

## Smoky Mountain Astronomical Society

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S. C. R. A. P. S.

Society's ChRonological Astronomical Papers

In the darkness above, the vaulting arch of the Milky Way turned inexorably and a million sparks of life emitted their gossamer radiation.

*"Out here," he said, "we are all poets."*

**From the President - Lee Erickson**



This summer's dry weather, though bad for agriculture, has been kind to amateur astronomy. And wow, we have had another great public outreach event. October 13<sup>th</sup> 2007, The Great Smoky Mountain National Park and the National Park Service hosted SMAS for a star party in Cades Cove. Special thanks to Angela Quick who acted as the voice of SMAS. Much more on the Star Party below.

A follow up on lighting practices in Blount County. October 4<sup>th</sup> there was a meeting of the Blount County Planning Commission. There were several requests for zoning changes. One zoning change request was for construction of a convenience store on US129 not too far from where the Foot Hills Parkway links to it. The planning commissioners asked questions regarding the hours of operation and lighting of this proposed convenience store. They specifically referred to the proposed requirements for full cutoff lighting. Even more interesting is that the property owner was fully aware of the concerns of stray lighting. He stated his contractor's design employed full cutoff light fixtures and the light plan was for low light trespass. Adjacent to the convenience store is to be constructed a dwelling. I think it is for a relative who will operate the store. As they intend to work the store themselves, they do not plan to have late hours. The planning commission approved the zoning waiver. After the meeting I spoke with the owner and thanked him for the use of smart lighting and explained we observe from up on the parkway. I invited him to attend a star party. I think the actions regarding lighting of the Blount County Planning Commission sets a good precedent. I will be watching the County Commission action regarding the general zoning requirements for lighting.

Reminder for your December social calendar, there will be no SMAS meeting. We have the Holiday Banquet instead. We meet at 7:00 PM in the Gondolier in Farragut.



## GSMNP and SMAS Star Party Report by Lee Erickson

Photos by Joe Baldwin and Lee Erickson. Our apologies to persons we missed.

(At Mike Littleton's suggestion, I recorded our public outreach effort by interviewing most of the members and a guest with a telescope who I could corner before the public arrived.

SMAS set up in the first field off of the right hand side of the road on the Cades Cove Loop Road. Here we are (above) setting up and relaxing before the visitors arrive.

Jason Derrick. He brought a Meade Telestar (approximately 4 inch). Jason has owned this telescope for about 10 months and his first light was on stars. Jason is a member of Lee Wallace's church and Lee brought him along for the great view of the sky we expect to have from the cove.





Joe Baldwin brought his year-old 10" Intelliscope. This is a Dobsonian telescope with encoders and an electronic display to assist object finding. On his first night out with the Intelliscope, he used the sky tour feature to see not just one first object but many. The most memorable of this first tour was the Eskimo, a planetary nebula in Gemini. Joe's target for the GSMNP star party is M57 the planetary nebula in Lyra.



Garry and Ann Bridges brought a Meade LX90 8 inch Schmidt Cassegrain telescope on an alt-azimuth mount. Gary and Ann have been observing with this telescope for about three years and started with the Great Nebula in Orion. The LX90 will be digging out the stars of the globular cluster M15 in Pegasus. You can make out their telescope, circled below. but they have become lost in this crowd of people.





Cassi and Dennis brought out the big light bucket of the evening. This Telekit 16 inch truss telescope saw first light with Dennis about one and a half years ago with a well known object M42. For the GSMNP Dennis is assigned the challenging object M33. M33 is a face on low but surface brightness galaxy.

Tim Hunt has had his Sky Quest 10 Intelliscope for about 2 years. His first light included Kemble's Cascade or NGC 1504. Tim will be presenting photons from M76, which, is in Perseus.





Steve Braddy, our newest member, arrived with 12x50 Orion Binoculars. He has had them just a month and reports that his first observation was of a cell tower. I suggested he try to find M8, the Lagoon nebula, with them as it is nice in binoculars. But I will confess that I never made it back to see how Steve was doing.

Kenny and Sheila Pridgen brought the Club's 10 Dobsonian. It was freshly fitted by Mike Littleton with a rack and pinion focuser that Mike also donated. Kenny's first observation with this scope was of the moon not even a year ago. Kenny is really learning his way around the sky with his charts and this scope. Kenny will be showing people around the Great Nebula of Andromeda, M31.





Mike Littleton brought his 13.5 inch Dobsonian, an Astro Systems Kit that he completed about 3 years ago. As I recall the mirror was from a previous telescope. And when he told me the first light was of the Moon, I have to assume that would be in this new kit configuration. Tonight Mike is taking visitors to the cove to the Pinwheel Galaxy M101. I have circled Mike's telescope in Joe's photo above. Perhaps someone in the photograph is Mike himself.

Mike Naney brought 15 x 70 Burgess Optical binoculars, which he has had for several years. He has no assigned objects and will pick targets of opportunity. Binoculars can be heavy and although Burgess Optical binoculars are designed for low weight, the tripod mount on which Mike has these mounted will give a nice stable view without arm fatigue.



Scott Byers brought his Meade 10 inch LXD55, a Schmitt Newtonian on an equatorial mount. Scott has had this for about 3 years. First light brought such treats as Albireo and the Ring Nebula. Tonight he is showing off the open cluster M52.

Nick Schepis brought his high tech 8 inch Celestron GPS. He has had this for about 3 years. His first object was a Subaru. The star cluster we call the Pleiades is the emblem of the Subaru automobile company, which makes it all right. Tonight Nick will be point his scope at higher targets, M13 the Great Globular in Hercules.



To start the event, Mike Maslona, the Park Ranger with whom we coordinated all of our activities, addressed the visitors at the orientation center near the Cades Cove camp ground. He then walked with them about 1/4 mile down the loop trail from the gate where access is cut off at dusk. They arrived at the field where we set up at about 7:15 PM.



At this time there was still a lot of light in the darkening blue sky. The visitors had been warned to wear warm cloths and bring chairs or blanket on which to sit. They seem to have come well-prepared.

The members of SMAS set up the binoculars and telescopes in a circle while the visitors were gathered on an adjacent rise of land. This formed a slight natural stadium-like seating effect. When the last stragglers were in place, Mike Maslona briefly explained about amateur astronomy and SMAS. He then introduced Angela Quick who became our voice for the evening.

Angela brought star charts for the visitors. These were passed out and she explained how to use them. It was still somewhat light when we started. She therefore began explaining how to orient the chart relative to the sky and direction you are facing. Then as the brightest stars became visible, she continued by identifying the most familiar asterisms. The easy summer triangle and Jupiter were first. She filled in the talk by related some sky lore of Native Americans and in particular Cherokee cultures. I most liked the explanation of "Where The Dog Ran." Next time you see Angela, ask her about "Where The Dog Ran."

It was finally dark enough that we unleashed the crowd on the telescopes and their operators. Conditions were better than last year. In 2006, shortly after we started observing, my ETX dewed up and I had to stop. This night I had no dew.



We, the members of the Park Service and the visitors to the park all had a great time. At about 9:30 we began to pack up and were all back into our original vehicles and leaving the park by 10:30 PM.

Agenda for the meeting November 9, 2007:

- 7:00 Arrive for friendly astronomical discussions and  
an opportunity to return library books and check out new ones.  
7:30 Formal meeting begins.

Tonight's program is:

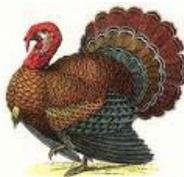
Photographing Stars in Southern Australia, by Jim Sanders

The **ANSWERS** to SCRAPs October Question(s) of the Month

1. **What is a blue moon?** Yer gonna hate this. Nowadays, with the general acceptance of sloppy thinking and technical indifference, people think a blue moon is the second new moon in a calendar month. Nah. Purists know that a real blue moon is the third new moon in a calendar quarter that has four new moons (by necessity it will occur in either the 2nd or 3rd month of that quarter, but it doesn't make any difference which).
2. **What is a dark moon?** It's when the moon is so close to the sun that you cannot see its crescent at either sunrise or sunset. The moon is within a hair of eclipsing the sun, but just barely misses.
3. **What is a black moon?** It means a month with no new moon. Since new moons are, by definition, 28 1/2 days apart, it is possible for a 28-day February to begin a fraction of a day after a new moon, and end a fraction of a day before the next new moon. In that case, it has no new moon at all, or perhaps, a Black moon.

Children, I must tell you with regret there was no response at all to these questions. This is sad. Where is your curiosity, your sense of pride, your love of astronomy? We may have to cancel the January Unicoi Crest star party and devote it to study.

# November 2007

SUN	MON	TUE	WED	THU	FRI	SAT
UTK—roof of Neilson Physics Building on The Hill at UT 1st & 3rd Fridays TAO —Tamke-Allan Observatory Public Stargaze Watts Bar Lake, Roane County 1st & 3rd Saturdays				1	2	3
4 Fall back  Standard Time begins 2 am >1 am	5	6	7	8	9 SMAS Meeting PSTCC 7 pm  New Moon	10 Star Party Unicoi Crest  Michael is excused.
11	12	13	14	15	16	17
18  Leonid Meteor Shower Midnight- to-5 am	19	20	21	22  	23	24
25	26	27	28	29	30  SCRAPS depends Upon its friends	Help! Help!