The Prairie Astronomer

October, 2026 Volume 67, Issue #10



IN THIS ISSUE:

CALAMUS STAR PARTY REPORT
CURIOSITY ROVER CATCHES MARTIAN DAWN

THE NEWSLETTER OF THE PRAIRIE ASTRONOMY CLUB



David Woolf, Kalamazoo, MI at NSP 2018
Photo by Mark Dahmke

Next meeting: Tuesday October 27th 7:30pm at Hyde Observatory

NEXT MEETING

A Behind-the-Scenes Look at ScopeBnB's Texas Observatory. Join Gabriel, founder of ScopeBnB and astrophotography enthusiast, for a behind-the-scenes tour of a fully remote deep-sky imaging setup operating under the exceptionally dark Bortle 1 skies of Texas. We'll explore the William Optics RedCat 91, ZWO ASI2600MC Pro camera, automated focusing and guiding systems, and how N.I.N.A. makes it possible to operate a telescope hundreds or even thousands of miles away. We'll also introduce ScopeBnB's unique club rental model, which allows astronomy club members to share exclusive access to a remote telescope for an entire week, capture their own targets, and experience truly dark skies without leaving home.

Cover: Pacman Nebula by Brett Boller

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M31 by Brett Boller



Most of our club meetings are held at Hyde Memorial Observatory in Holmes Park.

The Observatory is owned and maintained by the City of Lincoln Parks and Recreation Department, but is operated by volunteers, many of whom are also members of the Prairie Astronomy Club.

CALENDAR

October Meeting
Tuesday, October 27th, 7:30pm Hyde Observatory
Program: ScopeBnB,
Election of club officers

November Meeting
Tuesday, November 24, 7:30pm Hyde Observatory

December Holiday Gathering
Tuesday December 15 at 6 p.m. at Big Red Restaurant & Sports Bar, 8933 Andermatt Drive.

January Meeting
Tuesday, January 26th, 7:30pm Hyde Observatory

PAC Google calendar:
https://www.prairieastronomyclub.org/event-calendar/

2026 STAR PARTY DATES

	Date	Date
January	9	16
February	13	20
March	13	20
April	10	17
May	8	15
June	5	12
July	10	17
NSP	7/12-7/17	
August	7	14
September	4	11
October	2	9
November	6	13
December	4	11

Underlined dates are closest to the New Moon.

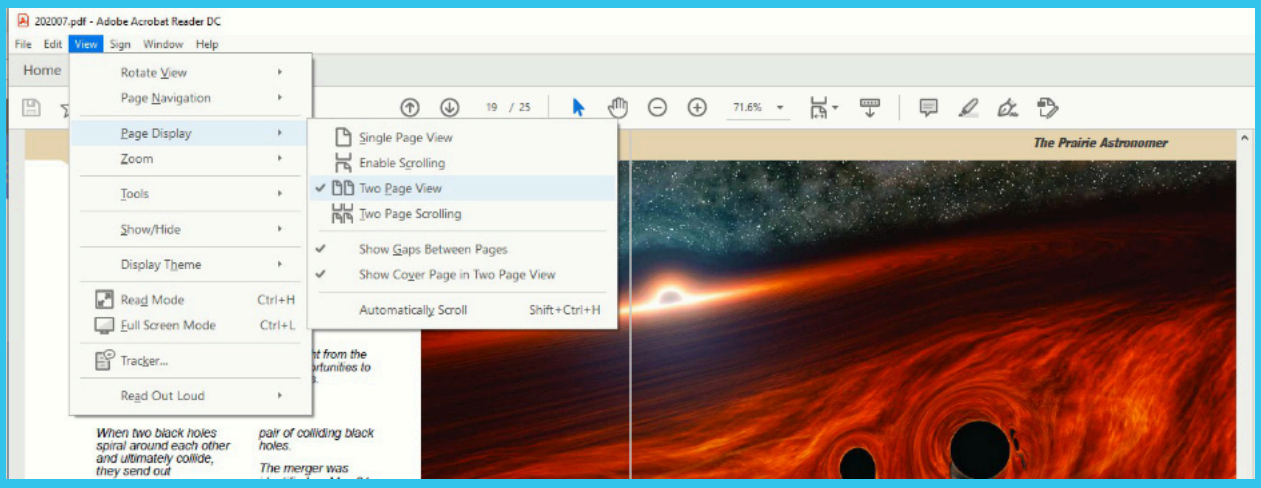
CLUB OFFICERS

President	Jason O'Flaherty jflaher@gmail.com
Vice President	Brett Boller proboller86@yahoo.com
2nd VP (Program Chair)	Open
Secretary	Jim White jrwhite2188@gmail.com
Treasurer	John Reinert jr6@aol.com
Club Observing Chair	Jim Kvasnicka jim.kvasnicka@yahoo.com
Outreach Coordinator	Don Hain dhain00@gmail.com
Website and Newsletter Editor	Mark Dahmke mark@dahmke.com

NOTICES

Newsletter Page View Format

How to Adjust Adobe Acrobat Settings for Two Page View



To view this newsletter in magazine spread format in Acrobat, select View ->Page Display->Two Page View. Acrobat will then show two pages side by side. Also make sure the checkboxes "Show Cover Page in Two Page View" and "Show Gaps Between Pages" are checked. If you have it setup correctly, the cover page will be displayed by itself and subsequent pages will be side by side with the odd numbered pages on the left.

Pay Dues

https://www.prairieastronomyclub.org/pay-dues-online/

Pay online using Paypal or a credit card. An individual membership is $30/year or family membership is $36/year. Students memberships are only $12 annually with a small volunteer requirement for our youth members.

PAC-LIST

Subscribe through GoogleGroups or contact Mark Dahmke to be added to the list. You'll need a Google/ gmail account, but if you want to use a different email address, just associate that address with your google account to access Google Groups. Once subscribed, you can view message history through the GoogleGroups website. To post messages to the list, send to this address: pac-list@googlegroups.com

The President's Message

Jason O'Flaherty



Dear PAC Members,

This will be my last letter as your president for now. At our October 27 meeting, we'll vote in a new group of officers, and I won't be running for president this year. My work schedule is demanding, and I want the next leader to have the time the club deserves.

Thank you for your support and trust over the past four years. It's been an honor to lead such a respected and historic club, and I've always been proud to tell people I was president of the Prairie Astronomy Club. I appreciate your help in keeping our meetings interesting and our club active in the community. My goal was to maintain the traditions that have brought PAC this far, while making small updates for today's needs. I wish the next president all the best, and I'll be here to support our officers. I hope to serve again when my work schedule allows.

There's still time to step up for an officer position. If you're unsure, you can always start as a junior officer and learn with support from others. We still need a nominee for 2nd Vice President. Please think about whether you can help with the club's organization, or suggest someone who would be a good fit before voting ends at our next meeting. If we want PAC to last another 65 years, we all need to pitch in and keep things moving forward.

If everything goes as planned, our October meeting will feature a presenter from ScopeBnB. They have offered our club a week of telescope rental under Bortle 1 skies in Texas. I've asked the board to approve $300 for this program, which is the largest expense during my time as president. The presenter will explain how the program works and how to remotely control the telescope with N.I.N.A. After that, we'll pick our rental week in November and send out a sign-up list so members can reserve observing times, since we can't all use the telescope at once. Every image you take with it is yours to keep.

Just a reminder, the October meeting will be at Hyde Observatory, and the club will provide Casey's Pizza. You can also join us on Zoom and vote remotely, but unfortunately, the pizza can't be delivered online.

Thank you again for everything. I'm excited to see what's next for PAC and look forward to watching the club grow from here.

For one last time, I wish you all clear skies,

Jason O'Flaherty

President, Prairie Astronomy Club

September Meeting Minutes

Jason O'Flaherty started tonight's meeting at 7:35 pm. Tonight's meeting is being held in person at Hyde Memorial Observatory and online via Zoom. Jason introduced himself and asked if there were any new members or guests in the audience, he welcomed new members Pedram, Cyrus and Whitney and a guest at tonight's meeting, Erin.

Jim Kvasnicka, club Observing Chair, wasn't able to be at tonight's meeting so he sent it to Jason so that he could present it. Star parties for the month of October will be on Friday night the 2nd and Friday night the 9th at the Clatonia Recreation Area, about 1 ½ miles north of Clatonia, Nebraska. October 21st and 22nd are the peak days for the Orionids meteor shower, which is the result of the earth passing thru remnants from Halley's Comet. Jim's complete observing report can be found in this month's newsletter. At 7:43 Jason finished the observing report and turned the meeting over to John Reinert for his treasurer's report.

John started with a slide showing the balance of the club's checking, CD and PayPal accounts. The club checking account balance is $2,243.07, CD1 balance is $32,298.43, CD2 balance is $5,046.63 and the club PayPal balance is $92.10 for a total of $39,680.23. Expenses this month included $202.00 for our PO Box and $207.11 for our Zoom account. PAC's bank was BMO which has changed hands and is now First Citizens Bank out of the Carolina's. The club's account number stayed the same but the routing number had to be updated with Stripe and PayPal. John announced that the dues rate published in the newsletter is correct for the annual rate from November 1 to October 31. There is a pro-rated amount that is calculated from the month a person joins to get them to the November 1st date. John's report ended at 7:47.

Jason briefly went over the membership options and dues rates and benefits of becoming a member, for example, help using your telescope, help finding objects in the night sky, the mentoring program which is headed up by Bob Kacvinsky. If you would like to see about getting a mentor or volunteering to be a mentor please see Bob or ask one of the club officers and they can get you in touch with Bob. Bob will try and send out an email approximately once per quarter about the mentorship program to the club membership.

Club business tonight is opening up nominations for club officers for the

Meeting Minutes, continued

next year, nominations will be open until the October meeting where any additional nominations will be taken and then nominations will be closed and we will have the election. If a member is interested in being nominated for a position, they can nominate themselves, they do not have to be nominated by someone else.

Jason briefly went over the offices and their responsibilities. Jason will not be able to be president next year but said that he would be more than happy to help someone with the Zoom setup and video for meetings. Jason announced that October's meeting and elections will take place at Hyde this year and not at BOO (Branched Oak Observatory) this year. Jason announced that we will have Casey's Pizza and refreshments at the October meeting. Jason opened up nominations for officers starting with the office of President. Jason asked Kale if he would be interested in being President for a year. Kale didn't answer one way or the other as he is also considering running for Treasurer. There were no other nominations for President but nominations are open for a month so if anyone is interested there is still time. First Vice President is the next office up for nomination. Brett is currently First Vice President and was nominated and accepted nomination for First Vice President, there were no other nominations for the office. Second Vice President is the next office up for nomination, this office is currently vacant. There were no nominations for Second Vice President. Secretary is the next office up for nomination, Jim White is currently the secretary, Jim was nominated for secretary and Jim accepted the nomination. There were no other nominations for Secretary. Treasurer is the next office up for nomination. John Reinert is the current Treasurer. Kale was nominated for Treasurer and decided that he has a month to decide.

The October meeting is going to be at Hyde Memorial Observatory and we currently don't have a program for that meeting. The November meeting program will be on how to buy a telescope. There won't be a meeting in December but we will be looking at having our holiday party on or about December 15th at Big Red Restaurant out by 84th and Nebraska Parkway, more news to follow on this subject.

There was a family reunion request for someone to bring a telescope to Mahoney State Park and several people have reached out

Continued on page 10

ARP 98

The Mantrap Skies Image Catalog

Arp 98 is a pair of interacting galaxies. Arp classed them under "Spiral galaxy with companion on arms: Elliptical galaxy companions." The spiral is PGC 5715 and is classed as Sbc at NED with a red shift distance of a bit less than 550 million light years. Seligman classifies it as Sbc? pec. One paper says "The 'bridge' has no relation to the normal spiral arms which are bound more tightly." I assume that refers to the bright tiny arms just visible in my shot. Still the bridge does appear to come off of one same as the opposite tidal arm comes off the other one. The elliptical galaxy is PGC 5714 and is called a red, spherical compact galaxy with halo. Seligman classifies it as E/S0. It has a red shift distance of a bit more than 550 million light years. The difference is likely due to gravitational interaction between the two. The spiral seems to have a small bright spiral then huge distorted spiral arms likely due to interaction with PGC 5714. I measure the extent of these arms as being nearly 170,000 light-years turning what would have been a small galaxy into an apparently large one though I suspect its mass is



Rick Johnson



Rick Johnson, a founding member of the Prairie Astronomy Club, passed away in January, 2019. His legacy lives on through his comprehensive catalog of over 1600 images at www.mantrapskies.com.

ARP98, continued

much less than the slightly smaller PGC 5714 which I measure as being about 140,000 light-years across.

At the far upper left is PGC 5484 at the same distance as PGC 5715 so a member of the group. It is classed simply as a spiral galaxy. Directly west (right) of Arp 98 is 2MASXi J0131394+320601 ID a galaxy bright in infrared light. Like all other galaxies in the image, I can find no data on it. Arp 98 is located in the constellation of Triangulum just north of the far more famous Triangulum Galaxy, M33.

I'd not made an annotated image but there is one faint asteroid in the image. I enhanced it on the annotated image as my processing from 2009 was so poor I nearly deleted it.



Minutes, continued

to get more information on this but we haven't seen a return reply.

There is an event at Spring Creek Prairie called Nocturnal November and we are welcome to take scopes to that event which is November 14th.

Dwarf Draco has just been released which is a 90mm smart telescope and the code PAC will get you a 5%.

If anyone is interested, we will be meeting at Culver's after the meeting for those that would like to attend.

Tonight's meeting adjourned at 8:08 and tonight's program is being presented by Jack Dunn which is Memories of Jack Foley Horkheimer.

Welcome to the
Prairie Astronomy Club

Erin Sandquist
Melissa Landis

NEW MEMBERS

Focus on Constellations: Cassiopeia

Jim Kvasnicka

Cassiopeia the Queen has the familiar "W" or "M" pattern superimposed over the brilliant star field of the Milky Way. Cassiopeia is a rather modest constellation with 600 square degrees. It is especially rich in open clusters that range from tiny groups of stars embedded in rich star fields making them difficult to see, to some of the finest open clusters in the sky. The constellation has an assortment of planetary nebulae, a few galaxies, and some colorful double stars. Cassiopeia contains two Messier objects in M52 and M103, both are open clusters. Cassiopeia is a circumpolar constellation best seen in November.

Showpiece Objects

Open Clusters: M52, M103, NGC 457, NGC 654, NGC 663, and NGC 7789

Galaxies: NGC 278

Multiple Stars: Eta Cassiopeiae, Iota Cassiopeiae (Triple)

Mythology

In Greek mythology, Cassiopeia and Cepheus were the king and queen of Ethiopia, the parents of Princess Andromeda. Cassiopeia was very vain and boasted that she was more beautiful than the Sea Nymphs. This upset Poseidon the God of the Sea who sent the terrible sea monster Cetus to destroy their land. The only way Poseidon would spare their land was if Cassiopeia and Cepheus offered their daughter Andromeda as a sacrifice to Cetus. They chained Andromeda to the rocky shore and as the sea monster Cetus was getting closer down flew Perseus on Pegasus who killed the sea monster, rescued Andromeda and married her.

Number of Objects Magnitude 12.0 and Brighter

Galaxies: 3

Globular Clusters: 0

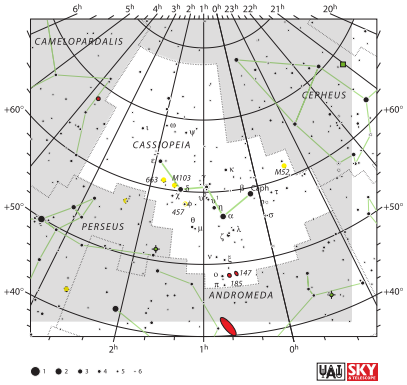
Open Clusters: 52

Planetary Nebulae: 2

Dark Nebulae: 0

Bright Nebulae: 1

SNREM: 0



By IAU and Sky & Telescope magazine (Roger Sinnott & Rick Fienberg), CC BY 3.0, https://commons.wikimedia.org/w/index.php?curid=15406247

November Observing

Jim Kvasnicka



Planets

Mercury: Inferior conjunction on November 4th.
Venus: Morning planet, will reach magnitude -4.5.
Mars: Morning planet in Leo. Magnitude +0.8 with a disk 6.76" wide.
Jupiter: Morning planet in Leo. Magnitude -2.0 with a disk 36.0" wide.
Saturn: Evening planet in Cetus. Magnitude +0.5 with a disk 19.4" wide.
Uranus and Neptune: In Taurus and Pisces.

Meteor Showers

Leonids: Peaks the night of November 16-17. Expect up to 15 per hour. The first quarter Moon will not interfere.

Messier List
M27: The Dumbbell Nebula in Vulpecula.
M30: Class V globular cluster in Capricornus.
M56: Class X globular cluster in Lyra.
M57: The Ring Nebula in Lyra.
M71: Class XII globular cluster in Sagitta.
M72: Class IX globular cluster in Aquarius.
M73: Asterism in Aquarius.

Last Month: M11, M16, M17, M18, M24, M25, M26, M55, M75
Next Month: M2, M15, M29, M31, M32, M39, M110

NGC and other Deep Sky Objects

NGC 7662: The Blue Snowball in Andromeda.
NGC 128: Elongated galaxy in Pisces.
NGC 247: Galaxy in Cetus.
NGC 253: he Silver Coin Galaxy in Sculptor.
NGC 288: Class X globular cluster in Sculptor.
NGC 457: The E. T. Cluster in Cassiopeia.

Double Star Program List

Iota Trianguli: Yellow primary with a pale blue secondary.
Gamma Arietis: Two equal white stars.
Lambda Arietis: Yellow and pale blue stars.
65 Piscium: Yellow pair.
Psi 1 Piscium: Equal bluish white pair.
Zeta Piscium: White primary with a secondary.
Alpha Piscium: Close white pair.
Gamma Andromedae: Almach, gold and greenish blue pair.

Challenge Object

NGC 193 and NGC 194: Two small round galaxies in Pisces that fit in the same FOV.

Calamus Star Party, October 8-12

Bob Kacvinsky

In early October nine members of PAC hosted a Star Party at the Calamus Outfitters Resort on the north end of Calamus Reservoir near Burwell, NE. The location is nestled in the sandhill's dark skies (Bortle 2) with the nearest towns Burwell (16 miles) and Taylor (22 miles), providing barely perceivable light domes in the far distance. Due to the off season, the resort reserved the entire resort for our use to avoid traffic and external lights.

The resort has a large 2+ acre lawn area offering virtually 360-degree view of the night sky. We had the main lodge with 5 guest rooms, each with two beds and private bathroom, a full function kitchen and very large main room with 25' table and TV lounge area. The table became a workstation for computers and electronic gear for the array of smart telescopes.

For the past 4 years (fall and spring) we used an AirB&B house nearby but as the star party popularity has grown, we outgrew the house and moved to the more spacious resort for the same rental cost/person. The main lodge can handle 9-10 people easily, and a second lodge building has up to 5 rooms for an additional 10 people. Attending this year and a brief list of equipment included:

Brett Boller: Askar FRA600; Zwo am5n Mt, Zwo asi2600mc Duo camera

Dan Delzell: Askar 65 PHQ telescope, ProxySky Ragdoll 17 Pro Mt, ZWO ASI2600MC Duo Air camera

Jason O'Flaherty: Williams Optics UltraCat 76 refractor, ZWO ASI2600MC Air Color Camera, ZWO AM5N Mt, ASIAir, ZWO CAA Rotator, ZWO EAF Pro autofocuser



Calamus Star Party, continued

Jim White: Celestron 925 Edge HD SCT telescope, Celestron CGX Mt, Celestron OAG CAMERA ZWO ASI2400MC Pro, Guide Camera ZWO ASI174MM Mini

John Reinert: Celestron CPC 1100 fork-mounted OTA, William Optics Swan 40mm 72 AFOV ; Nagler Type IV 17 mm 82 AFOV; Explore Scientific 12 mm 92 AFOV, Nikon D780 digital SLR camera, SkyFi III wireless telescope controller using SkyPortal app on iPhone, (derivative of Sky Safari Pro), G400 10x50 Explore Scientific binoculars

Amos Sobotka: Orion 150mm MakCass OTA, Orion Star Seeker IV GoTo Mt, Orion 1.25" Pro Lanthanum Zoom 8-24mm 60° eyepiece (Focused on Messier and double star visual observations)

Dave Churilla: SeeStar S50 Pro

Mike Kerns: Teeter 15” Dob; SeeStar S50 Pro (Visual and imaging)

Bob Kacvinsky: Meade 16” Lightbridge Dob; SeeStar S50; SeeStar S50 Pro (Visual and imaging)

We traveled out on Thursday, October 8, under beautifully clear skies, with four members playing two disc golf courses (27 holes) along the way. Everyone brought planned dishes, and we shared all meals



Calamus Star Party, continued

throughout our stay. Darkness arrived around 7:50 p.m. each night. Clear, dark, cloudless conditions held for the first three nights and again until about 2 a.m. on Sunday, October 11. Our viewing stretched from Boötes at dusk to Leo at dawn, with Orion high in the southern sky by early morning. Minor early-morning humidity caused few problems, so most equipment remained dry and operational. Mosquitoes were bothersome at dusk but subsided by 10 p.m., though moths occasionally gathered around our red lights. Overall, there were far fewer bugs than on previous Sandhills visits.

During the bulk of the evenings members were imaging popular galaxies and nebulas. Andromeda and several bright galaxies were done. PacMan,



Bubble, Fireworks, Pelican, N America, Eagle, and several other nebulas were popular targets along with parts of the Veil. Visually Amos was working on double stars and some popular Messiers, and I was attempting to find very dim Swift objects within the new AL Program. While most equipment was imaging, there was more time for social activities, watching football, baseball, and computer processing in the main lodge. The



Calamus Star Party, continued

processing extended into the daytime activities with members sharing "tricks and ways" to enhance images via several different software programs. If you wanted to learn to use imaging software, this weekend was the place to be. It was a bit of a nerd fest weekend. Brett and I did sneak away on Sunday to play a couple rounds of disc golf at Ord and Burwell, but for the most part everyone stayed at the lodge.

The views over the weekend very closely match the summer NSP for clarity, darkness, and quality. The fall (and similar spring event) provides cooler skies with less humidity, thermos bands, bugs, and considerably longer periods of darkness that can offset the slightly better Bortle ratings. After the very disappointing 2025 where over 15 nights (twice Calamus and NSP) I logged less than 8 hours of viewing time, in 2026 I had 13.5 nights of observing time at these 3 outings. What a change a year can make. We are hoping 2027 will be a repeat of 2026.



Clear Dark Skies to All.



Calamus Star Party, continued





Calamus Star Party, continued





Club Offices and Duties

Nominations for next year's officers will begin at the September meeting, and remain open until election at the October meeting.

Club officer nominations are made in September and elections are held in October. The following is a list of 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 shall be managed by a Board of Directors, which shall have the power to spend funds from the treasury for any valid purpose.

The Board shall create additional non-elected offices as required and initiate impeachment proceedings against officers who have been negligent in performing their duties.

Each decision of the Board shall require an affirmative vote of a majority of the Board members present, with a minimum of three members present.

The Prairie Astronomy Club has a sixty 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 shall organize and direct the regular monthly meetings and all other Club activities, officially represent the Club at meetings of regional and national importance where he/she is in attendance or delegate this authority, call meetings of the Board of Directors, and appoint non-elected officers.

Vice President

The Vice-President shall be responsible for meetings when the President is absent, mediate in cases of procedural dispute, temporarily assume any duties of any officer at the direction of the President, and maintain control of the current inventory of all club property.

Secretary

The Secretary shall be responsible for taking minutes at each club meeting and shall be in charge of Club publicity.

Treasurer

The Treasurer is responsible for all Club funds, communications with club members regarding the payment of dues, and keeping accurate records of all monetary transactions. In addition, the Treasurer is responsible for:

1.Sending out membership renewal notices.

2.Submitting a written report of the Club's monetary status at the request of the President or giving a verbal report at the request of any

Club Offices and Duties, continued

member during regular meetings.

3.Providing an annual financial summary to the auditing committee. The final audit report is to be completed, and final approval will be submitted to the President and club membership by the end of February.

4.Maintaining an accurate club membership roster.

5.All tax filings and reporting requirements needed to maintain the Club's 501c3 status.

Second Vice President

The 2nd Vice-President shall be responsible for the formation and presentation of monthly Club programs.

Publications Chairperson

The Publications Chairperson (or Newsletter Editor) is responsible for editing and publishing the *Prairie Astronomer*. The newsletter editor should have prior experience with the publication of a newsletter or demonstrated technical skills required for producing a newsletter.

Site Chairperson

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.

Recording Secretary

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 must be published in the *Prairie Astronomer* on a monthly basis.

Librarian

The Librarian shall keep the Club library and promote its circulation among the Club members. Dated records of persons to whom books are circulated are to be kept by the Librarian. He/she shall keep a current index of all Club library materials and file updated copies with the Club Treasurer as necessary. The Club Librarian and Secretary work together to maintain a record of club activities and regularly update the official club history.

Observing Chairperson

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

Outreach Chairperson

If the Club has an appointed Outreach Chairperson, the Chairperson takes on some of the roles performed by other officers – organizes outreach events, shares in media communications tasks, puts together flyers, etc.

All elected and non-elected officers must be accessible and responsive to club members via email and telephone or through other means of communication that are in common use. §

Club Outreach

Don Hain
dhain00@gmail.com
402-440-5318



I did see that several folks were interested enough in the occultation of Jupiter the morning of October 6th that they made it out to see the event and some to even share pictures of it. I made it out and got a few pictures too, but perhaps the best part of the morning was that I had taken out my beach chair and spent the bulk of the time in a semi-prone position looking up at the night sky from it. The view off to the southeast from where I live is simply inspiring. The LES plant is just a few blocks away (see picture), but it is not hard to block the light of the buildings and parking lot from my eyes and get a good gander at the night sky.

As mid-October approached, some mornings have seen me walk out my front door just before mixing up that wake-up cappuccino … the cappuccino that either follows or precedes the one that goes out with me for nighttime viewing (depending on your point of view). Anyway, I have noticed some new "stars" in the sky off to the southeast/lower-left of the winter hexagon. This morning, I had to see why I had never heard of them over the last few years as I have been getting to know my way around that asterism, so I fired up Stellarium on my tablet.

Of course, what I am seeing are a couple wanderers, Jupiter and Mars. The days of mid-November should see those two buddying up pretty closely. If you get a chance, don't forget Saturday, November 14th in particular. That is the evening when anyone and everyone from the club is invited out to Spring Creek Prairie . If you are new to the club or don't have a scope to bring, you are of course welcome to come out anyway to meet with any of us who do make it out.

Enjoy the night skies as we begin our move through the fall!

Club Outreach





Club Outreach

Upcoming event(s):

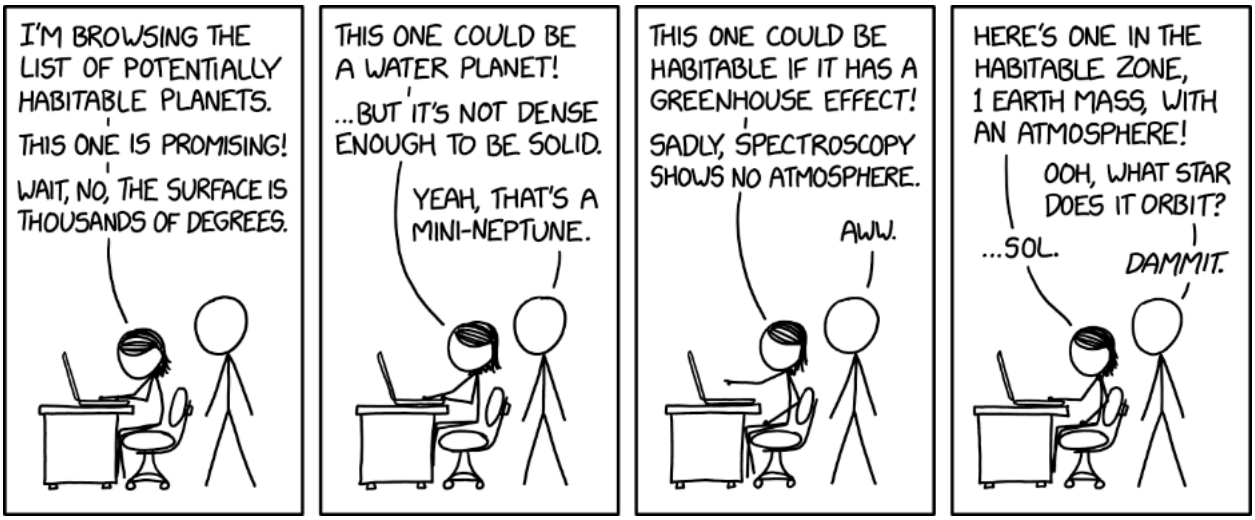
Nocturnal November
Date: Saturday, November 14th, 2026
Time: TBD (but expect 5:00PM to 8:00PM)
Where: Spring Creek Prairie
Needs: volunteers to provide scopes viewing the night skies and discussing the use of telescopes

Hyde Observatory: OPEN

When: Saturday nights … and other nights for groups per request
Where: Hyde Observatory
Sponsored by: Lincoln Parks and Rec / Hyde Board of Directors
Special Group nights: per requests to Pioneers Park Nature Center at 4024417895 or naturecenter@lincoln.ne.gov
Needs: volunteers willing to work out on the deck or manage the shows in the classroom about one Saturday per month, or nights scheduled by request of a group

See https://www.hydeobservatory.info/volunteer/ for more information

See https://forms.gle/ZKr4ivapvUhfejwL6 for the volunteer form to get paperwork with the city started. Since Hyde offers the activity through city government a background check is needed. Submission of this form will get that going.

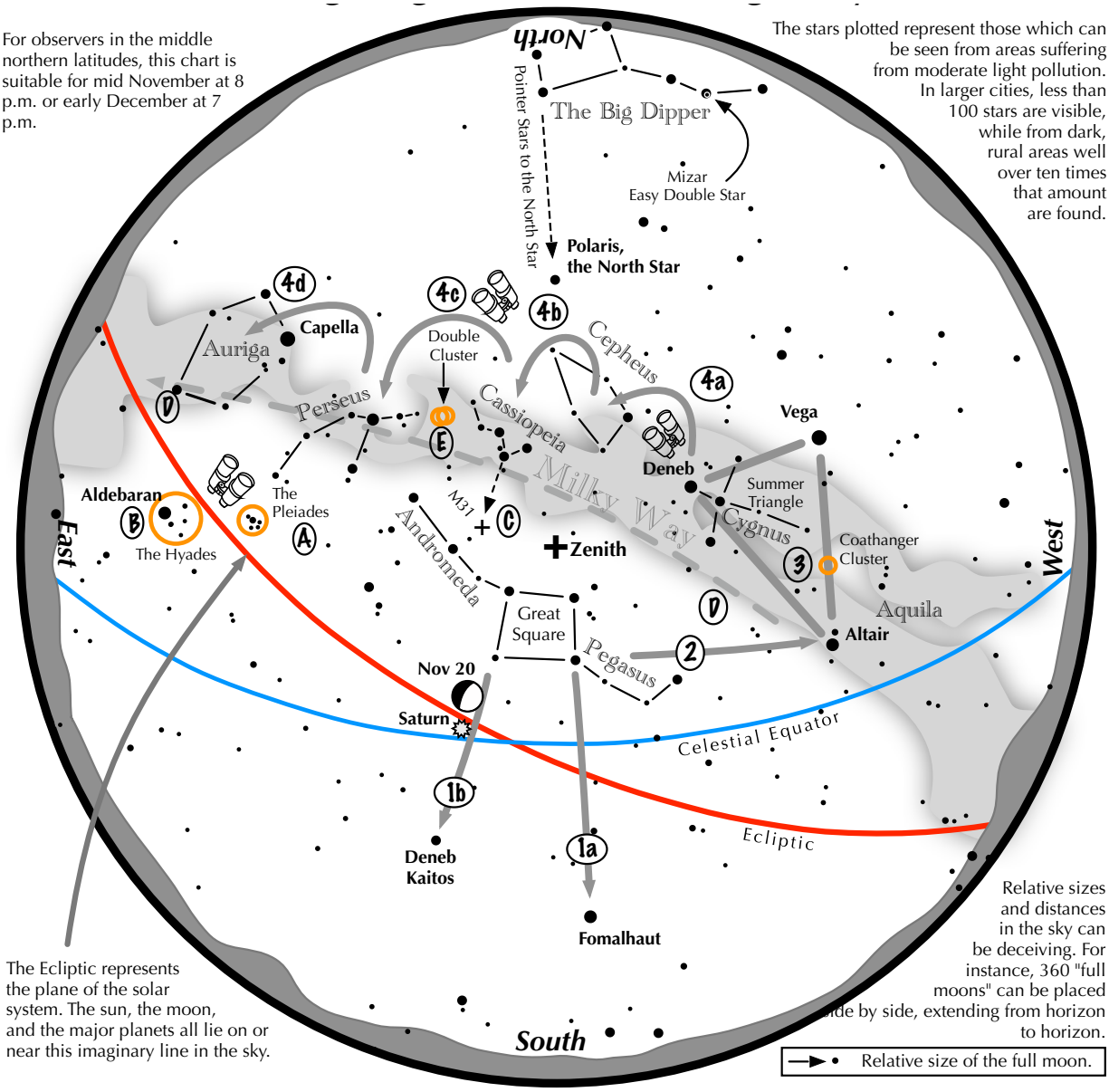


xkcd.com

Navigating the November Night Sky

For observers in the middle northern latitudes, this chart is suitable for mid November at 8 p.m. or early December at 7 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→• Relative size of the full moon.

Navigating the November night sky: Simply start with what you know or with what you can easily find.

1. Face south. Almost overhead lies the "Great Square" with four stars about the same brightness as those of the Big Dipper. Extend a line southward following the Square's two westernmost stars. The line strikes Fomalhaut, the brightest star in the south. A line extending southward from the two easternmost stars, passes Deneb Kaitos, the second brighest star in the south.
2. Draw a line westward following the southern edge of the Square until it strikes Altair, part of the "Summer Triangle."
3. Locate Vega and Deneb, the other two stars of the Summer Triangle. Vega is its brightest member, while Deneb sits in the middle of the Milky Way.
4. Jump along the Milky Way from Deneb to Cepheus, which resembles the outline of a house. Continue jumping to the "W" of Cassiopeia, then to Perseus, and finally to Auriga with its bright star Capella.

Binocular Highlights

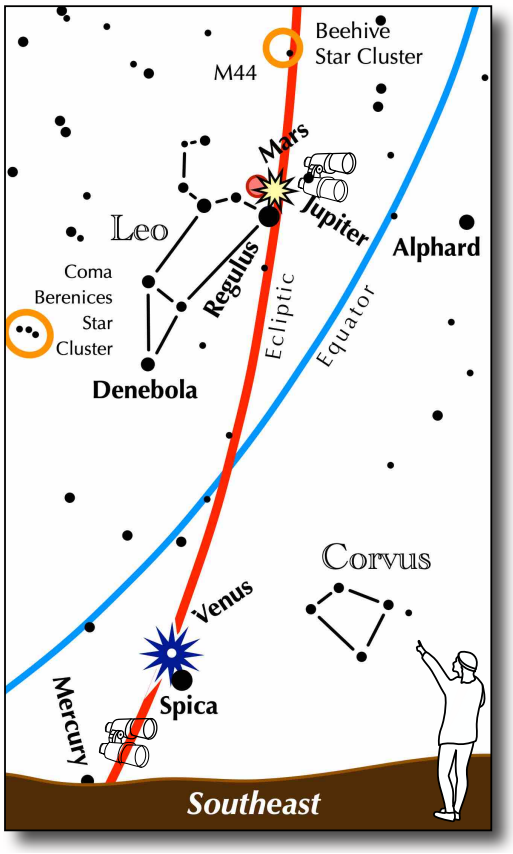
A and B: Examine the stars of the Pleiades and Hyades, two naked eye star clusters. **C:** The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval. **D:** Sweep along the Milky Way from Altair, past Deneb, through Cepheus, Cassiopeia and Perseus, then to Auriga for many intriguing star clusters and nebulous areas. **E.** The Double Cluster.

Astronomical League *www.astroleague.org/outreach; duplication is allowed and encouraged for all free distribution.*

Astronomical League Outreach

In the early mornings around November 15-18, try this activity:

Count the bright celestial wonders strung along the ecliptic

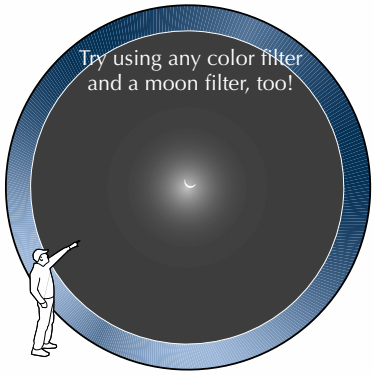


1. Red Mars meets bright Jupiter high in the southeast ninety minutes before sunrise. Grouped with them is the brightest star in Leo, Regulus.

2. Much nearer the southeastern horizon shines brilliant Venus sitting just above the bright star Spica.

3. 40 minutes before sunrise, little Mercury pops above the horizon, far below Venus. Binoculars help spot it in the bright twilight.

Grab a quick look at **Venus** through any telescope. Its beautiful, thin, and brilliant crescent awaits! As the mornings pass, the crescent grows smaller, but thicker.



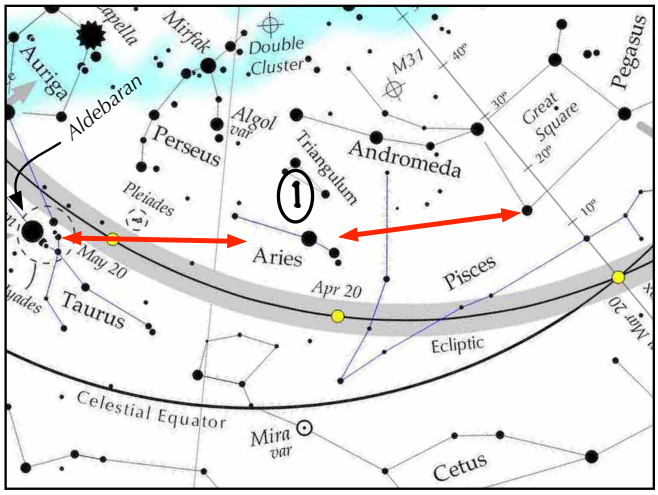
View in the southeast on November 15-18 90 minutes before sunrise

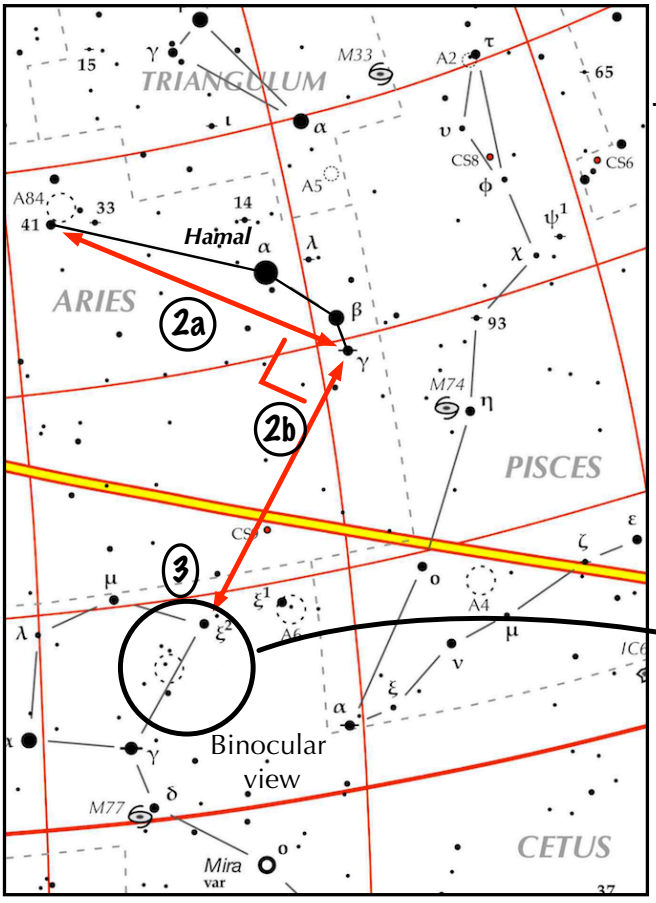
What a great way to start your day!

Astronomical League Outreach

The Questionmark, an asterism for binoculars

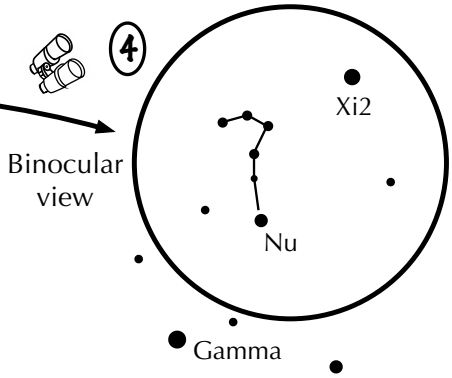
On the Astronomical League's Asterism list





How to find ...

1. Find Aries, which sits mid way between the Great Square in Pegasus and bright star Aldebaran in Taurus. Moderately bright Hamal (Alpha Arietis) is easy to spot, lying near the midway point. Find the dimmer stars Gamma and 41 Arietis.
2. Draw a line from Gamma to 41 and make another line of similar length extending 90° to the south–southeast of Gamma.
3. That line ends near Xi2. It occupies the northwestern vertex of the pentagon of Cetus' head.
4. Place Xi2 near the northwestern edge of the binocular field. The stars of the Questionmark are near the center of the field. These stars are arranged by chance, they are nowhere near each other in three-dimensional space.



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NASA's Curiosity Rover Catches Stunning Martian Dawn

A newly released panorama captured by NASA's Curiosity rover offers the most detailed view yet of distant, wind-carved Martian cliffs, highlighting features the mission's scientists have long been waiting to see up close. The scene was snapped at 8:30 a.m. local Mars time, showing striking blue hues in the foreground as bright morning light illuminates crags known as yardangs on the horizon.

The panorama was captured by Curiosity's Mastcam on Aug. 11, the 4,982nd Martian day, or sol, of the mission, and comprises six individual images that were stitched together after being sent to Earth. Unlike most of Curiosity's Mastcam images, this one was processed without white balancing, preserving the early morning appearance.

The yardang layer extends roughly 10 miles (16 kilometers) across the northwestern



The captivating shapes of wind-carved crags called yardangs are revealed in this zoomed-in crop of a broader panorama captured by NASA's Curiosity Mars rover on Aug. 11, 2026. Scientists are eager to learn more about how the yardang layer formed. Credit: NASA/JPL-Caltech/MSSS

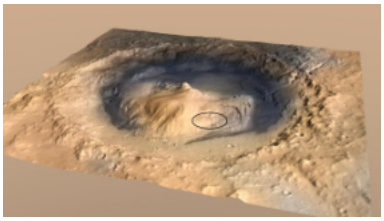
Martian Dawn, continued

reaches of Mount Sharp, a 3-mile-tall (5-kilometer-tall) mountain that Curiosity has been ascending since 2014. In fact, the rover recently passed another milestone in its ascent, reaching 0.6 miles (1 kilometer) of elevation — the most ever climbed on Mars. As it draws ever-closer to the yardangs, mission scientists expect to get even more amazing imagery — and, they hope, answers to how these cliffs were created.

Mount Sharp is made up of layers, each recording a distinct period of Mars' history. By studying them, scientists have been able to learn more about lakes and streams that covered this part of the Red Planet billions of years ago. Eventually, the water dried up and left salty minerals behind. After new material stopped settling on the mountain, some of it may have been stripped away by wind, giving rise to the yardangs.

"The yardang layer looks out of place. It's the wrong color, the layers tilt at an odd angle, and it almost appears plastered on," said Ashwin Vasavada, Curiosity project scientist of NASA's Jet Propulsion Laboratory in Southern California. "But that's what makes it exciting to reach. No one is sure exactly what created this layer, but one idea is it may be ash deposited by ancient volcanic eruptions."

Curiosity is in the second year of its fifth extended mission, which started with an exploration of the spiderweb-like boxwork ridges. The rover will spend most of the next year or so driving through layers enriched with sulfates and carbonates, both signs of ancient drying on the surface. Sometime in 2027, scientists hope to reach the base of the yardangs, where Curiosity will be able to use its robotic arm to collect one-of-a-kind data on these mysterious features.



This artist's concept shows Mount Sharp, the 3-mile-tall (5-kilometer-tall) mountain that NASA's Curiosity has been ascending since 2014. The location of the yardang layer, which the rover recently captured from a distance, is indicated by an ellipse annotation on the mountain's northwestern shoulder. Credit: NASA/JPL-Caltech/ESA/DLR/FU Berlin/MSSS

Astrophotography



The Pleiades (M45) by Jason O'Flaherty
31 × 120s (1h 2m) captured March 20, 2026, with a William Optics UltraCat 76, ZWO ASI2600MC Air and iOptron CEM26. Processed in Siril, Topaz Photo and Photoshop.

Astrophotography



Trifid Nebula by Leona Barratt
Vespera III, aperture 50 mm, focal length 245, 6 hours of data
Sirl and PS

Astrophotography



Pacman Nebula, NGC 281 by Dan Delzell
Askar 65 PHQ Telescope, ZWO ASI2600MC Duo Air Camera
Proxisky Ragdoll 17 Pro mount.
Processed with Astrowizard.
48 180 second exposures, 2 hours 24 Minutes.
Taken October 9, 2026 from Calamus Outfitters, Taylor Nebraska.

Astrophotography



Milky Way over Waikoloa Coast by Mark Dahmke
Panasonic Lumix G9II with Voitlander 10.5mm f/0.95 lens
ISO1600 f/1, 15 seconds unguided

Astrophotography



Helix Nebula by Brett Boller
180 x 180secs
Askar FRA600/ZWOAM5n/ASI 2600 MC DUO
Calamus Reservoir
10/9-10/10 2006

Astrophotography



Pacman Nebula by Brett Boller
100 x 180secs
Askar FRA600/ZWOAM5n/ASI 2600 MC DUO
Calamus Reservoir
10/9/2026

Astrophotography



Messier 22 by John Reinert
Nikon D780 single image ISO 40000 15 second exposure
through Celestron CPC 1100 2800mm FL

Astrophotography



Bubble Nebula by Jim White, taken at Calamus Reservoir on October 8th-11th.
This is 911 x 606 pixels, 15% of the original image.
311 - 4 minute exposures for a total of 20 hours and 44 minutes.
Celestron 925 EdgeHD Schmidt Cassegrain, Celestron CGX mount
ZWO ASI2400MC Pro imaging camera, ZWO ASI174MM Mini guide camera
Celestron OAG (Off Axis Guider)
Software - N.I.N.A., CPWI, PHD2, Stellarium, PixInsight

Hyde Observatory Needs You!



Volunteer at Hyde

Our crew of unpaid volunteers share an interest in Astronomy and they enjoy passing on that interest to the public.

You don't need to be an expert in astronomy or telescopes. We'll teach you what you need to know.

Volunteers start as telescope operators on the observing deck, which involves keeping one of the three telescopes focused on the sky objects we are showing and explaining them to our visitors. Experienced volunteers can become Deck Leaders who determine what objects to train the telescopes on, and answer the really difficult questions.

For more information, visit our website

From the Archives, October, 2006

PAC/OAS Annual Banquet

The PAC/OAS Annual Banquet was held on Sunday, October 15 at the SAC Museum. Over 90 people attended, making this the best turn-out ever. Al Dorn and Ron Veys introduced club officers and banquet volunteers.

PAC club member Earl Moser donated his 8" Meade telescope to the club with the request that it be given to a young amateur astronomer. The PAC officers voted to give the telescope to Joey Churilla, and the scope was presented to Joey at the banquet.

Rick Johnson, the guest speaker, was also roasted by Ron Veys, and presented a lifetime achievement award, signed by Lincoln mayor Colleen Seng.

Rick talked about his "Armchair Astronomer's Observatory" and presented dozens of beautiful images taken with both his 6" and 14" telescopes.

The plaque reads: "Lifetime Achievement Award. Presented to Rick Johnson by the Prairie Astronomy Club and Hyde Observatory Supervisors in Lincoln, Nebraska. For a lifetime of dedicated service to the amateur astronomy community."









Sami Veys checks out the cakes brought by OAS



Joey Churilla receives telescope donated by Earl Moser



Rick Johnson receives Lifetime Achievement Award from Ron Veys

MEMBERSHIP INFO

REGULAR MEMBER - $30 per year. Includes club newsletter, and 1 vote at club meetings, plus all other standard club privileges.

FAMILY MEMBER - $36 per year. Same as regular member except gets 2 votes at club meetings.

STUDENT MEMBER - $12 per year with volunteer requirement.

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

ADDRESS

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The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc. Your membership renewal date is available on the NSN website. Membership dues are: Regular $30/yr, Family $36/yr. New memberships and renewals to can be paid online. For other club information, please contact one of the club officers listed on page three. Newsletter comments and articles should be submitted to: Mark Dahmke, 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.

CLUB TELESCOPES

To check out one of the club telescopes, please contact a club officer. Scopes can be checked out at a regular club meeting and kept for one month. Checkout can be extended for another month if there are no other requests for the telescope, but you must notify a club officer in advance.
100mm Orion refractor: Available
10 inch Meade Starfinder Dobsonian: Available.
13 inch Truss Dobsonian: Needs repair.
10 inch Zhumell: Needs mount.

Buy the book! The Prairie Astronomy Club: Fifty Years of Amateur Astronomy. Order online from Amazon or lulu.com.

