

The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

August 2003

Volume 44 Issue #8

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 NEB-STAR www.neb-star.org

AUGUST PROGRAM

August program: TBA

CLUB EVENTS

Mahoney Star Party
Friday, August 22, 2003

PAC Meeting 7:30pm
Tuesday, August 26, 2003

UNL Student Observatory
Tuesday & Wednesday, August 26-27, 2003 10pm-

Club Star Party
Friday, August 29, 2003

Mahoney Star Party
Friday, September 19, 2003

Club Star Party
Friday, September 26, 2003

PAC Meeting 7:30pm
Tuesday, September 30, 2003

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.

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 the Meeting of July 22, 2003

President Dave Knisely called the meeting to order, one new guest, Julie Kostogorova a friend of Dr. Gaskell's.

Mars is GREAT right now; take the time to see it whenever you can. It will rise a little early still this month, but it's better than it has been. There are photos of Arsia and Olympus Mons on the net (FROM THE GROUND!)

There is still an effort to schedule a 'shallow sky' star party at a member's residence. Watch the PAC-list for info.

July 25 is the next PAC star party at Olive Creek.

The next club meeting will be Tuesday Aug. 26 at 7:30 PM. THIS IS THE DATE OF THE OPPOSITION OF MARS. Hyde and the UNL student observatory will be open late for the public this evening and the next, as follows: Hyde: 26 10PM-2:30AM. Aug 30 sundown - possibly midnight UNL Student Observatory Aug 26 & 27 10PM-2:30AM

The Astronomical League has observing awards for various programs. Steve Lloyd, and I have been trying to have a group work on our Messier certificates (sorry to report little progress on my part), but if you'd like to get started, contact club observing chair Jeff King for info.

Program Chair Brian Sivill is always looking for new programs. If you've done something interesting astronomically, and would like to share, contact Brian Sivill.

Of course, the 10th annual Nebraska Star Party starts Saturday, July 26-Friday Aug 1 at Merritt Reservoir.

In Hyde news, aside from the events next month, if you'd like to be a volunteer at Hyde observatory, contact Hyde Volunteer Coordinator, Dave Churilla.

Club newsletter editor and webmaster Mark Dahmke politely requests that no attachments be sent out in emails on the PAC-list as it can cause technical problems

Treasurer's Report: Effective Jan '04 Sky & Telescope subscriptions through the club will increase to \$32.95/year from the current \$29.95/year. If yours is about to expire, get the renewal in to Liz.

We are now taking orders for club apparel; payment is due to club treasurer, Liz Bergstrom by Sept. 15, prices are as follows:

All prices are with white lettering on blue background.

Reversed color scheme is \$2.50 extra

Jackets: \$22.00

Sweatshirts: \$16.00

T-Shirts: \$8.00

Polo: \$16.00

Hats: \$ 8.00

Both club scopes are currently checked out. Jeff Campbell will have the club dob at NSP, while Bill Lohrberg currently has the refractor. If you'd like a turn at either of these, contact Dave Borkofsky.

Brian Sivill moved to adjourn and yours truly seconded. Adjourn to Liz Klimek's program on her research at UNL on Quasar variability.

Respectfully submitted by:

Lee Taylor

Hyde Observatory Volunteer Schedule

Date	Team Leader	Operators		Supervisor	Events
August					
8/26/03	Jeff Campbell	AJ Benker	Erica Block	Dave Churilla / Dave Knisely / Erik Hubl	Mars Viewing 10pm - 230am
8/26/03	Scopes on Lawn	Jeff King	Dave Churilla	Dave Knisely	Mars Viewing 10pm - 230am
8/30/03	Karla Bachman	AJ Benker	Erica Block	Dave Churilla	Mars Viewing 11pm - 1 am
8/30/03	Scopes on Lawn	Joey Churilla	Jeff Campbell		Mars Viewing 11 pm - 1 am
8/30/03	Dave Churilla	Joey Churilla	Erica Block	Brian Sivill	Normal Time 9-11 PM
September					
9/6/03	Dan Delzell	Jared Delzell	Joey Churilla	Dave Churilla	
9/13/03	Bill Wells	Amina Cassini	Jeff Campbell	Brian Sivill	
9/20/03	Bob Leavitt	Josh Machacek	Erica Block	Dave Hamilton	
9/27/03	Jeff King	AJ Benker	Lynda Beck	TBA	
October					
10/4/03	Bill Wells	Karla Bachman	Steve Lloyd	Brian Sivill	
10/11/03	Bob Leavitt	Erica Block	Josh Machecek	Dave Hamilton	
10/18/03	Jeff King	Joey Churilla	Amina Cassini	Dave Churilla	
10/25/03	Dan Delzell	Jared Delzell	Lynda Beck	Rick Johnson	
Summer Hours: April through September (Sundown to 11:00 PM)					
Winter Hours: October through March (7:00 PM to 10:00 PM)					

The Nebraska Star Party – Dave Knisely

Well, all in all, I had a pretty darn good experience at NSP-10, although as with any star party, I never got all I wanted to do done. I packed my 10 inch Newtonian and my 100mm f/6 refractor, and left the house at 6:25 a.m. on Saturday morning July 26th from my home in Beatrice under cool variably cloudy skies. It was a pleasant six-hour drive into the high Sandhill country of western Nebraska to reach Merritt Reservoir nestled in the former upper reaches of the Snake River Canyon 28 miles southwest of Valentine. I also tempted fate and tried the infamous Brownlee Road short-cut well southeast of the reservoir. This one-lane winding road is black-topped, but its narrowness and its deep sandy shoulders made it a somewhat riskier route for those who want to save time. Still, the road led me into a sort of Nebraskan "Shangri La"; a wonderful green flat-floored hidden valley of ranches and farms, framed by 200 to 300 foot-high grassy but nearly treeless dunes.

After getting settled into my 2-bed cabin at the little Merritt Resort facility and sampling the evening buffet at Merritt's "The Water's Edge" restaurant, I headed out to the Snake Campground next to where the observing fields were. I helped fellow club member Brian Sivill get his big tent up, and despite my "help", he still got it properly erected :-). I then ran into Bob Cuberly from Illinois, who had his huge camping trailer parked in the shade of some trees. We spent time talking and taking some refreshment in the cool breeze blowing through the campground (it had been 111 degrees F. the previous afternoon). Bob gave us a look at his monster Astrophysics mount which could have held a 14 inch with ease, but he was only using a 6 inch planetary Newtonian on it. He hadn't set up his 15 inch Obsession, but it would clearly be only a matter of time until he did. Tom Miller of Lincoln, Nebr. showed up a few minutes later to say that he had indeed brought the 30-inch Obsession to NSP. The sky was mostly cloudy, so several of us congregated in the luxury of Bob Cuberly's camper for a while. We got some nice holes in the cloud cover, but it never cleared enough to justify getting the "big guns" out. I made the rounds of the early birds and did a lot of renewing old friendships, but we didn't observe other than with binoculars or the unaided eye.

Sunday was the first official day of the star party, marked chiefly by the start of registration in "Dillon's Lounge" in the lower level of the restaurant at Merritt Resort. The air was a bit warmer, which allowed many of the arriving families to take advantage of the sandy beach and warm water of Merritt reservoir for swimming and boating. I got over to the observing fields and pulled out my 10 inch scope for a reporter at the Sioux Falls TV station KELO so he could do an interview and get some footage of some of setups on the dunes. The sky once again did not want to cooperate very well as the night began, although it teased us with a spectacular sunset and some hazy openings at times. At least the photographer from NATIONAL GEOGRAPHIC (doing an article on the Great Plains) probably got some decent pictures of the area and the sunset before it got too dark to shoot. Some who did set up got fairly decent views of Mars once it

cleared the clouds near the horizon in the wee hours of the morning, although the more "serious" observing would have to wait another day. I got back to Merritt Resort to an area above the beach behind our cabins where our NSP staff usually congregates for some refreshments and late-night talk. My roommate John Lammers from Fairbury finally got in rather late, but at least he managed to navigate the Brownlee Road without incident (and in the dark no less).

Monday was partly cloudy, and I was quite busy. John Johnson of Omaha and I were the instructors for the 3-day NSP "Beginner's Field School", so we had to be up and running for the start of our first session at noon. After lugging the box of 100 Field School Manuals from my cabin (as well as my big "portable library"), I was startled to see the number of people filing into the restaurant for our first session. For only the introductory session, it looked like we had 43 people and of those, a majority indicated that it was only their first of second star party. We covered things like star party etiquette, planispheres, star atlases, guidebooks, constellations, and finding techniques. After a nice meal at the Water's Edge, we went back over to the observing field for the NSP Ice Cream social, a nice mixer for those who had never been at the star party before. The skies showed a lot more blue than the previous evening, so the guy from National Geographic was also busy on the fields. After the first of the door prizes were handed out, I hiked back towards the southern observing fields to see what was going on.

I ended up doing more of a "walk-about", observing with others' scopes rather than mine. Dob Row and the area around it was getting a little crowded, as there were quite a number to choose from (anything from 5 inch refractors to 8 and 10 inch SCT's to 10 and 13 inch Dobs to a 25 inch Obsession). I wandered away and ended up spending some time helping club member Liz Bergstrom with her new C8 that was proving difficult to manage. We finally got it set up and did at least get the binoviewer to work with it, although we were cursing the inadequate locking screws on the star diagonal.

Much later on, I linked up with a guy from California who had just come from being "skunked" by forest fires and bad weather at the Wyoming Star Party. Despite a little haze and a weak Aurora at times, we had a pretty good session with his 22-inch truss-tube Dobsonian. We hit a lot of the "usual suspects" (showpieces which almost everyone looks at initially) before going after more difficult targets. The "Cat's Eye" nebula (NGC 6543) was as sharp and detailed as I had seen in years, with the arc-like inner detail and central star easily seen. I mentioned a trio of galaxies in Draco (NGC's 5981, 5982, and 5985), so we had a look at them. This trio consists of an edge-on spiral, a somewhat smaller elliptical, and a tilted spiral, all in a short line which could be fitted into a 20' arc field of view. The edge-on galaxy showed its slight nuclear bulge, while the middle elliptical showed a small brighter core, and the larger tilted spiral showed its nucleus with mottled spiral detail in the outer haze. After going back to help Liz coax her 8 inch SCT back into its cases, I called it a night around 3 a.m., as I had to get at least a little sleep so I would be coherent enough to teach at the Beginner's Field School.

Tuesday was bright and sunny, and so was my disposition. The second day of the field school (Telescopes and Equipment) went pretty well with over 50 in attendance, although I sometimes found it hard to get these new people to ask the questions they really needed to ask. One of the NSP committee members from the Platte Valley group in central Nebraska gave me a CD-ROM with some shareware on it as a door prize for the school. When one guy in the back row of the restaurant finally asked a question, I answered it and then awarded him the disk, letting everyone else in the room know that sometimes, asking a question provides more of a reward than just the answer! Once I finished with the Field School, I took a look at the two vendors set up on the north entrance to the restaurant (Astrosystems and Camera Concepts). Liz Bergstrom, our club's "binocular aficionado", was quickly consulted on one pair of Celestron 10x60's I had my eye on. The recommendation "BUY THEM" came back, and I became \$99 poorer but at least now, I have a decent pair which are tack-sharp and don't slide out of focus!

I noticed large cumulus clouds in the north, activating my storm-spotter instincts. A quick look at the radar showed a line of intense thunderstorms was bearing down on our area with a severe thunderstorm watch in effect. We sent Liz to the observing fields to warn people. Still, even as the sky darkened and the wind began to increase, the vendors kept right on selling their stuff! Finally, as the gust front arrived, it forced them to quickly pile their wares into boxes, vans, and the foyer of the restaurant until the storm passed. The storm dumped a heavy burst of rain over the area, but the skies cleared before sunset and we had a great night of viewing. John Lammers and I set up his 8 inch f/5 Newtonian, my ten inch f/5.6 Newtonian, and my 100mm f/6 refractor next to where the road in the site splits to go to either Dob Row or the lower campground. While my computer was doing a disk scan initiated by Windows for a boot problem, I wandered around a bit. I did a little trouble shooting on a new ETX finder one attendee was trying to get to work, and when I finished there, another gentleman grabbed me to work on a balky LX-90, which wouldn't do a proper 2-star alignment (minor finder scope problem again). I wandered over to Dob Row for a look at M13 in Tom Miller's 30 inch, and I could see color in some of the stars.

Finally, my laptop computer I use for MEGASTAR finished its little Win95-induced tirade and it was time to observe. The Milky Way put on its usually stunning visual show, being easily seen even before twilight ended. John put his

30mm WideScan III eyepiece in my 100mm f/6 refractor (a *FOUR* degree field of view at 20x), and we were blown away by the views up and down the Milky Way. Imagine viewing *both* M8 and M20 in all their glory the same field of view with the UHC filter and you get the idea. We cruised the dark nebulae, which flow around and past the large Sagittarius star cloud, and held M24 in awe as a glistening cloud of stars framed nicely in the eyepiece. The Scutum star cloud was particularly well shown in that little 100mm aperture, bounded by patches of dark nebulosity and M11 shining brightly on its northern edge. The entire Veil Nebula was beautifully displayed in the scope with the UHC and OIII filters, including both arcs and the small triangular mass between them. The North America and Pelican Nebulae were also easy targets in that scope. In fact, other than a few brief looks at things (and some long looks at Mars), I didn't use my ten-inch nearly as much as the refractor. After a look at M31 in the refractor (wonderful as usual), we were taking a break when I glanced up at the head of Draco and decided to do a little star counting. John and I found a dim triangle of three stars near the middle of the head asterism, so I turned around to my computer to find out how faint they were. The one near the center of the head was easiest at magnitude 5.75, and the second one was 6.61, but to my surprise, the third and faintest star in the triangle was 7.59! It was *definitely* a good night!

We went up to the 22 inch Dob on the ridge next to our observing spot and did some more sight-seeing. We looked at the core of M31, and the whole area seemed to be faintly yellowish-orange, somewhat like the color of Arcturus. The owner was looking at planetaries, but did agree to try for the "Bubble" nebula NGC 7635 in Cassiopeia. He thought he found it, but when I looked in, it was clear that he had found something else. He was pointed at the nearby nebula NGC 7538, which looks like an irregular puffball around a pair of stars. A few nudges later brought the Bubble Nebula into the field. For the first time, I could just begin to see the arc-like cusps that give this object its name. We even tried (and saw) the central star in M57 before going back to planetary hunting. Mars was showing a fair amount of detail in my ten inch with Syrtis Major sitting near the middle of the planet. The 22-inch showed it as well, but seeing had started to decline a bit. Since we were in the area, we hit the Helix Nebula, and it was quite nice with the OIII filter. After a quick trip down Dob Row, we both decided to call it a night.

Wednesday was the last day of the Field School, and we covered a lot of ground on eyepieces, observing techniques, and projects. I also spent more money to buy a 30mm WideScan III eyepiece from Astrosystems. The NSP Beach Party then got into full swing, with sand volleyball, a sand wedge pitching contest, 2-legged races, and a lot of fun in the water. The kids had a lot of fun with the water balloon toss, with NSP Clear Skies Coordinator Alan Scruggs of Amarillo, Texas being the main target. Brewers Tubing brought out their gigantic Indian-style canoe that holds between 10 and 20 people, and many took advantage of it for a quick trip out onto the lake. At about the same time, the swap meet was being held in Dillon's lounge and I noticed that John Lammers had finally sold one of his eyepieces. Later, the free Brats Barbeque was held and more door prizes were awarded, followed by a long night of observing under a clear sky. At Merritt Resort, a public star party was also held that evening put on by a small group of NSP staff and attendees. Between 50 and 100 people from the area showed up, and were treated to a constellation talk by NSP regular Lorri May of Wentworth, South Dakota, along with viewing in 4 and 5 inch refractors, a couple of medium-sized Dobs, and an 18 inch Obsession. Thursday was the day of the tubing/canoe trip down the Niobrara river, where a lot of people took in the scenery of the canyon or got wet in the water gun battles on the tubes or from standing under Nebraska's highest waterfall, Smith Falls. A catered steak dinner was held that evening at the Water's Edge restaurant, and after that, most went back to the observing fields. I ran into the reporter from the NBC affiliate KNOP in North Platte and we had a nice discussion about what he had filmed. The western sky was starting to fill with high clouds from some thunderstorms in the area; so most only got an hour or two of viewing before having to tear down for the night.

Friday was the last full day of the star party and was highlighted by the formal presentations held in Valentine at the United Methodist Church. This was a change in venue, as the High School was undergoing a replacement of its air conditioning system, but the large church meeting room worked quite well. Several vendors were present, including Pete Smitka of Mag-1 instruments, and the swap meet also continued in the hallway. In the main meeting room, Bill O'Donnell gave a fascinating multi-media presentation of "Astronomy in Art, Music and Poetry", although he may never live down his reading of the children's book "Goodnight Moon" to a bunch of adult Astronomers! This was followed by lunch on-site provided by Pizza Hut and served by local school students to make money for their activities. The next speaker was Michael O'Connor's "Dakota Star Lore", followed by Richard Nugent's presentations, "The Age of the Crab Nebula Supernova", and a short one on the International Occultation Timing Association. The last talk was by South Dakotan Ron Dyvig, entitled, "Badlands Observatory...From the Ashes". A large number of door prizes were then given away, with the grand door prize being a 6 inch Dob from Hardin Optical for the kids and a Meade ETX-125EC Mak-Cassegrain for the adults.

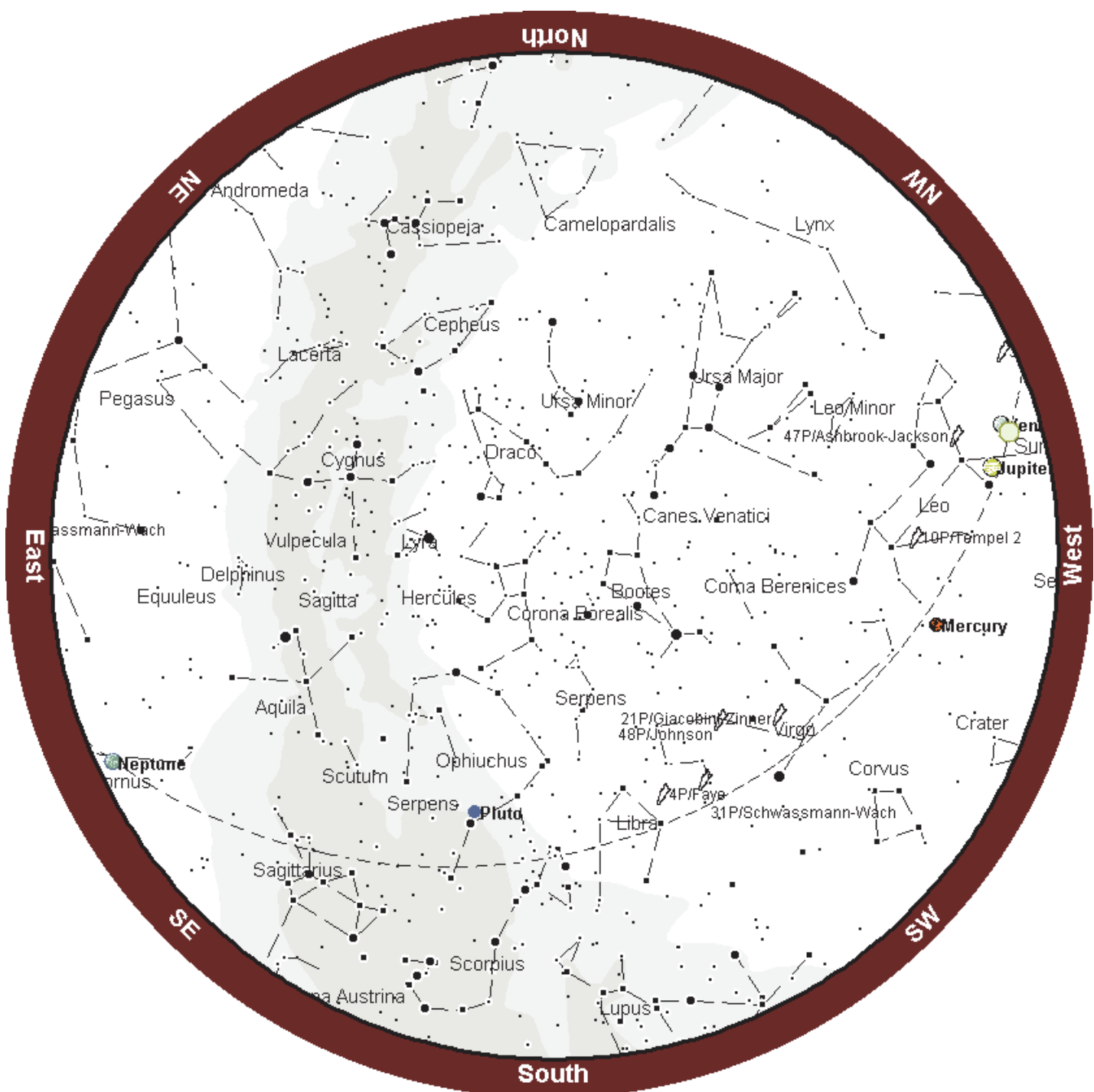
Those not having to travel back home went back out to Merritt Reservoir for a final night of observing under clear skies. Many of the NSP staff had a full-blown cook-out behind the cabins with lots of food for everyone. The crescent moon made its appearance, but it didn't stay up long and certainly didn't hurt things all that much. Richard Nugent brought his I3 image intensified eyepiece and put it on Don Chrysler's 14 inch Celestron SCT, where it was directed at a large number of things. Although the number of people present was down from earlier in the week, Dob Row remained the

center of all the action, with a large number of scopes set up, including Jim Rippey's 25 inch Obsession. Most observed to at least 3 a.m., when many of us decided to break down early due to having to travel long distances home after dawn (I had to get going by 11:00 a.m.).

Final numbers were: ATTENDEES: between 270 and 300. NIGHTS CLEAR: 4 (including 3 in a row). NIGHTS PARTLY CLOUDY: 2, NIGHTS COMPLETELY OVERCAST: ZERO!

Hopefully, we will see you all at the next Nebraska Star Party.

August Star Chart



Events Calendar

September 2003						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1  Sun: 18:53 - 08:00	2  Sun: 18:54 - 07:58	3  Sun: 18:55 - 07:56	4  Sun: 18:56 - 07:55	5  Sun: 18:57 - 07:53	6  Sun: 18:58 - 07:51 Hyde Observatory open to the public
7  Sun: 18:59 - 07:50	8  Sun: 18:59 - 07:48	9  Sun: 19:00 - 07:46	10  Sun: 19:01 - 07:45	11  Sun: 19:02 - 07:43	12  Sun: 19:03 - 07:41	13  Sun: 19:04 - 07:40 Hyde Observatory open to the public
14  Sun: 19:05 - 07:38	15  Sun: 19:06 - 07:36	16  Sun: 19:07 - 07:35	17  Sun: 19:08 - 07:33	18  Sun: 19:09 - 07:31	19  Sun: 19:10 - 07:30 Mahoney Star Party	20  Sun: 19:11 - 07:28 Hyde Observatory open to the public
21  Sun: 19:12 - 07:26	22  Sun: 19:13 - 07:25	23  Sun: 19:14 - 07:23	24  Sun: 19:15 - 07:21	25  Sun: 19:16 - 07:19	26  Sun: 19:17 - 07:18 Club Star Party	27  Sun: 07:18 - 19:17 Hyde Observatory open to the public
28  Sun: 07:19 - 19:15	29  Sun: 07:20 - 19:14	30  Sun: 07:21 - 19:12 PAC Meeting 7:30pm				

**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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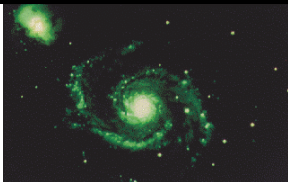
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**The Prairie Astronomer
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First Class Mail

**Next PAC Meeting
August 26, 2003
7:30 PM
Hyde Observatory**