



The Prairie Astronomer

September, 2007

Volume 48, Issue #9

The Official Newsletter of the Prairie Astronomy Club

PAC Program

Ron Veys will talk about laser pointers and Astronomy.

In This Issue

Outreach Report by Dave Churilla, Talent Plus Letter, Martin Gaskell.

Featured Astrophoto

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

NGC 6888, the Crescent Nebula, a bubble of gas blown by a Wolf-Rayet star. Since much of the emission of this object is at the very specific frequency of H-alpha light, by photographing it at that frequency I can suppress sky glow and see much fainter data. In fact, I nearly over exposed it. I didn't get enough color data to balance the luminosity image made from the H-alpha light. This cost me a lot of detail when I had to push the color data too much. Not having done this before I didn't know the right ratio of color to H-alpha data. Now I have a better idea, unfortunately I took several such objects before discovering I was short on color. In order to get enough red I merged the H-alpha data with the red channel. This gave the stars a red hue unless they were super blue. The three bright yellow stars you see in the photo are really blue B class stars. Using H-alpha to help the color turned them into yellow G stars. --Rick Johnson



Saturn image courtesy NASA.

The Prairie Astronomer

NEWSLETTER

Letter to Talent Plus-- Lee Thomas

August 18, 2007

Ms. Lori Hiebner
Talent+
1 Talent Plus Way
Lincoln, Nebraska 68506

Dear Lori:

On behalf of the other Hyde Observatory supervisors who met with you on Tuesday, August 14 (Dave Brokofsky, Martin Gaskell, Jim Kacvinsky and Bob Leavitt), please accept my thanks for your hospitality. We enjoyed the lunch and found the tour of your facility to be very informative.

It is our understanding that plans for the new parking lot that will be added to your facility call for no lighting, which we find very encouraging. If lighting were to be subsequently added, we assume that it would be of the same kind, with appropriate cutoff, as that in the present Talent+ lot. We understand further that your intention is to conform all new construction to the Lincoln city outdoor lighting standards in force at the time of construction.

Our discussion centered on the upward-shining lights on the structure, and at ground level of the present building, and of the future building. It is our understanding that you will present to your Board a proposal to turn off those lights during regular Saturday public night operations of the observatory (during the winter, 7:00-10:00 p.m., and summer sundown-11:00 p.m.), and on special nights when groups or unusual celestial events such as eclipses and comet appearances cause us to open the observatory. The Saturday public night turn-offs would be regular year-around. You would be notified of special events by the Lincoln Parks & Recreation department.

We hope your board acts favorably on this proposal. We very much appreciate your willingness to cooperate in continuing the community educational mission of Hyde Observatory in the same spirit as other businesses who have worked with us to control lighting in new construction at the periphery of Holmes Park.

Please pass along our thanks as well to Sandy Maxwell and Dennis Clifford for taking time out of their busy schedules to talk with us. Please let me know if we can provide any further information. We look forward to a cooperative relationship as good neighbors.

Sincerely,

Lee Thomas

Club Events

PAC Club Meeting
Tuesday, September 25, 2007
7:30pm @ Hyde Observatory

Club Star Party
Friday, October 12, 2007

Astronomy Class - Field School
Friday, October 19, 2007
7:00 pm @ Hyde Observatory

PAC Club Meeting
Tuesday, October 30, 2007
7:30pm @ Hyde Observatory.

Astronomy Class - Seminar
Thursday, November 08, 2007
7:00 pm @ Hyde
Introduction to the night sky

Club Star Party
Friday, November 09, 2007

Club star parties: Oct 12, Nov 9, Dec 7.

Next newsletter submission deadline: October 10th.

Club Telescopes - Checkout Policy

To check out one of the club telescopes, contact Brian Sivill or nanoamps@windstream.net. If you keep a scope for more than a week, please check in with Brian 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

NEB-STAR
www.neb-star.org

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

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



The Prairie Astronomer

NEWSLETTER

Club Business

Ron Veys called the meeting to order. Attendance: 16 PAC members and 3 visitors. Ron discussed upcoming club events:

- The next club star party will be held Friday, September 7 at the farm.
- The “Twilight on the Tallgrass” festival will be held at Spring Creek Prairie on September 8 from 5:00 pm – 10:00 pm.
- The Panhandle Astronomy Club is holding a star party on September 7-9 at a site south of Bridgeport, Nebraska.
- The next Mahoney Star Party will be Friday, September 14.
- The next club meeting will be Tuesday, September 25.
- An Astronomy Field School will be held on October 19.
- An Astronomy Seminar will be held on November 8.
- Hyde Observatory is open from 7:00 – 11:00 pm on Saturdays.

Treasurers Report: Lee Thomas reported the following account balances:

CD-1 16,835.26
CD-2 3,726.07
CD-3 5,108.45
PAC Checking Acct 2,213.56
PAC Savings Acct 9,117.48
Total 37,000.82

Lee Thomas reported on our August 14 meeting with Talent Plus. He sent a follow-up letter to Lori Hiebner on August 18. At this point we are waiting for a response from Talent Plus.

Observing Chairman’s report: Jim Kvasnicka discussed the August star party and upcoming observing highlights for the month of September.

Outreach Coordinator’s report: Dave Churilla discussed plans for the upcoming event at Spring Creek Prairie. He also talked about two classes that will be held this fall, an Astronomy Field School on October 19 and an Astronomy Seminar on November 8. Dave mentioned that as Outreach Coordinator, he would like to be notified of all outreach events. He is available to help with coordination, notifications, etc. as required.

A dinner for Martin Gaskell is being planned for early September. Watch the PAC list for further information.

The meeting was adjourned to the program. Martin Gaskell gave a talk about his visit to the home of Sir Patrick Moore in England.

Submitted by,

Bob Leavitt

Observing: What to View in October -- Jim Kvasnicka

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

Orionid Meteor Shower

October 20-22. Peaks on the 21st. Expect to see up to 20 per hour at a dark observing sight around 2:00 am.

Planets

Jupiter: Shines at magnitude -2.0 in the southwest. Jupiter is getting quite low by nightfall. By the end of October it will set less than an hour after dark.

Mars: Through the month Mars will increase in magnitude from -0.1 to -0.6. It will increase in size from 10" to 12". Mars rises in the late evening and by month end it will rise by 9:30. On October 3-4 Mars passes less than 1° south of M35 in Taurus.

Saturn: Near Venus at dawn. Saturn's magnitude has dimmed to 0.8 due to the rings closing to less than 10° from edgewise for the first time in 10 years.

Venus: In October Venus is about 30° up in the southeast an hour before sunrise. It shines brightly at magnitude -4.7.

Uranus: Magnitude 5.8 in Aquarius.

Neptune: Magnitude 7.9 in Capricornus.

Mercury: Sinks out of visibility in the Sun's afterglow. After October 23rd it enters the morning sky.

October Messier List

M24: The Sagittarius Star Cloud.

M25: An open cluster just east of M24 in Sagittarius.

M18: A small open cluster north of M24 in Sagittarius.

M17: The Omega or Swan Nebula. Just north of M18 in Sagittarius.

M16: The Eagle Nebula. North of M17 in Serpens. Open cluster and nebula combined.

M26: Open cluster in Scutum.

M11: The Wild Duck Cluster. Rich open cluster in Scutum.

M55: Globular cluster in Sagittarius.

M75: Globular cluster in Sagittarius. One of the most concentrated globular clusters.

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

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

NGC Objects

NGC 253: The Silver Coin Galaxy. Very large galaxy in Sculptor.

NGC 281: The PAC Man nebula. Large faint nebulosity near Eta Cassiopeia.

NGC 457: The E.T. Cluster. Open star cluster in Cassiopeia.

NGC 869/884: The Double Cluster in Perseus. Use low power, 350 stars.

NGC 7789: Faint but very rich open cluster in Cassiopeia. Over 300 stars.

Double Stars

94 Aquarii: Yellowish-red and a light greenish blue star.

Tau Aquarii: Observers report various colors. Blue-white and greenish; yellow and orange; white and yellow; white and pale blue and white and pale red.

Gamma Andromedae: Beautiful golden primary with a greenish-blue secondary.

Pi Andromedae: Bright white primary with a faint blue secondary.

Beta Capricorni: Orange-yellow star with a light blue companion.

Challenge Object

NGC 1499: The California Nebula. Very large and faint nebula in Perseus. Use a wide field of view with a H-Beta filter.

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

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.

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NEWSLETTER

Observing Outreach Report-- Dave Churilla

The Wachiska Audubon Society's Twilight on the Tall Grass was held at Spring Creek Prairie on Saturday night, Sept 8th. As is becoming tradition, members of the Prairie Astronomy Club participated as a twilight station for the event.

For those not familiar, the event usually starts at 5 PM with an early evening walk on the prairie where stations are set up with various presenters. We were paired with an Ornithologist, Dr. Kren, who was demonstrating bird banding. Erik and I talked about light pollution and handed out star charts for the evening's activities. The event's kick off saw Raptor Recovery release 2 Cooper Hawks back into the wild.

The Twilight on the Tall grass, which is after sunset (from 8 Pm - 10 PM) also has stations, although fewer of them. People are gathered in groups of about 15-20 people and walk the trail, stopping at the various stations. This year they had UNL's black lighting for Bugs, Doane's Bat Banding, and of course PAC's Viewing through Telescopes.

As we got closer to the Twilight on the Tall Grass event, Erik met up with Jim Kvasnicka, Bob Kacvinsky, and Dan & Mary Kinchloe who were going to set up their scopes on station out on the Prairie along with Erik's son, Caelum. I stayed behind at the main event site to set up my scope for those who couldn't go out on the Twilight walk.

The night was a huge success with people getting views through the telescopes. I kept mine on Jupiter as it seemed I had a steady stream of people from about 7:45 PM, when I got Jupiter in the scope, until 10:05 PM.

This is a very, very good opportunity for the club and I encourage any of you who can to help out next year. Deb Hauswald, the event coordinator, told me that folks ask if our club is going to be there, so our presence is a big draw for them. This year they had 300 preregistered who checked in, and 100 walk-ins making the total for this event around 400 people. Deb also really liked our setting up my scope for people to view at the main area.

There were at least 75 people who came who could not walk the trails, but got their first look through a telescope and at Jupiter, and her staff estimated that 175 people looked through my scope alone. It encouraged many to go on the Twilight walk as I told them that 5 more scopes were set up out there and it was estimated that over 325 people viewed through those scopes. She also said that while she was walking back from the trails toward the end of the night, she heard people talking about the telescopes. Guess you guys made an impression.

Thanks again to Jim, Bob, Dan and Mary for helping Erik and I with this Outreach Function. It was a great success.

Dave Churilla
Outreach Coordinator

Dinner Held Honoring Martin Gaskell--Bob Leavitt

A group of about 30 PAC'ers and their families were on hand September 7 for a dinner honoring Martin Gaskell. It was great to reminisce with Martin on his many years of involvement in the club. We spent the evening swapping stories about the good 'ol days in PAC and enjoying the great Valentino's Buffet. People made the rounds from table to table, cameras flashed, and all had a good time.

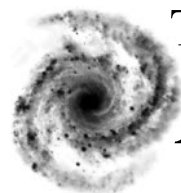
Martin came to Lincoln 16 years ago and has been involved with PAC ever since. As an academic researcher in Astronomy, he shared his many of his experiences with us. Through Martin, we had a window into the Astronomical Community, and projects such as the Space Telescope.

We want to thank Martin for his many contributions to the club over the years. His constant enthusiasm for astronomy and his boundless energy in these endeavors has been an inspiration to us all. Think of all the fascinating programs that Martin and his students presented, and how much we learned in the process! And who will ever forget "Dowp" and Martin's many telescope building adventures.

All we can say now is, "Martin, we're really going to miss you, and we wish you all the best in your new career at McDonald Observatory."

Martin said that he will be in Lincoln from time-to-time this fall, and we hope he will have a chance to attend some of our future PAC meetings.





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:	Ron Veys (402) 486-1449 RVeys@southeast.edu
VICE PRESIDENT:	Brian Sivill (402) 325-0997 nanoamps@windstream.net
2nd VICE PRESIDENT (PROGRAM CHAIR):	Jack Dunn jdunn@spacelaser.com
SECRETARY:	Bob Leavitt (402) 488-5335 bob.leavitt@alltel.net
TREASURER:	Lee Thomas lleet@alltel.net
Club Observing Chair:	Jim Kvasnicka (402) 423-7390 jim.kvasnicka@pfizer.com
Outreach Coordinator:	Dave Churilla weber2@inebraska.com
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The Prairie Astronomer
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FIRST CLASS MAIL

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{MM:RENEWALDATE}

**Next PAC Meeting
September 25, 2007
7:30 PM**