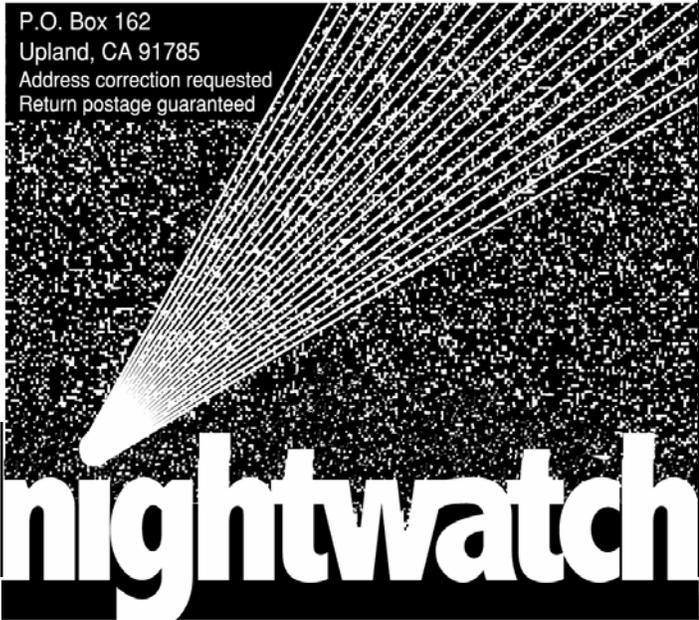


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nightwatch

Newsletter of the Pomona Valley Amateur Astronomers

Amateur
astronomers
just get better
looking . . .

NOVEMBER MEETING LOCATION

The November General Meeting will be held in room B126, Beckman Hall. As you enter the foyer of Galileo Hall, turn left, go through the door, turn right go all the way down to room B126. Signs will be posted to guide you

Volume 22 Number 11

nightwatch

November 2002

President's Message

One of the great things about amateur astronomy is the way we help each other out. Much of what I know about our hobby I have picked up from other amateur astronomers. I first learned that one needs an H-beta filter to see the Horsehead Nebula and many other useful observing tips from others at the star parties. The relatively little that I know about telescope building I learned in a PVAA telescope building class several years ago. I have spent almost as many hours looking through other people's telescopes as through my own. It's a great way to get ideas and make decisions about equipment purchases. Members of PVAA and other amateur clubs have always been most generous in sharing their knowledge and experience.

Observing the heavens is only one part of the pleasure to be derived from astronomy. Another is the wonderful people we get to meet. This month when we were coming down to the wire and still had no speaker Alex McConahay of the Riverside Astronomical Society exemplified that spirit of generosity and service when he agreed (on short notice) to speak to us about the RAS's new observing site at Landers. He will also be making an exciting offer to PVAA members. To find out more you must attend the meeting.

I feel fortunate to have the opportunity to be involved in amateur astronomy and privileged to know the many great people that I have met while staring up at the sky.

Ron Hoekwater

Club Announcements

I met two new visitors and one returning member, Brian Kidwell, to our meeting on October 18th. Monica Robinson

had been to our September meeting while her husband George was visiting for the first time. Monica's father was a member of the Club until about 5 years ago, until he moved to be under the dark night skies of Kinsman, Arizona. We hope all 3 will continue to join us at meetings and Star Parties.

The Club's Columbus Day public Star Party October 12th at Cahuilla Park in Claremont gathered a small crowd and found a few objects to view from under the glare of city lights. While there was some cloud cover, 3 telescopes and binoculars were available for the 15-20 guests to view the moon, Deneb, Vega, and Altair.

The Club is considering a 4th trip to the historic 60-inch telescope at Mt Wilson if there is enough member interest. The price per person will be about \$60-\$75. George Ellery Hale completed the telescope in 1908. Its mirror was cast in France in 1894 and given to Hale by his father – one of the more unusual presents from father to son, I'll wager! One of the more interesting tales of the construction of the 60-inch is that all 150 tons of material for the building and the scope itself were carried up the mountain by mule team. Although a truck was occasionally used, with a "modern" 4 wheel

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
November	2	15	1
December	7	13	5
January	4	17	9
February	1	14	6

(electric) drive, it was more expensive to run than the mules and was actually unable to negotiate by itself the steepest parts of the road up the mountain – mules were called in to help. Thus, the truck was only used (with “mule assist drive”) for the very heaviest parts of the mounting.

Ludd, Club Treasurer, reminded us of a few financial items. Our December meeting on December 13th will be a holiday dinner. Please see the menu choices in the October and November newsletters. Price of \$16 per person (there was a price misprint in the last newsletter) can be mailed to our PO Box or delivered to Ludd at the November meeting. I hope to see many of you there.

Our current membership year runs from September 1st, 2002 to August 31st, 2003. Dues are \$27, please renew soon to continue your access to Club benefits.

A few copies of Explore the Universe were available for \$5 and an Astronomy Calendar 2003 for \$8. If we get advance orders for at least 5 books, we will order the Royal Canadian Astronomical Society Observer’s Handbook for 2003 at \$18 each. Contact Ludd if you want to add your name to the list.

What’s Up

Lee Collins’ What’s Up this month featured the constellation Cygnus along with nearby star groups Vulpecula, Sagitta (the Arrow), Lyra, Delphinus, and Altair. His handout showed the locations of interesting objects in this area of the sky, visible clearly overhead in the night sky at this time of year.

October Speaker

Our speaker was Gene McDonald, a Biochemist and planetary scientist by training, working for JPL in the field of Astrobiology – the study of life in the Universe. Gene’s gave us a fascinating talk about the first step in discovering whether there is life outside of our planet. Having a complete understanding of the life that exists on Earth gives us a clue about what you are looking for elsewhere and some ways we may be able to detect it. Once we leave the Earth we have the obvious problems of conducting remote, long distance science and our missions are often years and millions of dollars in the making. A thorough picture of what we are trying to detect is essential; as it is unlikely a Martian or Europeanian organism will just step up to our cameras and wave “Hello.”

All our efforts to detect extra-terrestrial life are colored by the fact that we have but one laboratory in which to study – our own planet. Some of the factors, which influence where and if life can thrive on our planet are temperature, pH, salt concentration, radiation, oxidation, and magnetic fields. While life is found under a surprisingly wide range of these conditions – the one element that has so far been found to be absolutely necessary to life on Earth is liquid water. There

does not need to be much but at least a drop of two has so far been found to be a requirement. There are reasons to think that this requirement may be universal, given to great versatility of water and its involvement in the chemistry of cells. Given our Earthly bias though, one must wonder if other schemes are possible which we just haven’t considered.

One of the more interesting terrestrial life forms are those which live within salt crystals. Life also thrives in the very salty and highly alkinine conditions around Mono Lake, which has both active plant and animal communities. Life has even been found within rocks. A type of lichen lives a few millimeters under the surface of the porous sandstone located in Antarctic dry valleys. Extremely arid environments like these have led to the development of life that hides under the surface to conserve what little water is available to it. Studies have been done of the rocks to determine how to measure if this sort of life is present, or had been present in the past. Viable life, which appears to have been frozen for millions of years, has been found in premafrost on the northern part of our planet. The puzzle is how this life has survived the accumulated damage of so many years of

..PVAA 24 HR. Hotline.

Get the latest news on the star party, club meetings, special events and astronomy happenings.call
909/596-7274

Visit or website at

<http://www.cyberg8t.com/patrick/PVAA.htm>

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Vice President..Joe Hillberg.....909/985-5617
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Publicity.....Dorene Hopkins..909/983-5584
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exposure to radiation. A metabolizing life form repairs most damage to itself from normal radiation exposure – how does this occur in supposedly inactive frozen cells?

Life has also been found 1-1.5 kilometers deep in holes drilled into the volcanic lava flows around the islands of Hawaii. Life has been found near small gas bubbles trapped in the lava as it cooled and solidified.

Many of these extreme environments on Earth resemble conditions we may find on some of the planets or on the moons of the other planets. Cold, arid, high salt conditions on other planets and moons may still hold out hope for those searching for life. It has been the rare exception rather than the rule to find uninhabitable places on the Earth. Only the Atacama in Chile, where there has been no record found of rainfall, has no life been detected. One would like to think it bodes well in our search for life that it can thrive under so many extreme conditions here – kilometers underground, in the frozen land, near thermal vents on the ocean bottom, and even within rocks. The challenge will be to find it.

Claire Stover

NEWSLETTER

This notice is for the members of the PVAA. If you would like to have a larger newsletter (more pages), and more interesting articles to read, you the members will have to contribute your ideas and experiences to the newsletter. I'm sure that all of you have had good times and bad times at the telescope. I remember, one time at Joshua Tree National Park, when I set up the telescope I realized that I forgot the battery cable and had to rely on my knowledge of the sky which wasn't too good. And then in Illinois I went to a remote site, and after putting the telescope together, found that I had no counterweight. Now I remember.

But there were good times also. I participated in a Grazing Lunar Occultation in Illinois. The object is to see a star occulted by the moon, and see it blink on and off as the moon's mountains pass in front of the star. One time I saw 15 events.

Another time. I saw Spica graze the moon with a 60mm refractor at 1 P.M. The star looked like a diamond in the sky.

But enough of my experiences, how about some of yours, the members of this club. Send them by e-mail to mugjug@excite.com and by snail mail to Ray Magdziarz at 259 Blue Mountain Way, Claremont Ca. 91711. For the Dec. issue send before November 25.

Ray Magdziarz

I apologize for having printed the wrong cost for the PVAA Holiday dinner. The cost is **\$16.00** per person. **Editor**

6th ANNUAL PVAA HOLIDAY DINNER PARTY

The 6th Annual PVAA Holiday Dinner Party will be held on **December 13, 2002**, at 7:00 P.M. The location is **Jouni's Cafe**, 922 N. Central Avenue, Upland.

Again, this year our financial situation will not permit us to subsidize the dinner cost of \$16.00.

The deadline for payment, along with your choice of dinner, **MUST** arrive at the PVAA mailbox by November 30, 2002, or be given to Ludd Trozpek before that date.

Please fill out your name on the reverse side of this page with your choice of dinner and mail it or give it to Ludd Trozpek with your payment of \$16:00 per person.

Mount Wilson 60-inch Telescope Trip

Among of the most thrilling experiences of my PVAA life (or of my life in general for that matter) have been our group trips up to Mount Wilson to spend a night observing through 60-inch telescope. I was afforded views of the planets Jupiter and Saturn that rivaled images from the Hubble space telescope. Revealing 17th magnitude stars with ease and intricate detail, invisible in a lesser instrument, planetary nebulae such as the Ring and the Cat's Eye were nothing short of spectacular. A night with what was once the largest telescope in the world is a unique and unforgettable adventure for any amateur astronomer.

At this time, another PVAA observing run on Mount Wilson is under consideration. We will try to get a date sometime next spring or if that proves impossible then next autumn. The cost would be \$60 for members and \$75 for nonmembers. (We must pay a fee to the Mount Wilson Institute.) Board member, Lee Collins, has agreed to act as the coordinator of this club event. If you are interested in attending or have any suggestions regarding this exciting and educational club activity let Lee know at the general meeting .

Ron Hoekwater

Your PVAA Board Needs You

The PVAA board is a member short of the full complement. In order to correct this situation we hold a special election to select a board member-at-large at the November 15th general meeting. Consider it. This is your chance to take a more active role in PVAA! If you would like to maximize your influence on the direction our club takes, throw your hat into the ring and run for office. If you know of someone you think would make a good board member make that nomination at the next meeting. We need a complete board to fulfill the regulations in our by-laws and to operate more efficiently. Please give some thought to this.

Ron Hoekwater

DIRECTIONS TO THE PVAA PARTY

Jouni's Cafe is located at 922 N. Central Avenue, Upland. About a tenth of a mile south of Foothill Blvd, on the East side of the street. It is at the East side of the mini-mall. A small parking lot is on the premises

December Star Party

The Decmber star party will be at Joshua Tree National Park, Cottonwood Springs Campground. Near the center of loop "B". About twenty five miles past Indio, turn North for 7 miles at Cottonwood Springs road off Interstate 10

This Month's Speaker

For the November meeting our speaker will be Alex McConahay. Alex is the Star Party Director for the Riverside Astronomical Society. He will speak on his club's recently acquired observing site at Landers. A lot of hard work goes into an enterprise of this sort and after the next meeting we will all know a lot more about that.

Ron Hoekwater

Dinner Menu

The choices are:

	Member	Guest
1) New York Pepper Steak topped with Mushrooms	<input type="checkbox"/>	<input type="checkbox"/>
2) Broiled Chicken Breast with Lemon & Mushroom Herbs	<input type="checkbox"/>	<input type="checkbox"/>
3) Baked Salmon with Dill Hollandaise Sauce	<input type="checkbox"/>	<input type="checkbox"/>

The dinners will be served with salad, bread and butter, with cheesecake for desert. The table will have Vegetables with dip and Sauteed Mushrooms.

Member name
