

THE PRAIRIE ASTRONOMER

THE OFFICIAL NEWSLETTER OF THE PRAIRIE ASTRONOMY CLUB, INC.

NOVEMBER 2000

VOLUME 41 ISSUE #11

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Astronomy in NE: www.blackstarpress.com/ar/n/
Hyde Observatory: www.blackstarpress.com/ar/n/hyde/

NOVEMBER'S PROGRAM:

November's program will be a presentation from the Nebraska chapter of The Mars Society. Mr. Tom will be giving the presentation.

CLUB EVENTS



PAC MEETING

TUESDAY, NOVEMBER 28, 2000, 7:30 PM
at Hyde Memorial Observatory

CLUB STAR PARTY

FRIDAY, DECEMBER 22, 2000
at Wagon Train Lake
(See map on back page)

PAC MEETING

TUESDAY, DECEMBER 26, 2000, 7:30 PM
at Hyde Memorial Observatory

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.

2001 RASC OBSERVERS HANDBOOK: If you placed an order for the RASC Observers Handbook and/or the Ottwell Calendar, be sure to bring your payment to the November meeting. They are \$15 each.

EUVE SPACECRAFT TO SHUT DOWN: The Extreme Ultraviolet Explorer (EUVE) spacecraft introduced the universe in a whole new light. And during its extended, eight-year term in space, EUVE exceeded astronomers' expectations for what it would teach us. But despite the requests of some astronomers to extend the mission one more year, NASA has decided to cease operations of the spacecraft in December.

YOUR ARTICLES NEEDED!: Be sure to send me that article you've been meaning to write for some time. Or even a quick note on some observing you've been doing. Otherwise, I'm forced to fill empty space with some rather poor astronomy humor.

Q: How many astronomers does it take to change a light bulb? Answer on the bottom of page two.

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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: Willa Penney

Prairie Astronomy Club
October 24, 2000

President Dave Knisely called the meeting to order; there were no guests. Dave reported that the red spot on Jupiter is "back with a vengeance". He also said that Saturn is marvelous and anything larger than 3.5" should be able to pick up the C-ring.

There were 42 people at the Fall Banquet at Mahoney State Park; Jack Dunn presented the program. Next year's banquet will be held on Friday, October 12.

The Star Walk at Homestead National Monument on September 29 attracted 40 people. They were so pleased with the event that they donated \$100 to our club.

Next year, the Mahoney Star parties will only be held through September because of scheduling conflicts.

The next NSP planning meeting will be November 9 at Mahoney State Park Lodge; Dave Hamilton said that the 2001 star party will run from Sunday-Friday next year. The field school will be held on that Wednesday at the Waters Edge Restaurant. The monthly planning meetings are open to anyone and all are welcome.

The next club star parties will be October 27 and November 24 at Wagon Train.

The next Youth group will meet November 3; Mark Fairchild said that, because he is the only adult involved, more adults will need to be involved or the group will disband.

Lee Taylor suggested that a refresher course for volunteers be held several times a year. Dave Churilla is now the Volunteer Coordinator for Hyde, replacing Mark Fairchild.

Mark Dahmke has added a news feed to the PAC website: space.com. Please send any articles for the website to Mark. Instructions for joining the PAC list are in the October newsletter. It was again suggested that, if you answer any questions posed on e-mail, you cc: the PAC list so that everyone knows that the question has been answered.

Liz Bergstrom, treasurer, has club T-shirts, hats, 1 polo shirt and 1 jacket for sale. She also has a list for the RASC handbook and the Ottwell calendar. The order will be sent in after the November meeting; you MUST pay at the time of your order.

Erik Hubl reported on the fireball sighting on Friday, October 13. It has been determined that it was the 4th stage of a proton rocket from a Soviet satellite. Eric also reported on the planned development on the NE corner of 70th & Pioneers. The developer will meet with the Hyde committee sometime in early November to present the proposed plan and listen to lighting suggestions from the committee. Erik asked that members of the club attend to show our support; he will notify everyone via the PAC list as soon as a date has been set.

Election of officers for 2000-2001 was held:

President – Dave Knisely
Vice-President – Dave Brokofsky
2nd Vice-President – Brian Sivill
Secretary – Pam Fiedler
Treasurer – Liz Bergstrom

Meeting was adjourned to our program: Mark Plano Clark presented a program on the history of the Boswell Observatory at Doane College.

Answer to question on page 1: *None! Astronomers aren't afraid of the dark.*

Star Party Observations



By Brian Sivill

I guess the Friday night star party fell victim to unpredictable weather. I had to wait until 9:00pm when my wife got off work before I could leave for Wagon Train.

I arrived at 9:30 surprised to find no one there. Skies were remarkably clear, but there was a fairly stiff wind. I surmised that perhaps people had shown up, but the wind got the better of them. I decided to set up, and go it alone. Before I even got my heavy coat put on, Doug Bell drove up and we set up together.

It took about 10 or 15 min for me to get out my little 6" Meade and the Club's 13" Dob. Doug, meanwhile had put up his Brandon Vernonscope refractor. This was JUST long enough for a thick layer of clouds to roll in and fully obliterate the entire sky. SIGH.

Doug and I pulled up our chairs and started chatting; weather, astronomy, philosophy. We even resorted to scoping out the peculiar activities on the other side of the lake (nothing interesting). After about 20 min of conversation, the clouds started showing some openings, and Doug treated us to a nice peek at Jupiter and Saturn. It wasn't long before the sky had completely cleared off again and we were back in full swing. Doug showed me a view of the Pleiades in his

refractor, that in my experience, was one of the finest looks at this object I've ever seen. The background was black as coal, with the crystal-blue stars shining like diamonds.

With the 13" I viewed M33 in Triangulum, only barely making out any structure. I swung over to Auriga and checked out M37, 36 & 38 (M36 seems to be the most elusive). I also hit a few globs in Pegasus and Aquarius. I just love putting M2 under high power! Doug was busy too, and he called me to the eyepiece a few times. That refractor is dangerous, it has a way of making you WANT one....yikes. After about an hour and a half of very good sky, the clouds were moving back in, and we decided to call it a night.

All in all, it was a satisfying evening and I really enjoyed Doug Bell's company. Looking forward to the next one!!

--Brian Sivill
nanoamps@aol.com

Question: What is more useful: the sun or the moon?

Answer: The moon, because the moon shines at night when you want the light, whereas the sun shines during the day when you don't need it.

KIDS AND SCIENCE

The beguiling ideas about science quoted here were gleaned from essays, exams, and class room discussions; most were from fifth- and sixth-graders. They illustrate Mark Twain's contention that the "most interesting information comes from children, for they tell all they know and then stop."

- You can listen to thunder after lightening and tell how close you came to getting hit. If you don't hear it you got hit, so never mind.
- When they broke open molecules, they found they were only stuffed with atoms. But when they broke open atoms, they found them stuffed with explosions.
- When people run around and around in circles we say they are crazy. When planets do it we say they are orbiting.
- While the earth seems to be knowingly keeping its distance from the sun, it is really only centrifuging.
- Most books now say our sun is a star. But it still knows how to change back into a sun in the daytime.
- Some people can tell what time it is by looking at the sun. But I have never been able to make out the numbers.

METEOR SHOWER REPORT



Radio Meteor Observations
of the 2000 Leonid Meteor Shower
November 18th, 2000, 0700-0900 UT
Rockford Lake, Nebr. 40.227N, 96.581W, 1400 ft elevation.

Equipment: 1989 Chrysler Minivan AM/FM digital radio and Winegard 13 dB RF amplifier and extended whip antenna. Frequencies used: 105.5 Mhz, 91.5 Mhz, other frequencies below 92 Mhz.



After last night's somewhat limited success, I decided to go all out and use my "Mobile FM-DX" system in my van. It tends to be rather sensitive, as those of you who heard the Omaha stations from the site of NSP can probably attest to. I left Beatrice about 1 a.m. (0700 UT), and while driving, I did a count of the radio pings. In about a minute or two, I had heard about 17, and by the time I arrived at my viewing site at 0716, I had heard 112 meteor pings! However, I saw more meteors (about 5) while driving out to my site than I did the entire time I was on station, as low stratus clouds were

quickly filling the sky. I retreated into the van, and fell back on meteor ping counts once again. The number was fairly steady, with much of the time having more than 2 per minute. After about 0730, the number began to shoot up *very* rapidly, making counting rather difficult as often over ten pings were frequently recorded nearly every single minute! The first 4 digit number is the time (UT) and the number after the colon is the number of radio pings heard during that minute (ie: 0736: 17 means beginning at 0735 hrs UTC, 17 pings were heard during the following minute).

0700-0716: 112 (total, not using tape recorder) minute by minute loggings:

0717: 0 0718: 2 0719: 1 (1 vis.) 0720: 1 0721: 4 0722: 2 0723: 2
0724: 2 0725: 2 0726: 0 0727: 1 0729: 2 0730: 0 0731: 16 0732: 20
0733: 13 0734: 8 0735: 11 0736: 17 0737: 12 0738: 11 0739: 11
0740: 14 0741: 10 0742: 14 0743: 17 0744: 9 0745: 13 0746: 16
0747: 11 0748: 14 0749: 9 0750: 16 0751: 11 0752: 15 0753: 13
0754: 10 0755: 9 0756: 10 0757: 8 0758: 14 0759: 7 0800: 12 0801: 9
0802: 11 0803: 10 0804: 14 0805: 6 0806: 7 0807: 11 0808: 7 0809: 8
0810: 8 0811: 14 0812: 9 0813: 23 0814: 14 0815: 7 0816: 10


After 0816, the tape recorder's battery was getting rather low, but the high rate of 7 to 10 meteors per minute continued for another ten minutes or so before starting to decrease slightly. By 0845, the number had dropped to from 2 to 6 per minute, and by 0900, the sky had cleared, but very few visual meteors were seen. More than a few of these pings were long enough to get some idea of the kind of station doing the transmission. One burst in particular sustained a readable signal for about 5 minutes! The 1st hour total was 502 pings between 0700 and 0800 UT and the maximum rate per minute for the entire observation period was a

whopping 23 meteor pings per minute!! During the "outburst" phase from 0731 to 0816, the rate averaged about 12 per minute, which would translate roughly into about 720 per hour. From my brief visual observations, I would say that I was detecting between 3 and 4 times the number of meteors which an individual might see visually, since many were brief and probably were being drowned out by the moon. This is by far the most intense radio meteor shower I have ever heard. Clear skies to you.

David Knisely

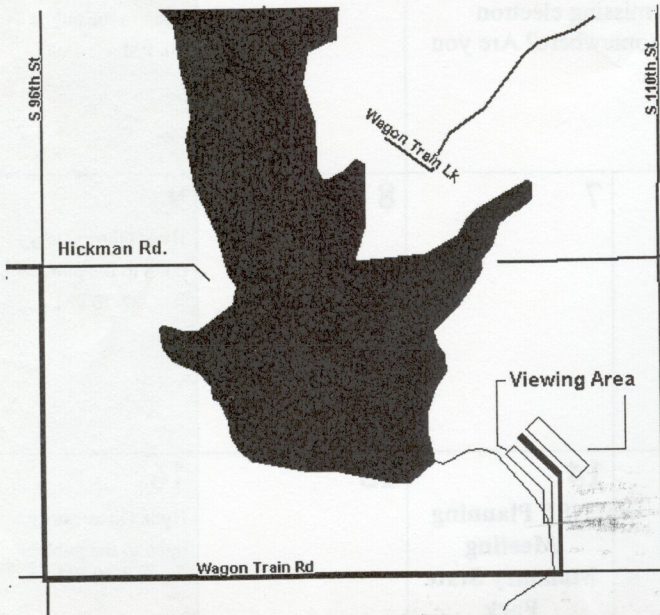
THE PRAIRIE ASTRONOMY CLUB CALENDAR

For December 2000

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
<p>A hydrogen atom lost its electron and went to the police station to file a missing electron report. He was questioned by the police: "Haven't you just misplaced it somewhere? Are you sure that your electron is really lost?" <i>"I'm positive."</i> replied the atom.</p>					1	2 Hyde Observatory open to the public 7-10 PM
3	4 1 ST QUARTER 	5	6	7	8	9 Hyde Observatory open to the public 7-10 PM
10	11 FULL MOON 	12	13	14 NSP Planning Meeting Mahoney State Park	15	16 Hyde Observatory open to the public 7-10 PM
17	18 3 RD QUARTER 	19	20	21	22 Club Star Party	23 Hyde Observatory open to the public 7-10 PM
24	25 NEW MOON  Merry Christmas!	26 PAC Meeting 7:30 PM Hyde Observatory	27	28	29	30
31	<h1>Have A Happy New Year!</h1>					

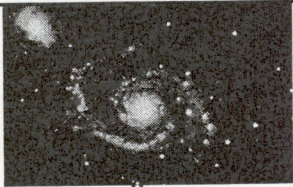
**Directions to Wagon Train Lake
Observing Site**

From Hickman, NE, turn East on Hickman Road. Go until you reach 96th Street, then turn RIGHT. Drive until you reach Wagon Train Road, then turn LEFT. Area 6 is about 3/4 of a mile East. Turn LEFT into Area 6.

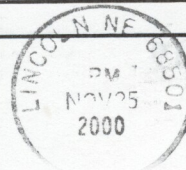


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The Prairie Astronomer
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First Class Mail

**Next PAC Meeting
November 28, 2000
7:30 PM
Hyde Observatory**

EARL MOSER 9/2001
P O BOX 162
HICKMAN NE 68372-0162

