

fully develop deep-sky observing techniques like averted vision, star-hopping, and dark adaptation on his own.

2. LEARN THE SKY: It is recommended that the new amateur spend a lot of time on learning where the various constellations and the brighter objects are. This will help the novice find things easily, thus easing the pressure to move up to big apertures simply because he feels that, "I can't find anything in this little scope!" It can also be done when the dreaded moon in the sky, since most of the brighter stars in the constellations are still easily visible. This will also encourage frequent observing.

3. MOVE UP TO LARGER APERTURES SLOWLY AND IN SMALL INCREMENTS: The new amateur astronomer should continue to use the 2.4" refractor or even a good pair of binoculars for as long as possible. The recommended time period is one full year, although a few hardy souls have been able to upgrade to a six inch in only a six month period without undue stress. The time period will help the new amateur learn about various telescopes and simple mountings without having to waste much money. The novice can attend star parties and look through a few big home-brew p73 instruments. This will help show the novice that no telescope will show galaxies visually as well as pictures taken with the 200 inch at Palomar do.

4. KNOW THE PRACTICAL LIMITS OF TELESCOPE SIZE: The size inch f/8 Newtonian is an ideal instrument for even advanced amateurs. It is fairly portable and will get the amateur over the "light hump" of the small aperture instrument. After much research, SPICA has determined that, for a truly portable instrument, the MAXIMUM RECOMMENDED APERTURE FOR A SINGLE USER IS TEN INCHES. A ten inch f/5 telescope can be packed in most mid-size cars, and can usually be set up by a single person. Larger apertures will show more faint objects, but they usually require a lot of cash, at least two people to set them up, and some time to assemble, collimate, and cool down. This can make observing a less pleasurable experience. SPICA's motto is: "Large aperture light gain may not be worth the back pain." Think about this before you buy your next scope.

Hopefully, by following these recommendations, the beginner can avoid the effects of aperture fever, and can grow into a normal, well adjusted amateur astronomer. SPICA has nothing against large apertures, but it believes that more emphasis on smaller and simpler telescopes can help keep amateur astronomy from becoming just another hobby for the rich and infamous.

The Prairie Astronomer

c/o The Prairie Astronomy Club, Inc.

P.O. Box 80553

Lincoln, NE 68501

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Next Meeting April 24, 1990

THE Prairie Astronomer

Astronomy Day, Final Notice!

The Prairie Astronomy Club, in cooperation with Mueller Planetarium, will celebrate ASTRONOMY DAY, 1990 on Saturday, May 5th, in the lobby and theater of Mueller Planetarium, in Morrill Hall on the UNL city campus. Set up will begin around 8:30 a.m., with the exhibit being officially open at 10:00 a.m. until 4:30 p.m. We still need telescopes, pictures, computers, and people, so if you haven't signed up to help, please do so at or before the April 24th club meeting. If you can't be at the meeting, you can contact Jack Dunn at Mueller Planetarium. This is our one big yearly publicity event, so PLEASE help us if you can.

Notes From The Bean Counter...

I still have a large number of membership cards which have not been picked up, many belonging to folks who are seldom seen at meetings, but who pay their dues regularly.

Your appearance at the next club meeting to personally claim your membership card would accomplish two things:

1. You would get to meet a lot of interesting people, many of whom have joined the club since your last visit. And, you'd hear a lot of news about club activities that may never be published in this newsletter.

2. You would save the club 25 cents to mail your membership card. (I know that doesn't sound like much: It never does when the Post Office talks about raising 1st Class Postage rates, either. But multiply 25 cents by the number of people who haven't picked up membership cards, and the club treasury takes an unnecessary hit.)

Besides, we'd like to see what you look like. People change. Longtime members show up who we welcome as visitors because nobody recognizes them! How embarrassing!

STOP! BRIDGE OUT! DETOUR! BEWARE OF SHARP DROP-OFF!

Club members headed for Atlas Site from Lincoln, secure in the knowledge that they "know the way" have recently been rudely confronted by the realities of Your Tax Dollars At Work. Lancaster County is replacing the bridge on Spur 34B south of Firth, right there by the Firth City Dump. So, as they say, You Can't Get There From Here, at least not by going through Firth. Word is that the replacement project will take most of the summer.

So, to avoid the use of excessive expletives, as well as keeping your blood pressure under control, use the Highway 77 to-Cortland-then-East route. (There is an alternative: Instead of going Left [East] toward Firth on the Firth Road, go Right to the next mile road, then south. This, however, takes you across gravel, rock, and dirt and may result in some wandering about the countryside in the Dark Nebraska Night.)

Watch these pages. We'll let you know when 34B opens again.

ASTRONOMY subscribers might note in the May issue, on page "J" of "Astronomy's 1990 Guide to Summer" that we are completely represented this time. Hyde Observatory is listed under "Places", Prairie Astronomy Club is listed under "Clubs", and our picnic and star party is listed and described as a regional event, complete with reference number on the Midwest map (the only one in Nebraska, I might add.) I admit I sort of arbitrarily set the date for the picnic as August 18th to meet their publication deadline. We usually don't get around to debating the date until June, which is way too late. But, the 18th seemed to meet our usual criteria...Perseids, New Moon, and guaranteed clouds, rain, and possible tornadoes. So, I took a chance.

President's Message...

Ben Kottwitz was last month's winner in our door prize drawing for the solar filter. The dollar prize drawing was once again unclaimed so now the unclaimed \$1.00 prize is up to \$3.00 at the 9:30 pm drawing. The solar filter and \$1.00 door prize are donated by Doc Manthey.

This month I've ordered one of those Sky Pointers advertised in Sky and Telescope. I think this gizmo will help teach time and coordinates and just maybe give me a better understanding on how setting circles work. I hope it comes before the next meeting. I would sure like to show it. Hope to see all of you at the next meeting. Remember it could mean \$ for you. Thanks for listening. I'm Ron Debus.

Amateur Astronomy's Social Disease by Dave Knisely

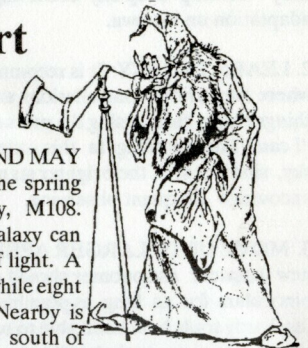
Many amateur astronomers start out their observing careers with relatively small telescopes. I fondly recall many a starry night when I just couldn't wait to grab my 2.4" refractor and my dog-eared copy of A FIELD GUIDE TO THE STARS AND PLANETS, so I could get down to some serious observing. Those years with my 2.4 were some of the best I ever had in amateur astronomy. Sadly, many current amateurs have fallen victim to the dreaded disease known as APERTURE FEVER, even before they get their first instrument. The symptoms are visible mostly to experienced amateurs and include the following; drooling on the pages in Sky and Telescope with the large telescope ads, hovering around the biggest scope at a star party for the entire night, and a total disdain for any aperture smaller than eight inches. A serious case of aperture fever can lead to complications like low bank balances, severe back strain from lifting big instruments, and a loss of

CONTINUED BOTTOM OF NEXT PAGE...

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc., and is free to all club members. Membership status and expiration date are listed on the mailing label. Membership dues are: Junior Members and Newsletter Only Subscribers...\$10/yr; Regular Members...\$24/yr; Family Memberships...\$27/yr; Address all new memberships, 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: Ron Debus (Pres)435-5688, Dave Knisely (V.Pres)223-3968, Kim Ellen Owen (Sec)423-7440, Lee Thomas(Tres)483-5639, Jack Dunn (2nd V. Pres)475-3013. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 12023 Parker Plz. #105, Omaha, NE 68154 no later than 7 days before monthly club meetings.

Observing Chairman's Report

by Dave Knisely



THE NEXT SCHEDULED STAR PARTIES ARE MAY 18th AND MAY 25th AT THE ATLAS SITE. Galaxies continue to dominate the spring skies. In Ursa Major is the fairly bright edge-on spiral galaxy, M108. Located about 1.5 degrees east and 3/4 degree south of Beta, this galaxy can be glimpsed in a three inch as a faint fuzzy cigar-shaped patch of light. A six inch will show a foreground star near the center of the galaxy, while eight or ten inch instruments will reveal some interesting dark detail. Nearby is the famous "Owl" nebula, M97, located two degrees east and 1.5 south of Beta. Small instruments will show this planetary as a small faint fuzzy disk of light, but a six inch under good conditions will show a dark patch just off center in the nebula, with larger instruments revealing the other "eye" dark spot.

In Canes Venatici are a number of interesting galaxies for modest apertures. Look 1.25 degrees north of the faint star 19 Canum for the spiral galaxy M63. Small telescopes will show it as a faint fuzzy oval with a brighter middle. A six inch will show a star on the west edge of the galaxy, while a ten will reveal a star-like nucleus and slightly mottled inner rectangular-shaped halo. In a rather blank portion of the constellation are a pair of very interesting galaxies. NGC 4631 is a nearly edge-on spiral located about 5.75 degrees south and 2.5 degrees west of Alpha Canum. Visible in a three inch, this object looks like a faint fuzzy cigar. Eight and ten inch telescopes reveal some patchy structure in the galaxy and one of the star clouds just off the center line near one end of the object. An eight inch under good conditions will reveal a tiny faint elliptical galaxy NGC 4627 along the north-west side of NGC 4631. Some astronomers believe that these two galaxies are interacting, causing distortion in NGC 4631. Less than a degree to the east-southeast is the peculiar galaxy NGC 4656. This object is difficult in a six inch aperture, appearing as a short faint fuzzy streak. An eight inch will show a faint "hook" extension on the north-east end, while a ten inch aperture will reveal a dark spot between the "hook" and the rest of the galaxy.

In Corvus is the interesting globular cluster, M68, located about three degrees south and one east of Beta. Visible as a faint fuzzy ball in small apertures, this globular begins to resolve in an eight inch at high power. A ten inch resolves it fairly well across its face with hundreds of evenly faint stars and no real central condensation.

In Coma Berenices is the bright spiral galaxy, NGC 4565, located 1.5 degrees east of 17 Coma. Small telescopes will show it as a faint fuzzy streak with a broader center, while an eight inch will show hints of a dark lane across the nuclear bulge. Also in Coma are a pair of interesting globular clusters, M53, and NGC 5053. Located about a degree north-east of Alpha, M53 is visible in large binoculars as a faint fuzzy spot of light. A six inch will resolve only the edges, while a ten inch makes it easy to see stars even in the core. NGC 5053 is a much fainter cluster that lies less than a degree to the southeast of M53, and will probably be just visible in a four inch as a very dim hazy patch of light. A ten inch reveals only about 30 stars in the cluster, with the rest being just a granular haze.

friends who USED to enjoy observing with the victim.

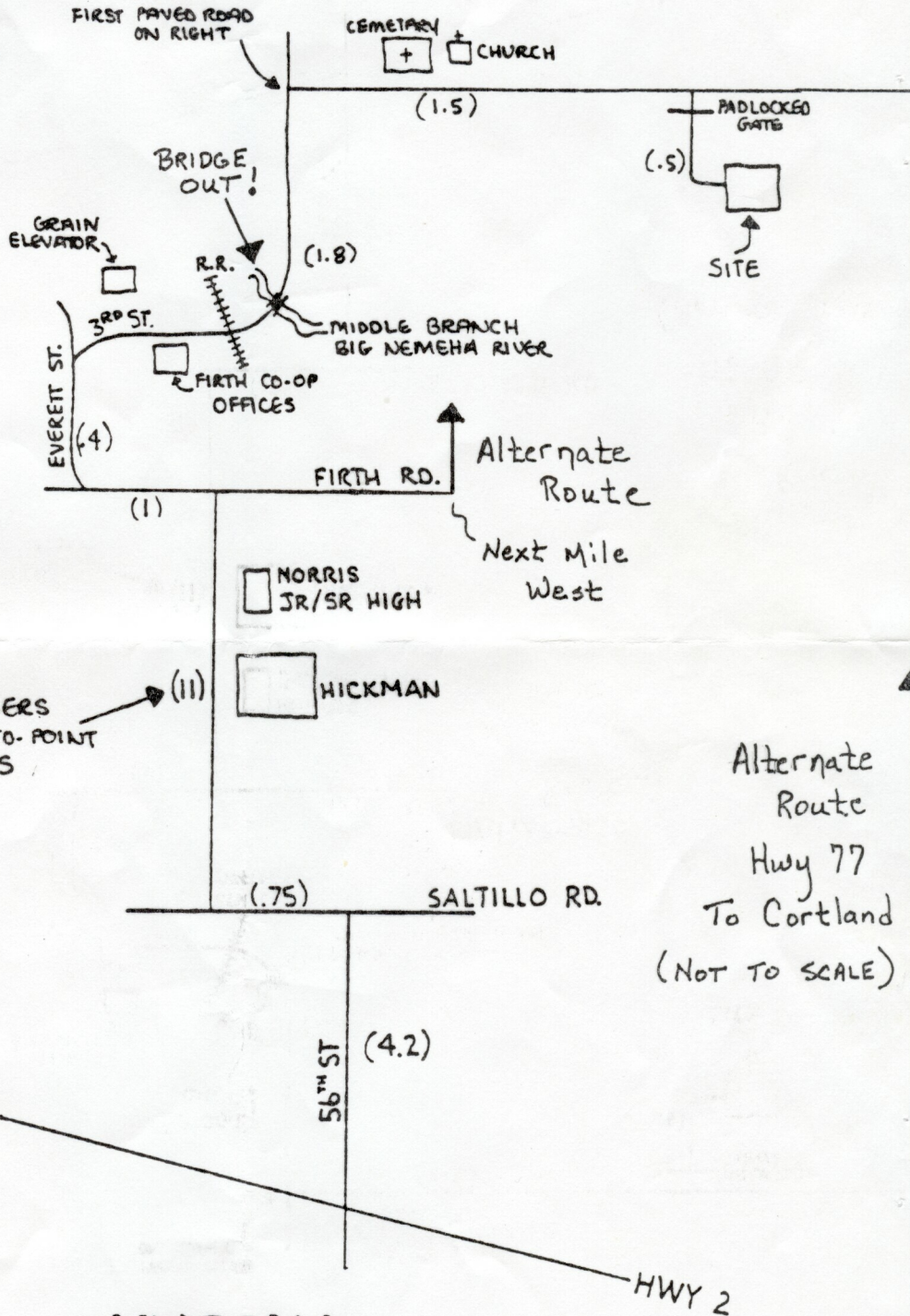
Is there a cure for this unfortunate malady? Thankfully, the Society for the Prevention of Immediately Curable Aperture-fever (SPIRO) has developed a simple plan to help the beginning amateur astronomer cope with this serious illness.

1. START SMALL: The recommended new amateur's first telescope is a 2.4 inch refractor with a 700 mm focal length on a simple altazimuth mount. This will allow the observer access to the major sights in the sky at a cost which will not destroy things like credit ratings and marriages. The instrument's portability will keep the new amateur's back healthy, and will encourage more frequent

ATLAS OBSERVING SITE



THESE NUMBERS
ARE POINT-TO-POINT
MILEAGES



LINCOLN