

The Prairie Astronomer

The Official Newsletter Of The Prairie Astronomy Club, Inc.

July 1999 Volume 40 Issue #7

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Hyde Observatory: http://www.blackstarpress.com/arin/hyde/





PAC MEETING
TUESDAY, JULY 27, 1999, 7:30 PM
at Hyde Memorial Observatory

NSP PLANNING COMMITTEE MEETING THURSDAY, JULY 29, 1999, 7:30 PM At Mahoney State Park Lodge

UNL STUDENT OBSERVATORY
FRIDAY, AUGUST 6, 1999, SUNSET UNTIL 11:00 PM
Open to the public

6TH ANNUAL NEBRASKA STAR PARTY AUGUST 7-14, 1999

Merritt Resort (See lake map on back page)

MAHONEY STAR PARTY NO STAR PARTY FOR AUGUST

PAC MEETING TUESDAY, AUGUST 31, 1999, 7:30 PM at Hyde Memorial Observatory

> MAHONEY STAR PARTY FRIDAY, SEPTEMBER 10, 1999 Mahoney State Park

JULY'S PROGRAM: Build Your Own Telescope!

UNL astronomer Martin Gaskell will present a program called "Family Telescope Making" which will show how you can build a powerful telescope on your own for a small fraction of the cost of a commercial telescope. Thousands of people do this every year. Even pre-school children can be involved in making telescopes; there will be hands-on demonstrations for children. It makes a great family project! More on Page 3.

FALL BANQUET: Time is running out for making reservations for the PAC/OAS dinner on Friday, October 8, at Mahoney State Park Lodge. It will be at 7:30 p.m. and a buffet dinner for \$7.00 is planned. Larry Hancock is planning door prizes and there will be a short program by Dr. Martin Gaskell. An observing session is planned after the program. Please contact Larry if you would like to help with this event. Money must be turned in to Larry by September 1st.

PAC-LIST: Mark Dahmke maintains an e-mail list server for PAC. If you have an e-mail address and are not on the PAC List, you may subscribe by submitting an e-mail to list@4w.com. Write "Subscribe PAC-List" in the body of the e-mail.

NSP 6: The Sixth Annual Nebraska Star Party is just around the corner. If you haven't made plans to attend yet, be sure to see Tom Miller or any Prairie Astronomy Club officer to find out how.

NO AUGUST MSP: Due to the 6th Annual Nebraska Star Party, there will be no Mahoney Star Party for August. The next MSP will be Friday, September 10th.

SUN ACTIVITY: Dust off those solar filters and start watching the sun. Our star is moving toward its eleven-year maximum, and that means more sunspots, solar flares, and prominences to observe.

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The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc. Membership expiration date is listed on the mailing label. Membership dues are: Regular \$20/yr, Family \$22/yr. Address all new memberships and renewals to: The Prairie Astronomy Club, Inc., PO Box 5585, Lincoln, NE 68505-0585. For other club information, please contact one of the club officers listed on the last page of this newsletter. Newsletter comments and articles should be submitted to: Jeff King, 4018 South 83rd Street, Lincoln, NE 68506-5973 or jeffrey892@aol.com, no less than ten days prior to the club meeting. The Prairie Astronomy Club meets the last Tuesday of each month at Hyde Memorial Observatory in Lincoln, NE.

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Secretary's Report

The meeting was opened by our President, Dave Knisely. There were no quests.

Dave reported that seeing has been very good lately; solar activity is high with over 230 spots last week. Comet Lee is making its appearance; however, it will be better in August. Venus and Mercury are still visible in the evening sky.

There are 2 more planning meetings left before the Nebraska Star Party: July 8 and 29. The actual planning is all done so these 2 meetings will be spent stuffing packets and T-shirts. Help is always welcome.

The next PAC star party is scheduled for July 9. It will be at the OAS club site near Weeping Water. Directions/maps to the site were handed out at the club meeting. We are considering an agreement with OAS to share their site. They have been kind enough to invite us to visit and look over their site.

PAC board members met with OAS members early in June at OAS president Bill O'Donnell's home in Omaha to discuss site-sharing. Larry Hancock showed a video tape of the site. The site is 4.5 acres; OAS is registered as a non-profit organization and does not have to pay taxes on the site.

July 16 will be the next Mahoney Star Party. Set up is on the driving range of Mahoney State Park. The UNL Observatory will be open to the public on Friday, July 9.

Liz Bergstrom, Treasurer, reported that after paying our League dues, we only have \$70 in the treasury. She reminded everyone to pay their dues promptly. If enough dues can be collected, we voted to donate \$150 to buy door prizes for kids at the Nebraska Star Party. A club banner, 5' x 1.5', blue with white lettering, would cost \$50 - \$100.

NSP News: Tom Miller has registration forms; he reported that he has about 130 registrations (over 200 people). Doug Bell, clear skies coordinator, reported that he had made special arrangements for the solar eclipse in Europe to draw clouds overseas for that week.

Tom invited PAC members and their families to his home on the 4th of July.

Larry introduced our new club librarian, Drew Stoddard. Larry also reminded everyone to turn in their registrations and money for the PAC/OAS banquet. Money must be turned in by September 1.

Mark Fairchild, Hyde volunteer coordinator, called everyone's attention to the volunteer schedule in the June newsletter. Hyde will NOT be open on July 3. The Hyde committee is working on getting an LCD projector and screen.

Dave invited everyone to Village Inn after the program.

Mark introduced our program: UNL Classics Professor Thomas Winter on "Hercules, Hero of the Sky", and the mythology of the summer constellations.



Professor Thomas Winter

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Family Telescope Making at the July Program

For the July program Martin Gaskell and family are going to present "Family Telescope Making." Bring the kids! In fact, bring your neighbor's kids and their parents – anyone who wants to know how to make a cheap telescope and keep the kids occupied while doing it.

Laura (age 16 months) supervises her 5-year old brother screwing a telescope tube together.





Daniel (5) and Timothy (7) painting the tube of an 8-inch Newtonian.

How Do I 'Dew' It?

By Todd Gross

Face it, most of us, even Newtonian reflector owners, will at one point or another have to deal with dew. Some of us, like myself, have the worst possible scenario: A moist climate, AND a Schmidt-Cassegrain scope, both perfect for gathering dew and/or frost.

Then why is it that I almost never worry about dew? Why do I leave my scope out at 10pm, allowing it to cool down, until my planned observing session at 4am, on some nights without even a dewshield? Dew, or the lack thereof, you see, is fortunately one of the easiest types of weather to predict!

What produces dew (or frost). Basically, on clear or partly clear, low-wind nights, the temperature falls to a temperature called the "dew point". The dew point, is the lowest the temperature can fall..it is a bottom limit, the only way it can fall lower, is if the dewpoint itself changes. (In actuality the dewpoint often rises somewhat as the temperature drops, but not on clear, calm nights).

What is important about the temperature falling to the dewpoint, is what happens when it does: Either fog forms, rain (or snow) falls, or dew/frost form. On a clear, calm night, it is the latter.

The dew accumulates on your optics, and can render an observing session useless, and it is hard to keep the dew off! Reflectors, and to a lesser degree, refractors both are naturally shielded from the sky, and thus the dew, but as long as the glass is open to the sky at all (especially if you are viewing towards the Zenith), you will eventually "dew up". That is because your optics loose heat even faster than the surrounding air when they face the sky.

Opposite of how you feel warm in the sun on a sunny day, space, with it's near absolute zero temperature, actually draws heat from a surface such as you, or your telescope's objective - it cools you down faster than the air, just like the sun warms you up! Thus, when skies are mostly clear, and winds are light, especially if the "dewpoint" is high, you will have problems, no doubt, on any surface that faces the sky, and the more directly it does, the worse the problem, as the temperature of the glass falls to the dewpoint, condensing moisture from the surrounding air.

Dew and frost are more common in some parts of the country and world, than others. Areas which are typically affected by areas of water such as the Gulf of Mexico, or Pacific/Atlantic Ocean will have more of a problem than let's say, the desert SW. I think, you will find, that all areas will have at least some dew from time to time. There are a few places such as South Florida that are only very rarely dew-free!

What is the secret to saving the trouble of piling on the dewshield, dew heating equipment, tarps, umbrellas, etc? Well, it's all in the weather systems themselves. While I am the first to admit that there can be situations where it is a tough call, there are a couple of very concrete weather setups that will be easy for you to identify. This cannot really apply to the tropics, however.

The important dew-less weather scenario that is easiest to recognize happens after a cold front passes by. This may be preceded by rain or snow, but is followed by either clearing, or some lingering clouds. If it DOES clear, the wind often stays fairly brisk for one or more days. On a weather map, we will be BETWEEN a receding cold front or storm center (low-pressure system), and an incoming fair weather cell (High-pressure system). No, or very limited dew will form in most places in this circumstance. To make things even better, especially in the upper Midwest of the U.S. and in the Northeastern U.S. these systems often stall in place, (Low pressure to the Northeast, High pressure to the Southwest of you) allowing the wind to keep up for several days. The "catch" is that if you live in cities or towns before a mountain range, such as the Appalachians, you can stay CLOUDY for days in addition to windy. This is the case in places like Charleston, W.Va.. (USA), and Rochester, N.Y. (USA). On the other hand, many cities in the Northeast U.S. corridor, benefit from the mountain range to the west, and stay mostly CLEAR for several days in this same weather setup, along with the wind. Thus, dewless nights can persist for many days straight prior to a High Pressure, fair weather system finally moving on in.

Once a high-pressure cell, or any very weak weather maker with very little wind, does finally arrive - the reverse holds true. While it may be clear, dew will likely form as clear skies and light winds allow for radiational cooling, the culprit which produces the dew or frost. These conditions will persist until the High-Pressure cell, or area of very weak weather systems (low or high-pressure nearby) moves on.

One very interesting irony is that the very conditions that produce dew or frost to form, will also often produce good stability to the atmosphere. In other words, on a night with lots of dew, check out the planets - seeing should be good! (But don't forget to take precautions again the dew!) This is means that on a night when the stars do not show much twinkle, you can expect that dew WILL form. A night when stars twinkle a lot will be an unsteady night, one where dew will likely NOT form!

While all of the above can be applied world-wide, especially the part about looking for twinkling stars on a dew-less night, the rest works best in the Eastern 2/3 of the US and Canada. Trying to apply the above weather scenario(s) gets more difficult in the mountains (such as the Rockies), and the above examples do not take place as often in let's say California, or the South of France. Generally speaking though, it will work, outside of the tropics.





NEKAAL's Farpoint Observatory

Director: Gary Hug

The Farpoint Observatory provides NEKAAL members with a great tool for astronomy, including the discovery of new, often very faint, objects.

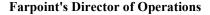
Located about 30 miles southwest of Topeka, Kansas, NEKAAL's Farpoint Observatory is equipped with a 17.5 inch reflector, CCD (charge coupled device) cameras, computer equipment, a classroom for lectures, a mini-kitchen, and restroom facilities.

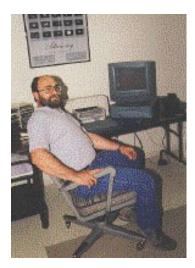
Featuring a 17.5 inch mirror manufactured by Coulter, the observatory's telescope can be used for both naked-eye observations and observations of extremely faint objects in the night sky (approximately 20th magnitude) using the CCD cameras. Solar observations will soon be possible with equipment currently on order. For vibration-free viewing, the telescope is secured at the base with large, concrete-filled drums isolated from the observatory floor.

Driving Directions to Reach Farpoint

Driving just west of Topeka on Interstate 70, watch for the Auburn Road exit. Go south on Auburn to the town of Auburn. In Auburn, turn west on Eighth Street. Continue west on Eighth about eight miles. The road will curve south. About one mile after the curve, you'll see a road leading west, with a sign saying that this is the road to Mission Valley High School and NEKAAL's Farpoint Observatory.

About 1.5 miles later, you'll be at Mission Valley High School. On the west side of the high school grounds, next to a large stone "Farpoint Observatory" sign, is a gravel road. This runs north, past the high school football field, to the observatory.





Observatory director Gary Hug is seen here in Farpoint's control room, the McDonald Computer Center. Thanks to his tireless efforts, Farpoint reliably performs its duties for NEKAAL members. For the latest Farpoint information, check out Gary's Farpoint Observatory page. E-mail may be sent to him at this address: frogstar@inlandnet.net.

Founded in 1978, the Northeast Kansas Amateur Astronomers' League is made up of amateur astronomers of all ages from around the area.

NEKAAL owns and operates Farpoint Observatory, located on the grounds of Mission Valley High School approximately 30 miles southwest of Topeka. We also produce a monthly newsletter, *The NEKAAL Observer*, which always contains great articles for the amateur - whether a "beginner" or an "old hand" at the wonderful science and hobby of astronomy.

Catch them on the web at:

http://www.cjnetworks.com/~nekaal/index.html

Thanks to Gary Hug and the NEKAAL members for permission to publish these pictures and text from their website. The next time your on the web, be sure to visit their site.

My Permanent Pier By Jeff King

(Editors note: Since no one submitted any material for the newsletter, you'll have to put up with my own submissions.)

After months of putting up with a bouncing tripod on my deck, I decided enough was enough and sat down to design a permanent pier for my telescope.

After finding the right supplies, I took my drawing in hand to Walt Meier's house here in Lincoln. Walt and I volunteer at the SAC museum a couple of times a week and in one of our conversations while sanding away on a B-17 Flying Fortress, the fact that he had a nice metal shop set up in his garage arose. So Walt offered to help and shot me a price that I couldn't refuse. In about 5 days I had my new pier at home.



The pier is constructed of 4" square tubing, 3/8" thick. The top plate is approximately 7" round and 1/2' thick to accommodate the Meade Super Wedge while the foot plate, which is hidden under the deck, is made of a 1/2" thick, 12" square plate. The top plate and the hole for the electrical outlet were cut with a plasma cutter which leaves a nice, smooth edge.

After much deliberation over which should be installed first, new clothes line pole for the wife or a permanent pier for the telescope, I won out with the promise that the former wouldn't be too far behind in construction. With help from the kids, I began digging the hole for the footing.

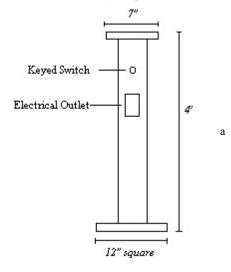
With post hole diggers in hand, I began digging a 4 foot by 12" hole in clay. I figured I'd better dig as far down as I was going to be above ground. No basis here, just thought it was a good idea. After the hole was dug, I put in a 12" sonotube and began to mix up the quickcrete. Six bags later I was finished with the footing, and before it set up, I anchored 4, 1/2" X 10" bolts to be used to

mount the pier on using a template made off the foot plate. Four days later I brought the pier around from the garage and mounted it on the bolts. Now I had to extend the existing deck around the pier.

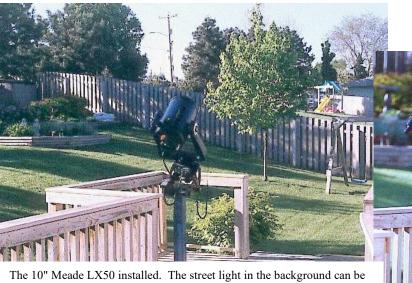


A few more measurements and a couple of trips to the hardware store, I had the deck frame built. A couple of weeks later I installed the deck boards and railing. I've used it about a dozen

or more times and it works great! Vibrations are nil (no sand in the pier yet, either) and set up is quick and easy since it is already polar aligned (with minor adjustments).



Left: Close-up of the 10" Meade LX50 on the pier.



The 10" Meade LX50 installed. The street light in the background can be shut off using a finely focused \$5 laser pointer on a miniature homemade alt/az mount.



NSP 6 Activities

A 1/2-DAY CANOE & TUBING TRIP is planned for August 12th on the beautiful Niobrara River near Valentine, Nebraska. We need to estimate the number of canoes and tubes to reserve, so please express your needs on the registration form if you are interested. Canoes hold 2 adults + 1 child. Covered inner tubes hold 1 adult + 1 small child. Transportation will be provided from Valentine to the river & back. The cost will be approximately \$15 per person, depending

on the number of participants. Do not send money for the trip with your registration.

BEGINNERS FIELD SCHOOL A daily field school to get you started with the great hobby of astronomy. Each afternoon the classes will focus a new skill, then each evening the students will be paired with experienced observers to practice and fine tune those new skills.

DOOR PRIZES will be given out throughout the week. All NSP registrants are eligible for door prizes. Details will be included in registration packet. Those wishing to donate door prizes should contact Clark Cheney at (402) 733-7238 or e-mail cdcheney@aol.com. Some of the prizes listed in the Official Program are: Meade ETC-90EC with Autostar, Tel Vue 10.5mm Plossl, 6, mirror grinding kit.

CONTESTS will once again be held for amateur telescope making, astro-photography, and "Name That Object". Awards will also be given to those die-hard observers who successfully complete "The Great NSP Deep Sky Challenge".

MEALS There will be two catered meals in the camping area, one Tuesday night (Hamburgers) and the other Thursday night (Grilled Chicken). Our ice cream social will be Monday night also in the camp ground area. We plan a beach party with kites, games and a barbecue on Wednesday. Information will be made available at NSP.

EVENTS					
Date	Activity	Time	Location		
Saturday, August 7	NSP Officially begins	2-4 p.m.	Registration in Lounge at Merritt		
	Attendees are invited to arrive early if so desired		Resort		
Sunday, August 8	Registration/Check-in	2-4 p.m.	Lounge at Merritt Resort		
	NSP will host a public star party for area residents	Dusk till ????			
Monday, August 9	Registration/Check-in	2-4 p.m.	Lounge at Merritt Resort		
	Ice Cream Social	7:30-8:30 p.m.	Snake Campground		
	Field School	To be determined	To be determined		
Tuesday, August 10	Registration/Check-in	2-4 p.m.	Lounge at Merritt Resort		
	Catered Meal	5-7 p.m.	Snake Campground		
	Field School	To be determined	To be determined		
Wednesday, August 11	Registration/Check-in	2-4 p.m.	Lounge at Merritt Resort		
	Beach Party/Swap Meet & BBQ	1-6 p.m.	At beach behind Merritt Resort		
	Grill will be open and we'll cook for you!	3:30-5:30 p.m.	At the big grill on the beach		
	Field School	To be determined	To be determined		
Thursday, August 12	NO REGISTRATION TODAY!	********	********		
	Niobrara River Trip	9 a.m3 p.m.	Valentine		
	Catered Meal	5-7 p.m.	Snake Campground		
	Telescope Making Contest Judging	7-8:30 p.m.	Observing site		
Friday, August 13	Programs	11 a.m4 p.m.	All activities will be in the High		
	Registration/Check-in	10 a.m3 p.m.	School Auditorium		
	Swap Meet	11 a.m4 p.m.			
	Photo/Deep-Sky Contest Judging and Awards	12 a.m4 p.m.			
	Remaining Door Prize Drawings	After last			
	Grand Prize Drawings	presentation			
Saturday, August 14	No Events Planned				
Sunday, August 15	Cabin Check-out	Before 11:30 a.m.	Merritt Resort		

Thanks to Bill O'Donnell for providing me with a copy of the "Official Program of Events". Please verify any dates and times with your program copy as I may have made an error while copying.

The Astronomer's Drinking Song

Author Unknown

The Editor does not endorse or promote the use of alcoholic beverages. In fact, he advises that not only does drinking and driving not mix but also drinking and observing do not mix. Thanks to the <u>Alachua Astronomy Club, Inc.</u>, Gainesville, FL

sky,
Its secrets to divine, sir,
Should take his glass--I mean,
should try
A glass or two of wine, sir!
True virtue lies in golden mean,
And man must wet his clay, sir;
Join these two maxims, and 'tis seen
He should drink his bottle a day,

Whoe'er would search the starry

Old Archimedes, reverend sage! By trump of fame renowned, sir, Deep problems solved in every page,

And the sphere's curved surface found, sir:

Himself he would have far outshone,

And borne a wider sway, sir,
Had he our modern secret known,
And drank a bottle a day, sir! When
Ptolemy, now long ago,
Believed the Earth stood still, sir,
He never would have blundered so,
Had he but drunk his fill, sir:
He'd then have felt it circulate,
And would have learnt to say, sir,
The true way to investigate
Is to drink your bottle a day, sir!

Copernicus, that learned wight, The glory of his nation, With draughts of wine refreshed his sight, And saw the Earth's rotation;

And saw the Earth's rotation; Each planet then its orb described, The Moon got under way, sir; These truths from nature he imbibed For he drank his bottle a day, sir!

The noble Tycho placed the stars, Each in its due location; He lost his nose by spite of Mars, But that was no privation: Had he but lost his mouth, I grant He would have felt dismay, sir, Bless you! he knew what he should want

To drink his bottle a day, sir!

Cold water makes no lucky hits; On mysteries the head runs: Small drink let Kepler time his wits On the regular polyhedrons: He took to wine, and it changed the chime,

His genius swept away, sir, Through area varying as the time At the rate of a bottle a day, sir!

Poor Galileo, forced to rat Before the Inquisition, E pur si muove was the pat He gave them in addition: He meant, whate'er you think you prove,

The Earth must go its way, sirs; Spite of your teeth I'll make it move

For I'll drink my bottle a day, sirs! Great Newton, who was never beat Whatever fools may think, sir; Though sometimes he forgot to eat, He never forgot to drink, sir: Descartes took nought but lemonade, To conquer him was play, sir; The first advance that Newton made Was to drink his bottle a day, sir!

D'Alembert, Euler, and Clairaut, Though they increased our store, sir

Much further had been seen to go Had they tippled a little more, sir! Lagrange gets mellow with Laplace, And both are wont to say, sir, The philosphe who's not an ass Will drink his bottle a day, sir!

Astronomers! what can avail Those who calumniate us; Experiment can never fail With such an apparatus; Let him who'd have his merits known Remember what I say, sir; Fair science shines on him alone

How light we reck of those who mock

Who drinks his bottle a day, sir!

By this we'll make to appear, sir, We'll dine by the sidereal clock For one more bottle a year, sir: But choose which pendulum you

You'll never make your way, sir, Unless you drink--and drink your fill

At least a bottle a day, sir!

Day	Time (CST)	August Celestial Events
3	9 p.m.	The moon passes 4 degrees south of Jupiter
4		The moon passes 3 degrees south of Saturn
6	11 a.m.	The moon passes 0.8 degree north of Aldebaran
9		The moon passes 1.2 degrees north of Mercury
11	6 a.m.	Total solar eclipse (sorry, only visible in Europe and Asia)
12		Perseid meteor shower peaks
18		The moon passes 7 degrees north of Mars
20	7 a.m.	Venus is in inferior conjunction
25	8 a.m.	The moon passes 0.6 degree north of Uranus
31	4 a.m.	The moon passes 4 degrees south of Jupiter

Newtonian Lovers Rejoice, Thou Addiction Do Not Forsake

To Brother Theodore,

If thou wouldst but recount thine own experience with refractive glass, 'twould be of exceeding benefit to all--for knowledge increaseth understanding. For thine edification, Brother Lance would relate to thee an most perplexing recent incident:



'twas on Solstice eve, when peaceful slumber was interrupted by unexpected appearance of three Spirits, in close temporal succession, into sleeping chamber. Spirit of Solstice past did remind Brother Lance of the simple pleasures afforded him by the three inch reflector of his youth. Spirit of Solstice present did shew to unto this humble Brother the seeds of discontent present in wandering eye of he that doth covet the seductive convenience of Schmidt-Cassegrain and Maksutov, or the "perfect image" of the refractor (an image obtainable, in truth, only through the unobstructed reflector).

The final Spirit did prophesy of the great wickedness and depravity that followeth close upon such covetousness: an evil progression of foul catadioptric, APO (rotten to the core), CCD, Nagler, cyphering machine in conjunction with stepping motor (but one step short of perdition), digital navigator, and all manner of vile optical and mechanical corruption, such that Brother Lance did fall to his face and clutch at the feet of this Spirit, to forsake and foreswear all association with such optical abomination and mechanical Manicheanism.

Next moment 'twas morning, and Brother Lance did find himself deliriously clutching at the foot of his Brother Dobson type telescope, and oft repeating the words "I'm not the amateur I was." Mayhap such delirium resulteth from consumption, on previous even, of

many bottles of Brother Molson's Exceedingly Fortified Special Solstice-Celebration Hop Beverage--but thou never knowest.

Paul Lorenz with his 12.5 inch newtonian mounted on a Kenneth Novak german style mount. Leastwise, said Spirit hath renewed mine old conviction of the divine ordination of the reflecting glass, and mine erstwhile held belief in the absolute depravity of any optical instrument whose design doth deviate from the simplicity that dwelleth within our beloved Newtonian.

Nevertheless, whether thine eyes are bathed in the pure Light of the Reflected Truth, or are temporarily confounded by inferior glasses, the Solstice doth signal the end of darkness, and the beginning of a slow but steady progression into Light.

May ye all see the Light.

Brother Lance

You Know You're an Amateur Astronomer When.....

From the Beaver Valley Astronomy Club's Stargazer's Gazette

- * you plan all your vacations around New Moon.
- * you can't recognize any of your friends in the daylight.
- * you have a dog named Sirius.
- * the first thing you do when buying a new car is measure the back seat to make sure your scope will fit.
- * your PIN number is your favorite NGC object.
- * you start talking like Jack Horkheimer around your coworkers.
- * you buy a surface-to-air missile launcher because you're tired of planes ruining your photos.
- * you force the Greyhound driver to pull over at gunpoint because a comet is rising.
- * you hate Christmas because of all the extra lights.
- * you can identify 8 species of owl by their calls.
- * you replace your car's headlights with red bulbs.
- * you try to buy a Nagler with food stamps.
- * you thought the movie "Space Jam" was a documentary about the early universe.
- * you buy your kid a 20-inch "starter scope" for his sixth birthday.
- * you know all the Greek lower case letters, but none of the upper case.

- * you ask your friend if she'll sew you a big black hood without any eyeholes for your birthday.
- * you have to explain to the police why you were prowling around wearing a black hood without any eyeholes.
- * you ask a complete stranger if you can use his bean field next Friday night.
- * you travel to Namibia for the Gamma Normids every year.
- * you have a copy of "Norton's" in your gym locker.
- * you've been looking forward to an occultation of SAO95788 by asteroid 354 Eleonora for three months.
- * you spend 18 hours on your weekend teaching your dog to hold a hair dryer in his teeth while standing on a bar
- stool. ("Why are you teaching Sirius to do that, Daddy?") * the kids can't come on the Grand Canyon vacation because "there'd be no room for the scope!"
- * you're coming home when your neighbor's getting up to go fishing.
- * you buy your kid a Clyde Tombaugh lunchbox (R.I.P., Mr. T).
- * you've gone through three lawn chairs in the past two years.

You Know you're a Redneck Astronomer When....

- (1) The most important part of your instrumentation is the pickup truck.
- (2) You have a Tasco refractor up on blocks in the front yard.
- (3) Your observing site would be perfect if it weren't for the alligators.
- (4) You carry a shotgun to deal with skunks, raccoons, and streetlights.
- (5) The board with holes on the side of the DOB mount fit beer cans.
- (6) A cup holder by the eyepiece has a partial beer to balance different eyepieces.
- (7) You will fight that guy trying to find WWV when it was already on a perfectly good country station.

- (9) The counterweight on your Dob doubles as a spit can.
- (10) You've used lard to slick those declination bearings
- (11) Others at the star party complain about the smoke when you barbecue spam.
- (12) You mow the lawn and find that dob you lost last year
- (13) You have a decal on your telescope tube of your favorite NASCAR driver's car number.
- (14) You're at a star party eatin' some KFC original recipe and you walk up to a guy and ask him if you can borrow one of his bran-new Pentax eyepieces.
- (15) You own the only mobile home in the trailer-park that has a roll-off roof!

For Sale:

For Sale:

10" Criterion Reflector, f/10
Drive Corrector (new, never used)
German equatorial mount
4 eyepieces
Finder
Carrying case
2 new needle bearings

Contact: Mark Ditter (402) 564-2041

\$325.00

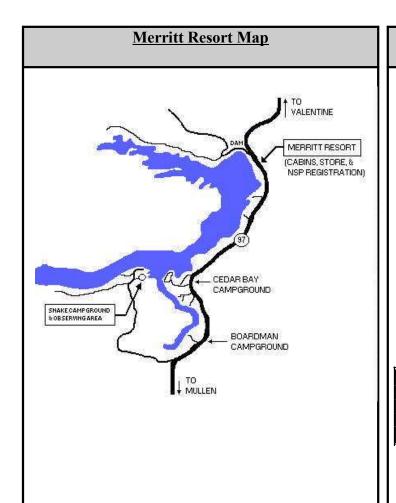


THE PRAIRIE ASTRONOMY CLUB CALENDAR

For August 1999

Wed Thu Fri

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4 3 RD QUARTER	5	6	7 Hyde Observatory open to the public sunset-11 PM
8	9	10	11 NEW MOON	12	13	14 Hyde Observatory open to the public sunset-11 PM
	SP	5, A	ug	yst		4th
15	16	17	18 1ST QUARTER	19	20	21 Hyde Observatory open to the public sunset-11 PM
22	23	24	25	26 FULL MOON	27	28 Hyde Observatory open to the public sunset-11 PM
29	30	31 PAC Meeting 7:30 PM Hyde Observatory	August 22. At the longitude=139.7 cdeg. The hourly ras low as 4 and as average magnitud	meteor shower is very time of Maximum deg), the radiant is late typically reaches high as 200. The ne of 2.3, and about	eteor Shower risible from about J on August 12/13 (J ocated at RA=47 de s 80, although some neteors tend to be v 45% leave persister g/day in RA and 0.2	uly 23 until 2000 solar eg, DECL=+57 e years have been ery fast, with an nt trains. The



OFFICERS OF THE PRAIRIE ASTRONOMY CLUB

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(402) 223-3968 dk84538@ltec.net

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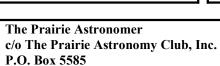
TREASURER: Liz Bergstrom

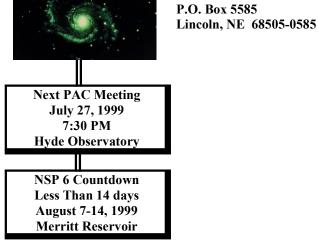
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Please send all submissions for <u>The Prairie Astronomer</u> to:

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First Class Mail