, visit our observatory, an opportunity to share their personal photo accomplishments, fun contests, door prizes that knocked their socks off. A chance to refresh, laugh, learn and share. Great Food!!!

There is more to tell, so, come to the meeting!

For me, a memory created for a lifetime. To have been a part of this team was an honor. To have worked alongside them was a gift.

## RELATED INFO

### May 2

Harrington Beach State Park  
Leaders Needed

### May 3

Harrington Beach State Park  
Gene & Charlotte DuPree

### May 5

West Bend Library  
Jeff Setzer

### May 17

Pike Lake State Forest  
Gene & Charlotte DuPree

### May 25

Port Washington Street Festival  
Leaders Needed

### May 25

Astronomy Day  
Harrington Beach State Park  
Leaders Needed

### **Star Parties 2014**

#### **Wisconsin Observers Weekend**

Hartman Creek State Park  
www.new-star.org  
May 29 - June 1st

#### **Northwoods Starfest**

August 22-24th  
Hobbs Observatory  
Fall Creek, WI

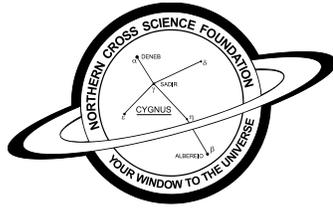
#### **Jim & Gwen Plunkett**

#### **OBSERVATORY**

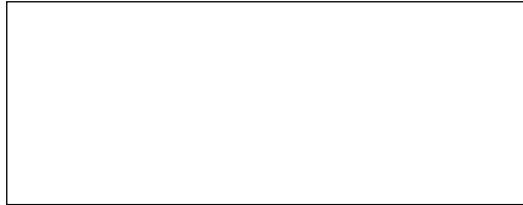


**Observatory Director:  
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*Happy 40th Birthday!*



## 2014 BOARD OF DIRECTORS

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*Continued from Pg 1 - April Lunar Eclipse*

using a Canon Powershot camera and a tripod. He produced some great images. I finally got to bed around 4:00am and later that day created the composite image of the eclipse in totality on the first page.

Later in the week, Nolan Zadra e-mailed me an image he'd taken of the eclipse he'd taken with a new 400mm f/5.6 lens he'd purchased for use with his Canon Rebel DSLR. His beautiful image of mid-totally is reproduced above. Both Nolan and Nick proved that using focal lengths of 400mm or less can produce excellent photos without significant blurring, using exposures up to one second.

Photo taken by Nolan Zadra



I will be ready for the next Lunar eclipse coming this October 8<sup>th</sup>, and the additional two predicted next year.

### For Sale

Celestron NexStar 4

Telescope, tripod, and accessories

Originally \$900, but will sell for **\$500.**

Marcia Peterson 262 643-4618

mentor27minn@gmail.com

## SPECTRUM

Is published by the Northern Cross Science Foundation, Inc. A nonprofit organization based in Southeastern Wisconsin and is a Member of the North-Central Region of the Astronomical League.



The NCSF supports the International Dark sky association.



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

<http://www.ncsf.info>

### Monthly Meeting Information

7:00 p.m. Astronomy 101  
7:30 Main Program  
Unitarian Church North  
13800 N. Port Wash. Rd.  
Mequon, WI 53097