

The Prairie Astronomer



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May 30th which is a Wednesday is the day of the Solar Eclipse. Depending on where you are located will dictate how much of the eclipse you will see. As far as our area is concerned the best time to view it is between 10:00 am and 12:00 noon. During this time up to 60% of the sun will be obscured by the moon.

Looking at it from a national picture shows the best viewing along a southeastern line. Cities such as New Orleans, Atlanta, Greenville SC. and Petersburg VA. will be in the path of "100%". This 100% is relative though to the type of eclipse this one will be.

There are several types of eclipse. The total eclipse is when the distance of the moon in relation to the sun earth is such that the moon appears as the same diameter as the sun. Thus if the moon passes between the sun and the earth it covers it completely. If the moon is far enough away from the earth that it doesn't equal the diameter of the sun it is called a ring eclipse. This eclipse will be a broken annular or ring one. In the path of "100%" as mentioned above the sun will be 99.8% covered by the moon.

This area of "100%" is only about 6 miles wide. After that the coverage drops off considerable. 60% of the sun will be covered in our area while only 13% in the state of Washington and Oregon.

In ancient days horror stories of heads rolling and sacrifices being made during an eclipse were told. Feel secure in the thought that those incidents do not happen anymore. You very seldom have to wait for a eclipse for that to happen now.

Observing an eclipse can be a very exciting happening but one in which certain safeguards must be followed. As foolhardy as it may sound to us there are many who feel they can look at the sun directly during the time of its maximum coverage. This is not true. Eye damage and blindness can result from this. Also any type of optical aid whether filtered or not is unadvisable.

The safest, most rewarding, and easiest is the "pin-hole" method. A pin-hole camera which then projects an image of the sun onto a white sheet of paper can be most pleasing. Experiment with several types now before the eclipse to determine which is best for you.

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The Computer Corner by Russ Genzmer

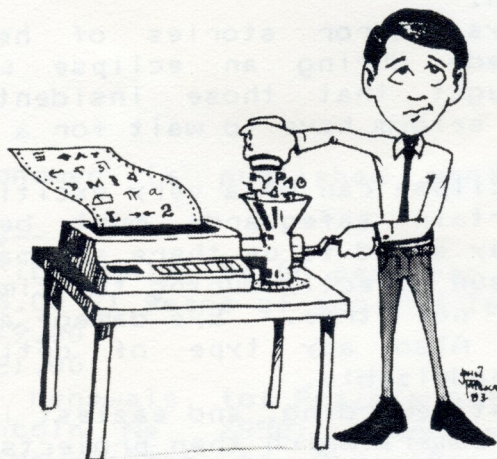
The idea was presented to me of interest in coordinating the members in our club who had computers into a users group. This idea is not new as users groups have been with us in other areas since the mid seveties. But it is now needed in our group. The club users group would be helpful in letting those with computers know who else had them. Our Astronomy Day exhibit had several members computers there that I had not known were into computers in the first place.

The group could use its resources to discuss whats good and bad out there for amateurs. To analyze the software or lack of it. To host active demonstrations during club programs. To help those that are interested in getting into the field. And for fun.

If interested, I'll circulate a sign up sheet at this meeting, or you can give me a call.

Next month I'll review the new Apple IIc. How with its portability, and some neat things coming out by fall this could be the amateurs computer, if you have \$\$\$.

Till then, don't byte off more then you can chew.



Crossed polarizing filters, smoked glass, or color film are not safe for solar viewing. Although they appear dark they do allow harmful invisible infrared rays to pass through to your eye.

Keeping away from the filter method and trying the projection one will allow you to observe in safety and comfort. Consult the may 1984 issues of Sky and Telescope and Astronomy magazines for more informative articles on observing the solar eclipse.

Russ Genzmer

There are new ceiling tiles installed in the auditorium now. This should help cut down on reverberation and allow for a more pleasing and clear sound during presentations and shows. Let us know what you think of it.

The program for this months meeting will be given by two members. Jack Dunn will show a video tape entitled "Computer Simulation of Astronomical Principles". He also will have a Digistar promotion tape on hand. John Lortz will have two video tapes also, they are called "Astronomy, A Hobby as Big as the Universe" and "Midsummers Eve".

From Andy Corkill, Astronomy Day Chairman comes... I want to thank all of those people that donated time, effort, and equipment for the Prairie Astronomy Day's observation of National Astronomy Day. The displays, shows, and interest shown by passers-by was a big success.

Observer's Report by David Knisely

Star parties are scheduled for June 1 and June 29th. This month is still good for galaxy hunting. In Canes Venatici M51 shows the most detail of any galaxy in the region. Located 1.75 degrees south and one degree west of 24 Canum Venaticorum, the galaxy and its small companion, NGC 5195, are visible in a 2.4 inch refractor, but at least an

eight inch is required to see the spiral structure clearly. In the southern portion of the constellation are an interesting pair of galaxies NGC 4631 and NGC 4656. NGC 4631 should be visible in a four inch but those with smaller telescopes should try for it. It appears as a long fuzzy fat cigar, with larger instruments showing some irregular dark detail as well as the small companion galaxy. NGC 4656 is much fainter but is interesting because of the hook shaped feature on the northeast end. Look about five and one half degrees west of Alpha Canum Venaticorum.

In Coma Berenices look for NGC 4565, a galaxy I have nicknamed "The Needle", about two degrees east of 13 Comae Berenices. Even a six inch will show it well as a long thin streak of light with an egg shaped nucleus, much like its appearance in photographs and an eight inch will show the dark lane across the nucleus.

Two degrees north of this galaxy is another galaxy that shows some vague detail, NGC 4559. My eight inch shows it as an elongated fuzzy patch with a slightly brighter central region and a patchy irregular outer haze.

Many people have seen the so called "Black Eye" galaxy, M64 just east of 35 Comae Berenices. But few people, it seems, have seen the dark feature itself. I recently caught my first good glimpse of the dark lane in my eight inch but I had to use over 100 power, something I don't normally do. If you are having trouble seeing details in galaxies, a bit more power can sometimes do wonders.

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Membership structure--

1. Newsletter subscriber only, \$6.00 per year.
2. Junior Member, \$6.00 21 years of age and less.
3. Regular Member \$19.00.
4. Family members \$21.00.

Address membership renewals to: Prairie Astronomy Club, Inc. PO box 80553, Lincoln Ne. 68501 Address all articles for inclusion in the Newsletter to Russ Genzmer 5301 So. 30th Lincoln Ne. 68516. All articles should be received 10 days before club meeting date.