



The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

September 2001

Volume 42 Issue #9

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 Astronomy in NE: www.blackstarpress.com/ar/n/
 Hyde Observatory: www.blackstarpress.com/ar/n/hyde/
 NEB-STAR: www.neb-star.org/

SEPTEMBER'S PROGRAM:

Check the PAC website for an update.

PAC-LIST: Mark Dahmke maintains an e-mail list server for PAC. If you have an e-mail address and are not on the PAC List, you may subscribe by submitting an e-mail to list@4w.com. Write "Subscribe PAC-List" in the body of the e-mail.

TELESCOPE FOR SALE: For Sale, 8-inch Criterion Dyna-Scope reflector, large setting circles, motor drive. Mirror replaced with Meade 8" F6. Low profile focuser, one eyepiece.\$100. Harlan Franey

489-5234 or see me at meeting.

ONLINE NEWSLETTER: Access to the online newsletter can be accomplished by going to:

www.prairieastronomyclub.org

Those members that wish to continue to receive the newsletter by mail and haven't already contacted me, please do so as soon as possible so you will not miss any newsletters.

CLUB EVENTS

MAHONEY STAR PARTY
FRIDAY, SEPTMEBER 21, 2001
At Mahoney State Park

UNL STUDENT OBSERVATORY OPEN HOUSE
FRIDAY, SEPTEMBER 21, 2001
at the UNL student observatory

PAC MEETING
TUESDAY, SEPTEMBER 25, 2001, 7:30 PM
at Hyde Memorial Observatory

CLUB STAR PARTY
FRIDAY, OCTOBER 12, 2001
Olive Creek S.R.A.

PAC/OAS BANQUET
FRIDAY, OCTOBER 12, 2001
Mahoney State Park

HYDE INSTRUCTIONAL STAR PARTY
SATURDAY, OCTOBER 13, 2001
at Hyde Memorial Observatory

BEHLEN OBSERVATORY OPEN HOUSE
FRIDAY, OCTOBER 19, 2001
at Behlen Observatory

PAC MEETING
TUESDAY, OCTOBER 30, 2001, 7:30 PM
at Hyde Memorial Observatory

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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 \$20/yr, Family \$22/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: **Jeff King, 4018 South 83rd Street, Lincoln, NE 68506-5973 or jeffrey892@aol.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

By: Pamela L. Fiedler

No meeting minutes were received.

Hyde October Schedule

October	Team Leader	Operators	Sup	Moon
10/6/01	Brian Sivill	Dan Delzell, Jared Delzell	Lee T	Full
10/13/01	Bill Wells	Bob Leavitt, AJ Benker		Last Qtr
10/20/27	Jeff King	Joey Churilla, Steve Lloyd	Dave C	New
10/27/01	Lee Taylor	Jeff Campbell, Dave Brokofsky	Rick J	First Qtr

LAST NIGHT OF SUMMER AT UNL STUDENT OBSERVATORY

On Friday September 21 the UNL Student Observatory will be open to the public from 8:00 to 11:00 p.m. to view the crescent moon, Mars, and other objects. Since fall officially begins when the sun crosses the celestial equator at 6:04 p.m. CDT the next day, this will be the last night of summer.

The main attraction of the evening will be the crescent moon in the southeast. On the part of the moon we can see it will be early morning and the craters will be seen in vivid relief. The big telescope at the observatory permits spectacular close-up views. A UNL astronomer will be on hand to point out lunar features. The dark side of the moon will be seen to be faintly glowing because of sunlight reflected from the earth.

The planet Mars will also be on view but Mars has now shrunk to half the size it had in the early summer as the earth has pulled away from it and only a quarter as much detail will be visible now. The unusual major dust storm that raged across Mars in late June and into July is still blurring features on the surface and one of the centers of dust activity will be visible.

If time permits the two distant giant planets of the outer solar system, Uranus and Neptune will also be viewed.

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 will not be open if the sky is totally cloudy.

There is no charge for admission to the observatory. Children of all ages are welcome. The observatory is unheated so visitors are advised to dress warmly.

There will be no public viewing in October. The next public night will be Friday November 2.

For more information about the Student Observatory contact Dr. Martin Gaskell, 472-4788 (MGASKELL1@UNL.EDU) or visit <http://www.blackstarpress.com/ariv/unl/stdobsv/>

Observing Report

DATE: September 4th, 2001, 0830 to 0900 hrs UTC.

LOCATION: Beatrice, Nebr. 40.283N, 96.735W, 1320 ft (402m) elevation.

INSTRUMENTS: 10 inch f/5.6 Newtonian: 101x, 178x, 282x, 353x, 445x, 588x.

CONDITIONS: Clear, Temp. 68 deg. F. Wind Calm.

UNAIDED EYE LIMITING MAGNITUDE: 4.8 (16 day-old moon).

SEEING: 0.8 arc seconds (variable: Antoniadi II).

OBSERVATIONS: After a late night working on the computer, I pulled the ten inch out for some planetary viewing. The moon's eastern limb showed a nice amount of fine detail, although for some reason, the seeing was not quite as good as it was in other areas of the sky. I noted a huge ledge or "gouge"-like feature near the southern side of Mare Crisium, which appears to be a crater chain of Apollonius-A, B, and X. It forms a narrow furrow which isn't quite radial to the center of Mare Crisium, but was impressive at the low sun angle. Farther north, Endymion showed its dark floor to contain more fine wispy detail than I usually see. Even under high sun, Plato showed its larger crater pits as white dots at only 178x (I could see at least 6 of them at 282x). Farther south near the terminator, Langrenus was well placed for viewing, with its terraced walls and lumpy central peak. Vendelinus showed its unusual form as a smooth-walled plain with some floor craters and a rather wierd bay-like inclusion well into its northeastern side where the crater Lame makes its presence known. The highlight of my "terminator tour" was the large crater Petavius, with its narrow straight rill running nearly straight from the central peak to its southwestern wall. Indeed, a large segment of the west wall of Petavius has a low valley-like form, as if the wall had collapsed to below crater-floor level. The central peak showed a "double-row" form of two short almost parallel irregular mountain segments.

With Saturn high in the east, it was time to take a look at that wonderful world. Even at only 101x, the rings were nice and sharp, with a number of moons visible. Titan was quite easy off to the northwest of the planet, and showed its tiny orangish disk at 353x. The moons Rhea and Tethys were west of the west ring ansa, while Dione sat on the opposite side of the planet, with all three along a line nearly parallel to the major axis of the rings. The 49 arc minute field of view of my 14mm Meade Ultrawide also showed a number of stars in it, which made tracking down Iapetus a bit more difficult. It was found all by itself a notable distance east of the planet, well away from the inner moons. 178x revealed tiny faint Enceladus between Dione and the east edge of the rings, although it vanished whenever the seeing got momentarily worse. 282x occasionally provided glimpses of Mimas very close to the southwestern edge of the rings not far off the west ansa, but much of the time it was not visible. The planet itself showed quite a bit of detail. Cassini's division was incredibly sharp, and the narrow dark arc of the planet's shadow was visible on the rings. I tried for the Encke gap in the outer portions of the A-ring, but it was not consistently visible. The disk of the planet showed the broad almost twin equatorial/temperate band which had irregular edges. At times, 445x made it look like two intertwined belts with broad sinuous edges. The south side of this band was less diffuse than it had been last year, and there was a hint of a narrow temperate belt between it and the polar regions. The south pole showed a large rather well defined polar dark cap which had a great detail more contrast than it had last year.





Indeed, it seemed to show hints of a bluish-grey color with perhaps just a hint of green close to the south limb of the planet. This dark cap was visible even at 178x, so it is much more prominent than it had been in previous years. Clear skies to you.

--

David Knisely

THE PRAIRIE ASTRONOMY CLUB CALENDAR

For October 2001

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
	1	2 FULL MOON 	3	4	5	6 Hyde Observatory open to the public 7-10 p.m.
7	8	9 3 RD QUARTER 	10	11	12 Club Star Party PAC/OAS BANQUET	13 Hyde Observatory open to the public 7-10 p.m. Hyde Instructional Star Party
14	15	16 NEW MOON 	17	18	19 Behlen Open House	20 Hyde Observatory open to the public 7-10 p.m.
21	22	23 1 ST QUARTER 	24	25	26	27 Hyde Observatory open to the public 7-10 p.m.
28	29	30 PAC Meeting 7:30 p.m. Hyde Observatory	31			

**Directions to Olive Creek
Observing Site**

Take US 77 south to Hallam Road, and go west on Hallam Road through Hallam and on to SW100th St. Then turn north (right) on the gravel and go about 2.4 miles to the Olive Creek entrance on the west side of the lake.

**OFFICERS
OF THE PRAIRIE ASTRONOMY CLUB**

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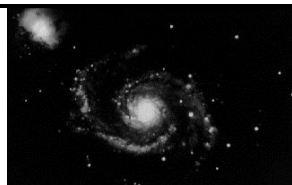
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First Class Mail

**Next PAC Meeting
September 25, 2001
7:30 PM
Hyde Observatory**