September 2013

Sponsored by the Santa Barbara Museum of Natural History



"Ahhh... It's so nice to have landed!" Photo: Mike Farris.

OUTREACH SUMMARY

Since the last newsletter, AU volunteers Chad Caprio, Mike Farris, Art Harris, Chris Larson, Pat & Chuck McPartlin, Janet & Martin Meza, Bonnie & Bruce Murdock, Max Neufeldt, Edgar Ocampo, David Salvia, Colin Taylor, Tom Totton, Tom Whittemore, and Paul Winn showed sky goodies to 600 customers.

OUTREACH FOR SEPTEMBER

AU monthly meetings start up again in September after the summer break. Here are the events scheduled so far for the month. Outreach events are subject to change, so to get the latest information on schedules, or directions, just contact Chuck at 964-8201 or macpuzl@west.net

SUNDAY, SEPTEMBER 1, SETUP 7 PM

Telescopes for Bacara Resort, on their Miró Lawn. Contact Chuck for instructions if you haven't come before

FRIDAY, SEPTEMBER 6, 7 PM

Monthly AU meeting in Farrand Hall at SBMNH. See a quick planetarium show, then hear a talk on astrophotography by our own Paul Winn!

SATURDAY, SEPTEMBER 7, 7 PM

Telescopes for Carpinteria State Beach, just to the right before the main entrance, across from the ranger station.

FRIDAY, SEPTEMBER 13, SETUP 7 PM

Telescopes for campers at Refugio State Beach. We set up in the day use parking lot at the southwest corner of the park.

SATURDAY, SEPTEMBER 14, 5 PM

Monthly planning meeting in the classroom next to Javier's office.

SATURDAY, SEPTEMBER 14, 7:30 PM

Monthly Public Star Party at SBMNH, next to Palmer Observatory.

TUESDAY, SEPTEMBER 17, SETUP 7 PM

Telescope Tuesday at the Camino Real Marketplace. We set up in the plaza next to the theater.

FRIDAY, SEPTEMBER 20, SETUP 7 PM

Monthly Public Telescope Night at Westmont College, at the observatory adjacent to the baseball field.



JPL Cassini Outreach Specialist, Jane-Houston Jones, took time to explain some more technical issues to the SBAU visitors. Photo: Mike Farris.

FRIDAY, SEPTEMBER 27 (AFTERNOON) THROUGH SUNDAY, SEPTEMBER 29 (MORNING)

Annual AU campout at the Mohawk Shores group campsite at Cachuma Lake. The Saturday dinner will be a catered event at 5:30 PM. The number of cars we are permitted to have with the site is limited, so carpool or come early if you can. If we run out of car permits, and you have to pay at the entrance gate, keep your receipt for reimbursement from the AU.

Information on the Cachuma Lake Wildlife

Cruises: Be sure to reserve a place if you want to take the cruise on Saturday (10 AM to Noon and 3 PM to 5 PM) or Sunday (10 AM to Noon)(meet at the marina 30 minutes before)! Climb aboard the "Osprey" for a 2-hour lake tour with a Santa Barbara County Park Naturalist. The cruise takes a look at area wildlife, wildflowers, and resident birds along the shore. Reservations: (805) 686-5050 weekdays, (805) 686-5055 weekends. \$15/adults; \$7/child 4-12 years old; please, no children under 4.



The public gathers at Westmont. Photo: Tom Totton.



Art Harris ponders his deep sky target list at the Bacara. Photo: Tom Totton.

From the President's Pen...

Mike Farris

I have been thinking about the SBAU and what we do! I believe as one of the top clubs in the world, we have done a great job at sharing the sky with people who would otherwise not get the chance. I remember the first time I looked through a scope and how wonderful that was. I also remember when I joined the club and how much it impacted me when I learned how large our universe was and the great distances between the stars and all the other wonderful details it had to offer.

But most importantly, I appreciate all the great people in the club who give you a very warm welcome and take the time to educate, share, and teach you about your scope, their scope, and the night sky. This, I believe, is the most important part of what we do, and so I feel that this will have a very positive impact on the people we touch. May I be bold enough to say that this might even change some people to be better human beings, with a greater understanding of what makes us tick and how it all started 13.7 Billion years ago?

So I ask you to make a difference and help us share the universe with more people by letting them know about our club, so we can have a bigger impact on the world and broaden their knowledge of the night sky. They too will see the world with new eyes and pass on the positive experience to even more people!

I would like to thank the following people who helped with the Astrovaganza day time event: Pat, Chuck, Javier, Julio, Zak and the Quasars, Tom Whittemore, Tim Wittenburg, Tim Crawford, Ed Edwards, Art Harris, Edgar Ocampo, Janet & Martin Meza, Jerry & Patricia Wilson, Ruben Gutierrez, Jim Williams, Ros Perry, and Lorraine Cass. You guys did an amazing job! Thanks a million!

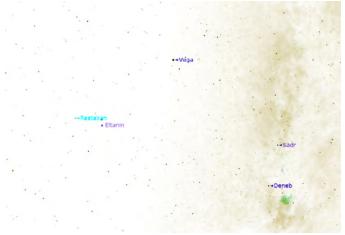
More recently, about 40 of us went to see the Space Shuttle and visit JPL. All had a great time! When you walk into the building that houses the Shuttle, the first thing you say is WOW! It is really big! Did you know that each thermal tile cost \$2000 and there are thousands of them and they range from 1/2" to 4" thick? The JPL tour is really something to see and very informative and it's just amazing all the technical things they do there. Should we do

this again, please don't miss it!

Finally, don't forget that this Friday, September 6th, is our first meeting of the Fall and the big not-to-bemissed AU campout this month at Cachuma Lake. I look forward to seeing you soon!

A Question of Magnitude...

T. Whittemore



Now that Draco is high in the sky at about 9:30PM, here's a fun exercise in stellar magnitudes that you can do – and maybe share with the public at outreach events. How bright is a star, anyway? In the box above are six stars which vary in magnitude from 0 to 5. Vega and Deneb are magnitudes 0 and 1, respectively. To the west of these lies the head of Draco, the Dragon, with stars of magnitudes 2, 3, 4 and 5. I have marked Rastaban and Eltanin for reference. Look up into the sky tonight and see if you can determine which of the stars in the dragon's head have magnitudes of 2, 3, 4 or 5. If your sky is reasonably dark, you will be able to see which of these is the brightest, the next brightest, and so on. Remember that, in astronomy, the brightest of these four stars glows at magnitude 2 and the dimmest at magnitude 5. When you finish, go back to Vega to appreciate the fact that Vega glows with 100 times the intensity as does your magnitude-5 star!



Grinding mirrors at the Tinkerer's Fest. Photo: Tom Totton.

AU Information Box

President: Mike Farris 637-3300

president@sbau.org

Vice President: Tom Totton 562-8795

vicepresident@sbau.org

Secretary: Colin Taylor 967-8140

dancingmagpie@cox.net

Treasurer: Pat McPartlin 964-8201

treasurer@sbau.org

Equipment: Art Harris 968-4017

n6is@cox.net

Outreach: Chuck McPartlin 964-8201

outreach@sbau.org

Newsletter: Tom Whittemore 687-2025

kometes@aol.com

Refreshments: Janet & Martin Meza 450-8383

Webmaster: Paul Winn 886-2319

webmaster@sbau.org

SBMNH Astronomy Programs Manager

Javier Rivera 682-4711x173

jrivera@sbnature2.org

AU AstroNews, the monthly publication of the **Astronomical Unit (AU)**, is mailed to the AU membership. For publishing consideration for the next month, submit astronomical items by the 20th of the current month!

AU annual membership rates:

Single = \$15 Family = \$25

AU mailing address:

Astronomical Unit c/o Santa Barbara Museum of Natural History 2559 Puesta Del Sol Road Santa Barbara, CA 93105-2998

On the Web: http://www.sbau.org

September 2013						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 BACARA 7PM	2	3	4	5	6 SBAU GENERAL MEETING 7PM	7 CARPINTERIA STATE BEACH 7PM
8	9	10	11	12	13 REFUGIO STATE BEACH 7PM	MONTHLY STAR PARTY SBMNH 7:30PM
15	16	17 CAMINO REAL MARKETPLACE 7PM	18	19	20 WESTMONT COLLEGE 7PM	21
AUTUMNAL EQUINOX 1:44 PM	23	24	25	26	CACHUMA CAMPOUT (afternoon)	28 CACHUMA CAMPOUT (all day)
CACHUMA CAMPOUT (morning)	30		1	1		

The Astronomical Unit

c/o Santa Barbara Museum of Natural History 2559 Puesta Del Sol Road Santa Barbara, CA 93105-2998