



The Prairie Astronomer

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Darn Dew

Dew is often misunderstood. It does not fall from the sky but collects on the surface of your telescope. Why? Because when the temperature of the optical surface becomes sufficiently colder than the outside air you've got dew problems. And there is nothing more frustrating than to be zeroing in on an object only to find you have to step back and wait and wipe until you get your optics back into shape.

Dew is not as much of a problem with reflectors as it is with refractors. But dew also affects eyepieces and finder scopes so no one is really free from it. Dew is more of a problem in humid areas and not so in dry cold weather.

Dew is caused by a property called radiant cooling. The optical device actually radiates more heat than it absorbs from the surrounding area thus its temperature drops.

Also contrary to popular wives tales, wiping it off does no good. There are two standard remedies. Slow down the radiant heat loss by installing a dew cap or cover of some kind. Replace lost heat with some kind of heating device, such as a hair dryer. Warm air blowers do though cause some image distortion since the heating is uneven.

As stated before eyepieces can also be affected by dew. A good and quick way of combating this is to put them in your hand leaving the lens open to the

air soon the dew will go away. This also can be used on small finder scopes but the larger ones would require some kind of warm air blower.

A few points to guard against dew:

- 1) Point the scope at the ground and leave the cap off after a while the dew should be reduced.
- 2) Aim the scope at the ground when not needed. The ground radiates heat itself and will keep the scope warm.

Russ Genzmer

**** NEWSWORTHY NOTES ****

Thanks again to LT. COL. Mike Schwitters from SAC who gave us an interesting program last month. We only hope this is the first of many future program ideas.

NORTH CENTRAL REGION CONVENTION

Des Moines Ia. is the site for the North Central Regional convention. Although it is not our region it is relatively close and might be in your plans. The dates are May 13 and 14th in Ankeny Ia. at the Best Western Motel. The usual papers, astrophotography, telescopes, and the like are planned for all day Saturday. Also Drake University observatory will be available for observing on the 13th.

PRESIDENT'S MESSAGE

I was contacted the other nite by one of our members who is just about finished with his Messier Objects search. It reminded me of my quest for the "Messiers". For those of you out there who are unfamiliar with the Messier award it is named after Charles Messier. He was a 18th century astronomer whose time at the telescope was spent in pursuit of comets. While he never gained the recognition he strived for as a comet hunter he did discover a number of objects in the sky that he catalogued. These were numbered sequentially as he found them and the letter M was appended to them. For example "M1", "M74" etc. The list of Messier objects now is around 110. The Messier award is given to those who retrace the historic trail of Messier and "rediscover" his objects. Books are available to help the observer keep organized and log his entries. While most if not all the objects can be observed in one nite, in March, (this is referred to as the Messier Marathon or "Lets go schizoid at the scope" for short) most amateurs require a year to locate them. Not because they are hard but because they are spread out among many seasonal constellations. The club is quite exclusive. At last projection there were about 20,000 amateurs out there and only about 475 of us have won the award. Why, I don't know. A number of the objects can be observed with binoculars, a good share of them with a 3" and all of them with a 4 to 6".

And there is the fact that at conventions, meetings, and star parties you know you are part of an exclusive group. One which is composed of members that received besides the piece of paper, memories both past and to be shared yet in the future.

The Prairie Astronomer is published monthly by the Prairie Astronomy Club.

Membership structure.

1. Newsletter subscriber only, \$6.00. Over 21 years of age no voting privileges (newsletter only).
 2. Junior member (New) \$6.00. 21 years of age and less. Receive newsletter and club voting privileges. No SKY and Tele subscription through club at this rate.
 3. Regular member \$19.00. Receives newsletter, voting privileges, SKY and Telescope subscription with dues through club. No age restriction.
 4. Family members \$21.00. Same as regular member, but receives 2 votes in elections.
- Numbers 2,3, and 4 above also can receive as an elective, Astronomy Magazine through the club at \$12.00 per year. Address membership renewals to: Prairie Astronomy Club, Inc., P.O. Box 80553, Lincoln Ne. 68501. address all articles for inclusion in the newsletter to Russ Genzmer 5301 South 30th. Lincoln Ne. 68516. All articles must be received 10 days before the meeting date.

NATIONAL ASTRONOMY DAY OBSERVANCE

By the time you receive this, National Astronomy Day may have come and gone. So I will thank all those concerned now. We changed several things this year and I hope it works out for the best. We moved our display from the usual Gateway mall to East Park Plaza, we also got more of the club involved in the planning and preparation for it.

MEMBER CLOSING IN ON MESSIER

Club member Andy Corkill is rapidly closing in on his Messier award. He reports to me he has only 12 objects left and wants to complete them by May. This way he will be able to have the award presented to him at the Mid States Convention in June in Kansas City. We all wish him luck. It is another feather in our clubs hat to have yet another member receive his Messier Award.

Observer's Report...

In Canes Venatici look for the interesting pair of galaxies NGC 4631 and NGC 4656. NGC 4631 is a monster of a edge on galaxy almost a quarter of a degree long. It is located six degrees south and two degrees west of Alpha Canum Venaticorum and appears as a fuzzy fat cigar shaped band of light. It has a tiny companion galaxy near the nucleus, but it takes a good sized

instrument to see it. NGC 4656 is also nearly edge on but is a bit fainter and a lot stranger! It has a hook like appendage on one end making it look like a backwards "J", and is a bit south west of 4631.

Speaking of edge on galaxies, the best one in the sky is in Coma Berenices NGC 4565 located 2 1/2 degrees east of 12 Comae Berenices. It shows as a long narrow streak of light with a broad, egg shaped nucleus at the center and a dark lane crossing the nucleus.

Many people complain about not being able to see spiral structure in galaxies. Try M100 located two degrees south and a half a degree east of 11 Comae Berenices. In my eight inch, the galaxy showed a few hints of spiral structure in the form of curves of light at each end. Half a degree west of 6 Comae Berenices is M98, an elongated spiral that show some clumping on the ends. And, believe it or not, there are a couple of globular clusters in Coma Berenices. M53 is a small but fairly bright cluster that shows many stars near the edges. About a degree southeast of M53 is the distant globular NGC 5053. It shows up as a fuzzy ball of light a bit fainter than M53 and is so distant that no individual stars can be seen.

On the Coma-Virgo boundary directly between Denebola and epsilon Virginis is the daisy chain of island universes known as "the Realm of the Galaxies". The densest portion is centered on the bright elliptical galaxies M84 and M86, and there is an area around them that contains nine or ten galaxies in a one degree field of view. Some are edge on,

but most show up as faint patches of light even in large telescopes. Sweeping the entire region will usually bring at least one galaxy into the field.

David Knisely

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