



The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

August 2002

Volume 43 Issue #8

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AUGUST PROGRAM

August program: To be announced

PAC-LIST: 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.

CLUB EVENTS

PAC Meeting 7:30pm Hyde Observatory
 Tuesday, August 27, 2002

Club Star Party
 Friday, September 06, 2002

UNL Student Observatory Open House
 Friday, September 20, 2002

PAC Meeting 7:30pm Hyde Observatory
 Tuesday, September 24, 2002

Mahoney Star Party
 Friday, September 27, 2002

Club Star Party
 Friday, October 04, 2002

PAC/OAS Banquet
 Friday, October 11, 2002 Mahoney

READ THIS NEWSLETTER ONLINE

Those who wish to help with publishing and postage costs by receiving only the on-line version of the newsletter should contact Liz Bergstrom at 464-2038. Mark Dahmke or Liz can give you the logon account and password for access. You may receive both the mailed version and the on-line version if you wish.

A printable PDF version of this newsletter is also available through the website.

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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: **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 — Lee Taylor

Prairie Astronomy Club Minutes for July 30, 2002

President Dave Knisely called the meeting to order. There were no new guests.

The July star party was well attended and a good night.

For the next month or so, Venus will be well placed for viewing.

We've had a pretty active sun recently, quite a bit of spot and flare activity.

The Omaha World Herald had a great article on light pollution recently, generating quite a bit of email to both the OWH and PAC-list.

The Nebraska Star Party runs from Aug. 4-9.

Brad Shafer will be giving a colloquium Sept. 25 at UNL.

Program director Brian Sivill asks anyone with something interesting to do with astronomy to contact him for a program.

The next Mahoney Star Party will be Sept. 27 at Mahoney State Park.

The Perseid meteor show peaks on Aug 12-13.

The PAC-OAS fall banquet is scheduled for Fri Oct. 11 at Mahoney State Park. +Observing Chair Jeff King reminds everyone to provide him with your notes and observing logs if you have completed any of the Astronomical League's observing programs.

Any time someone wants to go out to any of the club's regular observing sites (Olive Creek, Wagon Train, etc) put a note out on the PAC-list and you might get some company.

Hyde volunteer coordinator Dave Churilla asks any member interested in helping out at Hyde contact him and he'll get you started.

Also at Hyde, Sept. 14 will feature a lunar observing party. PAC members are encouraged to attend to set their 'scopes up outside.

A sheet was passed around to sign up for the online PAC newsletter.

Any articles you wish to have printed in the newsletter please be sure to email or otherwise get them to Mark Dahmke.

Treasurer's report: Liz Bergstrom reports that we're in pretty good shape financially and that several more people have signed up for the online newsletter, helping the club save money.

Anyone interested in helping the club start a publicity committee, to get astronomy and club information out to the public should contact Joe Vocht. Jere Williams (RIP) has left the club some books for our library and some binoculars.

A question was asked about keeping track of the books in the club Library. Club VP Dave Brokofsky has that responsibility.

Jeff Campbell moved to adourn and Larry Hancock seconded.

Adourn to program of Dr. Gaskell's trip to the former Soviet Union.

Respectfully submitted by

Lee Taylor

Hyde Observatory Volunteer Schedule

Date	Team Leader	Operators		Supervisor	Events
August					
8/24	Dave Churilla	Karla Bachman	Joey Churilla	Jack D	
8/31	Jeff King	Dan Delzell	Jared Delzell	Dave C	
September					
9/7	Bill Wells	Steve Lloyd	Karla Bachman	Jack D	
9/14	Dave Hamilton	Justin DeVries	AJ Benker	Dave C	Lunar Star Party
9/21	Jeff King	Dan Delzell	Jared Delzell	Rick J	
9/28	Dave Churilla	Joey Churilla	Jeff Campbell	Dave H	
Winter Hours (7:00 PM to 10:00 PM)					
October	(Tentative)				
10/5	Bill Wells	Justin DeVries	Lynda Beck	Dave C	Hyde Star Party
10/12	Brian Sivill	Steve Lloyd	Joey Churilla	Brian S	
10/19	Jeff King	Jeff Campbell	AJ Benker		
10/26	Dave Hamilton	Dan Delzell	Jared Delzell	Rick J	

The 9th Annual Nebraska Star Party— Dave Knisely (photos by Jim Rippey & Ed Campbell)

The Nebraska Star Party of 2002 presented its unique and highly successful formula of dark sky observing and entertaining family-style activities to over 400 attendees and guests. Held high in the pretty Nebraska Sandhills (3100 ft. elevation) just above the south shore of 11-mile long Merritt Reservoir 29 miles southwest of Valentine, this remote site is one of the finer dark-sky viewing locations in North America. Sponsored jointly by the Prairie Astronomy Club of Lincoln and the Omaha Astronomical Society, NSP-9 brought people from all over North America for a week of fun filled recreational and astronomical activities, along with some serious deep-sky observing.



Some "early-bird" observers arrived on Saturday August 3rd, and were greeted by temperatures in the high 90's under partly cloudy skies. This got people into a lot of recreational activities in and around the lake, taking full advantage of the warm water and 41 miles of white sand beaches the reservoir has to offer. Many attendees camped at the Snake Campground just north of the large observing fields, which had been prepared by the Nebraska Game and Parks Commission. Others stayed in nearby campgrounds or in motels in Valentine, while a number took advantage of the cozy cabins at Merritt Resort near the dam. Indeed, the "Water's Edge" Restaurant at the resort was where many NSP regulars gathered to sample the fine food the restaurant is famous for, as well as providing a shady location for the equipment vendors. As the evening began, thunderstorms briefly threatened, but the sky began to clear during twilight, providing the early birds the treat of a nice dark sky full of astronomical wonders.

Sunday brought the start of NSP registration, held downstairs from the restaurant in the Dillon's lounge. Sunday evening was prime-rib night at "The Water's Edge" restaurant. This allowed some NSP regulars to get rather filled with a delicious meal while gazing out at the fine view from the wide windows overlooking the lake. It was noticeably cooler on Sunday than it had been Saturday, but Sunday evening became mostly cloudy, although the clouds didn't prevent a lot of extended talk and the renewal of some old friendships from previous star parties. Groups gathered and talked well into the night on the observing fields, resting up from their long journeys.

Monday was a bit warmer and humid than Sunday, with partly cloudy skies. The NSP Beginner's Field School, taught by NSP regulars Dave Knisely and John Johnson, held its first of three 2-hour sessions in the "Waters Edge" restaurant at noon, giving about 90 new amateurs an introduction into the hobby. The opening session was entitled, "How to Find Your Way Around", and covered atlases, books, software, constellations, and star party etiquette. The main evening activity was the Ice Cream Social held on the observing fields in the main picnic area, where some of the first of many door prizes were awarded. In particular, a large number of door prizes for kids were presented along with the regular amateur astronomy offerings. Following this, Brenda Culbertson gave a talk on Naked-eye Observing. Several members of the news media were present, and a number of attendees were interviewed and photographed for later articles about the star party. Nearly 50 telescopes were present on the observing fields, including a huge 32 inch motorized Dobsonian built by James Holloway of Iowa. It was transported in a converted ambulance, and received the name, "The Maytag Scope" by a few members of the news media. However, after sunset, the clouds moved in until about 3 a.m. the next morning, reducing observing to the hour or two before morning twilight.



Tuesday morning was partly cloudy and warm with stiff southern breezes. The second Beginner's Field School session covering Telescopes and Equipment began at noon in the restaurant, followed by registration downstairs in the lounge. The vendors were doing a brisk business north of the restaurant, as more and more amateurs purchased a few items for their equipment boxes. Tuesday evening featured the Hamburger barbecue on the south patio of the lounge, with more door prizes being awarded afterwards. Back out on the observing fields the skies were clear and as twilight fell, the many scopes began to scour the skies for their dim celestial quarry. Most stuck with the big and bright "favorites" in and around the Milky Way, although galaxies like M51 were also viewed. A few thin cirrus clouds did occasionally float by, which did lower the transparency sometimes, but the sky remained mostly clear during the night. More serious observing tended to take place after midnight, such as going for the galaxies near M13, or observing tiny planetaries like the unusual one known as "Campbell's Hydrogen Star". The number of laptop computers in use on the observing fields was also quite high, as could be seen in a walk down Dob row. A 25 inch Obsession manned by Jim Rippey made quick work of things like the faint outer detail of M17, or the knotty spiral structure of M33. Some of the other big Dobs along Dob row occasionally had some trouble with the wind, but most of the other scopes like the many Schmidt-Cassegrains, a few refractors, and the lower-profile Newtonians continued to be busy into the night.



Wednesday was windy and warm. The third 2-hour session of the NSP Beginner's Field School was held at noon, covering Observing Techniques and Programs. A swap meet began downstairs in the lounge at 2 p.m., while the Great NSP Beach Party got cranked up on the beach below the resort. Sand Volleyball, the Sand Wedge (golf) pitching contest, and the 3-legged races all created quite a bit of activity, in addition to the many people swimming in the lake. A free Hot-dog/Brats cookout was also held for attendees, followed by more door prizes. After the cookout around sunset, a public star party and constellation talk was held in the field north of the restaurant, with John Johnson using his green laser pointer to point out different stars and patterns to those from the Valentine area. The skies were clear to partly cloudy, but the winds were high, forcing a number of people into a long low depression between the grass-covered dunes where parking is

normally located. This elongated feature was quickly christened, "Dobson's Hollow", as its shielded location enabled several Dobsonians in the 15 to 20 inch range to continue operating. Thunderstorms began to pop up late, scattering some haze across the sky, so many people called it quits early.

Thursday brought the tubing/canoeing trip down the picturesque Niobrara River under partly cloudy skies. Nearly 150 attendees took advantage of the trip, either canoeing in the Niobrara Canyon, or just floating down the water in huge inner tubes. In the evening, a catered chicken dinner was held at the restaurant, followed by a rather large thunderstorm that delayed observing for an hour or so until the sky began to clear off somewhat.

Friday, activities shifted to the Auditorium and lobby of the Valentine High School, where a number of formal programs were presented. Things kicked off with the historical "actor" Darrel Draper, who did his impression of the Lewis and Clark Expedition's guide George Drouillard. This was followed by Dr. James B. Swinehart of the University of Nebraska, who presented the fascinating talk, "Nebraska Sandhills: Desert in Disguise". Dr. Swinehart did try to fool some of those present with an image of dune fields from the Mars Global Surveyor, but more than a few recognized the image and where it was taken! At noon, Pizza Hut pizza was served by Valentine High School students next to the lobby, while others milled about browsing the vendor displays or looking at the swap meet tables. Voting by attendees for the NSP Astrophotography contest continued, after which, Darrel Draper was again speaking in the auditorium with a presentation on the Methods of Celestial Navigation used on the Lewis and Clark Expedition. This was followed by Bill O'Donnell's talk, "Discovery to Recovery", where he detailed how a disaster with his 12 inch Discovery Dob was turned around into creating a new and better truss-tube telescope.

The Keynote speaker was Dr. Howard Cohen of the University of Florida, who spoke on, "Praising and Perverting the Heavens", an interesting look into how non-astronomers incorrectly portray events in the night sky. The winners of the Astrophotography contest were then presented their awards. Adam Muchajewski from Wisconsin won awards in both the Wide field ("Milky Way") and NSP ("Star Trails") picture classes, while Michigan amateur Richard Bell won in the Deep-sky class ("M8/M20"), and Arkansas amateur Paul Anderson won in the solar system category ("Planetary Alignment at Texas Star Party"). The rest of the door prizes were then given out, with some attendees going home with new eyepieces, books, or other useful items. The kids grand prize was an 6 inch Bushnell Dobsonian, and the adult Grand prize was a Celestron Nexstar 5 inch GOTO Schmidt-Cassegrain with CCD camera.

By late afternoon, the sky was clearing beautifully, as thunderstorms had cleared the air and were now racing northeastward. Indeed, some said that the near sunset time and feel of the air reminded them of an early fall evening, complete with a sliver of a 1.5 day old moon low in the western sky. Those who stayed on the observing fields were rewarded with perhaps the best night of the entire week, with naked-eye limiting magnitudes of 7.5 or fainter. The sky was clear, the temperature was cool, and the wind was nearly calm, allowing all the telescopes to be used to full advantage. A low auroral display with faint narrow rays appeared for around half an hour in the northeast, and the International Space Station made a pass right by the galaxy M81. Those who were following the ISS could easily see its shape at only 59x as it raced across the sky. The huge expanse of the Milky Way showed tremendous detail to the unaided eye, including the wide nuclear bulge out into Scorpius and Ophiuchus, as well as the "Pipe" or "Horse" dark nebulae. The huge 32 inch revealed the Veil Nebula in a way which is difficult to describe adequately. Perseid meteors were also popping up at rates close to 20 per hour, with some leaving trails. Many people worked the limits of deep-sky that night, going for the less obvious and more difficult celestial wonders. The brighter globular clusters of the Andromeda galaxy were seen, especially distant G1, which could be glimpsed in only a four inch, and showed its tiny brighter core in a ten inch. The temperature dropped to the low 50's and a mild eastern breeze came up around 2 a.m., forcing a few people to don heavier jackets and coats. Some attendees had to cut their observing short to be rested for the trip home, but most seemed extremely pleased with the final night under the stars of the 9th Annual Nebraska Star Party.

NSP Donated LCD Projector to Valentine High School— Mark Dahmke

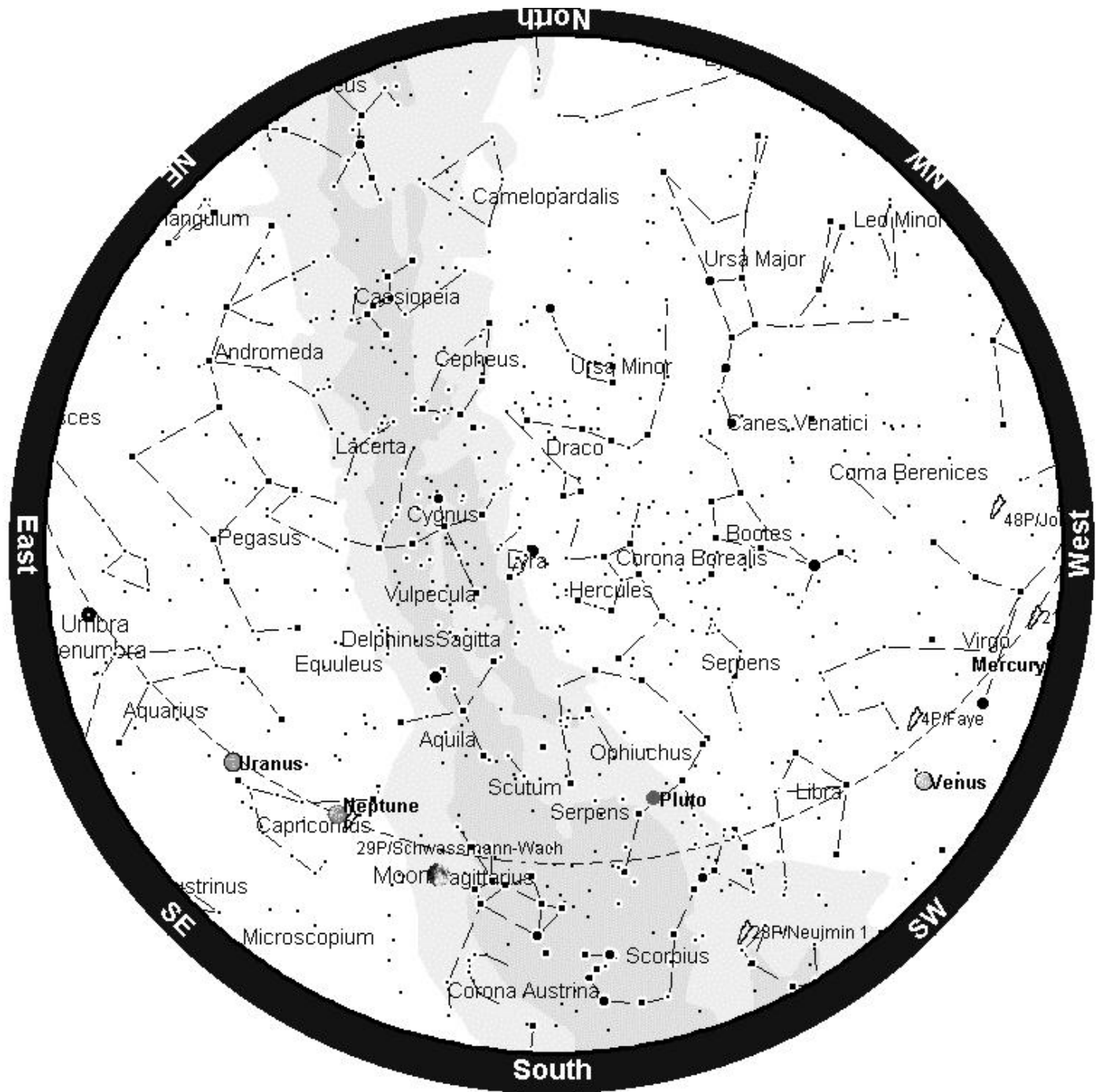
On August 9th, Valentine High School received a donation of an LCD video projector from the Nebraska Star Party. The projector can be used for classroom computer or video presentations, and in the school's auditorium.

"The citizens of Valentine, and the Valentine High School have been very supportive of NSP since it started nine years ago, and we wanted to give something back to the community. We noticed that the school didn't have an LCD projector and thought this would be a useful addition to the school's media center," said Eric Balcom, NSP coordinator.

The NEC projector, valued at over \$2,600, can display up to 1024x768 resolution images when connected to a computer, and also supports composite video, S-video and HDTV formats.

Balcom said, "Valentine's Merritt Reservoir is a great tourist destination and has been an ideal location to hold star parties because of its dark skies and almost non-existent light pollution. We appreciate the efforts of the residents of Cherry County to preserve this natural resource for the enjoyment of all, and we wanted to say thank you."

September Star Chart



Events Calendar

September 2002						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1  Sun: 18:53 - 07:59	2  Sun: 18:54 - 07:58	3  Sun: 18:55 - 07:56	4  Sun: 18:56 - 07:54	5  Sun: 18:57 - 07:53	6  Sun: 18:58 - 07:51 Club Star Party	7  Sun: 18:59 - 07:49 Hyde Observatory open to the public
8  Sun: 18:59 - 07:48	9  Sun: 19:00 - 07:46	10  Sun: 19:01 - 07:44	11  Sun: 19:02 - 07:43	12  Sun: 19:03 - 07:41	13  Sun: 19:04 - 07:39	14  Sun: 19:05 - 07:38 Hyde Observatory open to the public
15  Sun: 19:06 - 07:36	16  Sun: 19:07 - 07:34	17  Sun: 19:08 - 07:33	18  Sun: 19:09 - 07:31	19  Sun: 19:10 - 07:29	20  Sun: 19:11 - 07:28 UNL Student Observatory Open House	21  Sun: 19:12 - 07:26 Hyde Observatory open to the public
22  Sun: 19:13 - 07:24	23  Sun: 19:14 - 07:22	24  Sun: 19:15 - 07:21 PAC Meeting 7:30pm Hyde Observatory	25  Sun: 19:16 - 07:19	26  Sun: 19:17 - 07:18	27  Sun: 07:18 - 19:17 Mahoney Star Party	28  Sun: 07:19 - 19:15 Hyde Observatory open to the public
29  Sun: 07:20 - 19:13	30  Sun: 07:21 - 19:11					

**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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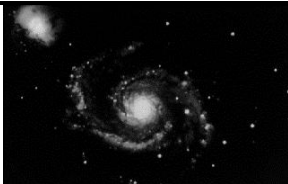
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First Class Mail

**Next PAC Meeting
August 27, 2002
7:30 PM
Hyde Observatory**