

# President's Report

by Dave Scherping

If you've been at the past meeting or two, you know there are a lot of activities the PAC is involved in this year. The Nebraska Star Party, I'm sure, will be a great time and a huge success. There's also the public observing nights at Mahoney State Park, Astronomy Day, Earth Day, and our monthly meetings and star parties. All of these activities need your support and I encourage you to volunteer and participate. For those who have been unable to attend the meetings lately, we missed you and we hope you'll join us this month.

Also, beginning this month, I will be including a PAC Calendar in the newsletter. I hope you'll enjoy the trivia and find the calendar helpful in remembering the many dates we have scheduled.

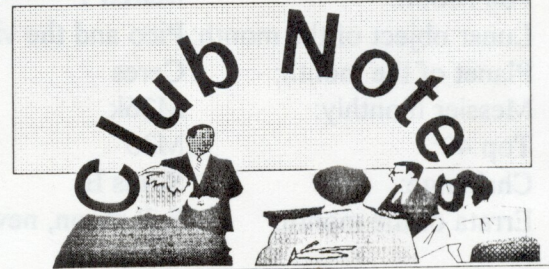
## STAR PARTIES

You'll notice on the calendar that there are three scheduled PAC star parties this month. On March 3rd, we will meet at the Beaver Crossing site. Many PAC members have enjoyed observing at this excellent site over the past several months, so we thought we'd schedule one of our star parties there. There are no signs posted so you'll need to follow these directions to get there:

Directions To Beaver Crossing Site: Get on I-80 and head west. Get off on exit 369 (about 27 miles west of Lincoln) and head south 1-1/2 miles. You will notice some grain bins on the left. Turn right (west) at the grain bins and go 2 miles to the 2nd road that tees to the right. Turn right (north) and go 1/4 mile. The park is on the right side of the road.

Also, on March 24th, we will meet at the Atlas site and on March 31st we will meet at Mahoney State Park.

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## Next Meeting:

Tuesday, February 28th, 1995, at  
7:30 p.m.

## Program:

MARS EXPLORER CD-ROM software.

This month, David Knisely will demonstrate Virtual Reality's MARS EXPLORER program for the CD-ROM equipped home computer. This software allows the user to view most of the surface of Mars at a resolution down to about one kilometer, using a database of merged images from the Viking orbiter spacecraft. Its user-friendly interface is loaded with features which make exploring the Martian surface easy and fun. Be sure to attend this month's meeting.

Next month's program will be a video presentation on the history and present activities of Lowell Observatory in Arizona. The April meeting's program will tentatively be on double stars. I still have May and June open, so if you are interested in presenting a program, please let me know as soon as possible. SEE YOU AT THE MEETING!

David Knisely, 2nd Vice President

# The Prairie Astronomer

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# Observing Chairman's Report

by Douglas Bell

Next star party:	March 3
Full Moon:	March 1
Lunar object of the month:	Pico and the virtual plateau
Planet of the month:	Ceres
Messier monthly:	M26k
Top 40:	M35
Challenge:	Sirius B
Errata of the month:	Full moon, new moon... if you can't tell the difference you need a new hobby!

**Observing tip:** *Try draping a cloth over your head and eyepiece.*

**Quote of the month:** *"To see, or not to see? That is the question."*  
William Shakespeare(?)

## Lunar feature of the month:

### *The Pico virtual plateau*

Best seen in a small scope. This one baffled me (doesn't take much) for years when I was a kid. Pico is a small, fresh crater in the Moon's northeast quadrant. Its asymmetric ray pattern makes the whole thing look like a giant plateau. Best seen at either 5 days or full.

## Planet of the month:

### *Ceres*

Ok, so what's a planet? Ceres is just past opposition and should be easily seen with binoculars. We know their there but how many of us have actually seen an asteroid.

## Top 40:

### *M35*

Buzz, Buzz in the beehive. A large open cluster beautiful in binoculars or at low power. People say it looks like bees buzzing around a hive. Uh...sure.

## Messier Monthly:

### *It's marathon time!*

Believe it or not the March new moon presents a reasonable (didn't say easy) chance to see all but one Messier in one night. Try it if you're feel up to it. It's not called a marathon for nothing.

## Deep Sky:

*Not forgotten. The Virgo cluster is coming!*

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The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc., and is free to all club members. Membership status and expiration date are listed on the mailing label. Membership dues are: Regular Members...\$10/yr; Family Memberships...\$12/yr; Address all new memberships, renewals, or questions to THE PRAIRIE ASTRONOMY CLUB, INC., P.O. BOX 80553, LINCOLN, NE 68501. For other club information contact one of the following: John Bruce (Lincoln) 483-0389, Lee Thomas (Lincoln) 483-5639, John Lortz (Omaha) 496-1122. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 11684 MEREDITH AVE., OMAHA, NE 68164 no later than 10 days before monthly club meetings. Club meetings are held the last Tuesday of each month at Hyde Observatory in Lincoln, NE.

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### NEBRASKA STAR PARTY

Things are moving right along in preparation for NSP. Here's where we're at:

- We're still actively pursuing individuals to give presentations. If you would like to present something, please contact me at 477-2596.
- We sent out over 100 requests for door prizes and have received several already.
- The proof for the tee-shirt design is done and will be shown at the meeting.
- The registration packet is done and is being sent to all who register.
- Cabins are nearly all spoken for, so if you want one, you need to contact Tom Miller asap.
- The next NSP Planning Meeting will be held **Thursday March 2, 7:00 pm**, at Miller Grass Seed Co., 1600 Cornhusker Hwy.
- Please **REGISTER AS SOON AS POSSIBLE** if you are planning on attending.
- **NSP HOTLINE:** (402) 466-4170.

### MAHONEY PUBLIC OBSERVING NIGHTS

The dates for this year's public observing nights at Mahoney State Park are: **March 31, May 5, June 2, August 4, & September 1**. We will meet at sunset at the Soccer Field at Mahoney State Park.

### ASTRONOMY DAY

Bev Hetzel is coordinator of this year's Astronomy Day activities, which will be held **Saturday May 13th** at Mueller Planetarium. If you would like to help out, please contact Bev.

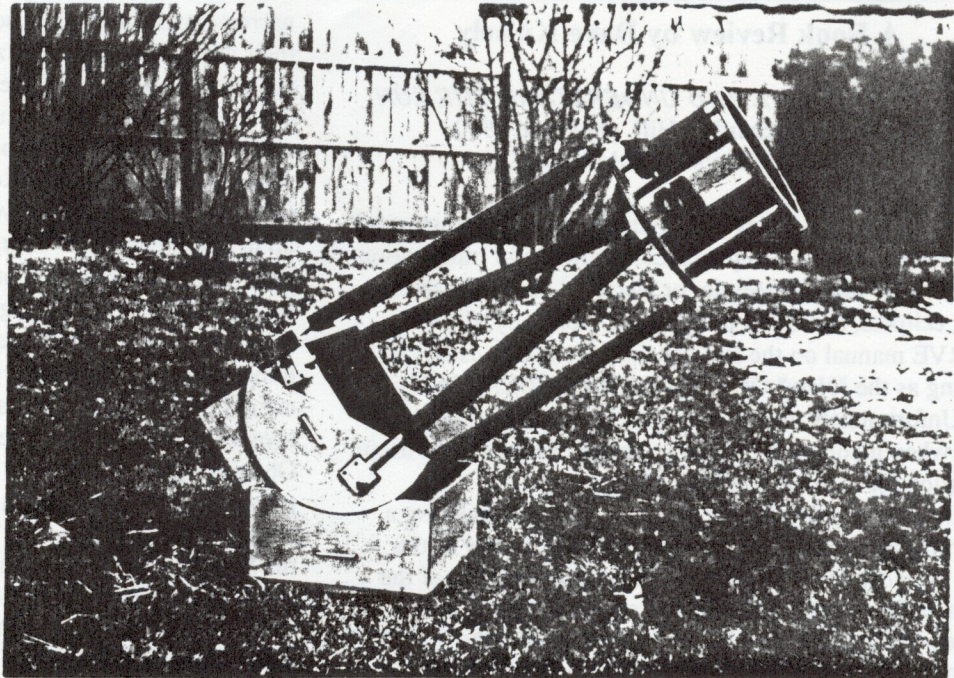
### EARTH DAY

The Prairie Astronomy Club plans to participate in Earth Day, which will be held at Antelope Park on **Saturday April 22nd**. Our goal is to educate the public on light pollution and we will be selling posters in cooperation with Hyde Observatory. If you would like to help out, please contact Eric Hubl at 488-1698 or me at 477-2596.

### CLUB SCOPE

The 13" club scope is finished and is being kept at my house [See Photo Below]. The scope is now available for use by any Prairie Astronomy Club Member on a first come-first served basis. You may borrow the scope for up to 1 week. If you have it during the week of one of our scheduled monthly star parties, or one of the Mahoney star parties, you must bring it or make arrangements for the scope to be there. Please contact me at 477-2596 if you want to borrow or reserve the scope.

The 13" PAC Telescope



(Continued from page 2)

### Challenge:

#### *Sirius B*

The brightest star in the sky is accompanied by a white dwarf. This is a hard double needing good optics, seeing etc. An occulting bar may also be a help. By the way, Sirius B is due to become a supernova in 50,000 years or so. It's drawing matter from Sirius A and when it passes Chandrasekar's limit....Boom! At only eight light years away this would be the end of life on earth, but it will have moved well away by then. Just something to think about.

### Trivia of the month:

#### *Off with their heads!*

In the 1790's the French Monarchy purchased a large amount of platinum for use in what was to be the world's largest telescope mirror. The revolution chopped that short but the platinum was still used for a valuable scientific function. What did it do and where is it now?

### Last month's answer:

#### *What the Keck!*

The largest telescope in the world is on the US island of ..... Puerto Rico. The Arecibo radio telescope. And no, this is not a trick question.

### A Book Review by Dave Knisely

#### *The New OBSERVE AND UNDERSTAND THE SUN*

Edited by Richard E. Hill, published 1990,  
by the Astronomical League

The OBSERVE series of manuals from the Astronomical League have provided many amateurs with useful information on viewing things like the Messier or Herschel objects, meteors, comets, eclipses, and other phenomena. Recently, the old OBSERVE manual on the sun has undergone a revision, now appearing as the "New" OBSERVE AND UNDERSTAND THE SUN. Unfortunately, this new edition leaves something to be desired when it comes to providing enough accurate and useful information for the budding solar observer.

The work consists of a collection of articles covering a number of aspects of solar observation. Little in any of the articles provides much of the "understanding" portion of the title, since there isn't a great deal of scientific information presented. Things like the 11 year sunspot cycle, the butterfly diagram, Joy's law, and the Mount Wilson classification system are left out or seriously slighted. The section on the McIntosh

sunspot classification was intriguing, but could have used better explanation and examples. The portions on observing equipment are mildly interesting, but they occasionally leave out vital information. For example, the first article, "The Sun in White Light", mentions welding glass filters but fails to tell the reader which filter number is best for solar use. While covering the use of solar projection, the authors also fail to mention that it is NOT a good idea to use it with Schmidt-Cassegrain telescopes, since, on some units, the concentrated solar heat may cause damage to the secondary mirror's mounting. In addition, the use of aluminized solar filter systems is criticized to an unfair degree.

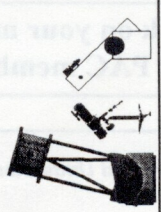



The article "An Introduction to Monochromatic Solar Observing", covers some historical information, but leaves out many of the descriptions of Hydrogen-alpha solar features needed for first-time H-alpha observers to figure out just what they are seeing. Some of the information and terminology presented is inaccurate or incomplete. The "THINGS TO NOTE CONCERNING SOLAR FLARE PRODUCTION" portion so lacks proper explanation and description that it tends to confuse rather than enlighten the observer. The author gives the excuse that "Space does not permit the mention and full descriptions of all solar features in H-alpha light." He could easily have cut out a lot of the historical material, and extended his descriptions and detail to make his article a lot more useful to the H-alpha enthusiast.

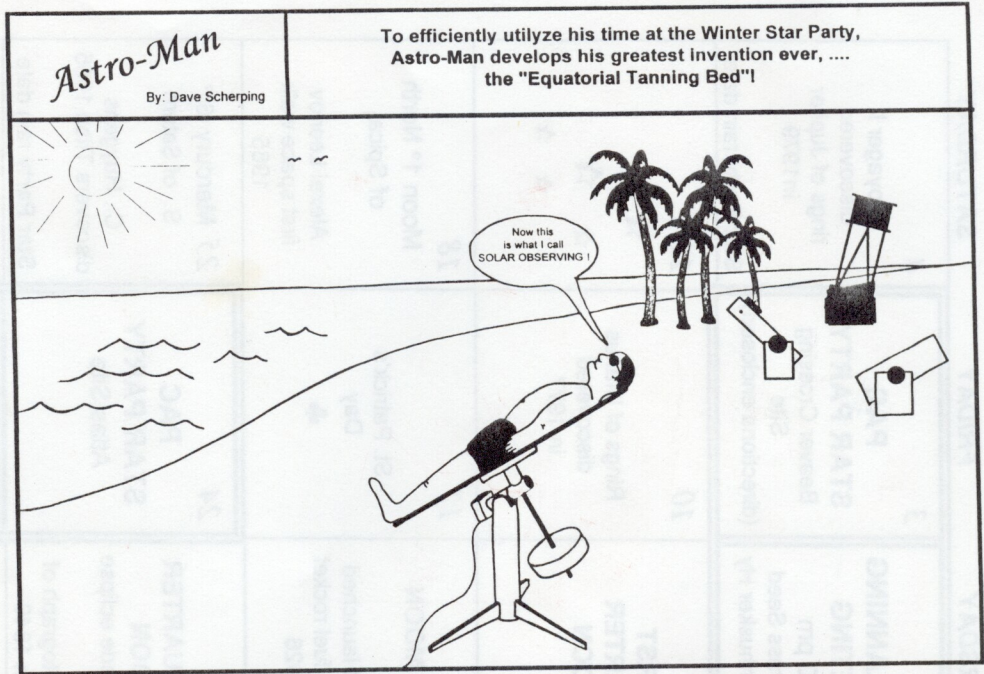
The better articles in the manual include the use of Stonyhurst charts and a unique direct-view heliographic coordinate determination system for determining the true solar coordinates of sunspots. The article on the Dobson Solar telescope is also quite good, showing how a simple home-brew aluminized system can provide safe and detailed views of the solar disk. The article by Dell Woods of DayStar on H-alpha narrow-band filters gives some interesting information about their design and use. Horizontal sun telescopes, spectroheliscopes, and the use of TV cameras are covered in some detail as well. Techniques for improving photography and white-light observing are presented, but I take issue with the suggestion one author makes about using light pollution (nebular) filters for solar work. They would probably not stand up to the intense solar energy collected by the telescope unless they were extremely well protected by a dense filter out-front to cut out a majority of the light.

The manual occasionally presents some redundant or unnecessary information which could have been reorganized or cut out by the editor. The single typewriter-like font and overall layout used look a bit crude when compared to the Herschel Observe manual, and there are a few typographical errors present, including the apparent misspelling of the editor's first name on the inside cover! This manual is more expensive than the Herschel or Messier manuals, but it is still relatively cheap, and it does contain some useful information. However, as a veteran sun watcher, I am afraid I cannot recommend it as a general observing manual. It needs to be rewritten and beefed-up extensively before it can seriously be considered to be a useful guide for the amateur.

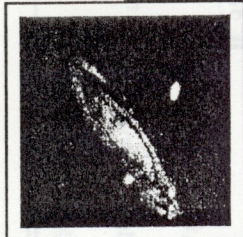
The PRAIRIE ASTRONOMY CLUB

MARCH 1995

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p><b>LOOK FOR...</b> Very young Moon on March 2nd &amp; 31st right after sunset</p>	<p><b>ALSO...</b> See Ganymede eclipsed by Jupiter on March 23rd (12:31-2:41 am) &amp; on March 30th (4:28-6:38am)</p>	<p>Feb 28 <b>PAC MEETING</b> 7:30 pm Hyde Observatory !!!</p>	<p><b>1 NEW MOON</b> Venus 1.5° North of Uranus</p>	<p><b>2 NSP PLANNING MEETING</b> 7:00 pm Miller Grass Seed 1600 Cornhusker Hy</p>	<p><b>3 PAC STAR PARTY</b> Beaver Crossing Site (directions enclosed)</p>	<p>4 Voyager I discovered rings of Jupiter in 1979 <b>Star Party</b> rain date</p>
<p>5 Saturn in conjunction with Sun</p>	<p>6 J. Fraunhofer born 1787</p>	<p>7 Asteroid 103 Hera crosses M95 4:00 am John Herschel born 1792</p>	<p>8 Cosmos 1867 (satellite) passes straight overhead moving NW to SE @ 8:00 pm</p>	<p><b>9 FIRST QUARTER MOON</b></p>	<p>10 Rings of Uranus discovered in 1977</p>	<p>11 ☆ ☆ ☆ ☆ ☆</p>
<p>12 </p>	<p>13 Percival Lowell born 1855 William Herschel discovered Uranus 1855</p>	<p>14 Albert Einstein born 1879</p>	<p>15 N. Lacaille born 1713</p>	<p>16 <b>FULL MOON</b> Goddard launched 1st liquid fuel rocket 1926</p>	<p>17 St. Patrick's Day ♣</p>	<p>18 Moon 1° North of Spica Alexei Leonov first space walk 1965</p>
<p>19 </p>	<p>20 Vernal Equinox 8:14 pm Moon @ Perigee</p>	<p>21 </p>	<p>22 Moon 2° North of Jupiter</p>	<p>23 <b>LAST QUARTER MOON</b> * Ganymede eclipse First photograph of moon 1840</p>	<p>24 <b>PAC STAR PARTY</b> Atlas Site</p>	<p>25 Mercury .6° S. of Saturn C. Huygens discovers Titan 1655 <b>Star Party</b> rain date</p>
<p>26 </p>	<p>27 Venus 6° South of Moon</p>	<p>28 <b>PAC MEETING</b> 7:30 pm Hyde Observatory ***** *A.M. conjunction!</p>	<p>29 UARS Satellite @ 60° altitude moving SW to NE 8:53 pm</p>	<p>30 <b>NEW MOON</b> *Ganymede eclipse</p>	<p>31 <b>MAHONEY PUBLIC STAR PARTY</b> Mahoney State Park Soccer Field</p>	<p><b>DON'T MISS...</b> Venus, Saturn, Mercury, &amp; Moon conjunction on March 28th just before sunrise!</p>



**For Sale:** 18" f/5 reflector housed in a 10x20 ft. building on the OAS observing site. Telescope has a Galaxy primary mirror, a 4" 1/25 wave secondary, a heavy Poncet mount, and a 5" f/5 refractor finder. It won the Mechanical Excellence Award at a recent Texas Star Party. The building has a split roll-off roof, carpeting, paneled walls, astronomy pictures, a couch, and a stereo. Will take best offer over \$3000. Might consider selling items separately, but prefers to sell as a unit. Call Roger Besch at (402)486-1977.



**The Prairie Astronomer**  
 c/o The Prairie Astronomy Club, Inc.  
 P.O. Box 80553  
 Lincoln, NE 68501



**Next Meeting**  
 February 28, 1995

Earl Moser  
 P. O. Box #162  
 Hickman, NE 68372

FEB

**Please Notice: If there is an asterisk on your mailing label it is time for you to renew your PAC membership!**

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