

SPECTRUM

Northern Cross Science Foundation Newsletter

December 2010

LOOKING UP

December 2, Thursday

General Meeting

7:30 p.m. - Business Meeting
Election - (3) Board Members
Holiday Party to follow

December 16, Thursday

Board Meeting

7:30 p.m.
Home of Joyce Jentges

January 6, Thursday

General Meeting

7:00 p.m.- Astronomy 101
7:30 p.m.- Main Program
Business Meeting to follow

January 8, Saturday

Candlelight Ski & Hike

6:00 p.m. to 9:00 p.m.
Harrington Beach

February 3, Thursday

Annual Banquet

Fox & Hounds Restaurant
Hubertus, WI
(Details to follow)

Astronomical League Outreach Club Award by Justin Modra

Interest in science and astronomy can often be sparked by reading a magazine or book. A teacher may inspire a student to continue studying a subject long after the class is completed. Or, firsthand experience can be gained by observing a phenomenon directly.

This experience can include a first look through a telescope, observing sunspots or a guided tour of an observatory. Think back and remember your first look through a telescope. Wasn't it exciting to see the Moon, Saturn, Jupiter, etc. for the first time? Of course it was. And it's also fun to facilitate those experiences by participating in events like sidewalk astronomy and public viewing nights.

The Astronomical League has a program by which those that participate in these events are recognized for their efforts. It's called the Outreach Club. By being a member in good standing of the Northern Cross Science Foundation (NCSF), you are also a member of the League and eligible to earn this award.

All kinds of activities can count toward your outreach award. Whether you set up your scope in your backyard and invite the neighbors over to take a look or if you participate in an organized public viewing night with hundreds of participants, both qualify. In addition to your participation, recording the details are important. Hopefully you already have an observing journal to keep track of observations. This is a great way to keep track your participation in outreach events.

While all kinds of events qualify, some do not. Time spent in preparing a presentation or writing an article doesn't qualify. Face-to-face time with the public are the hours that should be recorded. In addition the date, start and end times, and number of participants are also needed. It's also a good idea to note the instrument used (if any), objects viewed, etc.

In order to earn the Basic Level Outreach Club Pin, an minimum of 5 events are needed with a minimum total of 10 hours of face-to-face time with the public. There are also two more levels, which are described in the League web page, [http://](http://www.astroleague.org/al/obsclubs/outreach/outreach.html)

www.astroleague.org/al/obsclubs/outreach/outreach.html



Some NCSF members could already be eligible to receive this award just by submitting their activities in September of this year, see page 3 of the October NCSF newsletter <http://www.gxsc.com/ncsf/spectrum/oct10.pdf>

The record of your outreach activities has been recorded on a computer spreadsheet. The League has developed a template that is very easy to use. A customized version has been uploaded to the NCSF Google Groups files section. The file is called "Outreachlog - Mary Meade.xls" which is an example observing log for the fictional Mary Meade. If you are not comfortable using a computer spreadsheet program, bring your notes to a meeting and someone will be able to help you enter the data. If you are comfortable using a spreadsheet program, then modify the file and email the completed version to the president of the NCSF. Do not hesitate to ask questions either in person at the monthly meetings, via email to the NCSF Board Members or simply post your question to the Google Group. We'll find the answer and make sure you get the recognition you deserve!



November Meeting Minutes

By Kevin Bert

The November business meeting of the Northern Cross Science Foundation was held at the Unitarian Church North in Mequon. President Joyce Jentges opened the meeting at 7:25 pm. and welcomed over 14 members and guests. She then asked for standard reports.

Treasurer Gene Dupree reported a balance of \$678.14 in the Observatory account and \$3744.30 in the general fund. A check for \$62.91 from the Pick & Save program had just been received and he thanked all members that participated.

Secretary Kevin Bert reported that Fred Klein from Bayside joined the Northern Cross and was in attendance. No new Astronomical League information.

Joyce said that Jeff Setzer was in the hospital battling a leg infection. He would be spending some time in recovery at home and that we wish him a speedy return.

Under old business, Joyce said that Gene and Charlotte Dupree would be contacts for member's participation in the

year's final scheduled public event the Holiday Folk Fair over the weekend of November 20th. They have the signup list for volunteer periods with a number of openings still remaining.

Joyce gave a brief follow up report on the Barlow Planetarium trip that took place the previous Saturday. A 3:30 public show was attended instead of a private show due to a low signup. All in attendance were treated to an excellent show and pleased with the event. A UWM Planetarium show is in the works for a future trip.

Under new business, Joyce reported that Rick Kazmierski, Al Steinberg and Gene Dupree were finishing their terms as board member of the NCSF in December. She reminded members that if elected it consisted of a 3 year term and that nominees have the option to accept or decline to run. Outgoing members are also eligible to run again. Joyce then opened up the floor to nominations for three positions.

Rick Kazmierski nominated Tony Marek, Tony accepted to run; Gail Sherman nominated Gene Dupree, Gene accepted; Paul Gruener nominated Rick Kazmierski, Rick Accepted; Charlotte Dupree nominated Al Steinberg. Al Accepted; Don Miles nomi-

nated Paul Gruener, Paul declined. With no other names brought forward Joyce closed the nominations and announced that they would resume at the December meeting followed by elections.

As a reminder Joyce noted that the December meeting/party will have no 101 class or main program. It would be an opportunity for members to bring a desert, dish or plate to share. The club will provide beverages, cups, plates, plastic utensils and napkins. Following the brief business meeting there will be a time to socialize and enjoy the snacks. This is generally the best attended meeting of the year.

Gene Dupree announced that 2011 Calendars were available through him after the meeting. Any remaining calendars would be brought along to the December meeting. If you were not at the meeting and want to be sure he sets one aside for you, give him a call before the end of the month.

With no further business, the meeting was closed at 8:10 pm.

Things to See In the December Night Sky By Don Miles

Mercury & Mars: They both start the month trailing just behind the Sun making them evening objects (Mercury at mag -0.4 and Mars at mag 1.3). The pair start the month fairly close together (Mars ~6 deg. to the right of Mercury), but will pass within 1 deg. of each other on the 13th with Mars below. Mercury will begin to move towards, and finally "pass" the setting Sun on its way around the front side. By the end of the month, Mercury will have moved far enough past the Sun to then be a morning object as it is now ahead of the Sun. Mars will also drift towards the Sun, but it will be much more gradual.

Neptune, Jupiter & Uranus: This group also trails the sun, but much further back. Neptune (mag 7.9) is best viewed at about 6pm, and the pair of Jupiter (mag -2.6) and Uranus (mag 5.8) are best viewed around 6:50pm. Neptune is on the very Eastern edge of Capricorn, and Jupiter/Uranus are on the border of Aquarius/Pisces. Jupiter starts the month 3 degrees below and to the right of Uranus, but by months end, will pass a little more than half a degree below Uranus.

Saturn & Venus: These are both morning objects, and are highest in the sky as the Sun rises. Look for Saturn (mag. 1.3) rising in the East in the constellation Virgo at about 3am. Venus (mag. -4.5) rises about 4am in the constellation Virgo, and will continue to separate from the Sun until early January. The max separation to the west of the Sun ("maximum western elongation") will occur on the 9th of January. After which, Venus will again slide towards the Sun on its way around the back side.

Moon:

December 5th: New Moon

December 13th: First Quarter

December 21st: Full Moon

December 28th: Last Quarter

Special Events:

There are two events to watch for...

The first is a meteor shower...the Geminds. They'll peak the night of the 13th (a Monday), and into the morning of the 14th. The debris path is pretty scat-

tered, so the window of opportunity is pretty wide (from the 6th thru the 19th), but the peak is the night of the 13th with peak rates predicted to be ~60/hr.

The second event is a Total Lunar Eclipse. This is when the moon travels thru the shadow of the Earth. This eclipse will start the earliest stage (Moon entering the lighter part of the shadow – penumbra) around 11:30 pm the night of the 20th (another Monday), but won't seem dramatic until about 12:30am when the Moon enters the dark part of the shadow (umbra). After 12:30, the Moon will continue to get darker until it is fully in the shadow at about 1:40. This will last until about 2:53am when the Moon will start to move out of the umbra, and by 4:02 begin moving out of the penumbra. The eclipse will completely end at 5:06 then it will be back to its brilliant full moon brightness. If you're luck enough to be able to watch the whole event, take notice of the number of stars you can see thru the different stages. It will be a show that won't be repeated for a while.

December General Meeting

December Meeting



Holiday Party!

The December meeting is the one meeting we are required to have during the year.

The meeting will begin at 7:30 p.m. Nominations for the Board of Directors will be reopened, followed by elections to fill 3 opening positions on the board. After the meeting is over, we will have our Holiday

Party. Drinks will be supplied. We ask that everyone bring a dish to pass. Some suggestions are appetizers, salads, veggies, meatballs, casseroles, cheese/sausage and of course...desert! (cookies, cake, brownies, pie, etc.)

Show & Tell

Bring those astrophotos, star party pictures, or other astronomy related images to share with the group following the business meeting.

What can you observe on a snowy holiday night? Try observing colored Christmas lights through any nebula filter. You will notice that certain color lights disappear. This occurs because nebula filters only allow certain wavelengths of light to pass through, blocking other waves. Give it a try.

Barlow Bob

November Events

Friday, October 29

The Great Pumpkin Event was the last scheduled Public Viewing at Bayshore this year. Joyce Jentges lead this program. The new Bayshore schedule for 2011 will be out in the next couple month.

November 19, 20, 21

For the second year in a row, our Club sponsored a booth at the Holiday Folk Fair, State Fair Park. This year, we were set up in the west corridor, outside the main hall. This was a quieter location than last year and did afford a view of the parking lot for solar viewing, but traffic by the booth was limited due to the location. Booth volunteers included members from NCSF, WEHR, and the Lunar Reclamation Society.

Gene DuPree, Charlotte DuPree, and Carol Nelson. organized the event, set up the display, and worked the booth through the entire event. They were assisted by fourteen volunteers, but additional help would have been welcome. Gene and Justin were able to set up the Club's Solar Scope outside on Saturday afternoon for solar viewing. A variety of scopes were set up inside, including an Open-Dob which proved to be quite instructional for explaining telescope dynamics. Several scopes were pointed at pictures of celestial objects hung on the walls. It was interesting watch-

ing people try to identify the location of what they were looking at.

A new display this year was the Earth At Night, showing the effects of light pollution around the world. As many times as I've seen this image, it never ceases to amaze me that we live in one of the most light polluted regions in the United States. Another popular display was the simulated moon, Mars, and Earth rocks. Participants could get a first hand experience of the effects gravity has on different worlds. Several astrophotography displays by members were also on display.

Several hundred people visited our booth making the Folk Fair a significant public outreach event.



**Jim and Gwen Plunkett
Observatory**

**Observatory Director:
Dan Bert: 262-375-2239**

CURRENT CLACK

2011 Dues

Your 2011 Dues invoice is included with this Newsletter. New members having joined the Club this past year will find their dues have been prorated, making them payable on the same schedule as the rest of our general membership (at the beginning of each calendar year). Members receiving electronic mailing can download the Dues Invoice from the Club website or print the attached pdf file. Additional copies of the Invoice will be available at the December Membership Meeting.

Instructions for submitting Dues are indicated on the Invoice.

Note: Astronomy Magazine can only be renewed through the Club to receive the discount rate. However, you can renew an existing Sky & Telescope Magazine subscription on your own and the Club discount will automatically be available.

Observing Summary for 2010

The volunteer participation forms completed at each public viewing event have now been totaled and will soon be submitted to Harrington Beach state park. Looking back at this past year, a total of 22 public viewing events were held at the Jim & Gwen Plunkett Observatory. All together 29 different members logged a combined total of 478 volunteer hours to public outreach at the park. Thank you for your help.

In response to our request the park has put up snow fencing around the observatory to help with snow drifting.

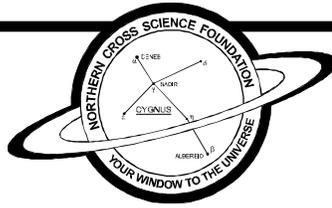
Help Needed at Observatory

-The metal doors and surrounding frames are in need of paint.

-The contributor plaques are fading and require another clear coat.

-The 9.25" SCT corrector plate is very dirty, we are looking for someone who has experience in cleaning these optics.

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“Holiday Folk Fair 2010”



Monthly Meeting Location
 Unitarian Church North
 13800 N. Port Wash. Rd.
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SPECTRUM

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<http://www.ncsf.info>



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