

# The Prairie Astronomer

May, 2009

Volume 50, Issue #5

The Official Newsletter of the Prairie Astronomy Club

## PAC Program

The program for the May meeting will be a video: the "Nature of Science" - 22 minutes. Also video and photos from Astronomy Day.

## In This Issue

Focus on Observing, Scouts in Space, Astronomy Day report.

## Featured Photo

Astronomy Day was held Saturday May 2nd at Morrill Hall. Total attendance was 489 for the day. Tim & Dana Govaerts from Lincoln won the Celestron Refractor, and Justin Coghill from Omaha won the PAC's 6" Orion Dob with Telrad. Shown here is Jim Atkins at the PAC table, talking with attendees. Photo by Bob Leavitt.

Please send your astrophotos to Mark Dahmke to be added to the PAC website and the newsletter.



Saturn image courtesy NASA.

## Club Business

Minutes for the meeting of April 28, 2009

President Brian Sivill called the meeting to order, 25 members, three guests

Announcements:

The next PAC meeting will be Tuesday May 26, 2009 at Hyde Observatory

The next star parties are May 15 and 22 at the farm.

Saturday, May 2 2009 is Astronomy Day. Set up for volunteers will be Friday afternoon.

The first Mahoney Star Party for 2009 will be May 15 at Mahoney State Park

The Nebraska Star Party will be July 19-24 at Merritt Reservoir.

Club Observing Chair, Jim Kvasnicka provided a review of recent star parties and upcoming sky events and objects for viewing.

Bob Leavitt provided a review of the Clubs outreach events for the month, including the beginning astronomy class on April 16 & 17. We had 31 attendees, including Bill Schlaebitz, he man who originally designed Hyde Observatory.

Club Business:

Treasurer's Report: No treasurer's report this month.

The remainder of the meeting involved Steve Lloyd and Jack detailing activities and assignments for Astronomy Day.

Adjourn to the program, Saturn: Jewell of the Sky

Respectfully submitted by,

Lee Taylor



More Astronomy Day Photos

## Club Events

PAC Club Meeting  
Tuesday, May 26, 2009 7:30pm @ Hyde Obsv.

PAC Club Meeting  
Tuesday, June 30, 2009 7:30pm @ Hyde Obsv.

Next newsletter submission deadline: June 20.

### 2009 Star Party Dates

#### May 22nd

June 12th and June 19th

July 17th and July 24th

August 14th and August 21st

September 18th and September 25th

October 16th and October 23rd

November 13th and November 20th

December 11th and December 18th

The date that is **bold and underlined** is the date closest to the New Moon.

Nebraska Star Party: July 19-24, Merritt Reservoir, Valentine, NE.

Mahoney Star Party dates: June 12th, July 10th, August 14th, September 11th

## Hyde Observatory AV Upgrade--Mark Dahmke

The Hyde Observatory AV equipment upgrade has been completed. In April a new cabinet was installed to expand the space available for computer and audio video equipment. Recent additions include a six port AV switch and Western Digital WDTV high definition media player. All components except for the computer used for monitoring of the solar panels are now on a master switch, which will help reduce power drain when equipment is not in use. Over the past year components added include VGA extenders and network connections for a laptop at the front of the classroom and on the deck, a new computer with HDMI output to the new HD projector, an HDMI switch, and 25" LCD monitor. Also it is now possible to feed composite video from the AstroVid Planet Cam directly from the deck to the projector. Jack Dunn and Lee Thomas are working on converting several of the old slide show programs, including the constellation programs, to HD video, which will be put on the new media player and DVDs.

## Club Telescopes - Checkout Policy

To check out one of the club telescopes, contact Cassie Etmund at [cggymnast1@aol.com](mailto:cggymnast1@aol.com). If you keep a scope for more than a week, please check in with Cassie once a week, to verify the location of the telescope and how long you plan to use it. The checkout time limit will be two weeks, but can be extended if no one else has requested use of a club scope.



## ON THE NET

**PAC:**  
[www.prairieastronomyclub.org](http://www.prairieastronomyclub.org)

**PAC E-Mail:**  
[info@prairieastronomyclub.org](mailto:info@prairieastronomyclub.org)

**NSP:**  
[www.nebraskastarparty.org](http://www.nebraskastarparty.org)

**NSP E-Mail:**  
[info@nebraskastarparty.org](mailto:info@nebraskastarparty.org)

**OAS**  
[www.OmahaAstro.com](http://www.OmahaAstro.com)

**Hyde Observatory**  
[www.hydeobservatory.info](http://www.hydeobservatory.info)

**Panhandle Astronomy Club**  
[Panhandleastronomyclub.com](http://Panhandleastronomyclub.com)

**PAC-LIST:** You may subscribe to the PAC listserv by sending an e-mail message to:

[imailsrv@prairieastronomyclub.org](mailto:imailsrv@prairieastronomyclub.org). In the body of the message, write "Subscribe PAC-List your-email-address@your-domain.com"

For example:  
Subscribe pac-list  
[me@myISP.com](mailto:me@myISP.com)

To post messages to the list, send to the address

[pac-list@prairieastronomyclub.org](mailto:pac-list@prairieastronomyclub.org)

**PAC can also be found on Twitter and Facebook.**

**Buy club apparel through the club website. Shirts, hats, mugs, mouse pads and more.**



## Scouts in Space--Dave Churilla

On May 9<sup>th</sup>, the Scouts held an event called “Scouts in Space” where Scouts had an opportunity to earn a merit badge in Astronomy. They had several stations set up for this event including the best station (OK, I’m a little biased), one featuring the Prairie Astronomy Club, which was manned by myself (Dave Churilla), Jim Kvasnicka, and Bob Leavitt. Dale Bazan and his daughter Lexi helped set up and man the station for the first part of the morning before setting off to enjoy the event. We were there 3 1/2 hours from 9 AM to 12:30 PM and saw between 250 and 300 scouts and their parents come through our station.

We set up early for the solar observing station with my PST (Coronado’s H-Alpha Personal Solar Telescope) and my H-Alpha T-Scanner on my 9.25” NexStar and Jim set up his 10” Dobsonian with his White Light Filter. It was a cool day but sunny and that afforded a good look at the sun. But of course there was little or nothing to see. The day before there had been a lot of activity on the eastern limb, but that had subsided by Saturday morning (maybe Rick Johnson is right, with my luck with the weather perhaps this Solar Minimum SHOULD be called “Churilla’s Minimum”!!!). Jim had it the worst with a blank yellow sun and a little granulation to show. Bob and I at least had a few small prominences in the H-Alpha setups and the T-Scanner did show a very nice shot of the boiling affect of the plage area that had shot a small flare the morning before when it was behind the limb and was now just edged onto the surface at the edge of the limb. People were having a good time watching the earth sized spiked prominences that were there and the “rough” surface that still could be seen. It was faint and not very big, but even the kids enjoyed looking at it.

Since part of the station had been to look through a homemade telescope (don’t think ours qualify) Jim usually talked about how the scopes worked. The organizers were very happy with PAC being there and said the kids and especially the parents really enjoyed the solar viewing.

Now...let’s get on with Solar Maximum so we can enjoy a Solar Star Party of our own!!!



# Astronomy Day Report -- Jack Dunn

Astronomy Day was held Saturday May 2nd at Morrill Hall. Total attendance was 489 for the day. One of the most popular displays was the solar system with a 1 meter "Sun" and models for the planets. The Homeland Security Robot and rocket launchings by the Tovado family were out front of the Museum to attract visitors. The solar system activity mentioned earlier was one of four "Night Sky Network" activities operated by PAC members. We also had volunteers from the "99s" (women aviators), UNL Physics and Astronomy and the Air Force Association. Jack Gable from Creighton University came up and did a quasar table (but without the British accent like Martin).(g)

Tim & Dana Govaerts from Lincoln won the Celestron Refractor, and Justin Coghill from Omaha won the PAC's 6" Orion Dob with Telrad.

## ANNUAL MEMBERSHIP DUES

**REGULAR MEMBER - \$30.00 per year. Includes club newsletter, and 1 vote at club meetings, plus all other standard club privileges.**

**FAMILY MEMBER - \$35.00 per year. Same as regular member except gets 2 votes at club meetings.**

If you renew your membership prior to your annual renewal date, you will receive a 10% discount.

Club members are also eligible for special subscription discounts on Sky & Telescope Magazine.



## June Observing: What to View--Jim Kvasnicka

This is a partial list of objects visible for the upcoming month.

### Planets

**Venus/Mars:** Both are 10° above the horizon an hour before sunrise. Venus shines bright at magnitude -4.2 and Mars at 1.1, one-hundredth as bright.

**Jupiter and Neptune:** Both rise in the middle of the night in Capricornus. Jupiter at magnitude -2.5 is 10,000 times brighter than 8<sup>th</sup> magnitude Neptune. At the start of the month the two planets are 28' apart and widen to 41' by the end of June.

**Uranus:** Rises about a half hour after Jupiter. It is near the Circlet of Pisces.

**Mercury:** Very dim and low at dawn, difficult to see.

**Saturn:** Shines high in the southwest in Leo.

### June Messier List (Virgo Cluster of Galaxies)

**M58:** Oval shaped fuzzy patch of light.

**M59/M60:** Both fit in the same FOV. M60 is brighter and larger.

**M84/M86:** Both fit in the same FOV. M86 slightly brighter.

**M87:** Round fuzzy with a bright core.

**M88:** Small oval fuzzy patch of light.

**M89/M90:** Both fit in the same low power FOV. M90 is larger and oval shaped.

**M91:** Faint, oval patch of light.

**M98:** Bright pencil like streak of light.

**M99:** Bright, round fuzzy patch of light.

**M100:** Round, hazy glow of light.

**Last Month:** M49, M51, M61, M63, M64, M85, M94, M101, M102, M104

**Next Month:** M3, M4, M5, M53, M68, M80, M83

### NGC and Other Deep Sky Objects

**NGC 5897:** Globular cluster in Libra.

**NGC 6144:** Globular cluster in Scorpius.

**NGC 6210:** Planetary nebula in Hercules.

**NGC 6503:** Galaxy in Draco.

### Double Star Club List

**Sigma Corona Borealis:** Equal pair of bright yellow stars.

**16/17 Draconis:** Pair of white stars.

**Mu Draconis:** Equal pair of close white stars.

**Kappa Herculis:** Yellow pair of stars..

**Alpha Herculis:** Orange and greenish pair.

**Delta Herculis:** Bright white primary with a blue-purple secondary.

**Rho Herculis:** Close white pair.

**95 Herculis:** Equal yellow and white pair.

**Alpha Librae:** Wide pair of yellow and white stars.

### Challenge Object

**3C 273:** Quasar in Virgo. At a distance of 2 to 3 billion light years it is one of the most distant objects visible in amateur telescopes. Magnitude is variable.

# Focus On Observing Clubs--Jim Kvasnicka

## Master Observer Club

This month we focus on the Master Observer Club. This will be the last observing club I will cover as I will be changing directions and start covering the constellations. The Astronomical League sponsors 30 observing programs to participate in. So far I have covered 15 of them. These programs help to give the observer focus and direction. The different programs range from beginning programs for the new person in the hobby up to those that require a major effort from an observer who has been in the hobby for a while. Programs can be done with the naked eye or require a large light bucket to complete. The programs range from a variety of objects to those that are specific for certain objects.

Many members move from one observing program to another. Some even work on several programs at the same time. Over the years the number of programs has grown and the quality of amateur observations has increased. Observers appreciate and enjoy receiving an award for the completion of a program. Because of this the Astronomical League has developed a Master Observer Award, which recognizes those with broad interest and outstanding observing skills.

The Master Observer Award will be given to members who have completed at least ten of the League's observing programs. There is a core requirement of five observing programs that must be completed by all. .

1. Messier Club
2. Binocular Messier Club
3. Lunar Club
4. Double Star Club
5. Herschel 400 Club

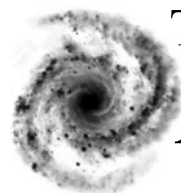
These are the five most popular clubs in the League and represent a well-rounded observing program. You can then choose any five of the remaining observing programs to complete the requirements for the Master Observer Award. Only the most advanced award for any club is acceptable for the Master Observer Award if there are levels in the program. The Caldwell Club has both Gold and Silver awards. In this case, each is treated as a separate award.

Once a member has completed ten observing programs they can earn their certificate and pin. Information needed for the award includes your name, the ten observing clubs and the certificate number if possible, mailing address, telephone number, email address and your club affiliation.

If you have any questions regarding the Master Observing Club or getting started in any observing program please see me and I will be glad to help you.

### **List of PAC Master Observer Club awardees.**

No PAC member has completed the Master Observer Club.



# THE *Prairie* *Astronomy* *Club*

Amateur Astronomy --  
A Hobby as Big as the Universe

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc. Membership expiration date is listed on the mailing label. Membership dues are: **Regular \$30/yr, Family \$35/yr.** Address all new memberships and renewals to: **The Prairie Astronomy Club, Inc., PO Box 5585, Lincoln, NE 68505-0585.** For other club information, please contact one of the club officers listed to the right. Newsletter comments and articles should be submitted to: **Mark Dahmke, PO Box 80266, Lincoln, NE 68501 or mark@dahmke.com,** no less than ten days prior to the club meeting. The Prairie Astronomy Club meets the last Tuesday of each month at Hyde Memorial Observatory in Lincoln, NE.

|   |   |
|---|---|
| <b>PRESIDENT</b>                          | Brian Sivill<br>(402) 325-0997<br>nanoamps@windstream.net   |
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| <b>2nd VICE PRESIDENT (Program Chair)</b> | Jack Dunn<br>jdunn@spacelaser.com                           |
| <b>SECRETARY</b>                          | Oliver L. Taylor<br>(402) 327-0804<br>otaylor89@hotmail.com |
| <b>TREASURER</b>                          | Dan Delzell<br>Dand@fes.org<br>(402) 483-4585               |
| <b>Club Observing Chair</b>               | Jim Kvasnicka<br>(402) 423-7390<br>jim.kvasnicka@pfizer.com |
| <b>Outreach Coordinator:</b>              | Dave Churilla, 467-1514<br>weber2@inebraska.com             |
| <b>Newsletter and Website Editor:</b>     | Mark Dahmke<br>(402) 475-3150                               |

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**Next PAC Meeting**  
**TUESDAY**  
**May 26, 2009**  
**7:30 PM**  
**Hyde Observatory**