



# Roanoke Valley Astronomical Society



News About Amateur Astronomy  
In Southwestern Virginia  
<http://www.roavas.org>

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September 2003

Mars-Struck Mob Swarms Parkway...

## Mars Seen at Parkway Scene

By Mark Hodges

Hi everybody, I wanted to let you know how the Mars program went Friday the 29th:

**Isaac** and I arrived about 8 p.m., and there were already ten or twelve people at the overlook. As we began setting up, more people were pulling into the parking lot. **Paul** and **John** arrived shortly after we did, and they too began setting up while everyone wanted to know where Mars was. **Mike Overacker** and **David Thaler** also arrived and set up their scopes.

We started off showing them a thin crescent Moon before it disappeared into the clouds. I showed people Alberio, and explaining the difference in star colors. The others were busy showing people different aspects of the night sky.

By then we had quite a crowd at the overlook. Then more and more people started to ask if the bright star low in the southeast was Mars. So of course we all started pointing our scopes at Mars.

It didn't look too good initially, with such a thick layer of air

and moisture — but as the night progressed Mars was looking better and better.

*There were easily 500 people at the overlook, and probably closer to 700 or 800 all total got to see Mars!*

We finally wrapped it up about midnight as one last car pulled in to look at Mars. All in all, we had a very successful night (even though the Mars watch had been officially canceled).

P.S: I'm also attaching a photo I took as we were getting started.



# Is Bad Hype Good Hype?

By Clark M. Thomas

This year's "Mars madness" has far exceeded "Moon madness." Maybe it's the romance of having the bronze "red" planet closer

than since the Neanderthals looked up (ignoring how nearly-as-close perihelic oppositions occur every 15 to 17 years).

Hyping journalists who can't tell one end of a telescope from another have printed some beauts. An example would be the claim that just 75 magnification will yield an image equal to the full Moon seen unaided. Right.

There are also more responsible journalists, such as the science editor of *Parade* magazine, who have screwed up the facts. Their August 17th edition featured a Viking Orbiter photo on the cover. Inside, David Levy talked about the we-are-the-Martians theory.

He started out right, then got completely off track. Levy got confused between Martian meteorites "bringing the chemical building blocks of life," and micro-organisms hitching a ride to Earth. He correctly pointed out how Mars was hit by nutrient rich comets, but so too was Earth!

Ok, I'm not REALLY complaining. Such bad hype is harmless, if it does not get too weird. Better, entice the public with accurate hype. The mob that made it to our Mars party didn't come to see Neptune or Pluto.

But they came, and we showed them the real skies with real telescopes. That's all good.

## Mystery Object

Can YOU identify the unusual man made object below? Here's a hint: "We put it there." Email your best guess to Dave Thomas, our Mystery Object Columnist, at [thomasde-ka8inl@worldnet.att.net](mailto:thomasde-ka8inl@worldnet.att.net)



## Astro-Quiz

An astronaut standing on the northern pole of the Moon and looking toward the Earth sees the right-hand half of the Earth sunlit, and the left-hand half dark. What is the phase of the Moon as viewed from the Earth?

**Answer to Last Month's Astro-Quiz:** While it seems that the full Moon should be only twice as bright as the quarter (half-lit) Moon, it's actually eleven times as bright. The quarter moon would be half as bright as the full moon if the moon were a smooth (but not necessarily mirror-like) reflector, because half as much illuminated area would be visible. But consider the local sun angle on a portion of the true (rough-surfaced) quarter moon visible from the earth: significant portions are in shadow and hence are dark. Thus, the illuminated reflecting surface is much smaller than half the area of the full moon.

The Roanoke Valley Astronomical Society is a membership organization of amateur astronomers dedicated to 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 is \$25.00; student membership is \$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.

RVAS web page: [http:// www.roavas.org](http://www.roavas.org)

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); John Goss, Past President (966-4606); Clark M. Thomas, Newsletter Editor (427-1873, [clarkt7@cox.net](mailto:clarkt7@cox.net)). Dave Thomas, Mystery Object Columnist ([thomasde-ka8inl@worldnet.att.net](mailto:thomasde-ka8inl@worldnet.att.net)).

Annual Gathering on Saturday, September 20th...

# Picnic and Star Party Just Days Ahead!

By Frank Baratta

It's that time again! In less than three weeks, RVAS members and their families will be gathering for the Society's 2003 picnic and star party. And if it's not on your calendar yet, what are you waiting for?

This year's edition of our annual event is scheduled for Saturday, September 20<sup>th</sup>. As has become our tradition, the gathering takes place at the Franklin County Recreational Park, south of Rocky Mount. The park is about 35 minutes south of Roanoke's Tanglewood Mall.

Officially, we'll get the festivities underway around 3 p.m. But the facilities are reserved from noon on, so members and their families can arrive as early as they'd like. The park has tennis courts, a fishing pond – sorry, no swimming – and room enough for an enjoyable stroll. There's a dirt court for volleyball or badminton and a playground area

## Last Month's Mystery Object

The Veil Nebula is made up of four NGC objects, 6960 6979, 6992-95, in the constellation Cygnus. The Veil covers an area from RA 20h 40m - 20h 55m and DEC +30 - +32 deg.

The nebula is the remnant of a supernova that occurred between 30,000 and 160,000 thousand years ago. and lies about 400 pc away.

The brightest part of the nebula is the northeast part of NGC 6992, and may be seen using 7 X 50 binoculars under ideal conditions. More detail is visible in larger amateur scopes.

for younger children. Restrooms are adjacent to the huge pavilion we'll be using. The pavilion has a large, permanent charcoal grill and plenty of picnic table.

Our picnic dinner should begin around 5:30 p.m. As in past years, the Society will provide the hamburgers and hot dogs, buns and condiments, soft drinks and tableware. Each member is asked to bring a side dish, salad or dessert (and any necessary serving utensils) to share with the group.

After dinner, there will be some announcements, short talks and other activities. There will also be several door prizes given away. These will include astronomy calendars and mugs, but the list is sure to lengthen by picnic day. In the past, giveaways have ranged from books to astronomy software and equipment. Needless to say, you have to present to win!

As far as observing is concerned, September is a great month for the star party portion of our activities. It's among the clearer months of the year, evening temperatures are still favorable, and night falls at an earlier hour. On the 20<sup>th</sup>, sunset is at 7:20 p.m., with astronomical twilight ending about 8:45. The moon sets about 4:20, so we can expect dark skies for as late as most people will care to observe.

The night sky view will bridge the seasons. High overhead, the "Summer Triangle" of Deneb, Vega and Altair will prominently straddle the Milky Way, while the constellations of spring set in the west and those of fall rise in the east. Mars, also rising in the east, will be about 30°

high by 9:30 and well placed for viewing. Though nearly four weeks past opposition, it will still sport a 23"-diameter disk, easily large enough to reveal surface markings. Along with fine views of Mars, planet lovers will also be able to hunt for Uranus and Neptune. The former will lie just 4.5° north of Mars, the latter about 20° to the west. And for the deep-sky devotees, the September skies offer some of the finest clusters and nebulae visible from our part of the globe.

So, find that favorite recipe that you've been waiting to share with your extended RVAS family. And then, dust off your scopes, collect your gear and get ready to have an afternoon and evening of food, friends and fun!!! See you on the 20<sup>th</sup>.

***(P.S. In case of iffy weather, be sure to check the RVAS Message Line, 540-774-5651, after 12:30 p.m. on the 20<sup>th</sup> for the latest on the picnic.)***

## *Directions to the site:*

From Tanglewood Mall, Roanoke, follow US 220 south through Boones Mill. Continue past the Rocky Mount - Business 220 exit. Continue past the Rocky Mount Route 40 exit. After the Route 40 exit continue on 220 for about another 4 miles and you'll come to a traffic light. On the right is an antiques store and on the left is a convenience store. You turn left at this light on to Route 619. Go about 2.3 miles on 619 and you'll see the Franklin County Recreational Park sign and entrance on your right. Come into the park and bear left and through the gate and continue down to the first pavilion.

# Mars Mania Meets the RVAS

By H. G. Wells

It seems that the astronomical community has come to a standstill over the current apparition of Mars. Everybody is talking about it. Taking notice, the RVAS met in the Hopkins Planetarium for an evening of Mars exploration.

That Was Then...Way back in 1976, two spacecraft approached and landed on Mars. Viking 1 and 2 gave a portrait of rolling hills littered with rocks of all sizes. The spacecraft's orbiting components completed an extensive detailed global surveillance which was manipulated into 3D images by JPL computers.

This month's Jack Horkheimer episode showed these images as a flyover of the volcanoes of the Tharsis shield and the giant gash called Valles Marinaris. This is how Mars would be up close and personal. Incredible!

This Is Now...With all the crummy weather lately, there haven't been many opportunities to see the Red Planet, or other celestial objects for that matter. **David Thaler** traveled all the way to Vienna, Austria to see the moon and Mars over the Danube River. Now that's dedication!

Here at home, **Paul Caffrey** managed to find a few clear hours one night to shoot some cool video. His images, projected onto the planetarium dome, were remarkable. The south polar cap was easily seen along with intriguing dark surface markings. Images like these were impossible with amateur equipment just a few years ago. Think of what amateurs will be capable during the next Martian opposition.

## ***A Martian Video and a DVD***

August's feature program was excerpts from two productions concerning Mars. The first was a video from JPL which covered recent reconnaissance expeditions, primarily the 2001 Mars Odyssey. This craft carried a suite of science instruments including a gamma ray spectrometer, a visual camera, and an infrared camera. Their purpose was to analyze the Martian atmosphere, surface rocks and ices.

The second half of the program was a DVD loaded with images of the Martian surface taken from spacecraft high above the planet: chasms, fossae, craters and volcanoes. Mars has plenty of each.

Thanks go to RVAS member **Fred Hoffman** for surprising members with complimentary copies of the "Astronomical Calendar" by Guy Ottewell, and a stack of moon phase charts. These "freebies" will readily assist those figuring out "What's Up!"

## ***So, You Want to View Mars***

Many newcomers are uncertain as to what it takes to obtain good views of Mars. Although it is especially close at this opposition, Mars is still a very small world in the telescope.

Therefore, if the atmospheric seeing can support it, use magnifications over 150x. The south polar cap will readily stand out. Try waiting until the planet is at least 20 degrees above the horizon.

If you have eyepiece filters, give them a try. You'll certainly get a different view. Here's a short guide for a few filter colors:

Red – enhances contrast of surface markings, polar cap edges and dust cloud boundaries.

Orange – penetrates hazes and clouds, brightening dust clouds.

Yellow – Brightens red regions.

Green – Darkens red regions and brings out the polar cap.

Blue – Helps bring out atmospheric clouds and hazes.

Looking past all the hype, Mars is still a small distant world that is very much unlike the earth. Its scant atmosphere, its cold temperatures, and its bone dry landscape are easily forgotten when viewed through amateur equipment.

Our imaginations are ignited! With lands named Hellas, Tharsis, Syrtis Major, and Chryse, how can they not be?

## ***Mars on the Internet...***

Even on a cloudy night you can "see" Mars. The coolest tool is courtesy of *Sky & Telescope's* web site. There you can download a free program which shows you what Mars will look like through a telescope at any time, and from anywhere on the planet. It even identifies major features you will see.

"Mars Previewer II" is found at: [http://skyandtelescope.com/resources/software/article\\_328\\_1.asp](http://skyandtelescope.com/resources/software/article_328_1.asp)

There are many other powerful Mars sites. To see a selection of the best, visit Clark Thomas's "Astronomy Links" site at: <http://members.cox.net/clarkt7/astronomylinks>

# The Local Group

By Genevieve Goss

Even if many moons have passed since you set foot in a classroom, it's difficult to shake the feeling that September is a time of new beginnings. With little effort, I can evoke the smell of a new box of Crayolas and the sound of locker doors clanging! In this month's column I am offering a few ways to answer the call to begin anew.

Hopefully, as you read this, observing conditions have finally improved enough to lure you outdoors. Mars viewing events and our RVAS club picnic are ways to encourage your participation at the local level. Fortunately, this year's September-dated VAAS (in Norfolk) has been changed to November 15.

The New Moon weekend of September 25-27 offers a full menu of star parties: the "No-Frills Star Party" at Tuckahoe State Park near Queen Anne, MD, (<http://www.delmarvastargazrs.org>), the "Big Meadows Star Gaze" in Shenandoah National Park (<http://www.raclub.org/BMSG/2003/BMSG.html>), and "Astroblast" near Oil City, PA (<http://www.oras.org>).

The weekend of October 24-26, you may choose from the "Mid-Atlantic Star Party" in North Carolina October 21-27 (<http://66.179.139.58/home.htm>), "Stella Della XVI" in Ottsville, PA (<http://bmaa.freeyellow.com/Sdv.html>), and "Blackwater Falls Astronomy Weekend" in West Virginia ([http://www.kvas.org/astronomy\\_weekend\\_2003.htm](http://www.kvas.org/astronomy_weekend_2003.htm)).

In the absence of decent observing conditions, members of our local group have still found ways to remain active in astronomy:

**John Goss**, representing RVAS, was interviewed regarding Mars for WDBJ-7's Almanac.

**Mark Hodges** was quoted by *The Roanoke Times* as part of the Martian media frenzy.

Mark, John, **Paul Caffrey**, and **Dave Godman** provided key information and a live feed of Mars for WDBJ-7's News.

Paul addressed the Roanoke Valley Bird Club, and managed to show them Mars, a few constellations, and a globular cluster before clouds closed in.

The same evening, **Frank Baratta** was braving equally bad observing conditions (plus a "strobe light" show from distant lightning in the NC Piedmont) at his monthly Star Watch on Cahas Mountain.

Joining him that evening were **Richard Zue, Mike Overacker, Katherine Hix, Mark Hodges,** and **John & Genevieve Goss.**

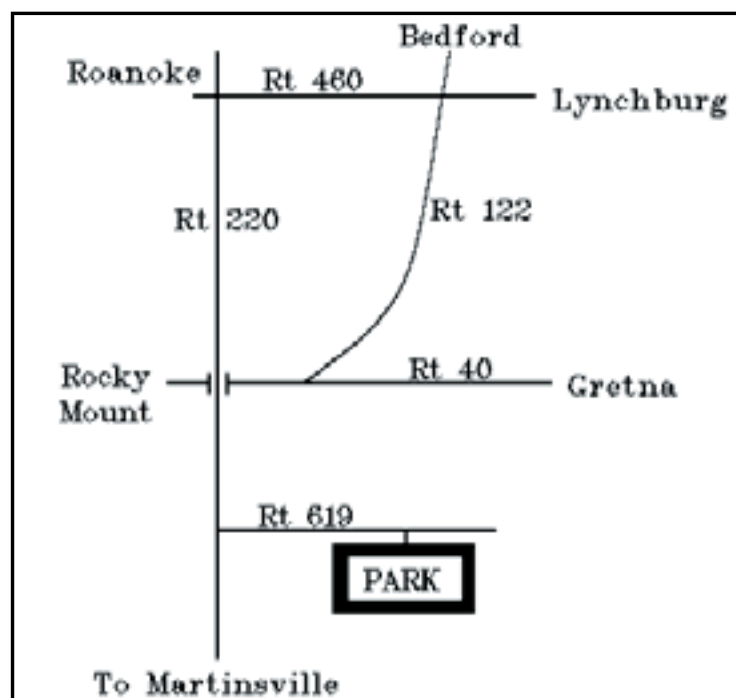
**Isaac Campbell** has expressed interest in organizing a club field trip to a dark-sky area near Petersburg and Davis, WV.

On a poignant note...

Long-time RVAS member **Vince Talley** has decided not to renew his active RVAS membership due to an increasingly severe vision problem associated with age-related macular degeneration.

He wishes club members "Clear skies"! You may want to let him know of your ongoing observing experiences. He intends to continue his astronomy pursuits through ElderHostel and computer software.

Here's a map to the RVAS picnic. Same place as last year! See you and your family there. Lots of great food, etc.



# Society Calendar of Events and Activities for September 2003

**SEPTEMBER MEETING: Annual Picnic and Star Party, Saturday, September 20<sup>th</sup>, 3:00 p.m.** Franklin County Recreational Park, Rocky Mount. Join us for an afternoon and evening of food, friends and fun!

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

-- **Friday, 19<sup>th</sup>.** Sunset is at 7:22 p.m. Astronomical twilight ends at 8:49 p.m. The Moon rises at 12:52 a.m. (Note: Saturday, the 20<sup>th</sup> is the RVAS picnic and star party at Franklin Co. Recreational Park.)

-- **Friday and Saturday, 26<sup>th</sup> and 27<sup>th</sup>.** Sunset is at 7:11 p.m. Astronomical twilight ends at 8:37 p.m. The Moon sets at 7:49 and 8:19 p.m., respectively.

-- **October Sessions:** 17<sup>th</sup> and 18<sup>th</sup>; 24<sup>th</sup> and 25<sup>th</sup>.

**FRANKLIN CO. PARKS DEPT./RVAS PUBLIC STARGAZE:** The next session is November 15<sup>th</sup>, 5:45 p.m.

**ROANOKE CITY PARKS DEPT./RVAS PUBLIC STARGAZE:** Saturday, September 27<sup>th</sup>, 7:45 p.m., Cahas Overlook, milepost 139, Blue Ridge Parkway. Free. Call 540-853-2236 to register. (Next month: October 18<sup>th</sup>, 7:00 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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