The Prairie Astronomer

Atlas Site Cleanup Done!

by Del Motycka

1988 sprint clean-up at the Atlas Site is history. It was held April 16th and nine members together with children and grandchildren came. Two members, Ron Debus and Steve Kell got a "head-start" on everyone by staying overnight after the Star Party the night before. They cut down the willow tree which obstructed the east parking lot. When I arrived at 7:45 a.m., they were busy dragging the large limbs away behind Steve's jeep.

By shortly after 9 a.m. the work crews were busy. Some cleaned up the east parking lt. Others removed limestone rocks from the asphalt at various locations.

Everyone helped plant 25 cedar seedlings for the future windbreak. These seedlings were planted in the open area along the north and west boundary lines. Some day we will have shelter from the cold north winds.

My sincere thanks to all who came.

Two major tasks remain for this year - placing the concrete over the pedestrian access and continued removal of 8 to 10 more trees. Ron and Steve showed us a relatively easy way to accomplish this. "DO IT ONE TREE AT A TIME." That way we are not intimidated by the thought of doing it all at once.

Let's have a big attendance at the April meeting.

Observing Chairman's Report

by David Knisley

The next scheduled Star Party is on Friday, May 13th, at the Atlas Site. May offers a mix of galaxies and globular clusters for the patient observer. Start off in southern Virgo with the famous "Sombrero" galaxy, M104, located about three and a half degrees south of Chi Virginis. This object is a nearly edge-on spiral and can be glimsed in a pair of 10X50 binoculars. The dark lane that gives this galaxy its name con be glimsed in a six inch at high power, but is best seen in eight or ten inch instruments.

Farther south in Centaurus is the large barred spiral M83. It is difficult to find due to the lack of bright stars nearby, but by looking two degrees north and three degrees west of h Centaure, you should be able to see it. It is fairly diffuse making it difficult for small apertures. Hints of its spiral structure can be seen using an eight inch, but it looks

best in a ten.

Up in Coma Berenices are two globular clusters, M53 and NGC 5053. M53 is about a degree north-east of Alpha and shows stars in a six inch telescope. The view improves with increasing aperture, with the view in a ten inch being interesting. NGC 5053 is about a degree east and a bit south of M53, but is much fainter. It should just be visible in a six inch as a very faint hazy ball. A ten inch at high power and under good conditions may show as many as ten stars in this cluster, so this isn't one of the real "showy" objects.

In Canes Venatici are a number of interesting objects including the edge-on spiral NGC 4244, located about six and a half degrees west and half a degree south of Alpha. It should be visible in a six inch as a long faint ray of the constellation are a pair of interesting galaxies, NGC 4631 and NGC 4656. NGC 4631 can be found six degrees south and two and a half west of Alpha and should be visible as a fuzzy cigar shaped patch in a four to six inch aperture. An eight inch shows much mottling across the galaxy, as well as revealing the tiny elliptical companion galaxy, NGC 4627, just north of the main galaxy. A degree south-east of NGC 4631 is the peculiar galaxy NGC 4656. It is difficult

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc., and is free to all club members. Membership status and expiration date is listed on the mailing label. Membership dues are: Junior Members and Newsletter Only Subscribers...\$10/yr; Regular Members...\$24/yr; Family Memberships...\$26/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 officers: Del Motycka (Pres) 489-2520, Ron Veys (V.Pres) 464-1449, Kim Ellen Owen (Sec) 423-7440, Dan Neville(Tres) 476-7772, Ron Debus (2nd V.Pres) 435-5688. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 9255 CADY AVE #14, OMAHA, NE 68134 no later than 7 days before monthly club meetings. Club meetings are held the last Tuesday of each month at Hyde Observatory in Lincoln, NE.

to see in a six inch, but an eight will reveal the strange curved end of this galaxy, making it look like a fish hook.

Six degrees east and 3/4 north of Alpha Comae Berenices is the spectacular globular star cluster M3. A four inch telescope will begin to resolve it, with larger apertures making it a glorious sight. What visit to Canes Venatici would be complete without a look at the Whirlpool Galaxy, M51. Visible in binoculars, this object can be found about two degrees south and two and a half west of Eta Ursa Majoris. Small instruments reveal it as a circular diffuse fuzzy patch with a small brighter center and another smaller galaxy, NGC 5195, near the north edge. A six inch makes M51 seem mottled, with the spiral structure being vaguely visible in a eight inch. A ten or twelve inch will show the brightest of the star clouds in the arms, as well as hinting at the connecting bridge of material between M51 and its companion, NGC 5195.

At The Last Meeting

by Ellen Owen

The meeting was called to order by President Del Motycka, with 30 members and 4 guests, including Bryan Schaff, present.

The Secretary was unable to at-

tend due to public school parent/teacher conferences, so the minutes are made available courtesy of Del Motycka.

Ron Veys explained how a solar filter was made for the Celestron 14--made of aluminum mylar (sun looks blue) with eyepiece filter (sun turns yellow again). Roger will sell this for \$40-\$50, to be used for solar eclipses. Rick Johnson will test the filter and report back next month to see if the club would be interested in purchasing the filter.

The Brunswick Foundation has a tax free donation and a letter for volunteer work and charitable organization with a \$100.00 check. Ron moved for the club to send a thank you letter, Earl seconded.

Dave Knisely reported on sign up sheet for Astronomy Day, which is April 23, the same day as the spring football game. Park north or east of the building as 15,000 -20,000 are expected for the game. We need a 10" homemade, 8" and 6" telescopes. Also binoculars, computers with games, and a video displayer. Jack will have a videotape to show. Astrophotography and posters are also needed, "Sky and Telescope," "Odyssey," "Astronomy," "Deep Sky," and other books and magazines. Bring your extension cords and miscellaneous items. Set up by 8:00; the building will open at 9:30. Come in the east door. A video spot is running on channel 42. The building will close at 4:30.

Dan Neville reports about \$357.00 in the bank. Also the time for key renewal is approaching in June or July. Taxes on the site are about \$55.00.

A Site clean-up day will be held the third week of April, the 16th of April. The Star Party will be the night before.

The Supervisors wrote a letter to the park department to have the road improved and more parking for the Observatory. Plans are now for 1990-1991, but we ask for a sooner date due to the traffic hazzard around the bridge on 70th Street.

With Sky & Telescope subscription rates increasing, the club voted to increase membership dues by \$2.00, putting Family dues at \$26.00/yr and Regular dues at \$24.00/yr.

There being no further business the meeting was adjourned. The program was presented by Jim Plant (from the Omaha club) who explained how he made is 10 inch telescope.

From The Editor's Desk...

This month's newsletter is a bit short in terms of what usually lies herein, but I thought you might be interested in seeing the revised copy of the PAC promotional flyer. Dave Knisely did the re-write which was laid out using PC Pagemaker and an HP Laserject. Thanks Dave.

This month's program will feature Jack Dunn who has some interesting things to show the PAC on his new digital disk player. I was suppose to do the program, but I will unfortunately be in Grand Juncion, Colorado installing a computer network. I will hopefully be around for the May meeting.

John Lortz

The Prairie Astronomer c/o Prairie Astronomy Club, Inc. 1988 P.O. Box 80553 Lincoln, NE 68501 Earl Moser Hickman, NE 68372 Expr: 9/88F Next PAC Meeting April 26th

AMATEUR ASTRONOMY A Hobby as Big as the UNIVERSE



Prairie Astronomy Club

Amateur Astronomy: The Universe At Your Fingertips

How would you like to take a trip to some of the most exotic and beautiful places in deep space without leaving the safety of Earth? Just imagine, exploring the surface of the moon, watching the weather on Jupiter, peeking into a stellar nursery, or gazing into the heart of a giant spiral galaxy. Amateur Astronomy delivers just that and much more!

Amateur Astronomers are hobbyists interested in observing the heavens for personal enjoyment or public education. You don't need to be a scientist or an optical expert to participate, and you don't even need to won a telescope. Many amateurs are just ordinary people like you and me who look at the skies through binoculars or just with the unaided eye and a star chart. Amateur Astronomers come in ages ranging from grade schoolers to senior citizens and in both sexes. Some build their own telescopes or just observe for the fun of it, while others do astro-photography or true scientific

The Prairie Astronomy Club, Inc.

The Prairie Astronomy Club was founded in 1961 as a non-profit organization dedicated to encourage the study of Astronomy and related subjects for the benefit of its members and the general public. The club presently has over 50 members with a wide variety of interests ranging from simple naked-eye sky gazing to deep-sky objects, variable star observing, and the use of computers. The club holds monthly meetings open to the general public on THE LAST TUESDAY OF EACH MONTH, unless the date conflicts with a major holiday. The meetings are held at 7:30 p.m., at THE HYDE MEMORIAL OBSERVATORY located in HOLMES PARK in southeast LINCOLN, NEBRASKA. Each meeting consists of a short business session, planning for upcoming events, and one or two short programs followed by refreshments and good conversation. A brief list of recent programs shows the variety of topics and interests that the meetings provide:

* SKY TOURS	How to identify the constellations.
* BINOCULAR NIGHT	What to look for in your next set.
* DEEP SKY OBSERVING	What to look for and how to find it.
* ASTROPHOTOGRAPHY	The right way to take deep-sky shots.
* TELESCOPE MAKING	Mirror grinding, testing, mountings.
* EYEPIECES FOR TELESCOPES	What is best for the price.
*PERSONAL COMPUTERS	Hardware and Astroprograms available.
* THE SPACE SHUTTLE	Televised activities in the payload bay.
* VOYAGER'S VIEW OF URANUS	Pictures via satellite from JPL.

* THE NEW TECHNOLOGY TELESCOPES. . Observatories of the future.

Benefits of Prairie Astronomy Club Membership

- 1. Each month, regular members receive Sky and Telescope Magazine, the oldest and probably the best publication for amateur and professional astronomers. This magazine contains colorful features pertaining to the science of astronomy, as well as articles covering things such as upcoming events, astrophotography, deep-sky observing, computers in astronomy, amateur telescope making, and amateur astronomy conventions. The cost of club membership is only \$2.00 more than you would pay for the magazine subscription alone.
- 2. Regular members and newsletter subscribers receive the club newsletter, **The Prairie Astronomer**, each month. It contains late-breaking astronomy news, information about meetings, and articles by club members and other authors.
- 3. Each regular member automatically is a member of the Astronomical League, the only nation-wide organization for amateur astronomers. Each member also receives The Reflector, the quarterly journal of the League, containing news about Astronomy, conventions, and recent book reviews. Membership in the League also allows you to buy astronomy books at a discount through the League Office, and to attend both regional and national conventions held yearly. The League also sponsors the Messier and Herschel Award programs to recognize the achievements of those dedicated people who view the most deep-sky objects.
- 4. Star Parties (outdoor observing sessions) are held monthly at the club's rural observing site near Firth, Nebraska (weather permitting). These events allow members and guests to see faint deep-sky objects and to find out how different telescopes perform away from city lights. Members can use the club 12.5 inch telescope to view the night sky. The club also holds a yearly picnic and star party in August, drawing amateurs from clubs around the area to share good food, astronomy talk, and good viewing.
- 5. Special publications such as the RASC Observer's Handbook, Astronomical Calendars, and subscriptions to Astronomy Magazine, Deep-Sky Magazine, and Telescope Making Magazine are offered to club members at special discount rates.
- 6. Trips to observatories, planetariums, and museums are sponsored by the club. Recently, the club took trips to the Kansas Cosmosphere and Discovery Center, Lake Afton Observatory, Behlen Observatory, Adler Planetarium, and the Museum of Science and Industry in Chicago.

"Duties" of Prairie Astronomy Club Members

While there are no requirements for membership other than the yearly dues, every member of the club on occasion serves as a guide or goodwill ambassador for Astronomy. Members often donate their time to the following activities:

- * Volunteer club members help run the **Hyde Memorial Observatory** during regular public nights and for special groups throughout the year.
- * The club stages Astronomy Day each year to inform the public about Astronomy as a hobby, and the progress of Space Exploration.
- * Other organizations such as the Cub or Boy Scouts and camp groups often call on the Prairie Astronomy Club to provide outdoor "Sky Tours" for their members. Also, scientific organizations occasionally ask for observations of certain astronomical events

Membersihp Dues

REGULAR MEMBER...\$24.00 per year. Includes Sky & Telescope, club newsletter, and 1 vote at club meetings, plus all other standard club privileges.

FAMILY MEMBERS...\$27.00 per year. Same as regular member except gets 2 votes at club meetings.

JUNIOR MEMBER.... \$10.00 per year. Must be 21 years of age or less. Includes club newsletter and 1 vote, but not Sky & Telescope Magazine.

NEWSLETTER SUBSCRIPTION ONLY...\$10.00 per year. Includes club newsletter only. No votes or Sky & Telescope Magazine.

FOR MORE INFORMATION: Come to a club meeting or contact the following...

Lee Thomas: 483-5639 (Lincoln) David Knisely: 223-3968 (Beatrice) Ron Debus: 435-5688 (Lincoln) John Lortz: 390-9821 (Omaha)

Address mail inquiries or membership dues to:

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