

The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

April 2002

Volume 43 Issue #4

Internet Addresses

PAC Web Page: www.prairieastronomyclub.org
 PAC E-Mail: pac@4w.com
 NSP Web Page: www.nebraskastarparty.org
 NSP E-Mail: nsp@4w.com
 OAS Web Page: www.OmahaAstro.com
 Astronomy in NE: www.blackstarpress.com/ar/n
 Hyde Observatory www.hydeobservatory.info
 NEB-STAR www.neb-star.org

APRIL PROGRAM

April program: check PAC Website

PAC-LIST: If you have an e-mail address and are not on the PAC List, you may subscribe by submitting an e-mail to list@4w.com. Write "Subscribe PAC-List" in the body of the e-mail.

CLUB EVENTS

PAC MEETING
Tuesday, April 30, 2002, 7:30 PM
 at Hyde Memorial Observatory

NSP PLANNING MEETING
Thursday, May 9, 2002
 Mahoney State Park

CLUB STAR PARTY
Friday, May 10, 2002
 Olive Creek S.R.A.

PAC MEETING
Tuesday, May 28, 2002, 7:30 PM
 at Hyde Memorial Observatory

UNL STUDENT OBSERVATORY
Monday, June 10, 2002
 Annular Solar Eclipse

Mahoney Star Party Dates
 May 17, 5 days after new moon
 June 14, 4 days after new moon
 July 12, 2 days after new moon
 September 27, 2 days before 3rd quarter.

READ THIS NEWSLETTER ONLINE

Those who wish to help with publishing and postage costs by receiving only the on-line version of the newsletter should contact Liz Bergstrom at 464-2038. Mark Dahmke or Liz can give you the logon account and password for access. You may receive both the mailed version and the on-line version if you wish.

A printable PDF version of this newsletter is also available through the website.

CONTENTS:

Secretary's Report - By Lee Taylor	Page	2
Hyde Schedule	Page	3
April Star Party - By Dave Knisely	Page	3
Observing Programs - By Jeff King	Page	4
Buildi on a Legacy - Become a Hyde Volunteer	Page	4
A Gathering of Planets	Page	5
Star Chart	Page	6
Events Calendar	Page	7
Club Viewing Site Directions and List of Club Officers	Page	8

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 \$20/yr, Family \$22/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 at Hyde Memorial Observatory in Lincoln, NE.

Secretary's Report — Lee Taylor

Prairie Astronomy Club Minutes for Tuesday March 26, 2002

President Dave Knisely called the meeting to order. No new visitors to Hyde.

Comet Ikeya-Zhang is naked eye staying in the evening sky for about another week. Eventually becoming visible in both evening and morning for a while.

The next PAC star party is April 12 at Oliver Creek, which will include snacks and drinks and an added incentive: a \$10.00 gift certificate.

Our observing chair is Jeff King, who is responsible for collecting all the necessary information for awarding Astronomical League observing programs. Any completed Messier, Lunar, or Herschel logs should be turn in to him so he can let the proper authorities know that you deserve your observing awards.

Jack Dunn passed around a sign-up sheet for Astronomy Day 2002, April 21. Any PAC member who'd like to help, get in touch with Jack.

The next NSP Planning meeting is Thursday April 11 at Mahoney State Park.

Our program chair, Brian Sivill is always looking for new programs for the PAC meetings. If you have a project you've been working on and would like to talk about it, Brian would be more than happy to talk to you.

On May 17, Homestead National Monument is sponsoring a nature hike and has asked PAC to provide some members for a constellation talk. Anyone who'd like to help, get in touch with an officer for directions to Homestead.

Hyde news: The Hyde volunteer appreciation dinner was held at Mueller Planetarium on March 10th. Thanks to all the volunteers and congratulations to our volunteers of the year for 2001, Brian Sivill and AJ Benker. The solar panel project is still alive -- Erik is still working with LES for a set for the observatory. Dave Churilla has manuals for anyone who'd like to volunteer at Hyde.

For those interested in saving the club money, the newsletter is online and now Mark Dahmke has archived issues in PDF format for those who wish to have a printed copy. Again, if you wish to save money, contact Liz Bergstrom for the password and start enjoying the benefits of the electronic version of the PAC newsletter.

PAC and Hyde have lost a dear friend. Jerry Williams passed away a few weeks ago. There will be a memorial service for him before the April meeting. Everyone who knew Jerry should plan to attend.

Treasurer's report: Everyone's paid up on dues and we still have the following items for sale:

8hats, T-shirts: 3XL, 2L; Polo Shirts 1XL

The annual audit remains unfinished with just a couple of things to work out.

Erik Hubl moved to take an opportunity to look at comet Ikeya-Zhang before adjourning to the program and yours truly seconded. Without objection, everyone who wanted went outside for a look at the comet. Once we all had had a good view, we adjourned to AJ Benker's program on the cosmic distance scale.

Respectfully submitted by,

Lee Taylor

Hyde Schedule

	Team Leader	Telescope Operators	Supervisor
4/20/02	Bill Wells	Bob Leavitt AJ Benker	Ron V
4/27/02	Dave Churilla	Joey Churilla Joe Babcock	Rick J
5/4/02	Brian Sivill	Justin DeVries Jeff Campbell	
5/11/02	Bill Wells	Joe Babcock Lynda Beck	
5/18/02	Jeff King	Joey Churilla Bob Leavitt	Dave C
5/25/02	Dave Hamilton	AJ Benker Steve Lloyd	

Prairie Astronomy Club's April Star Party — Dave Knisely

Well, finally, we got all our ducks in order and had one fine night of observing and just plain fun! There were a few clouds at times, but we were never completely clouded out, as large areas of clear to partly-cloudy skies were present much of the time. We had about 25 people and 13 telescopes at Olive Creek, along with some snacks and a nice door-prize courtesy our Observing Chairman Jeff King (thanks a BUNCH Jeff!). The scopes included a nice Orion XT-4.5 Dobsonian, an 80mm f/5 "Short Tube" refractor, a 120mm refractor, a Meade ETX-125 Autostar Maksutov, a "new" 6 inch Coulter/Murnaghan Dob, along with a home-brew 6 inch Dob, a 6 inch Schmidt-Newtonian, a couple of 8 inch SCT's, two ten inch Newtonians, a 12.5 inch "Portaball" Newtonian, and a 17.5 inch Sky Designs truss-tube Dobsonian.



When I arrived in deep twilight, the parking lot at Olive Creek Area #1 looked like a section of NSP, with lots of cars in the lot, and people milling about. Venus and Comet Ikeya/Zhang were the first things to be looked at, followed by a nice pass in the northern sky of the International Space Station. Dave Hamilton followed it in the Portaball, and said that, with the shuttle docked to it, it looked roughly triangular. After that, people started going after all sorts of things, from the late winter and early spring skies. I managed to stump the "Human GOTO" (a.k.a. Joey Churilla), with the interesting double star H3945 in Canis Major, more commonly known as "the Winter Alberio". Still, in the hunt, he did manage to get a fine look at the Tau Canis Majoris cluster (NGC 2362), which looked a little like a bunch of fireflies fluttering around a yard light.

From there, most people went off in various different directions. I visited Dave Brokovsky and we looked up M51 in his refractor. It showed some mottling and the companion galaxy quite clearly. Brian Sivill was busy in Auriga with some open clusters, while Joey and Dave Churilla were Herschel galaxy hunting in their ten inch Meade Dob. Joey quickly



landed on the big spiral NGC 2903, which was quite easy. Later, I looked this one up in Del Motycka's 17.5 inch monster, and it showed its spiral detail quite clearly. Del wanted to see the core of the Virgo cluster, so I put the Telrad of the 17.5 inch halfway between Denebola and Epsilon Virginis and landed smack-dab in the middle of galaxy city (a.k.a. the Markarian Chain). Some of the smaller edge-on spirals clearly showed their dark lanes. I moved the big Dob over to M88 to show Del some of its spiral detail. No matter which direction we went, we kept running into more galaxies. Dave Hamilton was galaxy hunting in Canes Venatici with his 12.5 inch Portaball, getting a fine view of M94 and then hunting down the wildly interacting pair of galaxies NGC 4485 and 4490 just north of Beta. Del moved his big scope over to M51, and the spiral detail was glorious. Clouds came over to force us to take a break for pop and chips, while Jeff



King did the doorprize drawing (won by Dave Brokovsky). As more holes opened up, Dave Hamilton went on to M81 and M82. The spiral arms in M81 were visible, but were a bit better when we put in the Lumicon Deep-Sky filter. With M82, we got "power hungry", bumping the power to over 400x on that galaxy and getting a wonderful view of the many mottled dark patches and bright spots in that object.

I wanted a look at M106, so I commandeered the Portaball to try for it, but was frustrated by a few puffy clouds. I went back to my ten inch and nailed the galaxy immediately. The galaxy has two sets of spiral arm detail: a bright inner oval almost "football" shaped core region with two arcs of the arms along its flanks, and very large faint outer spiral arm "fans". Both sets of detail were seen. We played with various eyepieces on Brian's 6 inch Schmidt-Newtonian on the

Beehive. We all liked the view with the Meade 14mm Ultrawide the best, although the 24mm Speers-Waler did show more field of view. I had wanted a view of a certain "carbon" star V Hydrae, and found it after waiting for the clouds to get out of the way. It was a deep reddish-orange, which was about as striking as my other favorite "red" star V Aquilae. After this, Dave Hamilton and I pulled out his AAVSO star charts and started finding and measuring some variables. We got R Bootis, T Herculis, and R Draconis measured, along with giving a couple of newcomers in the club a quick introduction on variable star observing. Most people called it quits after midnight, but 3 or 4 of us "die-hards" stuck it out until nearly 3 a.m., when we finally put our scopes to bed. Still, it was probably the best star party the club has had in many years, and I hope this is a sign of things to come.

A big "thank-you" to Jeff King and to all those who attended. The next one will be on May 10th, with the big planetary conjunction being the highlight in the western sky.



Skyglow from power plant



Olive Creek



Photos by Jeff King

Observing Programs — Jeff King

The Astronomical League offers a variety of observing programs that Prairie Astronomy Club members can benefit from. Both daytime and nighttime programs are available and any level of viewing skill is welcome.

To encourage PAC members to pursue an observing program, the rules, regulations and easy to use forms necessary to complete many of these programs are made available to you on the website. Just download the program you wish to start and you're on your way. Printable Adobe PDF files are provided. If you don't see your program listed, contact the club observing chair and he/she will provide you with the necessary forms.

Certificates of accomplishment for completing a program are available. See your PAC Observing Chair when you complete a program and he/she will review your records for accuracy and completeness. A letter of approval will be forwarded to the Astronomical League Observing Club Chairperson and you will receive a certificate and pin to proclaim to all that you have reached your goal.

Now is the best time to start a program. If you have any questions concerning any of these programs, contact the Prairie Astronomy Club Chairperson.

Programs currently available through the PAC website: Lunar Club, Urban Observing Club, Binocular Messier Club, Messier Club, Herschel 400 Club, Sunspotters Club (more will be added in the next few months).

Build on a Legacy - Become a Hyde Volunteer — Dave Churilla

On Tuesday, March 12, 2002 the Hyde Volunteers Appreciation Dinner was held. This event is held annually as a way to thank those who have volunteered their time and efforts to Hyde Memorial Observatory during the past year.

As most of you know this year in November is Hyde's 25th Anniversary. In that time Hyde has opened every Saturday night for the public to not only view the skies through the Telescopes, but to learn more about space and astronomy from the Volunteers staffing the facility during those evenings. Never has a fee been charged for these public nights, or the group reservations during the week, many of which are elementary school classes and scouting groups. I think this is a remarkable achievement and all the volunteers throughout the history of Hyde are to be commended.

This year's Volunteer Appreciation Dinner was held at Mueller Planetarium and was attended by 22 people. Thanks go out to Jack Dunn, our gracious host. Dinner was catered by Valentino's and included pizza, lasagna, pasta primavera, breadsticks and pop. Thanks to Holly who made brownies and some sort of Rock Road dessert that one could die for.

After dinner, Hyde Board Chairperson Erik Hubl held a short presentation, which included the presentation of the Volunteer of the Year Award for 2001. As the Hyde Board's Volunteer Coordinator it's been very difficult for me to really nominate a few individuals because all the Volunteers work so hard. All the volunteers deserve an award for their efforts. This year it came down to 2 individuals and the Board decided to give the award to both. Congratulations to Brian Sivill and AJ Benker for being selected Volunteers of the Year for 2001. They each received a certificate and their names will be placed on the plaque in the Foyer at Hyde.

To top off the night Jack treated us to the Planetarium Show Sky Quest and those who wanted to stay watched a SCI FI spoof called Dark Star. It was a very enjoyable evening shared with friends.

I want to take this opportunity to thank all the Volunteers. They have answered every call I've put out to work at Special Reservations as well as at the Special Events I organized last year. They are a great bunch of people who thankfully are dedicated to the concepts and philosophy of Hyde. We are all volunteers, so most of our thanks comes from seeing a packed house at Hyde, and the satisfaction of knowing that those who came to the Observatory left enjoying a wonderful experience in Astronomy and perhaps a little more knowledgeable about the science and the universe. These Volunteers do an excellent job of interacting with the public and taking responsibility to be at Hyde when they are needed.

You know, you don't have to have a Ph.D. in Astronomy to be a volunteer. Many of our Volunteers admittedly know very little if anything about the objects that are in the telescopes. Some know a lot about the objects or about astronomy/physics, but have trouble finding objects. We have a Deck manual that has information and star charts about the various objects we usually view at Hyde that will help you and every volunteer is more than willing to teach you. Soon we will be advertising a schedule of monthly events at Hyde. We need more volunteers to help out and to work on Public Nights. With a few more Volunteers you wouldn't have to work more than once every 6-8 weeks except if you want to, or if you help with the special events. In addition, in the coming months I will be asking PAC members to bring the telescopes to Hyde for various special events for the public to view through. These events give the public more opportunities to view different kinds of objects plus they help to promote Hyde. This year, they will also lead up to our 25th anniversary activities as we near November.

So, if you've wondered about Volunteering, stop wondering and contact me. While sometimes it can be a lot of work, it really is a lot of fun and very rewarding. Plus, you could be helping to build on the tradition of education and public observing that is the legacy of Hyde.

A Gathering of Planets

Throughout April and May, Mercury, Venus, Mars, Jupiter, and Saturn will form be clustered together in the western sky at dusk. All five of planets (plus the Moon) will be clustered within 33° of sky on the evening of May 14th. This is the last widely visible close grouping of all five planets until September 8, 2040, so make sure you find time to enjoy this "dance of the planets" throughout April and May. For more information, check Sky & Telescope, Astronomy, or their respective websites.

May 3-7: Five planets shine in the western sky during evening twilight.

May 8-12: All five naked-eye planets continue to be visible. Jupiter is highest in the sky. To its lower right is Venus. On May 10th Venus and Mars appear closest together ($1/3^\circ$).

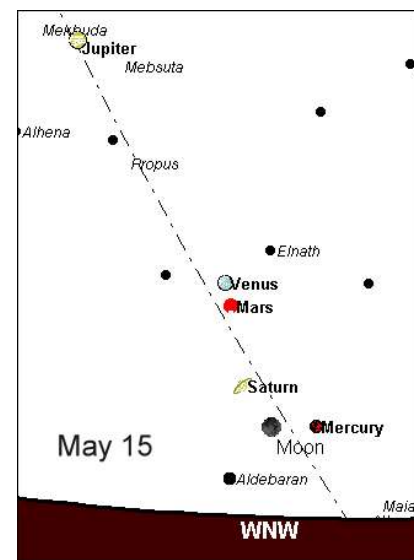
May 13: At about 40 minutes after sunset you will see a thin crescent Moon just above the NW horizon. Mercury is to the Moon's right, and Saturn to the Moon's upper left.

May 14: The crescent Moon is very close to Venus. Look for Mars just below Venus.

May 15: To the upper left of the crescent Moon is Jupiter, and farther to its lower right is Venus. Just below Venus is Mars (binoculars will help). Farther down is Saturn.

May 17-24: Venus and Jupiter are shining in the western sky after dusk and drawing closer together every day.

May 25-31: Venus and Jupiter continue to come closer together, to approach



conjunction on June 3rd (1° separation).

May Star Chart



North

NE

NW

East

West

SE

SW

South

Lacerta

Cassiopeia

Cepheus

Cygnus

Vulpecula

Sagitta

Lyra

Draco

Ursa Minor

Ursa Major

Lynx

Camelopardalis

Auriga

Hercules

Corona Borealis

Canes Venatici

Leo Minor

Cancer

Canis Minor

Bootes

Coma Berenices

Leo

31P/Schwassmann-Wach

Ophiuchus

Serpens

Serpens

Virgo

21P/Giacobini-Zinner

Sextans

4P/Faye

Corvus

Crater

Hydra

Libra

Umbra

Penumbra

Antlia

Lupus

Centaurus

47P/Ashbrook

37P/Forbes

Moon

Jupiter

Gemini

10P/Tempel 2

48P/Johnson

Pluto

Events Calendar

May 2002						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 	2 	3 	4 
			Sun: 18:24 - 08:22	Sun: 18:23 - 08:23	Sun: 18:21 - 08:24	Sun: 18:20 - 08:25 Hyde Observatory open to the public (sunset-11pm)
5 	6 	7 	8 	9 	10 	11 
Sun: 18:19 - 08:26	Sun: 18:18 - 08:27	Sun: 18:17 - 08:28	Sun: 18:16 - 08:29	Sun: 18:14 - 08:30 NSP Planning Meeting @ Mahoney	Sun: 18:13 - 08:31 Venus and Mars within 1/3 deg Club Star Party	Sun: 18:12 - 08:32 Hyde Observatory open to the public (sunset-11pm)
12 	13 	14 	15 	16 	17 	18 
Sun: 18:11 - 08:33	Sun: 18:10 - 08:34 Mercury to right of crescent Moon	Sun: 18:09 - 08:35	Sun: 18:08 - 08:36	Sun: 18:07 - 08:37	Sun: 18:07 - 08:38 Mahoney Star Party	Sun: 18:06 - 08:39 Hyde Observatory open to the public (sunset-11pm)
19 	20 	21 	22 	23 	24 	25 
Sun: 18:05 - 08:40	Sun: 18:04 - 08:41	Sun: 18:03 - 08:42	Sun: 18:03 - 08:43	Sun: 18:02 - 08:43	Sun: 18:01 - 08:44	Sun: 18:00 - 08:45 Hyde Observatory open to the public (sunset-11pm)
26 	27 	28 	29 	30 	31 	
Sun: 18:00 - 08:46	Sun: 17:59 - 08:47	Sun: 17:59 - 08:48 PAC Meeting 7:30pm Hyde Observatory	Sun: 17:58 - 08:49	Sun: 17:58 - 08:49	Sun: 17:57 - 08:50	

**Directions to Olive Creek
Observing Site**

Shorter:

Take Hwy 77 South out of Lincoln until you get to the Crete corner (junction Hwy 77 and Hwy 33). Go West on Hwy 33 (toward Crete) until you get to SW 72 St. Turn Left (South) on SW 72 St. and go about 5 miles until you get to SW Panama Rd. Turn right (West) until you get to SW 100 St. (SW 100 St does NOT go through to Hwy 33). Turn Left (South) on SW 100 St and go about 1 to 1 1/2 miles until you see the sign and entrance to Olive Creek (this is the West side of the Park). It's on your left (East) side of the road. More Black Top:

Take Hwy 77 South out of Lincoln until you get to the Crete corner (junction Hwy 77 and Hwy 33). Go West on Hwy 33 (toward Crete) until you get to about SW 114 St. - the first intersection after SW 100 St. (forgot to look at this street sign, sorry - you'll see a sign for Olive Creek though at this road-but don't count on anymore signs after that, I didn't see any). Turn Left (South) on SW 114 St and go about 5 miles or so until you get to SW Panama Rd (you'll see a church and small school on your right). Turn Left (East) and go about a mile to SW 100 St, then turn Right (South) and go 1 to 1 1/2 miles until you see the Olive Creek entrance and sign (on your left hand side of the road).

**OFFICERS
OF THE PRAIRIE ASTRONOMY CLUB**

PRESIDENT: Dave Knisely
(402) 223-3968
KA0CZC@navix.net

VICE PRESIDENT: Dave Brokofsky
(402) 486-3441
dbrokof@msn.com

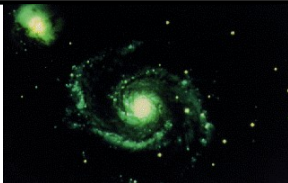
**2nd VICE PRESIDENT
(PROGRAM CHAIR):** Brian Sivill
(402) 420-1227
nanoamps@aol.com

SECRETARY: Lee Taylor
(402) 327-0804
otaylor89@hotmail.com

TREASURER: Liz Bergstrom
(402) 464-2038

Club Observing Chair: Bill Wells
477-1346

Hyde Volunteer Coordinator: Dave Churilla
(402) 467-1514
weber2@inebraska.com



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

First Class Mail

**Next PAC Meeting
April 30, 2002
7:30 PM
Hyde Observatory**