

THE PRAIRIE ASTRONOMER

The Official Newsletter Of The Prairie Astronomy Club, Inc.

August 2005

Volume 46 Issue #8

Internet Addresses

PAC Web Page: PAC E-Mail: NSP Web Page: NSP E-Mail: OAS Web Page: Hyde Observatory NEB-STAR www.prairieastronomyclub.org info@prairieastronomyclub.org www.nebraskastarparty.org info@nebraskastarparty.org www.OmahaAstro.com www.hydeobservatory.info www.neb-star.org

Club Events

August PAC Meeting Program: NSP Review

Tuesday, August 30

Club Star Party Friday, September 02, 2005

Mahoney Star Party

Friday, September 09, 2005 at Mahoney State Park

UNL Student Observatory Open

Friday, September 23, 2005 7:30-10pm, Venus/Jupiter conjunction

September PAC Meeting

Tuesday, September 27, 2005 Kris Miller will talk about working and living as a telescope operator at Lick Observatory. Sept 27 7:30pm at Hyde Observatory.

> PAC/OAS Banquet Friday, October 14, 2005

Program

Review of the Nebraska Star Party

Josh Mahecek will report on the Nebraska Star Party.

<u>PAC-LIST</u>: You may subscribe to the PAC listserv by sending an e-mail message to: imailsrv@prairieastronomyclub.org. In the body of the message, write "Subscribe PAC-List your-email-address@your-domain.com"

For example:

Subscribe pac-list stargazer@myISP.com

To post messages to the list, send to the address pac-list@prairieastronomyclub.org

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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 on the last page of this newsletter. Newsletter comments and articles should be submitted to: Mark Dahmke, PO Box 80266, Lincoln, NE 68501 or mdahmke@4w.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.

Secretary's Report

President Ron Veys called the meeting to order. There were 3 visitors. Ron discussed upcoming club events:

- The next club star party will be held on August 5th. It has been moved to a different location to avoid the high volume of traffic at Olive Creek during the summer months. The new location, provided by Jim Kvasnicka, is in rural Gage county southeast of Cortland. An email will be sent to the PAC List to provide directions to the site.
- The next club meeting will be August 30th.
- Dates for upcoming Mahoney Star Parties are August 12th and September 9th. The Omaha Astronomical Society is again requesting our support as they are expecting a large crowd for the August event.
- The Wachiska Audubon Society will be having a Perseids watch program on August 13th at Spring Creek Prairie. Contact Erik Hubl if you are interested in participating.
- The Astronomical Leagues national convention (ALCon 2005) is in Kansas City on August 12th and 13th.

NSP news: Plans have been finalized for this years NSP, which takes place July 31st through August 5th.

Treasurer's report: Lee Thomas reported that there is \$408.44 in the main club account.

Hyde Observatory is open Saturdays from sundown to 11:00 pm. If you'd like to help at Hyde, contact volunteer coordinator, Dave Churilla.

Ron reviewed upcoming observing highlights for the month of August.

The meeting was adjourned to the program. Jack Dunn presented a DVD on the Hubble Space Telescope, produced by the European Space Agency, and a short video on the Discovery Space Shuttle's return to flight.

Submitted by, Bob Leavitt

Club Telescopes - Checkout Policy

To check out one of the club telescopes, contact Mark Dahmke (475-3150) or mdahmke@4w.com. If you keep a scope for more than a week, please check in with Mark 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.

Hyde Observatory Volunteer Schedule

Date	Team Leader	Operators		Supervisor	Events					
September										
9/3/05	Steve Lloyd	Jim Kvasnicka	Josh Machacek	Dave Brokofsky						
9/10/05	Jeff King	Bob Kacvinsky	Dave Brokofsky	Dan Delzell						
9/17/05	Bill Wells	Joey Churilla	Steve Lloyd	Dave Churilla						
9/24/05	Brian Sivill	Bob Leavitt	Jaraed Delzell	Dave Hamilton						
October										
10/1/05	Dan Delzell	Bob Kacvinsky	Jared Delzell							
10/8/05	Jeff King	Steve Lloyd	Jim Kvasnicka							
10/15/05	Bob Leavitt	Joey Churilla	Dave Brokofsky	Dave Churilla						
10/22/05	Dave Hamilton	Josh Machecek	Jared Delzell	Dan Delzell						
10/29/05	Bill Wells	Bob Kacvinsky	Jim Kvasnicka							
Summer Hours: April through September (Sundown to 11:00 PM)										
Winter Hours: October through March (7:00 PM to 10:00 PM)										

UNL Student Observatory Public Nights – Martin Gaskell

The UNL Student Observatory will be open on these dates.

Friday September 23 7:30 p.m. - 10:00 p.m. - Venus/Jupiter conjunction

Friday October 21, 7:30 p.m. - 11:00 p.m. - first look at Mars

Friday November 4, 7:00 p.m. - 11:00 p.m. - Mars

Friday December 16, 6:00 p.m. - 10:00 p.m. - More Mars

As always PAC members are welcome to come and bring telescopes, or help out with using the portable UNL telescopes.

See http://www.physics.unl.edu/directory/gaskell/stdobs.html for more information.

The observatory will not be open if it is mostly cloudy. If in doubt call the observatory at 472-4728.

The UNL Student Observatory is located on the roof of the Parking Garage across from Memorial Stadium at the corner of Stadium Blvd. and T streets. The observatory telephone number is (402) 472-4728. Parking is available on the roof of the garage near the observatory.

Mars Reconnaissance Orbiter Mission Status

NASA's Mars Reconnaissance Orbiter, launched on Aug. 12, has completed one of the first tasks of its sevenmenth cruise to Mars, a calibration activity for the spacecraft's Mars Color Imager instrument.

"We have transitioned from launch mode to cruise mode, and the spacecraft continues to perform extremely well," said Dan Johnston, Mars Reconnaissance Orbiter deputy mission manager at NASA's Jet Propulsion Laboratory, Pasadena, Calif.

The first and largest of four trajectory correction maneuvers scheduled before the orbiter reaches Mars is planned for Aug. 27.

For the calibration task on Aug. 15, the spacecraft slewed about 15 degrees to scan the camera across the positions of the Earth and Moon, then returned to the attitude it will hold for most of the cruise. Data were properly recorded onboard, downlinked to Earth and received by the Mars Color Imager team at Malin Space Science Systems, San Diego. Dr. Michael Malin of Malin Space Science Systems, principal investigator for Mars Color Imager, said the image data are being processed and analyzed.

This multiple-waveband camera is the widest-angle instrument of four cameras on the orbiter, designed for imaging all of Mars daily from an altitude of about 300 kilometers (186 miles). Imaged at a range of more than 1 million kilometers (620,000 miles) away, the crescent Earth and Moon fill only a few pixels and are not resolved in the image. However, this is enough useful information to characterize the instrument's response in its seven color bands, including two ultraviolet channels that will be used to trace ozone in the Mars atmosphere. This is the first of two events early in the cruise phase that check instrument calibrations after launching. The second will occur in early September when higher resolution cameras are pointed at Earth and the Moon as the spacecraft continues its flight to Mars.

The Mars Reconnaissance Orbiter will reach Mars and enter orbit on about March 10, 2006. After gradually adjusting the shape of its orbit for half a year, it will begin its primary science phase in November 2006. The mission will examine Mars in unprecedented detail from low orbit, returning several times more data than all previous Mars missions combined. Scientists will use its instruments to gain a better understanding of the history and current distribution of Mars' water. By inspecting possible landing sites and by providing a high-data-rate relay, it will also support future missions that land on Mars.

More information about the mission is available online at http://www.nasa.gov/mro.

The Mars Reconnaissance Orbiter mission is managed by JPL, a division of the California Institute of Technology, Pasadena, for the NASA Science Mission Directorate. Lockheed Martin Space Systems, Denver, prime contractor for the project, built both the spacecraft and the launch vehicle.

PAC Website Updated - Mark Dahmke

The public PAC home page has been updated to use the same graphics and content as the members-only site. But the big changes are behind the scenes with the database that drives the entire website. I've merged the database tables that contain events, news, articles into one "objects" table and have added announcements and links as object types. This allows more flexibility in how content is used. For example, an article can now be added that shows up as both an article, an event and an announcement, and it can be tagged for display on either the public home page only, the members-only page, or both. Objects now have start and end dates, so an announcement can be placed on the public page for a specific period of time, and be automatically removed. Articles from past newsletters can selectively be placed on the public home page.

The New Public Home Page



The Prairie Astronomy Club

Lincoln, Nebraska

September PAC Meeting

Kris Miller will talk about working and living as a telescope operator at Lick Observatory. Sept 27 7:30pm at Hyde Observatory.

UNL Student Obseravtory Public Nights

The UNL Student Observatory will be open to the public from 7:30-10pm on Sept 23, Oct 21, Nov 4, Dec 16.

Dates of Mahoney Star Parties

The dates for the Mahoney Star Parties in 2005 are May 13, June 10, July 8, August 12, and September 9.

Can I Buy a Star?

Various businesses claim that you can have a star named after you or a friend. See this page for more information. The names of astronomical objects are determined by the International Astronomical Union (I.A.U.).

Build on a Legacy - Become a Hyde Volunteer

Help build on a tradition of astronomy education and public observing at Hyde Observatory. It's a lot of fun and can be very rewarding.

read more

Is Light Pollution Interfering with Your Enjoyment of the Night

Events

Hyde Observatory open to the public Saturday, August 27, 2005

August PAC Meeting

Tuesday, August 30, 2005

Hyde Observatory open to the public

Saturday, September 03, 2005

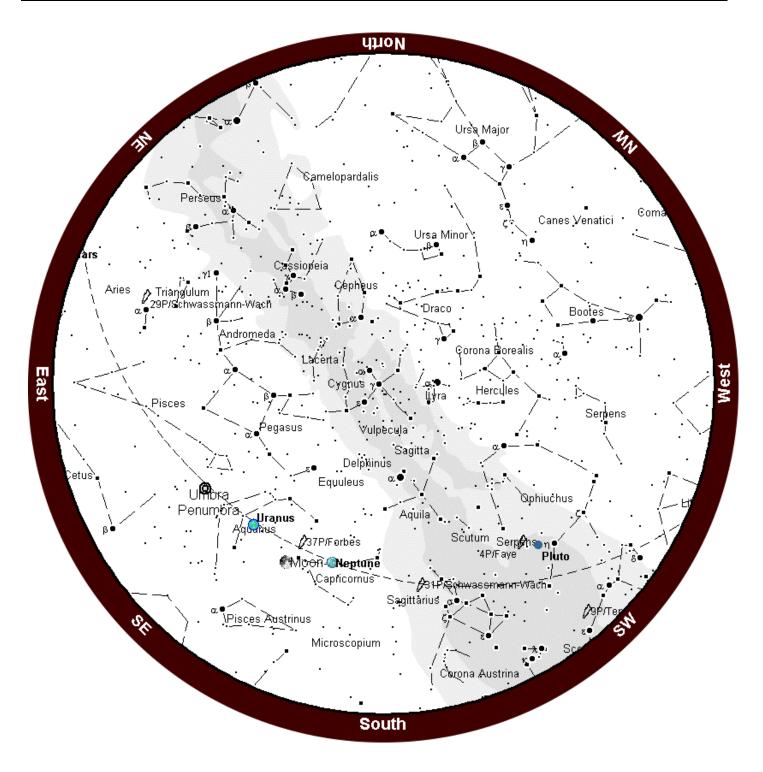
Mercury Close to Regulus

Sunday, September 04, 2005

Moon, Venus, Spica close

Tuesday, September 06, 2005

On the members-only page, club members can now display a list of current members. The "resources" section includes a page of links to other websites. The links are now maintained in the objects database, to make it easier to manage and update them. RSS News Feeds including Science Daily, Space.com News, Astromart News, Astromart Articles are available and updated daily. The next phase of development will be to add the ability for members to update their name and address in the PAC member database and to check their membership status/renewal date.



Events Calendar

September 2005									
Sun	Mon	Tue	Wed	Thu	Fri	Sat			
				1	2	3			
				Sun: 18:54 - 07:59	Sun: 18:55 - 07:57	Sun: 18:56 - 07:56			
					Club Star Party	Hyde Observatory open to the public			
4	5	6	7	8	9	10			
Sun: 18:57 - 07:54	Sun: 18:58 - 07:52	Sun: 18:59 - 07:51	Sun: 18:59 - 07:49	Sun: 19:00 - 07:47	Sun: 19:00 - 07:46	Sun: 19:01 - 07:44			
Mercury Close t Regulus	0	Moon, Venus, Spica close			Mahoney Star Party	Moon close to Antares; Hyde Observatory open to the			
						public			
11	12	13	14	15	16	17			
un: 19:02 - 07:42	Sun: 19:03 - 07:41	Sun: 19:04 - 07:39	Sun: 19:05 - 07:37	Sun: 19:06 - 07:36	Sun: 19:07 - 07:34	Sun: 19:08 - 07:32			
						Hyde Observatory open to the public			
8 🚳	19 🚳	20 🚳	21 🚳	22 🌑	23	24			
iun: 19:09 - 07:30	Sun: 19:10 - 07:29	Sun: 19:11 - 07:27	Sun: 19:12 - 07:25	Sun: 19:13 - 07:24	Sun: 19:14 - 07:22	Sun: 19:15 - 07:20			
			Moon - emersion of SAO 9048 Tau Arietis	I .	UNL Student Observatory Open	October Arietids ; Hyde Observatory open to the public			
25 🚳	26	27	28	29	30				
Sun: 19:16 - 07:19	Sun: 19:17 - 07:18	Sun: 07:19 - 19:16		Sun: 07:21 - 19:13	Sun: 07:22 - 19:11				
		September PAC Meeting							

Moon phase images by: António Cidadão

Directions to Olive Creek Observing Site

Shorter:

Take Hwy 77 South out of Lincoln until you get to the Crete corner (junction Hwy 77 and Hwy 33). Go West on Hwy 33 (toward Crete) until you get to SW 72 St. Turn Left (South) on SW 72 St. and go about 5 miles until you get to SW Panama Rd. Turn right (West) until you get to SW 100 St. (SW 100 St does NOT go through to Hwy 33). Turn Left (South) on SW 100 St and go about 1 to 1 1/2 miles until you see the sign and entrance to Olive Creek (this is the West side of the Park). It's on your left (East) side of the road. More Black Top:

Take Hwy 77 South out of Lincoln until you get to the Crete corner (junction Hwy 77 and Hwy 33). Go West on Hwy 33 (toward Crete) until you get to about SW 114 St. - the first intersection after SW 100 St. (forgot to look at this street sign, sorry - you'll see a sign for Olive Creek though at this road- but don't count on anymore signs after that, I didn't see any). Turn Left (South) on SW 114 St and go about 5 miles or so until you get to SW Panama Rd (you'll see a church and small school on your right). Turn Left (East) and go about a mile to SW 100 St, then turn Right (South) and go 1 to 1 1/2 miles until you see the Olive Creek entrance and sign (on your left hand side of the road).

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The Prairie Astronomer c/o The Prairie Astronomy Club, Inc. P.O. Box 5585 Lincoln, NE 68505-0585

First Class Mail

Next PAC Meeting August 30, 2005 7:30 PM Hyde Observatory

«TITLE» «FIRSTNAME» «MIDDLENAME» «LASTNAME»

«RENEWALDATE»

- «CAREOF»
- «ADDRESS1»
- «ADDRESS2»
- «CITY», «STATE» «ZIP»