

SPECTRUM

Northern Cross Science Foundation Newsletter

November 2013

Looking Up

November 7, Thursday

General Meeting

No Astronomy 101
7:30 p.m. - Main Program
Business Meeting to follow

November 21, Thursday

Board Meeting

7:30 p.m.
Home of Jeff Setzer

Scheduled Public Viewing for 2013 ended in October. There may still be impromptu observing events (Club or Public), so check our website for the latest updates at www.NCSF.info.

January 4, Saturday

Candlelight Ski&Hike

6:00 p.m.– 9:00 p.m.
Harrington Beach

January 18 Saturday

Candlelight Ski&Hike

6:00 p.m.– 9:00 p.m.
Horicon

February 1, Saturday

Candlelight Ski&Hike

6:00 p.m.– 9:00 p.m.
Harrington Beach

February 8, Saturday

Candlelight Ski&Hike

6:00 p.m.– 9:00 p.m.
Pike Lake State Forest

Preparing for a Nights Astronomy Observing *by Kevin Bert / Astronomy 101*

If you only have binoculars and are hoping for a clear evening to spend a few minutes viewing, little preparation is needed. As you accumulate more equipment, more planning is involved, especially if you are traveling to some site away from home. Here is a rundown of the steps and considerations that need to be made for a successful night's viewing.

When you're ready to enjoy a clear night viewing the heavens you don't want to be frantically searching all over your home for telescope parts and accessories. Keep all your equipment together in a few containers so you know that everything you need is coming along with you to your site. It isn't so bad if you forgot a key component when your simply viewing from the back yard, but if you're miles from home it could ruin the night altogether. A checklist isn't a bad idea either.

Days In Advance

1) Research Objects And Make A List.

It is so much more rewarding when you know some information about the faint smudges of light you are sometimes looking at. It can even direct you to some interesting details that you might normally overlook. Burnham's Celestial Handbook is one of my favorites. It works the sky constellation by constellation. Other books work the sky by object types.

Make a list of 10 - 20 objects that interest you. Naturally, select objects that are visible that time of the year, appropriate for your instrument and site conditions. You should add some challenge objects that will need moonless non light polluted skies to be seen at all. Even if you fail, you will better know the limits of your equipment when seeking out other objects.

Have a plan on how to locate the object. Whether it is by star hopping or using setting circles, include those notes along with the list.

2) Star Charts (Ones that will hold up to moisture)

Even if you have all the necessary notes on how to find your list of objects, it's still nice to have a good set of star charts to assist in locating objects if you're having trouble finding them. It can show you reference stars near your object and help identify other objects you might stumble upon across the way.

A planisphere is a handy device to brush up on the constellations key stars and their positioning

to one another for any given time.

3) Binoculars/Telescope and Accessories

Have a good working knowledge of your equipment and make sure that it is in proper working order. Set-up new equipment during the day to get accustomed to assembling it, operating it, and dis-assembling it. Use it at least once at home at night before you take it out to some remote site.

I would recommend getting a tool box that would include a number of basic tools. Be sure to include duct tape and a vice-grip. If the box is big enough it could store eyepieces too.

4) Folding Chair and Table

For years I worked right off the ground with star charts, eyepiece case and tool box. I later progressed to working out of my vehicle. I still do it at times but there are times when you can't park right next to your equipment. A table is a good investment.



Members Harvey & Gail Sherman with observing table and dew shield , notebook, red light lamp, star map, and observing chair.

Sometimes it's nice to be able to get off your feet for a few minutes. A folding chair or short ladder is handy. Some tool boxes double as a stool to sit on or a step for younger children to reach the eyepiece of a telescope.

5) Red Flashlight

A must for all observers. It will retain your dark vision when viewing charts or notes. It is more important when you are hunting for dim objects. There are a number of styles available. The LED ones are the most popular. They run a long time on one battery. A good white light flashlight is nice when it's time to pack up. You don't want to leave anything behind on the ground.

(Continued on Pg. 2)

(Continued from Pg. 1)



Gene DuPree prefers working out of the back of his pickup truck.

6) Bug Repellant

In the summer the mosquitoes are very active at dusk. They usually slow down as the night cools. Shorts are a bad choice. Wear loose fitting clothing that covers your body. Sometimes the only way to keep them away is to use a repellant.

7) Notebook

Get into a habit of recording a few details of the objects you're viewing. It is rewarding to look back and see just how much your observing skills have improved over the years. Astronomical League observing

programs require you to keep a log if you want credit.

If possible, plan on getting to your observing site while it is still light. It is a much easier to set up equipment and it gives you more time to work on some of the on site details as it slowly gets dark. It also gives extra time for equipment to thermally stabilize.

Last Minute Details

8) Extra Clothes

Nights usually get cooler than you think. It is nice to be able to get an extra jacket or sweater. If you're not comfortable it's hard to concentrate on what you're observing.

9) Food and Drink

If you're going to put in a few hours of viewing, something to drink and a snack can give you some needed energy and relief. A hot drink in a thermos can take the chill out in winter. Try to avoid alcoholic beverages while observing. It has been shown that even a small amount can reduce your sensitivity to light. Avoid the messy snacks that can stick to your hands and be transferred to your equipment.

On Site Details

10) Check Collimation of Telescope

If you have a reflecting telescope, check the collimation. You want to get optimum performance. Reflectors are prone to getting out of alignment. Refractors generally don't.

11) Align your finder



Members Jeff Setzer, Kevin Bert, Rick & Nick Kazmierski making adjustments. Someone installed the finder backwards!

This telescope accessory is a device that always seems to need some adjustment. It only takes a minute to do. Use the North Star as a target if you have an alt-azimuth mount. Equatorial mounts can choose any bright star.

Things to See In the November 2013 Night Sky By Don Miles

Pluto, Venus, Neptune & Uranus: Pluto is highest at sunset, and sets about (9:30pm/Sunset) in the constellation Sagittarius. Venus is the next to set, but instead of it being extremely difficult to locate like Pluto, brilliant Venus is at (mag -4.5), so is an easy object even with it being lower on the horizon. It sets about 7:30 throughout the month and is also in the constellation Sagittarius, and will move from west to east completely across the teapot as it stays up later each night. Neptune (mag 7.9) remains stationary in the constellation Aquarius. It's up at sunset, transits about (8 pm/6 pm), and sets about (1:30am/11:30pm). Uranus follows Neptune by about 2.5 hours, so will transit about (10:30pm/8:30pm). It's in the constellation Pisces, and at (mag 5.7).

Jupiter & Mars: Jupiter is at (mag -2.5), and rises about (9:30/7:30pm) in the constellation Gemini. It will remain mostly stationary in the "body" of the left twin throughout the month, but beginning in December will appear to move from east to west. Mars (mag 1.4) rises about (1:30/1am) in the constellation Leo, but over the course of the month will quickly move eastward into Virgo.

Saturn: Starts the month trailing the Sun too close to be viewed, but by mid-month will then be a morning object (right before sunrise), and by about 5:30 by the end of the month. It's at (mag 0.5) now, and will continue to rise earlier and be higher in the sky all winter.

Moon:

November 3rd: New Moon

November 9th: First Quarter

November 17th: Full Moon

November 25th: Last Quarter

Special Events:

** Daylight Savings Ends The 3rd ***

* Meteor Showers... There are a couple of meteor showers worth looking for this month. The first are the Taurids which peak the night of the 5th, but can be seen about a week before and a week after the peak with rates about 10/hr. The low numbers don't sound spectacular, but these are slow (17 miles / second), and are known to fragment and produce bright yellow fireballs. The recent new-moon will set about 6:30pm, so won't hamper viewing. The next are the Cepheids, which peak on the 9th. Peak rates are about 18/hr, but the moon will begin to be an issue. It sets about 11pm, so the later you can observe, the more you'll be able to see. The next are the Andromedids, and they peak the night of the 14th. Peak may be a stretch of a description, as the numbers per hour may be even lower than the Taurids. What makes this worth watching is these are also not only known for their bright fireballs, but they leave reddish smoke trails behind. The moon sets around 3:30am, so will wash out most of the faint meteors. Next are the Leonids, and they peak the night of

the 17th and may be as high as 100/hr. These are fairly fast (44 m/s), and are sometimes seen as bluish or greenish, and leave smoke trails behind. The just past full moon will again wash out the bulk of the more faint ones.

* Comet(s)... Comet ISON continues to brighten, and is still on track as far as brightness predictions. It starts the month about a third of the way between Regulus, will pass very close to Spica the nights of the 18 & 19th, then will make a long U-Turn in Scorpius and continue thru the "upper" claw of Scorpius by the end of the month. It will then continue between Hercules & Corona Borealis around Christmas, and on to Ursa Minor by New Years. Two other comets people are watching... Comet Lovejoy, and Comet Encke. Check the web for their current positions & brightness.

Looking for Feedback... With most people (myself excluded) having smart phones and able to get instant accurate astronomy info with one app or another... Is there anybody that sees value in this column continuing? If so (or not), please let Rick or Mickey Kazmierski know, and we'll go from there.



November General Meeting

Main Program ...with Jeff Setzer

This month's Main Program will be presented by Jeff Setzer and is entitled:

Buying a New Telescope

Jeff will discuss telescope types, different manufacturers, accessories, and things to look for or avoid when purchasing. Knowing Jeff and his ever-expanding collection of telescopes, don't be surprised if he brings a few to demonstrate. Jeff's impressive knowledge on various telescopes will be for those who are new to buying, as well as those who are looking for that "next one!"

101 Class... with Kevin Bert

There will not be a 101 class this month.



October Events

LacLawrann Family Fun Night October 3&4

Reported by Rick Kazmierski

Even with threatening weather forecasted, the DuPree's made an appearance for the event on the 3rd, packing up as the rain increased. The Kazmierski's were leaders on the 4th, but the event was cancelled by LacLawrann earlier in the day due to weather.

Harrington Beach October 5

Reported by Charlotte DuPree

October 5, Harrington Beach, Dark Sky Night. This just proves that if there is a Public Viewing Night on the schedule, you better be there. With a cloudy, misty rain, we arrived about 5 minutes late. As we pulled into the parking lot, it looked like there might be a few club members already there. While we were parking, we discovered 10 visitors, standing outside, waiting for us. One family was from Eden. They found the observatory on the DNR web site. We spent the next hour, or more, sharing the club story, the telescope, and the observatory.

LacLawrann Luminary Walk October 12

Reported by Rick Dusenbery

Despite rainy weather earlier this date, the skies cleared late afternoon, so went to support the Luminary Walk at the LacLawrann Conservancy in West Bend. This time, set up was on the trail near a hilltop instead of down near the buildings. As people came along the luminary lit trail, they stopped to gaze at the first-quarter moon through the 8" Dob. The line of people was virtually non-stop from about 7:00 to around 9:00 P.M. Estimate about 150 to 200 people of all ages took advantage of this opportunity. Once the crowd thinned out, turned the scope to the Andromeda Galaxy, the Perseus Double Cluster, Alberio, Mizar/Alcor, and the Coathanger. Some of the

people also got to see the ISS as it passed by in the Northern sky.

Harrington Beach October 19

Reported by Charlotte DuPree

Harrington Beach Haunted Hike. Oct 19. Another cloudy night greeted us at the 6:00 start time. There was a steady flow of visitors. They were using the observatory, to stay out the rain, while waiting for the shuttle. The clear sky arrived by 8:00, so we opened the roof. Instantly we had 50 plus people, standing in line, waiting for us to site up the big scope. Thanks to Rick D. and Al Steinberg, who set-up before the rain, and stayed until 10:00. Jeff came and gave moral support.

Harrington Beach October 25

Reported by Kevin Bert

On Oct. 25th over thirty Grafton cub scouts and parents visited the Jim and Gwen Plunkett Observatory after an early evening hike in the Harrington Beach State Park. Clouds prevented any viewing so an astronomy talk about constellations and telescopes was started by Charlotte Dupree and finished by me. The observatory was packed and at times a bit noisy but the talks were well received. An old friend and former member of the Northern Cross, John Meyer was in attendance and I was happy to have a chance to talk with him. His son Phil had contacted me to arrange this scout outing. I told the group to watch our web site for next years schedule and invited them all back for some viewing when the skies were clear. Thanks to Gene Dupree and Dan Bert to assist with the crowd.

RELATED INFO

New Members

NCSF Welcomes New Club Members

Chad Andrist
from Milwaukee, WI



Leaders for Public Viewing

January 4

Candlelight Ski & Hike
Charlotte and Gene DuPree

January 18

Horicon
Charlotte and Gene DuPree

February 1

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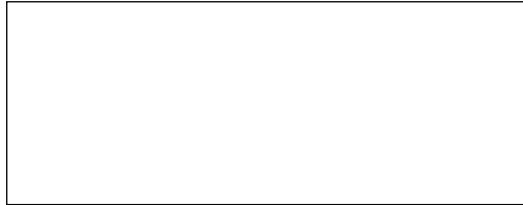
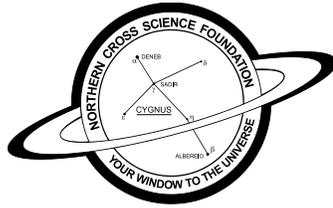


Jim and Gwen Plunkett Observatory



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NCRAL 2014 Update:



Our last ncral committee meeting was held at the Country Inn & Suites where we are hosting the conference.

Why were we there??? Food, it was all about food. We perused the menu selections and came up with what we believe will be attractive and mouthwatering to everyone! Just a little hint about it. We will be having a Buffet with Two Entrée's! We will be announcing the complete menu on our NCRAL website soon!

Also, we should have our Registration on the website in November.

Our Banquet Speaker now has her airfare in hand.

Our committee is working very hard to make this a great event, with great speakers, vendors, excellent dining in a beautiful and comfortable setting. In addition to coming up with what we feel will be a very affordable Conference Fee.

Country & Inn has blocked off rooms, all with double beds for a very low price of \$80. per night, which includes a Complimentary Breakfast! The rooms are reservable now!

If you haven't checked out our NCRAL 2014 Website, please do at:

<http://www.ncsf.info/ncral2014.htm>

SPECTRUM

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The NCSF supports the International Dark sky association.



Send inquiries to:

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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