



THE PRAIRIE ASTRONOMER

The Official Newsletter Of The Prairie Astronomy Club, Inc.

September 2005

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Internet Addresses

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

Club Events

UNL Student Observatory Open

Friday, September 23, 2005 7:30-10pm,

Venus/Jupiter conjunction

September PAC Meeting

Tuesday, September 27, 2005

Program: Lick Observatory, Kris Miller

Club Star Party

Friday, September 30, 2005

UNL Student Observatry Open

Friday, October 21, 2005 7:30-10pm - first look at

Mars

PAC/OAS Banquet

Friday, October 14, 2005

October PAC Meeting

Tuesday, October 25, 2005

Program: What's New on Mars, Martin Gaskell

Program

Working at Lick Observatory

Kris Miller will talk about working and living as a telescope operator at Lick Observatory. Kris started working at Lick Observatory in 2003 and became a telescope operator/technician at the beginning of 2004. Lick Observatory is a leader in the development of adaptive optics and has been the location of the discovery of over 70 extrasolar planets. The observatory's web site is: <http://mtham.ucolick.org/> Lick Observatory is located on Mt. Hamilton near San Jose, California.

Kris is a former Lincoln resident and club ember. He was a member of the Prairie Astronomy Club while in junior high and high school, from 1975 to 1980.

PAC-LIST: 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

Vice President Mark Dahmke called the meeting to order. There was 1 visitor. Mark discussed upcoming club events:

- The next club star party will be on September 2nd at Jim Kvasnickas family farm.
- The next club meeting will be September 27th.
- The last Mahoney Star Party of 2005 is scheduled for September 9th.
- The UNL student observatory will be open to the public on September 23rd, October 21st, and November 4th.
- The PAC / OAS Banquet will be held October 14th.

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

Treasurer's report: Lee Thomas reported that there is approximately \$400 in the main club account.

Mark Dahmke mentioned that there was a slight mix-up with membership renewal notices, and as a result they were not being sent out. This has been corrected and the notices should now be going out.

There was a short discussion on the new observing site. Jim Kvasnicka talked to his mother-in-law and she has agreed to allow us to continue using the site. Her only concern is regarding liability if someone were to be hurt on the property. Lee Thomas stated that the club has liability insurance, which covers club events such as star parties. There was a comment regarding the need to notify club members about the new site. Directions to the site are posted in the members-only area of the PAC web site and an email will be sent to the PAC list before each star party to let people know when and where it will be.

Lee Thomas reported on Astronomical Leagues national convention, ALCon Expo 2005, which was held in Kansas City August 12 - 13. Lee Thomas and Ron Veys attended. There were lots of vendors and good presentations, and Lee said it was well worth their time to attend.

Dave Knisely reported that Homestead National Monument will be having their annual Halloween special on Saturday, October 29th. They would like to have several telescopes set up for the public. Last year there were over 100 people at this event. Homestead will donate \$100 to the club if we participate. Contact Dave if you would like to participate.

Erik Hubl reported that the Wachiska Audubon Society is having a "Twilight On the Prairie" event on Saturday, September 10th. This event takes place at the Spring Creek Prairie, which is south of Denton on SW 98th street. PAC members will set up their telescopes at one of the stations on the tour. Contact Erik if you would like to participate.

Mark reviewed upcoming observing highlights for the month of September.

The meeting was adjourned to the program. Josh Machacek and Dave Knisely presented slides and commentary on their experiences at this years NSP.

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					
9/24/05	Brian Sivill	Bob Leavitt	Jaraed Delzell	Dave Hamilton	
October					
10/1/05	Dan Delzell	Bob Kacvinsky	Jared Delzell	Erik Hubl	
10/8/05	Jeff King	Steve Lloyd	Jim Kvasnicka	Jack Dunn	
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	Jared Delzell	Jim Kvasnicka	Jack Dunn	
November					
11/5/05	Dave Churilla	Joey Churilla	Jared Delzell		
11/12/05	Jeff King	Steve Lloyd	Dave Brokofsky		
11/19/05	Bob Leavitt	Jim Kvasnicka	Dan Delzell		
11/26/05	Bill Wells	Bob Kacvinsky	Josh Machecek		
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.

The September Star Party -- Bob Kacvinsky

The PAC Star Party was held Friday at the new location SE of Cortland, NE at a farmstead of Jim Kvasnicka's family. Attending were Jim Kvasnicka, Mike Smith, Dan and Mary Kincheloe, John Lammers, and Bob Kacvinsky. Jim and Bob arrived just before 8 PM to semi hazed skies with a cloud bank to the south. Lots of mosquitoes and moisture, but as the night wore on, the clearing skies made it a great night. Mike, Dan and Mary came in just as dark arrived around 8:30, and John came in later. Three scopes were set up: Jim's 10" Orion, Bob's 12" Hardin, and Dan's 4.5" Orion. Dew was a bit of a problem most of the night, especially on the telrads, but manageable.

The night started with views of Venus and Jupiter at twilight. Jupiter was surprisingly stable with all 4 moons out. Between 8:30 to 9 the haze continued to clear off and the southern skies opened up nicely. The Milky Way was bright and we had horizon to horizon viewing until just past midnight when the southern horizon slowly filled with high clouds. We had very good viewing until 1 AM when we finally closed up.

Jim began working on objects in Pegasus including finding galaxy 7331 with two faint companion galaxies and attempts to find Stephen's Quintet. M15 looked clear and took power easily up into the 250X range while still showing clear individuality of stars within the core. Jim then went to the triplet around Andromeda and the pair M81 and M82 in Ursa Major. We had an excellent viewing of the Ring Nebula pushing it up to 400X in the 12" using the 2.5X Powermate and 9mm Nagler. Both M13 and M92 in Hercules also gave clear views.

Dan and Mary concentrated on several larger objects including Jupiter, Venus, M13, M22, Andromeda, the double cluster, and several other objects. The 4.5" gave M22 a clear look with very little "fuzziness" with a clear view of individual stars. M22 was almost as good as M13 with only a slightly smaller size. Dan and Mary had to leave shortly after 11 PM. It makes for a long day with a full day of school.

John brought a couple of his "big/canon" lenses that we swapped into both the 10" and 12" scopes. We had a nice tour of Scorpius and Sagittarius while touring several of the normal favorites: M4, M22, Lagoon, Trifed, and M11. While looking at M4 we were picking up some of the faint nebulosity background around Antares.

We then moved up into Ophiuchus touring M10, M12, and M14. The open clusters IC4665 and 6633 both gave nice crisp views, although the humidity on the lenses would give a bit of a glow, especially with the bright blue stars. We had to wipe the moisture off periodically to keep the sharp image. In Aquarius the small Saturn Nebula 7009 showed a definite oval shape, but did not show any details within the central core. M2 gave a nice clear look and we were able to push it to over 300X with John's 6-9 variable Panoptic.

Bob worked on a tour of Cassiopeia starting with the ET, double cluster, and Stock 2 star clusters. The blue and yellow bright stars in the clusters were giving good contrast. We then toured the star clusters 7789, double of 7788 & 7790, triple of King 14, 133, & 146, double 659 & 662, along with 381, 457, and 281. The area around Cassiopeia is loaded with numerous objects and we worked on the tour highlighted in Sky & Telescope.

Three additional highlights of the evening viewing included the dark nebulas in Cygnus. All three lanes of the veil nebula were visible with the O III (Bob's) and SkyGlow (Jim's) filters. The fingers at the bottom of

the middle lane were all visible and this lane was 2-3 times brighter and better outlined than the other two. The bright star near Miami and New York helped outline the North American nebula. We need a 2" filter to open up the field of view to capture more than a part of the NA.

The Dumbbell (M27) had an excellent peanut shape and took power from 167 to 250X. When we added the UHC (Bob) and SkyGlow (Jim) filters, the view changed to a large oval and improved. In the 12" scope, the Dumbbell, with 9 mm Nagler and UHC filter, improved sharply with two clear crescents across the top and bottom of the football shape. The view gave a 3D effect with the ball ends and center looking as if in the background of the crescent edges. Everyone enjoyed this look.

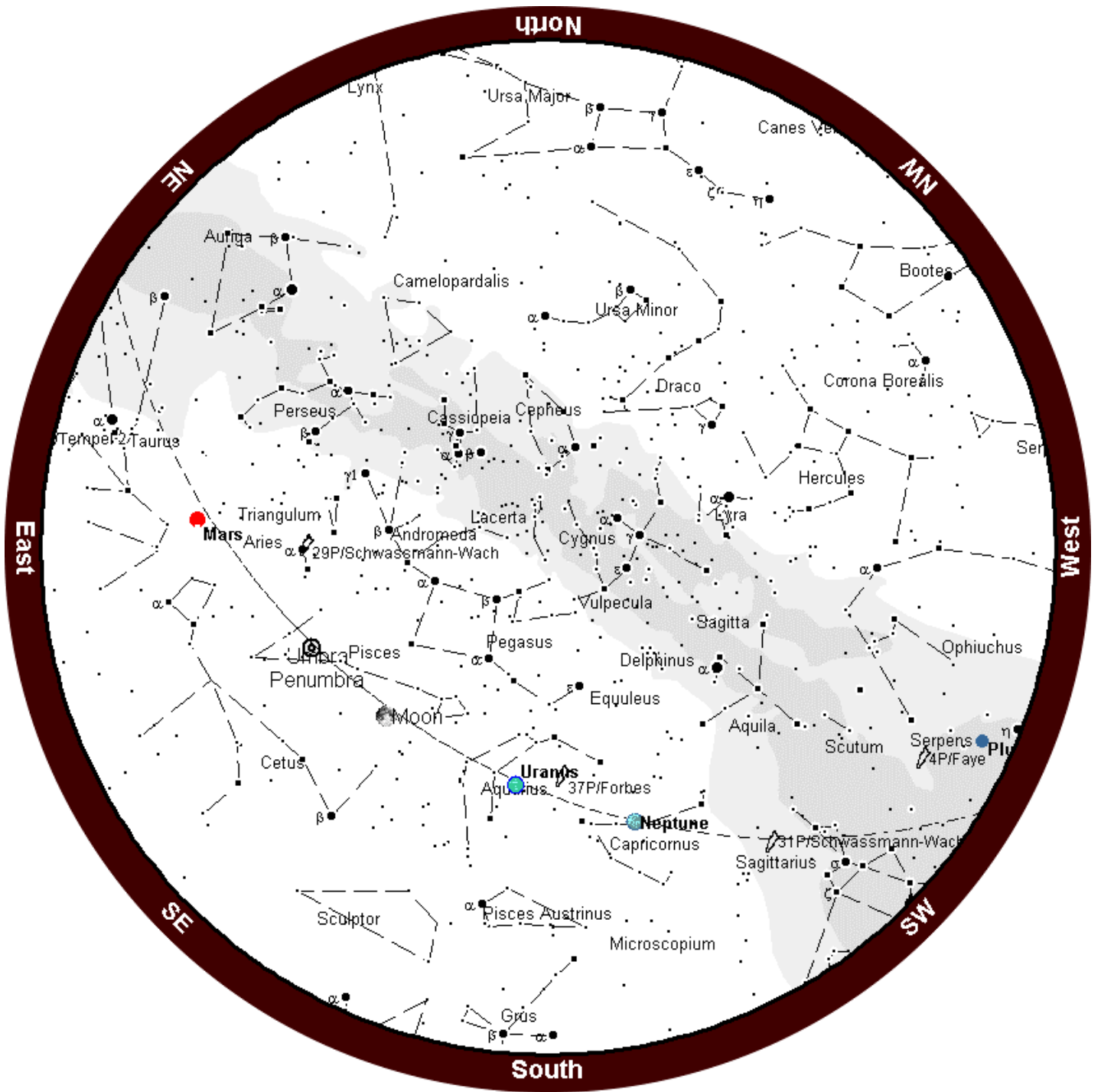
The last viewing of the night centered around Mars, which cleared the horizon around 11:15 and was high enough to give a clear view around midnight. We tested several filters including a moon, red, and light and dark blue. The light blue gave the best view. The upper right edge of the planet was slightly depressed given a 90% gibbous view. We potentially could see one of the moons blinking in and out at about 7 O'clock position within the Dobs. With the light blue filters, there was a distinct V shaped darken mare feature across the planet.

After a look at a few other quick objects, we tore down around 12:50 AM and called it a night. What started out as a questionable night, turned out to be very good viewing. Special thanks again to Jim Kvasnicka and his family for allowing us to use their property. This site is clearly superior to the Olive Creek location.

What's New on Mars – Subject of October PAC Program

On Tuesday, October 25, 2005 Martin Gaskell will give a talk on what is new on Mars. The next few months will give us our best view of Mars from Nebraska until 2020. Amateur observing techniques are better than ever and we've had a spate of discoveries from spacecraft since the last opposition that are radically changing our view of Mars. Get ready for a great opposition!

October Star Chart



Events Calendar

October 2005						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 Sun: 07:23 - 19:09 Hyde Observatory open to the public
2 Sun: 07:24 - 19:08	3 Sun: 07:25 - 19:06 Mars close to Pleiades	4 Sun: 07:26 - 19:04	5 Sun: 07:27 - 19:03 Mercury close to Jupiter	6 Sun: 07:28 - 19:01	7 Sun: 07:29 - 19:00	8 Sun: 07:30 - 18:56 Draconids ; Hyde Observatory open to the public
9 Sun: 07:31 - 18:55	10 Sun: 07:32 - 18:53 Orionids	11 Sun: 07:33 - 18:52	12 Sun: 07:34 - 18:50	13 Sun: 07:35 - 18:48	14 Sun: 07:36 - 18:47 PAC/OAS Banquet	15 Sun: 07:38 - 18:45 Hyde Observatory open to the public
16 Sun: 07:39 - 18:44 Venus Close to Antares	17 Sun: 07:40 - 18:42	18 Sun: 07:41 - 18:41	19 Sun: 07:42 - 18:39	20 Sun: 07:43 - 18:38	21 Sun: 07:44 - 18:37 UNL Student Observatory Open	22 Sun: 07:45 - 18:35 Hyde Observatory open to the public
23 Sun: 07:46 - 18:34 Mars dia. 20 arc sec	24 Sun: 07:48 - 18:32	25 Sun: 07:49 - 18:31 October PAC Meeting	26 Sun: 07:50 - 18:30	27 Sun: 07:51 - 18:28	28 Sun: 07:52 - 18:27	29 Sun: 07:53 - 18:26 Mars closest approach; Hyde Observatory open to the public
30 Sun: 06:54 - 17:24	31 Sun: 06:56 - 17:23					

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).

**OFFICERS
OF THE PRAIRIE ASTRONOMY CLUB**

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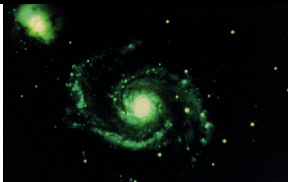
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The Prairie Astronomer
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First Class Mail

**Next PAC Meeting
September 27, 2005
7:30 PM
Hyde Observatory**

«TITLE» «FIRSTNAME» «MIDDLENAME» «LASTNAME» «RENEWALDATE»
«CAREOF»
«ADDRESS1»
«ADDRESS2»
«CITY», «STATE» «ZIP»