

The Observer

SAN

BERNARDINO VALLEY AMATEUR ASTRONOMERS

Member of The Astronomical League

<http://sbvaa.org/>



Volume #53, Issue 12

Since 1958

December, 2011

Meeting:

Saturday, December 3
between 3 and 5 pm.

Shakey's Pizza

836 W. Colton Ave,
Redlands, CA 92374
Tel. 909-793-5993

Program

Annual Holiday gathering



There will also be a **White Elephant Gift exchange***. For those wishing to participate please bring a nice wrapped gift..... 'value not to exceed \$25.00.' Check with Tom or Rudy for more details.

Tom Lawson tlawson@linkline.com

Rudy Rodriguez RudyRStar@yahoo.com

* Also known as Yankee Swap' (New England), Kris Kringle, Dirty Santa, GiftWar, Grinch Exchange, Rob Your Neighbor, Nasty Christmas, Chinese Gift Exchange, and Thieving Secret Santa.

SBVAA Officers

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Calendar of Upcoming Events

November 26, Star Party, Johnson Valley

December 3, Club holiday get together at

Shakey's Pizza

836 W. Colton Ave.

Redlands, CA

Time: 3:00 to 6:00 p.m.

December 26, Star Party, Johnson Valley

* * * Special Notice * * *

Our **2011 Holiday Get-Together** Has Changed!

The correct Date Time and Place is:

December 3rd, 2011 between 3 and 5 pm.

Shakey's Pizza in Redlands

836 W. Colton Ave, Redlands, CA 92374,

Tel. 909-793-5993

The menu will be pizza, chicken and mojo potatoes

The Club will buy the main entree 🍷😊

Members and Guests buy your own Drinks, Salads, etc.

The Carnegie Observatories, Part 2

A Brief History

In 1904 George Ellery Hale obtained support from the newly formed Carnegie Institution of Washington to found the Mount Wilson Solar Observatory in the mountains near Pasadena, California. Hale was determined to push beyond the descriptive astronomy of earlier generations to understand the internal physics of the Sun and the stars. In pursuit of this goal, stellar telescopes soon followed; first the 60-inch, then the 100-inch Hooker telescope, each the largest in the world at the time of its construction.



George Ellery Hale

The Mount Wilson telescopes transformed astronomy and astrophysics. It was with these that Shapley mapped the globular cluster system of the galaxy, Hubble discovered the expanding universe, Baade first recognized the phenomenon of stellar populations, and Adams, Joy, Sandage, and others established the empirical basis for theories of stellar structure and evolution.



*The 100-inch
Hooker Telescope*

Striving to push deeper into the universe, in 1928 the Carnegie and Mount Wilson astronomers began work with the California Institute of Technology on a 200-inch telescope on Palomar Mountain. They jointly managed both sites until 1980.

A desire among Carnegie astronomers for an observing station in the Southern Hemisphere,

which would provide access to the Magellanic Clouds and the center of the Milky Way, led to the establishment in 1969 of Las Campanas Observatory, located at a superb site high in the southern reaches of Chile's Atacama Desert. The principal telescopes at Las Campanas are the Swope 1-meter telescope, the du Pont 2.5-meter telescope, and the twin 6.5-meter Magellan telescopes. Carnegie operates the latter for a consortium whose other members are Harvard, MIT, and the Universities of Arizona and Michigan.

*Las Campanas
Observatory, Chile*



Carnegie is a very special place, and the environment of the Observatories reflects the values of an institution dedicated to enabling exceptional scientists to pursue their ideas with complete freedom. This freedom permits Observatories scientists to pursue long-term projects whose pace is dictated by the pace of discovery itself, rather than by the need to justify the next grant or the next allocation of telescope time. All Staff Members are free to use their time as they see fit, and each uses it differently. Some develop instruments, some are involved in the affairs of the Observatories or the astronomical community, some pursue mostly their own research. A few work alone, but an increasing number are part of broad collaborative projects, both within and beyond the Observatories.

*Twin 6.5 meter
Magellan
Telescopes*



It is this exceptional environment that has enabled the relatively small Carnegie staff to make disproportionately large contributions to the field of astronomy for over 100 years.

Afton Canyon Star Party Report

By Mike Ratcliff

The SBVAA had two star parties on the weekend of Oct 29. I and several other hardy souls went to the more distant Afton Canyon site seeking dark skies. There were four members led by Cliff, plus John, Robin, and myself. On Friday night, the others were in the main campground. I came in late after dark Friday and set up on the group camping site above the main campground, then joined the group for Saturday.

The road was a big issue last year due to damage from heavy rains. This year was much better. The road was well graded up to the group site. The last part of the road going down to the main campground was not quite as good but a lot better than last year. You just had to be a bit careful in a couple of spots. When I got to that point at night, the headlights were highlighting the uneven road just like the lunar terminator, and it spooked me a bit, so I backed up a bit and stayed at the group site the first night. What can I say, I spook easily and, besides, it was nearly Halloween too. That's my excuse and I'm sticking to it.

As far as conditions, the surprising item was the colder temperatures. We were all a little bit under-prepared as the previous week was pretty warm. Wind was not an issue fortunately. Transparency was good to very good at times for me on Friday night. Saturday was OK. Seeing was fair at best both nights. However, we all turned in by 1 a.m. and can't say much about later on when seeing can get better.

Cliff had invited several groups of friends who turned out to be very enthusiastic, so much of Saturday night felt like a successful outreach program with many "oohs" and "aahs." We had a good time.

Cliff brought out his 18" dob and I had my 16" dob. But the most photogenic setup had to be John's, with 3 refractors mounted on a single

tripod mount. To me it had a missile launcher look to it. And the views were impressive too. Nothing like a dark sky and a wide field of view to look at the Milky Way with.

Jupiter looked nice, and for the first time I saw what are called "barges". These are small but dark storms that at first glance look like shadows of one of the moons. But true shadows are circular, and these were too elongated. I looked at some recent photos on the CloudyNights.com forums and, sure enough, there they were. Two barges easily noticeable. One post on the forum indicated that these aren't storms actually but openings in the upper clouds. The great red spot also well seen.

As for objects seen, we had a tour of many of the fall highlights, too numerous to list. Some of the more memorable and off the beaten track were the Cats Eye nebula and its central star that would pop into view if you focused carefully, two dark lanes in the Andromeda Galaxy, and the Helix Nebula a large but dim planetary nebula. Also lesser knowns such as NGC 246, the "skull" nebula, NGC 253 and NGC 247, elongated galaxies not that far from us. 253 easy to see and has good detail. 247 much dimmer but about the same size and distance from us. I usually try some challenge objects, and the dwarf galaxy IC1613 in Cetus was not too difficult on Friday night, meaning that the conditions were pretty good. Dark sky a must on this one. Even some nights at Grandview aren't good enough. Cliff showed us the Fornax galaxy group on Saturday night. Near midnight, we all got blasted by the Orion nebula that is the brightest nebula in the northern sky. All in all a good time.



(Photo by Robin Hennen)