



The Prairie Astronomer

February, 2009

Volume 50, Issue #2

The Official Newsletter of the Prairie Astronomy Club

PAC Program

“The Sky Is Falling” Michael Sibberensen will talk about meteorites.

Michael Sibberensen is the newest staff member of the NASA – Nebraska Space Grant Consortium. He serves as Outreach Coordinator, helping bring space science and engineering educational opportunities to Nebraska residents. He has a diverse background in not only physics and astronomy education, but also has experience as a professional entertainer, owns a video production company, and has experience in technical writing, editing and publishing.

In This Issue

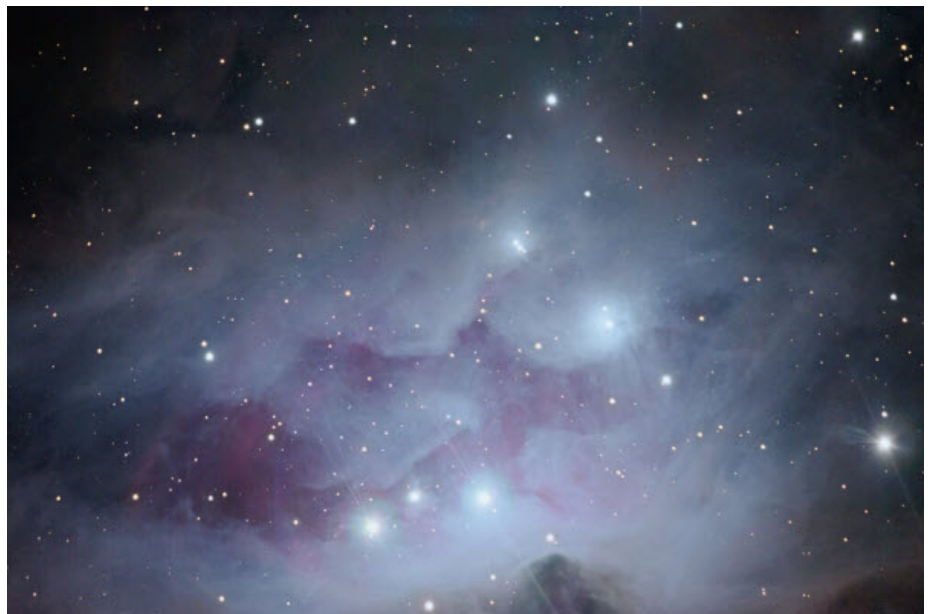
Focus on Observing, Social Networking, Learn How to Use Your Telescope.

Featured Photo

NGC 1977, the Running Man Nebula - by Rick Johnson. “The Running Man is a reflection nebula lit by starlight reflected off it just as a cloud is seen in our atmosphere due to sunlight reflected off of it. Since the brightest stars are blue and because blue light scatters best off particles the size of those in most reflection nebula they usually appear quite blue. NGC 1977 is no exception. Though you will see some reddish tinges in the darker areas due to weak emission by hydrogen gas in the cloud. It is part of the same huge molecular cloud that the Orion Nebula, M42 and M43 are and thus about 1350 light years away.”

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

Saturn image courtesy NASA.



Club Business

President Brian Sivill called the meeting to order. 24 members, 2 guests.

Announcements: The next PAC meeting will be Tuesday February 24 at Hyde Observatory. Club members are invited to Mueller Planetarium on January 30 or 31 at 4PM for the fulldome show: *Two Small Pieces of Glass*, a history of the telescope since the time of Galileo, produced specifically for the International Year of Astronomy. The next PAC star party dates are Feb. 20 and 27 at the Kvasnicka farm. Dave Silcox announced that one of Galileo's original telescopes will be displayed at the Franklin Institute in Philadelphia from April to September of this year.

The Mid-States Regional Convention of the Astronomical League (MSRAL) will be held March 7 & 8 at the Holiday Inn in Columbia, Missouri. Registrations and hotel reservations must be in by February 5, 2009. Jim Kvasnicka has forms for those wishing to register.

Outreach Coordinator, Dave Churilla and observing chair, Jim Kvasnicka will be leading an introductory astronomy field class on April 16 & 17 at Hyde Observatory. The class will cover the different types of objects to observe and help beginners with using the different types of telescope used to observe them. This class is open to the public. Registration is \$8/single \$15/couple or family. Club members who'd like to help out can contact Jim for what help he needs.

Observing report:

Jim provided an observing report, including recent observing activity for the last couple of star parties and a review of objects to observe for the month of February. Unfortunately, the December star party had poor observing conditions. The January dates had decent weather, but road conditions prevented most from attending. We did have two hearty souls venture out last time. Jim noted that a new comet is expected to reach magnitude 4 in February. Comet Lulin is visible in Libra just before sunrise.

IYA: Jack Dunn reviewed the recent *IYA FIRST LIGHT* event at the Strategic Air & Space Museum. We had roughly 170 paid admissions to the event. Jack had plenty of photos to share. Upcoming events for IYA include:

- * a new Hubble image for display in Mueller Planetarium's lobby, to be unveiled on February 14

- * astronaut Clay Anderson will be in town on March 14. He'll be speaking at Morrill Hall in the morning and at Hyde Observatory that evening.

Hyde News:

Hyde volunteer coordinator, Steve Lloyd announced that there will be a volunteer orientation on Saturday February 7 from 9:30AM - 12:00PM. From 9:30 - 10:30, new volunteers will be trained on operation of the telescopes and observatory procedures. From 10:30-12, Mark Dahmke will show volunteers how to operate Hyde's Astro-Vid video camera.

Hyde Observatory's Board of Supervisors also announced that they are seeking to fill a part-time paid supervisor position to run the observatory on Saturday nights.

PAC financial report: The audit has one or two loose ends to tie up, but is largely complete. Club account balances as of Dec. 31, 2008 were:

Checking:	\$2863.69
Savings:	9333.64
CD-1:	18297.24
CD-2:	4050.09
CD-3:	5555.00

Total Accounts: \$40,099.66

Brian mentioned that the board was considering several projects we wanted to do with some of these funds. We'll be outlining them in the near future.

Adjourn to Brian's workshop on *How to Use Your New Telescope*

Respectfully submitted by:
Lee Taylor

Club Events

Club Star Party
Friday, February 20, 2009

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

Club Star Party
Friday, February 27, 2009

PAC Club Meeting
Tuesday, March 31, 2009 7:30pm @ Hyde Obsv.

Next newsletter submission deadline: March 22.

2009 Star Party Dates

March 20th and **March 27th**

April 17th and **April 24th**

May 15th and **May 22nd**

June 12th and **June 19th**

July 17th and **July 24th**

August 14th and **August 21st**

September 18th and September 25th

October 16th and October 23rd

November 13th and November 20th

December 11th and **December 18th**

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

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

Club Telescopes - Checkout Policy

To check out one of the club telescopes, contact Cassie Etmund at ccgymnast1@aol.com. If you keep a scope for more than a week, please check in with Cassie once a week, to verify the location of the telescope and how long you plan to use it. The checkout time limit will be two weeks, but can be extended if no one else has requested use of a club scope.



ON THE NET

PAC:
www.prairieastronomyclub.org

PAC E-Mail:
info@prairieastronomyclub.org

NSP:
www.nebraskastarparty.org

NSP E-Mail:
info@nebraskastarparty.org

OAS
www.OmahaAstro.com

Hyde Observatory
www.hydeobservatory.info

Panhandle Astronomy Club
Panhandleastronomyclub.com

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

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

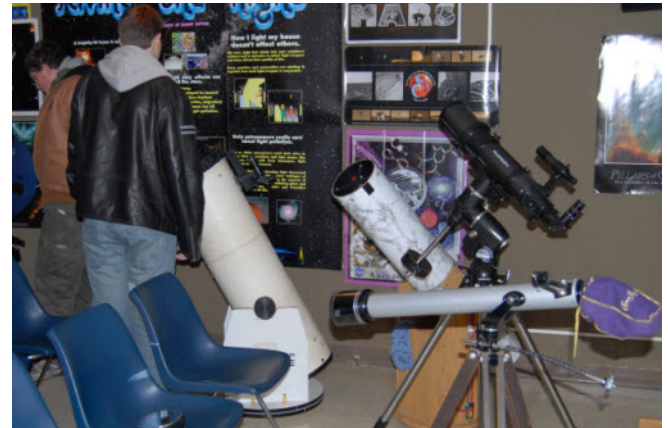
To post messages to the list, send to the address
pac-list@prairieastronomyclub.org

PAC can also be found on Twitter and Facebook.

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



PAC's Annual "Learn How to Use Your Telescope" Program



Eight guests brought their telescopes to our annual "Learn How to Use Your Telescope" session.

2008 PAC Financial Report--Dan Delzell

2008 Itemized Cash Analysis

Income	
Donations	100.50
Hyde Astronomy Class	107.00
Interest Income	1,274.63
Member Dues	967.50
Ottwell & RASC Handbooks	76.25
Total Income	2525.88

Expenses

Astronomical League	225.00
Dues and Subscriptions	100.00
Insurance	350.00
Newsletter	55.20
Postage and Delivery	29.76
US Postmaster	42.00
Total Expenses	801.96
Total Income Less Expenses	1723.92

Account Balances as of 12/31/2008

Account	Balance
PAC Checking	2,863.69
PAC Savings	9,333.64
CD-1	18,297.24
CD-2	4,050.09
CD-3	5,555.00
Total	40,099.66

Social Networking for PAC--Mark Dahmke

Facebook

A few months ago I setup a group on Facebook for PAC, and I see that several club members and a few guests have been using the discussion forum. I'm also working on code for our website that will automatically post updates to the events calendar to the Facebook calendar. Please check out the Facebook site and let me know what else you'd like to add to it.



Twitter

For those who aren't familiar with Twitter, it started as a way to let friends know what each other is doing. It has grown into one of the hottest messaging services on the Internet. For an example of what you can do with Twitter, go to "find people" and enter "sts125." You'll find near real-time messages from the team who is preparing for the STS-125 Hubble repair mission. Also try searching for IYA. I've created a profile for PAC, named "PAC_Lincoln_Ne." I (or club officers) will post announcements and status messages, including meeting notices. You can be notified of new messages by email or text messaging.

RSS Feed

I've also added an RSS feed to the PAC website. The content will be identical to what is sent to Twitter, but you can use an RSS reader on your PC or phone, to read the announcements.

I'd like to try to build more of a community around these services. One possibility would be to get real-time Twitter updates from club members who want to coordinate and/or report on club star parties as they happen, via text messaging. Your ideas and suggestions would be appreciated - please let me know how you think we could make use of these services to provide better communication among club members.

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 STAR PARTIES

Club star parties are held monthly on the Friday night nearest the new moon. Since they are held on private land, they are for club members and invited guests only. If you'd like to attend a star party, please contact one of the club officers. Check the club website members-only area for directions to the site.

March Observing: What to View--Jim Kvasnicka

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

Planets

Venus: Starts the month 27° above the horizon but starts to drop. By March 21st it is down to 5°. On March 25th Venus is 5° above the horizon both at sunrise and sunset.

Saturn: In Leo's hind foot at magnitude 0.5. Saturn will be closest to Earth on March 8th so it will look a little bigger at 19.8". The rings are tilted 2° to 3°.

Jupiter: Just 7° above the SE horizon a half hour before dawn on March 1st. By March 31st it will be up to 15°.

Mercury and Mars: Close together about 6° lower left of brighter Jupiter.

Uranus and Neptune: Not visible this month.

Ceres: The asteroid will be at magnitude 6.9 from mid-February through the first week of March. This is as close and bright as Ceres will be in our lifetime. It won't be this close again until the year 4164!

Comets

C/2007 N3 (Lulin): Should brighten to 5th or even 4th magnitude as it crosses Virgo and Leo. On February 23rd Lulin is 2° SSW of Saturn. On February 27th look for it within 1° of Regulus. Finder charts can be printed from SkyandTelescope.com/CometLulin.

March Messier List

M41: Open cluster in Canis Major.

M44: The Beehive Cluster in Cancer.

M46/M47: Open clusters in Puppis next to each other.

M48: Open cluster in Hydra.

M50: Open cluster in Monoceros.

M67: Open cluster in Cancer.

M81/M82: Galaxy pair in Ursa Major.

M93: Open cluster in Puppis.

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

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

NGC and Other Deep Sky Objects

NGC 2362: Open cluster in Canis Major.

NGC 2451: Open cluster with a bright carbon star in Puppis.

NGC 3344: Face on spiral galaxy in Leo Minor.

Hickson 44: Galaxy group in Leo.

Double Star List

Epsilon Canis Majoris: Bright white star with a blue-white companion.

Delta Geminorum: Yellow primary with a pale red-rose colored secondary.

Alpha Geminorum: White and yellow stars.

12 Lyncis: Close pair of yellow-white stars.

19 Lyncis: White pair.

38 Lyncis: White and yellow stars.

Zeta Cancri: Yellow primary with a pale yellow secondary.

Iota Cancri: Yellow and pale blue pair.

Challenge Object

Abell 1367: Cluster of 30 or more galaxies in Leo within a 1° FOV near 93 Leonis.

Focus On Observing Clubs--Jim Kvasnicka

Comet Observers Club

This month we focus on the Comet Observers Club. To some astronomers there are no more wondrous and beautiful objects as comets. Since the invention of the telescope astronomers have searched for new comets. In this process they have discovered nebulas, star clusters, galaxies and more. Comets are important members of our solar system and their study is important to mankind.

Comets are invisible except when they are near the Sun. When they are near the sun and active, comets have several distinct parts:

Nucleus: Relatively solid and stable, mostly ice and gas with a small amount of dust and other solids.

Coma: Dense cloud of water, carbon dioxide and other gases sublimed from the nucleus.

Dust Tail: Up to 10 million km long. Made up of dust particles driven off the nucleus by escaping gases.

Ion Tail: As much as several hundred million km long. Made up of plasma and laced with rays and streamers caused by interactions with the solar wind.

Most comets have highly eccentric orbits that take them far beyond the orbit of Pluto, these are seen once and then disappear for millennia. The short and intermediate period comets stay within the orbit of Pluto for a significant fraction of their orbits.

There are two levels of recognition for the Comet Observers Club.

Silver Level

- Observe at least 12 different comets.
- Two of the comets can be observed prior to January 1, 2001.

Gold Level

- Observe at least 18 additional comets.
- Two of the comets can be observed prior to January 1, 2001.

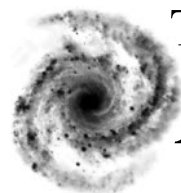
Your observations should include the following information: your name; date & time; comet name; size of the telescope; location; observing notes; a sketch or image of the comet. When you have completed your observations you can submit a copy to me for review. I will check your observing log and verify the observations. I will then submit your name to the Comet Observers Club Chair for approval.

If you have any questions regarding the Comet Observers Club or getting started please ask and I will be glad to help you.

List of PAC Comet Observers Club awardees.

No PAC member has completed the Comet Observers Club.

FOR SALE: 8" Meade LX200 GPS f/10 with accessories - see <http://www.mark.dahmke.com/misc/lx200/>
Asking \$2,000 for the entire set, or will sell scope and accessories separately. The scope is lightly used and in excellent condition. Tripod, electric focuser, 26mm lens, 1.25" diagonal, f/6.3 reducer, wedge, counterweights, flip mirror, etc. Call 402-475-3150 or email mark@dahmke.com.



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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VICE PRESIDENT	Cassie Etmund
2nd VICE PRESIDENT (Program Chair)	Jack Dunn jdunn@spacelaser.com
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TREASURER	Dan Delzell Dand@fes.org (402) 483-4585
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

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FIRST CLASS MAIL

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{MM:RENEWALDATE}

Next PAC Meeting
MONDAY
February 24, 2009
7:30 PM
Hyde Observatory