



The Prairie Astronomer

December, 2009

Volume 50, Issue #12

The Official Newsletter of the Prairie Astronomy Club

PAC Program

Program: demonstrations of astronomy software for PCs and smart phones.

In This Issue

800 Power Telescope: Buy Now!, Observing Awards for 2009, Audit Report, January Observing, Focus on Constellations

Featured Photo

Arp 239 by Rick Johnson. 14" LX200R@ f/15, L=4x10 RGB=2x10x3, STL-11000XM, Paramount ME

“Arp 239 is a pair of interacting spirals of the M51 type per notes at NED. It consists of two galaxies, NGC 5279 and 5278 (left to right--east to west). It appears they have a common arm that isn't just a perspective feature, or so several papers indicate. Arp notes "smaller galaxy is fairly symmetric spiral". Oddly that is what it appears to be in his image yet in mine the western arm seems far smaller and tighter to the core than the eastern one. Color may have something to do with the different appearance. NGC 5278 appears to be a typical one armed spiral. As to the common arm it appears more a tidal blob between two arms than a real arm, at least in my image. A super nova was seen in the western galaxy in 2001.”

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



Club Business

Minutes from the November meeting:

Announcements:

Brian Sivill called the meeting to order and handed over the gavel and shawl to Dan Delzell the new President. The Nov. 13 party was cloudy but the Nov. 20 party had great visibility. We had 11 attendees.

The next PAC star parties will be on Dec. 11 & 18 at the Kvasnicka farm.

The next PAC meeting will be Tuesday December 29, 7:30 PM at Hyde. It will feature information about Astronomy software and gadgets.

Club Observing Chair, Jim Kvasnicka provided a review of recent star party activity and a preview of December's observing highlights. Jim also reported that all the planets are visible this month either in early morning or at night. The Geminids Meteor shower will take place Dec. 12th-15th with the best chance on the night of the 13th-14th.

Mark Dahmke has gotten the MSRAL website up and running. You can now sign yourself up and pay on the website. The URL is www.msral2010.info. Watch this site for updates on speakers and events.

Bob Leavitt, Dale Bazan and Bill Lahrberg will start the Audit in early December and report back to the club in December.

The Galileo Scopes have arrived and you can pick your scope up if you ordered one. Please work with Bob Kacvinsky to get yours.

We had 35-40 people attend the "How to buy a telescope" presentation. We also gave away 5 Galileo scope to 5 lucky visitors. Every thought it was a great success. Thank you to club members who welcomed the visitors and answered their questions and opened the deck after the presentation.

From the Newsletter Archives – December, 1966

A grazing occultation occurred on Dec 18th at 6:45pm local time. This was one of the best planned and attended occultations observed that our club has participated in. About ten or so members gathered at my place on the afternoon of the event. After locating our viewing spot on the survey map we had lunch and then departed for the site, about 24 miles south of Firth. We had all the equipment necessary. Rick Johnson brought his new 10 inch F/8, a tape recorder and shortwave radio to pick up time signals on WWV. Terry and Scott brought their six inch scopes and I had my 8 inch and the 2.4 refractor. But the best laid plans of mice and menu etc. Wouldn't you know after a week of clear warm dry weather that those clouds would have to move in. We could see the Moon through the clouds but not the star, not even in the 10 inch.

Well, we plan another one on Dec 31st at 3am. This will be a third mag that will be a little closer to home. About one half mile south of my place. I will be out there. Hope to see some of you there also.

—Earl Moser, Club President

Club Events

PAC Club Meeting
Tuesday, December 29, 2009 7:30pm @ Hyde Obsv.

Newsletter submission deadline, December 19, 2009

PAC Club Meeting
Tuesday, January 26, 2010 7:30pm @ Hyde Obsv.

2010 PAC Star Party Dates

January	8 th & 15 th
February	5 th & 12 th
March	5 th & 12 th
April	9 th & 16 th
May	7 th & 14 th
June	4 th & 11 th
July	2 nd & 9 th
August	6 th & 13 th
September	3 rd & 10 th
October	1 st & 8 th
November	Oct 29 th & 5 th
December	3 rd & 10 th

2010 PAC Lunar Party Dates

April 23rd, May 21st, June 18th, July 16th, September 17th, October 15th,
November 12th

Astronomy Day 2010 is April 24th.

2010 Convention of the Mid-States Region Astronomical League (MSRAL)

June 4th, 5th, 6th at UNL

Nebraska Star Party

August 8th – 13th Merritt Reservoir South of Valentine, NE

Volunteer Activities

Astronomy Day – April 24th

Spring Creek Prairie Twilight on the Tallgrass – September (date not set)

Homestead National Monument Halloween on the Prairie – Sat. before
Halloween

Hyde Observatory on Saturday nights

Additional volunteer events will occur when they are scheduled

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: mailsrv@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.



January Observing: What to View--Jim Kvasnicka

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

Planets

Jupiter: Shines bright in the SW. By month's end it will be setting soon after twilight.

Neptune: Starts the month 2° west of Jupiter at 8th magnitude.

Uranus: South of the Circlet of Pisces at 6th magnitude.

Mars: Rises around 7 pm to start the month. It will reach opposition on January 29th and peaks at magnitude -1.3.

Mars will be closest to Earth on January 27th at 0.66 a.u.

Venus: Remains unseen all month.

Mercury: From January 15th to the 30th it can be seen in the SE.

Saturn: Rises at 11:30 pm to start January at magnitude 0.8 in Virgo.

Meteor Showers

Quadrantids: Peaks on January 3rd. Expect up to 40/hour. The moon will bother.

January Messier List

M33: Large, dim spiral galaxy in Triangulum.

M34: Large, bright open cluster in Perseus.

M52: Rich open cluster in Cassiopeia.

M74: Faint galaxy in Pisces.

M76: The Little Dumbbell, planetary nebula in Perseus.

M77: Small, faint galaxy in Cetus.

M103: Small open cluster in Cassiopeia.

Last Month: M2, M15, M29, M31, M32, M39, M110

Next Month: M1, M35, M36, M37, M38, M42, M43, M45, M78, M79

NGC and Other Deep Sky Objects

NGC 1746: Large, loose open cluster in Taurus.

NGC 1817: Open cluster in Taurus with a chain of N-S stars.

NGC 2169: The 37 Cluster in Orion, open cluster that looks like the number 37.

Cr 69: Open cluster in Orion.

Double Star Club List

Beta Orionis: Rigel, bright white and dim blue stars.

Delta Orionis: Mintaka, Bright white and pale blue stars.

Struve 747: Equal pair of white stars in Orion.

Lambda Orionis: Pair of white stars.

Theta 1 Orionis: The Trapezium in M42.

Theta 2 Orionis: Three white stars.

Iota Orionis: Bright white primary with a blue secondary.

Sigma Orionis: White primary with three pale blue stars.

Zeta Orionis: Alnitak, Bright white star with two white secondary stars.

Challenge Object

B33: The Horsehead Nebula in Orion. A dark nebula superimposed on a very faint emission nebula, IC 434. An H-Beta filter and dark skies are a must.

Focus On Constellations - Jim Kvasnicka

Orion

Orion the Hunter is perhaps second only to the Big Dipper in Ursa Major as the most recognizable star pattern in the sky. Orion is accompanied by his faithful dogs, Canis Major and Canis Minor. Together they hunt various celestial animals including Lepus, the rabbit, and Taurus, the Bull. The three bright stars Alnitak, Alnilam, and Mintaka make up Orion's belt. Betelgeuse forms Orion's left shoulder and means "The Armpit of the Central One" in Arabic, which shows that Orion was recognized across many cultures. Hanging down from Orion's belt is his sword. The central star of his sword is not really a star, but the Great Orion Nebula, M42, one of the most famous and observed objects in the sky. Another famous object found in Orion is B33, the elusive Horsehead Nebula. The constellation Orion is best seen in January.

Mythology

Orion, the son of Neptune, boasted that so great was his might and skill as a hunter that he could kill all the animals on the Earth. Gaea, Goddess of Earth, was alarmed by such a boastful statement. Gaea was afraid that Orion might try to carry out his boast. Gaea sent a giant scorpion to Orion and ordered the beast to sting Orion. After a brief battle the scorpion stung Orion in the heel (the star Rigel) and he died. Both Orion and the scorpion were given honored places in the sky, but they were placed at opposite ends of the sky dome so they would never engage in battle again. There are other stories of how Orion met his death; this one is the most common.

Objects in Orion Magnitude 12.0 and Brighter

Galaxies:

Open Clusters: NGC1981, NGC2169, NGC1662, NGC2175, NGC2194, NGC2186, NGC2112, NGC2141, Basel11B, Berk21

Globular Clusters:

Planetary Nebulae:

Bright Nebulae: M42, M43, M78, NGC1977, NGC1980, NGC1973, NGC1975, NGC2071, IC434

SNREM:

Dark Nebulae: B33, B35, B36, LDN1616, LDN1622, LDN1641

Named Stars: Betelgeuse (Alpha), Rigel (Beta), Bellatrix (Gamma), Mintaka (Delta), Alnilam (Epsilon), Alnitak (Zeta)

Number of Orion Objects in Various Observing Clubs

Messier Club: 3 objects

Double Star Club: 9 objects

Herschel 400 Club: 8 objects

Globular Cluster Club: 0 objects

Open Cluster Club: 5 objects

Planetary Nebula Club: 2 objects

Urban Club: 4 objects

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.

Club Telescopes

To check out one of the club telescopes, contact Cassie Edmund 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.



Audit Report

On December 6, 2009 Bob Leavitt and Dale Bazan conducted an audit of the PAC financial records with the assistance of treasurer Bob Kacvinsky. We examined the bank statements and club's financial records for the checking and savings accounts. All transactions in the bank statements were matched against corresponding transactions in the financial records, along with opening and closing balances. In addition, all transactions were reviewed to ensure that they were appropriate income and expense items for the club.

One discrepancy in the checking account was accounted for as follows:

Check 1604 for \$2.05 was dated 12/26/2007, made out to Chad Tolly for a RASC Refund. The check was finally cashed 3/12/2009. It was accounted for in the 2007 Audit.

We reviewed the current CD documents and found them to be in order. We have not yet completed the audit of CD statements due to the following:

The CD statements from Bank of America are received once a year on 12/31/XX. PAC is credited for interest each month, but the year-end statements are used to apply to the account. Thus, the balances from the 12/31/2008 statements are:

Act: 414 12-31-2008 Balance 5555.00 - Interest in 2008 199.75

Act: 716 12-31-2008 Balance 18,297.24 - Interest in 2008 785.47

Act: 161 12/31/2008 Balance 4050.09 - interest in 2008 173.83

In January, Bob Kacvinsky will update the accounts with the monthly interest income and rebalance for 12/31/2009. At that point we will complete the review of the CD accounts.

Submitted by Bob Leavitt and Dale Bazan

Observing Awards in 2009 – Jim Kvasnicka

The past year was an excellent year for PAC and observing awards. The following observing awards were presented to PAC members in 2009.

Outreach Club

Dan Delzell, Dave Knisely, Bob Leavitt, Bob Kacvinsky, Brian Sivill, Dave Churilla, Joey Churilla, Jim Kvasnicka, Cassie Etmund, Dan Kincheloe, John Lammers, Ron Veys, Steve Lloyd, Josh Machacek, Lee Taylor, Bill Lohrberg

Messier Club

Bob Leavitt, Dan Delzell

Globular Cluster Club

Dan Delzell, Dave Churilla

Double Star Club

Bob Kacvinsky

Lunar Club

Jim Kvasnicka

Binocular Messier Club

Jim Kvasnicka

800 Power Telescope: Buy Now! – Dave Churilla

It never ceases to amaze many of us who have been in this wonderful hobby of Astronomy for some length of time how unscrupulous vendors try to mislead the general public just to sell their merchandise. You've see the ads – they show a Hubble picture of Saturn or the Ring Nebula and claim the telescope can be used at 800 Power! As responsible hobbyists we try to let people know the facts about the hobby and about telescopes.

For a number of years now PAC has presented a program in January to help people learn to use telescopes that they received as presents for Christmas. This year we decided to help people preemptively by presenting a program in November that helps them to choose the RIGHT telescope and to know some of the pit falls of the poor choices. We had hoped that at least a few families would show up but were taken back when we had 33 people attend. That was a great turnout and we had a lot of great comments about the program.

PAC owes a big thanks to Brian Sivill – Basics of Telescopes, Jim Kvasnicka – Buying the Right Telescopes, and Bob Kacvinsky – Accessories, who gave the program and I must say did a very, very good job.

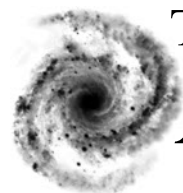
Hopefully this kind of program, like the Learn About Your Telescope Program, can continue to be annual events for November and January and help people to not only avoid the pieces of junk that are often sold this time of year to unsuspecting patrons, but help them to choose the right scope for their needs and perhaps encourage people to join the Prairie Astronomy Club.

Good job guys!



Winners of two of the Galileoscopes given away as door prizes. Photos by Brian Sivill.





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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Next PAC Meeting
TUESDAY
December 29, 2009
7:30 PM
Hyde Observatory