



Amateur  
astronomers  
just get better  
looking ...

John Seaton

# nightwatch

Newsletter of the Pomona Valley Amateur Astronomers

Volume 19 Number 7

*nightwatch*

July 1999

## President's Message

If the stars should appear one night In a thousand years, how would Men believe and adore.  
Emerson

We are now under the summer skies. If your interests are in phenomenon associated with the deep sky objects in the milky way then this is your season. Globular and open clusters, diffuse nebula and the other features of this most special time of year are yours for the observing. I most certainly encourage you to come to the summer star parties to share your interests and knowledge with others.

**Prolog:** I didn't know I was going to write about the public star party until a week after it had happened. I'm not the best with names as a rule, so I guess I'm going to apologize to every one who was there that I fail to mention in the following text.

As you are all aware, the club sponsored a public star party at the First Baptist Church of Upland back on the 17th of June. I rolled in to the parking lot at a few minutes before 8:00 pm thinking that this could be a spotty affair. Much to my pleasant surprise I found many of my fellow PVAA members already set up for the coming of the public. Ron Hoekwater had set up his mighty 22" toward the east side of the parking lot. Jack Gardner drifted over to say hello before the night set in. John Jacobs was ensconced with his telescope as was Joe Hillberg along the northern border of the parking area. Dennis Lumbert was next to me and Bob Branch was ready for action with his 6" telescope. Although I didn't get over to pick up coffee I knew that Ray Magdziarz's wife, Irene and Jack's wife Lorraine, were representing the club on a most important front: refreshment. Of the people that come to the public star parties, the ones that hold my attention the most

are the children. Some of the most original thinking I have ever witnessed has come from a child trying to make sense of what he or she has just seen for the first time through a telescope. To make a direct comparison with something one knows and apply that to a new situation is what science is all about,; we just get better at it as we accumulate information and mathematical tools. Children are starting to make sense out of the world and the idea that some things aren't possible or that the realm of the stars isn't quite like it is here is based on experience. Witness some of the odd ideas, such as a flat earth and a universe without change, that have been held as fact at times in the past.

With all this in mind I try and explain things from the very basics and build up. I told one little boy that the nearest star is over 4 light years away. I very quickly realized that this wasn't telling him anything. First I explained that light goes very fast but not so fast as to be unmeasurable. Then, I gave him examples of how long light takes to travel to various places in the solar system: for instance, eight minutes to go from the Sun to the Earth. Once he understood the concept of light taking time to travel, he was ready to understand how much further it is to the stars.

## PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
July	10	2	23
August	14	27	6
September	11	24	3
October	9	22	1

You never know when you've infected someone with the astronomy bug. They look through the eyepiece and see something that strikes a hidden chord within them, sparking a feeling of belonging to a larger order of things stretching back to the very beginning of time. You can hook them with a telescope, a dark sky and an inviting introduction, "Have you ever really seen the craters of the Moon?"

**EVENTS:**

General Meeting on Friday July the 2<sup>nd</sup>. We will have Chris Clarke talking to us about the planet Mars. Bob Branch will lead us amongst the stars in What's Up, and your baffled president shall wax and wain on the subject of Wolf-Rayet stars.

Star Party on Saturday the 12 th. Kennedy Meadows; that ever popular arena of darkness is the location for the party. Its over three hours to the site and plenty cold at night so be prepared. Ask your die hard observers for more detail on the site ( or come to the general meeting ).

Club Tour of Big Bear Solar Observatory on August 15 th at 2:00 pm. Call your president or at the general meeting tell him that your dying to go. I will therefore hold a spot for you  
*Roy Schmidt*

**PVAA General Meeting  
 June 4, 1999**

**Business and Announcements**

1. **Election Coming.** President Roy Schmidt reminded members that the election of a new slate of officers will be coming in August. The slate prepared by the Board and presented by the President indicates that all existing officers will run for re-election, with one exception: Secretary Patrick Nicholson will not be a board member, next term. Nominees are requested for any and all positions.
2. **Solar Observatory Tour.** Roy announced that he finally made contact with the appropriate person, and was thus able to schedule a tour of the Big Bear Solar Observatory for Sunday, August 15, and 2 p.m.
3. **Star Party** for June will be Cottonwood Springs, on June 12.
4. **Public Star Party** will be June 19, 8 p.m. to 10:30 p.m. at First Baptist Church of Upland, 532 Eighth street.
5. **Messier Log.** Member Bob Marvos made up a log for the Messier objects, including date found, location, and appropriate comments. The log is available to PVAA members.

6. **Mars Surveyor.** John Jacobs has compiled a large notebook of releases and pictures of and by the Mars Surveyor, available for perusal by members.

**What's Up?**

Bob Branch reminded members that Mercury will be available in evening twilight on Star Party night, and Venus, of course, will be obvious in the evening sky. It will be just 0.5 degrees from the Beehive cluster. Mars is approaching Spica in Virgo, showing a disk spanning approximately 16". Retrograde motion now stops, Mars will move away from Spica. The brightest part of the Milky Way will be high in the sky--it merits a good, long look at low power.

Constellation of the day is Hercules. Bob went through the mythological background, reminding us that the **infant Hercules was already so strong that when two serpents were sent to kill him (by a jealous goddess), he was able to strangle them both, one in each hand!**

Hercules has NGC 5058 and two other planetaries, but they are far overshadowed by the justly-famous globular, M13. M92, the other bright globular in Hercules, would be a favorite target anywhere else in the sky, but it isn't easy to find and M13 is! For those of us who tend to take the head of Draco for the Hercules "Keystone" asterism (Herc's upper torso), you can locate the Keystone with certainty by looking

..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>

**PVAA Officers and Board**

<b>Officers</b>	
President.....	Roy Schmidt.....909/980-1867
Vice President.....	Joe Hillberg.....909/985-5617
Secretary.....	Patrick Nicholson....909/626-1528
Treasurer.....	Jack Gardner.....909/626-2665
VP Facilities.....	Dave Gardner.....909/980-2994
<b>Board</b>	
Ron Hoekwater.....	909/391-1943
Ray Magdziarz.....	909/626-8303
JoeVlietstra.....	909/982-4584
Bob Branch.....	909/982-8015
<b>Directors</b>	
Nightwatch.....	Ray Magdziarz.....909/626-8303
Membership.....	Jack Gardner.....909/626-2665
Publicity.....	Dorene Hopkins.....909/983-5584
Programs.....	Bob Branch.....909/982-8015

on a line between Arcturus and Regulus. Try it!

### Presentation of the Evening

Our speaker of the day was Wayne Johnson, known as "Mr. Galaxy", but best known for having discovered four Supernovas. Wayne described his technique for looking for Supernovas, as well as describing some of his experiences in the process.

A member of the Orange County Astronomers, Wayne has access to the club observatory, which features a tracking 22-inch telescope. The Observatory is located near Anza, about 15 miles north of Palomar mountain. It has a roll-off roof, a 22" telescope, and walls of filled concrete blocks, designed to deter vandalism--always a threat in a remote facility. The heavy construction does the job, but is slow to settle to ambient temperature, creating a problem with thermal waves during the early evening.

The 20 X 20 foot house and the 22-inch Cassegrain telescope were built entirely by members of the Orange County Astronomers. There is a radio link to the club-house for downloading images, and a large monitor to show what the CCD camera picks up. The camera uses thermo-electric cooling, but can also be operated with water cooling. The telescope includes a 4" finder scope.

To make a point, Wayne started his astro photos by showing a beautiful image of the Sagittarius Milky Way--great to look at, but too busy for finding supernovae. Wayne uses a blink comparator to compare pictures taken earlier of a galaxy, with a more recent one. The technique of shifting quickly from one image to the other makes a "new star" show up readily--but the background can't be too busy. A Hubble image of Eta Carinae is showing a nova, and M1 illustrates a supernova remnant, as does the veil nebula.

The first galaxy to have a supernova found by earth-bound astronomers was M31, where a supernova was identified in 1885. Nearby M33, a classic spiral in ideal position for showing supernovae has never had one show up. If M33 had a supernova, it should be obvious enough to show up in binoculars.

Spiral Galaxy M83 has been a good supernova producer--five observed, so far. M61, near Corvus, has had 4 or 5 Supernovae. M100 has shown 5 or 6; M88 currently is showing a supernova, on the way down the light curve, but still about Mag 13.

To improve his chances and make for efficient use of time, Wayne likes to get several galaxies in the field of view at one time--relatively easy to do in regions like the Virgo galaxy cluster. Because a supernova at peak brightness is about as bright as an entire galaxy, it normally shows up clearly, even in a wide-field image, where individual galaxies subtend only a few pixels on the camera.

One of the things that got Wayne started was missing a supernova that appeared the night he looked at M66--in M66!

His first was in NGC 4547. No. 2 was in M51, where it was obscured in the brilliance of the central core, but showed up clearly when the image was underexposed (there's a lesson there!). #3 was in the spiral arms of NGC 5370, and #4 was in NGC3877.

Wayne identified several web sites providing information on supernovae. (I didn't get the addresses!). These included: Astronomical Headlines, International Supernova Network, The Central Bureau for Astronomical Discovery, which provides the guidelines for proofing and reporting a discovery.

Patrick Nicholson

### 1999 RTMC

The 31st Annual Riverside Telescope Makers Conference was held at Camp Oakes, near Big Bear, May 28 through May 31. Although a full moon Saturday night hapered observing, many still came out to enjoy the atmosphere and take advantage of the bargains.

RTMC has been an annual treat for me since 1994. It is where I purchased my Starsplitter and many of my filters and eyepieces. I have saved many hundreds of dollars and would have saved hundreds more had I done all my shopping there.

In addition to the vendors, RTMC hosts lectures on all sorts of astronomical topics such as: observing techniques, photography, CCD imaging, equipment, telescope building, and much more. I have attended lectures on solar eclipse photography, CCD cameras, the history of binoculars, and others.

There are few other places and none so close where one can go to see and look through so many different telescopes. You can try out all sorts of equipment, meet old friends and make new ones.

This year PVAA members Bob Acres, Lee Collins, David Gardner, Joe Hillberg, Owen Robbins, Ludd Trozpek, myself, and, perhaps others that I did'nt see attended. Former members: Dave and Billie Chandler were there.

I heard stories about a Boy Scout telescope which took several boys with an engine hoist all day to assemble. We looked at the Sun through a specially built solar telescope with a Hydrogen Alpha filter. Solar prominences, granulation, filaments and plages were all plainly visible. I had never before seen so much detail. It was one of the highlights of the week-end.

Another was winning a Televue 19mm Panoptic eyepiece at the drawing Saturday night. What a thrill! It was donated by Pocono Mtn. Optics.

If you weren't ther you have 11 months to plan to attend the 32nd RTMC Memorial Day weekend 2000. Hope you can make it.

Ron Hoekwater

Once again it's election time in the Pomona Valley Amateur Astronomers. The board asks that you mark your ballot and return it in the prescribed manner so that it might be counted. Your ballot is important as it will help decide the next slate of officers. Select the nominee of your choice by marking an "X" in the appropriate box, and on unopposed nominees mark each office with a YES vote to elect the nominee or a NO vote to reject the nominee. Remember, every ballot carries the same weight in this election.

**Rules for voting:**

Please follow the rules accordingly so that your ballot is validated and counted in the election. Ballots will be distributed in the July newsletter to the membership eligible to vote (according to paid dues.). Additional ballots can be obtained at the general meeting of August 27. In the event that a member submits more than one ballot, the last ballot received by the treasurer prior to "closing of the polls" will be counted with all previous ballots being destroyed. Any ballots submitted at the August 27 meeting will supercede any mailed ballots with the mailed ballots being destroyed prior to counting.

Each ballot must be returned to the treasurer of the P.V.A.A. either by mail (as described below) or by personal delivery at the August 27 general meeting. Nothing is to be written on the ballot other than the selection markings. Do not sign the ballot or add any additional notes or comments or the ballot will be declared invalid.

Ballots returned by mail must be sent to : P.V.A.A.  
Attention: Treasurer  
P.O. Box 162  
Upland, California 91786

Mailed ballots must be received at the post office by August 26, 1999 in order to be valid. Mailed ballots must be signed on the FACE OF THE ENVELOPE in the lower left hand corner to establish eligibility.

<b>Official Ballot of the Pomona Valley Amateur Astronomers for the term of officers 1999-2000</b>		
	<b>YES</b>	<b>NO</b>
<b>President</b> Shall Roy Schmidt be elected president of the PVAA	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vice President</b> Shall Joe Hillberg be elected vice president of the PVAA	<input type="checkbox"/>	<input type="checkbox"/>
<b>VP-Materiel</b> Shall Dave Gardner be elected VP-Materiel of the PVAA	<input type="checkbox"/>	<input type="checkbox"/>
<b>Secretary</b> Secretary to be determined		
<b>Treasurer</b> Shall Jack Gardner be elected Treasurer of the PVAA	<input type="checkbox"/>	<input type="checkbox"/>
<b>Board members at large serving a two year term</b> Shall Bob Branch be elected as a board member at large	<input type="checkbox"/>	<input type="checkbox"/>
Shall Ron Hoekwater be elected as a board member at large	<input type="checkbox"/>	<input type="checkbox"/>

## June Star Party

Night time conditions at Cottonwood Springs In Joshua Tree National Park were clear and comfortable for the June star party. Tee shirts were all that was necessary until about 2:00AM and the sky was beautiful except for some haze along the horizon. The outside lights have been removed from the restrooms which helped.

Regular star party attendees, Lee Collins, Tom Desy, Joe Hillberg, John Jacobs, Dennie Lumbert, Bob Marvos, and myself were there along with several new and less frequently seen amateur astronomers. Unfortunately, I didn't write down their names and can't recall them now. Anyway, it was a good turn out.

Omega Centauri was breathtaking, Centaurus A was wonderful and Barnard's galaxy, in Sagitarius, was subtle but marvelous to see. These were the three highlights of the night for me. The usual cast of characters, M objects and brighter NGC objects were also fun to see again. A good time was had by all.

July's star party is at Kennedy Meadows on July 9 and 10. This promises great skies, but don't expect tee shirt weather at night here. I hope to see many of you there.

*Ron Hoekwater*

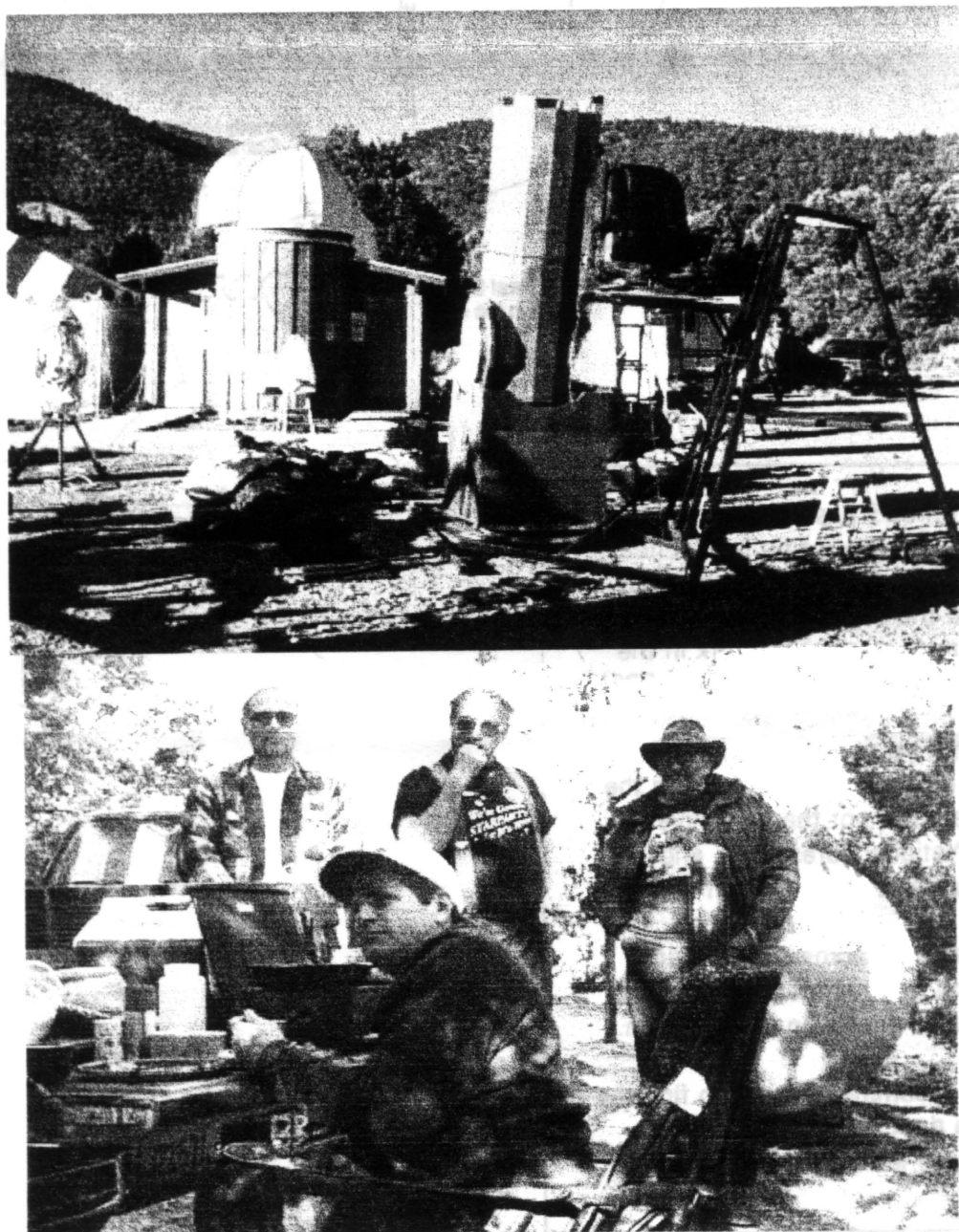
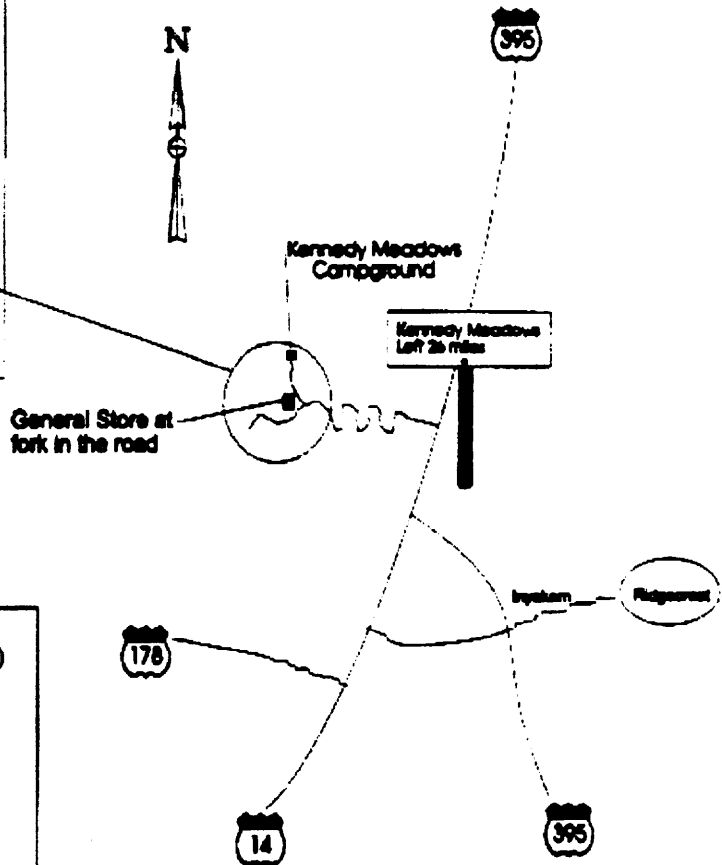
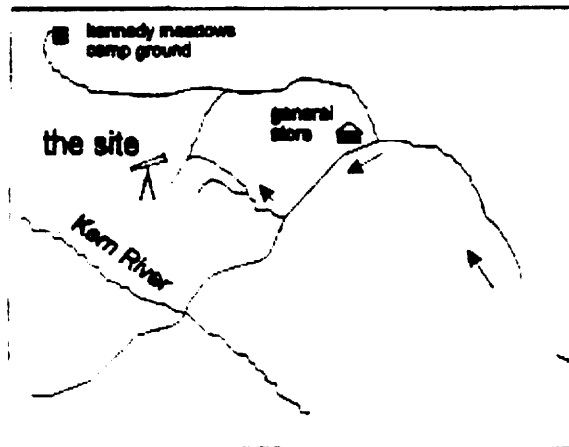


Photo by Ludd Trozpek

# the road to Kennedy Meadows



Go north on 395 past Inyokern about 10 miles until you see a sign for Kennedy Meadows; it is about 26 miles to left off 395 to the site. The best milestone is the country store at the fork in the road (see inset) 25 miles up from 395. To the right is Kennedy Meadows Camp Ground--but you go left past the store. Continue on the paved road, cross the cattle guard but not the Kern River. Past the National Forest sign, and close to a marker for the High Sierra trail, turn off to right onto a dirt road. Bear right across a small ridge, then watch to your left for a level camping area bordering a wide wash. That's it!

We don't recommend trying to find the site in the dark; if you don't know the site well, get there well before sunset.