

Harford County Astronomical Society



Monthly Newsletter

Volume 36 Issue 5 May 2010

Public Star Party (Open House):

Saturday, May 22, 2010

at Dusk

At the HCAS Observatory

General Meeting:

Thursday, May 27, 2010

at 7:00pm

In the Observatory Classroom

Please check our new website for possible schedule updates and changes:

<http://www.harfordastro.org>



<http://astroleague.org/>



<http://nightsky.jpl.nasa.gov/>

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HCAS General Meeting

The Meeting was called to order by President Tom at 7:08pm. The minutes of the March meeting were published in the Newsletter, and were approved as published.

Newsletter issues: As seen in the most recent Newsletter, the club has been doing a lot of observing! Kudos to those who publish what they observe.

Treasurer's Report: Tim reports that we have \$3932.89 in the checking account. He has received many renewals, but they have not been deposited as yet. He will let us know how many at the next meeting. In attendance at the meeting tonight was David Schwaber. He owns a pair of 25X100 Binoculars.

Awards: Grace made a special presentation of the Dark Sky Investigators/Junior Astronomer's Awards. Angela Rusek and Maggie Carey have observed all 12 items on their cards, and were awarded Trading Cards, a Planisphere, Certificate, Patch and a special red flashlight. Congratulations to Angela and Maggie!

Outreach: Recent activity - Earth Day at Abernethy Festival Park on April 17 brought us 249 visitors. The very next day, Prospect Mill Elementary School had their own Earth Day Celebration and we received 71 visitors. Parkville Elementary School invited us to set up telescopes on April 23, and we had 84 visitors. We received two wonderful thank you letters in response to this event. Mike Talbard did a presentation of the Solar System in your Pocket to 31 kids at St. Margaret's School.

Upcoming Activities: Broad Creek is having approximately 225 boy scouts registered for an astronomy program on April 23. We have free use of the facility at Broad Creek, and it is important that we have as many members available for this outreach as possible.

Grace reminds us that if we do an outreach in which we use NSN materials, we need to input the event on the NSN website to receive the pins for this year.

Observatory Operations: Larry reports that the College's laptop has been reformatted and completely overhauled. Mark reported on the progress of the dome renovations. He said that

there is some heavy work to be done, welds need to be completed. He will aim to have the dome completed for the May Open House. There was discussion as to how to get the data from the telescope to the classroom. Larry, Gary and Mike will look into a network cable from the dome to the classroom.

Website: Larry reports that the picture galleries are updated, he is still looking for pictures of members with their telescopes. Contact him directly if you would like to have that put in the website.

Observing Reports: All recent activity at Broad Creek and other locations was reported in the April edition of the newsletter. Secretary's note: In the interest of conserving room in the Meeting Minutes, I will not publish the Observing Reports in the Minutes. Upcoming events: Cherry Springs Star Party June 10-13; it looks like we will have a large HCAS turnout this year! Stellafane in Vermont and Almost Heaven in West Virginia are coming during the Summer. Black Forrest at Cherry Springs will be September 10-12.

Night Sky Network: Teleconferences have been falling on our meeting nights, so Grace is recording them. We did receive a shipment of "The Two Inch Universe" and a box of DVDs.

HCAS40: The pins are here, and they look great. Phil will print up the certificates of those who complete the list. The list is available as a PDF file on the website. Two members have completed the list already.

Elections: All nominees were elected:

Board of Directors (3 positions):

Joe Manning
Gary George
Dave Jayroe

Officers (all current officers are re-elected):

President - Tom Rusek
Vice President - Grace Wyatt
Treasurer - Tim Kamel
Secretary - Karen Carey

Congratulations to all those elected or re-elected.

Miscellaneous Business: Karen was asked as to the status of the IYA2010 Podcast dedication to Harold Berman. She reports that she has not moved forward on this, but asked for someone to write the dedication. Mark will email her the dedication. Pamela Gay from Southern Illinois University, Astronomy Cast and the IYA Podcasts will be at the STScl on May 27 in the afternoon and at Balticon during the Memorial Day weekend. Karen will be attending the talk at the STScl, if anyone is interested in carpooling, please contact her directly. "Hubble 3-D" is showing at the IMAX theatre at the Smithsonian's Air and Space Museum. Ricky Hubble shows concern for the cars at the Observatory during Open House events. We do have the sign available for use, we should be using them. Jeremy asks if he can do some more renovations to the Club's 13" Dobsonian. Cost will be approximately \$260. Board will discuss and advise.

The meeting was adjourned at 8:00.

– *Karen Carey, Secretary*

**New Members
May 5, 2010**

Please welcome the following three new members:

James Locke
Clair Bressler
Timothy Willig
Steve Matysek

Welcome aboard!

**Treasurers Report
May 9, 2010**

Current balance in checking account is: \$4225.77
Current Balance in PayPal account is: \$105.30

Membership now stands at 53 individuals and families. This is now the highest membership roll we have had in several years.

25 members have renewed their membership for the 2010 to 2011 fiscal year.

- *Tim Kamel*

Observation Reports

The best times to observe at Broad Creek are between the last quarter and first quarter of the lunar cycle. The next two such periods are :

**May 4 through May 18, 2010
June 4 through June 15, 2010**

Try to keep some of these dates open on your schedule!

Because of the unpredictable weather conditions, we cannot set a specific date and time to observe. Sometimes the decision to go to BC is made within a few hours before sunset. In any case, all club members will be notified by email.

For any questions, contact Roy Troxel at: rtroxel@comcast.net

**Broad Creek
April 14, 2010
8pm - 12:15 am**

This was a fairly warm evening, with the temperature in the 50s and no dew. Paul, Grace, Bill, Phil and myself were observing.

Began the session by looking at Venus, which is now getting lower on the horizon. Used the #58 green filter and saw a gibbous phase.

Spent some time with Mars, which was directly overhead. Used two eyepieces, 175x and 121x, as well as a red #25 filter, but couldn't see any details on the planet.

Although the Orion Nebula was low in the southwest, I was able to see an unusual amount of detail, using the OIII filter. I could easily see the northeast portion of the globe of the nebula. I could also see the Rosette Nebula, using the OIII, but couldn't see the Flame or IC434. I was able to see The Crab Nebula, also. It was viewed best through the OIII.

Rising in the east was the M3 globular cluster in Canes Venatici. Although the sky was still a dark blue, I could see individual stars. Portions of the sky were very clear that night.

Later, saw M53 globular cluster in Coma Berenices. A second globular in that constellation, NGC50503, appeared only as a dim fuzzy object.

Other objects observed were:

Saturn: Viewed its satellite Titan to the right (west) of the planet, and another satellite to the left, just off the tip of the ring. Also saw the shadow of the rings on the planet, plus a belt in the southern hemisphere.

M5 globular cluster in Serpens: This was low in the east, but it appeared brightly in the clear air.

Using the 12mm Nagler eyepiece (121x), I began hunting for galaxies in the constellations of Coma Berenices, Ursa Major, and the "bowl" area of Virgo. Many of the galaxies were brighter than usual, and if I used averted vision, and nudged the telescope slightly, they appeared without a lot of hunting. The sky was transparent enough to allow me, in many cases, to distinguish the core from the star clouds and spirals. I was also able to determine overall shapes of many of the galaxies - elongated, edge-on, elliptical, circular, etc..

M51: Obtained a clear view of this object, displaying a spiral structure, as well some individual star clouds.

M82: Was able to use 175x on this galaxy, which brought out its distinguishing black dust clouds and enormous areas of nebulosity.

By 12:15, I decided it was time to pack up. It had been a successful night of spring observing.

**Broad Creek
April 15, 2010
8:00pm - 12midnight**

The temperature averaged about 60 degrees, making it a little warmer than the previous night.

I began observing just after sunset, when Venus appeared just above the trees along the western horizon.

As the sky grew darker, I spied the moon, about five degrees lower than Venus. It was about 2% illuminated, and on its side, forming a very thin smile. I had never seen the moon like that before. It was almost comical! A few degrees lower, and seen through the leaves of the trees on the horizon. was Mercury. Used my 10x50 binos to view moon and Mercury.

Despite some cloud interference, I was able to continue observing galaxies in the Coma-Virgo-Ursa Major region, which was overhead.

- Roy Troxel

Observation of April 30, 2010

Tonight's observation at Camp Spencer was for the Boy Scouts. Camp Spencer is toward the southern end of Broad Creek. We normally observe at Astronomy Hill. There were over 200 scouts registered. I arrived there at 7:10 PM, the temperature was a very comfortable 73 degrees.

I went about setting up the 16 inch Dobsonian before it got dark. HCAS members that participated were; Larry, Gary, Tom and Angela, Mark, Mike, Paul, Dave, Bill, Tim and myself. Objects that I showed to about 40 scouts and parents and scout masters were, in no specific order, Saturn, Titan and several other moons. Saturn was very steady and yellow in color. Mars was a very obvious red. Polaris with its 9th magnitude companion, Castor, in Gemini, displayed its two brightest components (it has 6!). Cor Caroli in Canes Venatici was nice along with M3, a very bright globular cluster some 32,000 light years away. M3 was very impressive, some of the comments were awesome!, cool!, neat! Swinging up to Ursa Major, M81 and M82 two rather bright galaxies did not disappoint. The sky was very steady tonight. M82 showed plenty of detail with the 12mm eyepiece (153x). This is a cigar shaped galaxy with quite a bit of mottling. It apparently interacted with M81 some 200 million years ago and caused quite a bit of disruption throughout the galaxy (M82). On the other hand, M81, apparently came through this encounter unscathed. The bright central core was completely surrounded by the glow of the spiral arms. Throughout the session I also used my laser pointer showing where Mars and Saturn were in sky. I also used the laser pointer to show how to find the north star, Polaris, by pointing out the Big Dipper's pointer (stars that point to Polaris). I also showed the Beehive cluster, M44 in Cancer, a very bright and large open cluster.

As the crowd dwindled down and we could see the Moon behind the trees, we decided to close up and the last of us left at 11:45 PM at a comfortable 61 degrees.

Phil Schmitz

Observation of May 4, 2010

Used both the 10x50 binos and 25/40 by 100mm binos. Also used Bill's C11 at Astronomy Hill. Temperature was 72 degrees and the seeing was a 4 and the transparency a 5. We had clouds at dusk, but they went away shortly. Spotted Venus at 8:20 PM. Saw the Winter Triangle, Sirius in Canis Major, Procyon in Canis Minor and Betelgeuse in Orion. Mars was seen as was Saturn with Titan. M35, an open star cluster in Gemini with the 25/40x100 binos was large and nice as was M44, the Beehive open cluster in Cancer (which was seen in the 10x50's).

In Bill's C11, we saw NGC 2392, the Eskimo Nebula, a bright planetary nebula in Gemini, as well as NGC 2371-2, another planetary in Gemini that is extremely faint. Looked at M81, a spiral galaxy and M82, an irregular galaxy, also saw M101 a large diffuse spiral galaxy, all in Ursa Major. Moved on to some of the Coma-Virgo cluster galaxies; M87, M86, M84, M100 and M85. In the constellation of Leo, M65 and M66 were seen. These galaxies are about 50 million light years away from us. In Virgo, M104, a very bright spiral galaxy, whose dust lane was easily visible was seen. In Coma Berenices, NGC4565, a very elongated spiral galaxy was seen with its small central bulge along with the less impressive NGC 4494, another galaxy.

M56, a diffuse globular cluster and M57 were both seen in Bill's C11. Staying with Bill's C11, M63 a very bright spiral galaxy in Canes Venatici was seen along with M3, a extremely bright globular cluster. M51, a bright spiral galaxy and NGC 5195 a nearby irregular galaxy were also seen. Back in Coma Berenices, M64, the bright Black Eye spiral galaxy was nice. M53 did show some stars in the periphery.

The double double in Lyra was seen in the 25/40 x 100 binoculars as was M57 (which was seen earlier in Bill's C11).

It was 59 degrees when we left at 12:10 AM.

Phil Schmitz

Outreach Programs

Outreach Program April 30, 2010

Astronomy Hill, the dark site that the Harford County Astronomical Society uses, is located at Broad Creek Scout Camp. In addition to infrequent use by a rescue dog group and by some scouts, we seem to be the primary users of the site. In the 5½ years since I have been a member, I personally have never seen any one else there except for people passing through.

During this period, we have never been asked by the scouts or the Park Rangers to pay any fees or provide any services. So, when they asked that we provide a program for a Scout function, we were pleased to do so and responded in a big way.

The function itself was held at Camp Spencer which, by my reckoning, was less than a mile south west of Astronomy Hill. There are lots of amenities here for the groups using the site, including a pool, archery, rest room facilities, etc.

We had 10 members responding that included Larry, Gary, Tom, Phil, Bill, Mark, Paul, Mike, Dave and me.

Participation by Scouts was light. Initial projections were for 225 scouts and leaders, mostly 9 year olds but also older scouts. I do not think we had 50 scouts and leaders come by. We had this program originally planned for Saturday, 5/1 but the program was changed by the scouts to Friday due to a conflict with other activities. We heard later that there was some confusion about which day it was. We also found that there were some meetings going on that delayed the scouts from coming. We were scheduled to start at 9:00 but the event did not really start till about 9:30. By 11 PM, there were only adults left as most of the young scouts had turned in. Our group started packing up at about 10:30 and the last of us left at about 11:30.

We could not have asked for a better night. It was clear, with fairly good seeing. We were able to preview several good sky objects including the Mars and Saturn. No luck with Venus though, as the scouts did not show up in time before Venus dropped below the sky line. The moon was still in the tree line as we left. I kept M-44 in my GOTO though out the night as I used a laser pointer to shows constellations and planets. Other members showed other objects including galaxies, clusters and Nebulas. I had my first look at the Ghost of Jupiter, which looked great in Mikes SCT. Saturn and five moons were spectacular in Phil's Dob. Lastly, we were treated to an ISS flyby at about 9:30 PM.

I had a great time while I was there but feel a little disappointment at the low participation by the scouts. We were there in force to show our appreciation for what they have done for us. What a shame we could not have reached more of them.



Open House April 24, 2010

Tonight was our April open house and it was completely overcast and drizzling, with no hope of redemption. None-the-less, we had 8 visitors plus a few students from Garry Lang's astronomy class at HCC. The latter promptly left when they realized that there would be no viewing.

Mark and Karen held a Q&A session and let the discussion take them far and wide. Phil did a session on meteorites and Grace did a piece on what is a planet.

The balance of the night turned into a cleanup session. We removed the old mirror grinding table from the grinding room, placed some pallets down and placed file cabinets on them so that we can begin the process of putting away the Astronomy and Sky and Telescope magazines. We also placed a book shelf into this room to put away some of the books and materials that we have been receiving of late.

Besides Mark, Karen and I, also attending for the club were Tony, Gary, Mark, Grace, Mike, Dave, Tom, Phil, Roy, Paul, Karen and Maggie.

Tim Kamel

Outreach Program April 23, 2010

On Friday, April 23rd, we were finally able to complete the outreach program at Parkville Middle School that we had been trying to orchestrate for almost a full school year. We had a tentative date set for almost a week, but the weather forecasts were poor, prediction was for rain. None-the-less, we held off on canceling, hoping for a change. As Friday approached, the forecast improved till the prediction was for clear skies. We decided that we would be a go. During the day, the skies were perfectly clear, but as the time for the event approached, a thin layer of clouds approached that obscured some of the fainter objects in the sky but did not interfere with the brighter objects we wanted to show case.

Participating for the club were Mike, Grace, Larry, Gary, Bill, Mark, Phil and me. We were able to set up about 200 feet behind the school. Luckily, we could drive out on the field and set up instead of lugging the equipment from the parking lot. We could not do much with the yellow lighting and a floodlight that was aimed along the back wall of the school near the computer lab. This is pretty typical for the schools that we do outreach for.

Participation by the school was 84 guests, including 2 teachers and one administrator. The rest were students in the four seventh-grade Gifted and Talented program and their parents and siblings. The two teachers were the science teachers that were doing a segment on astronomy.

This program was a little different than what we normally do in that we were required to feature specific targets in our scopes. These targets matched up with what the students were taught in class on the day of star party. The students each had a card listing the six objects (plus three alternates) and those that viewed the six objects got a small gift (light stick) and were exempted from taking a test. To assure that the students were doing the viewing, we were issued small stickers to place on the students' cards.

Objects chosen were the Moon, Venus, Orion Nebula (star birth), Betelgeuse (dying star), Saturn, and the Pleiades. As the night progressed, we lost our view of the Pleiades to an obstructing tree and substituted the Praesepe star cluster.

The increasing cloudiness notwithstanding, we had a good night. The students were well behaved and seemed to enjoy the session. We concluded the session a little after 10 PM.

By 11 AM, I had unpacked and was looking from my back yard at perfectly clear skies!!!

Miscellaneous

**Cherry Springs
Annual Star Party
June 10 – 13, 2010**
(Thursday thru Sunday)

Registration is now OPEN!

For more information and online registration, visit:
<http://www.astrohbg.org/CSSP/Registration.html>

This newsletter is the official publication of
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