

FOCAL POINT



Newsletter for the

Milwaukee Astronomical Society

September 1991

From The Editors

As the Summer Triangle gives way to Fall's Great Square, MAS opens its fall season with a stellar lineup of activities/programs for your enjoyment. Specific details and dates are highlighted in this and future issues of the *Focal Point*.

We look forward to serving you and seeing you at the events throughout the season. And don't hesitate to share your thoughts and insights about some special aspect of observing or astronomy in general. Even if writing is not your thing, we'll gladly work with your ideas, sketchy notes or verbal comments. The *Focal Point* is your newsletter, we just oversee the information. Come on—we'd love to hear from you!

Note: If you have n't done so, please take the time to fill in the membership survey (a copy is included in this issue). Your opinion is important to the future of this club.

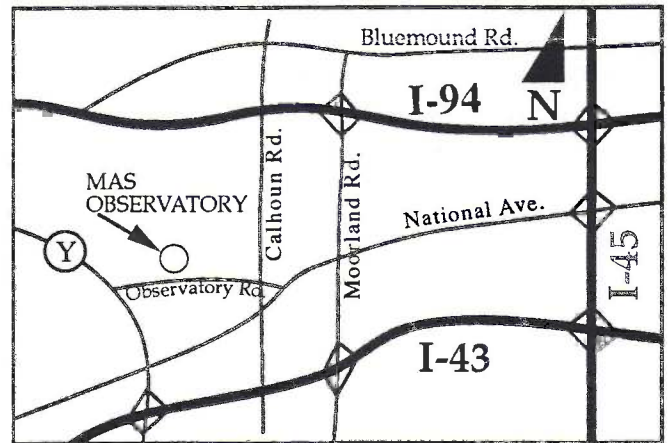
Matthew McNeely & Tom Gill

Program/Meeting

Did you miss the "Big One"—the total solar eclipse this summer? Share the fun, beauty and adventure of fellow MAS member experiences in Mexico and Hawaii! Paul Borchardt, assistant observatory director and Dan Koehler, treasurer, will share slides and tales of MAS expeditions to both Baja Mexico and Hawaii to view July's total eclipse of the sun. I'm sure you will find their experiences educational as well as entertaining! Join us for a travelog to faraway places to witness one of nature's most awesome performances!

The first meeting is at the Observatory on Friday September 20th, 8:00 pm.

Tom Renner



Calendar of Events

- September 6-8,Astrofest 1991
- September 9, Monday MAS Board Meeting
7:30pm at the Observatory
- September 20, Friday 8:00 pm Program-Meeting
at the Observatory
- September 25, WednesdayDeadline for next Focal Point
- October 2, Wednesday First Wednesday Meeting
7:30 at the Observatory
- October 4-5, Greenbush and Wildcat Mountain
- October 14, Monday MAS Board Meeting
7:30pm at the Observatory

Saturday Nights—Member night at Observatory—Call key holder

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Library News

What sits on the counter next to the bookshelves in the observatory office? It is NOT grooming its forelegs nor waiting to envelop you in a sticky web. Why, it's the **NEW BOOK** box! Check it out—you might discover gems like The Astronomers' Stars: Patrick Moore examines the most interesting details of about a dozen notable stars. Various stages of stellar evolution are represented in this selection.

The Starry Room: Naked Eye Astronomy in the Intimate Universe also was added during the summer. Fred Schaaf is the author that all of us should have read before we were introduced to binoculars, telescopes or enticing observatory photos. In his foreword, Chet Raymo ("The Soul of the Night") calls Schaaf a naturalist of the heavens. So much beauty is within reach of anyone who simply takes the time and knows when and where to look.

Intrigued by the stories behind the great discoveries? You will especially appreciate three books donated by Tom Bardenwerper: The Copernican Revolution by Thomas Kuhn, A History of Western Science by Anthony Alioto, and The Watershed, by Arthur Koestler ("Darkness at Noon"). This last is a biography of Johannes Kepler. It masterfully brings to life the self-tormented man who had his roots in the medieval fantasy of a perfect universe but whose genius flowered with devotion to observational truth.

Another recent donation from a friend is The Universe of Galaxies, a compilation by Paul Hodge of "Readings from Scientific American." Authors include Bart Bok and Vera Rubin.

Planning to give a classroom talk? The Astronomical League Education Committee has produced an Introduction to the Universe slide set complete with a discussion guide booklet. Was your July 11 eclipse experience only partially satisfying? Paul Borchardt has captured a memorable totality from his Hawaiian vantage point. Eight slides depict pink prominences, the pearly corona and a dazzling diamond ring. These and all of our slides are indexed and kept in the audio-visual closet in the lecture room at the Observatory.

If you have any questions or suggestions concerning our library, or if you need help finding something, June Regis and I are at your service.

Sally Waracznski

Picnic Recap

The 1991 MAS Picnic was a success—a dry time was had by all! Activities included: Volleyball, pinata for the kiddies, gastronomic delights at the Share-a-dessert-table, good conversation and photo previews & tales from eclipse attendees.

We'd like to thank the following vendors for their generous donations this year—over 20 door prizes added excitement to the day. Please keep these companies in mind when you see their products advertised elsewhere:

Astro Systems (Bright Star Atlas) • Astronomical Workshop (Eclipse book) • Earthspace Enterprises ('You Are Here' T-shirt & cards) • Space Images (Full Color Space Photos) • Innovative Energies (Binoc-U-Mount) • Cygnus Graphic (3-D map of solar system) • Chest Works (Nylon MAS Jacket) • The Starry Messenger (Subscription) • Orion (Skyblock LP filter) • Corvus & Craishin (Eclipse T-shirts)

The Future Yours, Mine and Ours

Here are the questions from a survey sent earlier this year. Because response was low, we are reprinting them here. If you have not done so, please take the time to respond to these questions and make your views known.

A. What equipment, instruments, modifications, etc. would help to make the telescopes easier to use? Which is the most important to you and should be considered a priority?

B. With the bright city lights and increasing amount of lights surrounding our Observatory, do you feel MAS should have an alternative dark sky location? Where?

C. In the coming years, what equipment should be obtained to help keep our Observatory interesting to members and visitors?

D. As a member you have many benefits. Can you think of any new benefits that will help us as an astronomy club?

E. Do you think MAS needs a new building for meetings and programs?

F. Can you suggest any projects that can be done using the existing Observatory equipment?

G. What else is on your mind concerning MAS?

Please send responses (you need not sign your name) to Jim Kube, 727 S. 92nd St., West Allis, WI 53214. If you prefer, call Jim at 453-8858 to discuss your concerns.

Reminder

Membership Dues are Due!

See enclosed form for details. Please return promptly to expedite magazine subscription renewal process.



Ask The Astronomer

I've seen many references to something called "UT" in astronomy magazines and books. It looks like some sort of time, but doesn't match what my watch says. Just what is "UT?"

Out of Time

Dear Out,

"UT" means Universal Time and is the time used by the general astronomical community to standardize the way time is recorded by any astronomer in all parts of the world (or in space, I should add!). UT has the great advantage in that the time is the same for everyone, no time zones and daylight savings time, astronomers have agreed to have UT be truly "universal" time. It is measured in hours and minutes just like normal "civil" time.

If UT is "universal," where do we measure it from? By international agreement, the "standard" time zone is of the famous and historic Greenwich Observatory in England. So now not only are positions on earth measured relative to the Greenwich Observatory, but so is the measurement of "Universal Time." UT is now truly universal!

It's easy to convert UT to your watch time, and vice versa. Since the folks on the east coast are 1 hour ahead of us in the central time zone, we must subtract 1 hour from their time to get ours. For example, 10:00 am in New York City is the same as 9:00 here. UT time, which is based on the time zone of Greenwich, England, is 6 hours ahead of us. So to convert UT to central time, just subtract 6 hours. Hence, 10:00 UT is 5:00 am our time. But be careful for differences in date. Also, during daylight savings time you need subtract only 5 hours. To convert your watch time to UT, do the opposite and add 6 hours (5 during daylight savings).

Greenbush—Andromeda

Our Fall Campout will take place at Greenbush on Friday-Saturday, October 4-5 at Greenbush campsites #5 & 6. A waning moon will allow the Andromeda Galaxy to glitter along with other autumnal delights. Bring your tent, telescope and firewood. Please call Paul Borchardt in advance if you plan to attend. Campers must pay \$2.00 per day, per person plus vehicle registration (\$3.50 per day or \$14.00 for an annual sticker). For more info, call Paul at 781-0169.

Wildcat Mountain Recap

During the weekend of August 9-12, some 40 observers gathered at Wildcat Mountain State Park for a mini star party. Joining us were folks from the northwest Suburban Astronomers and Newstar Clubs. The group site at Wildcat Mountain easily accommodated everyone. The area is deep sky observers dream—a large field set back in the forest amongst the beautiful Kickapoo hills of western Wisconsin. No artificial lights for miles. Heck, many of the local farms are Amish with no electricity!

Friday night was clear. Saturday and Sunday could have been better due to a high thin haze but even so, a lot of observing was done. The Persiads were a disappointment. The weather wasn't. Low 80's by day and 60's at night. The good weather, lovely surroundings and some quality time under the stars made for a truly relaxing weekend.

I'd like to reserve this site during the new Moon weekend in August 1992. Maybe we can make this an annual event if enough people are interested.

Notice: The Northwest Suburban Astronomers have reserved the group site at Wildcat Mountain this fall. Friday, October 4th through Sunday, October 12, 1991. Anyone from MAS is welcome. Hope to see you there.

Dave Kriege

Saturday Nite Keyholders

Sep. 7	Richard Wiesen	781-4757
Sep. 14	Paul Borchardt	781-0169
Sep. 21	Greg Cieslak	744-5703
Sep. 28	Brian Ganiere	272-4649
Oct. 5	Chris Hasseltine	482-4515
Oct. 12	Lee Keith	425-2331
Oct. 19	Dan Koehler	662-2987

For Sale

Solar Eclipse Photos—5 different 8x10" color images including inner corona, outer corona, diamond rings. Call Paul Borchardt at 781-0169.

10" f4.5 Dobsonian reflector—Coulter optics, beautiful wood mount, like new for \$390.00. Call John Marrari at 691-2539 for details.

Giant Binoculars—20x100 binoculars with attached dew zapper front and rear, Lumicon Deep Sky filters, glass Thousand Oaks solar filters. Like new—must sell, \$890.00. Call Rick Moskow at 786-2250 (days) or after 9:00 pm at 966-2656.

4-1/2" Reflector—With equatorial mount, eyepieces, finder, barlow, moon filter. For details, contact Tom Saler at 545-8483.



Night (de)Light

It's almost an annual ritual: during the wee hours of Astrofest, Matthew McNeeley, Rick Moskow and I are swooning after a night observing galaxies, nebulae and clusters, dead on our feet and dewed to the bone. But before the last of the eyepieces are safely put away, someone says "let's go for the blinking planetary!" (NGC 6826 in Cygnus)

I'm sure it would be much easier if we looked with fresh eyes when Cygnus was flying high overhead, but Planetary Nebulae are weird and it helps to be in a weird mood. Some folks insist it's crazy to 'go after' objects which are often described as looking like an out of focus star. I'm quite fond of them because they can be tricky to find at low powers but get interesting as you crank it up, actually showing subtle greens and blues in moderate sized telescopes. You can use a prism to blur the stars in the field into their spectra leaving the planetary unaltered.

We opted for the 'power sweep' method whereby wild zig-zagging with a high power eyepiece ultimately uncovers this playful quarry after almost giving up three or four times. But we persevere and finally, there it is. And then isn't. This object should be required viewing for learning averted vision because when you look right at it, the nebula disappears from view and you find yourself looking at the central star. When you look away the planetary blinks on just like someone threw a light switch.

A truly a dynamic experience! Experiment with different magnification to enhance the blinking effect and don't wait 'til 3am to start looking!

Tom Gill

Have you got a delightful story to tell about a favorite object or anything astronomical? Night (de)Light's the place to do it.

Telescope Class

UW-Waukesha is hosting a class entitled, "Astronomy with Telescopes" will cover care and use of a telescope and how to find things in the sky. Participants may bring their own scopes or use those at the Observatory.

The class is held 7-9:30 -pm on 5 consecutive Fridays, October 25 and November 1, 8, 15 & 22. To register or for more information, call Don Bracco at 521-5460 or Lee Keith at 425-2331.

New Members

The Board recently announced the following new members. We offer one and all a big WELCOME!

Jan Garvens & Family
Waukesha

Susan Kenast & Family
East Troy

James M. Frisvold & Family
Delafield

David and Karen Englemann
Milwaukee

James F. Gregorski
West Allis

Leslie D. Moore Sr. & Jr.
Waukesha

Grace Marko & Family
Waukesha

Christopher Weiss & Family
West Allis

Martin A. Savasta
Wauwatosa

Paul W. Zipter & Mary Jo Smith
Glendale



MAS INFORMATION

MAS OFFICERS

President Dr. Richard Wiesen
781-4786

Vice President Matthew McNeely
354-5347

Secretary Dorothy Kube
453-8858

Treasurer Dan Koehler
662-2987

Obs. Director Gerry Samolyk
529-9051

Ast. Obs. Director Paul Borchardt
781-0169

Librarian Mrs. Sally Waraczynski
321-0918

Assist. Librarian Mrs. June Regis
962-0896

Program Dir. Tom Renner
392-2799

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MAS Observatory

18850 W. Observatory Rd.
New Berlin, WI
542-9071

NCRAL 1992 CONVENTION UPDATE

Most MAS'ers already know that we'll be hosting the 46th convention of the North Central Region of the Astronomical League (NCRAL) next spring. Beginning with this issue of the *Focal Point* and continuing through the April 1992 issue, watch the newsletter for additional details concerning this event. Following are the most asked questions about NCRAL conventions, and the 1992 convention in particular:

What is the NCRAL?

The MAS is a charter member of a national organization of amateur astronomical societies known as the Astronomical League (AL). Its 175 member societies represent some 12,000 amateurs in the U.S., Puerto Rico, and Panama. The League is subdivided into ten geographical regions. The MAS is a member of the North Central Region which covers the states of Wisconsin, Illinois, Minnesota, North Dakota, South Dakota, Iowa, and the Upper Peninsula of Michigan. The NCRAL is the largest region of the AL with a "population" of 33 member societies and about 1,500 amateurs.

What is the NCRAL Convention?

Each year, each region of the League sponsors a regional convention. The site of each year's convention can vary, as it does in the NCRAL, because it is hosted by a different NCRAL-member society. Last year's convention was held in DePere and was sponsored by the Neville Public Museum Astronomical Society of Green Bay. The 1993 NCRAL convention will be hosted by the Madison Astronomical Society in conjunction with the National convention of the Astronomical League.

Other regions have chosen a permanent home for their conventions such as the Southwest Region, which holds its convention annually at the Texas Star Party. All members of all societies in a particular region are invited to attend that region's annual convention.

How does a NCRAL Convention take place?

Usually, a member society makes a "bid" for the convention (i.e. the officers of that society offer to host the event for a particular year) at the Regional business meeting one or two years prior to the year in which they wish to host it. The offer is voted on by members of the region present at the business meeting.

The MAS' offer to host the 1992 convention was presented at the Regional business meeting in Madison in April 1990. Next year will mark the eighth time in forty-six years that the MAS has hosted a regional or national convention and will also serve as a celebration of the Society's 60th anniversary.

Who plans and organizes the NCRAL convention?

An interested group of members from the host society form a committee which works independently to plan the program and other details of the convention.

What is there to do at a NCRAL Convention?

Although this depends upon the ingenuity of the local organizing committee, the format is fairly standard. Members of the Region are solicited for papers on topics of interest to a broad spectrum of convention attendees. Professional astronomers are invited to address the convention about their areas of expertise. Commercial astronomical vendors set up displays and sell their goods.

A regional convention is a good opportunity to visit the host society's observatory (if they have one) and meet its members. In general, these conventions are an excellent way to meet other people in the same area of the country with interests similar to your own. There's food, fun, and good conversation in an excellent learning environment.

Although the 1992 convention will follow a pretty standard format, our committee has some surprises up their sleeves which we'll be revealing in the coming months!

When and where will the 1992 NCRAL Convention take place?

The 1992 NCRAL Convention will be held Friday evening, April 24th and all day Saturday April 25, 1992 at the Country Inn Hotel and Conference Center, 2810 Golf Road, Pewaukee (just west of the intersection of Waukesha Co. Hwy T and Interstate Hwy 94).

What can I do to help?

The best help you can give us is attending the convention! If you'd like to do more (and there's plenty to do to get ready) consider helping at the Observatory to ready it for a couple of hundred visitors on convention weekend. A few more members on the committee wouldn't hurt either. If you can spare some time and want to help, contact General Chairman Dan Koehler, evenings at 662-2987.

When can I expect more information?

As mentioned above, watch the next five issues of the *Focal Point* for details as they become available. The convention will also be discussed at all General Membership meetings beginning with our next meeting on November 15. All MAS members will receive registration materials around January 1, 1992. You need not request materials by mail.

For now, remember the dates: April 24 - 25, 1992. The convention committee is depending on a large turn-out of MAS members!

**1992
NCRAL**