nightwatch

Newsletter of the Pomona Valley Amateur Astronomers

Amateur astronomers just get better looking . . .

John Seaton

Volume 18 Number 11 *nightwatch* November 1998

President's Message

Two of the 8"school loaner telescopes are done. Any club member can check out one of these telescopes with a deposit. Thank you Ray Magdziarz and John and Janis Seaton for your help in making these telescopes!

Our October star party was nice. Mr. Cross came out and cleared out the side entrance for us. More from Ron Hoekwater.

Our next staar party on November 21 will be at Yesterday Ranch.

Death Valley star party on November 20-21 will be at Mesquite Springs campground, 10 miles from Scotties Castle, and Ubehebe Crater.

Joe Hilberg

General Meeting
October 1998

President Joe Hillberg opened the meeting with a series of announcements:

1. The annual Halloween Star Show at Claremont Center (formerly Griswold's) has been approved by management, and will take place Saturday, October 31 at the North parking lot, behind Claremont Center, 6:30 p.m. to 10 p.m.
2. We have received approval from the owners to return to Yesterday Ranch near Barstow for our regular Star Parties. Accordingly, the Star Party scheduled for 17 October will be at Yesterday Ranch. Check your Member's Guide for directions.

Visitors.

A call for visitors yielded one: Kenneth O'Guinn, who found us through our Web Page.

What's Up?

Patrick Nicholson presented What's Up?, featuring the area around Perseus, Cassiopeia, Andromeda in the North Eastern sky. In addition to the well-known galaxies in this area: M31, M32, M110, M33, it is also well-supplied with open clusters, the best-known of which is the famous Double Cluster located between Perseus and Cassiopeia. Just two degrees north of that is the little-known, but impressive cluster, Stock 2. Then there is the very large and bright cluster, Mel 20, centered around Alpha perseii, which is otherwise known as the Perseus Association--a group of stars probably born out of the same dust cloud, and moving together through the sky. This very large cluster (3 times the size of the full moon) needs to be checked out with binoculars to be appreciated. Finally, the challenge of the month is a series of clusters

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
November	21	6	Oct. 30
December	19	18	4
January	16	8	29
February	13	5	26

that are off the beaten track: NGC 1582, between Perseus and Auriga, and NGC 1545, NGC 1528, and NGC 1444 that are clustered near the border of Monoceros, to the east of most of Perseus. Check them out!

Presentation of the Evening.

Bob Branch provided an unusual program: Instead of a speaker, he allowed William Herschel's music to speak for the man himself! Bob, in his introduction, pointed out that William Herschel was born Friedrich Wilhelm Herschel in the hanseatic city of Hanover. Like his father before him, Wilhelm was an oboist in the Hanover Band (an organization still functioning today). Young Wilhelm took advantage of the confusion of the wars of the period to move to England, where he re-named himself William Herschel. He found employment as an organist for the Octagon Chapel in Bath, where he eventually became musical director.

Young Herschel brought his sister Caroline over with him, and Caroline served as his housekeeper and director of his household servants, after he achieved some level of prosperity in Bath. She also became his assistant in the world of Astronomy, once he became able to pursue his interests as an amateur astronomer. Caroline also became a capable observer in her own right, discovering several comets.

Herschel was a skilled instrument maker, as well as observer. After his first effort, his "small" 20-footer (focal length), he came up with a stable and safe design and made a number of large 20-footer telescopes, most of which had 18-inch speculum metal mirrors. His optics were excellent, so he was able to make and sell a number of these telescopes, as an additional source of income. Herschel was also an organized and meticulous observer. Instead of just looking at the solar system, he set out to check out all of the 3,000 or so bright stars, establishing their locations, and making precise notes on their appearance, evidence of double stars, or other phenomena. Eventually, he found one that moved, which turned out to be Uranus. That discovery earned him a stipend from the king (who was also a German). With money provided by the king, Herschel eventually built his "40-footer", which had a 4-foot diameter mirror. That large scope, however, was not very successful, so most of Herschel's work was done with his series of 20-footers, with 18-inch mirrors.

His only son, John, took one or more of the 20-footers with him, when he went to South Africa to map the southern skies. John had learned the art of mirror polishing from his father, and so was able to keep his metal mirrors polished, while he pursued the mapping of the numerous clusters and nebulae he found. This work, begun by William and completed by John is the source of many of the "NGC" objects in the "New General Catalog".

The Music.

We were given the opportunity to hear three harpsichord sonatas, Preludiums 4, 7 & 20 and an organ "Voluntary" in D Major. Herschel is a conservative composer of the early Baroque style, similar to Scarlatti. He lacks the remarkable structural creativity of Bach that allowed him to create independent contrapuntal melodies that worked together as a unit. He also missed the melodic creativity of Mozart and Handel (as in the Messiah). I would not classify him as a great composer; rather, as an earnest journeyman.

England, at the time, was suffering from a major dearth of good composers, with the result that many of them came over from Germany and Vienna, partly to escape the continuous wars that plagued the continent at the time. Handel made his fortune by moving to England. Haydn visited, had great success, and advised the young Mozart to follow Handel's example, which, unfortunately, he chose not to do. Fortunately for the field of Astronomy, Herschel followed the trend.

Herschel's music is built around arpeggios or scales, played against a background of arpeggios (broken chords--the notes played individually), in the case of the harpsichord, or sustained chords, in the case of the organ. He was able to create variety by repeating segments of this music, with the repeated scales or arpeggios moving up or down by thirds or forths, to create a pleasant variation. Then, once the variations brought him back to the original pattern, he would close out the section with one of the standard baroque endings. His sonatas all followed the early baroque pattern of rhythms: fast, slow, fast.

PVAA Officers and Board

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

The result of this style of composition is that a short piece, such as one of the sonatas, is relatively pleasant--enough movement to divert the ear, while the repetitiveness has a soothing effect. As the concert proceeds, however, the overall sameness creates a soporific effect that makes yawning difficult to resist.

The conclusion is: We in astronomy are fortunate that William Herschel's musical skills were sufficient to support him, until his innate skill as an instrument builder and astronomical observer brought him fame and some measure of fortune, so that he could pursue his fine program of organized observing and pass both skill and knowledge on to son John. Though his music may be forgettable, Herschel made his mark in the scientific world.

Patrick Nicholson

October Star Party

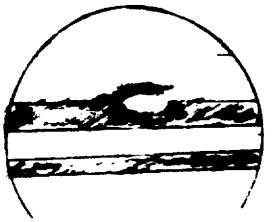
After months abscence, PVAA returned to Yesterday Ranch for the October Star Party. Access to the ranch, which had become a problem, is now considerably improved. Privacy, availability of an outhouse, and a fairly flat horizon are factors in favor of this star party site. However, it is difficult to find in the dark and arrival before sunset is recommended.

When I arrived, George Gerlach and Joe Glynn were waiting, so we all went in together. Wind in Cajon Pass was a cause of concern, but it was calm at Yesterday Ranch. Joe Hillberg arrived next, followed by Lee Collins (after an excursion into Coyote Lake bed) Last of the regulars to arrive was Bob Mavros, and we all went about setting up for the night's observing.

George brought his 10-inch Meade LX200 SCT and Joe Glynn his 20X50 Selsi binoculars. Joe Hillberg brought his homemade 10-inch Dobsonian, Bob brought 8-inch SCT with plans to do some photography, and Lee brought his eyes and some books of star charts. I brought my 22-inch Starsplitter

I started the night by looking at some of the usual suspects: M31, M15, M57, the Helix Nebula, and others. Bob and Lee spent some time looking at faint constellations including Camelopardalis. Joe Glynn observes mostly planets. We all saw a number of meteors, possible early Orionids, or Epsilon Geminids.

Around 9:00 PM I turned the telescope to Jupiter and could scarcely believe my eyes. There as plain as day, was the Great Red Spot. I have only seen the Great Red Spot a couple of times in the last 5 years and both times it was difficult. This time, the atmosphere was exceptionally steady and much fine detail was visible. Both the size and the speed of the Great Red Spot were impressive. Jupiter rotates on its axis in only 9 hours and 55 minutes.



Jupiter's Great Red Spot (Oct. 17 , about 9:30 PM)

The Great Red Spot is a cyclonic storm which has stood relatively fixed for centuries. This may be due to a standing wave in the atmosphere. The color of the Great Red Spot has faded in recent years. Observers now often describe it as tan or orange. I saw it as cream-colored or pale pink when using a light blue filter. There was almost no contrast between the spot and the light zones of the planet. The spot stood out because it was mostly surrounded by the dark Southern Equatorial Cloud Belt. One theory has it that the red spot's color is due to red phosphorus from the breakup of phosphine (PH4). Another theory has sulphur as the culprit. Still another is that the colors in Jupiter's clouds are due to to complex organic chemicals. The red spot might get its color from carotene, the pigment that colors carrots. Experiments have shown that it is possible to create organic molecules in cicumstances similar to those in Jupiter's atmosphere. Seeing the Great Red Spot was the thrill of the evening for me. It reminded me of seeing the impact sites of Comet Shoemaker-Levy 9 in the summer of '94.

About this time, a visitor arrived. Kenny O'Guinn, who attended his first PVAA general meeting October 9th, searched the desert for the star party for hours but perseverence paid off. We were able to show him the sky on a night when the seeing was exceptionally steady. Unfortunately he came in short pants and tee shirt and had to leave about midnight, it can get cold in the desert. Joe Hillberg forgot his blood pressure medecine and also had to leave. The rest of us bedded down about 2:AM.

In the morning we packed up and headed to Quigley's in Barstow for breakfast and discussion, then headed home. The memory of seeing the Great Red Spot on this evening will stay with me for a long time.

Ron Hoekwater

PVAA 24 HR. Hotline...
Get the latest news on the star party, club meetings, special events and astronomy happenings.

call 909/985-1684

Visit or website at:
http://www.cyberg8t.com/patrick/PVAA.htm

The PVAA will have it's second annual Christmas dinner party at a local restaurant in Upland, on December 18, 1998. The club will subsidize part of the dinner cost for each member and one guest. The unsubsidized part of the dinner cost will be $7.00 per person. We need to have you sign up by December 1, 1998. Please fill out the following form and send it to PVAA at P.O. Box 162, Upland Ca, 91785, or give it to Jack Gardner.

Dinner begins at 7:00 PM. It ill consist of one of three choices.

1:Chicken Cordon Bleu. Chicken breast stuffed with ham and swiss cheese.

2: Beef Brochette. Top sirloin meat done like a shishkabab.

3: Vegetarian dinner

The restaurant is called **JOUNI'S** at 922 N. Central Ave. Upland. it is in a minimall about one tenth of a mile south of Foothill Blvd. on the east side of Central Ave. This is by reservation only, there will be no unexpected guests admitted at the door. There will be no refunds since the restaurant will prepare the scheduled meals.

I am joining the party. Name _____

I will have a guest Yes _____ **No** _____

Selection of entree	**Member**	**Guest**
Chicken dish	_____	_____
Meat dish	_____	_____
Vegetarian dish	_____	_____

Please enclose a check for $7.00 per person. There will be no dinner tickets sold at the door.