

BEFLECTIONS / REFRACTIONS

University Lowbrow Astronomers

October 2012

Volume 36, Issue 10

Lowbrow Summer: 2012

The Lowbrows had a very active summer from the from the solstice to the first day of fall. The newsletter doesn't have the space to report on all the events in one issue but this should give you an idea of the breadth of the club's activities. It is impressive and we should be proud of what we accomplished.--Ed.

Ann Arbor Public Library Loan-a-Scope Program: Telescopes Made Available to Area Families

This past spring the Ann Arbor Public Library, with librarian Lowbrow Amy Cantu leading the charge, launched it's telescipe loan program. Eight Orion StarBlast scopes were retrofitted by Lowbrow Clay Kessler and were introduced to the public at a Lowbrow/Library observing event at the Leslie Science Center at the end of April. Thinking the program would need more publicity to catch with the public, the public relations campaign included a second observing event at the end of June. The first event, though, saw all the scopes loaned out and by the time of the second event the waiting list for scopes had grown to well over one hundred.

Since the June 27th event had been publicized, it was held as scheduled, but due to the immediate popularity of the program no scopes were available for loan that night. The evening was a great success, with scores of families on hand to view the moon and Saturn.

Hoping to meet demand, the Library bought more instruments and held a retrofit party in the basement of the main branch August 25th, more than doubling the number of scopes available. The waiting list increased as well, though, to over two hundred.

--Jim Forrester

August 25th: New Batch of Loan-a-Scopes Made

From the left: George Piner, Librarian and Lowbrow Amy Cantu, Mystery Man in the Hat, Charlie Nielsen and Clayton Kessler.





Jack Brisbin and Paul Walkowski tinker away on the new StarBlasts.

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Okie-Tex Star Party September 8-15



Photo: Nathan Murphy

Lowbrows far and wide descended on the far western end of the Oklahoma pan handle and joined 300 other amateur astronomers at the Okie-Tex Star Party, September 8-15. Seven of the eight nights were brilliantly clear, making for quite a successful week. The perfectly timed Wednesday evening rain gave everyone an opportunity to catch up on some much needed sleep.

A highlight was NGC 6726, an emission nebula in Corona Australis. The bright stars blazing out of the fluorescing gas reminded everone of the height challenged desert dwellers of the first Star Wars film making 6726 the Jawa Nebula. Check out this Astronomy Picture of the Day: http://apod.nasa.gov/apod/ap120927.html

From the left: Nathan Murphy (now of Madison, WI), a rather surprised Chris Sarnecki reacting to a somewhat unusual guest, Honorary Lowbrow Rob Campbell (Long Island, NY), Robert Wade (Ledyard, CT), Jim Forrester, George Piner and Mark Deprest.--Jim Forrester

Lowbrow Calendar

Saturday, October 13, 2012. Open House at Peach Mt. Starting at Sunset (May be cancelled if it's cloudy.).

Friday, October 19, 2012. (7:30PM). Monthly Club Meeting. Documentary Film: The City Dark

Saturday, October 20, 2012. Open House at Peach Mt. Starting at Sunset (May be cancelled if it's cloudy.) (this open house is co-sponsored by the Ann Arbor District Library and the University Lowbrow Astronomers).

Thursday, November 1, 2012. (7:00PM). "A Voyage to the End of the Universe." Public talk by Terence Dickinson. This event is hosted by the Ann Arbor District Library and will take place in the downtown branch of the library.

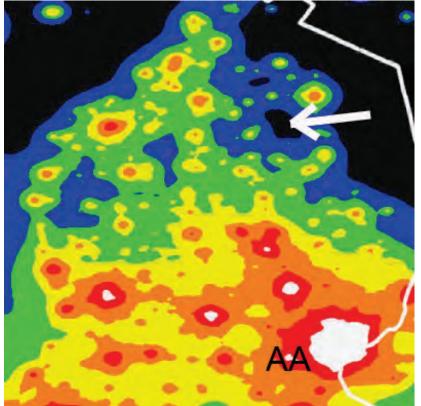
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The Darkest Spot in the Mitten

by Brian Ottum

By virtue of my volunteering at Bryce Canyon National Park, I'm known as a "Dark Ranger." So this summer I've been on a search for the darkest spot in lower Michigan. The journey starts with a detailed inspection of the light pollution map. You can see that there is a nice dark "hole" in the NW of Michigan:



This "hole is located east of Mio & Fairview, in the Huron National Forest. It is just 185 miles north of Ann Arbor, a 3hr srive. I figured that there had to be observing spots on the public land up there. Tony Licata, in a posting in the Michigan Astronomers Yahoo Group, said that he'd been looking in that area and found nothing. So I went to the "DarkSkyFinder" and "Blue Marble Night Lights 2010" websites fir detailed inspection. The national forest is the obvious target with just trees. lakes and the beautiful Au Sable River.

Google maps' satellite view of the area is several years old and poor resolution. However, Bing's aerial view is excellent. I found a dirt forestry road that had a good-clearing, located off a paved forestry road.

So on Monday, September 10th, I drove my small RV to the area. The entrance scared me, because the forest service had obviously dumped a couple cubic yards of dry sand on the road as it crossed a muddy low point. I got out and inspected. A tough decision – do I risk getting the RV's tires stuck in the sand, miles from the nearest person? But the lure of dark skies was too great. I backed up to the pavement, and gunned the RV. It seemed to float over the quicksand and then started up the hill. The dirt road had been slightly washed out from rains, but I was able to maneuver the RV from side to side to avoid the ruts and bottoming out. It was white knuckle time as I picked my way up the hill.

But soon I was on level ground, in a 900' long clearing, about 150' wide. I drove to the end of the clearing and parked. The site is nice and high, and not near any water. Soon the sun went down and it was time to get to work. I set up my camera, fisheye lens, and motorized mount to follow the Milky Way all night. [See the video at http://vimeo.com/49973087]

Once that was done, I got out my lounge chair and binoculars. It was easy to pick out Messier objects. So I got out my pocket sky atlas and started to pick out dark nebulae. Have you ever seen the "Funnel Cloud" dark nebula above Deneb? It is huge and distinct to the naked eye.

Coyotes called in the distance, and an owl hooted. Otherwise, there was very little noise. Almost too little. Quite unsettling for be ng miles from the nea est person.

I awoke the next morning to see that the camera was still automatically taking pictures, but rotated to point to the ground. Since Verizon cell service was TOTALLY unavailable, I rode my bike 5 miles to the east to get a good 3G signal.

Much of that day was spent listening to the 9/11 remembrance stories on satellite radio. It takes a lot of electrons to take all-night time lapse videos so my solar panel recharged batteries throughout the day. (The camera needs power, as well as the the anti-dew heat strip, and the motor drive.)

That night was also fantastic, with the Milky Way emerging quickly after twilight, directly overhead. I had fun taking some images while ZOOMING the lens. Looks like switching to warp speed!



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About 1am, I'm sitting in my chair and panning the binoculars through Cygnus. All of a sudden there was a shriek and wail that originated about 100' in front of me, in the woods. Shivers went down my spine and I jumped into the RV. There was another and I figured it was a coyote calling his buddies. Embarrassed, I went back to my chair outside. He was probably more afraid of me than the reverse.

That dark spot in the Huron National Forest was great, but it has three big drawbacks. First, the entrance

road is a bit scary. Second, the horizons are not good at all, with trees all around at about 30 degrees up. Third, there are NO facilities whatsoever. On the flip side, it is super secluded, super dark with no light domes at all.

Tony Licata found a more open site nearby, with better horizons. He and Mike Rousseau went there after the GLSG. The site is just a mile from the Horseshoe Lake campground in the Huron forest. We plan to all return there in mid-October, so I will have more to report. That site is "2" in the following map. My dark and rustic spot is "1."



THEN ON TO

The Great Lakes Star Gaze, Gladwin, MI



Observing field at the Great Lakes Star Gaze



Photo: Brian Ottum

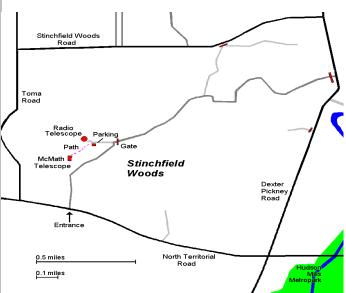
Brian Ottum got time lapse video of the all night activity and set it to music. You can view it here: http://vimeo.com/49606864

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Places & Times

versity Lowbrow Astronomers. Dennison Hall can be found on and \$5 if you live outside of the Lower Peninsula of Michigan. Church Street about one block north of South University Avenue in This entitles you to the access to our monthly Newsletters on-line at our 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 Michi- http://www.umich.edu/~lowbrows/theclub/ gan'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

Dennison Hall, also known as The University of Michigan's Physics Membership dues in the University Lowbrow Astronomers are \$20 per year & Astronomy building, is the site of the monthly meeting of the Uni- for individuals or families, \$12 per year for students and seniors (age 55+)

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.

(See the website

for more information on joining the club).

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.

Newsletter Contributions

Members and (non-members) are encouraged to write about any astronomy related topic of interest.

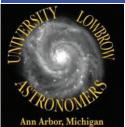
Lowbrow's Home Page

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



University Lowbrow Astronomers

Reflections & Refractions





Website
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Star-hopping katydid advising greatful Lowbrow last July

