

The Prairie Astronomer

April, 2009

Volume 50, Issue #4

The Official Newsletter of the Prairie Astronomy Club

PAC Program

"Saturn: Jewel of the Heavens" This is a "flat" version of a new fulldome show from Clark Planetarium. About 8pm, Tuesday, April 28 at Hyde Observatory.

In This Issue

Focus on Observing, Astronomy Class Report, Hyde Volunteer of the Year, 100 Hours of Astronomy, Astronomy Day.

Featured Photo

31 people attended PAC's Field Astronomy Class, April 16-17.

Please send your astrophotos to Mark Dahmke to be added to the PAC website and the newsletter.



Saturn image courtesy NASA.

Club Business

President Brian Sivill called the meeting to order, 20 members, 3 guests.

Announcements:

The International Year of Astronomy (IYA) has scheduled one of its cornerstone projects:

100 hours of Astronomy (100HA) for April 2-5. The Prairie Astronomy Club is participating with events at Morrill Hall and SouthPointe Pavilions. Mueller Planetarium will present a special showing of Two Small Pieces of Glass and the PBS special 400 Years of the Telescope on Friday April 3. Club member will be present with telescopes for the guests to look through. Also, Outreach Coordinator, Dave Churilla will have a group at SouthPointe for the general public there. Finally, the Strategic Air and Space Museum will hold a public star party on Saturday April 4 from 8-10PM.

The Hyde Volunteer Appreciation Night will be held at Mueller Planetarium on April 7 at 6PM. PAC will be hosting a beginner's field school on the evenings of April 16-17. We have 13 registrants.

The next PAC star parties will be on April 17 and 24 at the farm.

The next PAC meeting will be on April 28 at Hyde Observatory.

The annual Astronomy Day will be Saturday May 2 at Morrill Hall. If you'd like to help, contact either Jack Dunn or Steve Lloyd.

The first Mahoney Star Party will be Friday May 15 at Mahoney State Park.

The 16th annual Nebraska Star Party will be July 19-24 at Merritt Reservoir.

OBSERVING REPORT

Club observing chair, Jim Kvasnicka presented the monthly observing report, reviewing the last two star parties and outlining the new Galileo Observing Club.

OUTREACH AWARDS

Ron Veys received the Astronomical League's outreach award for his outreach activities.

As stated in the March edition of The Prairie Astronomer, Earl Moser had been nominated to receive an honorary membership in the club. The nomination was ratified by acclamation. Afterward, Earl reflected on the good times he has had and notoriety he has gained during his time with us.

Jack Dunn provided a review of Clay Anderson's visit to Lincoln, noting around 500 visitors at the museum and around 450 at Hyde on March 7. Also, Jack discussed some plans for the 100 Hours of Astronomy and Astronomy Day for this year.

The attendees of the Mid-States Regional Convention of the Astronomical League provided a report on the conference. Most notably, club president, Brian Sivill volunteered PAC to host the 2010 MSRAL Convention in Lincoln, NE. Jack Dunn has been nominated to serve as chairman of the MSRAL convention committee, with Ron Veys as co-chair.

Treasurer's report: No treasurer's report this month. For anyone interested in the club's current financial status, feel free to contact Dan Delzell.

Brian suggested a committee to make the final selection for the telescope giveaways on Astronomy Day and throughout the year. Lee Taylor and Dan Delzell have volunteered to serve on this committee.

The Galileoscope, an improved replica of Galileo's first instrument, is available, but due to overwhelming demand, delivery will be delayed. PAC has decided to order 30 of these for giving away to interested people at PAC events

such as our field schools, etc. Hyde as also ordered 30 of these. With luck, they will ship before the end of the year.

Adjourn to the program, the short version of 400 Years of the Telescope

Respectfully submitted by,

Lee Taylor

Club Events

PAC Club Meeting
Tuesday, April 28, 2009 7:30pm @ Hyde Obsv.

Next newsletter submission deadline: May 17.

Astronomy Day at Morrill Hall
Saturday, May 02, 2009 Morrill Hall 9:30 am to 4:30

PAC Club Meeting
Tuesday, May 26, 2009 7:30pm @ Hyde Obsv.

2009 Star Party Dates

April 24th

May 15th and May 22nd

June 12th and June 19th

July 17th and July 24th

August 14th and August 21st

September 18th and September 25th

October 16th and October 23rd

November 13th and November 20th

December 11th and December 18th

The date that is **bold and underlined** is the date closest to the New Moon.

Nebraska Star Party: July 19-24, Merritt Reservoir, Valentine, NE.

Mahoney Star Party dates: May 15th, June 12th, July 10th, August 14th, September 11th

Club Telescopes - Checkout Policy

To check out one of the club telescopes, contact Cassie Etmund at cggymnast1@aol.com. If you keep a scope for more than a week, please check in with Cassie once a week, to verify the location of the telescope and how long you plan to use it. The checkout time limit will be two weeks, but can be extended if no one else has requested use of a club scope.



ON THE NET

PAC:
www.prairieastronomyclub.org

PAC E-Mail:
info@prairieastronomyclub.org

NSP:
www.nebraskastarparty.org

NSP E-Mail:
info@nebraskastarparty.org

OAS
www.OmahaAstro.com

Hyde Observatory
www.hydeobservatory.info

Panhandle Astronomy Club
Panhandleastronomyclub.com

PAC-LIST: You may subscribe to the PAC listserv by sending an e-mail message to: imailsrv@prairieastronomyclub.org. In the body of the message, write "Subscribe PAC-List your-email-address@your-domain.com"

For example:
Subscribe pac-list
me@myISP.com

To post messages to the list, send to the address
pac-list@prairieastronomyclub.org

PAC can also be found on Twitter and Facebook.

Buy club apparel through the club website. Shirts, hats, mugs, mouse pads and more.



PAC Field Astronomy Class--Dave Churilla

Thursday and Friday night, April 16th & 17th, members of the Prairie Astronomy Club held what has become an annual event: The PAC Field Observing Class. Jim Kvasnicka and Bob Leavitt did the main organization with Dave Churilla and Dan Delzell pitching in.

31 people attended the class, which was an absolutely fantastic turn out. We offered the class not only to the public for a nominal registration fee but as we realized that we had some room we also offered it to a few new club members free of charge to help them as they embark on their observing journey.

Cassie Etmund and Josh Machacek were to help outside with scopes, but the weather was cloudy both nights. In the classroom Bob Leavitt and Dave Churilla covered basic "Astronomy 101" topics including the moon, planets, stars, star clusters, nebulae, and galaxies. In the field observing part of the class we had to improvise because of the weather. Jim Kvasnicka and Dan Delzell covered classroom topics for telescopes, optics, star charts and observing techniques. Bob Kacvinsky ran the multimedia stuff and provided comic relief for the evening. We had good discussions with the students and everyone seemed to be enjoying themselves.

But how do you handle field observing with cloudy skies? Well, you get the best minds in Lincoln together (OK, Dave's was there so it wasn't ALL the best minds) and you come up with a revised plan. On the first night we set up scopes on the lawn. Each student had a chance to move the telescope and use the finder scope to locate distant lights and buildings. In fact we made a rule that they couldn't come back into the classroom until they did. On the second night we used a planetarium software program (Cartes de Ciel) to show how star hopping can be used to locate deep sky objects. This was put together in a hurry, but it really turned out well. Jim, Bob K., and Dan deserve a lot of credit for making field observing on cloudy nights into a good learning experience. During it, one woman was using her fingers to measure the distance from the guide star to the object (Dan was using M16), which was a great indication that they had been listening the night before to Jim's talk about that.

One of our goals was to get people interested in observing and possibly joining PAC. So it was good to see that nearly everyone expressed interested coming to a star party (if we ever get decent weather!!) We will follow up and contact them for upcoming star parties. A number of them are very interested in buying scopes and getting involved in the hobby and we hope to see them at future club meetings. All in all it was a very fun and very good experience for both students and instructors with a lot of really good comments. Many thanks to Dave, Jim, Bob L., Dan, and Bob K. for all their efforts in preparing and presenting this class.



Respectfully submitted: Dave Churilla & Bob Leavitt

A few comments from students (from evaluations):

Enjoyable & informative, good instruction.

Enjoyed the enthusiasm & knowledge of the instructors-well done!

Enjoyed the whole session.

Enjoyed the teamwork & how you all worked together – you held couldn't go outside.



Bob Leavitt Receives Hyde Volunteer of the Year Award



The Hyde Observatory "Volunteer of the Year" Award was presented to Bob Leavitt by Jack Dunn at the Hyde Volunteer Appreciation Dinner held on April 7th at Mueller Planetarium. Congratulations Bob!

After dinner and the award presentation, Jack ran the full-dome show "Two Small Pieces of Glass" in the planetarium.



ANNUAL MEMBERSHIP DUES

REGULAR MEMBER - \$30.00 per year. Includes club newsletter, and 1 vote at club meetings, plus all other standard club privileges.

FAMILY MEMBER - \$35.00 per year. Same as regular member except gets 2 votes at club meetings.

If you renew your membership prior to your annual renewal date, you will receive a 10% discount.

Club members are also eligible for special subscription discounts on Sky & Telescope Magazine.

May Observing: What to View--Jim Kvasnicka

This is a partial list of objects visible for the upcoming month.

Planets

Venus/Mars: Very low at dawn in the east. Venus is 5½ magnitudes brighter.

Jupiter: In Capricornus. Rises around 3 am at the start of May and by 1 am at the end. Jupiter will increase in magnitude from -2.2 to -2.4 and increase in size from 38" to 41".

Neptune: At the start of May Neptune is 2° from Jupiter and will close to less than ½° from May 22nd to June 2nd.

Uranus: Becomes visible at the end of the month.

Mercury: Fading in brightness making it a difficult naked eye object in the WNW.

Saturn: High in Leo after dark. The rings open a little to 4° for May and then start closing. They will be edge on to Earth on September 4th.

May Messier List

M49/M61: Galaxies in Virgo south of the Virgo Galaxy Cluster.

M51: The Whirlpool Galaxy in Canes Venatici.

M63/M94: Two more galaxies in Canes Venatici.

M64: The Black Eye Galaxy in Coma Berenices.

M85: Elliptical galaxy in Coma Berenices.

M101/M102: Galaxies in Ursa Major, difficult to see.

M104: The Sombrero Galaxy in Virgo.

Last Month: M40, M65, M66, M95, M96, M97, M105, M106, M108, M109

Next Month: M58, M59, M60, M84, M86, M87, M88, M89, M90, M91, M98, M99, M100 (The Virgo Cluster)

NGC and Other Deep Sky Objects

NGC 5529: Galaxy in Bootes.

NGC 5634: Globular cluster in Virgo.

IC 5217: Planetary nebula in Lacerta.

Hickson 68: Galaxy group in Canes Venatici.

Arp 84: Interacting galaxies in Canes Venatici.

Double Star List

Kappa Bootis: Yellow and blue stars.

Iota Bootis: Yellow primary with a dim blue secondary.

Pi Bootis: Pair of white stars.

Epsilon Bootis: Yellow and greenish yellow pair.

Xi Bootis: Pair of yellow stars.

Delta Bootis: Yellow primary with a blue-white secondary.

Mu Bootis: Yellow pair.

Zeta Corona Borealis: Light blue and greenish yellow stars.

Challenge Object

NGC 5053: Very faint and loose globular cluster in Coma Berenices. Located 1° SE of M53. The Class XI GC requires large aperture.

Focus On Observing Clubs--Jim Kvasnicka

Galaxy Groups and Clusters Observing Club

This month we focus on the Galaxy Groups and Clusters Observing Club. This program of 250 galaxy groups and clusters is designed for visual and/or CCD observation. For many the challenge will be to see these galaxy clusters with their own eyes. A telescope with a minimum aperture of 12" is recommended for this observing club, although there will be galaxies in some of the groups or clusters beyond this range.

To obtain your certificate and pin for this program you must purchase the Observe Galaxy Groups and Clusters observing guide from the AL Bookstore on line. This guide was written to specifically support this observing club.

There are two categories of search methods for this program. Manual and device aided. To be considered for the manual certificate all of the objects must be located manually.

There are two types of observing techniques, visual and imaging. Imaging infers that observations are obtained using astrophotography and/or CCD techniques.

From the 250 objects listed in the Galaxy Groups and Clusters Guide you must observe 120 objects from the following categories.

- 30 Galaxy Trios
- 30 Hickson Galaxy Groups
- 30 Additional Galaxy Groups
- 30 Abell Galaxy Clusters

Your observations should include the following information: your name; date & time; location; equipment used and magnification; seeing conditions; and a description of what you observed. To receive your certificate and pin complete the submission form found in the guide along with your observations and submit them to me. I will forward them and your name to the Galaxy Groups and Clusters Observing Club chair for approval.

If you have any questions regarding the Galaxy Groups and Clusters Observing Club or getting started please see me and I will be glad to help you.

List of PAC Galaxy Groups and Clusters Observing Club awardees.

No PAC member has completed the Galaxy Groups and Clusters Observing Club.

From the Newsletter Archives--Astronomy Day, April 1979

PAC President Ron Veys reports:

“National Astronomy Day was Saturday, April 7, and thanks to you, it was well publicized in Lincoln. I'm really proud of the members of the club who helped man the display area in the Gateway Mall, who brought their own telescopes out to put on display, who entered and helped to run the astrophotography contest, and who worked at the observatory that night. About 60% of our club members were involved in Astronomy Day activities in one way or another. ... the main office out at Gateway estimated that over 3000 people walked through the mall that Saturday and saw our display of telescopes and photographs. We passed out about a thousand free sky calendars and the publicity paid off because Doc Manthey reports that a very good crowd showed up at the Observatory for public viewing that night.”

100 Hours of Astronomy- Southpointe Pavilions--Dave Churilla

In keeping with the theme of 100 Hours of Astronomy for IYA, Jim Kvasnicka arranged for PAC to set up at South Pointe Pavilions in the central pavilion area. Four of us, Dan Delzell, myself, Bill Lohrberg and Jim, arrived at South Pointe at 6:30 PM to set up. We had to transport our equipment a ways via carts to the set up area, but it was worth it. It was a nice area and gave access for the public from 4 areas of the mall. We were set up and ready to go by 7 PM.

My apologies to Jim and Bill as I took about a dozen pics and only the attached came out for some reason. I guess Dan and I are just more photogenic :-)

The evening started out slowly with a few people coming over, mainly parents with kids - and Dan had to beckon them over. But it soon became very busy and quite steady and we estimated somewhere over 300 people viewing through our telescopes (Jim had lost count at 200 and there was quite a bit of time left). The crowd really enjoyed the views and there were a lot of questions with quite a few people hanging around despite our only having the Moon in at first.

One minor highlight was finding Saturn before it could be seen naked eye. I had aligned my Celestron NexStar 9.25" on the Moon then tried to have the scope find Saturn. But no dice... couldn't see anything. I kept trying periodically from 7 -7:30 PM and couldn't see it. As Jim said, with the rings nearly edge on there just wasn't enough light being reflected. But about 7:35 or so I tried again and found it. It was in the field, just hadn't been good enough to see it yet I guess. People thought that was quite the deal and some even stuck around so we could PROVE that we didn't just put a picture in the scope... they were only kidding, but it became a source of discussion. When we could finally see it naked eye people were impressed. For the most part we had the full disc of the moon



in one scope (usually Dan's), a nice high powered one in Jim's (about 200x) and I pumped mine up to 260x with my 9mm Nagler. Once Saturn was naked eye Bill showed it in his scope.

People were really impressed and it was one of those special outreach times when it was fun talking to people who 1) really appreciated us being there, 2) had a genuine interest in what we were telling them and asked really good questions and 3) both the adults AND kids had a really good time... and an unexpected one as no one really knew we were going to be there.

South Pointe has expressed interest in our coming back on an ongoing basis. We probably should talk about that at a PAC meeting as the commitment might be too great unless we alternated. I doubt we could do it more than a few times a year. A solar viewing day might be fun though :)

Thanks a ton to Bill and Dan for helping out... as usual they were great with the public and especially the kids. And a big thanks to Jim for setting it all up. If I missed anything you guys can fill in.

By the way, the one picture of me shows me getting REALLY frustrated and not being able to see Saturn. I really thought I could get it in at 7, but no chance.



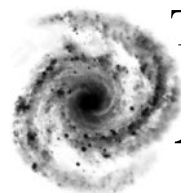
Jack Dunn's Report from Mueller Planetarium

We had a great event at the Planetarium last night. About 65 - 70 people responded to the invitation. NET (Nebraska Educational Television) paid for the food and Pepsi gave free Pepsi products. The sky was clear for the Moon (with that winter storm on the way glad it waited for us).(g). I'm glad Dave had clear skies as well for Southpointe. Pictures will be coming. People signed up for a drawing of prizes of DVDs of the "400 Years" documentary and CDs of the soundtrack music. Rod Bates the head of NET was there and drew the prize winners. I'm very happy with "Two Small Pieces of Glass" as a promoter of star parties. I'm thinking of making a video slide for the end of the show that promotes the PAC star parties. And thanks to those that brought telescopes as we had a nice crowd outside after "400 Years" even on our light-polluted campus. The Moon was fine.

Astronomy Day--May 2, 2009

Mueller Planetarium and Lincoln's Prairie Astronomy Club join forces with Astronomy Magazine and Celestron Telescopes to celebrate the International Year of Astronomy with Astronomy Day 2009! Special fulldome Planetarium shows (TBA) will be shown all day long. All those who visit the event will have a chance to win a Celestron AstroMaster 70AZ telescope valued at \$150 given away locally, and register for a chance to win a Celestron NexStar 8 SE Computerized Telescope (valued at \$1399) given away nationally. 2006's national winner registered at Mueller Planetarium! The Prairie Astronomy Club will also be giving away a Dobsonian Telescope. That's three chances to win your very own Telescope! Over 25 of the prime Planetariums, Museums and Observatories across the country are part of the promotion of amateur and professional Astronomy sponsored by Astronomy Magazine.

Lincoln's Prairie Astronomy Club, Hyde Observatory, Mueller Planetarium and many other organizations will join in the celebration of Astronomy Day with events on Saturday, May 2. Activities will be held all day in the University of Nebraska State Museum (Morrill Hall) on the UNL City Campus and will conclude with a "star party" during the regular open hours (sundown to 11 p.m.) of Hyde Memorial Observatory in Holmes Park. Admission to the events in Morrill Hall (excluding the Fulldome Experience) is free with paid admission to the University of Nebraska State Museum. There is no admission charge at Hyde Observatory.



THE *Prairie* *Astronomy* *Club*

Amateur Astronomy --
A Hobby as Big as the Universe

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 \$30/yr, Family \$35/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 to the right. Newsletter comments and articles should be submitted to: **Mark Dahmke, PO Box 80266, Lincoln, NE 68501 or mark@dahmke.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.

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|---|---|
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Next PAC Meeting
TUESDAY
April 28, 2009
7:30 PM
Hyde Observatory