



ROANOKE VALLEY ASTRONOMICAL SOCIETY

NEWS ABOUT AMATEUR ASTRONOMY IN SOUTHWESTERN VIRGINIA



<http://www.roavas.org>

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UPCOMING EVENTS

The Local Group

If cold weather and winter sniffles are generating cabin fever, take a hint from gardeners ---set your sights for warmer weather. A little winter 'shopping' might relieve the mid-winter blahs! Be watching this website <http://www.charlotteastronomers.org/sstar.htm> for an announcement of the 2003 Southern Star, held at Wildacres Retreat near Little Switzerland, NC. Registration is usually in early March with the event taking place in late May. Be aware that Southern Star usually sells out quickly.

Other star parties and astro events taking place within a driveable distance include the Delmarva Star Gaze VIII, hosted by the Delmarva Star Gazers <http://www.delmarvastargazers.org/> which will be held in southern Delaware from April 10- 14, 2003. The 12th ANNUAL NORTHEAST ASTRONOMY FORUM & TELESCOPE SHOW occurs May 17 - May 18, 2003. (As Mark Hodges will suggest, start saving your \$\$!) For information: <http://www.rocklandastronomy.com/neaf.htm>

The 13th Annual Mason - Dixon Star Party is scheduled for May 30 - June 1, 2003 in Spring Valley County Park, York County, PA. Further details can be found at <http://masondixonstarparty.org/>. This year's Laurel Highlands Star Cruise, hosted by Amateur Astronomers Association of Pittsburgh, falls on a non-competing weekend, June 25-29, 2003. Check out: <http://www.lhstarcruise.org/>

Experience the 'big show' with the Astronomical League at AL-CON 2003! The venue is closer this year: Nashville, Tennessee July 9-12, 2003. Locate more information at: <http://www.astroleague.org/al/alcons/alcon03/alcon03.htm>

If you just can't wait until spring, you may want to check out <http://www.scopesandstuff.biz/> to find out more about upcoming stargazing programs at Smith Mountain Lake State Park (the next one is Feb. 28 at 7:30 p.m.) or click your heels together 3 times and say "There's no place like home" and head to the Parkway for the monthly RVAS observing sessions!

Genevieve Goss

BOBFEST 2003 REPORT

Regional Meeting of Amateur Astronomers

The Eleventh annual Regional Meeting of Amateur Astronomers (a.k.a. Bobfest) was held on January 11 once again at the Dover Campus



Center of Gardner-Webb University. This event is sponsored by the Cleveland County Astronomical Society (CCAS.)

Gardner-Webb is located in Boiling Springs, NC (Just west of Shelby) and is about a 3-1/2 hour drive from Roanoke. This year, as before, I elected to car-pool with Katherine Hix, Roger Poe and Elaine Osborne. Thanks for all the driving, Roger!

Bobfest is a one day event. The doors opened at 8:30 a.m. for the swap tables; setup and presentations began at 10:30 a.m.

There were four main presentations:

Gayle Riggsbee began with "History of the building of the Yerkes Observatory & what it looks like now" a very en-

(Bobfest: Continued on page 2)

Upcoming Star Party



The Cline Observatory at Guilford Technical Community College, in association with the Greensboro Astronomy Club, presents

the *Triad Starfest* - **Tri*Star** for short, a gathering of astronomers of all types, from novice to professional, for a full day of presentations, displays, and observing. The event allows astronomy enthusiasts to share ideas, learn about a range of astronomical topics, get together with old friends, and make new ones. The event will draw astronomers from North Carolina and surrounding states.

Mystery Object

Can you identify the below object?

E-mail your guesses to Dave Thomas at thomasde-ka8inl@worldnet.att.net



Tri*Star will take place on Saturday, 1 March 2003 in the Percy H. Sears Applied Technologies Center on the campus of Guilford Technical Community College in Jamestown, NC. In addition to a series of speakers scheduled throughout the day, there will be a wide range of astronomical displays, assorted astronomy-related vendors, prize drawings, "how-to" help for astronomy beginners, and daytime and nighttime observing sessions (weather permitting). Best of all, there is no registration fee - this event is free and open to anyone with an interest in astronomy!

**Tri*Star* 2003 Speakers* include Johnny Horne, contributing editor, *Sky and Telescope*, Dr. Anthony Crider, Elon University, Dr. Dana Crider, Catholic University of America, and Dr. Dan Reichart, University of North Carolina at Chapel Hill. For more information, see <http://technet.gtcc.cc.nc.us/>

(Bobfest: Continued from page 1)

lightening and learned presentation on the construction and history of the Yerkes Observatory.

Doug Gegen and Bruce Hoffmaster spoke of "Big Telescope Born Again at Birr"--a de-

scription of their recent trip to Birr Castle (Ireland) and the 72 inch telescope. Since I gave a presentation myself on this topic last year I was quite skeptical, but the speakers were able to get much more access to the site due to their connection with the Antique Telescope Society.

Dr. Steve Harris gave an excellent talk entitled "Is the Expansion of the Universe Accelerating?: There may be more to Empty Space than meets the eye"

Art Mullis concluded the presentations with "Globular Clusters: Nebulous Objects or Galactic Time Capsules?"

There were many door prizes. Since the event was free we all purchased some tickets (\$1 each), and yours truly walked away with a copy of David Malin's "The Invisible Universe" which certainly made it well worth the trip.

Interested members can look at more photos of the event on the Web at <http://www.ccastro.org/bobfest.htm>.

Paul Caffrey

Astro-Quiz

At its "opposition" on February 1st, Jupiter's position was near 9 hours right ascension and also near 135 degrees ecliptic longitude. What was the Sun's position in the two coordinate systems at the time?

Answer to Last Month's Astro-Quiz: Various coordinate systems can be used to mark the position of celestial objects. The more ancient is the "ecliptic," based on the Sun's yearly path across the sky, with *ecliptic longitude* being the coordinate along the path and *ecliptic latitude* being the coordinate above or below the path. The more recent "equatorial" coordinate system projects earth's equator into space and creates northern and southern celestial hemispheres; its coordinate along the "celestial equator" is known as *right ascension* and above or below, *declination*. Earth's spin axis tilts, so the ecliptic and celestial equator intersect. This intersection point marks ecliptic longitude 0 and latitude 0 and 0 hours right ascension and 0 degrees declination. The point corresponds to the "vernal equinox," the beginning of spring. Presently in the constellation Pisces, the point precesses through a full circuit of the ecliptic over a 26,000-year cycle, due to the wobbling of earth's spin axis.

The Roanoke Valley Astronomical Society is a membership organization of amateur astronomers dedicated to the pursuit of observational and photographic activities. Meetings are held at 7:30 p.m. the third Monday of each month at Center in the Square Roanoke. Meetings are open to the public. Observing sessions are held one or two weekends a month at a dark-sky site. Yearly individual dues are \$20.00 (Family membership: \$25.00; Student membership: \$10.00). For information, call the RVAS Message Line at 540-774-5651. Articles, quotes, etc. published in the newsletter do not necessarily reflect the views of the RVAS, its editor, officers, or individual members.

Officers/Executive Committee: Paul Caffrey, President (345-2847); Katherine Hix, Vice President (334-2443); Carol Mesimer, Secretary (334-1177); Lynn Slonaker, Treasurer (774-5695); Dennis Stevens, Executive Committee Member-At-Large (989-8801); Dave Godman, Immediate Past President (774-3337); Dave Reese, Newsletter Editor (366-8775, dereese@mindspring.com), Dave Thomas, Mystery Object columnist (thomasde-ka8inl@worldnet.att.net), RVAS Message Line: 540-774-5651, RVAS Web page: <http://www.roavas.org>

Club Observing Reports

Report on observation of Comet 2002 X5, c. December 22

We went to Explore Park. Mark was there when I arrived around 3:30AM. We waited till around 4:00AM before looking for the Keystone of Hercules. The comet was supposed to be about half way between eta and pi Herculis but was not visible in either my

Last Month's Mystery Object



Spiral Galaxy M106, NGC4258

The January Mystery Object is M106, NGC4258, a type Sb galaxy in the Constellation Canes Venatici.

M106 shines at a magnitude of 8.4. It is located in the sky at RA 12 hrs 19 m, Dec +47 deg 18 m and has an apparent size of 19x8 arc minutes.

A Slightly edge on galaxy, M106 is loosely associated with M108 and M109. It is classified as a Seyfert galaxy and a peculiar spiral. In 1994 a team of radio astronomers discovered a black hole near the galaxy's nucleus.

M106 is about 25 million light years from Earth and is speeding away from us at 537 km/sec.

Dave Thomas

(Photo credit line: N.A. Sharp, REU program/NOAO/AURA/NSF)

80mm Megrez or Marks Orion StarMax 102mm, there was just too much ambient light from the Waning Gibbous moon which was directly overhead. We pulled out the 13.1 and finally found the comet approx. 2/3 of the way between eta and pi (towards pi.)

There wasn't much to see, just a faint fuzzy washed out smudge. My LPR filter seemed to help a little.

Isaac joined us after 5:00am. We packed up just after 6:00 a.m.

Explore park worked fine; Cahas would have been unbearable with the wind.

Paul Caffrey
December 23, 2002

M1 Transits the Crab Nebula, Saturday, January 4

I think it was about 9:30. We left when the clouds rolled in quickly. There was one of Mike's astronomy class students there with his two little boys, but they didn't stay long enough for David to get his scope tweaked. They weren't properly dressed for the breezy cold. The boys didn't even have hats, so I don't blame them! Even MY toes started to get cold after a while, standing on the cold asphalt. Dave [Reese] was dressed for the South Pole, but nothing defeats like a cloud cover. We also noticed that the upper atmosphere was too turbulent for any high-power viewing. And, too, even the 17" could not "see" M1, such was Saturn's pupil-tightening brilliance.

Clark Thomas

Ed. Note: Yes, it's embarrassing, but sometimes it does take a while for me to get my scope tweaked. But I love it. Just ask Frank Baratta. ☺

Saturday January 25

It was a dark and stormy night... No, that's not right.

It was a dark and cloudy night -- that blissfully became a dark and clear night.

Clark Thomas had a wonderful 2 1/2 hrs. of fine viewing, and he didn't have to worry about shining his car lights on anybody else. It was sooooo peaceful.

Among the evening's highlights were these:

M76, the Little Dumbbell nebula. It looked almost as good without any filter as it did with an UltraBlock filter. It's much smaller, and less impressive, than M27, the BIG dumbbell nebula.

The star, Mirach, in Andromeda has a nearby companion galaxy, NGC404. The galaxy is hard to see because it is so near a second magnitude star, but it was visible as a grey patch near the star.

M79 is an unimpressive globular cluster in Lepus, below Orion. Its 14th magnitude stars were just visible in my 8" scope on this clear night.

M41 is a very impressive open cluster in Canis Major. It's only 2200 light years away.

M93 is a nice open cluster in Puppis, though small.

M46 and M47 are open clusters near to each other in Puppis. I found M46 first, and it was small and obviously more distant than M47. I believe M46 is 5400 light years away, and M47 is 1600.

M50 was a bit hard to find in Monoceros, but it's a nice open cluster when you get there.

M78 is not impressive in Orion, compared with M42. The Flame Nebula in Orion was also visible, but it could use some serious CCD imaging to find that "flame."

Alas, I could not see the Horsehead, but it will be there for later attempts with better scopes and better filters.

I was having so much fun with the deep sky objects, and with two satellites gliding through my field of view, that I "forgot" to look at Jupiter and Saturn.

Clark Thomas

Society Calendar of Events and Activities for February 2003

FEBRUARY MEETING: Monday, February 17th, 7:30 p.m., fifth floor meeting room, Center in the Square, Roanoke. Tonight's meeting will feature a program by Mark Hodges on the Solar Max satellite. Join us!

"MEMBERS ONLY" WEEKEND OBSERVING SESSIONS: Unless otherwise noted, observing sessions are held at Cahas Mountain Overlook, milepost 139 on the Blue Ridge Parkway.

Friday and Saturday, 21st and 22nd. Sunset is at 6:06 p.m. Astronomical twilight ends at 7:33 p.m. The Moon rises at 11:44 p.m. and 12:56 a.m., respectively.

Friday and Saturday, 28th and (Mar.) 1st. Sunset is at 6:13 p.m. Astronomical twilight ends at 7:40 p.m. The Moon sets at 3:48 and 4:52 p.m., respectively.

March Sessions: 21st and 22nd, and 28th and (Mar.) 1st.

FRANKLIN CO. PARKS DEPT./RVAS PUBLIC STARGAZE: The next session is March 8th. These public sessions are intended for Franklin residents. All RVAS members, especially those able to bring telescopes to assist, are welcome to attend. RVAS members should contact Frank Baratta for further information.

ROANOKE CITY PARKS DEPT./RVAS PUBLIC STARGAZE: Saturday, February 22nd, 6:30 p.m., Cahas Overlook, milepost 139, Blue Ridge Parkway. Free. Call 540-853-2236 to register. (Next month: March 22nd, 7:15 p.m., Cahas Overlook.)

RVAS EXECUTIVE COMMITTEE MEETING: Meetings are now held the first Tuesday of each month; contact one of the officers regarding specific location and time information.

**ROANOKE VALLEY ASTRONOMICAL SOCIETY
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ADDRESS CORRECTION REQUESTED