Prairie Astronomer

2-93

Atlas Site Update

by Chairman Steve Bornemeier and John Bruce

Our goal is to create and continue enthusiasm for site use and to improve the site itself. The committee has many plans to further the initial efforts of Del Motycka who put in a lot of time and effort to help get the site to where it is today. Thanks go to Del and Dave Kiple for the outdoor plumbing, and to all involved with the initial work.

Site status: Most of the brush and metal objects have been removed to help with mowing. Our own gate and partial fencing have been installed to help prevent unauthorized vehicle traffic. The brush pile was burned and grass seed should now be placed over the dead area.

Site objective: Our objective is to create a pleasant observing field. This can only be accomplished if we participate together as a club. I know that we all work during the week and that we don't really need another job. The idea is to have fun on weekends, so we would like everyone to try and think of enjoyable projects that you would like to see done and would perhaps be willing to do. Most of the hard jobs are done, so future work should be like icing on the cake. Here are a few opportunities for involvement that we came up with:

- Plans and ideas for setting up club telescopes.
- Enhance horizon light obstruction through tree and shrub planting.
- Initiate parking layouts if use continues as in August and September 92 star parties. John Bruce is setting up red LED lighting to improve road use at night.
- Photographic pad constructions
- Continue mowing and clean up events to maintain appearance.
- Ideas to help Eric Hubble mark pad to geophysical and astronomical events.
- Place siding on the tin shed to improve appearance and to weather-proof it for use as a warming and meeting shed.
- Improve and paint the table observing spools.

Thank you for the site. I hope to do what I can to improve it and enjoy myself while doing it. We can make it what we want it to be, please include yourself by whatever means you can, money, time or materials.

The Reviewer

THE ASTRONOMER'S SOURCEBOOK by Bob D. Gibson copyright 1992 Woodbine House Inc. 300 pages, \$19.95

Wouldn't it be nice if we had a single comprehensive source of information on astronomical installations, equipment manufacturers, and astronomy clubs nation wide? Astronomy and Sky and Telescope provide this valuable information in a small yearly supplement to their magazines, but frequently, those issues get lost or forgotten in the amateur's library. Now, Bob Gibson has attempted to remedy this problem with THE ASTRONOMER'S SOURCEBOOK.

The cover bills the book as "The Complete Guide to Astronomical Equipment, Publications, Planetariums, Organizations, Events, and more". It does indeed contain quite a bit of useful information on those topics, but I am afraid I can't use the word "complete" in describing its coverage.

The book has ten chapters, containing sources for everything from books and software, to telescopes, observatories, clubs, and educational resources. The first chapter, entitled "Armchair Astronomy" gives a fairly good list of books, periodicals, computer software and BBS's, telephone hotlines, photos, and even gifts or novelties.

Chapter Two, on Astronomical Organizations, is where the book really falls short. The listing of Astronomy Clubs in North America shows only about 150 clubs in the U.S., which is about one third the number in the yearly Sky and Telescope or Astronomy supplements. This wouldn't be quite so bad if it weren't for the large number of prominent clubs and organizations which were mysteriously omitted from the sourcebook. The missing clubs include the famous Amateur Astronomers Association (New York, 600 members), the Amateur Telescope Makers of Boston (300 members), the Southern Cross Astronomical Society (Miami, 287 members), the Texas Astronomical Society (250 members), the Astronomical Society of Michigan (204 members), and many other active groups. The Massachusetts and Arizona listings are particularly bad, with only one club out of the 10 listed in each state by Sky and Tel's supplement being shown in the book. Gibson completely omits all the clubs in the Phoenix area, leaving Tuscon's group as the only Arizona entry. Gibson should have consulted the magazine supplements or the Astronomical League's database before he began to compile his list of clubs.

He is also in error on the cost of League Membership for members of afiliated clubs. Chapter Three on telescopes and accessories is fairly complete, although Gibson again left out a few prominent suppliers, such as Star Instruments and P.A. Clausing optical coatings. I do take exception to his statement on page 88, which implies that the majority of large instruments at the world's major observatories are Newtonians. Most research telescopes are either classical Cassegrains, or Ritchey/Chretiens.

Chapters Four and Five are fairly conventional, covering sources for atlases, guide books, and astrophotography. Chapters Six and Seven on Observatories, Planetariums, and Museums, again show the effect of the author's limited research. Only about half of the installations listed in the magazine supplements are listed by the Sourcebook, and once again, many prominent facilities are either missing or poorly covered.

Chapter Eight contains a brief list of U.S. spacebased Astronomy projects, while Chapter 9 gives a few tid-bits on the history of Astronomy. Both chapters could have been omitted without hurting the book very much.

Chapter 10 contains a listing of institutions offering degrees in Astronomy or related subjects, along with a compilation of scholarships and educational resource centers. The Sourcebook also contains a number of useful appendixes and indexes, along with a glossary containing a few misleading definitions.

THE ASTRONOMER'S SOURCEBOOK can be a somewhat useful source of information, but it is far from complete. The author needs to do better research before he or his publisher can make any claim about this work being comprehensive. With a little more effort, this book could have been a great deal better.

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: Regular Members...\$10/yr; Family Memberships...\$12/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: Dave Knisely (Beatrice)223-3968, Ron Veys (Lincoln)486-1449, Lee Thomas(Lincoln)483-5639, John Lortz (Omaha)496-1122. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 12023 PARKER PLZ #105, OMAHA, NE 68154 no later than 10 days before monthly club meetings. Club meetings are held the last Tuesday of each month at Hyde Observatory in Lincoln, NE.

Observing Chairman's Report by Dave Knisely

THE NEXT SCHEDULED STAR PARTIES WILL BE HELD FRIDAY, MARCH 19th AND 26th AT THE ATLAS SITE. Late winter skies offer an interesting mix of clusters, nebulae, and even a few galaxies. M50 is a good example. It is a moderate sized group of stars located 3.75 degrees north and two east of Theta Canis Majoris, and is easy to resolve in almost any telescope. A six inch will reveal over 100 component stars, with larger apertures bringing out many faint background stars.

In nearby Puppis is another nice cluster, M93, located one degree north and one west of Xi Puppis. It is rich, but its stars are fainter, making it a tougher target for small telescopes. This group has several nice star chains in the middle, and is located in a fairly rich background of stars.

In Hydra is the bright planetary nebula, NGC 3242, located about 1.75 degrees south and a third west of Mu. It appears as a fuzzy 9th magnitude star in small instruments, but larger ones show a striking bluish color and some interesting detail. An eight inch at high power reveals a highly elliptical inner shell and faint central condensation plus a circular diffuse outer shell that overlaps the inner one. A ten inch will make it look like its photograph, but it takes a good night.

Also in Hydra is the pretty open cluster M48, located about two degrees south and three west of the faint star 30 Mon. It is large and fairly rich, but the stars are faint, making it more difficult for small telescope users. It is roughly rectangular or wedge shaped, and is almost a full degree across. A ten inch will show about 80 to 90 stars in the group, with a crescent-shaped star chain near the center.

For those of you interested in picking up a galaxy or two, check out NGC 2613, located 5.5 degrees east and 1.5 north of Rho Puppis. It is visible in a six inch, appearing as a moderate

sized faint cigar shaped fuzzy patch with a brighter middle.

one side of the center.

In Lynx is a nice big nearly edge-on spiral, NGC 2683. Located about five degrees west and one south of Alpha, this object appears as a faint fuzzy needle of light in moderate apertures. Larger instruments hint at some dark detail to

Of course, all amateurs will want to view M44, the Beehive cluster, one degree west and 1.5 north of Delta Cancri. It is visible to the unaided eye, and resolvable even in small binoculars. To view it completely, you need at least a degree and a half of field. Its stars are quite bright, with the central portion looking a bit like the constellation Cepheus. Very large amateur telescopes will show two small very faint galaxies on the southwestern side and three others on the southeast side of the cluster.

As a final galaxy target, look 3.2 degrees east and a half north of Gamma Sextantis for the elliptical galaxy NGC 3115, also known as the "Spindle". Visible in a 2.4" refractor at low power, this galaxy shows its oval form very easily, with larger instruments revealing the very pointed ends and brighter center.



Editor's Note:

Please make a note that as of March 1 I'll have a new address. Please send your newsletter articles to:

John Lortz 11684 Meredith Ave. Omaha, NE 68164 Phone: 402-496-1122

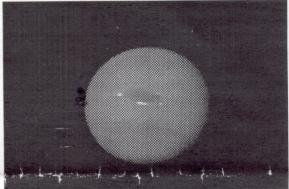


WELCOME NEW MEMBERS!!!

(As of December, 1992)

Daniel Cowell Liz Irwin Leslie Myers

The three photo's in this month's newsletter are courtesy of Dave Knisely.



PLEASE NOTICE

If there is an asterisk on your mailing label it is time for you to renew your PAC membership!

The Prairie Astronomer

c/o The Prairie Astronomy Club, Inc. P.O. Box 80553
Lincoln, NE 68501



First Class Mail

92025 09/93 FS 08 Earl Moser P.O. Box #162 Hickman NE 68372

Next Meeting February 23, 1993

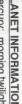
	28	21 Mercury 4º South of Moon Moon at Apogee	14 Last Quarter Moon 22:18	7		S
22.22. 9.86 22.22. 9.86 21.55 9.31	29	22	σ	8 Full Moon 03:47 Moon at Perigee	1 1st Quarter Moon 08:46	Δ
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April	BESINGS 13.85 BESINGS 13.85 BESINGS 3.01 SECTIONS 14.35	27	20 Vernal Equinox 08:41 Saturn & South of Moon	ಪ		S



PLANET INFORMATION

Mercury: morning twilight mid/late month Venus: sets at 19:00
Mars: sets at 02:00
Jupiter: rises at 18:00

Prairie Astronomy Club





Planet View Info Report for 3/1/1993 to 3/31/1993

Sunrise/Moonrise Data for March 1993 Lincoln, NE (40.83N, 96.67W)

		Latitud		Lincoln, NE	96°42'15" W		
Latitude: 40*48'59" N Longitude: 96*42'15" W Local Time = UT - 6.00 hours Elevation: 351 meters							
Date	Rise		RA	Dec	Elongation	III Fr	DIST(AU)
Date	Nisc			200	Liongamon		
			rcury				. 7.7
3/ 1/1993	7:18 1		23h33m35s	0*28'30"	14°02'07"	0.160	0.73798
3/8/1993	6:37 1		23h16m30s	-0°41'53"	4°19'18"	0.011	0.63210
3/15/1993	5:59 1		22h53m53s	-4°05'35"	11*32'30"	0.065	0.62166
3/22/1993	5:34 1		22h45m44s	-6°45'59"	21°06'03"	0.214	0.67927
3/29/1993	5:19 1	16:32	22h54m59s	-7*32'03"	26°11'18"	0.361	0.76879
		Ve	enus				
3/ 1/1993	8:01	21:33	0h57m45s	2'07'09"	37.53'33"	0.234	0.40000
3/8/1993	7:32	21:16	1h02m50s	13°50'27"	32°57'12"	0.170	0.35848
3/15/1993	6:59	20:48	1h01m11s	14°42'27"	26°21'59"	0.105	0.32346
3/22/1993	6:24	20:09	0h52m33s	14°28'22"	18° 12'40"	0.049	0.29766
3/29/1993	5:48	19:22	0h38m43s	13'01'52"	9*56'21"	0.015	0.28389
			lars				
01414000	10.10		6h43m37s	26°21'04"	119°17'39"	0.926	0.92149
3/ 1/1993	12:48				113°36'40"	0.920	0.98415
3/8/1993		3:56	6h49m22s 6h56m56s	26°03'49" 25°43'48"	108°21'50"	0.911	1.04896
3/15/1993		Physical Colonia			103°29'32"	0.906	1.11530
3/22/1993	11:53		7h06m01s	25°20'35"	98°57'05"	0.900	1.18253
3/29/1993	11:38	2.55	7h16m24s	24°53'38"	96 57 05	0.902	1.10233
		Ju	piter				
3/ 1/1993	20:47	8:30	12h50m42s	-3°45'26"	147°16'32"	0.998	4.59289
3/8/1993	20:16		12h48m10s	-3°28'10"	154°58'07"	0.999	4.53759
3/15/1993	19:45		12h45m17s	-3°08'56"	162°43'06"	0.999	4.49582
3/22/1993	19:13		12h42m09s	-2°48'19"	170°28'29"	1.000	4.46845
3/29/1993		6:32	12h38m52s	-2°27'03"	177°46'02"	1.000	4.45607
			aturn		4710014011	1.000	10.82998
3/ 1/1993	6:22	16:42	21h43m07s	-14°49'29"	17°22'18"		
3/8/1993	5:57	16:18	21h46m16s	-14°34'10"	23°34'12"	1.000	10.78892
3/15/1993	5:32	15:55	21h49m20s	-14°19'15"	29°46'13"	0.999	10.73637
3/22/1993	5:06	15:31	21h52m16s	-14°04'53"	35°58'43"	0.999	10.67285
3/29/1993	4:41	15:07	21h55m04s	-13°51'12"	42°11'52"	0.999	10.59907
		U	ranus				
3/ 1/1993	4:40	14:00	19h30m42s	-22°14'07"	49°31'05"	1.000	20.21188
3/ 8/1993	4:13	13:34	19h31m56s	-22°11'36"	56°14'30"	1.000	20.11848
3/15/1993	3:47	13:07	19h33m02s	-22°09'22"	62°58'17"	0.999	20.01737
3/22/1993	3:20	12:41	19h33m59s	-22°07'28"	69°42'44"	0.999	19.90987
3/29/1993		12:14	19h34m46s	-22'05'53"	76°27'50"	0.999	19.79748
			eptune				
3/ 1/1993			19h27m52s	-21°13'34"	50°00'55"	1.000	30.81351
3/8/1993	4:06 1	3:35	19h28m38s	-21°11'54"	56°50'55"	1.000	30.71758
3/15/1993	3:39	13:08	19h29m18s	-21°10'25"	63°40'41"	1.000	30.61389
3/22/1993	3:12 1	12:41	19h29m52s	-21°09'08"	70°30'27"	1.000	30.50384
3/29/1993	2:45	12:14	19h30m19s	-21°08'03"	77°20'07"	1.000	30.38901
		P	luto				
3/ 1/1993	23:47		15h46m33s	-4°58'07"	104°24'56"	1.000	29.46326
3/ 8/1993			15h46m30s	-4°54'57"	111'11'50"	1.000	29.35287
3/15/1993			15h46m20s	-4°51'34"	117'57'09"	1.000	29.24779
3/22/1993			15h46m05s	-4°48'01"	124°40'10"	1.000	29.14955
3/29/1993			15h45m44s	-4°44'23"	131°19'25"	1.000	29.05971

day		sunrise		sunset	twilight			phase 43
1	6:33	7:01	12:39p	6:18p	6:46p	11:05	1:31	
2	6:32	6:59	12:39p	6:19p	6:47p	12:01p	2:28	54
3	6:30	6:57	12:39p	6:20p	6:48p	1:04p	3:20	64
4	6:28	6:56	12:38p	6:21p	6:49p	2:13p	4:07	74
5	6:27	6:54	12:38p	6:23p	6:50p	3:27p	4:48	84
6	6:25	6:53	12:38p	6:24p	6:51p	4:43p	5:26	91
7	6:24	6:51	12:38p	6:25p	6:52p	6:00p	6:00	97
8	6:22	6:50	12:37p	6:26p	6:53p	7:17p	6:33	100
9	6:21	6:48	12:37p	6:27p	6:54p	8:34p	7:06	99
10	6:19	6:46	12:37p	6:28p	6:56p	9:49p	7:41	96
11	6:17	6:45	12:37p	6:29p	6:57p	11:02p	8:19	90
12	6:16	6:43	12:36p		6:58p	XX:XX	9:01	82
13	6:14	6:41	12:36p	6:31p	6:59p	12:10	9:49	73
14	6:13	6:40	12:36p	6:33p	7:00p	1:11	10:41	62
15	6:11	6:38	12:36p	6:34p	7:01p	2:05	11:38	52
16	6:09	6:37	12:35p	6:35p	7:02p	2:51	12:37p	42
17	6:08	6:35	12:35p	6:36p	7:03p	3:29	1:36p	32
18	6:06	6:33	12:35p	6:37p	7:04p	4:03	2:36p	24
19	6:04	6:32	12:34p	6:38p	7:05p	4:32	3:35p	16
20	6:03	6:30	12:34p	6:39p	7:06p	4:58	4:33p	10
21	6:01	6:28	12:34p	6:40p	7:07p	5:23	5:31p	5
22	5:59	6:27	12:33p	6:41p	7:09p	5:48	6:28p	2
23	5:58	6:25	12:33p	6:42p	7:10p	6:12	7:27p	0
24	5:56	6:23	12:33p	6:43p	7:11p	6:39	8:26p	1
25	5:54	6:22	12:33p	6:44p	7:12p	7:08	9:25p	3
26	5:52	6:20	12:32p	6:45p	7:13p	7:41	10:25p	7
27	5:51	6:18	12:32p	6:46p	7:14p	8:19	11:24p	12
28	5:49	6:17	12:32p	6:47p	7:15p	9:03	XX:XX	19
29	5:47	6:15	12:31p	6:49p	7:16p	9:54	12:20	28
30	5:46	6:13	12:31p	6:50p	7:17p	10:53	1:13	38
31	5:44	6:12	12:31p	6:51p	7:18p	11:57	2:00	48
	Full Moon		8	3:47				
	Last Quarter 14 New Moon 23			10:18p				
			23	1:16				
			30	10:10p				
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8:39

March Equinox 20