



The Prairie Astronomer

November, 2009

Volume 50, Issue #11

The Official Newsletter of the Prairie Astronomy Club

PAC Program

Every holiday season people ponder buying telescopes as gifts, for their children, for their family or for friends. The few designs found in most department stores offer little information and clerks are rarely knowledgeable. Buying on the internet or home shopping channels without any help doesn't inspire confidence. What if you had a chance to have help in making that purchase?

The Prairie Astronomy Club offers this assistance this month at its regular meeting at Hyde Observatory on November 24th with a session on "how to buy a telescope." Experienced amateurs will provide examples of both the good and bad purchases and lots of helpful hints. And five visitors will actually go home with a "Galileoscope" – a starter telescope. The Astronomy Club will be giving away these telescope kits.

In This Issue

Rick Johnson's Observatory Update, Outreach Activities, December Observing and Constellations, Financial Report, MSRAL Report.

NGC2346 by Rick Johnson. 14" LX200R @ f/10, L=4x10' RGB=2x10'x3, STL-11000XM, Paramount ME. "NGC2346 is a rather famous planetary nebula in Monoceros near Delta and not far from the more famous, far larger, Rosette Nebula. Though the latter is a huge star birth region, NGC 2346 is a tiny star death region being a pair of stars, one of which is dying, thus creating a bipolar planetary nebula about 2000 light years away.
<http://hubblesite.org/newscenter/archive/releases/1999/35/image/d/>

Featured Photo

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



Board Meeting Minutes

PAC Board Meeting Minutes from 11/10/2009

Present:

Dan Delzell - President

Jason Noelle - VP

Steve Lloyd - Program Chair, 2nd VP

Brett Boller - Secretary

Bob Kacvinsky - Treasurer

Jack Dunn - Publicity Chair

Dave Churilla - Outreach Coordinator

Jim Kvasnicka - Observing Chair

Mark Dahmke - Website Coordinator

We reviewed the club bylaws and asked if there were any questions out job responsibilities.

Jason agreed to meet with Cassie Etmund to get a complete inventory of club equipment and enlist the help of another club member to check the telescopes and identify anything needing repair.

Brett B will record the minutes of each meeting and submit them to Mark to be included in the club newsletter.

We discussed the other jobs in the club that need to be addressed.

ALCOR would submit a club roster to the Astronomical League 3-4 times a year for our current paying members and act as the point of contact for the League. Dan D. said that he will continue to sending the information.

Bob Kacvinsky volunteered to be responsible for Web Inquires and route them appropriately

Dan discussed the Publicity Chair and thanked Jack Dunn for filling this position. Jack is well positioned to promote both Hyde and PAC activities.

Dave Churilla will continue as Outreach Coordinator and handle the communication to prospective and new club members.

Brett Boller will take over the club library. We discussed if club members new of the resources in the library and we talked about how to promote it and what materials, books and DVDS, we'd like to add to it.

Brett will also find someone to help him with meeting minutes if his classes keep him from attending a meeting.

Jim K. has been chosen as the site chairperson and will coordinate observing site maintenance.

Bob K. will handle the renewal notices as they come up each month .

Annual Audit

Dan has asked Bob Levitt, Dale Bazan, and Bill Lohrberg. to conduct the annual PAC audit. They hope to report to the club in the December or January meeting

It was decided that they should follow Rick Johnson's document on how to conduct the audit.

New Members Packet

Dave C volunteered to take care of sending information packets to new members.

Publicity

Nikki Bates approached the club with ideas to publicize Hyde and PAC activities. Jack D is working with her to implement some of her ideas. She's suggesting short TV or radio interviews about upcoming events like the Leonid Meteor shower, doing Public Service Announcements about the public nights at Hyde and taking advantage of the free community calendars available on the local TV and Radio stations.

We're very excited about this and appreciate Nikki's efforts!

We discussed the need to attract younger members to the club. In the past year we've had a number of younger members join and discussed working with the local scouting organizations as a way to do this.

November Meeting

We completed planning for the November meeting, "How to Purchase a Telescope" Brian Sivill, Bob Kacvinsky and Jim Kvasnicka will be presenters

Jack mentioned that the clubs Galileo scopes have (finally) arrived and suggested we raffle off 5 to people who attend the November meeting. This suggest was approved.

Hopefully Dave C will receive Orion Catalogs that will be a valuable to for the program at Nov. meeting.

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

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.



December Observing: What to View--Jim Kvasnicka

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

Planets

Jupiter: Fairly high in the SW at dusk at -2.2 magnitude. By the end of December it will be setting by 8:30 pm.

Neptune: Less than 0.6° from Jupiter for several days around the 21st of December.

Uranus: South of the Circlet of Pisces.

Mars: Rises 5 hours after sunset to start the month and less than 3 hours at the end. It will double in brightness from the start to the end of December.

Venus: By the end of the month it is lost in the Sun.

Mercury: The first three weeks of December Mercury shines at -0.5 in the SW.

Saturn: Rises at 1:30 am to start the month at magnitude 1.0 in Virgo. The rings increase their tilt from 4.3° to 4.9° .

Meteor Showers

Geminids: December 12-15. Peaks on the night of 13-14. Expect up to 120/hour.

December Messier List

M2: Class II globular cluster in Aquarius.

M15: Class IV globular cluster in Pegasus.

M29/M39: Open clusters in Cygnus.

M31: The Andromeda Galaxy.

M32/M110: Companion galaxies to M31.

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

Next Month: M33, M34, M52, M74, M76, M77, M103

NGC and Other Deep Sky Objects

NGC 157: Oval shaped galaxy in Cetus.

NGC 246: The Pac Man Nebula in Cetus.

NGC 672: Oval shaped galaxy in Triangulum.

NGC 936: Galaxy in Cetus near M77.

NGC 1535: Planetary nebula in Eridanus.

Double Star Club List

Eta Cassiopeiae: Yellow primary with a rose colored secondary.

Sigma Cassiopeiae: Yellow and light blue pair.

Theta Aurigae: Bright white primary with a pale blue secondary.

1 Camelopardalis: White and pale blue pair.

32 Camelopardalis: Equal pair of white stars.

Gamma Ceti: Bright white and pale yellow stars.

Chi Tauri: White primary with a pale blue secondary.

118 Tauri: White primary with a yellow secondary.

Challenge Object

NGC 3172: "Polarissima Borealis" – closest galaxy to the North Central Pole; small and faint. Located in Ursa Minor.

Club Events

Club Star Party
Friday, November 20, 2009

PAC Club Meeting
Tuesday, November 24, 2009 7:30pm @
Hyde Obsv.

Club Star Party
Friday, December 11, 2009

Club Star Party
Friday, December 18, 2009

Newsletter submission deadline,
December 19, 2009

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

Club Star Party
Friday, January 08, 2010

Club Star Party
Friday, January 15, 2010

Astronomy Day, April 24

MSRAL Convention
June 4-6, 2010

Focus On Constellations - Jim Kvasnicka

Perseus

Perseus the Hero lies in the Milky Way and is rich in such typical Milky Way objects as open clusters and diffuse nebulae. Perseus' two Messier objects, open cluster M34 and the planetary nebula M76, both fine sights, are not the most outstanding objects in the constellation. That honor goes to the famous Double Cluster, NGC869 and NGC884. Another showpiece object is the variable star Beta Persei, Algol. The constellation Perseus is best seen in December.

Mythology

Perseus slew the Medusa, the snake haired Gorgan. Anyone who looked at Medusa would turn to stone. Perseus got around this problem by not looking directly at her. He did this by looking at her reflection in his shield. He killed Medusa by cutting off her head. Some of her blood fell into the sea and mixed with sea foam out of which sprang Pegasus the white winged horse. Later while riding Pegasus he came across Andromeda chained to the rocks on the shore as a sacrifice to the sea monster Cetus. Perseus was able to kill the Cetus by pulling out the head of Medusa from a bag and holding it up to Cetus. The monster looked at the head of Medusa and was turned to stone.

Objects in Perseus Magnitude 12.0 and Brighter

Galaxies: NGC1023, NGC1161, NGC1058, NGC1169, NGC1186, NGC1003, IC284, NGC1272 NGC1275

Open Clusters: M34, NGC869, Tr2, NGC884, NGC1545, NGC1528, NGC1444, NGC1342, NGC1582, NGC957, NGC744, NGC1245, NGC1513, Ru148, NGC1496, NGC1605, Berk11, Berk68, Czernik8

Globular Clusters:

Planetary Nebulae: M76

Bright Nebulae: NGC1499

SNREM:

Dark Nebulae: B5

Named Stars: Mirphak (Alpha), Algol (Beta), Miram (Eta), Menkib (Xi), Altik (Omicron)

Number of Aquarius Objects in Various Observing Clubs

Messier Club: 2 objects

Double Star Club: 2 objects

Herschel 400 Club: 10 objects

Globular Cluster Club: 0 objects

Open Cluster Club: 7 objects

Planetary Nebula Club: 5 objects

Urban Club: 6 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.



End of Year Financial Report

Account Balances 10/31/2009

	CD1	\$18,297.24
	CD2	\$4,050.09
	CD3	\$5,555.00
	Checking	\$3,186.07
	Savings	\$9,367.69
Total In Accounts		\$40,456.09
Income and Expenses FY 2008		
Income		
	Donations	\$100.00
	Class Registration	\$182.00
	Gifts	\$30.00
	Interest Income	\$313.49
	Member Dues	\$1,581.50
	Miscellaneous Income	\$0.27
	Ottwell & RASC Handbooks	\$128.30
	Total Income	\$2,335.56
Expenses		
	Astronomical League	\$240.00
	Dues & Subscriptions	\$100.00
	Education/New Member Packets	\$72.34
	Government Fees	\$74.00
	Insurance	\$350.00
	Meals & Entertainment	\$37.46
	Member Dues	\$5.00
	MSRAL	\$55.37
	Newsletter Expenses	\$147.98
	Office Supplies	\$21.38
	Ottwell & RASC Handbooks	\$128.30
	Printing	\$40.66
	Postage	\$16.20
	Total Expenses	\$1,288.69
	Total Income Less Expenses	\$1,046.87

Note: There are outstanding expenses dealing with telescope purchases that are not included in this report. The audit committee has been appointed. Their audit report should include all expenses.

Respectfully submitted by Dan Delzell, PAC Treasurer.

Mid States Convention Report – Jack Dunn

The MSRAL 2010 website is now on-line at <http://www.msral2010.info> Tell your friends in other clubs to check it out. It features the ability to do registration (and pay for it) entirely on-line.

We have two main speakers confirmed so far. Dr. Peter Schultz, of Brown University. Pete was a founding member of PAC. He has been a member of the science team on the Deep Impact and LCROSS missions and is also head of Rhode Island Spacegrant Consortium.

Rob Landis is an engineer working for NASA Ames Research Center and attached to Johnson Space Center. He has worked in Mission Control for International Space Station missions, trained controllers in the Russian control room for ISS, was an engineer on the trajectory part of the Mars Rover missions and also is an expert in Russian space program history.

We are inviting other speaker but do not have them confirmed and of course also have an on-line form for others who might like to speak.

Mid-States Regional Convention
Astronomical League

June 4-5
2010

Home Schedule Lodging Info Convention Registration Vendor Registration Form Speakers Form Map/Directions Contact Us About PAC

Hosted by
The Prairie Astronomy Club

Mid States Region
of the
Astronomical League

Mid-states Regional Convention, Astronomical League

Coming Soon - this site is still under construction. Please check back in early December for more information.

Follow us on Facebook

On this web site, you'll find general information about the convention, an agenda, an online registration form and lodging information.

Speakers (so far)

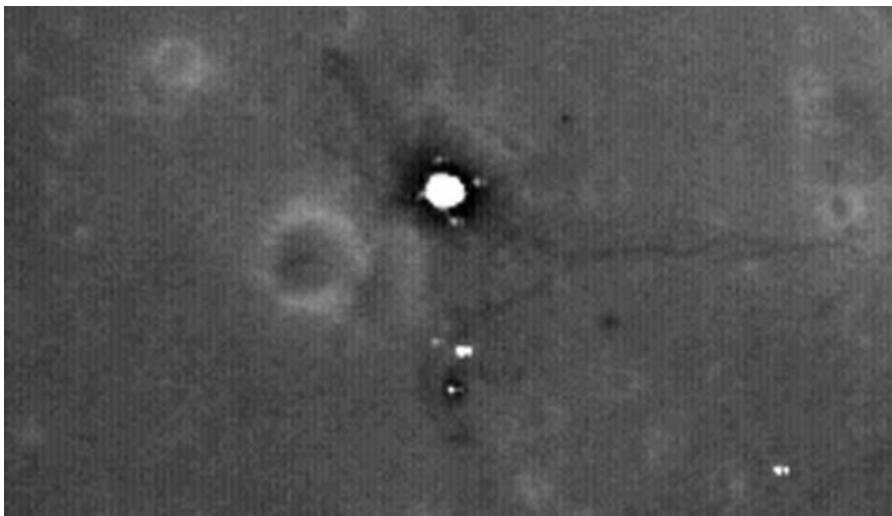
Dr. Pete Schultz, Science Coordinator for NASA-Ames Vertical Gun Range. Dr. Schultz was a founding member of the Prairie Astronomy Club. He received his Ph.D. in Astronomy at the University of Texas at Austin in 1972. After working as a research associate at the NASA Ames Research Center, and a Staff Scientist at The Lunar and Planetary Institute, he became an Associate Professor in the Department of Geological Sciences at Brown University in 1994. He was promoted to full Professor in 1994. In addition to his research and teaching responsibilities at Brown, he has served as Director of the Lunar and Planetary Institute Planetary Image Facility, and is currently the Director for both the Northeast Planetary Data Center and the NASA/Rhode Island University Space Grant Consortium.

Rob Landis, Senior Engineer at NASA Ames Research Center. Mr. Landis is currently on extended TDY to NASA Johnson Space Center's Lunar Surface Systems Project, Houston, Texas. He is also studying other potential uses of the Orion (and associated Constellation hardware) to expand human exploration beyond the Moon — to near-Earth asteroids.

His experience at NASA includes: spaceflight mission operations with a variety of spacecraft (i.e., HST, MSTI-3, RXTE, ISS, Cassini-Huygens, and the MERs - Spirit and Opportunity). His academic background is in astrophysics and planetary science while work experience has been in mission operations. He is currently writing a book entitled "General Old Stars" about the life of Ormsby.

LROC Images Apollo 11 Landing Site

This is LROC's first picture of Apollo 11 after LRO dropped into its 50 km mapping orbit. At this altitude, very small details of Tranquility Base can be discerned. The footpads of the LM are clearly discernible. Components of the Early Apollo Science Experiments Package (EASEP) are easily seen, as well. Boulders from West Crater lying on the surface to the east stand out, and the many small craters that cover the moon are visible to the southeast.



From the Newsletter Archives – December 25, 1979

Meeting to Feature Help for New Telescope Owners

The Club prepared and distributed a pamphlet “So You’re Buying Your First Telescope... Some Practical Suggestions to Consider Before You Buy...” before Christmas. Anyone who received a telescope for Christmas, club member or not, is invited to bring his instrument to the club meeting Wednesday night, for some practical suggestions on how to assemble it correctly and use it to get the most out of the investment in time and money. If you have any friends or relatives that will be receiving a telescope as a Christmas gift, be sure they attend the meeting.

Club Outreach Events – Dave Churilla

Well, it's been a very good year for Outreach for PAC. I want to thank all the members who have volunteered their time to help with Outreach this year. Without you we couldn't have done what we have and touched so many people. We handled 14 events this year that ranged from a dozen people to nearly 500 people. Those 14 events took up 50 hours of each volunteer's time and saw 2,173 people attend them. For our small group that's not too bad. Again, thanks to all who helped out this year.

I got a letter from the organizers at Homestead National Monument thanking us again for setting up for the Boy Scout Camporee. Allison LaDuke said that all the boys and most of the parents were talking about what they saw in the telescopes around the campfires that night. She said we made a big impression on all of them.

The Homestead Halloween at Homestead National Monument near Beatrice was held on October 24th. Thanks to Bob Kacvinsky, Jim Kvasnicka, Dave Knisely and John Lammers for helping me out at this event. We set up on the Prairie this year and had about 350 people view through our telescopes. It was cloudy early but it cleared for the event and everyone at least got a chance to see the moon and Jupiter that night. They came in groups of from 20 - 50 people and frankly there were times we didn't have enough time with them. They all were thoroughly enjoying looking through the scopes and didn't want to leave to go to the other stations.

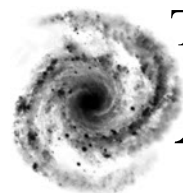
As I said last month, I have to confess that it will be nice to be able to relax without having an activity hanging over my head, but many of us are in the middle of planning for the Mid States Regional Astronomy League Convention next June and that's taking up some time. Don't forget, this is also an Outreach Activity and we can use your help. Let Jack or Steve Lloyd know if you are interested in lending a hand.

And again, as Outreach Coordinator I do NOT need to handle every Outreach Activity that we do. If you are asked to do something by all means you can take care of it and even get volunteers. But I would like to ask that you inform me of the activity ahead of time and then give me the final information when it's over. I'm keeping records of all our Outreach efforts and need the date, time, type of event, PAC's activity in the event, who the volunteers were, how many people were at the event, start and end times, and contact individual with their email and phone number.

Thanks for all your help and I hope we see more of you helping out at our Outreach Activities.



Date	Length (in hrs)	Activity	PAC Contact	Activity Contact	Description	# Attending	Volunteers
01/17/09	4.0	IYA Kick Off at SAC Museum	Brian Sivill	Jack Dunn	Opening event for PAC's IYA Celebration. Speaker at SAC Museum. Planned Star Party was cancelled due to clouds.	270	Brian Sivill, Jack Dunn, Dave Knisely, Cassie Etmund, Jim Kvasnicka, Bob Leavitt, Lee Taylor, Dave Churilla, Dan Delzell, Bob Kacvinsky
01/27/09	2.0	Learn Your Scope Seminar	Brian Sivill / Jack Dunn	Brian Sivill	Annual Seminar after Christmas for public to bring scopes to PAC meeting to learn how to use them	17	Dave Churilla, Jim Kvasnicka, Bob Kacvinsky, Dave Knisely, Jack Dunn, Lee Taylor, Brian Sivill, John Lammers, Josh Machacek, Dan Delzell, Bob Leavitt, Ron Veys, Cassie Etmund
04/03/09	3.0	100 Hours of Astronomy @ South Pointe Pavilion	Jim Kvasnicka		Set up scopes for public viewing for 100 Hrs of Astro for IYA	300	Dave Churilla, Jim Kvasnicka, Bill Lohrberg, Dan Delzell
04/16-17/09	7.0	PAC Astronomy Field Class	Dave Churilla	Jim Kvasnicka	Annual PAC Field Observing Class and Astro 101. Field activities were hampered by clouds.	28	Dave Churilla, Jim Kvasnicka, Bob Leavitt, Bob Kacvinsky, Dan Delzell
05/02/09	8.0	Astronomy Day	Jack Dunn	Jack Dunn	Astronomy Day set up with booths, demos and telescope displays. Most of PAC membership helped out	475	Most of PAC
05/09/09	3.5	Scouts in Space @ Scout Camp/Walton	Dave Churilla	Brian Gebers	Set up Solar Observing for Scouts for Badges	250	Dave Churilla, Jim Kvasnicka, Bob Leavitt & Dale Bazan
05/28/09	2.0	Camp Carol Joy Holling - Ashland, NE	Bob Kacvinsky	John Morelock	Set up scopes for middle school teens	50	Jim Kvasnicka & Bob Kacvinsky
06/01/09	2.0	Children's Circle Montessori	Jim Kvasnicka	Jim's Wife	Set up Solar Observing for Pre-Schoolers	25	Jim Kvasnicka
06/23/09	2.0	Prairie Hill Learning Center	Dave Churilla	Deb Buck	Set up scopes for middle school teens	15	Dave Churilla, Jim Kvasnicka & Dale Bazan
08/01/09	1.5	Children's Circle Montessori	Jim Kvasnicka	Jim's Wife	Pre-Schoolers & Neighbors for Lunar Viewing	40	Dave Churilla, Jim Kvasnicka, Bob Kacvinsky, Dan Kinchloe & Mary Kinchoe
09/26/09	2.5	Spring Creek Audubon Twilight on the Tallgrass	Dave Churilla	Deb Hauswald (DHAUSWALD@audubon.org)	Fund raiser for Spring Creek Prairie	250	Dave Churilla, Cassie Etmund, John Lammers, Dave Knisely, Jim Kvasnicka, Bob Kacvinsky, Dale Bazan, Dan Kinchloe
09/27/09	3.0	Southwest High Astronomy Class	Dave Churilla	Court Monroe	Held a mini Star Party for some of the Astronomy Class from Southwest High School	12	Dave Churilla, Jim Kvasnicka, Bob Kacvinsky
10/10/09	3.0	Boy Scout Camporee at Homestead National Monument	Dave Churilla	Jessica Fleming (Jessica_Fleming@nps.gov)	Homestead National Monument Open House	91	Dave Churilla, Bob Kacvinsky, John Lammers, Brian Sivill, Jason Noelle
10/24/09	6.5	Homestead National Monument Halloween on the Prairie	Dave Churilla	Allison LeDuc (Allison_LeDuc@nps.gov)	Homestead National Monument Open House	350	Dave Churilla, Bob Kacvinsky, Jim Kvasnicka, John Lammers, Dave Knisely
50.0		TOTAL EVENTS IN 2009		14	TOTAL NUMBER PUBLIC	2,173	



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.

PRESIDENT	Dan Delzell 402-432-6283 dan@delzell.net
VICE PRESIDENT	Jason Noelle oegrad2002@yahoo.com 402-730-8317
2nd VP (Program Chair)	Steve Lloyd lloyds45@aol.com 402-327-9313
SECRETARY	Brett Boller proboller86@yahoo.com
TREASURER	Bob Kacvinsky bob.kacvinsky@syngenta.com 402-423-4967
Club Observing Chair	Jim Kvasnicka (402) 423-7390 jim.kvasnicka@pfizer.com
Outreach Coordinator:	Dave Churilla , 467-1514 weber2@inebraska.com
Newsletter and Website Editor:	Mark Dahmke (402) 475-3150
Publicity	Jack Dunn jdunn@spacelaser.com

The Prairie Astronomer
c/o The Prairie Astronomy Club, Inc.
P.O. Box 5585
Lincoln, NE 68505-0585

FIRST CLASS MAIL

{MM:TITLE} {MM:FIRSTNAME}
{MM:MIDDLENAME} {MM:LASTNAME}
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{MM:ADDRESS1}
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{MM:RENEWALDATE}

Next PAC Meeting
TUESDAY
November 24, 2009
7:30 PM
Hyde Observatory