

November 24, 1970

Phone: 489-7651

\*\*\*\*THE PRAIRIE ASTRONOMER\*\*\*\*

This month's meeting will be held at Olin Science Hall at Nebr. Wesleyan, 7:30 p.m. Our program, "supergiant variable stars," will be presented by Dr. Leung of the U of N astronomy department.

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--The President's Report--

On October 30, 1939, CBS radio presented its weekly series called The Mercury Theater. The program for the evening was the presentation of "War of the Worlds" by H. G. Wells. The director and narrator was Orson Wells. This program soon proved to be the epic in radio history. The nation-wide panic and hysteria of millions of Americans, who actually believed that the earth was being invaded by Martians, has never been forgotten.

On October 31st of this year, a local radio station broadcast a recording of that program. I was especially interested in hearing it because I remember listening to the original broadcast in 1939.

I made a tape recording of the program and it is available to anyone who wants to hear it. It may be of particular interest to club members because there is mention of the Martian Canals and the scientific explanation of them by learned astronomers in 1939.

Another item of historical interest is our club's 10th anniversary. I am not sure whether our club was founded in 1960 or 1961. Perhaps one of the charter members or the recording secretary can come up with the exact date by meeting time. Then we'll decide what to do about it.

---Earl Moser

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For anyone who might be interested, consider the possibility of getting

### Club Observatory

At the October 27<sup>th</sup> meeting of our club, a motion was made, seconded, and unanimously passed that all previous observatory committees be dissolved and that the board of directors be appointed to handle the disposition of the telescope. Larry Stepp, who made the original motion, explained that he felt this step to be necessary because of the complete lack of action that has occurred on the problem.

President Earl Moser has decided that the first step to be taken is to take a poll of the feelings of the club as a whole on this issue. The board will still follow their own judgement on the issue, but they feel that an indication of the club's opinion would be of great help in resolving this matter in the best interests of the club.

The form below is the poll. There is already a stamp and the form is addressed on the back. All you must do, therefore, is to fill out the form and put it in a mailbox. Please take the trouble.

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The results of this poll will be published, but no information



READ THIS BEFORE FILLING OUT THE POLL

I feel that an explanation of how the board will interpret the polls is necessary in order that the true feelings of the club will be discovered. Therefore, the listing below will define the terms used in the poll, as they will be used by the board.

Rural Location : Any location more than five miles out of the city limits.

Urban Location : Any location within the area bounded by Cornhusker highway on the north, 70th street on the east, Van Dorn street on the south, and 1st street on the west.

Suburban Location : Any location outside the limits of the urban area, but less than five miles from the city limits.

I suggest that a map be consulted to examine these areas.

Secluded Location: Any location which cannot be seen from the road and which is not a source of advertising for the club.

Advantages: Protected from car lights.

Less obvious and less likely to be vandalized.

Drawbacks: No public display

Prominent Location: Any location which is easily visible and prominent to the public

Advantages: Advertises the club.

Drawbacks: Exposed to car lights.

A target for vandalism.

In addition to the information which is on the poll, if you want an Observer's Handbook for the next year, but that down under your signature. This pamphlet is printed by the Royal Astronomical Society of Canada, and is loaded with information that is very useful to observing. The price is \$1.50. All members who want an observer's handbook must send in the poll immediately, as our order will be sent in the 25th of November.

Brian Dodson  
Treasurer.

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Good Observing is Back

With the seasonal demise of Daylight Savings Time and the amazingly clear skies which are a mark of Nebraska autumns and winters, now is the time to haul out your telescopes and begin to observe anew. There is, of course, one minor drawback. The cold. It seems to be a law of nature that the best results and conditions occur only with a maximum of personal discomfort. Anyway, that's what it seems like. Last night (October 31) Earl and I used his eight inch on some of the celestial wonders. The cassini division could be seen over the entire ring of Saturn, and several satellites were seen. The Horsehead was seen, a very difficult object for an 8".



M 42 was very good, with the loop easily seen, and several other patches of nebulosity being seen in the region. The various nebulosities in the Pleiades were easily seen, and the Merope nebula could be traced for  $\frac{1}{2}$ ". The clusters in Auriga were their usual beautiful selves, and the small cluster next to M35 was easily seen. No dust lanes could be seen in M31, but three spiral arms and some brightness variations could be seen in M33. These observations are typical of those possible on a good late Autumn and Winter night.

There were still some drawbacks, however. The cold was cutting through any clothing we could put on. The optics were frosting up. We had a small hot-air blower which was used for unfrosting the optics, and also for warming hands. Worth it's weight in gold. We went inside for a while, and when we came out, the eyepieces were covered with frost, the telescope tube was covered with frost, inside and out, and the diagonal mirror was frosted over. About 15 minutes later, the optics were defrosted, and we were finally ready to observe.

Viewing in cold weather is more work, and has it's drawbacks, but is finally so rewarding that I feel obliged to recommend it to everyone.

Brian Dodson

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#### The Planets This Month

- Mercury- Unfavorable all month
- Venus - Rises in the south-east at Mag -4.4 three hours before the sun.
- Mars - Rises at Mag +1.8 four hours before sunrise.
- Jupiter- Rises two hours before the sun at Mag -1.3
- Saturn - At Mag 0.1, it rises before sunset, and is in good position most of the night.

Uranus and Neptune are very faint in the early morning skies. The occultation of two galaxies by Pluto was not observed with the club's 12" because of cloudy skies.

On the 14th, the Geminid meteors are mostly drowned out by a nearly full moon.

On the 22nd, the Ursid meteors are in good position, and 15 per hour may be seen.

On the 25th, a conjunction of the moon, Jupiter, and Venus is visible in the early morning skies.

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If the solar system were an atom of gas.

The galaxy would be a disc of very thin gas .03 inches in diameter. The entire observable universe would be comprised of 150 billion of these small gas droplets, which would take up a total volume FIVE MILLION CUBIC FEET, and would comprise a sphere 170 feet in diameter. This sphere would be made of such a tenuous gas that we would call it a very good vacuum, and would weigh about, oh, .006 ounces. This is the weight of a very small grain of sand. The complexity of the universe is immense, but it's size can be visualized in this manner.