SPECIRUM

Northern Cross Science Foundation Newsletter

May 2009

LOOKING UP

May 6, Wednesday

Sidewalk Astronomy

7:00 p.m.

Bayshore Town Center

May 7, Thursday

General Meeting

6:30 p.m. Solar Viewing 7:00 p.m. Astronomy 101 7:30 p.m. Main Program **Business Meeting to Follow**

May 21, Thursday **Board Meeting**

7:30 p.m.

Home of Joyce Jentges

May 23, Saturday **Members Night**

7:00 p.m.

Harrington Beach

May 29, Friday

Public Viewing

7:00 p.m.

Harrington Beach

May 30, Saturday

National Astronomy Day

2:00 p.m.

Harrington Beach

Monthly Meeting Location **Unitarian Church North** 13800 N. Port Wash. Rd. Mequon, WI 53097

100 Hours of Astronomy



THE UNIVERSE Thanks to everyone who helped out during 100 Hours of Astronomy! It was by far the most extensive outreach event in NCSF history, and we covered more locations over the four days than any other group I've heard about anywhere in the world. We had nearly

1,000 visitors overall!

Our biggest nights and locations were Wednesday night at West Bend Library (300 people, many of which saw Fox6 weatherman Vince Condella's live broadcasts from the site and came down after supper) and Friday night at Bayshore Town Center (500 people). We had dozens of guest at Pike Lake and Harrington Beach as well. On the weekend days we had 150 people visit us at Bayshore as well.

This event was such a success that a new IYA2009 Cornerstone Event has just been announced, called "Galilean Nights" to take place in late October. More details will be forthcomina.

By Jeff Setzer IYA 2009 Coordinator

The Galileoscope is now in production and we will be placing our order soon. Unfortunately, they are behind in answering their inquiries so we are still working to establish a dialog to avoid unnecessary shipping fees. Saturday, May 30 is our celebration of National Astronomy Day, which is an IYA2009 event this year. We'll be set up at Harrington Beach State Park from 2pm through 11pm. We need volunteers to help with the daytime activities as well as telescopes for the evening. Let me know if you'd like to help. A new item this year is a children's craft activity where they make their own decorated "binoculars." We're looking for toilet paper tubes, so save them up and bring them along for the kids to use.



Vince Condella of TV6 with member Gene Dupree at the West Bend Library Event on April 1st.

Small Scope Star Party - September 12, 2009

By Kevin Bert

Part 2 - The Telescopes:

"Observer's Scenarios" had been noted in Part 1 of this article in the March Spectrum. Lets take a look at the categories of small telescopes themselves and what their owners have experienced.

With the demand for more high-end, small aperture telescopes, a number of highly color corrected, state of the art optics (APO's), made the scene with names like Astro Physics, Takahashi, Borg, Tele vue. Stellarview and William optics. These give

possibly the best views in small telescopes, but they often come with a big price tag as well. There is nothing like viewing pinpoint stars across the entire star field of a cluster or intricate detail of a planet and most often these telescopes deliver. Part of the reason is that they are less affected by the earth's turbulent atmosphere as compared to much larger reflecting telescopes. The other is no blurring effects of halos around focused images due to poor color correction. These are the perfect examples of a quality small scope that we need at the SSSP to set at

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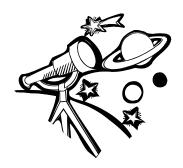
(SSSP from pg 1)

one end of the viewing spectrum. Quite often these gems require extra work to set up if used on a precision machined mount. I hope that won't discourage you from setting yours up.

The other end of the viewing spectrum is of interest to the SSSP and welcome as well. Many have heard the legends of department store scopes and thankfully most of you have never experienced them. For strictly members' research and variety, I hope that someone will have the fortitude to bring your Barlow encrusted 600-power astronomical marvel to the party. To avoid embarrassment we will all believe you when you say that you felt sorry for it and rescued it from the dump.

It is amazing how sometimes odd and unusual things that were never meant to be a telescope can work surprisingly well. As an ATM, (Amateur telescope maker), I can relate to these enterprising individuals. The goal of some is to make a nice little scope with as little capital as possible. These homemade jewels are assembled from the most unusual parts. Lumberyards, hardware stores, surplus stores, flea markets, rummage sales, workplace dumpsters and yes, even the salvage yard

can provide the raw materials. The glass is the key. You are always on the lookout because any two lenses have potential. Oh I'll take that old copy machine, camera or projector off your hands if you don't want it. Who knows what wonder glass lurks inside? All you have to do is try it to be sure. Lenses not quite the right size for your tube? Nothing that a little masking tape won't cure. Cheap and dirty is their motto and



the excitement of trial and error fuel the desire to build on! I am sure that scopes like this are just starving for a little starlight. I know just the event that is the cure for their appetite.

Traditional homemade telescopes use materials specifically manufactured for the purpose and avoid the guesswork.

Most often these tend to be simple reflecting telescopes. Years back, 4 1/4inch and 6-inch scopes were the predominant size for an amateur. Today an 8-inch is a starter. Reputable components are purchased and sometimes handmade according to plans. Wood is the preferred material for most telescope makers when constructing the components. Only simple hand tools or readily available woodworking power tools shape the pieces of the telescope puzzle. Metal components may be used depending on an individual's skill and available equipment. They often complement the wood and make the structure more functional. More often than not a telescope maker gleans ideas they like off of other telescopes they have seen and combines those ideas into their own unique creation. A few rare individuals go the distance and grind and polish the optics for these scopes. Years ago purchased optics were hard to come by and expensive, so it was worth the time and trouble making your own. Today very good ready-made optics can easily be purchased and is the route most builders' use. You end up with a scope that is often better than one purchased from a manufacturer.

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Things to See In the May Night Sky

By Don Miles

Mercury: Look above and to the left of the setting sun right after the sun actually sets. Mercury is close to the Pleiades star cluster, but will be much brighter than the stars in the cluster. Look early in the month, as it will soon pass between the sun and the earth, and in doing so, will be lost in the glare.

Venus, Mars, & Uranus: Venus is once again the brightest object (mag. -4.7) in the eastern sky before sunrise. Mars and Uranus are also morning objects, but much dimmer. Mars (mag 1.2) has just passed below Venus on its way towards the Sun. Uranus (mag 5.9) will be below and to the left of the moon on the morning of the 19th by about 5 degrees.

Jupiter & Neptune: Jupiter (mag. -2.3) is a morning object in the southeast, and will be much brighter than any other stars in the area. Jupiter will continue to brighten throughout the rest of the summer. Jupiter will pass about ½ of a de-

gree (the width of your baby finger held at arms length) below much dimmer Neptune (mag. 7.9) on the morning of the 27th.

Saturn: Look higher in the Southeast as the sun sets. Saturn is still located below the "hind legs" of Leo and will be highest in the sky about 9pm, and will set about 3am.

Pluto: As usual with outer "planets", not much seems to change with them, but only our vantage point does. Pluto is still viewable early in the morning, but at 14th magnitude, and low in the southeast, you'll need at least a 12" scope and dark skies.

Moon:

May 1st: First Quarter May 9th: Full Moon May 17th: Last Quarter May 24th: New Moon May 30th: First Quarter Special Events:

Meteor Showers: Watch for the Eta Aquarids the early morning hours of Wednesday the 6th. They'll be more evident after 4am, which is about when the moon sets, with maximum predictions of about 60/hour. We will actually be passing thru the debris field from April 19th thru May 28th, but will be thru the densest part the night of the 5th. Look to the east-southeast in the general direction of Aquarius.



May General Meeting

Solar Viewing

Weather permitting, the Club's new Solar Scope (Solar Max 90) will be set up in the church parking lot for Sun viewing prior to the start of the meeting.

By Kevin Bert

101 Class

The May 101 class is entitled, "Deep Sky Objects Explained" by Kevin Bert. Beginners often have questions on some of the new terms they hear at astronomy viewing sessions or meetings. Many deep sky objects are accessible with small telescopes and often the primary interest of observers after seeing the moon and planets. Kevin will cover a handy Deep Sky reference handout for those needing help keeping track of the types of objects and associated terms. It is available to members at 101 meetings and ties in well with the constellation of the month.

The featured constellation will be Leo.

Main Program

The Main Program will be presented by Steve Diesso and is entitled:

"A Week at Kitt Peak"

Steve is the President of the Milwaukee Astronomical Society and will share his week long experience at Kitt Peak.

Note Worthy

The Board of directors is considering new locations for our NCSF Monthly Meetings. At our May meeting we will be discussing the Logenmann Community Center as a future site. The facility is large enough to meet our needs, the monthly rent is very reasonable, and they consider our presence an asset to their program. In addition, they are strategically located in Mequon. To hear more or voice an opinion, please attend this month Membership Meeting.

New Membership Cards have been printed and will be distributed at the May meeting.

April Events (100 Hours of Astronomy)

Wednesday, April 1st

West Bend Library

Vince Condella from TV6 did his nightly weather forecast from this event. Clear skies and seven telescopes attracted an estimated 300 visitors.

Thursday, April 2nd

West Bend Library

Charlotte DuPree reported that cloudy skies limited attendance at this event to only a hand full of visitors.

Friday, April 3rd

Bayshore Town Center

Jeff Setzer reported clear skies, six members, 8 telescopes made this the biggest event of the weekend. An estimated 500 people attended.

Pike Lake

Rick Kazmierski reported clear skies, seven members, and 23 people at this event.

Harrington Beach

Justin Modra reported partly cloudy skies, six members with scopes, and 20 visitors.

Saturday, April 4th

Bayshore Town Center

Jeff Setzer reported 100 people observing . The Club's new 90mm solar scope made it's debut. Our solar scope made possible with funds donated by Bayshore Town Center. The event ended after dinner do to Weather.

Pike Lake

Don Miles reported mostly cloudy skies, limiting attendance to 4 visitors. Four Club members were present with telescopes.

Harrington Beach

Joyce Jentges reported that four Club members were present for this event, but cloudy skies limited public attendance to just 2 visitors.

Sunday, April 5th

Bayshore Town Center

Overcast and cold weather moved this event inside the Rotunda, but 50 visitors still stopped to check out our display and discuss Astronomy related issues.

CURRENT CLACK

Members Night

May 23

OPEN

Leaders for Public Viewing

May 29

Public Viewing

Leaders Needed

May 30

National Astronomy Day

Coordinator Jeff Setzer

Star Parties

Wisconsin Observers Weekend

July 23 - 26

Hartman Creek State Park, WB

www.new-star.org

Northwoods Starfest

August 21-23

Fall Creek, WI

www.cvastro.org

Praire Skies

September 17-20

4H Camp near Bourbonnais, IL

Www.prairieskies.org

Brat Fry Coordinator Needed

We are still in need of a Brat Fry Coordinator for this summer. These fund raising events help support our Club's many activities and are another way to introduce the general public to the Science of Astronomy and Northern Cross. Joyce Jentges or Charlotte DuPree can answer any questions about these events.

For sale

20" f/5 Obsession Telescope with Trailer. Price - \$7,500

Assorted Astro Equipment

Dennis Bullock 262 723-4983 Vicki Bertagnoli 608 868-3957 SPECTRUM 5327 Cascade Drive West Bend, WI 53095





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(SSSP from pg 2)

Please let everyone have the opportunity to get a look through yours.

Somewhere between the two extremes of purchased telescopes reside the majority of small telescope owners. Small reflectors or achromatic refractors from manufacturers like Meade, Orion and Celestron have been used and enjoyed by thousands of amateurs. They can deliver surprisingly good images for the cost. They are sometimes mounted equatorially to simplify tracking the celestial objects, either manually or by clock drive. Alt-azimuth mounts are often lighter and easy to transport, but newer models are very stable, have excellent movement, and can be computer controlled to track objects. Be sure to bring your scope along.

After covering some types of small scope scenarios, I hope that some members would be inspired to submit a small Spectrum article on experiences with their Old Spyglass as we have a few months to go before the big event. I am sure that there are some interesting stories to tell that others would like to hear. Many observers have only scratched the surface of the true potential these small telescopes have to offer and my hope is that the SSSP will rekindle their passion with an opportunity to explore the skies with a small telescope.

In the next few months of Spectrum, you will be hearing more interesting quotes from the Top Ten List of "Things you might hear at the Small Scope Star Party," as we build up to part 3 in this series, prior to the big event.

Observatory Note

The observatory keypad is now working again without repair. Why the keypad failed to function for a time is unknown. The lock box will remain on the back door for the time being in case the keypad would malfunction again.

SPECTRUM

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http://www.ncsf.info



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