



From The Editors

I attended the NCRAL Convention on Saturday, April 25. What a wonderful event—from the opening speaker to evening Banquet. MAS is fortunate to have talented members who can blend their skills and enthusiasm to create and coordinating a Convention of this magnitude. A special thanks to **Dan and Mary Koehler** for their grand design and many months of toil on and tedious detail. Also, thanks to the NCRAL committee and the many members who gave time and energy to bring the convention to stellar fruition. I'm sure the members of the North Central Region in attendance left this convention feeling very impressed with our city and Society.

With happy memories of the NCRAL Convention, we turn our attention to MAS-sponsored events including Open Houses & everyone's favorite, the Annual Picnic (July 25). We look forward to seeing you at these get-togethers under warm summer skies.

-Matthew McNeely

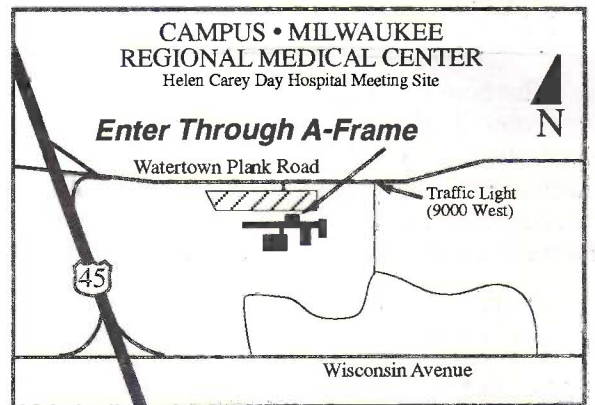
It just sort of happened: this issue focuses on re-igniting our enthusiasm for astronomy & stargazing. Enjoy.

-Tom Gill

Program/Meeting

The program portion of May's meeting will be presented by Ken Mandelson, a Marquette University instructor. Ken's talk is titled "Life of a Star." Following the program will be the Board and Officer elections. Meeting starts at 8 p.m.

This is the last meeting of the season held at this location. Doors open from 7:30 to 8:15 only.



Calendar of Events

- May 11, Monday MAS Board Meeting
7:30pm at the Observatory
- May 15, Friday **8:00 pm Program-Meeting
and Board Elections**
- May 22, Saturday Open House
8:00 p.m. at the Observatory
- June 3, Wednesday First Wednesday Meeting
7:30 at the Observatory
- June 8, Monday MAS Board Meeting
7:30pm at the Observatory
- June 12, Friday Deadline for Summer Focal Point

Looking Ahead: Picnic on July 25th!

Saturday Nights—Member night at Observatory—Call key holder

Inside!

- Library News2
- Night (de) Light2
- Nichols Astronomy Day2
- Board Elections2
- For Sale3
- Keyholder Info3
- Touching the Cosmos3-4

Library News

The Backyard Astronomer's Guide by Terence Dickinson and Alan Dyer. Camden House, 1991, \$39.95 (An Astronomy Book Club selection).

A fortunate few of us were introduced to the wonders of the night sky by an adult friend or family member with an old brass refractor—someone who looked upon the stars with the same sense of recognition as that evoked by migrating geese or early spring wildflowers. For the rest of us who might be struggling with a bewildering array of observing equipment or conflicting attitudes about what constitutes a “worthy” astronomical pursuit, this book can become such a friend.

Dickinson and Dyer have a depth of experience and resources at their disposal that gives their advice and opinions credibility of the highest magnitude. Freshness and candor characterize every discussion including that of the various sky phenomena. Telescopes and accessories receive more than the usual outline; they are examined with a critical eye regarding design and manufacturer, and the Schmidt-Cassegrain finally receives its due. The three chapters on astrophotography are meant to be an introduction to both the possibilities and the pitfalls of this hobby-within-a-hobby. Observing tips include necessary consideration of light pollution factors and also attempt to dispel some conventional optical “wisdom” based, to some extent perhaps, on equipment of the past.

This book is intended for folks who have already decided they want to become observers. It helps develop a perspective rather than attempting to be an exhaustive textbook; further reading is suggested. To paraphrase the authors...owning fancy, expensive equipment will not guarantee your enjoyment of astronomy. You can, however, buy your way into this outstanding guide book that will help you get the most out of the equipment you have while also helping you plan for the future.

We have purchased the following Astronomical League manuals which may be found in the VERTICAL FILE indicated after each title:

Observe Meteors, Levy and Edberg, 1986 - METEORS

The New Observe and Understand the Sun, Hill, 1990 - SUN

Observe Eclipses, Sweetsir and Reynolds, 1979 - ECLIPSES

Observe Comets, Edgerg and Levy, 1985 - COMETS

Math for Amateur Astronomers, Fox, 1988 - ASTRONOMY-MATHEMATICS

Observe: A guide to the Messier Objects, Holyoke, 1966 - MESSIER OBJECTS

A guide to the Herschel Objects is currently under revision and will be purchased when available. These manuals may be signed out as library books.

-Sally Waraczynski



Night (de) Light

The Ring. The Orion Nebula. Jupiter and its moons. Saturn. Easy targets that every astronomer worth their star-stuff has viewed on countless occasions. But viewing them through a newcomer's eyes keeps them new and exciting time and again. By answering questions and enticing people to try for something a little more challenging, future stargazers and potential MAS members are born.

In the same vein, sharing sky delights with MAS members is equally rewarding. Case in point: the first Friday of the recent Greenbush campout, six intrepid MAS campers (not too intrepid, it was over 70° F 'til past midnight) chased “sucker holes” around the sky, viewing whatever was currently visible. Several scopes and their different views (from Matthew McNeely's 4" refractor to Mike Wolkomir's 17.5" Dobsonian) were shared and enjoyed by all. We were giddy to be together, revelling in each other's company under a canopy of stars (and clouds). Saturday was clear for a longer time, and more members joined our group to hob-nob and poke around the night sky. Such experiences are truly Nights of Delight!

-Tom Gill

Board/Officer Elections

Elections to the MAS Board of Directors will take place at the May 15 meeting. The membership elects the Board; the Board in turn elects the officers of the Society. Completing terms and not seeking re-election to the Board are: Matthew McNeely and Peter Smitka. Incumbents seeking re-election are Brian Ganiere and Jim Toeller. Other members running for the Board are Tim Burrus, Tom Gill, Sally-Jo Michalko, and Ken Waraczynski. Four positions will be filled at the May meeting.

Once constituted, the newly elected Board will convene to elect the officers. All incumbents are seeking re-election, namely: Richard Wiesen, President; Matthew McNeely, Vice President; Dan Koehler, Treasurer; and Dorothy Kube, Secretary.

If you need more information about the May election or would like to be a candidate for the Board or one of the officer positions, call Richard Wiesen or Matthew McNeely for details.

Good luck to all candidates!

Share the Sky

Lee Keith will be conducting a public lecture and observing session at Lapham peak near Delafield on Saturday, May 16. If you would like to come and bring your telescope or binoculars to help share the wonder of the sky, contact Lee for details at 425-2331.

WJ Nichols Observatory Astronomy Day Celebration

Member Nick Nichols will be hosting an Astronomy Day Celebration on Saturday, June 6th at his W. J. Nichols Observatory located at 3885 Pioneer Rd, Richfield.

The event is held from 2pm to midnight and MAS members and general public is invited. In addition to displays and observing, the WK Amateur Radio Club of Milwaukee will be broadcasting during the day. For more information, contact Nick at 628-4059.

Open House Schedule

To help you with your summer planning, here is the list of summer Open Houses. All are held on Friday's at the Observatory and begin at 8 p.m.

May 22	When the Moon Bleeds: Lunar Eclipses
July 24	Miranda: The Moon That Broke Apart
August 7	Faster Than A Speeding Bullet: Meteors
August 21	Jupiter Meets Venus
September 4	Heavenly Heroes: Constellation Myths
October 2	Saturn: The Planet With "Ears"
October 23	The Hubble Space Telescope is NOT Dead!

For Sale

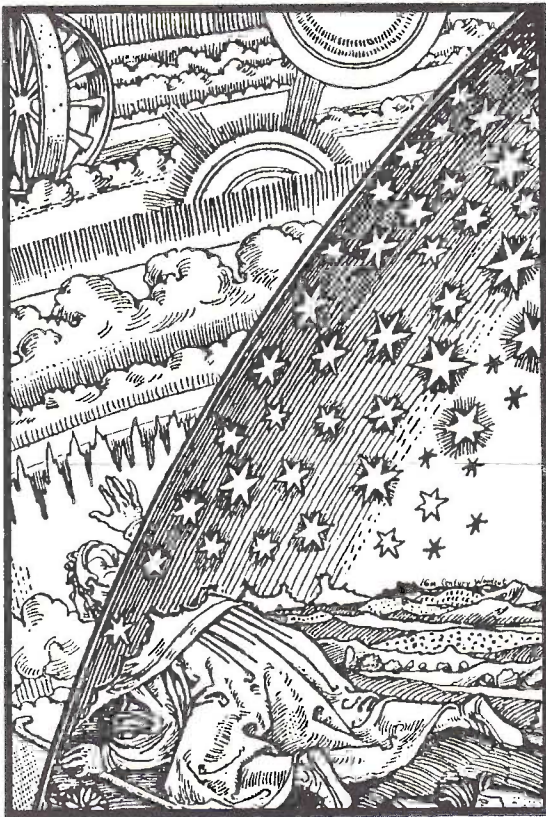
6-inch f/9 Telescope on Dobsonian mount with 1.25" focuser and one 25mm eyepiece. \$200 from Tom Gill, 476-6986 days or evenings.

8-inch f/6 Dobsonian telescope. 7 months old. Mirror custom made, superb optics have complete Focault test data. Small secondary (1.52"), 2" helical focuser with 1.25" adapter. Comes with Telrad and rotating Fiberglass tube. Call Nolan Zadra at 962-3021 evenings.

Saturday Nite Keyholders

May 16	Paul Borchardt	781-0169
May 23	Marty Brunet	544-1342
May 30	Greg Cieslak	529-0548
June 6	Brian Ganiere	961-8745
June 13	Chris Hasseltine	482-4515
June 20	Lee Keith	425-2331
June 27	Dan Koehler	662-2987
July 4	Jim Kube	453-8858
July 11	John Pfannerstill	475-6494

Touching the Cosmos



I wrote this for a writing contest a while back but thought it appropriate for our publication as well. I offer it as a testimonial to the many MAS members who volunteer their time and hope that it will entice others to get more involved in public education as well. -Tom Gill

At times like this I feel like Santa Claus. Eight people, giddy with anticipation, are in line tonight, I offer no gifts, only visions but I know from experience what they want. They want to be amazed.

I'm a stargazer. Looking at the stars gives me a pleasure so great I feel compelled to share it. I prefer the moniker "stargazer" over the more haughty sounding "amateur astronomer." The stars are for everyone. My telescope ignites a natural curiosity whenever it points toward the sky. People gather around me. I never have to ask twice if they would like to take a look.

Tonight I'm not alone. Other club members have set up telescopes on the observatory grounds of the Milwaukee Astronomical Society in New Berlin. By the end of the evening, over 200 people will have a better appreciation for the sky above.

The sky is clear and inky dark. No moon means more and fainter objects will be visible through my ten-inch Newtonian telescope. Cosmic hors d'oeuvres, guaranteed.

"What can I show you tonight?" I ask the anxious group. "A distant galaxy, much like our own Milky Way? A stellar nursery where stars are born from gravity's effect on galactic dust? Or majestic Saturn, the giant ringed planet that shines by reflected sunlight even though it's a billion miles away?"

They all want Saturn and I comply, swinging the big red telescope toward the southern horizon. Many of them have seen photos beamed back from the NASA space probes which recently toured our solar system. Now they want to see for themselves. Since we are Earthbound, the view in my telescope

Cont on next page

Touching the Cosmos, cont.

cannot rival NASA's images, but it has a quality no photograph can match. It's real. Seeing Saturn for the first time often causes people to quickly look up from the eyepiece and stare with naked eyes into the distance at the small, orangeish bit of light. Convinced that it's really there, they return to the eyepiece to savor another closer look.

After Saturn we scan the star-rich regions of the Milky Way, then move on to more esoteric treasures: The Ring Nebula—a ghostly shell left by an exploded star; the Hercules Cluster—a condensed ball of stars which orbits our galactic core like a moth hovers around a light; and the Blinking Planetary—a blue-green disc which fades from view when you look directly at it then appears to blink back on just as you look away.

Everyone liked the objects and wants to know how I got interested in the night sky. There are many reasons I became a stargazer and I'm never sure of the direction my answer will take. Consider that we are all made of star-stuff. The atoms and particles that make up our bodies come from exploded stars and cosmic dust. Looking up reminds me that the Earth is a small planet, the sun a tiny star in a vast network of unfathomable size and complexity. As a hobby, astronomy goes way beyond the norm—it is a quest, a way to explore who we are and our place within the cosmos.

I'll leave the task of trying to unravel the mysteries of space for another day.

"I'm just curious," I reply. "The sky occupies one-half of our physical world. I want to know and see what's out there. Haven't you ever wanted to touch the cosmos?"

I remember gazing at the Milky Way as a boy. I couldn't get over how beautiful it was—a glimmering river of stars that stretched from horizon to horizon. I didn't know exactly what it was but I felt it was bigger and more important than anything I had seen before. It's a shame that today, people who live in or near a city are not even aware of such marvels. Bright lights blot out all but the brightest stars. This "light pollution" robs people of an opportunity to appreciate the natural beauty of the night sky. For me, light pollution means a longer commute to darker skies or tolerating an abbreviated sky from my own back yard.

Wherever the location, the stars still hold my interest. Late one summer night, I spotted a familiar group of stars on the eastern horizon—the Pleiades, or Seven Sisters. I had not seen this group of stars for some time but I knew that in a few months it would be high overhead in the cold night skies of January. Their appearance then was as celestial messengers. I thought of our ancestors, who before TV or radio, even before cities, looked to the sky for information and entertainment. They relied on the sky to alert and prepare them for changes ahead.

The same stars still grace our skies. If you take the time to learn about them, the night sky becomes less mysterious and infinitely intriguing. All it takes is a star chart and a clear night. A star chart is similar to a road map with one exception—with the aid of binoculars or a telescope you can instantly visit the places and objects described.

On a clear night, you can see forever—or so it seems. Objects glimpsed in a telescope lie at distances that boggle the mind.

"Look right here," I say, helping a young boy peering into the eyepiece, "This is what a million suns looks like." His silence tells me either he doesn't see the magnificent, though faint, spiral galaxy called M81, or that the image he sees is hard to comprehend. "Think of this telescope as a time machine," I suggest, "the light you are looking at left that galaxy when dinosaurs still walked the earth."

The dinosaur comment works every time. "Wow," he replies, and looks a while longer before running off to tell his dad. His reaction is my reward. A young mind is fertile ground and I hope that a seed was planted which will cause him to look up often, and be amazed.

—Tom Gill



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

FOCAL POINT Staff

Matthew McNeely (Editor)
8200 N. Cedarburg Road
Brown Deer, WI 53209
354-5347

Tom Gill (Editor/Publisher)
1391 N. 72nd Street
Wauwatosa, WI 53213
476-6986

MAS Observatory

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