

April, 2007

Volume 48, Issue #4

The Official Newsletter of the Prairie Astronomy Club

PAC Program

At the April PAC Meeting: Webb Space Telescope Preview and Night Sky Network Activities.

In This Issue

It was time for a newsletter redesign! I suggested to the PAC officers that we could do something with "more color," so here it is. Please send me your comments and suggestions. What do you want to see in your club newsletter? Is this design an improvement? We're going to start printing extra copies to put at Hyde, so it will serve as marketing for the club, therefore I thought it might be a good idea to add more color and more photos. In this issue we have a new column - Jim Kvasnicka's "What to View," and Dave Churilla's outreach activity report. --Mark Dahmke





M101: Luminosity image was 2 hours in 20 minute sub frames binned 1x1. The RGB frames were all 20 minutes using 10 minute sub frames binned 2x2. Camera was a STL-11000XM. Scope is a 14" LX200R on a Paramount ME. Photo by Rick Johnson.

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 on the last page of this newsletter. Newsletter comments and articles should be submitted to: Mark Dahmke, PO Box 80266, Lincoln, NE 68501 or mdahmke@4w.com, no less than ten days prior to the club meeting. The Prairie Astronomy Club meets the last Tuesday of each month

Hyde Observatory Volunteer of the Year Award



The Hyde Observatory "Volunteer of the Year" Award was presented to Dave Churilla at they Hyde Volunteer Appreciation Dinner held on April 10th at Mueller Planetarium.

Right: Bob Leavitt and Josh Machacek try on the new Hyde Observatory Staff polo shirts.



Astronomy Day, April 21st

Astronomy Day 2007 Astronomy Day is Saturday April 21 at Morrill Hall on the UNL campus, 9:30 a.m. - 4:30 p.m. See telescope displays, robotics demos, a Fulldome Black Holes planetarium show, and lots of educational exhibits. Win a \$300 Meade telescope! For information call 472-2641 or see the Mueller Planetarium announcement

April, 2007

Club Events

Astronomy Day Saturday, April 21, 2007, Morrill Hall, UNL

PAC Club Meeting Tuesday, April 24, 2007 7:30pm @ Hyde Observatory

Club Star Party Friday, May 11, 2007

Mahoney Star Party Friday, May 18, 2007

PAC Club Meeting Tuesday, May 29, 2007 7:30pm @ Hyde Observatory.

Club star parties: May 11, June 15, July 6, August 10, Sept 7, Oct 12, Nov 9, Dec 7.

Mahoney star parties: May 18, June 15, July 13, August 10, Sept 14.

Nebraska Star Party: July 15-20, Merritt Reservoir, Valentine, Nebraska

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

<u>PAC-LIST</u>: 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-emailaddress@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.



Club Business

Secretary's Report

Ron Veys called the meeting to order. Attendance: 17 PAC members and 1 visitor. Ron discussed upcoming club events:

- * The next club star party will be held Friday, April 13 at the farm.
- * The next club meeting will be Tuesday, April 24.
- * Hyde Observatory is open from 7:00 11:00 pm on Saturdays.
- * The volunteer appreciation dinner will be Tuesday, April 10 at Mueller Planetarium.
- * Astronomy Day is Saturday, April 21. Planning for this year's event is being handled by Liz Klimek and Jack Dunn. Liz and Jack gave an update on Astronomy Day plans and passed around a signup sheet for volunteers.
- * The International Sidewalk Astronomy Night is scheduled for Saturday, May 19th. Organizers are hoping to make this a public outreach event for astronomy clubs across the country. Contact Dave Churilla if you are interested in helping plan an event for PAC.
- * OAS is sponsoring the Mid States Regional Convention of the Astronomical League this year. The event will take place in Omaha on June 8 9, 2007.
- * The 14th annual Nebraska Star Party will take place July 15 20, 2007.

Treasurer's report: no report this month.

The PAC annual audit was discussed. No audit has been done for 2 years. Jack Dunn and Ron Veys volunteered to do the audit. Lee Taylor volunteered to be the member-at-large. Since Lee has done it in the past, Ron was going to check to see if another member would be willing to do it. If not, then Lee will be designated.

The PAC Executive Board met recently and made the following decisions:

- * Decided to look into building a cabinet on the Hyde telescope deck. The cabinet would be on the south wall and run most of the length. It would be built to hold our telescopes, including any future ones we might purchase. This project will be a responsibility of the Hyde Board
- * Recommended to the Hyde Board that they dispose of the 12-inch scope.
- * Appointed Dave Churilla as PAC's Outreach Coordinator.
- * Appointed Jim Kvasnicka as the new Observing Chairman. Jeff King previously served in this position. We want to thank Jeff for performing these duties for the past several years.
- * Decided to do a scaled down PAC/OAS banquet this year. Brian Sivill will coordinate the planning for PAC.
- * Agreed with Mark Dahmke's suggestion to print extra copies of the newsletter and to move forward with plans to modify to the newsletter

Ron reviewed upcoming observing highlights for the month of April.

The meeting was adjourned to the program. The first part of the program was a teleconference by Dr. Ken Sembach on his work with intergalactic mater and the Hubble Space Telescope. He also provided an update on the new instruments that will be added to HST during the upcoming repair mission. Dr. Sembach is a Hubble Project Scientist and astronomer with the Space Telescope Science Institute. After the teleconference, Dr. Martin Gaskell gave an update on science proposals for the HST, and on current plans for the Space Shuttle HST repair mission. Dr. Gaskell is on a committee that reviews HST science proposals.

Submitted by,

Bob Leavitt

April, 2007

Observing: What to View -Jim Kvasnicka

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

Venus: Shines brightly in the west at magnitude -4.0 about 40° up at sunset. Venus will stay visible for 1.5 hours after twilight. **Mercury:** Becomes visible about half way through May. Look for it 25° to the lower right of Venus. **Saturn:** Magnitude 0.5 in Leo. **Jupiter:** Magnitude -2.5 in southern Ophiuchus. Rises around 11:00 p.m. DST at the beginning of May.

May Messier List

M51 Canes Venatici: The famous Whirlpool galaxy. M63 Canes Venatici: Spiral galaxy. M94 Canes Venatici: Galaxy with a bright core surrounded by a fuzzy haze. M101 Ursa Major: Spiral galaxy difficult to see. M102 Ursa Major: Look for NGC 5866, considered the same object. M64 Coma Berenices: Black Eye galaxy. Bright oval shape. M85 Coma Berenices: Elliptical galaxy.
M49 Virgo: Elliptical galaxy, round patch with a bright core. M61 Virgo: Faint, face on spiral galaxy. M104 Virgo: Sombrero galaxy. Bright, edge on spiral galaxy. Last Month: M40, M65, M66, M 95, M96, M97, M105, M106, M108, M109

NGC Objects

NGC 3242 Hydra: Ghost of Jupiter. Small bright planetary nebula. NGC 2903 Leo: Large, bright elongated galaxy. NGC 4244 Canes Venatici: Large, edge on spiral galaxy. NGC 4631 Caned Venatici: The Whale galaxy. NGC 6543 Draco: Cat's Eye Nebula. Visible 11.0 magnitude central star.

Double Stars

Iota Cancri: Pale orange and blue pair. Springtime Albireo. **Gamma Leonis**: Nice pair of golden yellow stars. **Alpha Canum Venaticorum:** Cor Caroli, Blue and greenish – yellow stars. **54 Leonis:** Yellow primary and greenish secondary. **Delta Corvi:** White primary and a beautiful rose colored secondary.

Comets

C/2007 E2: Comet Lovejoy. Discovered by Terry Lovejoy in Australia using a Canon 350D camera with a zoom lens. Starting April 20^{th} Lovejoy will pass through the southern half of Aquila. April $24^{th} - 26^{th}$ it should be at its brightest. At the end of April it will be passing between Lyra and Hercules. Look for finder charts on the web.

Challenge Object

Markarian's Chain: This is one of the many galaxy groups visible during the spring. It is a chain of 8 galaxies in the Coma-Virgo galaxy cluster that stretches for 1.5°. It is made up of M84, M86, NGC 4435, NGC 4438, NGC 4458, NGC 4461, NGC 4473 and NGC 4477. We've had fun at past star parties seeing how many of the 8 galaxies we could fit into the same FOV. If you are a beginner this is an exciting area of the sky to look at and have some fun at the same time.

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 full 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.

Outreach Activity Report

By: Dave Churilla Where: Nature Camp - Pioneers Park Nature Center When: March 13, 2007 2:30 PM – 4:00 PM Attendance: Approximately 50 people

Becky Seth, of the Pioneers Park Nature Center, asked PAC if we could set up a solar observing session for some Day Campers at the Nature Center. On Tuesday afternoon, March 13th, myself, Dave Knisely and Jim Kvasnicka agreed to set up our telescopes for the event. We had my Coronado PST (dedicated H-Alpha Filter), my 10" Newtonian with the DayStar T-Scanner H-Alpha Filter, Jim's 10" Dobsonian with his White Light Filter and Dave had his 9 ¼" NexStar set up without a filter.

While Jim had no luck as there weren't any Sunspots to see with his White Light Filter, there were a few prominences to be seen with the PST and even closer in the T-Scanner. Dave K. awed the kids with daytime views of Venus.

We tried to keep count of the number of kids, but they started arriving in groups that sort of backed up, but we figured there were somewhere between 30 and 50 youngsters ranging in age from about 5 years old to probably 12. In addition there were about 6-10 adults who enjoyed the views as well.

In the scopes with H-Alpha filters the prominences were a bit active. The kids couldn't tell they were moving, but coming back for 3rd and 4th looks one could tell that they had changed. The kids found this very exciting. Some just stared through the eyepiece. Of course viewing Venus through the NexStar got a few "oohs" & "aahs", not to mention the fun of watching the scope "GOTO" it's target.

Hopefully Bob added the PowerPoint along with the text so you can enjoy the images of the kid's wonderful looks as they viewed our nearest star. Oh, and be sure to check out our new banner! It's sweet! It's smaller than the other (36" x 24") so it is more easily set up on a table when we set up for these Outreach Activities.











Events Calendar

May 2007						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 🔊	2 🔊 Sun: 18:23 - 08:23	3 🔊	4 🔊	5 Sun: 18:19 - 08:26 Hyde Observatory
6	7 Sun: 18:17 - 08:28	8 🌍 Sun: 18:16 - 08:29	9 Sun: 18:15 - 08:30	10 Sun: 18:14 - 08:31	11 Sun: 18:13 - 08:32	Open to the Public 12 Sun: 18:12 - 08:33
13	14	15	16	17	Mercury close to Pleiades; Club Star Party 18	Hyde Observatory Open to the Public 19
Sun: 18:11 - 08:34 Moon close to Mars	Sun: 18:10 - 08:35	Sun: 19:09 - 09:35 Mercury close to Aldebaran	Sun: 18:08 - 08:37	Sun: 18:07 - 08:38	Sun: 18:06 - 08:39 Mahoney Star Party	Sun: 18:05-08:40 Moon close to Venus; Hyde Observatory Open to the
20 Sun: 18:04 - 08:41	21 Sun: 18:03 - 08:41	22 Sun: 18:03 - 08:42	23	24 Sun: 18:01 - 08:44	25 Sun: 18:01 - 08:45	Public 26
				Moon close to Rho Leo		Hyde Observatory Open to the Public
	28 🔊	Sun: 17:58 - 08:48	30 🔊	31 🔊		
Mercury half phase		PAC Club Meeting				



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Next PAC Meeting April. 24, 2007 7:30 PM