

The High Desert Observer

The Bulletin of the Astronomical Society of Las Cruces

August, 2009

President's Message

August is here and the monsoon season brings us beautiful mornings and cloudy afternoons and evenings. It's a great time to take those vacations to other parts of the country where monsoon is a word they think only applies to the tropics. However if you go on vacation don't carry your eyepieces in the back of your truck, or they may vibrate into disassembled parts as George found out upon his return.

There were several members representing us at the City Hall July 29th to discuss the proposed revised Outdoor Lighting Ordinance. I will bring copies to the monthly meeting. It seemed to be a step forward until I discovered they had removed the deadline that required all lighting to meet the current ordinance. It seems the new ordinance will only apply to new construction or major renovations. Any lighting that is currently legally in place will forever be grandfathered. It spells out quite clearly what is and is not allowed. It also is clear on how it is to be enforced. For those of you who have neighbors who insist on illuminating your property there is a section defining "Light Trespass," what is and is not allowed and how to get it enforced. However, again, as long as they have it in place before the new ordinance is put into effect we have no recourse. It was announced that a meeting to get public comment on a proposed new lighting ordinance will be scheduled for some time in the future. So when it is announced I will be asking for support to go and voice our position. I am planning to attend and welcome as many of you as are able and willing.

The Upham lighting situation continues. I thought we had resolved the issue when they reported to Rich that the light had been turned off until it can be repaired, It was the wrong light!!! The light that is causing the problem is next to the 25 at the exit past the Upham exit and it belongs to a Christian broadcasting radio station. Rich Richins was contacted by the radio station. They claim it would cost \$39,000 to retrofit their antenna with red lights. Apparently red lighting also requires a repainting of the antennas. So that's not likely to occur. They did, however, seem willing to turn down the light intensity when we're using Upham. They need to notify the FAA/FCC each time, so we would need to give them a usage schedule well in advance. Rich can just forward them the regularly-scheduled DSO nights (from the calendar). More to come as it develops.

Our Webmaster Rich Richins is the proud winner of first place in the 2009 Astronomical League Webmaster Award competition. I am very proud of the job Rich has been doing and it is a well-deserved award. Way to go Rich!!!

White Sands Star Party is coming up. It's just a couple weekends away, Sept, 11th and 12th, and we, the ASLC have agreed to provide the workshop speakers. So if you have an area of interest you would like to share, step up and get your name on the schedule. Let's continue to provide the quality of information and presentation we have in the past. Mike Mosier keeps asking for information to put in the schedule. I finally have some to give him at our last meeting. Dave Dockery, Steve Barkes, Ron Kramer, and I volunteered to do workshops. We could use a few more volunteers. I also need titles for the workshops to submit for the workshop schedule.

Your President and humble servant,

Jerry Gaber, 575-382-9183

The Astronomical Society of Las Cruces (ASLC) is dedicated to expanding members and public awareness and understanding of the wonders of the universe. ASLC holds frequent observing sessions and star parties, and provides opportunities to work on club and public educational projects. Members receive *The High Desert Observer*, our monthly newsletter, membership in the Astronomical League, including AL's quarterly *A.L. Reflector*. Club dues are \$35 per year. Those opting to receive the ASLC newsletter electronically, receive a \$5 membership discount. Send dues, payable to ASLC with an application form or a note to: Treasurer ASLC, PO Box 921, Las Cruces, NM 88004.

ASLC members are entitled to a \$10 discount on subscriptions to *Sky and Telescope* magazine.

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This Month's Observer

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Next Meeting

The next monthly meeting will be held August 28th at 7:30 pm in the usual place (Main Campus of the Dona Ana Community College, room 77); this month's speaker will be Howard Brewington. The topic will be "Life at Apache Peak Observatory."

The Imaging Group will meet at 7:00 pm.

Events

The next monthly dark sky viewing nights will be held on Saturday, Aug. 22nd at the Upham site. The next moon gaze will be held at International Delights Cafe on Sat. Aug. 29th. For these and other events, please see the ASLC website for further information:

<http://www.aslc-nm.org>.

September Issue of the *HDO*

A note to all members, we need more contributors ! Sharpen your writing skills, share your knowledge and help bolster our newsletter! Articles for the September issue should be sent to Tony Gondola by the 10th of the month. Text should be sent as email (acgna@comcast.net) or as an attached Microsoft Word document. Images should be sent in jpg format.

If you have any questions about submitting materials for publication in the *HDO*, please don't hesitate to contact me at 373-5104, acgna@comcast.net.

Thanks in advance! Tony Gondola, Editor, ASLC Newsletter

July 2009 ASLC Meeting Minutes

Call to Order: Jerry Gaber, President, Astronomical Society of Las Cruces (ASLC), called the meeting to order at 7:32 pm., 24 July 2009, Rm. 77, Dona Ana Community College.

President's Comments: Jerry Gaber welcomed the group and recognized new members or visitors present. New member Iyad Hijazi, a NMSU graduate student, introduced himself and his son Muhammad.

Secretary's Report: The minutes for the June meeting were submitted as published in the current issue of the Club newsletter, the *High Desert Observer (HDO)*. Wes Baker moved to accept the minutes as published, Vince Dovydaitis seconded. The minutes were accepted by the members present. There was not an additional Secretary's report.

Treasurer's Report: The Treasurer was present and noted that she is recovering well following hip replacement surgery the first of the month. She did not have a current report of the Club's finances. Dues or other payments can be submitted to her following the meeting. There was no additional Treasurer's report.

Committee Reports:

Observatory Committee: Rich Richins, Committee Chairman, is out of town. There was no progress to report.

There were no additional committee reports.

Old Business:

1. Club-logo Apparel – Ron Kramer asked for an expression of interest from the members present in additional apparel items. He needs a minimum of twelve (12) for an order. Items available include t-shirts, polo shirts, denim shirts, hats, caps, and “hoodies.” Get with him following the meeting to inform him of items, sizes, quantities, etc., that you are interested in.
2. Meade Solarscope – No update was available because of the Treasurer's recent health issues. The scope ordered by the Club was to have shipped no later than May 2009. She will contact Meade “one last time” on the status of the order and report at next month's meeting. Steve Barkes will continue research into other vendors and brands.
3. Upham light – Rich Richins has been trying to establish who is responsible for the flashing light impinging on the Club's DSO site at Upham. American Tower, Inc. is the owner of the tower and was apparently unaware that the red lens covering the light had been damaged/broken (there are no sensors on the tower to detect such damage). The tower is due for maintenance and the light will be repaired at that time.

4. Meeting Presentations – Jerry Gaber has contacted Valerie Atmar, Wirt's widow. He had noticed that the links to the recorded lectures/presentations from the Club's website were broken. He wanted to know if the Club would still have access to them or if they were lost. Mrs. Atmar emailed her son and had him reboot the server and the links are back up. She is going to get the Club the software to continue to record the presentations and she has contacted Dr. Judd about possibly training some of the Club members in using the QCShow software. Dr. Judd is a high school teacher in El Paso and teaches the use of this software application. The software package costs \$249.99 and includes five (5) machine licenses. Bert Stevens made a motion that the Club purchase the software to continue recording meeting presentations, Janet Stevens seconded. During the ensuing discussion, Steve Barkes pointed out possible issues with the hardware the software would be loaded on and that the Club may need to purchase a dedicated laptop(s) to support this effort. Wes Baker stated that there are several “inexpensive” laptops available, especially as the fall school semester begins, that could support this software. The question was called and passed with no opposition. Jerry also asked Mrs. Atmar for permission to do some sort of memorial page to Wirt for the Lecture page on the Club's website and she thought that would be a nice gesture.
5. Public Outreach Coordinator – Bernie Joplin is the new coordinator, taking over from Chuck Sterling, who must step down for personal reasons. The Club thanks Bernie for stepping forward and volunteering to undertake this task and thanks Chuck for the excellent job he has done and for a smooth transition of responsibility to Bernie. There will be a MoonGaze at International Delights Café (IDC) on 25 July, weather permitting. The “official” MoonGaze noted on the website’s Calendar of Events will be 01 August at IDC.
6. 100 Hours of Astronomy - Another 100 Hours of Astronomy event will possibly be held in October '09 as part of IYA 2009. Kirby Benson and Wes Baker will continue to track this event. Note: Kirby had cataract surgery on 23 July but is doing well.
7. White Sands Star Party (WSSP) 2009 – WSSP 2009 is scheduled for 11-12 September, a ¾ Moon weekend. The Alamogordo club has asked that the Club again provide mini-workshops and seminars during the day on Saturday. Jerry has at least five (5) volunteers, so far, but topics are still to be determined. Get your presentation planned and inform the President so he can provide a list to the other sponsors.
8. Beginners/Imagers circle – Thanks to Steve Barkes for tonight’s presentation. Vince Dovydaitis will present prior to the August meeting and Ron Kramer will present in September. Additional volunteers are needed for the rest of the year.
9. *HDO* articles – Tony Gondola needs input for each issue. Brief articles are fine and will be appreciated. Please submit them to him by the 10th of each month.

There was no additional old business discussed.

New Business:

1. Star Parties – Jerry Gaber has been in discussions with Allen Scott of The Albuquerque Astronomy Society (TAAS) about a possible joint club star party. The one planned for the Datil Wells area 19-20 June was cancelled because of weather. They are now looking at an October/November event either at Datil Wells or Valley of Fires State Park. At nearly 7000 feet, the Datil Wells area will be progressively colder later in the year and Valley of Fires SP is becoming the favored site. Please let Jerry know your preferred site and date for this event.
2. September Monthly Meeting – Jerry Gaber will be out of town on 25 September.

There was no additional new business for discussion.

Ron Kramer offered a motion to adjourn and Bill Stein seconded. The motion passed and the business portion of the meeting was adjourned at 8:02 pm.

Announcements:

Vince Dovydaitis announced that he still has posters signed by Clyde Tombaugh available for \$100 donations to the Astronomy endowment. Please see him after the meeting.

Bernie Joplin has an introductory level telescope for sale. Asking price is \$250. See him for details.

Nils Allen has spent the last 4-5 weeks in Utah presenting night sky programs under the auspices of the National Park Service. There were weather issues early on, but all-in-all it was a good experience and provides a source for a future *HDO* article.

Achievements:

Steve Smith was presented his Messier 110 certificate earned in March.

Dave Dockery has obtained the Messier, Caldwell, and Outreach awards through the Astronomical League (AL).

Rich Richins placed 1st in the AL webmaster competition.

There were no additional announcements made.

Presentation:

This month's program was "Various Amateur Astronomy Organizations" by members of the Club.

Astronomical League (AL), Nils Allen – The AL is a not-for-profit alliance of 280+ amateur astronomy clubs with its headquarters in Kansas City, MO. It promotes the science of astronomy, fosters observational and computational work, and craftsmanship opportunities in the various fields of astronomy. It also provides a medium for correlating amateur activities and professional research and encourages and coordinates activities of amateur astronomical societies. The AL consists of ten (10) regions (ASLC is in the Southwest Region) and there are opportunities for individuals to serve at both the national and regional levels. The Club is a member of the AL and each Club member is part of the AL. A significant benefit of AL membership is affordable liability insurance for the Club. More information is available at <http://www.astroleague.org>.

Association of Lunar and Planetary Observers (ALPO), Joseph Mancilla – ALPO was founded in 1947 by Club founding member Walter Haas as a medium for advancing and conducting work by both professional and amateur astronomers who share an interest in Solar System observations. ALPO was an international organization from the beginning. Joseph noted that it has been very useful in improving his observing skills and has given him an opportunity to contribute data to the science of astronomy. ALPO has Lunar and Planetary observing training programs (mentorships) that he has found very useful. Joseph related his experience of locating Pluto earlier this year utilizing techniques learned through ALPO. More information is available at <http://www.alpo-astronomy.org>.

Minor Planets Division, ALPO, Jerry Gaber for Fred Pilcher – The Minor Planets Division of ALPO was established in 1973 to observe asteroids, primarily visually. The majority of minor planet observations and light curve work are performed by amateur astronomers with professional astronomers relying on the data collected. Club member Fred Pilcher was a charter member and the original coordinator of the division.

International Occultation Timing Association (IOTA), Bert Stevens – IOTA was founded by a group of amateur astronomers, including Club member Bert Stevens, interested in the US space program. These amateurs supported the space program by observing and timing total and graze occultations of celestial objects by the Moon in preparation for the lunar missions. Several software applications have been developed for analysis of these observations. More information is available at <http://www.lunar-occultations.com/iota/iotandx.htm>.

American Association of Variable Star Observers (AAVSO), Bill Stein – Two (2) percent of visible stars exhibit some level of variability. Founded in 1911, the AAVSO obtains data on this variability through observation. Through collaboration between professional and amateur astronomers, AAVSO is frequently asked to support scientific projects. All that is required is a set of eyes and an AAVSO chart. Club member Bob James is very active in AAVSO observing and has logged in excess of 10,000 observations. Additional resources are available through the AAVSO website. More information is available at <http://www.aavso.org>.

This presentation was not recorded for rebroadcast on the Internet. Other meeting presentations can be accessed on the web at <http://www.aicsresearch.com/lectures/aslcnm>.

The presentation for the August meeting will be Howard Brewington on “What It’s like to Work at an Observatory.”

The July 2009 monthly meeting concluded at 9:20 pm.

-Respectfully submitted by John McCullough, ASLC Secretary

Promoting the Night Sky at Cedar Breaks National Monument

By Nils Allen



Well, what an experience! Bonnie and I recently completed our first Astronomy Volunteer-In-the-Parks (Astro-VIP) experience, working for the Night Sky Program under the National Park Service. For a month we served at Cedar Breaks National Monument (CEBR), a fairly small and not-well-known park located in southwest Utah, about 30 miles from Cedar City. The leadership there has had informal star parties using local volunteers before, but never a consistent night-sky program. So they asked for an experienced astronomer to stay on-site and work to create just that, in return offering a free camp site and \$25/day stipend. So off we went! Leaving on June 11th by way of Tucson and Flagstaff (we visited one of our kids in each town). We arrived at CEBR on the 13th, after flogging the RV and telescope trailer up, up, up. Some snow was still on the ground as we neared our 10,350 ft. destination – yes, it was quite cold, as

promised. Upon arrival we were pleasantly surprised to be directed to a full hookup site by the camp hostess – that was more than was promised. It turned out that they still lacked a second camp host and thus we could use that site until the position was filled. So Bonnie volunteered to serve as the other camp hostess to have something to do (and allow us to stay in the site). We quickly found out that, due to the limited staff, everyone does everything – and there was much to be done! We had no idea how much time and effort would be required (most of the time I helped Bonnie with her hosting duties).

Initially the staff seemed uncertain about what to do with me as a Night Sky Program volunteer – this was something new for them (and me too!). So we settled on having major programs each Friday and Saturday night, since weekends tend to be when a significant number of the public actually might be around and come to a star party. I also decided to hold informal astro-events in the campground any night when we discovered at least a few folks interested in the night sky. This worked because we could query campers during evening camp-host rounds, or later at the nightly Ranger-led presentations held at dusk in the camp amphitheatre. Actually we didn't start having more than a half-dozen visitors in the campground till July arrived – lots of folks would pass through every day but few would stay. Those that did stay were generally unprepared for June's chilly, breezy night air, and would shiver somethin' fierce as they viewed constellations and a few telescopic targets (and then leave quickly!) It was just unfortunate that darkness came so late in the evening (10:30-ish) and also that the Milky Way wasn't well placed in the sky till after 11pm.

Anyway, our first week at ‘the Breaks’ included occasional rain, sleet, snow and too many clouds to see much of the night sky. It also included beautiful views with deer, squirrels and chipmunks roaming around. When it was too cloudy for night sky viewing, I worked on improving the CEBR telescope (a hand-me-down 10" Meade Starfinder Dobsonian) and helping to plan a soon-to-be-developed “Astronomy Camp Site”. I chopped firewood as I assisted Bonnie and the other camp hostess, Sara, also had a hand at cleaning bathrooms, picking up trash, recyclables, and patrolling the grounds. The high point at the end of the week was a 2-day visit by Teresa Jiles, the Night Sky Program coordinator who recruited me. She came up to take a set of ‘sky darkness’ data, and to provide me training and materials related to doing night sky programs ‘the NPS way’. Teresa’s background includes working as a professional astronomer and doing public programs – just before taking this job she worked as a Night Sky

Ranger at nearby Bryce Canyon NP. Since this week was also the annual Astronomy Festival at Bryce, as part of our training she took Bonnie and I over there to observe how they put on a major public night-sky program. The idea was to be in ‘stealth mode’, and not let the Bryce staff know we were nearby volunteer astronomers. So, after a very scenic drive, Bryce Canyon sunset views, dinner at the lodge there (thanks, NPS!), and listening to a great ranger talk on light pollution, we joined the crowds in the telescope field for the concluding Star Party. Unfortunately it had clouded up by then, so we opened up and had a good time chatting about astronomy and star parties with the Rangers & lead volunteers, including some folks we will be working with at Lake Powell in September. Most of the 30-odd volunteers were from the Salt Lake City astronomy club – they put on a top-notch event compared to what we could offer at CEBR, but we had some consolation...my 22" was the biggest scope at either park!

Back at the Breaks the second week was warmer and sunnier. At times in the afternoon I set up my PST to offer visitors a view of the sun at Point Supreme (the main viewing area near the Visitor’s Center ... Bonnie had started working there). Much of the time there was little to see on the solar surface, so a more popular activity was to use my mounted 20x80 astro-binocs on the rim for folks to see close-ups of the who-dos, arches and caves (at CEBR you can’t really hike out into the rocks like you can at Bryce, so it’s the only way to see things up-close). It was fun to interact with the wide variety of tourists who came to see the views from our 10,350’ high viewpoint – actually I think more than half were not Americans. Once we held a morning program for about 70 youngsters from a Cedar City elementary school. At mid-week we joined an employee all-hands BBQ and got better acquainted with the rest of the CEBR staff, an eclectic mixture of new young kids and seasoned ‘older’ Rangers. Since we were only there for 1 month of their 4-month season (and support from other astronomer-volunteers is iffy at best), I promoted a night-sky training program for interested staff members to take, so they could lead their own star parties. A handful responded, so we prepared and provided training sessions on how to use their scope, do a laser sky tour, and generally do a public star party. This turned out to be complex as staff work schedules weren’t real supportive of staying out till 11pm to get training – but a few staffers got trained enough to get by. Because we attended virtually all of the nightly Ranger talks, Bonnie and I got ‘trained’ ourselves, learning much about the geology, plant and animal life and Indian culture of the area. On our day-off (we did have a few!) we zipped over to Zion National Park – that is one big impressive park with lots of visitors! After being in daily temperatures around 60-70 degrees max, the 100-degree temps were toasty!



Zion was visually awesome, where one spends much time looking *up* (as compared to *down* at CEBR). We took the Emerald Pools hike that was listed as 2+ miles - I'm sure someone took off the "0" at the end because it felt like 20 when we got back (ok, I'm exaggerating, but not much!).

Our third week there kicked off the CEBR annual Wildflower Festival, their biggest overall program. Due to the cool temperatures the flowers were behind schedule, but they quickly caught up. It was warming up and being the 4th of July week the campground was filling up - life around the park (human & otherwise) was blossoming even if the flowers weren't. Bonnie and I took a day-off to visit Kolob Canyons (another part of Zion) - the rugged red rocks were nice eye-candy but the 107 deg. temp encouraged us to go back up the mountain pretty quickly. The new camp-host Greg finally arrived so the daily duties became much easier for both of us, thank goodness – I could focus mostly on astronomy activities. Saturday July 4th was a Star Party night at Point Supreme – we watched fireworks in the distance at Brian Head, a nearby ski resort community. We had held a handful of parties at the Point by then, but were yet to have a really good night – if it was clear the wind and cold temps limited what could be accomplished. But due to our high elevation the 'seeing' tended to be quite good, so my 22" kept yearning to catch more of those pristine photons!

The fourth week was really busy! New flowers were blooming every day, many more folks were visiting the park, and I was finishing up the staff training and star parties (finally a series of clear nights!) My daughter had come to visit, and she and Bonnie conspired to surprise me with a birthday cake at an evening staff BBQ. Bonnie finally got to go on a "marmot hunt" (with camera) and then we did a lengthy 'flower hike' on the Alpine Pond trail, one of the best. It turned out that probably the best observing night for our whole visit came the night AFTER the final scheduled star party (and of course the big Dob was packed securely away in its trailer!) Just no luck at all... Then it was time to pack the RV, though it felt like we had just begun. One more necessary activity - Cedar City is the home of the annual Shakespeare Festival and we didn't want to leave without seeing a play - we finally did just that on our last night there. On our departure day staff members brought us a cake and card and we said good-bye to all of our new friends – it was kinda hard (it wasn't how long we stayed as much as how involved we got). If we didn't have other firm commitments we would have liked to stay a while longer....

So off we headed for 2 days at Glen Canyon National Rec Area and Lake Powell – talk about a change in scenery and climate (no trees, 106 degrees!) We wanted to check out the set-up there since we're assigned there for the month of September, and also leave the RV. Turned out that a scheduled star party was happening our 2nd day there, so we joined in with the 22" and got acquainted with the local Astro-Rangers and how they

operate (they were excited more about my big Dob than anything). We left the RV, trailer and scopes stored there for our return and headed towards home via Monument Valley and Cortez, CO - the next day was spent exploring Mesa Verde National Park.



What a rush of beautiful sights and intriguing people! Despite our duties and busy schedule we did manage to take in six major scenic destinations and get to know many terrific NPS folks. I would recommend this program to any of my fellow astronomers who like working with the public in beautiful surroundings – contact me if you want more info. For Bonnie and I this was a good fit, a nice blend of beneficial service and personal enjoyment. Guess that's why we're heading back for more!

M-16 The Eagle Nebula

By Jerry Gaber



The Eagle Nebula is part of a diffuse emission nebula, or H II region, which is catalogued as IC 4703. This region of active current star formation is about 6,500 light-years distant. The tower of gas that can be seen coming off the nebula is approximately 57 trillion miles (97 trillion km) high.

In early 2007, scientists using the Spitzer discovered evidence that potentially indicates the Pillars were destroyed by a nearby supernova explosion about 6,000 years ago, but the light showing the new shape of the nebula will not reach Earth for another millennium.

Image Details:

Taken at Las Cruces NM Stargate Observatory 16-Aug-2009 with SGIB ST8 through an LX200 14" at F10 self guided with internal 237 and AO8 lum (1Hr 20ea 3 min Subs) + (15Min Ha 3ea 5Min subs) red (30Min 10ea 3 min Subs) + (15Min Ha 3ea 5Min subs) green and blue 30Min 10ea 3 min subs aligned and combined with nebulosity processed with Photoshop.

ASTRONOMICAL SOCIETY of Las Cruces
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