

THE PRAIRIE ASTRONOMER

THE OFFICIAL NEWSLETTER OF THE PRAIRIE ASTRONOMY CLUB, INC.

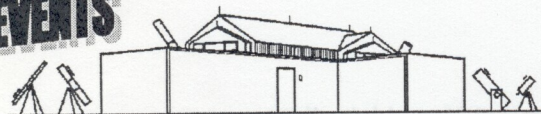
MARCH 2001

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Hyde Observatory: www.blackstarpress.com/arin/hyde/

CLUB EVENTS



BEHLEN OBSERVATORY OPEN HOUSE
FRIDAY, MARCH 23, 2001
Behlen Observatory

PAC MEETING
TUESDAY, MARCH 27, 2001, 7:30 PM
at Hyde Memorial Observatory

NSP PLANNING COMMITTEE
THURSDAY, APRIL 12, 2001, 7:00 PM
Mahoney State Park

PAC MEETING
TUESDAY, APRIL 24, 2001 7:30 PM
at Hyde Memorial Observatory

CLUB STAR PARTY
FRIDAY, APRIL 27, 2001
Wagon Train Lake
(see map on back page)

MARCH'S PROGRAM:

This Month's program will be a presentation by OAS's AL DORN. He will be speaking about getting the "Messier Certification", and relating some of his recent experiences. This program has been rescheduled to March due to the inclement weather in February.

PAC-LIST: Mark Dahmke maintains an e-mail list server for PAC. 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.

2001 MAHONEY STAR PARTY DATES: The 2001 Mahoney Star Party dates are:

May 25
June 15
August 17
September 21

ASTRONOMY DAY IN LINCOLN: We have set up a webpage for Nagin Cox's talk at: <http://www.spacelaser.com/astro/galileo.html>
We are going to be doing a further Astronomy Day page as well in the next week or so.

MARS ODYSSEY PROBE: April 7th - our Astronomy Day observance - is also the scheduled launch day for the Mars 2001 Mars Odyssey probe. See the website at <http://mars.jpl.nasa.gov/2001/> Nice of them to plan if for us that way. Nagin Cox, our speaker, is currently on the Fault Protection Team for the 2003 Mars Rover. Thanks to Jack Dunn for all the Astronomy Day info.

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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: Jeff King, 4018 South 83rd Street, Lincoln, NE 68506-5973 or jeffrey892@aol.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

By: Pamela L. Fiedler

Secretary's Report/ Pamela L. Fiedler

for the Prairie Astronomy Club

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

There will be a club star party on the 23rd of March.

The next NSP Planning Meeting will be Thursday, March 8th.

Be sure to keep updated on Comet Linear WM1. Predictions place it at Mag. 4 later this year.

Jack Dunn talked about Astronomy Day. This year it will be held on April 7th. If you would like to help with preparations, contact Jack or Holly.

Saturday, April 21st is the Informational Star Party at Hyde. See Dave Churilla for details.

Dave Churilla discussed revamping the Hyde Memorial Observatory. New displays for the walls are planned. If you have any ideas, please see Dave.

Liz says we're holding our own on the budget. If you are past due on your membership, please get it updated.

Discussion was held on the Fox network TV show concerning the Apollo missions.

Meeting was adjourned to the program.

HYDE MARCH VOLUNTEER SCHEDULE

Summer Hours Begin: Dusk until 11:00 PM

Date	Team Leader	Operators		Coordinator
4/7/00	Dave Churilla	Matt Reiling	Joey Churilla	Dave C.
4/14/00	Lee Taylor	AJ Benker	Troy Anderson	Lee T.
4/21/00	Bill Wells	AJ Benker	Bob Leavitt	Dave C.
4/28/00	Jeff King	Lee Taylor	Bill Wells	Lee T.

UNL STUDENT OBSERVATORY OPEN HOUSE

Friday, March 2, 2001

The UNL Student Observatory certainly had a lot of visitors for their "Public Observing" night. It was a very enjoyable evening. The sky was clear, and the weather fairly mild (considering recent weather patterns). While Dr. Martin Gaskell treated the public with views through the big 16 inch SCT, Mark Fairchild was steering 3 or 4 smaller scopes just outside the dome. UNL astronomy students were abundant, many of them were photographing objects in the various telescopes.

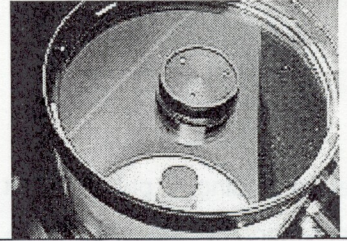
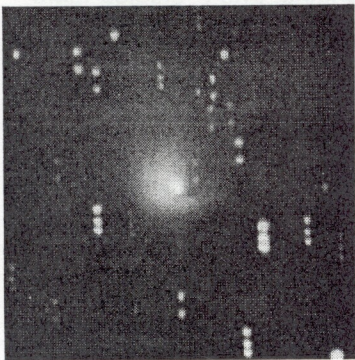


Photo courtesy Mark Fairchild

It was estimated that around 200 people attended. It was a very busy night! I set up my 6 inch F5 Meade at the request of several students who were interested in attempting some prime-focus photography. I'm not too expectant that our attempts were very successful due to my hasty polar-alignment, and the quality of sky available at that location. Nevertheless I had a great time talking with students and their friends. While that was going on, Dr. Gaskell had moved a few telescopes close to where my scope was setup, and lines began forming at all of them. Thankfully, Lee Taylor was in attendance, and provided his experienced hand at running two telescopes. In fact, Lee was steering one scope without any finder, and by the end of the evening he was challenging himself to see how many Messier objects he could find by sighting down the tube. Doug Bell was present and stayed for some time, observing and providing interesting conversation.

I had only intended to stay until around 9pm, and ended up staying the whole evening -until things wrapped some time around 10:15. I'm sure glad I went! It was a lot of fun. Afterwards, I headed out to Wagon Train Lake. That will be the subject of a separate, and probably boring "observing report" (this way its easier to ignore and delete!!!).

--Brian Sivill, Prairie Astronomy Club

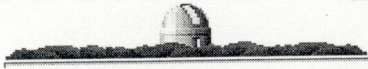


COMET HALE-BOPP STILL ALIVE

Now nearly 2 billion kilometers (13 astronomical units) from the Sun, midway between the orbits of Saturn and Uranus, Comet Hale-Bopp (C/1995 O1) continues to surprise astronomers with its longevity. Glowing at magnitude 14.5 in the far-southern constellation Dorado, the comet has remained unusually active — shedding gas and dust to form a prominent, curved jet and an enormous, fan-shaped coma, estimated to be about 2 million km across. Hale-Bopp is currently moving away from us at 1 million km a day. Astronomers plan to continue monitoring it as long as possible, perhaps for the next several decades.

— Edwin L. Aguirre

Deep Sky Observations



By Brian Sivill

Observing Report

Friday, March 2ND 2001

Location: Wagon Train Lake

Weather: 27° F Partly Cloudy

Sky Quality: Excellent transparency. Steady seeing.

After attending public night at the UNL student observatory, I was eager to get out under some reasonably dark sky.

On my way to the lake, it looked like the evening would be short. Clouds were bearing in and some patchy fog was about. I arrived around 10:45 and set-up, despite the current conditions. I picked a few objects that were in reasonably clear sky: M35 at 30X was beautiful, and surprisingly contrasty considering its proximity to the 1st quarter Moon. M44 at 22X was in better sky, and entirely out of the Moon's influence. It was stunning, the stars were intense as compared to the fairly dark-blue background sky.

By now, the northern sky was crystal-clear and Ursa Major was begging to be explored. The first thing I tried was the faint "Owl" Nebula -M97. I had tried to see it a few nights ago, from my deck, under very clear sky, and had no luck.

Tonight it was easy to spot, even in my 35mm Erfle. I tried several other magnifications - 64X and 114X. The 64X -using a 12mm plossl seemed most satisfying and I studied the nebula for a while. Excited about the quality of the sky, I wasted no time in jumping over to M51. It was clearly visible at all magnifications. I went up to 114X using my newly purchased 6.7mm series 3000 plossl. Both components were reasonably bright. I don't really think I was able to resolve any spiral detail, but having observed the object so many times, its easy to see what you "expect" to see. In any case it was lovely, and very pleasing.

Clouds were hanging in the west, but overhead, it had totally cleared. The constellation LEO was directly at zenith and I decided to try for a few galaxies. First I located M96. During warmer weather, I've not had much luck in finding M96 with my 6 inch scope. Tonight, I landed it right in the center of the eyepiece. This was primarily due to the fact that I could clearly see all of my "reference" stars in the finderscope. M96 was no more than a fuzzy blob with a bright core -at any magnification, but exciting nonetheless. Nearby M95 was also easily found and similar in appearance. M105 wasn't terribly hard to spot, but a bit fainter than the other two. My chart also showed NGC3384 and 3389 in the same area, but they were not visible. Now I swung a few degrees east and found galaxies M65 and 66. They were surprisingly outstanding, and I studied them for some time using both the 12mm and 6.7mm eyepieces. I also tried to find NGC3628 which is in the same FOV but it was too faint.

This was a night for GALAXIES!! I know these are the "easiest" of galaxies, but they are difficult objects for me under average skies. It takes a night of this quality for my 6 inch to be successful on 9th-10th magnitude galaxies. Continuing the galaxy-fest, I steered back to Ursa Major and quickly located M81 & 82. These were easily the brightest galaxies of the night. M81 was a beautiful oval, and M82 was distinctly elongated and thin (shaped like a little cigar). I ran every eyepiece in my

possession through the focuser and was finally very happy with the 114X view through the 6.7mm.

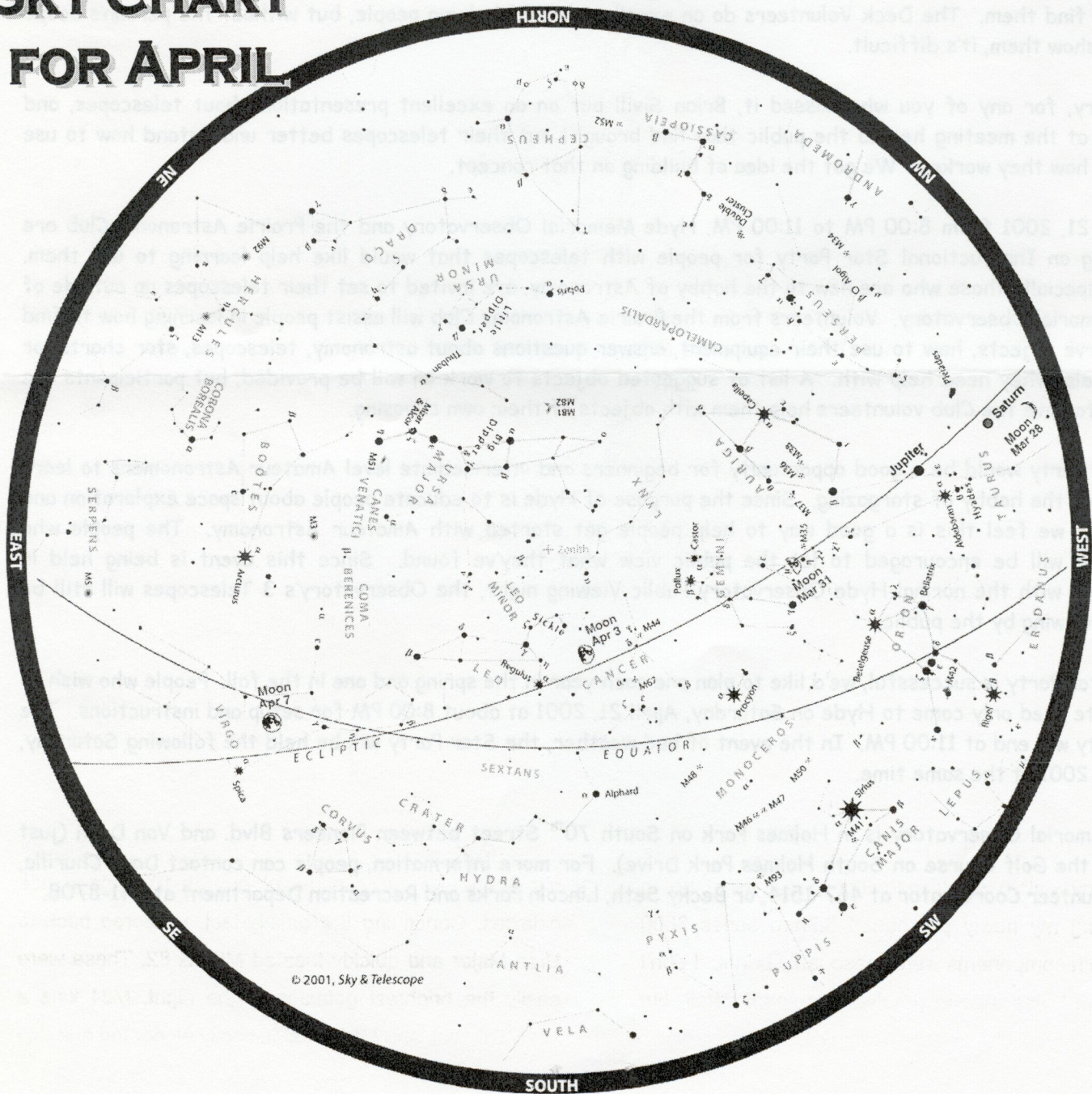
My final object of the night was spiral M101. It was not detailed, and only faintly visible, looking like a thin ghostly whisp. I definitely did not detect any detail or spiral structure.

That wrapped up the evening, it was now about 1:30am. The Moon was close to the horizon, and few more clouds had moved in. By the time I was packed up, the

sky had totally cleared, spectacular and moonless. Hercules was well above the eastern horizon....hmm coulda seen M13 for the 3 millionth time.....On my way home, I fought through the thickest FOG, I've run across in many years. I just can't believe how clear it was at the LAKE!!

What a night.

SKY CHART FOR APRIL



The Romantic Astronomer

By: Dave Churilla

A VIEW OF THE UNIVERSE LEARN HOW TO USE YOUR TELESCOPE AT HYDE'S INSTRUCTIONAL STAR PARTY

Nearly every Saturday night someone comes into Hyde and asks us about telescopes. Often they want to know how to work theirs, but many times they are looking for advice on how to better observe objects in the sky, or even just find them. The Deck Volunteers do an excellent job of helping people, but without the person's scope there to show them, it's difficult.

In January, for any of you who missed it, Brian Sivill put on an excellent presentation about telescopes, and members at the meeting helped the public that had brought out their telescopes better understand how to use them and how they worked. We got the idea of building on that concept.

On April 21, 2001 from 8:00 PM to 11:00 PM, Hyde Memorial Observatory and the Prairie Astronomy Club are sponsoring an Instructional Star Party for people with telescopes that would like help learning to use them. People, especially those who are new to the hobby of Astronomy, are invited to set their telescopes up outside of Hyde Memorial Observatory. Volunteers from the Prairie Astronomy Club will assist people in learning how to find and observe objects, how to use their equipment, answer questions about astronomy, telescopes, star charts, or anything else they need help with. A list of suggested objects to work on will be provided, but participants are welcome to have the Club volunteers help them with objects of their own choosing.

The Star Party would be a good opportunity for beginners and intermediate level Amateur Astronomers to learn more about the hobby of stargazing. Since the purpose of Hyde is to educate people about space exploration and astronomy, we feel this is a good way to help people get started with Amateur Astronomy. The people who participate will be encouraged to let the public view what they've found. Since this event is being held in conjunction with the normal Hyde Observatory Public Viewing night, the Observatory's 3 Telescopes will still be open for viewing by the public.

If the Star Party is successful, we'd like to plan one each year in the spring and one in the fall. People who wish to participate need only come to Hyde on Saturday, April 21, 2001 at about 8:00 PM for setup and instructions. The Star Party will end at 11:00 PM. In the event of bad weather, the Star Party will be held the following Saturday, April 28, 2001 at the same time.

Hyde Memorial Observatory is in Holmes Park on South 70th Street between Pioneers Blvd. and Van Dorn (just West of the Golf Course on South Holmes Park Drive). For more information, people can contact Dave Churilla, Hyde Volunteer Coordinator at 467-1514, or Becky Seth, Lincoln Parks and Recreation Department at 441-8708.

JET PROPUSION LABORATORIES TEAM CHIEF SPEAKS ON THE GALILEO MISSION TO JUPITER AS PART OF "ASTRONOMY DAY" - APRIL 7TH

In 1492, European explorers found a "New World" called America. In our own time, a different kind of ship is pushing at the frontiers of our knowledge. The Galileo spacecraft is in orbit around Jupiter and has been sending back stunning new images of this giant planet and its incredible moons. On Saturday evening, April 7th at 7:30 p.m. in the UNL Nebraska Union, NASA scientist Nagin Cox, former Deputy Team Chief for the Galileo Spacecraft Team at NASA's Jet Propulsion Laboratory will speak on: "The Galileo Mission to Jupiter - The Daring Return to Io: Moon of Volcanoes and Fire."

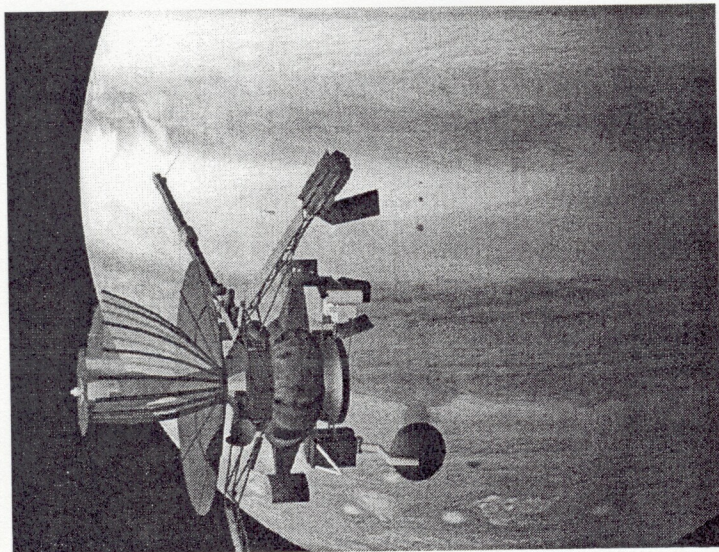
This presentation will end more than a day of activities connected to the observance of "Astronomy Day." On Friday evening April 6th there will be open evening of observing at the UNL Student Observatory (located on top of the Parking Garage west of Memorial Stadium at Stadium Blvd. and T streets) from 8:00 to 11:00 p.m. Astronomy Day, on Saturday April 7th, there will be exhibits, demonstrations and presentations highlighting the world of astronomy and space science. The Prairie



Astronomy will be highlight telescopes in the lobby of Mueller Planetarium (in Morrill Hall on the UNL City Campus) from 10 a.m. to 4 p.m. There will be displays of all sizes of telescopes - from home-built telescopes to commercially-made products. There will be hands-on demonstrations of telescope mirror-making. This year's Astronomy Day theme is "bring us your telescopes and we will show you how to use them." If you have purchased a telescope or received one as a gift in the past year, Prairie Astronomy Club members want to help you learn how to get the most out of that telescope. Mueller Planetarium will also present planetarium programs throughout the day (admission is charged for Planetarium shows).

The day will conclude with the presentation by Ms. Cox in the Nebraska Union. In the Galileo Europa Mission of 1998-1999, the spacecraft Galileo completed the major portion of its exploration of the mysterious moon Europa. Does Europa have an ocean? Galileo's data has been essential to answering that question. Now, Galileo has survived one of its greatest challenges - returning to the volcanic moon Io - deep in the heart of Jupiter's radiation belts. Come relive the journey through the solar system, experience the excitement of arrival at Jupiter and share in the wonder of Galileo's Millenium Mission - the ongoing voyage of discovery.

This program is sponsored by Neb-Star, a private, non-profit organization for the promotion of astronomy and aerospace education in Nebraska as well as by the Ralph Mueller Planetarium - UNL, and the Prairie Astronomy Club of Lincoln. The talk is free and open to the public. Ms Cox will also speak on Sunday, April 8th, at the SAC Museum at exit 426 on I-80 at 2 p.m.



Highlights of Astronomy Day

Friday, April 6th UNL Student Observatory open 8:00 p.m. to 11:00 p.m. for viewings of the moon, Jupiter, and Saturn. (free)

Saturday, April 7th 10 a.m. - 4 p.m. Telescope exhibits and demonstrations in the lobby of Mueller Planetarium (Morrill Hall - UNL) (free)

Planetarium shows:

- 10:30 a.m. "Rusty Rocket* (show for young children)
- 11:00 a.m. "The Sky Tonight" (live 20 min. introduction to night sky - admission \$1)
- 2:00 p.m. "Spirits From the Sky: Thunder On the Land" - Sky legends of the Skidi Pawnee*
- 3:00 p.m. "The Sky Tonight" (live 20 min. introduction to night sky - admission \$1)
- 3:30 p.m. "Spirits From the Sky: Thunder On the Land" - Sky legends of the Skidi Pawnee*
- 7:30 - 9 p.m. Nagin Cox: "The Galileo Mission to Jupiter- The Daring Return to Io: Moon of Volcanoes and Fire" - presented in the auditorium of the UNL Nebraska Union. (free)

The UNL State Museum requests a donation for admission. All Astronomy Day events are free, except for the planetarium shows in Mueller Planetarium that are \$4 for adults and \$3 for children (live sky shows are \$1)

For further information:

Mueller Planetarium - Jack Dunn 472-2641 www.spacelaser.com







Neb-Star - Ron Veys, President Phone: 486-1449 www.Neb-Star.org

UNL Dept. of Physics and Astronomy Student Observatory - Martin Gaskell, 472-4788

www.blackstarpress.com/ARiN/UNL/stdobsv.html

THE PRAIRIE ASTRONOMY CLUB CALENDAR

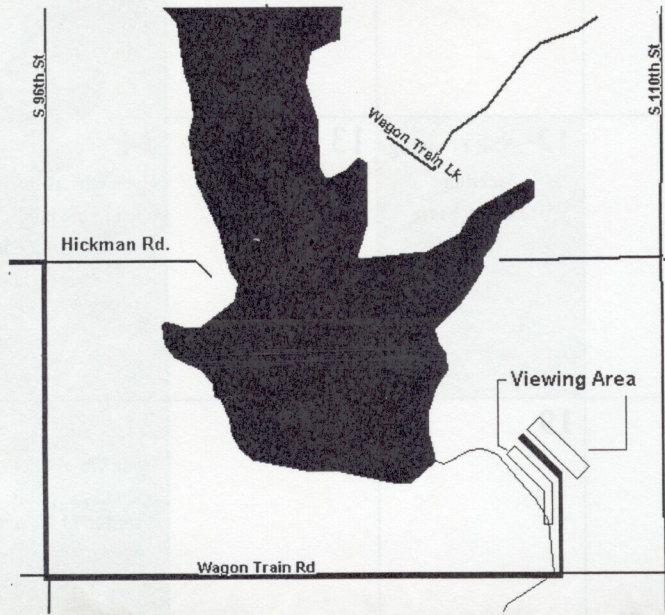
For April 2001

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
<p>1 1ST QUARTER</p> 						<p>7 Hyde Observatory open to the public sunset-11:00 p.m.</p>
<p>8 FULL MOON</p> 				<p>12 NSP Planning Meeting Mahoney State Park</p>		<p>14 Hyde Observatory open to the public sunset-11:00 p.m.</p>
<p>15 3RD QUARTER</p> 						<p>21 Hyde Observatory open to the public sunset-11:00 p.m.</p>
<p>22</p> 	<p>23 NEW MOON</p> 	<p>24 PAC Meeting 7:30 p.m. Hyde Observatory</p> 				<p>28 Hyde Observatory open to the public sunset-11:00 p.m.</p>
<p>29</p>	<p>30</p>					

Next PAC Meeting
 March 27, 2001
 7:30 PM
 Hyde Observatory

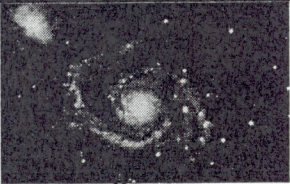
**Directions to Wagon Train Lake
Observing Site**

From Hickman, NE, turn East on Hickman Road. Go until you reach 96th Street, then turn RIGHT. Drive until you reach Wagon Train Road, then turn LEFT. Area 6 is about 3/4 of a mile East. Turn LEFT into Area 6.

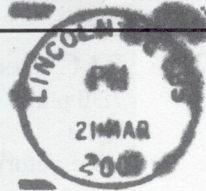


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First Class Mail

Next PAC Meeting
March 27, 2001
7:30 PM
Hyde Observatory

EARL MOSER 9/2001
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