

Meeting Announcement

Our next meeting will be next Tuesday evening, December 28, at 7:30. Note, however, that Wesleyan is not available over the Christmas holiday so that as of yet we have not determined a place to meet. Therefore, to find out, please call: Jess Williams--488-2112, Monte Cole--488-1652, Larry Stepp--488-6465, or Ed Woerner--466-9234. Thank you for putting up with this inconvenience.

Our program this month will be a talk by Dr. Donald Taylor, professor of astronomy at the University of Nebraska. The subject of his talk is to be "Research topics for the amateur." As one who has just finished a class under Dr. Taylor, I know he can be counted on for a superb presentation. In addition, there will be plenty of lively discussion and interesting conversation plus, of course, refreshments.

At our last meeting after Professor Moore's planetarium show, Brian Rugg presented the club with a new observing program. Then Ed Woerner discussed telescope optics, followed by a film on Apollo 15.

The Secretary's Report

What is a secretary? Webster says: Originally a confident, one intrusted with secrets; a person employed to write letters, draw up reports, records, and the like; one who carries on other's business correspondence or other matters.

I think my job in our club is more a public relations one, selling the club to those interested in what we as an amateur astronomy group are attempting to do—use our telescopes to their best possible

advantage, learn visual astronomy, and grind our own lenses and mirrors.

I receive many letters, some good, some bad, and many worthwhile advertisements of all kinds which I keep in a file for future reference.

I am always glad to take time to inform any one about our club and try and join them up.

So, as I said at the start, my job as secretary of our club is more of a public relations job.

Jess William,
Secretary
P. A. C.

As a correction to last month's listing of members in the League's Messier Club, I should like to add that Brian Dodson has also found all 107 objects.

A club observatory is not that hard to come up with. Other clubs have made considerable progress in much less time than we have spent on the project. Let's try to get something done on one soon.

This month several members took time out to submit items to the newsletter. I want to thank these people, and also to encourage anyone else to contribute if they so desire.

Anyone with an idea for a program should get in touch with our program chairman, Larry Stepp.

WANT ADS

For Sale:

Norton's Star Atlas--for information contact George Work, 488-0304.

One Kodak Instamatic Camera #414. Electric eye and automatic film advance. Perfect condition. \$30.00. Contact Brian Rugg.

The Sky for January

Mercury--Greatest western elongation on January 1; this planet is easily seen in the morning sky; it is well up at sunrise.

Venus--Setting about two hours after the sun, this planet is well seen this month at about magnitude -3.6.

Earth--Perihelion on January 3.

Mars--This planet can be seen in the evening but sets around midnight.

Jupiter--A morning star visible just before sunrise; on the 6th, Jupiter will be very close to Mercury.

Saturn--Very conspicuous in Taurus and a fine object for observation in January; close to Aldebaran but brighter.

Uranus--In Virgo, visible in the morning sky.

Neptune--A morning object, not far from Nu Scorpii.

There will be an eclipse of the moon on January 30, from 09:12 to 12:36 Universal Time.

January is a poor month for meteors although The Observer's Handbook lists the Quadrantids on January 3, at a single observer hourly rate of forty; the moon is at first quarter on that night.

Observing in January

At the last meeting I tried to get an observing program off the ground, but due to the fact that I submitted my article to the newsletter too late and my lack of preparation, the program came off rather poorly. At the end of the meeting I had the feeling that everyone was a little confused over the whole thing. So this month the program will start anew and the newsletter will contain helpful hints on the location of the objects listed last month and again this month.

M34--This is a large loose cluster in the constellation of Perseus just across the eastern boundary of Andromeda. It is listed in even the smallest atlases and is quite bright, being about magnitude six. Probably

the best method of locating this object is to sweep with your finder scope half way between the stars Beta Perseus and Gamma Andromeda.

The first priority to be met in observing is an atlas -- It doesn't matter how small for most guide stars are fairly bright. After you have an atlas go outside at night and get oriented, that is, try to find or match up the stars in the atlas with the stars in the sky. I recommend for beginners The Sky Observer's Guide. This small handbook sells for just one dollar and contains all the basic information on how to get started in astronomy. In the back of the book is a small atlas containing most of the brighter objects in the sky. Another requirement is the learning of the Greek alphabet, because all

stars down to about the fifth magnitude are given Greek letters. This method is probably the best way to identify stars. The brightest star in a constellation is designated Alpha, the next brightest is called Beta and so forth. This way star identification becomes easier; some of the very brightest stars are also given names such as Vega, Deneb, Sirius, Rigel, etc.

Anyway, getting back to M34, in your finder scope it should appear as a fuzzy spot, something like an out-of-focus star. Also, when possible, try to get out in the country, for all deep sky objects are far easier to see. For example M34 is a faint patch in my finder in town, but out in the country it becomes a naked eye object.

(Continued)

M31--This is the famous galaxy that is so often seen pictured in books. It is the brightest spiral galaxy in the sky, being about fifth magnitude. Out in the country its elongated form can be plainly seen without optical aid. This galaxy is easy to locate in your finder, even in the city. First locate Beta Andromeda, a bright star about magnitude two and a half, then move in a northernly direction (that is, towards Polaris) to a fourth magnitude star, Mu: after this proceed in the same direction until you arrive at a slightly fainter star called Nu. Once this star is sighted you will see M31 just off to the left looking like an elongated saucer. (This is the way it appears in an inverting telescope, it's actually off to the right of Nu) If your telescope is a

little bigger or you're away from city lights, you'll probably glimpse the satellite galaxies of M31--M32 and N.G.C. 205. M32 is smaller than N. G. C. 205 but brighter and more condensed. In your eyepiece N.G.C.205 will be off to the left of the much larger and brighter M31. M32 will be off to the right of M31.

The challenger for this month is N.G.C. 404 -- a small and dim galaxy just a half degree west of Beta Andromeda. Recently I glimpsed this object at Earl's in my six inch reflector on a superb night. N.G.C. 404 would be much easier to see if it were not so close to Beta, for bright stars blot out dim objects. In the telescope it appeared as a circular patch of light at about the 11th magnitude. As you begin to look for objects in the sky don't be discouraged if you can not find them at first, for the one skill that is needed for observing is patience.

As one last word I'd like to ask people who don't have telescopes or enough time to use them, to at least step out in your back-yard for a few minutes every week and just look at the stars with your eyes or a pair of binoculars. Also, if people have questions concerning observing, I'd be more than willing to try and answer them.

Donn Baker, the club librarian, submits the following list of materials available in the library. Anyone interested in checking out any of these is advised to contact Donn.

- Astronomy Made Simple
- Mariner IV to Mars
- Biography of the Earth
- Field Book of the Skies
- Last Ice Age
- Greenhouse World
- Discover the Stars
- The Fascinating World of Astronomy
- Astronomy
- New Handbook of the Heavens (3 on hand)
- Introduction to Astrophysics: The Stars
- Celestial Objects for Common Telescopes
- Vol. I, The Solar System
- Vol. II, The Stars
- Amateur Astronomy Handbook
- Astronomy Handbook

In addition to these, the library has the following back issues of Sky and Telescope.

Vol. 16	No. 2	Sep. 57	Vol. 36	Complete
"	27	No. 3	"	37
"	29	No. 3,4	"	38
"	30	Complete	"	39
"	31	"	"	40
"	32	"		
"	33	No. 1,2,3	Plus 17	miscellaneous
"	34	No. 1-5	duplications	of the a-
"	35	No. 2,3,4	bove.	

Contributions to the library are always encouraged. See Donn on this matter too.

Brian Rugg

Following is a list of articles on subjects relating to astronomy. These may all be found in current popular magazines and are highly recommended to all.

Space World, Dec. 71; An article on the latest Orbiting Solar Observatory and two articles on the value of the space program.

Scientific American, Dec. 71; p.20, "The Gum Nebula" by Stephen Maran; A discussion of current researches into this, the largest known nebula in our galaxy.

Time, Dec. 13, 71; p. 50, "Looking for Life Out There" An interesting essay on the possibilities of extra-terrestrial life containing much fascinating speculation plus present scientific notions and ideas. Many interesting photographs!

Aviation Week & Space Technology, Dec. 20, 71; p. 22, Latest information from Mariner 9 and the Soviet's Mars 2 and Mars 3. P. 66, "Lunar Photos Reveal New Details" Lunar Geology illustrated with many pictures brought back by Apollo 15.