



The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

January 2003

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JANUARY PROGRAM

January program: New Scope Owners Night

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

Tuesday, January 28, 2003
 New Scope Owners Night

Club Star Party

Friday, January 31, 2003

PAC Meeting 7:30pm

Tuesday, February 25, 2003

Club Star Party

Friday, February 28, 2003

NSP Planning Meeting 7:30pm

Thursday, March 13, 2003
 Mahoney Lodge

Astronomy Day

Sunday, April 06, 2003
 Mueller Planetarium

Mahoney Star Party

Friday, May 09, 2003

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.

Mahoney Star Party dates for 2003: May 9, June 20, July 18, August 22, September 19.

Nebraska Star Party: July 27 to August 1, Merritt Reservoir, Valentine, Nebraska.

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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 December 30, 2002

President Dave Knisely called the meeting to order. Welcome visitor Jim Bauer.

Congratulations to Dave Brokofsky for receiving his Messier certificate for 70+ objects.

For the rest of us, the Astronomical league issues awards for observations such as seeing 70+ Messier objects, all 110 of them, lunar features, double stars, etc. For more information, see our observing chair, Jeff King. Also, during the club's star parties this year, there is a group, including Steve Lloyd and myself to observe the Messier objects before the end of the year. We intend to meet at star parties and/or when/if we can get together to help each other commit ourselves to finding and observing all Messier objects.

At the last PAC star party, we had 4 people, Dave & Joey Churilla, Dave Knisely, and John Lammers.

If you have an itch to go out observing some evening, put a note on the PAC-list and you might get some company.

The next PAC star party will be Friday Jan 3, 2003.

There is a new comet in Hercules Kudo-Fujikawa while we get some time to see it, the best show will be in the southern hemisphere.

The next PAC meeting will be Tuesday January 28, 2003. The program will be New Scope Owners Night. The public is encouraged to bring their new Christmas present telescopes out to Hyde and we'll help them understand, use and get the most out of their new equipment. Program chair Brian Sivill asks all PAC members to bring, not necessarily their telescopes, but as many TOOLS as you can as they will probably be more useful.

The next date for a public night at the UNL student observatory has not yet been set, but Martin Gaskell will put a note on the PAC-list as soon as the date is determined.

Brian Sivill is always looking for new ideas for programs. If you have done something interesting or would like to, get in touch with Brian.

National astronomy day is scheduled for May 10. HOWEVER, WE WILL BE CELEBRATING IT ON SUNDAY APRIL 6, 2003 AT MUELLER PLANETARIUM. PAC members are encouraged to bring out their telescopes and show the public at Mueller what we do. Hyde will also be open that evening.

The Mahoney star party dates have not yet been set.

The next NSP planning meeting will be Jan. 9th.

Hyde Observatory will be receiving a new solar array power system over the next few months. Dedication is tentatively scheduled for March.

The PAC newsletter is available online on the PAC website. Get in touch with an officer or Mark Dahmke for instructions on how to access it.

Treasurer's report: RASC's and Ottwell calendars are in!!! If you ordered one, Liz has it.

Jeff King and Dave Brokofsky have volunteered to help Liz with the annual audit of the PAC's books, thanks Dave and Jeff.

We had a nice recorded view of the Leonids Meteor shower, thanks to Martin and Jeff Campbell's video of the event.

Steve Lloyd moved to adjourn and Liz seconded, adjourn to program.

Larry Stepp provided his annual review of the new projects in astronomy. This year, site selection for the Overwhelmingly Large Telescope.

Respectfully submitted by,

Lee Taylor

Hyde Observatory Volunteer Schedule

Date	Team Leader	Operators		Supervisor	Events
January					
1/18/03	Jeff King	Justin DeVries	AJ Benker	Brian S	
1/25/03	Dave Hamilton	Jeff Campbell	Bob Leavitt	Rick J	
February					
2/1/03	Brian Sivill	Dan Delzell	Jared Delzell		
2/8/03	Dave Churilla	Joey Churilla	Lynda Beck		
2/15/03	Jeff King	AJ Benker	Bob Leavitt	Dave H	
2/22/03	Bill Wells	Karla Bachman	Josh Machacek	Rick J	
March					
3/1/03	Jeff King	Justin DeVries	Karla Bachman	Brian S	
3/8/03	Dave Hamilton	Steve Lloyd	Lynda Beck	Dave C	
3/15/03	Dave Churilla	Joey Churilla	Bob Leavitt		
3/22/03	Bill Wells	Lee Taylor	Josh Machacek	Rick J	
3/29/03	Brian Sivill	Dan Delzell	Jared Delzell	Dave H	
Summer Hours: April through September (Sun down to 11:00 PM)					
Winter Hours: October through March (7:00 PM to 10:00 PM)					

Observing Report — Dave Brokofsky

Location: Olive Creek SRA
Instrument: 120mm Skywatcher Refractor
Power: 33X, 56X, 71X, 115X
Objects: NGC 2129, NGC 2022, NGC 2325, M 74, M 42
Seeing: 8.5

Over all, the night was a good one to kick off the new year. When I arrived at Olive Creek I was met by Jeff Campbell and Karla Bachman who both arrived before I did. I was also followed in by some guests that turned out to be friends of Dave Churillas.

After taking some time to set up and get acquainted with the sky that was almost perfect I decided it was time to get started. By then Dave and Joey Churilla had shown up and were in the process of setting up.

The first object I started out with was NGC 2129 not far from 1 Geminorum using my 14mm wide angle (No, not an ultrawide but a wide angle from Intes). It took a little time to find this cluster since there are a lot of background stars in the vicinity but once I had found it I noticed that it stood out nicely from the background. Other than that, there wasn't much to note except that there were about forty or so members in the cluster. Having logged that cluster I decided to move on as a high deck of clouds was now starting to move into that area of the sky.

My next object was NGC 2022 in Orion. It is a faint planetary nebula and not all that large but I decided to shoot for it anyway to see if I could find it. I started out using my Meade 26mm for a nice wide field and low power. Finding 29 Lamda Orionis (a.k.a. Meissa) I moved the scope to the south and east of Meissa into the area where both "the Sky" and "Cartes Du Ciel" indicated 2022 was to be. I panned around for a while but found nothing. I rechecked the location of the nebula and again searched the area until that cloudbank moved in. I then decided while I waited to see if the clouds broke, to look further south to see what I could find in Canis Major.

After looking over what all was in Canis Major I decided to go for a relatively bright galaxy in far Southern Canis Major, NGC 2325. This galaxy proved to be a challenge indeed. Being fairly low in the Southeastern sky and being around a magnitude 11.2 I knew this galaxy would take some work. So I consulted my laptop for the position and started my search at 21-Epsilon Canis Majoris (Adhara) and from there moved a little bit north and a ways east to where this galaxy as well as many fainter ones are found. After panning around for awhile I again came up empty handed (this was

becoming monotonous) and so was forced to try another way of finding this galaxy using what I knew about star hopping and the sort.

After formulating anew strategy I again went back to the telescope to again try to locate this galaxy. My next attempt took me to the star 22-Sigma Canis Majoris not far to the north and east of 21-Epsilon Canis Majoris and then made my way to the brightest star between the two from there I made my way a little bit south and east until I finally ran into an elongated fuzzy patch. Using averted vision and moving the scope just slightly I confirmed it was really there and then checked my position with the telrad. That was definitely NGC 2325. From there the clouds began to become more numerous I decided that my extreme deep sky viewing was probably over so I stuck to the brighter items. My first was M-42 revisited. It seemed relatively bright at 40X and even the trapezium was easily visible as four tight pinpoints of light. I looked at the overall structure and noticed that only the largest of detail was visible due to the thickening high clouds. I then decided to leave Orion and look for something in the now clearing southern sky.

My final target was M77 a pretty bright galaxy in Cetus. it actually didn't take a great deal of effort to find the galaxy once I located the star 82-Delta Ceti. From there it was just a little way east and a tiny bit south. There I found M77, There wasn't a great amount of detail but a bright core and some hints of the spiral arms were present in my view.

Before long the clouds had again started to cover the sky and looked, this time, to be for good so I took that as a sign to pack up and get ready to head for home. By then it was coming up on eleven o'clock in the evening and I needed to get home anyway since I had things to do for the next day. Before I could get completely packed up John Lammers arrived with his eight inch tube. I had a look through the scope at Orion as it again peeked through the cloud deck. The view was a wide, fairly sharp view as John used a 32mm Plossl. It will be interesting to see his scope when it is completed.

From there Dave's guests left and the Churilla's and I packed it up as it didn't seem that the sky was going to open up anymore tonight. We finished listening to the Fiesta bowl on Dave's transistor radio then we all talked for a little while before I left as it was almost eleven forty.

To sum things up we ended up with three scopes at the star party (counting John's eight inch tube without a mount :) and about nine people total. It was a good time and the sky, if you ignore the clouds, was almost perfect. Sure hope the sky can be that clear next month.

Star Party and Observing Report — Dave and Joey Churilla

Greetings Everyone,

Well, the Holidays and the cold probably played a big part in keeping attendance down for the Star Party Friday night, but I have to say it was one of the more enjoyable in awhile for Joey and I.

We arrived at Olive Creek at about 7:45 PM, just ahead of a father, his daughter and son whose names escape me (my apologies to them, as I know they are on the PAC List and reading this). We enjoyed their company for about an hour and a half before the cold got to the youngsters (actually the son is in high school and the daughter in college). While they were there Joey and I visited some old favorites:

M31: we tried it with the deep sky filter and it seemed to make a rather significant difference. I could see the star field much clearer and even some structure with the filter.

M33: again, we worked it with the deep sky filter and with averted vision and prolonged and continuous viewing one could make out some of the spiral structure.

Other favorites we viewed with our companions were Saturn, the Double Cluster in Perseus (NGC 869/884), and the Orion Nebula.

Our friends left at about 9:30 or so and Joey and I decided to hang around and work on his Herschel 1 list (I'm his assistant...you know, hand him this eyepiece, look up stuff in Night Sky, etc).

Since the night was a bit hazy, with some nice clear times, we decided to work on Open Clusters. We began our search in Gemini working first on the Open Cluster NGC 2129. This cluster is a hazy glow just SW of M35, but very evident. It was a pleasing cluster with about 20-25 stars visible (it has about 40). The surface Magnitude is 8.6, but there are a couple of slightly brighter stars in the center. While the cluster is not tightly packed, it's tight enough to be obvious.

Next we hit NGC 2158, which is just SW of M35, in fact with the edge of M35 just in view at 83X we could see the Open Cluster. Its surface Magnitude is also 8.6, but a little patch of haze had blown in and although we could see the cluster, it was, at first just little patch of blurry haze. But averted vision and the 9mm Nagler helped to bring out some of the stars (there are over 900 of them in the cluster). It appears very small compared to M35 and there are a string of 5 stars that seems to trail from M35 to the cluster.

NGC 2266 was our next target, a wedged shaped Open Cluster just NE of Epsilon Gemini. Again the haze hindered a really good view, but there are 5 stars that make the shape of a sword in the middle of the cluster. It was again a pleasing view although one needed averted vision again to see more of the stars (there are about 50, but Joey counted about 27).

Next he tackled NGC 2304, a little more difficult as it was farther away from the guide stars and only Magnitude 10.0. It lies between and a little S of a line between Zeta Gem and Gamma Gem, and nearly in the middle. I didn't look at this one, but Joey described it as a very faint haze of about 20 stars in a semi circle (there are actually 30 of them).

Joey was getting a bit tired and it was about 10:15 PM, so we looked at Saturn and Jupiter, poured ourselves some hot Chocolate and decided to take a break, considering packing it in. We decided to wait until 11:00 PM to see if Dave Knisely and John Lammers showed up. Luckily, they did. Ours was still the only scope set up so Dave proceeded to give Joey some objects to have fun with.

The first was NGC 2264, the Christmas Tree Nebula in Monoceros. It surrounds the star 15 Mon and has some nebulosity to it. Its several parts resemble a Christmas tree and although we didn't do it, a nebula filter should bring out some of the cloud's wispy tendrils.

Next we looked at Hubble's Variable Nebula, NGC 2261 (a Herschel 2 object). It's an emission nebula about a degree SSW of NGC 2264 and has somewhat of a comet shape to it.

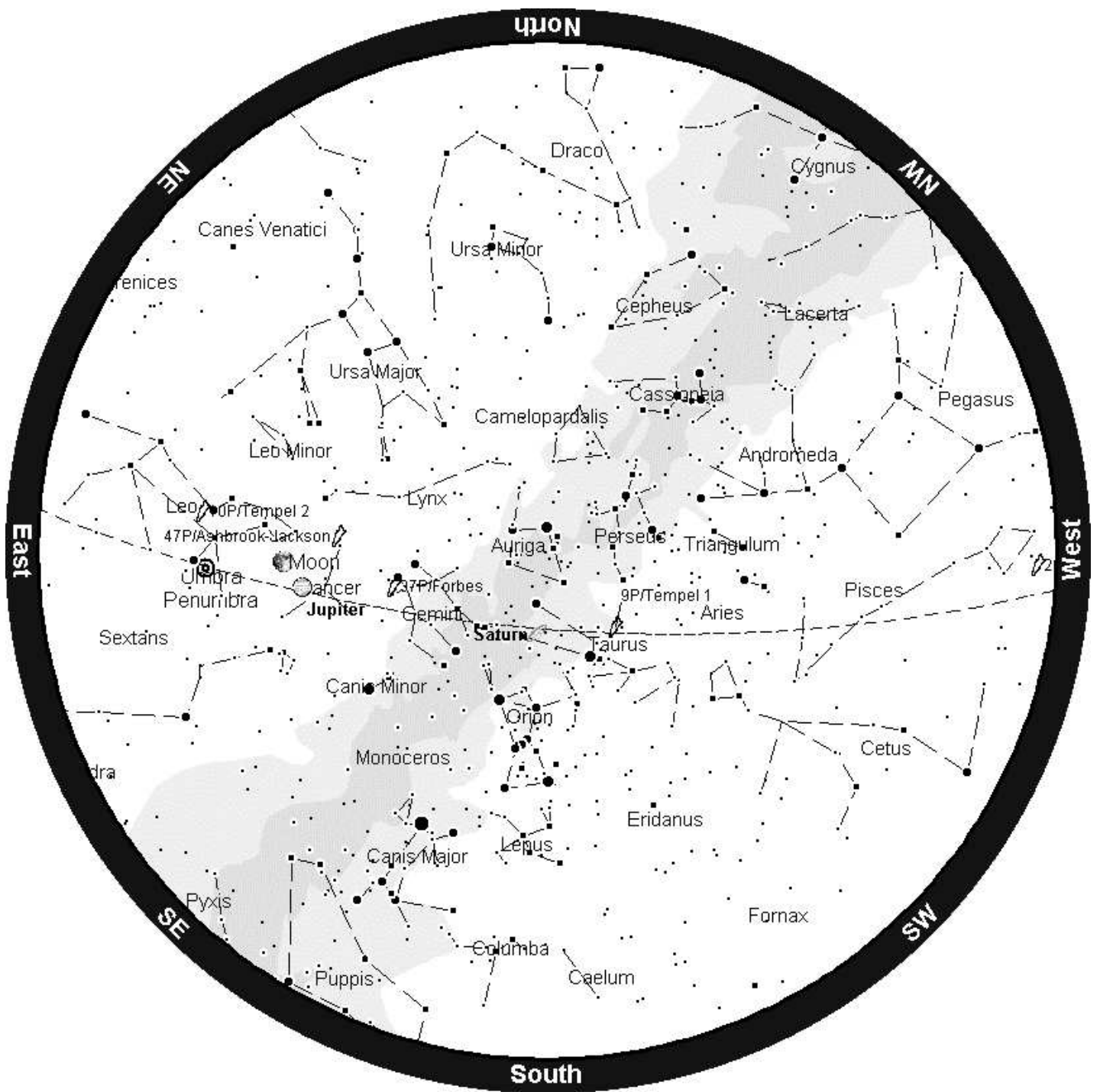
Our last object was NGC 2169, which is about a degree W of Xi Ori. It's a particularly interesting Open Cluster as it seems to have 2 parts and actually makes the number " 37 " . It was fun looking at it.

At that point everyone was getting tired and the time was approaching 1 AM. I put one of my favorite objects in the scope, M42 (the Orion Nebula), as the haze had cleared rather nicely in that area. It was spectacular in the Glass Hand grenade (Meade 14mm Ultra Wide), but I stuck the O-III filter on the 9MM Nagler and it was amazing. The combination of 127X and the filter brought out detail I've not seen before-- gorgeous wisps and 3d rendering that were mesmerizing.

However, we all decided that the breeze that had kicked up and lateness of the hour made it time to pack up. I think Joey and I finally hit the sack at around 2 AM.

All in all it was a most enjoyable time out...with the exception of not having all of you out there with us. Hopefully the next time we'll have a great crowd.

February Star Chart



Events Calendar

February 2003						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1  Sun: 07:36 - 17:43 Hyde Observatory open to the public
2  Sun: 07:35 - 17:46	3  Sun: 07:34 - 17:46	4  Sun: 07:33 - 17:47	5  Sun: 07:32 - 17:48	6  Sun: 07:31 - 17:49	7  Sun: 07:30 - 17:51	8  Sun: 07:29 - 17:52 Hyde Observatory open to the public
9  Sun: 07:28 - 17:53	10  Sun: 07:27 - 17:54	11  Sun: 07:26 - 17:56	12  Sun: 07:24 - 17:57	13  Sun: 07:23 - 17:58	14  Sun: 07:22 - 17:59	15  Sun: 07:20 - 17:59 Hyde Observatory open to the public
16  Sun: 07:19 - 18:00	17  Sun: 07:18 - 18:02	18  Sun: 07:16 - 18:03	19  Sun: 07:15 - 18:04	20  Sun: 07:14 - 18:05	21  Sun: 07:12 - 18:06	22  Sun: 07:11 - 18:08 Hyde Observatory open to the public
23  Sun: 07:09 - 18:09	24  Sun: 07:08 - 18:10	25  Sun: 07:07 - 18:11 PAC Meeting 7:30pm	26  Sun: 07:05 - 18:12	27  Sun: 07:04 - 18:14	28  Sun: 07:02 - 18:15 Club Star Party	

**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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First Class Mail

**Next PAC Meeting
January 28, 2002
7:30 PM
Hyde Observatory**