THE Prairie Astronomer

Vol 28 Num 2
Feb. 1987

Astrophotographer's Are....

BY A NON-ASTROPHOTOGRAPHER

Essayist Stephen Leacock thought Americans were funny. He chided them for making tea by boiling water to make it hot, then putting ice in it to make it cold; they put lemon in it to make it sour, then add sugar to make it sweet.

He should have known some astrophotographers.

They buy daylight film, then take their pictures at night.

They'll buy the slowest film on the market, then acquire $300 worth of equipment to make it faster.

They'll buy film rated at ISO 400 then expose it at 1600.

They'll develop color slide film as negatives and make slides of print film.

They'll acquire an assortment of lenses of various sizes and focal lengths, but will take them all off to make deep sky photos.

Astrophotographers will buy the fastest lens available at f/1.2 or f/1.4, then stop it down to f/2 for taking pictures.

They will use a camera that will stop action at 1/1000 of a second to expose a shot of an unmoving object for 40 minutes.

They'll equip their telescopes with the finest setting circles to locate dimly-seen objects, then defer their use in favor of sky-hopping from one object to another.

They'll buy telescopes you can't even look through, and put film in the telescope instead of their camera.

Astrophotographers are forced to develop their own film because processors seldom see anything worth printing.

Normally nice people, when taking pictures they become so sensitized to the dark that even a bright remark will cause their pupils to dilate and their dander to rise.

Kidding aside, astrophotographers really do know their stuff. So if you want to know the best film to use, all you need do is ask one. Right?

Well let me put it this way. I asked four.

No. 1: "Fuji 400 is the best thing on the market, and you can push it."

No. 2: "The only color film to use is 3M 1000. For black and white use a panchromatic."

CONTINUED FROM PAGE 1

No. 3: "I never use anything but 2415."

No. 4: "Don't sweat it. All you need is Ektachrome 400 and Tri-X."

So there you have it.

As Stephen Leacock said, "Americans (read astrophotographers) are funny."

The author adds "Please publish anonymously. I'm going to need some more advice on film."

Our author is a member of the Atlanta Astronomy Club. This article appeared in the November, 1986 issue of Ad Astra, the Atlanta Astronomy Club's monthly bulletin. He may be reached in care of Leonard Abbey, CIS #72277,566; but for his own safety and sanity he refuses to be identified!

President's Message.....

It has been an exceptional, even extraordinary winter for astronomers. If we had foreseen 65 degree days in January and February, we could have purchased Atlas Site and worked right through the winter to get it ready for viewing. Alas, predicting the future, not to mention Nebraska weather, is not among the talents of astronomers.

Now, of course, we are nearing the tome for actually putting down our money and taking possession of Green Acres. Anybody want to bet that when March rolls in, monumental Arctic Blizzards will suddenly materialize, and the Spring Thaw will arrive shortly after Memorial Day?

In any case, at our coming meeting, we will be organizing The Big Buy, and I'll be looking for somebody to head up site preparation (otherwise known as cleanup squad.) Those NOT present at the meeting will automatically be placed at the top of the Chain Saw list, so for self-protection, you should attend.

Norma tells me that we are pretty near to being set at East Park for Astronomy Day. We'll want to roll around some plans for this year's event at the February meeting, as well.

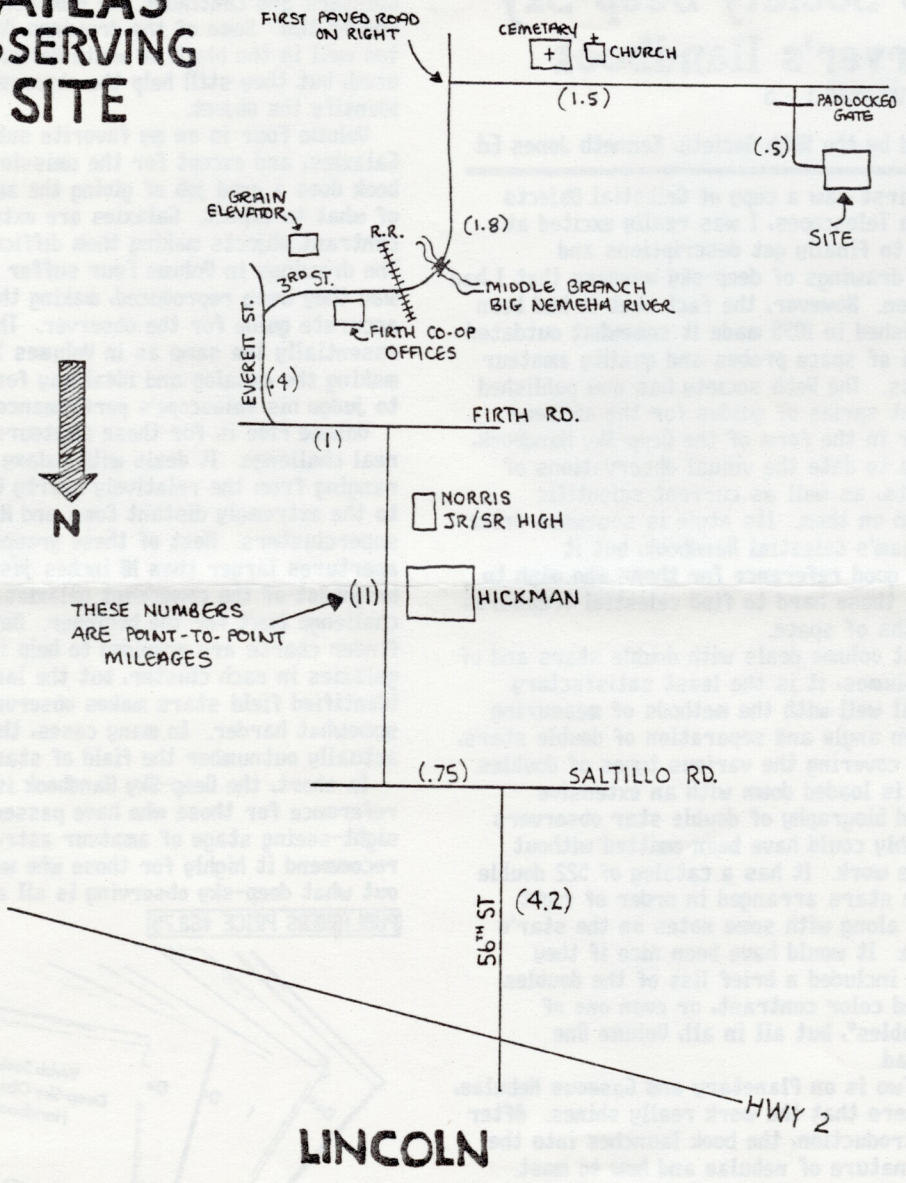
Be sure to welcome Les Myers to the club. His wife presented him with a membership for his birthday. No word how old he is, but she told me he is (a) holding a full-time job, (b) taking classes at UNL, and (c) has a brood of 2 at home, so he must be aging rapidly, whatever the calendar says. In the midst of all that, he takes time to appreciate the night sky. As we all know, a little respite under the stars can be a great way to recharge the batteries. Welcome to the club, Les.

See you all at the meeting February 24.

Lee Thomas

The Prairie Astronomer is published monthly by The Prairie Astronomy Club Inc., and is free to all club members. Membership expiration date is listed on the mailing label. Membership dues are: Junior Members and Newsletter Only Subscribers... $8.00/yr, Regular Members... $22.00/yr, Family Membership... $25.00/yr. Address all Membership 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: Lee Thomas (Pres) 483-5639, David Knisely(V. Pres) 223-3968, John Lortz (Sec.) 390-9821 (Omaha), Norma Coufal(Tres.) 483-5685, Dan Neville (2nd VP) 476-7772. All articles and comments should be sent to newsletter editor JOHN LORTZ 9255 CADY AVE. #14, OMAHA, NE. 68134 no later than 6 days before monthly club meetings.

ATLAS OBSERVING SITE



THE REVIEWER...

by David Knisely

Webb Society Deep-Sky Observer's Handbook

VOLUMES 1 - 5

Compiled by the Webb Society, Kenneth Jones Ed.

When I first saw a copy of Celestial Objects for Common Telescopes, I was really excited at being able to finally get descriptions and sometimes drawings of deep-sky wonders that I had not yet seen. However, the fact that it had been first published in 1895 made it somewhat outdated in this era of space probes and quality amateur instruments. The Webb society has now published an excellent series of guides for the amateur astronomer in the form of the Deep-Sky Handbook, bringing up to date the visual observations of most objects, as well as current scientific information on them. Its style is somewhat drier than Burnham's Celestial Handbook, but it provides a good reference for those who wish to ferret out those hard to find celestial treasures in the depths of space.

The first volume deals with double stars and of the five volumes, it is the least satisfactory. It does deal well with the methods of measuring the position angle and separation of double stars, as well as covering the various types of doubles. However,it is loaded down with an extensive history and biography of double star observers that probably could have been omitted without hurting the work. It has a catalog of 522 double or multiple stars arranged in order of right ascension, along with some notes on the star's appearance. It would have been nice if they would have included a brief list of the doubles that showed color contrast, or even one of "double-doubles", but all in all, Volume One isn't too bad.

Volume Two is on Planetary and Gaseous Nebulae, and it is here that the work really shines. After a brief introduction, the book launches into the scientific nature of nebulae and how to most effectively observe them. Following this is an extensive catalog with drawings of both planetary and gaseous nebulae in telescopes ranging from three to thirty inches in aperture. Some of the drawings of planetary nebulae were a great help in finding those that are almost stellar in appearance. Descriptions are provided for all objects for several different apertures, allowing the prospective observer to get an idea what to expect at his telescope.

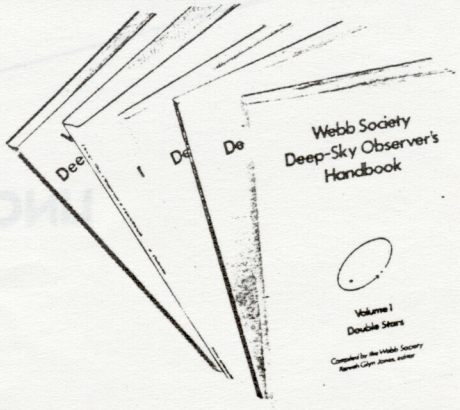
Volume Three concerns Open and Globular Clusters and continues the fine performance of volume two. Some of the drawings don't reproduce too well in the black on white format that is used, but they still help the observer to at least identify the object.

Volume Four is on my favorite subject: Galaxies, and except for the omission of M100, the book does a good job of giving the amateur an idea of what to expect. Galaxies are extremely low contrast objects making them difficult to draw. The drawings in Volume Four suffer more from the way they were reproduced, making them a less accurate guide for the observer. The format is essentially the same as in Volumes Two and Three, making the catalog and ideal way for the amateur to judge his telescope's performance.

Volume Five is for those amateurs who want a real challenge. It deals with Galaxy Clusters, ranging from the relatively nearby Virgo group to the extremely distant Coma and Hercules superclusters. Most of these groups require apertures larger than 18 inches just to see the brightest of the component galaxies, so this challenge isn't for the beginner. Detailed finder charts are provided to help identify the galaxies in each cluster, but the lack of identified field stars makes observations somewhat harder. In many cases, the galaxies actually outnumber the field of stars!

In short, the Deep-Sky Handbook is an excellent reference for those who have passed beyond the sight-seeing stage of amateur astronomy. I recommend it highly for those who want to find out what deep-sky observing is all about.

PUBLISHERS PRICE $68.75



OBSERVING CHAIRMAN'S REPORT

by David Knisely

THE NEXT SCHEDULED STAR PARTIES ARE ON FEBRUARY 27TH AND MARCH 27TH. We are now entering the early spring sky with its abundance of galaxies. In southern Leo is an interesting trio of galaxies, M105, NGC 3384, and NGC 3389, all located about one and a half degrees south and a half east of k Leonis. M105 is bright and round but shows little other detail. NGC 3384 is small and faint as is NGC 3389, so use at least a six inch aperture. About one degree south of M105 is M96, a spiral that should just be visible in a three inch. It shows little detail, but if you look about a degree west of M96, you will find its neighbor M95. It is slightly fainter than M96, but should still be visible in a three inch.

About halfway between Theta and Iota Leonis is the bright trio of galaxies M65, M66, and NGC 3628. A good pair of 10x50 binoculars will probably show M65 and M66 as tiny faint spots of light right next to each other, but larger telescopes reveal some detail in the galaxies. M65 is a nearly edge-on spiral appearing as a large fuzzy oval with a bright center. Hints of dark lane are sometimes seen in ten or twelve inch instruments. M66 shows hints of spiral structure and mottling in an eight inch, with a ten showing the claw like main spiral arm. NGC 3628 is considerably fainter than either Messier object, but should show as a faint narrow streak of light in a six inch aperture. An eight inch under good conditions should also show a long dark lane running the length of the galaxy, and all three galaxies should fit nicely in a one degree field of view.

Up in Ursa Major is the face-on spiral NGC 3184, located about 3/4 degree west of Mu Ursa Majoris. It should show up in an eight inch as a faint almost circular patch of light with a small brighter center and irregular edges. About two and three quarter degrees north and a bit east of Lambda is NGC 3198, a large elongated spiral that should be in range of a six or eight inch telescope. Eight inch and larger instruments will show some mottling over the face of the galaxy.

The best pair of galaxies for the small telescope has got to be M81 and M82, located about two degrees east and a bit sought of 24 Ursa Majoris. Both are visible in binoculars if the power is high enough, and they fit nicely in the one degree fields many 60 mm refractors have. M81 is the south member of the pair and appears as a fuzzy oval with a faint outer haze. It is a tilted spiral, but the spiral arms are narrow and very faint, requiring at least a ten inch to be easily seen. M82 is edge-on, and shows as a fuzzy cigar with a dark spot in the middle. An eight inch will show a wealth of dark detail in this irregular galaxy, making it a favorite at star parties. There are two other galaxies nearby, but they require probably a four to six inch to be visible. NGC 3077 is about half a degree south-east of M81 and shows as a small faint fuzzy oval. The other galaxy is NGC 2976, located about a degree and a half south-west of M81. It is fainter than 3077 and shows little detail in any telescope.

Next Meetings Pgm.

Lee Thomas will present the new Uranus Slide Show

At The Last Meeting:

The January meeting started right on the money at 7:30pm with 26 members and 4 visitors present. President Thomas started the business portion of the meeting outlining what he hopes the club can accomplish in 1987 and highlighting what was discussed at a mid-January board of directors meeting. Topics discussed were...

- shorten meetings to a 30 minute business part and a 20 to 30 minute program part to allow for more time out on the observing deck.
- occasionally hold meetings at Nebr. Wesleyan to utilize the planetarium.
- designate an official greeter for visitors.
- re-establish the telescope making and astro-photography classes.

Plus, the club would concentrate on the following special projects... The Atlas Site, a fall trip to Hutchinson, Astronomy Day, the Midstates Convention, refurbishing the club 12 inch scope, and the new club 8 inch scope.

The letter of intent to purchase the Atlas Site was received by the Firth Coop who said it would be fine for us to make the purchase toward the end of March. Then Astronomy Day 1987 was discussed, and the date was set for May 9th. Because of some complications with having it at Gateway, Norma was asked to look into East Park Plaza as this years site. Norma was also unofficially put in charge of Astronomy Day with three subordinates handling different parts of the display... Rick Johnson was put in charge of computers, Dan Neville in charge of telescopes, and John Lortz in charge of displays.

Rick Johnson ended the meeting with a video program on the November 1985 Atlantis shuttle flight. Rick recorded the event from NASA's channel on one of the satellites, getting some shots you very rarely see on regular TV.

For Sale: Earl Moser has a 6 inch f/4 reflector he'd like to sell. It has an equatorial mount, clock drive, and enhanced coating optics. Earl is asking $130, and the scope would be ideal for first telescope or for use as a rich field telescope.

THE PRAIRIE ASTRONOMER
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FEB 20
1987

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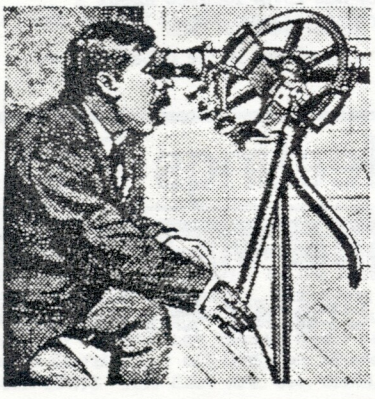

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Next PAC Meeting
February 24, 1987