

The Observer

SAN BERNARDINO VALLEY AMATEUR ASTRONOMERS

Member of The Astronomical League

<http://sbvaa.org/>



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Since 1958

January, 2013

Meeting:

January 26, 2013

Location:

San Bernardino County
Museum, 7:00 p.m.
Redlands, CA. California
St. exit, I-10 Fwy.

**Pre-meeting Dinner, 5:00
p.m.,**

The Sizzler
1800 So. Waterman
Ave.
San Bernardino, CA

After the meeting telescopes
will be set up for viewing
and members will be
available to answer
questions. Bring your
telescope to observe with us.

*No telescope is too humble,
and beginners are always
made welcome!*

After viewing the group will
head for Coco's in Redlands,
Tennessee exit, I-10 Fwy.

**Meeting in the Education Building on the east side of the Museum
complex, behind the locomotive**

Program

50 Years of Discovery The European Space Observatory

A video highlighting the 50th anniversary of the European Space Observatory in Chile will be presented at the January club meeting.

From atop Cerro Paranal see how the southern latitudes offer unbound views of the Milky Way under some of the clearest skies on the planet. Learn what new discoveries have been made with the awesome instruments located there and see the new wave of advances in optics and recording devices.



Filled with incredibly beautiful celestial images, this program shows where 21st century astronomy is headed!

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Calendar of Upcoming Events

January 12, Star Party at Johnson Valley

January 19, Club meeting at the Museum

February 9, Star Party at Johnson Valley

February 16, Club meeting at the Museum

March 9, Messier Marathon Star Party, at
GMARS site, Landers, CA

March 9, Star Party, Wildlands Conservancy at
Oak Glenn

March 16, Club meeting at the Museum

Scheduled Club Events for 2013

Club Meetings

Star Parties

January 26

January 12

February 16

February 9

March 16

March 9

April 20

April 13

May 18

May 11

June 22

June 7 - 9

July 20

July 6

August 10

August 3

September 21

September 6 - 8

October 19

October 5

November 16

November 2

November 30

December 7

Sir Patrick Alfred Caldwell-Moore CBE, FRS, FRAS March 4, 1923 -- December 9, 2012



Most of you have probably read of the passing of Sir Patrick already. Here are just a few highlights about him.

Moore was a former president of the British Astronomical Association, co-founder and former president of the Society for Popular Astronomy (SPA), author of over 70 books on astronomy (all of which he wrote using a 1908 Woodstock typewriter), and host of the world's longest-running television series with the same original host, the BBC's "The Sky at Night." As an amateur astronomer, he became known as a specialist in Moon observation and for creating the Caldwell Catalog of deep space objects.

He will be sorely missed.

A Great Year of Observing Ahead!

By Cliff Saucier

Our astronomical pursuit is often thwarted by various events that at times seem to be conspiring to keep us from observing the night sky. The phase of the Moon, the vagaries of the weather, and the artificial constraint of the calendar must all come together in such a way that it can be amazing that we can get out at all. A desert trip is only worth the time and gas from a day or two after the third-quarter Moon and a day or two after the new Moon. About a week out of the month. At forty to sixty dollars in gas (figuring on twenty miles to the four dollar gallon for ease of calculation, your mileage may vary!), you can bet we check out the weather and sky conditions as we best can. There's a lot of light pollution out there and even our Johnson Valley site is only in the blue zone on Clear Sky Charts light pollution maps. Afton Canyon is a gray zone site, as is Grandview, though it's next to a black zone (Death Valley) and the beautiful thinness of the desert air. A significant drive is required to really see the deep sky.



Now the good news! This year the calendar nicely brackets the new Moon, giving us more chances for a clear piece of weather at least once during the month. In 2013, club meetings will fall closer to the full moon. The last few years those of us that do the deep dark trek have been missing meetings if the opportunity to observe came up. You can't pass up a good night out, as they can be rare. Some years we only see Orion in the fall at the beginning of it's

cycle, and winter storms keep it out of view till it's about to set in the spring. The core of our dark sky group travels to various spots on these extra viewing weekends, trying out places the club may find a little far or perhaps a rougher road than some would be comfortable with.

As I am writing this, some members are on their way back from a night at Kelbaker Road, off of the I-40, about one hundred and sixty miles from here. One of Martin Carey's favorite spots that many of us have been to. The conditions can approach Grandview at times. Another spot we are fond of is Red Cloud Road, past Indio and almost to Desert Center. It's a lower elevation site that doesn't get as cold as some of our other spots in the winter, yet has a very good sky with minimal light domes. One year a spring time trip to Death Valley was very rewarding. The volcanic crater in Amboy is a lovely daytime landmark were the nights get dark as can be.



There's nothing like seeing through telescopes under a very dark sky. and everyone is more than welcome to journey with us through the desert, as well as the very cosmos. Come and join in the fun and wonderment!

*(Photos of NGC 3169 - 3166 and NGC 2859
courtesy of Jon Talbot)*

Kelbaker Road Dark Sky Excursion

By Mike Ratcliff & Martin Carey

Sometimes it works out that there are two weekends in a month with nearly moonless skies. This December was one of those months, with Saturday December 8 having a moon rise at 2 a.m., and December 15 being close to new moon with our usual monthly star party. Since I'm pretty much a zombie by 2 a.m. anyway, December 8 looked like a good candidate for a second dark sky excursion. Plus a few of us had an appetite for some darker skies farther away than the normal club sites.

After several suggestions, we chose the area around Kelbaker Road on the western edge of the Mojave National Preserve. Martin Carey has been out that way many times before, and Cliff Saucier and Steve Peeters a year ago found a good spot, down a dirt road about 1/2 mile off of Kelbaker Road.

So that night four of us managed to make it to the location: Martin, John S, Robin H, and me. The directions were simple on paper: Kelbaker Road 6 miles north of I-40, then 1/2 mile east on Hidden Hills Road. I got there first and set up a 5 gallon bucket as a marker at the turnoff, but someone played a joke on us and hid the bucket in the bushes. I'll have to be more discrete next time. Fortunately the Hidden Hills Road has a sign, so we all made it without too much mishap. Hidden Hills road itself is easily passable but you do have to navigate carefully in a few spots to avoid getting your vehicle high-centered. Still, it's better than the Afton Canyon road. The trip overall took us about 2 1/2 to 3 hours.

The sky was nice and dark. There was a small light dome to the northeast from Las Vegas, and some light from Barstow and the LA metro to the west and southwest. Martin measured a sky darkness of 21.57. This is noticeably darker than Johnson Valley, and getting close to Grandview. As an aside, Martin noted his darkest measurements ever were 21.8 to 22.0 in Death Valley and Nevada (The

bigger the number, the darker, and 22.0 is about as dark as it gets anywhere). Not only was it dark, but the sky was extremely transparent, making it ideal for deep sky objects.

A few clouds showed up around 10 p.m. You can tell you are at a dark site when the clouds appear blacker than the sky. Part of that is that the sky itself is not really 100% dark like a cave, but has a glow.

Another sign of dark skies was that the Zodiacal Light was easily seen. The Zodiacal Light is a band of light, somewhat like the Milky Way but much dimmer, that follows the zodiac. The Zodiacal light is from sunlight scattered by dust in our solar system, so it is in the zodiac just like the planets. When looking west that night, the Zodiacal light and the Milky Way made a nice "V" in the sky. The Milky Way going up and to the right, through Cygnus, and the Zodiacal up and to the left through Capricorn Aquarius, and (barely visible) Pisces.

We had 4 telescopes operating, Martin's 20 inch dob and wide field 4" Refractor, John S's 12 inch dob, and my 6" dob (I'm reworking my other scope). Some highlights were the Crab Nebula (M1), the Silver Coin galaxy (NGC 253), the Orion Nebula, and the Horsehead Nebula. The Orion Nebula was really showing off, with colors showing in the bright region near the Trapezium, and many swirls of faint clouds. The Horsehead is a challenge object and was visible in John's dob when using a filter. In Martin's 20" the Horsehead was starting to show some detail of the shape of the horsehead.

We had been expecting some winds later that evening and on into the next day. Sure enough it hit around midnight, putting an early end to the night. But 6 hours of very good observing and club companionship was well worth the effort. I'm looking forward to going out there again. If anyone is interested in joining us for some "unofficial" viewing, let me know. Also, there is talk about a dark sky run out to Death Valley in April.

[*Remember, a really dark sky is like having an extra inch of aperture.]*