



Volume 12 Issue 9, September 2000

A GLANCE INSIDE

What's Up in September
From the President
A Look Back at August
Membership Dues and Subscriptions
From the Membership
Help Needed for Public Observing
From the Internet

A GLANCE OUTSIDE

05 First quarter moon
06 Double shadow transit on Jupiter (2:37am)
08 Delta Aurigids meteor shower peak (6/hr)
13 Full moon (Harvest Moon)
20 Last quarter moon
22 Autumnal Equinox
27 New moon



WHAT'S UP IN SEPTEMBER

SEPTEMBER 13TH MONTHLY MEETING

Please join us from 7:00 PM to 9:00PM at the Neville Public Museum. This month's talk is "Celestial Navigation" given by **Alan Wentworth**. Alan is an instructor with the Green Bay Sail and Power Squadron, a local boating organization. So come on out and learn about navigating by the stars.

Happy Joes to follow!

SEPTEMBER 22ND – 24TH ASTROFEST 2000

This is it – the big one! Vendors, speakers, camping, observing, and a flea market await at Astrofest in Kankakee, Illinois. Hopefully you have sent in your registration form. Otherwise it will cost a \$100.00 per person at the door.

Carpooling and other details will be discussed at the September club meeting.



SEPTEMBER 29TH – 30TH POW #4

Dust off your binoculars and telescopes and join your fellow amateur astronomers for two nights (hopefully) of observing bliss. You can set up your own equipment in the field below the observatory or join Ron for views through his 30 inch telescope.

Summer doesn't last long, so get out and observe while it's still warm out!



FROM THE PRESIDENT

By Katrina DeWitt

Are you looking for an observing program that will challenge your observing skills and your patience without having to leave the city for a dark sky or having to wait until the moon is new? Then the A.L. **Planetary Observer's Club** might just be what you want to try. This club is designed to really introduce you to the many different aspects of observing within our solar system.

This eleven-page list consists of twenty-seven different observing projects. Some of these can be

completed in one night's time while others will take the course of a couple of weeks to two months time to finish. What one gains from completing this endeavor is knowing a great deal more of our solar system and better observing skills. Not to mention the satisfaction of completing a lengthy observing program.

To give you an idea of what is involved, here is a short, simplified list of just a few of the projects:

- note the time of sun set or rise for 4-8 weeks depending on the season
- complete a lunar occultation timing
- plot Mars retrograde motion
- plot the course of an asteroid on a star chart for 3-5 days
- locate Uranus
- sketch Jupiter's satellites over the course of a week.

While hardly complete, this list gives a great indication of what is involved and what time commitment needs to be made. This is definitely not an observing program for those looking for a "quick" completion program or those who are faint at heart. :)

To complete this program, one needs the following items: the list of the twenty-seven projects of which twenty-five need to be completed, a telescope, good star charts, reference materials such as Sky and Telescope magazine, an accurate watch, paper and pencil, an inkling for detail, and lots and lots of patience.

Once completed, you need to send your logs and the project list to Don DeWitt, the NPMAS Awards Coordinator. Upon validation, he will then complete the necessary paperwork and send for your certificate and pin to be presented at the next club meeting.

As you can see, this program is not intended to be completed in a short amount of time. It will require patience, attention to detail, and the cooperation of mom nature. Barring this, it is a GREAT way to get a good knowledge of our solar system, what and how to observe and hone your observing skills for later use in other, more difficult observing programs.

No one from our club has completed this program. As far as I know, I am currently the only one working on this endeavor. I have twenty-four of the twenty-five needed observations. Mom nature has stymied my efforts the last four months trying to get the last project completed. (See what I mean about patience and mom nature?). If you would like more information on this or any other A.L. observing program contact me. Until then, good luck and clear skies!!

A LOOK BACK AT AUGUST



OBSERVING NIGHT AT CAMP WABANSI

By Raymond Nancoz

On Thursday, August 3, a group of NPMAS members gathered at Camp Wabansi on the shores of Green Bay, north of Dykesville, to introduce the kids at the camp to astronomy. From the NPMAS came Ron Parmentier, George McCourt, Shaun Stamnes, Ray Nancoz, and a gaggle of Wickers (Steve, Sue, & Tammy). There were about 50 to 70 kids raring to get their first look through a telescope.

Unfortunately a promising day began to turn into a hazy and cloudy evening. This left the crescent moon as the only target. The moon shown through the haze fairly well and all the kids got to look at it through at least some of the five scopes present. As twilight turned into night the clouds finished their job and obliterated the sky, dashing hopes for any quick looks at the bright objects (M57 & M13) so near the zenith.

So the kids were shuffled off for a round of sing-a-long and off to bed. Even with the less than perfect conditions our audience was excited to see what they saw and the evening can be chalked up as a success.



NORTHWOODS STARFEST AUGUST 4TH – 6TH

By Wayne Kuhn

The weather report wasn't looking good for the weekend but a large contingent of the NPMAS headed out to the Northwoods Starfest anyway. The main car pool left around 9:00 AM on Friday morning. It included Ray Nancoz riding with Ron Parmentier, Katrina DeWitt riding with Dick Francini, and Beth Schultz and Don DeWitt riding with myself. Other club members who left separately included Gary Baier, Gerry Kocken, George McCourt, Tony Kroes, Steve & Sue Wicker, and Shaun & Deanne Stamnes.

Everyone going knew that a star party is more than observing – much more. Thus spirits were high as we journeyed to Fall Creek. In our vehicle, Beth and I tortured Don by singing along with a "Johnny Horton's Greatest Hits" CD. After a quick lunch at a quaint roadside stop and a little misguided adventure with the local roads, we arrived at our destination.

The Northwoods Starfest site includes the Hobbs Observatory, The Eau Claire County Youth Camp, and the Wise Nature Center. This configuration is great for a star party because it provides a place to observe, a place to sleep and a place for meetings and other activities. Most of our group stayed in one of the youth camp cabins, which was spacious and very clean (except for an unfortunate accident with some peanut M&Ms).

The sky was smeary the first night but we were able to get in some observing between the clouds. Saturday evening brought rain so most scopes were taken down and packed away before nightfall. Luckily we had a great program featuring John Dobson speaking on his ideas on how the universe works. His talk was clever and humorous and was worth the trip to Northwoods by itself! NPMAS club members also made a "killing" by winning many of the door prizes that were given out. An all night movie-fest ended the nights entertainment.

It was my first trip to Northwoods Starfest and I was very impressed with the facilities. There is plenty to do from hiking, speakers, a wonderful nature center, and two working observatories. The accommodations were very clean and the group meals were not only a great value but good eaten' too. I would highly recommended it to other NPMAS members.



MONTHLY MEETING AUGUST 9TH

Thirty-eight people met in the Neville's auditorium for the August club meeting. Our speakers were club members Jeff & Jill Last, our resident weather experts. The topic, "Weather on other Planets", included a excellent power point presentation with lots of stats, graphics, and pictures. Well done, Jeff & Jill!

POW #2 AUGUST 25TH – 26TH

By Ron Parmentier

Saturday, August 26th was the night that proved to be the night to come due to a cloudy Friday. It was a great star party – the best in a long time. It was like a mini Astrofest.

We had the first birthday party ever held at the observatory for Terry Becker of NEWSTAR. It included a birthday cake and gift giving. It was a complete surprise as we lured him away from his observing. It was fun as any surprise like that always is.

I looked out from the observatory door at the grounds. There were scopes, scopes, and more scopes! With new and seasoned observers putting up with the usual summer dew problems. They were busy observers showing newcomers the skies. About six members represented NEWSTAR.

There were some at the site for the first time, and even some new to telescopes. I had fun showing the sky to some that were eager to look through the 30" observatory scope. Mike Monfils and Ty Westbrook were helping me find some new objects. One that stands out is a very remote globular cluster in Delphinus. It was Caldwell #47 – a remote GC.

And as usual I gave the group that not often view of the Ring Nebula in Lyra at 1000 power plus! The central star was seen. M15 and some double stars were also on the agenda.

At 3:00 AM the die-hards had stunning views of Jupiter and Saturn with the binocular view attached to the scope. It was one of those nights when the "seeing" was steady enough to show all sorts of detail of Jupiter's belts and the disks of the four Galelian satellites. 350 power and higher was used.

A hot water pot was set up for hot chocolate and there was plenty of popcorn and birthday cake to finish up the night. I got home at 6:00 AM (the hot chocolate was a big help keeping me awake until then). I sure had a great time with the enthusiasm of those I talked to.

POW #2 (FROM A DIFFERENT POINT OF VIEW)

By Don DeWitt

I have been a member of the club for 12 years now. While I have eaten a lot of popcorn in my day, this is the first time I have observed in the middle of a cornfield. That's right, if you are like me and haven't been out to Ron's observatory this year you would have been just as surprised as I was to see 6 foot tall corn surrounding the observing site. It does work well for shielding some of the farm lights across the street and if we run out of microwave popcorn-no problem, just go grab an ear or two.

While Ron Parmentier was showing the members of NEWSTAR (and any NPMAS members who ventured up there) the night sky through the 30", several people were busy below. Tony Kroes was cranking out CCD images including a mosaic of M31. I haven't heard how it turned out but maybe we will be seeing it at an upcoming meeting soon. Katrina DeWitt bagged another 35 objects off of the Herschel 1 list. Don DeWitt, George McCourt and Mike Monfils leisurely checked out some Messiers and Caldwell objects along with 4 or 5 off of the Herschel II list. Andy Wagner and Gary Baier were also out there quietly working on their respective lists as well.

The most interesting part of the evening started out innocently enough as Ray Nancoz was working on his Messier list with the club scope. At the same time Steve Mofle's friend Julie was getting a quick course on how to star hop from Steve. After showing her the basics, Steve let her take over. Soon a battle between Julie and Ray had begun with Messiers falling left and right. Julie finished her first-ever observing experience bagging 13 Messier objects. While I don't have a count on how many Ray got, he was quoted saying "I'll stay all night if I have to, she won't out gun me".

Once midnight rolled around, we all started getting the munchies. Many bags of popcorn were popped that night and we also had the chance to help Terry Becker from NEWSTAR celebrate his birthday as Tom Jorgenson brought cake out.

All in all, it was a very fun and well-attended star party. We hope to see you at the next one!

Editor's note: Ray reportedly observed 16 Messiers that night, barely edging out Julie.



DUES AND MAGAZINE RENEWALS REMINDER

The time has come once again to collect dues and magazine renewals for the 2001 calendar year. You will be seeing a post card or letter in the mail this week. It will state what you owe for magazine renewals based on what you signed up for last year. It will also have what you owe for dues as well. Finally, there will be several blank spaces for you to order various yearly calendars and publications that the club gets discounts on.

Please check off what you would like and return the card along with a check made payable to NPMAS to Ron Parmentier, 161 Rosemont, Green Bay, WI 54301. You may also bring it to the next club meeting. If mailing them in, please send your payments back by October 15th, 2000.

FROM THE MEMBERSHIP



AURORA SURPRISE

By Anthony J. Kroes

I was out on the night of the 11-12th working on gathering some more Herschel and Arp images because it was a nice warm clear night. By chance this clear night fell on one of the projected maximums of the Perseid meteor shower so I tried to keep an eye on the sky when I wasn't glued to the laptop screen working with my CCD camera. I only saw one meteor that I could say for sure was a Perseid, but I did get a front-seat view to some great aurora!

They were very intense, rippling, pulsing 360 degrees around the horizon and all the way over the zenith down to the south until they got lost in the sky-glow of Green Bay (I was viewing from Howard, NW corner of Green Bay). The northern horizon was lit by slowly moving bands or 'curtains' that were fairly short in height, but had many moving 'spikes' and vertical streamers coming out of them. The sky was constantly crossed by pulsing waves of energy moving toward the zenith from all directions.

Where they met at the zenith there was a constant display of green 'clouds' where the energy collided. They faded and increased brightness back-and-forth slowly as they 'morphed' into different shapes. Behind the scenes, the entire sky was flickering with tiny moving patches of aurora that gave the impression of staring into a flickering bonfire. The entire sky seemed to be covered with green fire.

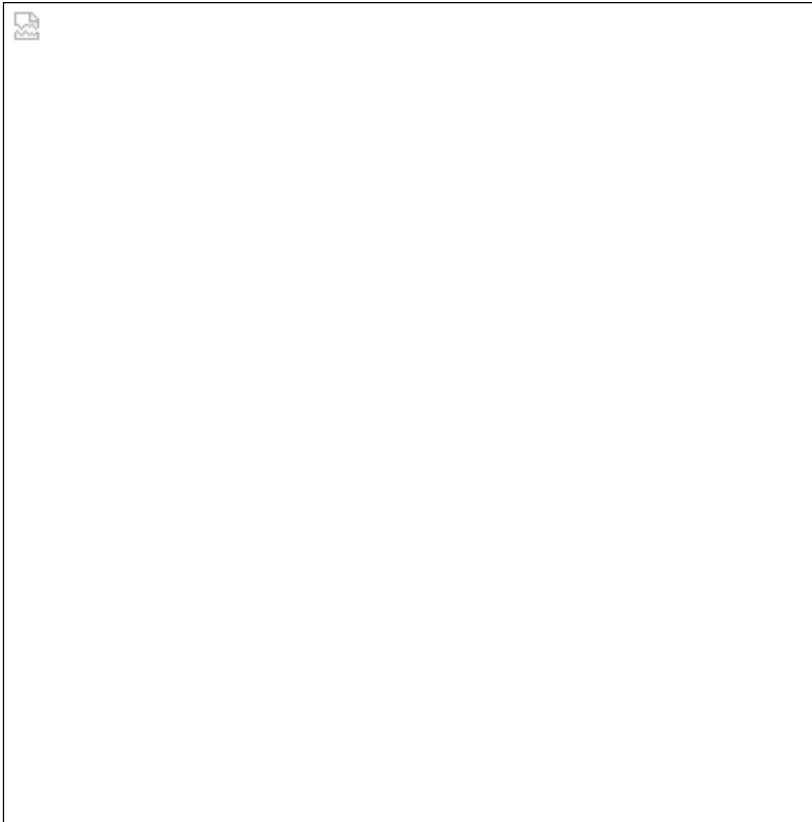
The moon was the only problem, as the show would have been even more awesome (is that possible?) if the moon hadn't hung around until 2:30 am. Even with a nearly full moon I could already see aurora before midnight and it was in full swing by 1:00 a.m. but most of the intensity was lost in the moon-glow.

I had to adjust the positioning of several of the CCD images I was trying to take as there were bright aurora streaks and bands going through the area I was trying to shoot in!

ened to almost white while the area near the zenith stayed a deeper fluorescent green. I saw no red display with this aurora but have heard some reports that others did, and have seen many pictures posted on the internet that show a lot of red.

The red is misleading in two ways though - Film can pick up colors our eyes can't (as well) in a 15 or 30 second exposure, so photos of aurora (if exposed properly) can show a much more extravagant show than we actually saw. Also, certain films don't show the night sky with the right colors. I am sure we have all seen astrophotos (many of my own included) that had a green, brown, or magenta cast to the background sky. This is caused by the film and processing and can throw off the colors of an auroral display (like showing much more green or red than there really was to the unaided eye).

It was a great display and the second 'Great Display' of the year. Hopefully if you missed one, you caught the other. I guess I've been lucky (Aurora-wise) this year as I got to see both. This one was a bit more widespread for sky coverage than the one earlier this year, but both were great. I have only seen one other 'show' that compared to these and that was in 1988 or 1989 when I was home on leave from the Army and staying at a friend's house. We stayed up for three nights during a week period and each display was as spectacular as this one!



THE PERSIEDS PLUS!

By Steve Wicker

In the wee hours of August 12th I woke up and thought I would just take a peek outside. Without my glasses on I looked and thought, yeah figures, cloudy again! But at second glance (and with my glasses on) what I was seeing was a beautiful aurora! I quickly woke my wife Sue up and told her we both got dressed and went outside to view the show. It was beautiful, at one point we saw a bright "spike" going from northwest all the way to the zenith. We were also treated to about 8 meteors too. We kept saying to each other gee it sure would be nice if we were out at a nice dark site, but we enjoyed it just the same. Then nicely placed in the east were Jupiter and Saturn and just above them the Pleiades open cluster. What a treat to see so many things just from the backyard. I guess that's why I love astronomy so much, there is so much to see out there and you never know what you might find along the way.

Clear Skies, Steve W.

PS: Well I placed the orders for the T-shirts sweatshirts etc. (with the help of my wife Sue). We should have them at the meeting in September - just in time for Astrofest! Hope you enjoy your new shirts etc. Thanks to everyone for your orders. And a big thanks also to **Wayne Kuhn** for making out the order forms, that made things a whole lot easier.

UNDER THE DOME

By Ty Westbrook of NEWSTAR

What a magnificent sight. I wonder what the occasional passerby thinks when they see a full-fledged observatory perched atop a solitary hill in the middle of a cornfield. I know that as I approached Parmentier Observatory for the first time I acquired a permanent grin. For two weekends in a row now I have been fortunate enough to spend a couple of nights observing "under the dome" through the 30" Classical Cassegrain telescope at Parmentier Observatory and all I can say is WOW!

The total experience is amazing to me. It may sound strange but I feel a sense of reverence when I'm under the dome at night. Maybe it starts downstairs where the walls are covered with photos of the heavens and of astronomers and observatories past and present. But when the lights go off and the observatory shutters are cranked open letting in that ancient light I immediately feel a connection to all astronomers throughout the ages.

Ever since I can remember I've dreamt of having my own observatory so it's easy to understand why I felt like a ten-year-old for more than five hours or so. Just the process of finding objects was a thrill. It is definitely a team effort locating an object. With one person at the eyepiece, one at the circles, and one reading the chart, the work of an observatory quickly becomes clear. After about a 30 minute search for NGC 7814 (an 11th magnitude galaxy in Pegasus) we finally put it in the eyepiece and what a thrill it was. It's enough to make you feel like an Edwin Hubble or Percival Lowell. The views of Saturn and Jupiter were absolutely breathtaking.

I'm most grateful to Ron for his generous and patient personality. For as much observing as he has probably done through his scope, he seems just as excited and amazed as any beginner. Although I get the feeling that he gets almost as big a kick out of letting others see as he does seeing himself. If for some reason you haven't been out to the observatory, do yourself a favor and spend a night under the dome. You will have a great time.

Editor's Note: Ty does an excellent job describing one of the NPMAS's greatest assets – Parmentier Observatory. If you have not taken advantage of this benefit of membership, please do. You will be delighted you did.

HELP NEEDED FOR PUBLIC OBSERVING

SATURDAY, SEPTEMBER 9TH – SHIOCTON AIRPORT

From Katrina DeWitt

I received an email from Jeff LaViolette, a member of the Wolf River Skydivers asking our club to help out and hold an observing night for their group on Sat. Sept 9th at the Shiocton Airport. Jeff was impressed with our astronomy day functions and was excited to learn that our club was willing to do observing nights for different groups.

There will be approximately 75-150 skydivers and their families camping at the airport during the weekend. Many have not looked through a telescope and are unaware of what the sky has to offer. This is a great opportunity to publicize our club and share our wonder of the night sky to others.

I need as many members as possible to help make this event go smoothly. The date is **Saturday, Sept. 9th at the Shiocton Airport from 7:00 - 9:00 p.m.** If you could help out I would greatly appreciate it. Maybe we could get some carpooling or caravanning as well as go out for pizza afterwards.

If you are able to help, please call me at home (920-405-8534) ASAP! Thanks for helping out.

MONDAY, OCTOBER 2ND – RED SMITH SCHOOL

From Ron Parmentier

We need some volunteers with scopes to show the kids from Red Smith Elementary School the night sky. Red Smith is located just down the hill from Victoria's Supper Club.

The program will run from 6:30 PM to 8:30 PM and will be held in the school parking lot (if it is clear). The moon will be near first quarter so there should be plenty to look at. Please contact Ron at 920-336-5878 if you can help out.

FROM THE INTERNET

FROM SUE AND KEN ROSE (ASTRO-OFFICERS)

The AL (Astronomical League) has been working behind the scenes with Boeing and NASA to develop an amateur telescope in space and they got it approved. The 14" SCT will be placed on the ISS (International Space Station) and administered by the AL. If you ever needed a reason to join the AL, you have it now! They need the support of the entire amateur astronomical community to make this work. It won't be cheap, but the rewards can be incredible. Just think of it. Our own telescope in space!

MEDIA RELATIONS OFFICER NEEDED

The Astronomical League has an immediate need for a volunteer with professional experience in the areas of public and/or media relations.

As announced at Astrocon 2000, the League has been asked by Boeing and NASA to take a leadership role in the design, development and operation of an amateur telescope aboard the International Space Station (the "ISS-AT"). The ISS-AT is scheduled for implementation in approximately 2006.

As this project is made known to the wider public, there will be considerable media interest. The League is looking for a League member to serve as ISS-AT Media Relations Officer to handle telephone, electronic, mail and live inquiries regarding the project and the League's role in ISS-AT development. Applicants should have prior experience in public and media relations and should be relatively comfortable fielding technical questions in the areas of optics, space-based telescope design, space science, and astronomy. Applicants will need access to e-mail during the day and in the evenings. Applicants should be prepared to field a substantial number of telephone calls regarding the project and to mail press packages or materials as necessary. Applicants may be called on to participate in live radio, television and/or on-line interviews.

Please make this opportunity known to your members. Interested persons should send an e-mail to League President, Chuck Allen, at cea@compuserve.com outlining prior experience in media relations.

NEWSLETTER PHOTO CREDITS

Kids at Camp Wabansi (photo by Raymond Nancoz)

Northwoods Starfest Group (photo by Wayne Kuhn)

August 12th aurora (photo by Paul Greenhalgh)

THE EYEPIECE

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BOARD MEMBERS

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