

The Prairie Astronomer

The Official Newsletter of the Prairie Astronomy Club



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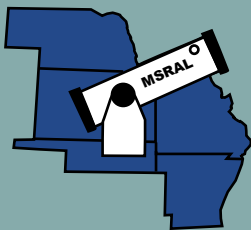
September Program

Mark Dahmke will present a brief program about his telescope mount enclosure design. Jack Dunn will talk about Powell Observatory. Powell is operated by the Astronomical Society of Kansas City. Like Hyde, it is operated by volunteers, mostly from ASKC. Jack will outline the design of Powell and contrast and compare its operation with Hyde. ASKC is planning a major addition and renovation to the Observatory facility. There is much to be learned from their operation and yet, Hyde still has some advantages. A year ago last June Ron Veys and Jack visited Powell when they were in Kansas City for the MSRAL convention. Jack will be at Powell again on September 17th as part of the Western Alliance of Planetariums conference and plans to interview ASKC President Rick Henderson on video about their plans.



Featured Photo

Jeff Kisicki is the winner of the Astronomy Magazine Celestron Grand Prize drawing from Astronomy Day.



Night Sky Network

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, P. O. Box 5585, Lincoln, NE 68505** 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.



Meeting Minutes

Jason Noelle called meeting to order at 7:30 PM

Announced program of Nebraska Star Party Recap Slideshow to follow business meeting.

Next meeting September 24 including officer nominations.

Bob Kacvinsky had nothing to note for Treasurers Report.

Several outreach opportunities were described. Sept 6, SAC Museum, Sept 7 Wildwood in Nebraska City, Sept 22 UNL Morrill Hall telescope display, and Oct 5 Cub Scouts in Walton, NE.

Details were or will be emailed.

Other Business: National Astronomy Day Telescope Winner was discussed. Winner was from Lincoln and entered at Astronomy Day. Will present it at a PAC meeting or at Hyde and invite to PAC.

Observing report was presented by Jim Kvasnicka. Upcoming star parties at the farm on Aug 30 and Sept 6. Lunar Party on Sept 15 at Jim's house.

Business meeting concluded at 7:45.

PAC Executive Board Meeting Minutes (Sept 9, 2013)

Prairie Astronomy Club Executive Board Meeting September 9, 2013

In attendance: Jack Dunn, Ben Rush, Jason Noelle, Dan Delzell, Dale Bazan.

Jason called meeting to order at 7:38.

Jack Dunn shared wireless lapel mic devices for presenting to large crowds and recording guest speakers. Will propose to purchase at Hyde board meeting at approximately 495.00 from Midwest Sound.

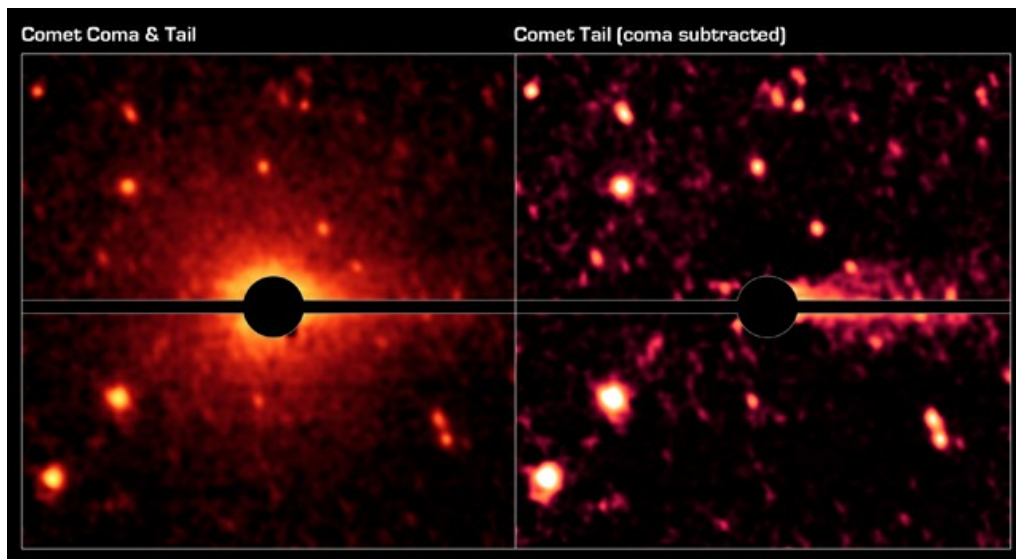
Discussed program for September. Jack assured he was ready for two things. Mark Dahmke will share telescope mounting, and Jack will share information about Powell Observatory (30 inch telescope) in Lewisville, Kansas and used by Astronomical Society of Kansas City (ASKC).

Discussed October program (other than elections). Jack will investigate videos including one on Voyager and will contact UNL space law department to determine if they would like to present again. Will need to verify copyright of Space Rip hosted on YouTube.

Jason shared he will not be running for President again for next term. Ben will also not run for office. Bob is willing to serve as Treasurer. Dale is willing to remain as Secretary if nominated. Elections were discussed in general.

Plans for potential outreach and attracting youth were discussed in general.

Meeting ended at 8:24.



With the help of NASA's Spitzer Space Telescope, astronomers have discovered that what was thought to be a large asteroid called Don Quixote is in fact a comet. Image credit: NASA/JPL-Caltech/DLR/NAU

ANNUAL MEMBERSHIP

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.

STUDENT MEMBER - \$10.00 per year with volunteer requirement.

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.

Club Telescopes

To check out one of the club telescopes, contact Ben Rush. If you keep a scope for more than a week, please check in 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.

100mm Orion refractor:
Available

10 inch Meade Dobsonian:
Available

13 inch Truss Dobsonian:
Available

PAC Star Party Dates

Dates in bold are closest to the new moon

Sept 27, **Oct 4**, Oct 25, **Nov 1**, Nov 29, **Dec 6 & 27**

2014 Star Party Dates

January 24, **31**
February 21, **28**
March 21, **28**, April 25
May 2, 23, 30, June 20, **27**
July 18, **25**
NSP: July 27-Aug 1
August **22, 29**, Sept 19, **26**
Oct 17, **24**, Nov 14, **21**
Dec 12, **19**

Lunar Party Dates

May 9, June 6, Sept 5, Oct 3
* Lunar party dates are tentative, sites to be determined.

PAC E-Mail:

info@prairieastronomyclub.org

PAC-LIST:

To subscribe send a request to PAC. To post messages to the list, send to the address:

pac-list@prairieastronomyclub.org

Links

PAC: www.prairieastronomyclub.org

Night Sky Network: <https://nightsky.jpl.nasa.gov/>

CafePress (club apparel) www.cafepress.com

www.hydeobservatory.info

www.nebraskastarparty.org

www.OmahaAstro.com

Panhandleastronomyclub.com

www.universetoday.com/

www.planetary.org/home/

<http://www.darksky.org/>

NGC4603 Credit: NASA

Events

PAC Meeting
Tuesday Sept 24th, 2013
@Hyde Observatory
(Nominations for Club Officers)

PAC Meeting
Tuesday Oct 29th, 2013
@Hyde Observatory
(Election)

PAC Meeting
Tuesday Nov 26th, 2013
@Hyde Observatory

Newsletter submission deadline
October 13, 2013



Wildwood Star Party—Dan Delzell

Members of PAC and OAS participated in a Star Party hosted by the Wildwood Historical Home in Nebraska City on September 7th.

Bob Kacvinsky, Eugene Lanning, Rick Brown, and Dan Delzell from PAC and John Johnson and Donna and Mark Prior all participated.

The Wildwood Historical Home was built in 1869 when Jasper Anderson Ware moved his wife and three little daughters to the house which was then in the country. His wife exclaimed that she could not live in such a “wild wood” The family grew to love their home and it is now known as the Wildwood Historical Center.



Mrs. Jasper Ware enjoyed astronomy as a hobby. She obtained a telescope that was once used on a lumber ship.

After the passing of the last immediate family member, the land was purchased and the house was restored by local citizens of Nebraska City.

Our hosts all wore typical period dress to the event. I'm sure they were uncomfortable in the heat!

The night started hot with a mix of clouds and sun. The moon was a few days past new, but we were able to treat the early patrons to nice views before it was lost to the trees. Venus was easily visible before astronomical twilight. We were also able to view Saturn as it was setting just as it was getting dark enough for deep sky objects.

The deep sky objects we viewed were M57, M13,

Albireo, M11, M27 and many more. We had approximately 40 attend the event, many had never had the opportunity to look through a telescope.

It was a good time had by all. I want to thank Bob and Rick for helping and give a special thank you to Eugene Lanning who was our Nebraska City man on the ground. He was able to scout the site at night and help deal with some lighting issues we would have had. Thanks also to John, Mark and Donna from OAS.

I received a nice thank you from Wildwood, “You guys and gal were terrific! You were so patient and full of information. I know you did not get technical with us! I found the stars to be beautiful and so much more.” They're already talking about doing it again next year.

This is the type of event that directly meets PAC's mission. They're fun to do and the public greatly appreciates them. If you've never worked a public event like these, sign up for one coming up. You'll have a good time and help spread a love of the stars to people who normally wouldn't have the opportunity to look through a telescope.



Ellen Jasper's telescope

Wildwood Star Party, continued



Rick Brown sharing views of the moon with the Ladies of Wildwood



Left: Eugene Lanning teaching one of our Wildwood Hosts.

Right: Bob Kacvinsky helping a young Nebraska City man view M57



Club Offices and Duties—Mark Dahmke and Jack Dunn

With the nomination of club officers coming up in September, we thought it might be a good idea to review the bylaws and describe the responsibilities of each of the officers and what is required to maintain a functioning club.

As stated in the bylaws, the club has five officers: President, Vice President, Secretary, Treasurer and Second Vice President. The business of the club is managed by a Board of Directors. The Board consists of the five elected officers. Each decision of the Board requires an affirmative vote by at least three Board members. The Board can also create additional non-elected offices as required and can initiate impeachment proceedings against officers who have been negligent in performing their duties.

The Prairie Astronomy Club has a fifty year history of service to club members and the community. Potential club officers should have a good understanding of the history of the club, its formation and mission, its relationship with Hyde Observatory and the types of events, activities and outreach that is part of the tradition of the club. The most complete resource is the book *The Prairie Astronomy Club: Fifty Years of Amateur Astronomy*, which is in the club library or available as a PDF document.

President

The President organizes and directs the regular monthly meetings and all other club activities. The President also prepares the meeting agenda and PowerPoint for the meeting.

The President also officially represents the club at meetings at the regional and national level where he/she is in attendance or delegates this authority. The President has the authority to call meetings of the Board and to appoint non-elected officers.

The President should have good communication skills and be comfortable interacting with the media and public, be a good public speaker, be available to do radio and TV interviews and to deliver prepared introductions and remarks at club-sponsored events.

Another duty of the President is the annual club audit. Within 10 days of assuming office, the

President must appoint a committee of three club members to perform the audit. The audit must be completed within 45 days of the close of the fiscal year which is October 31.

When assuming office, the President should hold a meeting of the Board to present his/her direction and ideas for the club for the coming year, and appoint any unfilled non-elected positions.

Vice President

The Vice President is responsible for running club meetings and other events in the absence of the President. The VP is also to be the mediator in cases of procedural dispute and must be available to assume the duties of any officer at the direction of the President. The VP also maintains control of the current inventory of all club property.

Secretary

The Secretary handles all Club correspondence, is responsible for the distribution of information received through official club correspondence and is in charge of Club publicity (often the job of Publicity or Outreach Coordinator is delegated to a non-elected member). The Secretary also sends out membership renewal notices and delivers meeting minutes to the newsletter editor. The Secretary is responsible for maintaining an accurate club membership roster. The master copy of the roster is currently maintained on the Night Sky Network website. The bylaws also require publication of the complete roster in the newsletter on an annual basis.

Treasurer

The Treasurer is responsible for all Club funds and for keeping accurate records of all monetary transactions. The Treasurer must submit a written report of the club's monetary status at the request of the President or give a verbal report at the request of any member during regular meetings. He/she also prepares an annual financial report in November for publication in the newsletter and presentation at the November meeting. The Treasurer is also responsible for all tax filings and reporting requirements, to maintain the club's 501c3 status.

Club Offices and Duties, continued

Second Vice President (and Program Chair)

The Second Vice President is responsible for the formation and presentation of the monthly club programs. Ideally the 2nd VP should try to plan ahead six months to one year to build a list of potential presenters or programs. The 2nd VP also sends out email announcements of upcoming programs to the membership, and sends a program description to the newsletter/website editors.

The club usually has several non-elected officers:

The **Publications Chairperson** (or Newsletter Editor) is responsible for editing and publishing the *Prairie Astronomer*. The newsletter editor may also be the website manager/editor. The newsletter editor should have a good working knowledge of desktop publishing software (and computers in general), graphics, photo editing, some design and layout experience and some experience with social networking and Internet marketing. The Website editor needs to be familiar with WordPress (or similar CMS software) and HTML, graphics and word processing applications. Ideally the newsletter and website editor(s) should have prior experience with the publication of a newsletter or website, or demonstrated skills. The publications chairperson is also responsible for social networking for the club - posting Facebook and Twitter announcements for club meetings and events.

If the club has an appointed **Outreach Coordinator**, the coordinator takes on some of

the roles performed by other officers – organizes outreach events, shares in media communications tasks, puts together flyers, etc.

The **Club Librarian** (often the Vice President) manages the club library. He/she keeps a current bibliographic listing of all Club library material including the archive of all back issues of *The Prairie Astronomer*. The Club Librarian and Secretary work together to maintain a record of club activities and regularly update the official club history.

The **Observing Chairman** presents a monthly report at Club meetings and/or in the *Prairie Astronomer*. He/she keeps members informed of upcoming celestial events, sky objects of special interest and star parties.

The **Recording Secretary** (often the Club's elected Secretary) is responsible for keeping the minutes of the club meetings and filing a copy with the Club Secretary. Minutes need to be kept in a systematic fashion as they record the history and life of the club and need to be published in the *Prairie Astronomer* on a monthly basis.

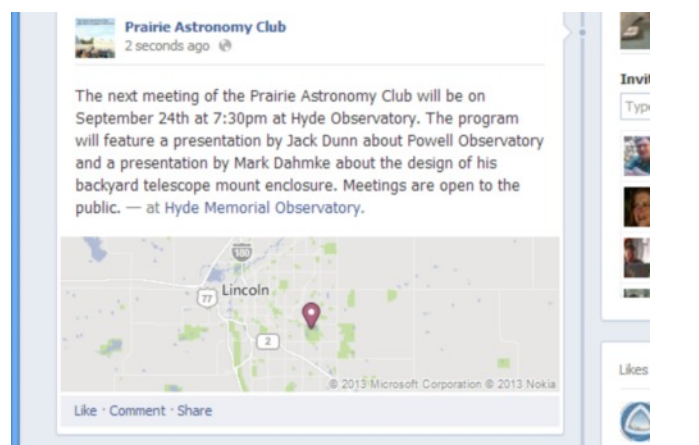
The **Site Chairperson** (if one is appointed) is responsible for establishing a site committee to oversee the maintenance and security of the club observing site.

While not a requirement of the bylaws, all club officers and appointees should have good computer and social media skills, should be accessible and responsive via email and phone.

Help Increase PAC's Visibility on Social Networking Sites

Help spread the word about club meetings and upcoming events. If you haven't joined PAC's Facebook page, please do so now.

When news items and meeting announcements are posted to the page, share them with your friends. This has a tremendous **multiplier effect** - news of PAC meetings and events can **reach thousands of people** who might otherwise not be aware that PAC (or Hyde Observatory) even exists!



October Observing—Jim Kvasnicka

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

Planets

Venus: Increases in brightness from -4.2 to -4.5. Venus sets 2½ hours after the Sun.

Mercury: Brighter than Saturn but much lower requiring binoculars to see it.

Saturn: Visible to the naked eye to start October but you will need binoculars after mid-month to see it as it gets lower each day.

Jupiter: Rises around midnight to start the month and two hours earlier at the end. It will increase in brightness to -2.4. Its disk increases from 38" to 41".

Mars: Rises 4 to 5 hours before the Sun in Leo passing less than 1° from Regulus on October 15th.

Uranus/Neptune: In Pisces and Aquarius.

Comets

C/2012 S1 ISON: Fairly high in the predawn sky.

It is projected to brighten from 10th to 7th magnitude. The comet passes 2° north of Regulus on October 16th. Mars and Comet ISON will proceed in tandem 1° apart from October 16th to the 19th.

Messier List

M11: The Wild Duck Cluster in Scutum. .

M16: Open cluster embedded in the Eagle Nebula IC 4703 in Serpens Cauda.

M17: The Swan Nebula in Sagittarius.

NGC Objects—Jim Kvasnicka

The Helix Nebula

NGC 7293

The Helix Nebula in Aquarius was discovered by Karl Ludwig Harding in 1824. The Helix Nebula was never noted by William Herschel. It is the largest and closest planetary nebula to us. Its absolute distance is uncertain. The distance varies from 85 light years to 590 light years. The most common distance used is 450 light years.

M24: The Small Sagittarius Star Cloud.

M18/M25/M26: Open clusters in Sagittarius.

M55/M75: Class IX and Class I globular clusters in Sagittarius.

Last Month: M13, M14, M22, M28, M54, M69, M70, M92

Next Month: M27, M30, M56, M57, M71, M72, M73

NGC and Other Deep Sky Objects

NGC 7009: The Saturn Nebula in Aquarius.

NGC 7293: The Helix Nebula in Aquarius, use an OIII filter.

NGC 7331: Elongated galaxy in Pegasus.

NGC 7814: Oval shaped galaxy in Pegasus.

Double Star Program List

8 Lacerta: Four white stars.

Beta Cephei: White and blue pair.

Struve 2816: White primary with two blue secondary stars in Cepheus.

Xi Cephei: Yellow pair.

Delta Cephei: Yellow primary with a pale blue secondary.

Eta Persei: Bright yellow and light blue stars.

Struve 331: Whit primary with a pale blue secondary in Perseus.

Epsilon Pegasi: Bright yellow and white stars.

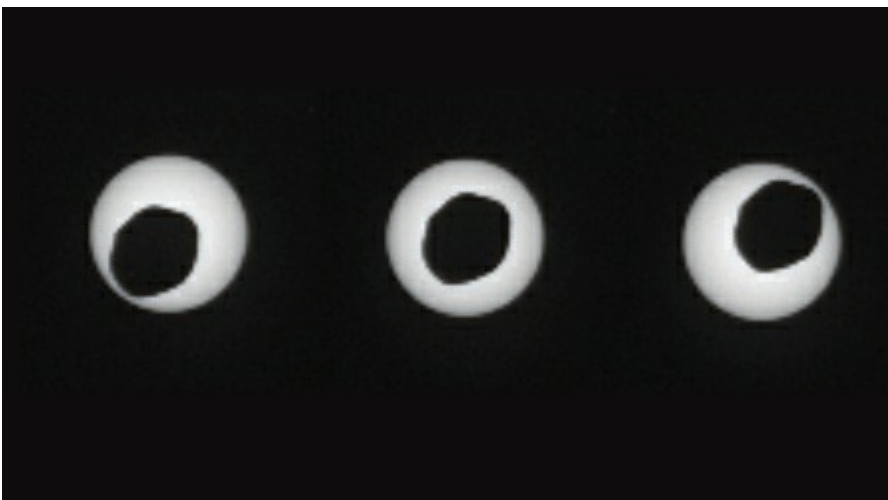
Challenge Object

Stephan's Quintet: A group of very faint galaxies in Pegasus. Large aperture is required to see them.

The Helix Nebula is large with its halo extending to 28 arc minutes or roughly the size of the full Moon. Because it is spread out over a great distance it has a very low surface brightness making it difficult to see. It may best be seen in dark skies with a pair of binoculars. If you use your telescope an OIII filter makes it easier to detect.



Brad Moser took this shot at the star party on Sept 6th at the Strategic Air and Space Museum.



Annular Eclipse of the Sun by Phobos, as Seen by Curiosity

This set of three images shows views three seconds apart as the larger of Mars' two moons, Phobos, passed directly in front of the sun as seen by NASA's Mars rover Curiosity. Curiosity photographed this annular, or ring, eclipse with the telephoto-lens camera of the rover's Mast Camera pair (right Mastcam) on Aug. 20, 2013, the 369th Martian day, or sol, of Curiosity's work on Mars.

Curiosity paused during its drive that sol for a set of observations that the camera team carefully calculated to record this celestial event. The rover's observations of Phobos help make researchers' knowledge of the moon's orbit even more precise. Because this eclipse occurred near mid-day at Curiosity's location on Mars, Phobos was nearly overhead, closer to the rover than it would have been earlier in the morning or later in the afternoon. This timing made Phobos' silhouette larger against the sun -- as close to a total eclipse of the sun as is possible from Mars.



THE *Prairie*
Astronomy
Club

**Amateur Astronomy —
A Hobby as Big as the
Universe**

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FIRST CLASS MAIL

**Next PAC Meeting
TUESDAY
September 24, 2013
7:30 PM
Hyde Observatory**