



REFLECTIONS

of the University Lowbrow Astronomers

September 2002



The University Lowbrow Astronomers is a club of Astronomy enthusiasts which meets on the third Friday of each month in the University of Michigan's Physics and Astronomy building (Dennison Hall, Room 130 or 807). Meetings begin at 7:30 PM and are open to the public. Public star parties are held twice a month at the University's Peach Mountain Observatory on North Territorial Road (1.1 miles west of Dexter-Pinkney Road; further directions at the end of the newsletter) on Saturdays before and after the new Moon. The party may be canceled if it's cloudy or very cold at sunset. For further information call (313) 480-4514.

September 2002

- **September 20** Lowbrow Meeting at 7:30pm at Dennison Hall.

Also note that our web site has a new URL: www.umich.edu/~lowbrows/ Thanx Dave!!

October 2002

- **Saturday October 5.** (Starting at Sunset). [Regular Open House at Peach Mountain.](#)
- **Sunday October 6.** (12:00-5:00PM in the EECS building on Beal Street, University of Michigan North Campus). [Great Space Adventures Day.](#)
- **Saturday October 12.** (Starting at Sunset). [Regular Open House at Peach Mountain.](#)
- **Friday October 18.** Lowbrow Meeting at 7:30pm at Dennison Hall.

IMPORTANT NOTICE

Included in this issue is a reprint of the University Lowbrow Astronomers' Constitution or By-Laws. It is very important that an organization of our size, responsibilities and resources have a set of operational guidelines that is up to date and practical. It will be obvious to the majority of the members upon reading the version reprinted here, that certain revisions will need to be made and then ratified by the general membership. It is also important that you take the time and make the effort to have your suggestions heard. This is YOUR club! If you would like to be part of a group or committee or have suggestions to help revise and update the Club By-Laws please notify one of the current officers by September 30th.

IMPORTANT NOTICE

CONSTITUTION OF THE UNIVERSITY LOWBROW ASTRONOMERS

I. Membership and Dues

- A. All those having *paid* their dues for the year *will* be considered members.
- B. Honorary membership may be extended for one year to deserving members of the club or community by will of two-thirds *of* the club members present and voting at any regular meeting.
- C. Those wishing to be on the mailing list must pay their dues.
- D. The membership year will extend from May 1st to April 31st, though dues for the subsequent year may be paid and collected in April.
- E. As long as the club continues to exist, dues will not be refunded.
- F. Only members having paid dues for the year ending in April will be eligible to vote or run for office in the April elections.
- G. Members' 14 years old or younger, who are normally accompanied by an adult who is a member, are exempt from paying dues.

II. Officers and Elections

A. Elections

- 1. The club will have five regular officers. These are
 - a. President
 - b. Editor of the Newsletter
 - c. Observatory Director
 - d. Treasurer
 - e. Secretary
- 2. Officers will be elected at the April meeting for the year starting May 1st.
- 3. Nominations will be taken by the President at the start of the April meeting.

4. Voting will proceed by secret ballot.

5. The ballots will be tallied by a member not running for office.

6. The nominee for an office obtaining at least one more vote than any other single nominee will win that office.

B. Interim Officers

- 1. All officers who will not be present in the Ann Arbor area during the summer must inform the club so that an interim officer may be elected,
- 2. An interim officer's term will end at a date prescribed before their election, unless the regular officer is not available. In such a case the interim officer will continue as acting officer.
- 3. Should the regular officer fail the claim the office within three months. The acting officer shall become the regular officer and hold the office till the next regular election.

C. Resignations and other Vacancies

- 1. If an officer should fail to notify the club before leaving Ann Arbor for the summer, the office will be considered vacant.
- 2. The positions of officers who quit the club, or no longer show an interest its activities are considered vacant.
- 3. All vacancies will be filled as soon as possible by a special election which will proceed as a regular election would.

D. Removal of Officers

- 1. Officers may be removed from office for any of the following reason
 - a. Misuse of club funds
 - b. Misuse and/or damage to club and/or

university property

c. Assault of a member or nonmember during a club meeting or outing.

d. Failure to perform the duties of the office in an appropriate and/or intelligent manner.

e. Failure to pay dues.

2. Charges must be brought before the membership.

3. Removal will be effective upon the will of two-thirds the total membership and the position will be considered vacant. The vote will be taken by secret ballot.

E. Duties of Officers

1. The duties of officers as listed in this section are only meant as guidelines to the present officers and will become fully effective May 1st, 1981.

2. The President is responsible for:

- a. Presiding over meetings
- b. Organizing monthly programs
- c. Coordinating the activities of the club
- d. Acting as club representative to other organizations and public events.

3. The Editor of the Newsletter

a. The Editor is responsible for the appearance and contents of the newsletter

1) The contents of the newsletter should be:

- a) Visibly appealing
- b) Grammatically correct
- c) Scientifically and factually accurate
- d) Interesting

2) The contents of the newsletter should not be

- a) Libelous
- b) Plageristic
- c) Offensive to members of any race or creed
- d) Obscene
- e) Inane

b. The Editor is responsible for printing the newsletter in the most economical way consistent with the above specifications.

c. The Editor coordinates public relations activities of the Club.

4. Observatory Director is responsible for:

a. Supervision of the renovation, repair and upkeep of the 24-inch telescope and observatory.

b. Scheduling of observation time with the 24-inch telescope should an increase in demand Cause conflicts to arise.

c. Reporting all progress and necessary expenditures on the telescope to the membership

d. Keeping track of whom possesses keys to the telescope building and gate.

5. The Treasurer is responsible for:

a. Keeping a record (including receipts when possible) of all income and expenditures of the club.

b. Monitoring the use of club funds and reporting any misuse.

c. Preparing a financial report to the Club every four months to be presented at the May, September and January Meetings

d. Proposing means for increasing the treasury funds to the club.

e. Keeping a record of who has paid dues.

6. Secretary

a. The club secretary is responsible for notifying the membership, through postcards or other means, of upcoming meetings and events.

b. The secretary is responsible for keeping the membership address list up-to-date. All changes of address and phone number should be reported to the secretary.

c. The secretary is responsible for keeping a record of the meetings. This need not be word-for-word but rather an outline of what the program was what was proposed what announcements were made.

7. All officers may be called upon from time to time to perform other duties.

8. If an officer is unable to perform a specific duty at a specific time, that officer may call upon another officer or member to perform that duty.

III. Meetings and Other Activities

A. Meetings shall be held monthly at a day, time and place as convenient as possible to the membership, as is announced by the president and conveyed by the Secretary to all members.

B. Other events and activities may be planned from time to time and will be held at the day, time and place decided upon by the membership and announced by the officers.

C. Members are encouraged to attend meetings. And other events and to actively participate in all activities of the club.

IV. Expenditures

A. Expenditures shall be considered as one of two types:

1. General Operating Expenditures

2. Special expenditures

B. General expenditures are the ongoing expenses incurred in the fulfillment of the duties of officers and the basic objectives of the club. Examples:

1. Minor repair and upkeep expenses of the telescope and observatory.

2. Cost of printing the newsletter.

3. Cost of producing and mailing meeting and event announcements.

4. Cost of printing and disseminating posters and flyers.

5. Long distance phone calls by members to members of this club or other clubs or organizations on official business to places outside of Ann Arbor but within the 313 area code and accounting to a maximum of \$5 in any one week. Phone bills should be presented as evidence of the call.

6. Other on going expenses for activities approved by the club.

C. Special expenditures are one-time expenses for a Special purpose or of a large sum. Examples

1. Major expenses towards the repair and upkeep of the *telescope* and observatory.

2. Purchases of equipment for the telescope or observatory,

3. Expenses of special events and activities planned by the club.

4. Long distance calls out of the 313 area code to be charged to the club.

5. Any other one-time expenses over \$15.



Journey Into Another World

By Jim Wadsworth

August 2002

Some time last summer I was surfing the web and came across the Nebraska Star Party site. I logged on and read the info. It sounded challenging. I thought about going and it remained in the back of my mind for months. I didn't think I could undertake such a large challenge as going that far away for that many days to a strange place without knowing anybody or what I would be getting into.

Anyway, I bought a small trailer called a Scamp, easy to pull behind the Aerostar. This spring I got the application form for the Nebraska Star Party and registered. Now what! Well, I talked to Clayton Kessler because he is a veteran of the Texas Star Party and should know what to bring, how to take care of the scope and stuff, what food to bring, and what to do when not observing; nothing like talking to an expert. Well, the time approached fast, August 4-9 was two weeks away. I better get packing and planning.

The Nebraska Star Party is located at Merritt Reservoir, 27 miles south of Valentine, Nebraska. It's 120 miles north of North Platte. That's a long way from Dundee, MI. It dawned on me that I wouldn't make it in a day so I'd better leave on Friday the 5th. I did! That's a long ride at 60/65 mph on Interstate 80.

After a stop over in Lincoln, Nebraska and a scenic drive up Neb. 97, I arrived at Merritt resort where I got the required state park permit and directions to the observing field at the Snake campground, 5.5 miles south of the resort. It had been brutality hot, high 90's most of the trip. Just as I was about to leave for the observing field, it rained I mean a cloudburst with horizontal rain. Oh great now the campground will be wet and mucky. After 1 and 1/2 hours it stopped and I went to the "SPOT."

One drives back into the observing field through a winding road up and over sand dunes covered with grass, small trees and local plants down into a camping area with a boat launch, a shelter, outhouses, and a hand pump for water. Trees line the shore of the reservoir, which is 11 miles long. Turn around from the water and on the hills in about an 11 mile circle is the observing field. Take your pick of the hilltop or valleys. No need to be grouped all together. No obstructions either nothing but hills and clear blue sky!

Now the problem was, where to find my observing site. Should I go into one of those valleys or up on top of the hills. To me, the valleys presented two problems. One, you couldn't see the horizon very well and what if we had lots

of rain. Better go to the hilltop. Which one, well close enough to the privy but far enough so other campers wouldn't interfere with my viewing nor mine with theirs. So, I selected one of the higher ones, where I could see the horizon clearly in all directions.

It was still cloudy but slowly clearing so I set up my Scamp and easy-up shelter and waited to see what was going to happen that evening which was Saturday the 6th. This is going to be great, I thought as the thunderstorm receded into the distance, slowly but surely. Some thick very broad stratus clouds were on the horizon in the west but posed no problem now. I got out my blue collapsible chair and enjoyed the sight. O boy this is going to be GREAT, I said under my breath. A slight wind was blowing out of the south cooling the heat of the day. "I'm really here in clear sky country, I made it." This week will be fantastic.

I went inside the Scamp to rest a bit. It gets dark about 9:00/9:30 PM CDT. I woke up about 10PM and went outside. Venus was in the western sky. It was not dark enough to see the other objects or stars. I set up my tripod and 11x80 binoculars. I could see the half-disk of Venus clearly. Amazing! Setting in the camp chair, I enjoyed watching the sky turn darker and darker. "There's that pesky stratus cloud blocking most of the sky now. DAMN!! The sky was clear in the south to about 40 before being blocked by that cloud. Scorpius is clear and just to the east is the teapot, Sagittarius, clearer than I've ever seen it. And there it was Brilliant, Clear, Majestic, actuality, Awesome; THE MILKY WAY!! Starting from the south across the sky all the way through Cassiopeia. The different arms; clearly marked; the Sagittarius Arm, the Perseus Arm and all the stars in their glory.

I had a hard time comprehending what I was witnessing. There it was close enough to almost reach out and touch. The visual display of our galaxy; showing itself, clearly; much, much more than any picture or word description I've ever seen or read. Actually, just drinking that sight in with my eyes was mystical even can I say Soul shaking! Snapping back to reality, I wanted to see how many of the traditional objects we see at Peach Mountain could be found with the binocs, so I trained them on M-4. It popped immediately in view as did M-22, M-28, M-7, M-6, the lagoon, M-8, M-20, M-24, M-17, the Swan Nebula, and M-16, the Eagle Nebula. The last two were well defined. I tried other sites but guess what, that stratus cloud was covering most of the sky. I looked at my watch and 11:24 appeared. Having gotten up at 6:00 AM/EDT that morning and traveling 600 miles in 95 degree heat, I was exhausted. I went to bed, hoping for more clear skies Sunday night.

Well I woke up about 8:30 the next morning, looked out the window and much to my surprise saw low wet clouds.

They remained all day and all night. The wind kept blowing also, not the normal Michigan wind but wind that rocked the Scamp and made the top vent rattle. Needless to say, I slept as much as possible in the 90/95 degree heat. Well, maybe a better tomorrow. Monday started out not much better, still high winds and cloudy. I better read Astronomy or Sky and Telescope. Not much accomplished, heat and wind, high heat, high wind. That afternoon looked much better. The sky cleared with cotton-ball clouds. Everyone around was anticipating a good night. Still the wind was up. Around 7:00 PM the other astronomers started setting up their scopes. I followed. We waited, checked the scopes and waited, hoping the wind would slow down, still hot though. One can see for miles when clear. About 9:00 PM, a cloud deck moved in, and yes, it got thicker and thicker. I gave up about 11:30 PM and dismantled the scope and went to bed. I woke up around 3:30 AM. The sky was clear but the dew was heavy and the wind strong. As I said earlier the Milky Way was majestic, radiant, and beautiful. The arms were distinct and clear. I looked and absorbed Lyra and Cygnus, the swan, and Aquila in the west. Taurus and the Pleiades were rising in the east, all cradled in the Milky Way's arms. I didn't want to battle the moisture, wind and heat and crawled into bed.

Tuesday, clear all day but hot again with very high wind. Not much to do so I went to Merritt resort and hung out in the air-conditioned rec. room watching the weather channel on the big 54 inch TV. The evening looked good. I set up the scope and binocs. I'm ready man! Here comes the sunset, glorious, and twilight and Venus. It's half disk clearly visible.

The MILKY WAY is very subtle. You can see it faintly as Scorpius and Sagittarius stand out. The summer triangle stars stand out brightly and then there it is. It smacks you right in the face. It outshines these previous stars and constellations. Now you have to look for Scorpius and Sagittarius or the triangle. They're hidden.

Now comes the serious stuff. Check out my bright clear M-8, Lagoon Nebula. See if it's entirely in my 34mm plus filter, clear, well-defined dust lanes, distinct. M-20's there, the Trifid, clear; now the Swan, M-17 shows its stuff very detailed, then M-16, the Eagle, best ever in clarity. One could see the outline not the smudge we see here in Michigan. Other objects checked out were; M-28, M22, M-13, M-31/32, the Andromeda galaxy. The double cluster was naked eye. Again, the entire Milky Way was brilliantly clear across the sky from south to north. The meteors were there too! Even the Space Station came into view briefly. But as things go, the sky got milky and all but the brightest stars disappeared. I closed up shop and went to bed about 2:45 AM. Hopefully it's a better night tomorrow.

Same-o, same-o on Wednesday, hot, windy and humid. It looked like a decent night so I was ready to go around 8:30 PM. Venus was visible and many bright stars appeared. I thought M-4 would be a good target. I tried and couldn't find it, or any of the other objects. I finally found M-4 with the binocs though extremely faint. The sky was completely washed out even some of the main stars were hard to see. It was getting sticky, sticky on everything so I quit early and had a good nights sleep. As usual the wind is strong all the time.

Thursday was cloudy most of the day. One astronomer had a NOAA radio. It forecast high winds and storms for that evening. That group was covering up and tying down their scopes. I took the hint and did the same with mine. It was double covered and staked down. No wind is going to blow this scope over. It did blow and rain and thunder and lightening with small hail thumping the Scamp around 6/7 PM. No viewing tonight! I woke up about 12:30 AM. It was cool, actually cold and you guessed it windy, very windy. It was clear now but so windy that the scope would be pushed and bounced about. I didn't unpack it. I used the binocs instead. I could see M-4, M-22, M-31/32 and all the usual others. The wind was so strong that it even affected the vision of the binocs. I gave up and went to bed at 1:30AM.

Friday morning was overcast. Weather predictions were for cloudy all day and possible thunderstorms in the evening. I had enough of the hot sticky windy, windy weather. It didn't take much to push me to pack up and leave for home. The people from Omaha told me about a short cut with good roads and little traffic. There would be lots of small towns though. I took it and cut off about 200 miles. The rest of the trip was long but I was glad to pull into my driveway in Dundee. Mission accomplished. I'd been to the NEBRASKA STAR PARTY!

Since that time I've had time to absorb and reflect on the experience. Negatives were the hot weather and the ceaseless strong wind. Clear/cloudy skies are a tossup. Probably the most important thing that has lasted is the experience of the Milky Way. Clearly one is overpowered by its brilliance, its massiveness, and its awesome presence, hiding within its brilliance the Messier objects we see here at Peach Mountain. Many other treasures are there to be discovered and enjoyed like so many of you know.

The strange thing is; I felt a comfort from seeing the Milky Way this clearly. Like I'm home now! I know where Earth is in relation to its place in the universe. We read about our position in the solar system and in the Milky Way and the rest of the Cosmos but all that is abstract. When I saw the Milky Way and can see the Sagittarius Arm in the south extending overhead and stopping only to pick up the Perseus Arm to the north though Cassiopeia I'm home here in the Orion Arm. I'm in a place where I know where it is. People

talked about the moon in many different ways but when a man stepped on it, it became a place. To me that was the discovery of the Nebraska Star Party that I hadn't expected and am glad I experienced it. It certainly was a journey into another world different from all the noise, busyness, and chaos that stress us daily. That different noise and heat and magnificent sky is part of me now and I'm glad I experienced this different world.

A Lowbrow Goes Asteroid Hunting From an E-mail by Mike Radwick

Michigan weather sure surprised me tonight! I arrived home at around 10:00pm and found that the skies were mostly clear. So I grabbed the star-chart (from Sky and Telescope), my ETX-90 scope, and binoculars to go asteroid hunting.

The clouds almost disappeared by 11:00, but I still couldn't find the asteroid. It was about then that I realized that the conversion from UTC to EST time is 4 hours, and I was using 5 hours. (Serves me right for having alcohol with dinner). Overall, conditions were pretty poor: The moon was pretty bright, and even though the clouds went away, the sky was very hazy. On a scale of 1 to 5, I'd say visibility was about 2 (and variable).

The variable sky kept working in my favor every so often, and eventually I found some stars that I could recognize from the star-chart. I made another glance at my scope, and star-hopped to a set of mag-7 stars that the asteroid should pass in a few minutes...

Success!! At 11:30:24 (0330:24 UTC), I found the asteroid! It was very faint in the 90mm, but was recognizable due to its fast motion relative to the stars. At a guess, I would say the brightness was around mag 8.4. It took about 4 minutes for the asteroid to move outside the field of view (FOV) offered by my 32mm eyepiece. Unfortunately, I lost the asteroid when it moved outside the FOV, so I had to star hop again.

At 11:45, I picked it up again, and tracked it for 15 more minutes. The S&T star-chart was very accurate. I don't think there was any hope of seeing the asteroid with binoculars, but anyone with a scope should have been able to find it. I hope you guys had the chance (and success) I had.

(BTW Mark - I was NOT using the computer on my scope! Everything was done by hand)

John Ridley's Observational Report

We just got back from vacation last night. We went down south to Mammoth Cave and then east to the Smoky mountains, and stayed with an aunt there in Boone, NC.

The first day we stopped at the Neil Armstrong Air & Space museum. It's a nice little place, we arrived somewhat late and only had about 45 minutes to look around, and didn't get to see a show. However, they have a nice collection of suits, booster engines, etc. They also have a little chunk of moon rock. I thought it was kind of awesome to stand there and look at it.

That night (Thursday Aug 8) I did about 45 minutes of DSO observing using 10x50 binocs from the playground of a campground with a mercury vapor light burning about 150 feet away.

Log excerpts:

M22 in Sag - bright and obvious.

M28, JUST visible, faintly.

Possible iridium flare in Cygnus, around 10:30 (no watch)

Lagoon & Trifid very bright and easy, as are M17 and M16

Split Albireo, observed Coat Hanger.

M13 big, M92 pretty easy also.

M29 - it does look a bit fuzzy tonight in binocs, I guess I'll cut Messier some slack - I used to wonder how he could think that looked anything like a comet.

M71 in Saggita - MAYBE - a slight brightening there.

M39 for sure.

The next evening (Fri, Aug 9) we were at Big Bone Lick state park, and a couple of profs from the local university were out doing a public night at the campground. They had a 10" LX200 and an 8" SCT of some kind, Meade I think. They were doing the standard stuff. I brought out my binocs and put them on M22. When they were showing M13 (M13 would break your neck to look at on my photo tripod so I picked a lower globular cluster), and got integrated into the show so people could see what that type of object looked like in their binocs. They were nice guys doing a good show for interested campers.

After that, we went down to Mammoth Cave and then towards Boone. It was cloudy for a couple of days here so no astronomy activity. The cave is pretty neat.

Luckily we went there a few years ago when I only hauled along my C8; I learned at the time that "the mountains" in this case stink for observing. Even though they're at 4000 feet, it's very humid, the transparency is horrible, and the light pollution is quite bad. This is "lucky" because it saved me from trying to bring along the 15" dob on vacation and thereby irritating Jenn for no good reason :-)

Anyway, though there was scattered cloud cover most of the peak Perseid time, I woke up at 2:15AM the morning of the 13th, laid on the hill, and watched for about a half hour. I saw 3 Perseids in 3 or 4 minutes, the 3rd one bright and left a slight train that persisted for perhaps 5 seconds. Then 2 over the next 15 minutes, and nothing for the next 15 minutes or so. I went in at that point. My center of vision was on Cygnus, which was in the center of perhaps a 40 degree circle where stars were visible; all the rest of the sky was obliterated by a light dome from the nearby college town of Boone.

So a nice little bit of astronomy got done given the limitations of light pollution and weather and equipment space.

Does anyone know of a list of campgrounds that have good sky and good (the less the better) lighting???

John Ridley
<http://ridley.webhop.net>

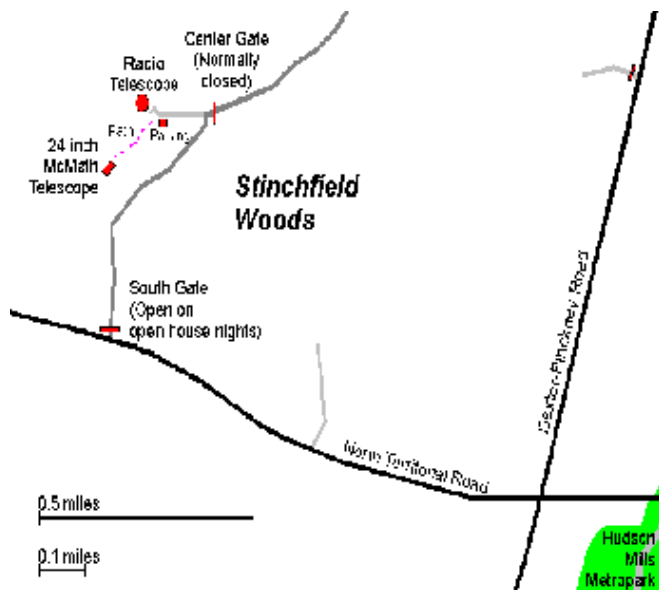


The space above should be filled with an article or picture, but you never sent it to me!
I need your help to fill the Newsletter!



Places and Times:

Dennison Hall, also known as The University of Michigan's Physics and Astronomy building, is the site of the monthly meeting of the University Lowbrow Astronomers. It is found in Ann Arbor on Church Street about one block north of South University Avenue. The meeting is held in room 130. Monthly meetings of the Lowbrows are held on the 3rd Friday of each month at 7:30 PM. During the summer months, and when weather permits, a club observing session at Peach Mountain will follow the meeting.



Peach Mountain Observatory is the home of The University of Michigan's 25 meter radio telescope as well as the University's McMath 24 inch telescope which is maintained by the Lowbrows. The observatory is located northwest of Dexter. The entrance is on North Territorial Road, 1.1 miles west of Dexter-Pinckney Road. A small maize-and-blue sign marks the gate. Follow the gravel road one mile to a parking area near the radio telescopes. Walk along the path between the two fenced in areas (about 300 feet) to reach the McMath telescope building.

Public Star Parties:

Public Open House/Star Parties are held on the Saturday before and after each new Moon at the Peach Mountain Observatory. Star Parties are canceled if the sky is cloudy at sunset or the temperature is below 10 degrees F. Call 480-4514 for a recorded message on the afternoon of a scheduled Star Party to check on the status. Many members bring their telescopes and visitors are welcome to do likewise. Peach Mountain is home to millions of hungry mosquitoes - bring insect repellent, and it does get cold at night so dress warmly!

Amateur Telescope Making Group meets monthly, with the location rotating among member's houses. See the calendar on the front cover page for the time and location of next meeting.

Membership:

Membership dues in the University Lowbrow Astronomers are \$20 per year for individuals or families, and \$12 per year for students and seniors (age 55/+). This entitles you to the monthly REFLECTIONS newsletter and the use of the 24" McMath telescope (after some training). Dues can be paid to the club treasurer **Charlie Nielsen** at the monthly meeting or by mail at this address:

**6655 Jackson Road #415
Ann Arbor, MI 48103**

Magazines:

Members of the University Lowbrow Astronomers can get a discount on these magazine subscriptions:
Sky and Telescope: \$29.95 / year
Astronomy: \$29.00 / year

For more information contact the club Treasurer. Members renewing subscriptions are reminded to send your renewal notice along with your check when applying through the club Treasurer. Make the check payable to "University Lowbrow Astronomers".

Newsletter Contributions:

Members and (non-members) are encouraged to write about any astronomy related topic of interest. Call or E-mail to Newsletter Editors at:

Mark S Deprest (734)223-0262 msdeprest@comcast.net
Bernard Friberg (743)761-1875 Bfriberg@aol.com to discuss length and format. Announcements and articles are due by the first Friday of each month.

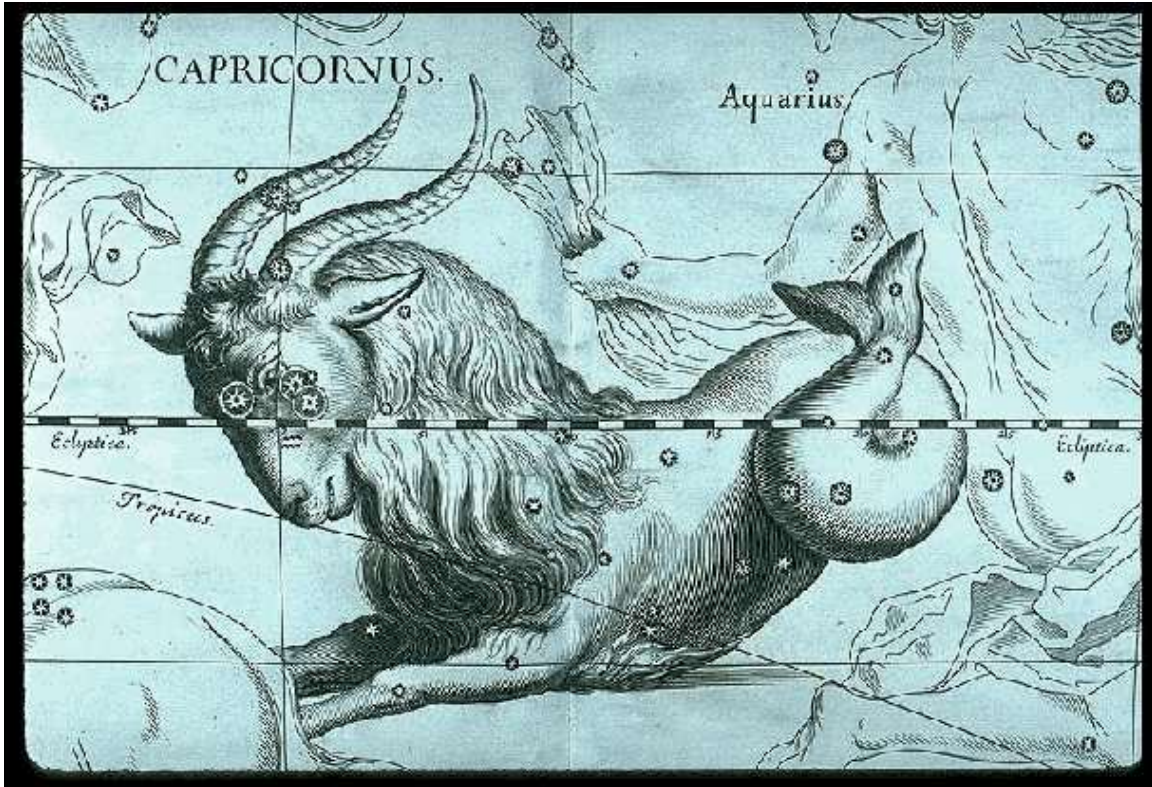
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Parking Enforcement	Lorna Simmons	(734)525-5731
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Lowbrow's Home Page:

<http://www.umich.edu/~lowbrows/>

Dave Snyder, webmaster



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Lowbrow's WWW Home Page:
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