



## EPHEMERALS - APRIL 2007

DATE	WHEN	WHAT & WHERE
4	7:30p	Arrowhead School Night @ Arrowhead School, VB
5	7:30p	April Meeting @ TCC
6	Dusk	Skywatch @ Northwest River Park
7	Dusk	Cloverwatch & @ Franklin Fairgrounds
14	Dusk	Nightwatch @ Chippokes Plantation
21	900a	A S T R O N O M Y D A Y @ VA Beach Libraries
23	7:00p	Azalea Garden Science Fair @ Azalea Garden MS
24	7:00p	Azalea Garden Science Fair @ Azalea Garden MS
28	Dusk	Garden Stars @ Norfolk Botanical Gardens

## LOOKING UP

Hello fellow astronomers!

Ah, the feel of warm weather!

To be able to go out at night without 2 tons of clothes, use an aluminum scope that doesn't freeze your fingers when you touch it, dang, haven't even had to use heaters lately. Now, that's my kind of observing night.

Let's just hope April doesn't bring the "showers" and gives us all a break. Speaking of April, on the 4th is the Arrowhead Science Fair, the 5th is our monthly meeting, and Astronomy Day is on the 21st. Of course we can't forget Easter, or the Tuckahoe Star Party. And then for us Grandparents and parents, the Doodlebops will be

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That's All Folks!

in town on the 20th. Doodlebops?

Spring is always a busy time, cleaning, starting that yard work and garage sales, but we must leave time to play. So make some plans to join your fellow members at Skywatch or Nightwatch, join in on some of our local activities at schools or just come on out to the monthly meeting and hang out.

Now, for all you out there that has forgotten to renew your membership, send that check in to BBAA so you won't miss any issues of the newsletter, or notices of all the events going on, and most of all, we will miss you!!!

See you at the meeting.

Dale Carey

# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## MARCH'S MEETING MINUTES

The March meeting of the Back Bay Amateur Astronomers was called to order by President Dale Carey on Thursday February 1st, 2007 at 7:30 PM at TCC in Virginia Beach.

**Members in Attendance:** There were fifteen members and two guests in attendance which included: Bruce Bodner, Kenny Broun, Dale Carey, Larry Channel, Ted Forte, Jay Garrard, Chuck Jagow, Karen Jagow, Georgie June, Ben Loyola, Cecil Nichols, Tom Pearson, George Reynolds, Kevin and Barb Weiner. Our two guests were David Veitch and Jim Miller. Cecil Nichols attended his first meeting though he had been a member for over many months, just never seemed to be able to find the darn place. We were all glad he did!

**Treasurer's Report:** Barbara Weiner reported that the club has \$5,469.63 in the treasury, with \$1,477.30 in the scholarship fund leaving \$3,992.33 remaining for club operations.

**Secretary's Report:** Chuck Jagow reported membership was currently down to 99 members with 26 members needing to pay their dues.

**Astronomical League Correspondent's Report:** Georgie June had no official ALCOR Report or any awards to hand out.

**Old Business:** Ted Forte announced that the March 10th Girl Scout Outreach event at the Northwest River Park had been rescheduled to April 7th and also reiterated that there still was a serious water problem at the park.

Chuck Jagow is to set up a Yahoo database for the Camp Skimino Girl Scout outreach event as well as a file section to hold information as he receives it from the scout leaders.

**New Business:** Discussion ensued about what the club could do to improve the chances of awarding the BBAA scholarship. Dale Carey brought up the possibility that the reason that the BBAA scholarship has gone unclaimed again might be that its size is only sufficient enough to cover a few college level text books and as such may not seem tempting enough. After a little discussion George Reynolds made the motion to raise the fund to \$1000 for this year and subsequent years. The motion was seconded. The matter was taken to a vote by the general membership present and the vote was recorded as such: 9 votes for, 5 votes nay and one un-cast vote. It should be a matter of record that no one on the Scholarship Committee voted for

the increase. It should also be noted that no one on the Scholarship Committee spoke up in defiance of the raise. Nothing further was said of importance after the vote concerning the Scholarship Committee during the meeting.

Georgie June said she would check on securing the large shelter at the NWRP for July 14th for the summer picnic.

Dale Carey also brought up that Chippokes has requested that we provide a little show & tell to their campers on our scheduled Nightwatch evenings.

**Rapid Response Robotic Telescope Project Report:** Ted Forte reported on a meeting that took place in January at the Virginia Beach Planetarium. Chuck Dibbs arranged the meeting, where Dr. Salgado of NSU was able to pitch the RRRT's use by the public school systems to some key educators and administrators. Discussions centered on possible uses of the telescope by the schools, training of teachers and other procedural issues. A demonstration of the ACP Planner software that might be employed to help students and teachers write observing scripts was demonstrated. As a result of the appeal made at that meeting, we secured an important endorsement of the program from the Virginia Beach Math and Science Academy. The endorsement was submitted as an attachment to a request for funding made to the National Science Foundation.

**Observer's Corner:** Chuck Jagow took all of the "heat" for the recent cloud layers with his acquisition of a USED 16" dob several weeks ago.

**Miscellany:** Tom Pearson spoke of his trip to the Annie Jump Cannon collection at the Harvard University Archives in Cambridge. He said it was very informative and rewarding and recommends it highly.

The spring ECSP is to be held during May 11th and 12th in Coinjock NC.

It was also noted that Master Observer Ted Forte's Birthday is on May 11th.

The two guests were invited to return and provide a short presentation on how they paint ceilings to match the night sky.

**Presentation:** Dale Carey showed a short presentation of his recent trip to the Orange Blossom star party in Florida.

**In Conclusion:** The meeting was adjourned at 8:58 PM.

*Chuck Jagow*



## Black Hole Breakfast

by Tony Phillips

We all know that birds eat worms. Every day, millions of birds eat millions of worms. It's going on all around you! But how often have you awakened in the morning, stalked out in the dewy grass, and actually seen a bird having breakfast? Even though we know it happens all the time, a bird gulping a worm is a rare sight.

Just like a black hole gulping a star...

Every day in the Universe, millions of stars fall into millions of black holes. And that's bad news for the stars. Black holes exert terrible tides, and stars that come too close are literally ripped apart as they fall into the gullet of the monster. A long burp of X-rays and ultraviolet radiation signals the meal for all to see.

Yet astronomers rarely catch a black hole in the act. "It's like the problem of the bird and the worm," says astronomer Christopher Martin of Caltech. "You have to be in the right place at the right time, looking in the right direction *and* paying attention."

A great place to look is deep in the cores of galaxies. Most galaxies have massive black holes sitting in their pinwheel centers, with dense swarms of stars all around. An occasional meal is inevitable.

A group of astronomers led by Suvi Gezari of Caltech recently surveyed more than 10,000 galactic cores—and they caught one! In a distant, unnamed elliptical galaxy, a star fell into a central black hole and “burped” a blast of ultraviolet radiation.

“We detected the blast using the Galaxy Evolution Explorer (GALEX), an ultraviolet space telescope,” explains Gezari. Her team reported the observation in the December 2006 issue of *The Astrophysical Journal Letters*. “Other telescopes have seen black holes devouring stars before,” she adds, “but this is the first time we have been able to watch the process from beginning to end.”

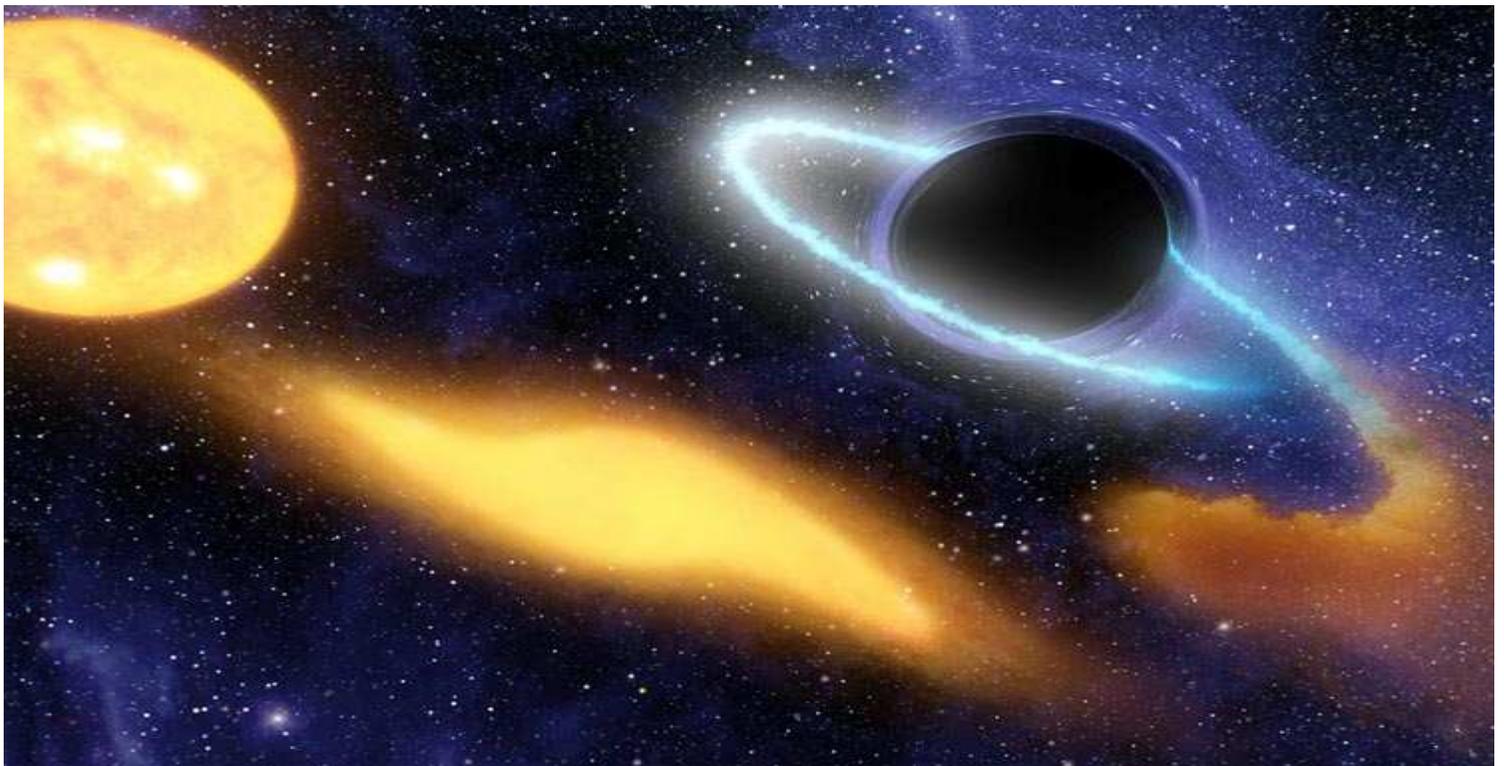
The meal began about two years ago. After the initial blast, radiation diminished as the black hole slowly consumed the star. GALEX has monitored the process throughout. Additional data from the Chandra X-ray Observatory, the Canada-France-Hawaii Telescope and the Keck Telescope in Hawaii helped Gezari's team chronicle the event in multiple wavelengths

Studying the process in its entirety “helps us understand how black holes feed and grow in their host galaxies,” notes Martin.

One down, millions to go.

“Now that we know we can observe these events with ultraviolet light,” says Gezari, “we've got a new tool for finding more.”

*In this artist's concept, a giant black hole is caught devouring a star that ventured too close.*



# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## BBAA INFO

The BBAA meet the first Thursday of every month. While school is in session we meet at the VA Beach TCC campus in the Pungo building. Summer meetings are usually held at the Chesapeake COX campus. The March meeting will be on Thursday April 5th at 7:30 PM at the TCC campus in Virginia Beach.

## BBAA INTERNET LINKS

### BBAA WEB SITE

<http://groups.hamptonroads.com/bbaa/>

### YAHOO GROUP

<http://groups.yahoo.com/group/backbayastro>

### BBAA OBSERVER NEWSLETTER

<http://www.backbayastro.org/newsletters/newsletter.shtml>

## WHERE IS THE MEETING?

### TIDEWATER COMMUNITY COLLEGE CAMPUS

The TCC Campus is located in Virginia Beach off of Princess Anne road. The following should help you locate the campus.

#### FROM Interstate I-64:

Proceed to the I64 / I264 junction and take I264 East .  
Take the S. Independence Exit, 17A, right hand lane  
(.000000048134 AU).

Turn LEFT onto Princess Anne road  
(.000000010322 AU).

Turn LEFT onto Community College Place  
(.000000002131 AU).

At the Stop Sign turn right and follow the road around to the left and park in one of the parking lots.

The meeting is held in the Pungo Building which is on the right hand side of the pathway that splits the two major parking lots. The Astronomy classroom is in the far back right hand corner of the building.

### COX COMMUNICATIONS CAMPUS

The COX Communications Campus is located in Chesapeake's Greenbrier section. The following should help you locate the facility.

#### FROM Interstate I-64:

Take exit 289B (between the Indian River & Battlefield exits).  
South on Greenbrier Parkway (.7382 miles).  
Turn RIGHT onto Eden Way West (.9231 miles).  
Turn RIGHT on Crossways Blvd (.88901 miles).  
Turn Right into the Cox Campus

The meeting is usually held in the Silver room located on the North side of the facility. Enter and tell the guard that you are with the BBAA and they will issue a badge and direct you to the room.

**President**  
Dale Carey  
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vbstargazer@verizon.net

**Vice President**  
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RRRT Coordinator**  
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**Scholarship Coordinator**  
Ben Loyola  
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**What do you want to do?**

## OBSERVER INFO

The BBAA Observer is published monthly, the monochrome version is mailed to members who do not have Internet access. Members who do have Internet access can acquire the full color version on the Internet at:

<http://www.backbayastro.org/newsletters/newsletter.shtml>

Please submit articles and items of interest no later than the 20th of April for the May issue. Please submit all items to:

[ObserverBBAA@cox.net](mailto:ObserverBBAA@cox.net) / [chuck@jagowds.com](mailto:chuck@jagowds.com)

OR

BBAA Observer  
P.O. Box 9877  
Virginia Beach, VA 23450-9877

# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## Total Lunar Eclipse March 3, 2007

Where to view the March 3, 2007 lunar eclipse? That was on my mind weeks before the event. My intention was to photograph the rising totally eclipsed moon over the historical North Carolina Currituck Lighthouse, but found it nearly impossible to know the exact spot to set up all my telescope and camera gear.

As the day progressed it became certain the farther south one traveled the worse the weather was going to be, so Dr. Robert Hitt and I opted to say put. Arriving at the Virginia Beach oceanfront clouds blanketed the low eastern horizon. I could see clearing to the north, so I drove down Atlantic Avenue towards the north end of the beach, ending up at Ft. Story. Boy, was that a mistake. I was instructed at the gate to get out of the car, open my glove box, hood and trunk. Don't get me started about that farce of checking every car passing through little old Ft. Story. Anyway, after my car was cleared I told the patrol police I don't want to pass through after all, and left.

We chose to set up on a side street near Ft. Story, with only a

short walk to the beach. Once my 100mm and 80mm refractors were set up several people arrived. We each had a great time, and enjoyed our own little intimate party. It was encouraging to look down the beach and see so many people who had come to witness the eclipse. The air was very still, and the temperature was unseasonably warm and dry. What a great night for an eclipse.

Clouds still persisted along the eastern horizon, causing us to miss most of totality. In the meantime I let our little crowd gaze into my scope at Saturn. I told them that Saturn has a huge "wow" factor, and informed them that most people ask, in an exclamatory tone, "You Have A Picture In There, Don't You??" It was hysterical because as passersby would look into the eyepiece they would say just what I told my group they would say. We all burst into laughter. The person looking was wondering why everyone was laughing at them.

Anyway, it was a great eclipse. I managed to see at least some of totality and all of the ending partial phases. As a consolation prize I not only showed the crowd Saturn but The Great Orion Nebula, the open cluster M 41 in Canis Major, the two Ursa Major galaxies M 81 & M 82 and even NGC 2392, The Eskimo Planetary Nebula in Gemini.

*Kent Blackwell*



## Observer's Corner

**Mar-18-07** With the absolutely strange weather day on Saturday I decided to stay in town and observe from Mark Ost's "observatory" (16 miles from my driveway!), with a sky reading of 20.32 on the Sky Quality Meter, or about 5.4 magnitude. It was a great night, both in transparency and seeing. Glen, I hope you had an equally great night at Gates, NC. I'm only sorrow I missed the Gates or Coinjock NC sky. I did manage to split Sirius, something I have never done with small aperture. Here's my report. The only word that comes to mind of Saturday night's observing is, Voila! I trained my 10" f/4.7 Dobsonian to Sirius, determined to spot the elusive Pup secondary star. After about ten minutes I suddenly saw it! Using a 15mm Edmund R.K.E. eyepiece and a 2.5x Barlow (an excellent, inexpensive combination) the star showed without too much difficulty, although it would only appear about 50% of the time. I asked observing partner Mark Ost to confirm and after a few moments he proclaimed that we did it! Thanks Sue French and all the others who offered suggestions. The rest of the evening I continued my quest of trying to locate all the NGC galaxies in Leo but after seeing The Pup next to Sirius everything else seemed mundane.

**Kent Blackwell**

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**Feb-17-07** Kent and Stan joined me for an excellent night last night. This was a rare combination of 10/10 Transparency and 9-10/10 Seeing. With no wind the 19 degrees was very bearable as we stayed out till 11:30 covering a lot of ground. Kent was off hunting planetaries that no one knows about. The sky was so good even those little beasts were accessible. I was able to do a bright Abell galaxy cluster in Leo with the 4 inch! Stan has constructed beautiful panels for light blocks which assemble and disassemble easily. We fixed those to the opening of the observing area, increasing not only the darkness but the observing area available, and it looks good to boot. Zeta Cancri was split in the 4 inch at 571X. This is a challenging triple that is easily mistaken for a wide double. The AB pair comes in at 1.04 or 0.9 arc seconds depending on who you believe. Struve 667 in Orion is a colorful double that is accessible at 3 or 4 arc seconds. Saturn was the best I've seen it this year. It was razor sharp to 200x. I tried one of Kent's old ortho eyepieces that can no longer be found anywhere. It was made in Oklahoma in the dark ages and is a classic example of you can make them wider nowadays but not sharper. The view was superlative. Kent has a story about buying a cheap telescope from someone because the telescope had one of those oculars in it. Throw away the telescope and keep the eyepiece. All I can say is, Kent you better insure that lens. The name escapes me as I write and I will remember in a bit; but it was that good. We compared it side by side with the UO ortho and good as the UO is, it is not in the same class. For planets; less is more. Stan was tearing up the sky with his 12 inch. Doing good work on various galaxies.

**Mark Ost**

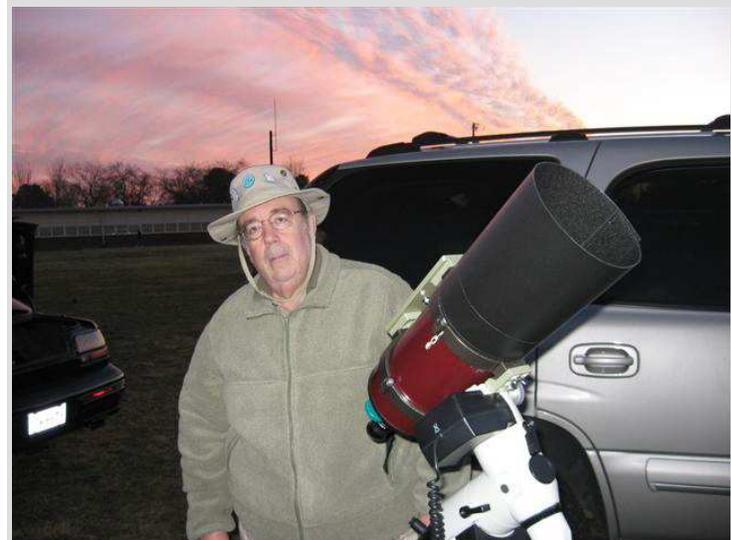
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## OUTREACH

**Kemps Landing Magnet School Lunar Eclipse** Our eclipse outing on March 3rd at the school was a success. We set up in a line down the Western fence line using our vehicles to block the wind.



At first we were a little concerned about this big bank of clouds that seemed to be heading directly West to block the moonrise. We setup pretty early so we had plenty of time for the winds to carry the clouds away. That is one good thing the winds were good for. As



time passed, a few people began to arrive and ask a few questions here and there, I wondered if there were going to be the hordes that Dale had promised. It

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# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

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seemed that almost as soon as Venus began shining brightly and I swung my scope around that the viewing lines started.



Once it was dark enough for the jewel of the solar system to pop my scope spent the rest of the evening following Saturn. Nearly a couple hundred folks looked through my scope I am sure. I had a line that stretched about twenty feet long most of the night. I did have a nice clear view of the eclipse as the moon rose above the trees, it was already in full eclipse by that time. It looked like a ghostly gray ball eerily hanging in the sky almost invisible. It wasn't until the Earth's shadow was about halfway across the face of the moon before I could swing over and look at the moon with my scope. It was an awesome view with half of the moon in the Earth's shadow and the other half shining in all of its glory. I was able to look for only a couple of minutes before a couple of stragglers showed up and wanted to look at guess what? Saturn.

Many thanks to Kevin Weiner, Rick Bish & family, Tom Pearson, Bruce Bodner, Mark Ost, and Dale Carey.

**Chuck Jagow**

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**Camp Skimino Girl Scouts** Despite a few setbacks in the day including completely overcast skies, snow flurries and temperatures you would expect with such weather, nine intrepid souls trekked to Camp Skimino to help the Girls Scouts in search of their badges. Organizationally, our first hurdle was the presenter who

was sick and was staying home. Kevin Weiner stepped in and saved the day there and did a "blind" delivery of George Reynolds's presentation without ever having seen it before that moment. Mike Pereira did an awesome Q & A period that primed the Girl Scouts for the presentation. Georgie's anti-cloud wand cleared the skies just as the sun set, so we were able to show the girls some gorgeous views, albeit a bit light enhanced from the camps street lights that is.

The following is straight from the Girl Scout leader Diane Black and is addressed to: Mike Pereira, Kevin & Barb Weiner, Ted Forte, Richard Dickson, Georgie June, Dale Carey, Kevin Swann and myself,

*Dear BBAA,*

*We would like to thank you and the members of the Amateur Astronomers for coming to our Indian River Service Unit Camp and opening up a whole new world to our Girl Scouts. We all had a wonderful time and learned so many new things. Everyone was VERY impressed with the telescopes and the way you gave each person ample time to see the sights, as well as explanations as to what they were seeing. The presentation was great and every girl was able to earn her Sky Search badge. We had a lot of fun and we couldn't get over how the sky cleared up just in time for the night sky to shine. Thank you all again for a great and enjoyable experience!*

*Diane Black*

**Chuck Jagow**



## APRIL 2007

BBAA	OUTREACH	ASTRONOMICAL
<b>05</b> = BBAA Meeting @ TCC, 7:30 PM	<b>04</b> = Arrowhead Science Fair, Arrowhead Elementary School, 5549 Susquehanna Dr, Virginia Beach, 6:30 PM, Dale Carey POC	<b>02</b> = FULL MOON
<b>06</b> = SKYWATCH @ NWRP, Dusk		<b>10</b> = LAST QUARTER
<b>07</b> = CLOVERWATCH @ Franklin Fairgrounds, Dusk		<b>17</b> = NEW MOON
<b>14</b> = NIGHTWATCH @ Chippokes State Park, Dusk	<b>21</b> = ASTRONOMY DAY @ Virginia Beach Libraries. 9:00 AM - 5:00 PM, Sign up to attend and have a great day! One of our most enjoyable events!	
	<b>23</b> = Azalea Garden Science Fair @ Azalea Gardens Middle School, 7721 Azalea Garden Rd., 7:00 PM, George Reynolds POC.	
	<b>24</b> = Azalea Garden Science Fair @ Azalea Gardens Middle School, 7721 Azalea Garden Rd., 7:00 PM, George Reynolds POC.	<b>24</b> = FIRST QUARTER
<b>28</b> = GARDENSTARS @ The Norfolk Botanical Gardens, 7:00 PM		