

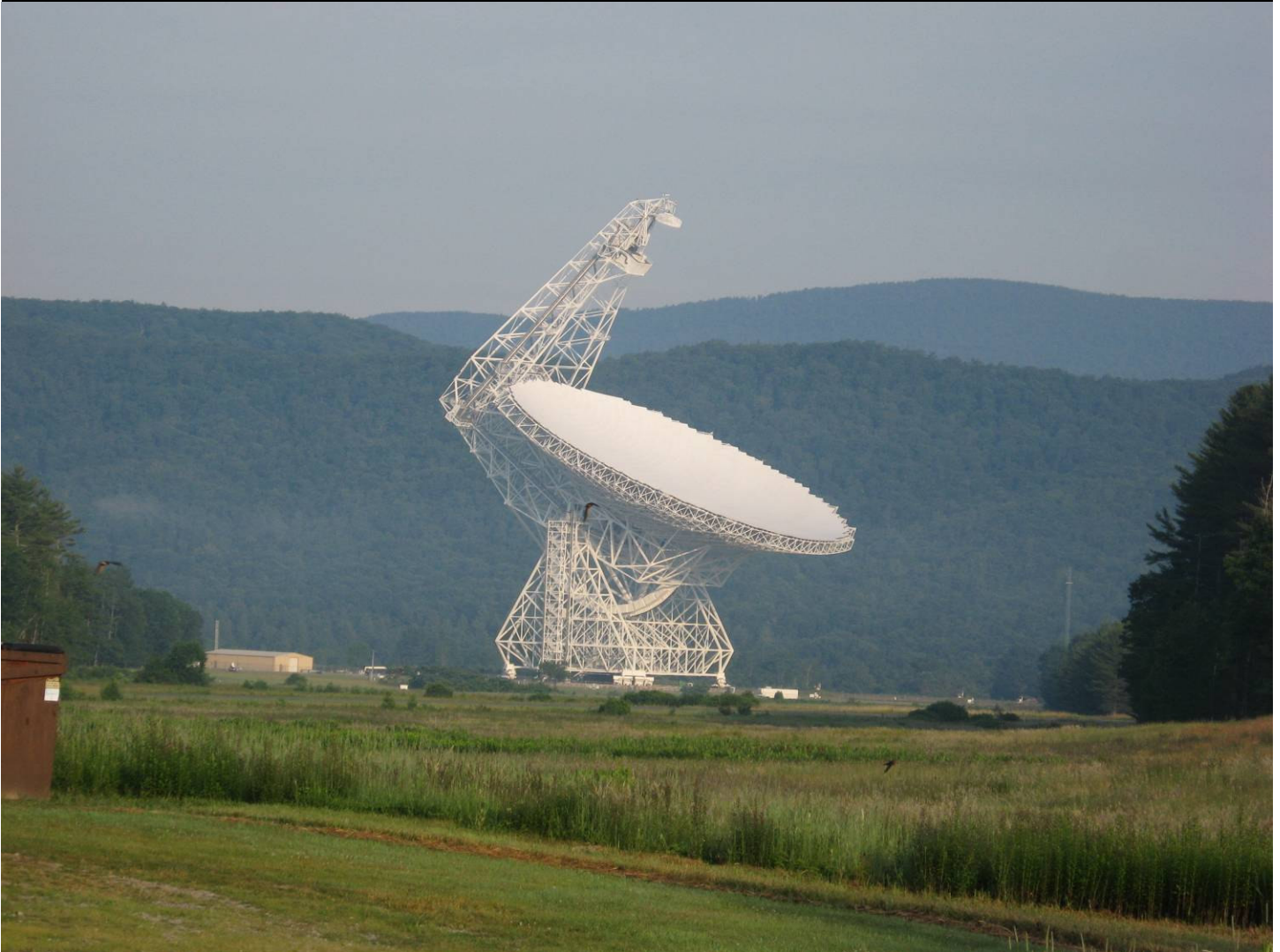
REFLECTIONS / REFRACTIONS

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University Lowbrow
Astronomers

July 2008

Volume 32 Issue 7



The GBT (Green Bank Telescope) in Green Bank, WV as seen from Camp Lowbrow at the 2008 Green Bank Star Quest.

Yasu & Yumi Inugi and Mark Deprest attended this event during the first week in July, and although the weather did not cooperate for observing the event itself was a lot of fun.

The organizers, planned out every waking minute with activities for everyone, and if you weren't into the activities and talks, you could always go site-seeing in one of the most picturesque areas in the country. I have many pictures of this trip and if you come to the next club meeting I might be persuaded to share them with you.

Yasu and Yumi seem to have had good time and enjoyed many of the activities and played a little golf while out there. Rain and night fog put a damper on the most observing, but Wednesday night we did get in some, under very dark skies.

I may put together a little article of review for this event, but for now you'll just have to enjoy this picture.

The Light of Other Days

Tom Ryan

I've recently been looking into effects of the fact that light travels more slowly through some substances than others, and that its speed through these substances is also frequency dependant. I'm doing this to be a better engineer. My simple research led to an article (published in this newsletter, and it will lead to more) in which it was implied that cold equations determine the speed of light in glass.

Really, this may or may not be true. The equations are a description of what we see, not a reason for it, and light's speed may be determined by things about which we presently have no understanding. What seems hard fact today can become truly meaningless tomorrow. Even Einstein said that he expected all of Physics to fall in the future (the sole exception being Statistical Mechanics, which really isn't Physics at all).

It is comforting to believe that the Universe is ruled by laws. As an engineer, I recognize and take pride in the fact that applying equations to Nature is what is keeping ninety-nine percent of humanity alive. But equations are not everything.

In 1966, Bob Shaw wrote a story that featured Slow Glass, which is glass in which light doesn't simply slow down by thirty percent or so, but rather takes years to travel a quarter inch. But the focus of the story is not on the technology. It is on the things that remain after everything else is gone. Its title is "Light of Other Days", and you can read it here:

http://www.scifi.com/scifiction/classics/classics_archive/shaw/shaw1.html



But before you do, please read the poem that inspired the story.

The Light of Other Days

By Thomas Moore. 1779-1852

Oft, in the stilly night,
Ere slumber's chain has bound me,
Fond Memory brings round the light
Of other days around me:
The smiles, the tears
Of boyhood's years,
The words of love then spoken;
The eyes that shone,
Now dimm'd and gone,
The cheerful hearts now broken!
Thus, in the stilly night,
Ere slumber's chain has bound me,
Sad Memory brings the light
Of other days around me.

When I remember all
The friends, so link'd together,
I've seen around me fall
Like leaves in wintry weather,
I feel like one
Who treads alone
Some banquet-hall deserted,
Whose lights are fled,
Whose garlands dead,
And all but he departed!
Thus in the stilly night,
Ere slumber's chain has bound me,
Sad Memory brings the light
Of other days around me.

Junior Lowbrows Update

By George W. Ferrier

We were unable to do much because of the weather and due to the fact that school is out and people are pursuing other activities. I was able to give 4 members an assignment to complete in two weeks.

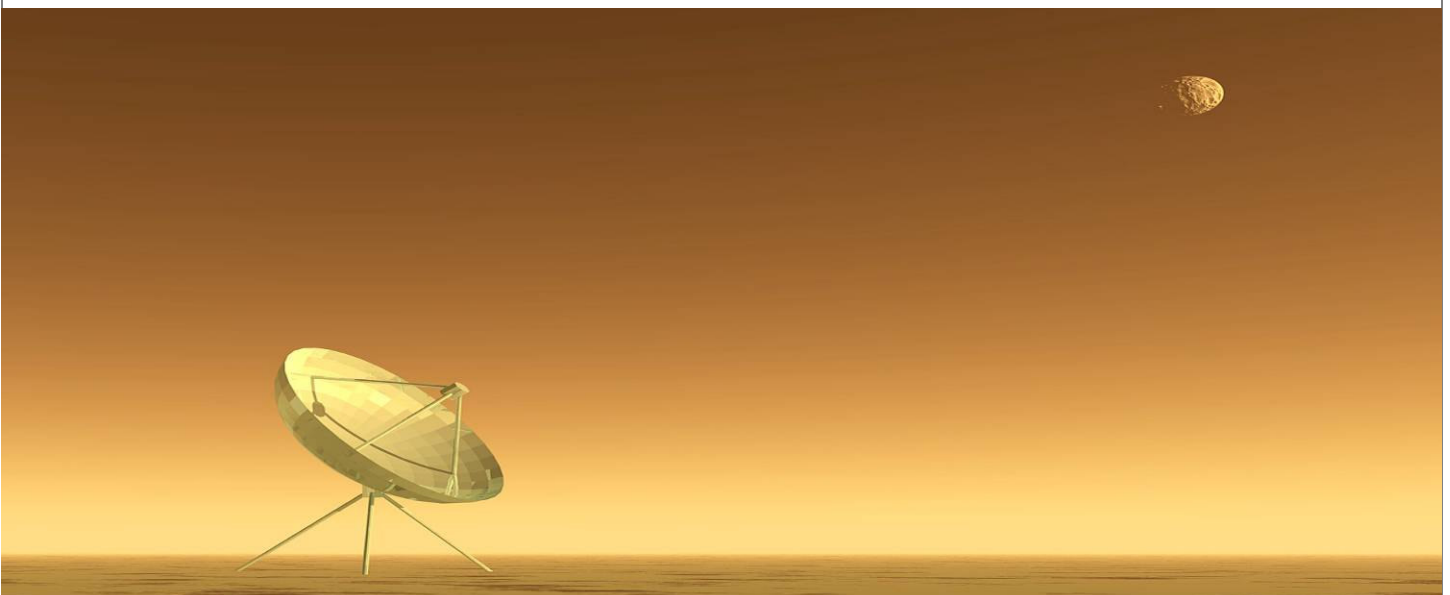
I had them to try and find 3 out of 5 features on the Lunar Surface, and all but two were able to accomplish this assignment, the Five were:

1. Mare Tranquillitatis
2. Tyco
3. Fracastorius
4. Copernicus
5. Mare Nubium.

Then during the day when the Moon was visible I had them try to locate the location where APOLLO 11 landed.

We were also able to observe some Man-made Satellites Passing overhead. We were able to view Envisat, on June 16th going SE to W at 32* at 22:13 hrs also again at 23:53 hrs SSW to W at 32* and at 23:10hrs we watched Genesis pass at 52* from NNW to WSW.

I am still trying to figure out how to use the Telescope but we were able to view Mizor & Alcor and also Arcturus on Three Different occasions. Because of the sky clarity being Magnitude 2 most of our clear nights we have not done much viewing. We have been doing some studying about our Universe and what it consists of and we talked about the life & death of stars and the difference between a Planet and a Star, also we talked about how the North Star changes during the years.



Happy One Year Anniversary!

By Belinda Lee

About a year ago I picked up a small box that changed my nights. That small box held a Questar Telescope; it was my Dad dream to share with his daughter exposing her to the wonders of space. Sadly, he only saw in its' small box that was tucked behind my drivers seat. After 10 years of disuse it was going to get some much needed use. Robert and I were about to begin star gazing we had talk about it for over a year. And the key element to star gazing, a telescope, was in the car. Our nights would never be the same.

The first night did not amount to much, just staring at the neighbors' bonfire. The next day was looking at the sun. A week later were looking at Jupiter. We quickly added to the list from there Alberio, the Hercules star cluster, the Dumbbell and Ring Nebula. The night madness built and Robert bought his own scope. We endured Michigan's mosquitoes and stayed up to 3 in the morning or later just gazing at the heaven. Sometimes we even got up at 4 am to look out at the heavens finding the Andromeda galaxy and the Orion Nebula. As our hours of sleep dropped the number of object we saw increased and we didn't complain we were the night time explores.

Next was if we couldn't convince our friends that staying up half the night to look at old light was fun well ... we'd just have pictures to share. Easier said that done! My hands are not steady but Robert's are so the first idea was to hold a camera over the objective and shoot. Sometimes it worked others it didn't. Also on the didn't work list a beep, beep, cheap, cheap CCD. It had a defective port for the cable, darn! The even sadder news was it would be over 3 months before they could a replacement to me. But, several months later came a nicer and 6 times more expensive CCD. Even better was not paying the extra money since the old one was defective ... can you say hooray! The replacement was a great addition to the observing kit washed away all the three plus months grumbling when is it getting here.

We discovered that star gazing was hard in our knees, back and neck and soon came the observing chair. In my humble opinion every telescope should come with an appropriate chair! Pain reduction, again, hurray!

We're cheered again finding the Lowbrow's! Hurray, an even darker place to see the night sky and a chance to look through a 24 inch telescope. How do you spell chinking?! We even met a few members. Happily wrote our checks to officially join the club.

A week later we're at Astronomy on the Beach sharing the night sky with folks of all ages. Robert won a calendar and some other gifts. My prize was the thrill of seeing another Questar! Charlie had the club's Questar at Kensington that evening.

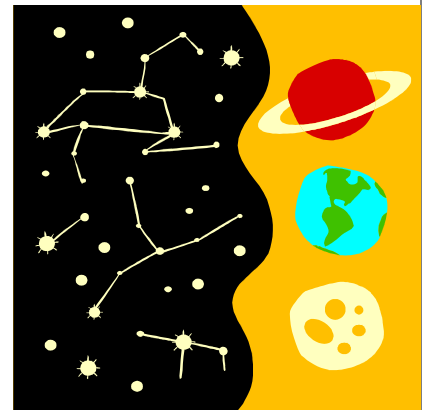
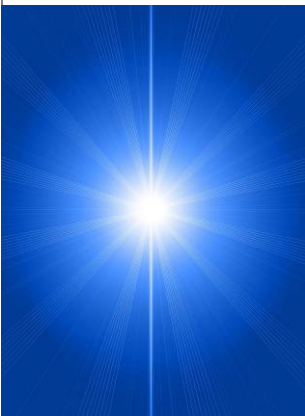
That led to being a Night Sky Network Co-Coordinator. If my scope was under used I made up for lost hours of viewing. Scout badges and time at the Natural History Museum racked up the view hours. It lead to a getting more scopes. A Burgess was my idea and a Dobsonian was a gift. A client gave me a 6 inch Criterion. It was learning new skills, collimation, using a finder scope and changing lens.

Then the list of gadgets! Filters, shrouds, red goggles, eye patches all added to the joy of sky watching. Going out to view the heaven meant turning on red lights, putting on goggles and collect more that just a chair and telescope. It turned into a joyful production.

Winter was challenging, a clear winter's night in Michigan is COLD! But, there were nights dressed like an Eskimo staring at the heaven. The nebula filter enriched the view of the Orion Nebula. It lead to the quest was for another famous nebula, the Horsehead Nebula. Though finding it before clouds could roll and the cold seeped to one's bones was a losing battle. But, a quick and rewarding offset was seeing Saturn and Mars.

The weather warmed again and it was time to really use the CCD and another hurdle, polar alignment. Polar alignment wasn't the big hurdle figuring out how to use the CCD was the hurdle. Beware when you get an instructional DVD verse a manual. But, in the course of a weekend there were the first images. That weekend was the one year mark. How things changed from bringing home a little box.

So, in wrapping up let me thank all the people not mentioned in the year's journey. You have not brightened our lives but have darkened the heavens so the twinkle in the sky is even brighter! The next year will be even better!



Sauce Pan

By Belinda Lee

Now you know I've really lost it! What does an article in titled sauce pan have in Reflections, humor me.

I awoke with a strong need for a sauce pan and for a cooking avoidant person this is cause for great concern. But, if that is really what I need lets get a colorful cheap sauce pan, fine! Off to the strip mall, and what a surprise, there is a new Rider's Hobby Shop! Even bigger surprise, the sell telescopes and have astronomy stuff!!

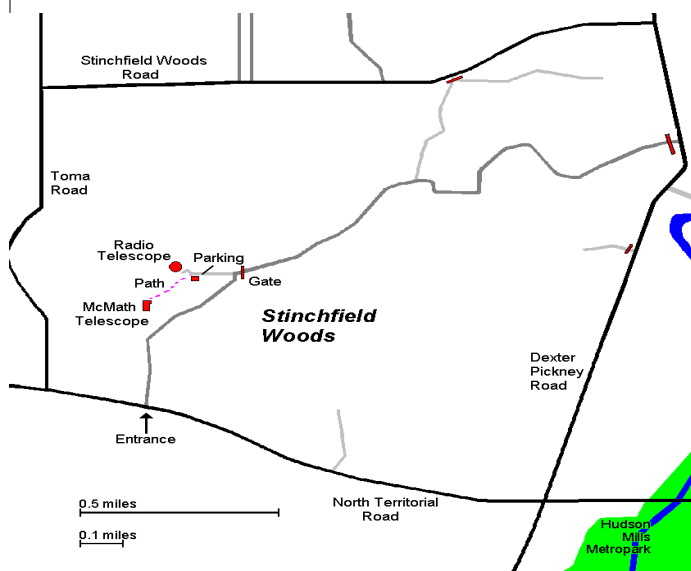
The owner, Eric, is excited to have a new store big enough to care astronomy stuff. Rider's was previously on the corner of Carpenter and Ellsworth. The new Rider's Hobby Shop is in the strip mall the corner of Carpenter and Packard. The phone number is 734.971.6116. At last we have a local place to get our gadgets! Eric is also excited to help post our open house schedule and any other events we have planned.

Oh and for the sauce pan, the need for a new one faded walking into Riders!

Places & Times

Dennison Hall, also known as The University of Michigan's Physics & Astronomy building, is the site of the monthly meeting of the University Lowbrow Astronomers. Dennison Hall can be found on Church Street about one block north of South University Avenue in Ann Arbor, MI. The meetings are usually held in room 130, and on the 3rd Friday of each month at 7:30 pm. During the summer months and when weather permits, a club observing session at the Peach Mountain Observatory 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" telescope which is maintained and operated by the Lowbrows. The observatory is located northwest of Dexter, MI; the entrance is on North Territorial Rd. 1.1 miles west of Dexter-Pinckney Rd. A small maize & blue sign on the north side of the road marks the gate. Follow the gravel road to the top of the hill and a parking area near the radio telescopes, then walk along the path between the two fenced in areas (about 300 feet) to reach the McMath telescope building.



Public Open House / Star Parties

Public Open Houses / Star Parties are generally held on the Saturdays before and after the New Moon at the Peach Mountain observatory, but are usually cancelled if the sky is cloudy at sunset or the temperature is below 10 degrees F. For the most up to date info on the Open House / Star Party status call: (734)332-9132. Many members bring their telescope to share with the public and visitors are welcome to do the same. Peach Mountain is home to millions of hungry mosquitoes, so apply bug repellent, and it can get rather cold at night, please dress accordingly.

Membership

Membership dues in the University Lowbrow Astronomers are \$20 per year for individuals or families, \$12 per year for students and seniors (age 55+) and \$5 if you live outside of the Lower Peninsula of Michigan.

This entitles you to the access to our monthly Newsletters on-line at our website and use of the 24" McMath telescope (after some training).

A hard copy of the Newsletter can be obtained with an additional \$12 annual fee to cover printing and postage. Dues can be paid at the monthly meetings or by check made out to University Lowbrow Astronomers and mailed to:

The University Lowbrow Astronomer c/o Yasuharu Inugi

**2918 W Clark Rd #203
Ypsilanti, MI 48197**

Membership in the Lowbrows can also get you a discount on these magazine subscriptions:

Sky & Telescope - \$32.95 / year

Astronomy - \$34.00 / year or \$60.00 for 2 years

For more information contact the club Treasurer. Members renewing their subscriptions are reminded to provide the renewal notice along with your check to the club Treasurer. Please make your check out to: "University Lowbrow Astronomers"

Newsletter Contributions

Members and (non-members) are encouraged to write about any astronomy related topic of interest. Call or Email the Newsletter Editor: **Mark S Deprest (734)223-0262** or msdeprest@comcast.net to discuss length and format. Announcements, articles and images are due by the 1st day of the month as publication is the 7th.

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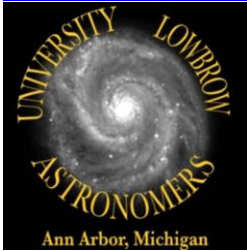


University Lowbrow Astronomers

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Reflections & Refractions

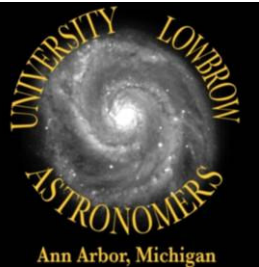


Website

www.umich.edu/~lowbrows/



Camp Lowbrow at the Green Bank Star Quest V 2008.



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