

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT RIVER
ASTRONOMY CLUB
An Affiliate of the Astronomical League

Vol. 13, No. 1

March, 2009

Officers: President, **Bill Warren:** (770)229-6108, warren7804@bellsouth.net; Vice President, **Larry Higgins;** Secretary-Treasurer, **Steve Bentley.**

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Club mailing address: 1212 Everee Inn Rd., Griffin, GA 30224. Web page: www.flintriverastronomy.org; discussion group at FRAC@yahoogroups.com.

Please notify **Bill Warren** if you have a change of home address, telephone no. or e-mail address.

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Club Calendar. Fri.-Sat., Feb. 27-28: Cox Field observings (at dark); **Tues., Mar. 3:** Jackson Road Elem. observng (7:00 p.m., rainout date **Thurs., Mar. 5**); **Thurs., Mar. 12:** club meeting (7:30 p.m., Stuckey Bldg. on the UGa-Griffin campus); **Fri.-Sat., Mar. 20-21:** Cox Field observings (at dark); **Fri.-Sat., Mar. 27-28:** Cox Field observings (at dark).

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President's Message. When our Outreach Club awards finally arrived a scant nine months after I

ordered them, I was like **Steve Martin's** character, Navin Johnson, in the 1980 movie "The Jerk," leaping around and gyrating wildly while shouting, "The phone book is here! The phone book is here!" Those pins were long overdue, but much appreciated.

So here's an easy question for you:

Aside from having joined our little astronomy club, what do the following FRAC members – **Charles Anstey, Betty Bentley, Steve Bentley, Curt Cole, Tom Danei, Larry Higgins, Steve Knight, Felix Luciano, Tom Moore, Dr. Richard Schmude, Joel Simmons, Steven (Smitty) Smith** and I have in common?

Answer: We are among the first 125 A. L. members to qualify for the Outreach Club certificate and pin. Those who were present at our Feb. meeting received their pins that night.

Of the A. L.'s 22,000+ members, only 0.06% have earned an Outreach Club pin. Not many, huh?

Well, consider this: Of those 125 Outreach award recipients, **13** of them – that's **10.4%** -- come from one little astronomy club in central Georgia. *Ours.*

Or consider it this way: with 13 recipients in a club with 43 members, **30%** of FRAC's members have been actively and regularly involved in public outreach. I bet there's not another astronomy club anywhere in the world that can match our participation rate in public outreach. The pins we've received is all the proof I need to verify that statement.

I hope that all of you who have earned an Outreach pin will wear it regularly to FRAC meetings and other functions, not just as a reminder of your achievement but also as an incentive for other members to follow your example and become involved in our public observings and pin programs.

You could, of course, store that certificate and pin (and any others you might have received as well) in a trunk in your attic or garage, far away from public view – but why?

Throughout your life, people have always stood ready to criticize you for whatever you've done wrong. This is a chance for you to quietly remind others of something very good that you've done right. As I've often pointed out, *Those A. L. pins don't earn*

themselves; you earn them. So wear your pin(s) – please – and wear (it/them) proudly!

-Bill Warren

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Last Month's Meeting/Activities. **Charles Boils** and **yr. editor** went out to Cox Field on Jan. 29th-30th, and Charles got a great start on his Messier certificate and pin by logging 19 Messiers.

On Jan. 31st, **Alan & Vicky Pryor** ventured out to Cox Field and, after a late start due to a traffic tieup on I-85, they stayed till 1 a.m.

Also on the 31st, **Steve Bentley** conducted a 2-1/2-hr. constellation class for about 10 adults. After an indoor portion in which he taught them how to use a planisphere and star charts, he took them outside and showed them the constellations, using a laser pointer. They're gonna arrange another weekend observing session to be held at Steve's house.

And all of the above occurred in a 3-day period in which no club observings were scheduled.

The threat of bad weather kept everyone but **Larry Higgins** and **yr. beloved president** home on Feb. 10th. They showed **Venus, M45 (the Pleiades)** and **M42 (Orion Nebula)** to about 40-50 Orrs Elementary students and their parents at the school's final PTA meeting of the year.

We had 16 members at our Feb. meeting: **Curt & Irene Cole, Tom Danei, Carlos Flores, Steve Bentley, Larry Higgins, Tom Moore, Dwight Harness, Kevin Murdock, Jessie Dasher, Chuck Boils, Joel Simmons, Mike Stuart, Charles Turner, Felix Luciano** and **yrs. truly**.

Since we were celebrating FRAC's 12th birthday, we didn't have a speaker. Instead, we gorged ourselves on **Betty Bentley's** wonderful pound cake, carrot cake and other assorted goodies. Before that, though, we voted unanimously to elect the slate of officers **yr. president** announced at the Jan. meeting: president, **Bill Warren**; vice president, **Larry Higgins**; secretary-treasurer, **Steve Bentley**; and Board of Directors **Tom Moore, Felix Luciano, Tom Danei** and **Joel Simmons**.

The only glitch in the voting arose when Tom M. complained that the ballots were unnecessarily complicated because some people might not know how to spell "X". (That didn't really happen, but only because Tom didn't think of it.)

The other "business" conducted at the meeting was **yr. president's** awarding the long-awaited Outreach Club certificates and pins to the eight awardees who were present at the meeting: Larry, Joel, Felix, Steve, Tom M., Tom D., yr. editor – and most importantly, Curt, who waited patiently for 15 months to receive his pin. (The original was lost in the mail.)

Dwight Harness did an absolutely splendid job of arranging, organizing and hosting our FRAC visit to "The Cove" meteor crater impact site on Sun., Feb. 15th. Thanks to Dwight's hard work, the other 13 FRACsters and two visitors had the time of their lives exploring the 4-mi.-wide crater all afternoon. Attendees included: **Charles Boils** and his nephew, **Tony Gubbels**; **Alan & Sally Bolton**; **Jerry & Beverly Williams**; **Tom & Brit Danei**; **Charles Turner**; **Larry Higgins**; **Dwight**; **Joe Auriemma**; **Curt Cole**; **Carlos Flores**; and **yr. editor** and his guest, **Andrew Capel**, a geology major at Columbus State Univ.

Scientists such as Auburn geologist **David King** are reluctant to designate sites such as The Cove as impact craters until they've found one or more of the "smoking guns" that prove such sites to be of meteoric origin. We didn't find any *shocked quartz*, *iridium-laced rocks* or *shatter cones* during our visit to The Cove – at least, we didn't know it if we did – but after touring the site for four hours we saw more than enough evidence to prove to ourselves that The Cove is a bona fide impact crater.

Our first stop, a barren hilltop along the N rim, afforded us a splendid view of about half of the crater – all but the W, SW and extreme NE portions of the rim and interior. Later, we went to an open field inside the crater for an unobstructed view of the entire E rim. Those views alone were worth the trip.

We also stopped near the center of the crater to see the two 30-ft. radio dishes belonging to Ga. Tech but presently not in use by them. We ended up our trip with a hike up a steep mountainside strewn with rocky debris. There were no shatter cones – but there were

also no heart attacks, no sprained ankles and no snakebites, so we figured we broke even.

Thanks again, Dwight, from your many friends in FRAC for all the time and work you put into your preparations for our trip. Like the old Top 40 hits, The Cove was a blast from the past, in a very real sense.

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This 'n That. Yr. editor recently received the *Wetumpka Impact Crater Newsletter*, sent out by Auburn's **David T. King**. In it Dr. King writes, "During October, 2008, I led a field trip to the crater for the Flint River Astronomy Club of Griffin, Ga. It was a very nice fall day and all participants seemed to enjoy seeing crater features without the aid of a telescope."

*Speaking of Wetumpka, yr. editor recently completed and sent out to FRAC members his Wetumpka article, "Wetumpka: A Fond Look Back," which has also been put on our website in the "Articles" section. He'll try to do the same thing re The Cove, as time permits.

*Beginning next August, FRAC will hold monthly public observing at Orrs Elementary in Griffin, those observing to coincide with the school's PTA meeting nights. Since the school normally conducts eight PTA meetings every school year and all you need is five public observings to earn an Outreach Club certificate and pin, it'll be a great opportunity to get your feet wet in the A. L.'s easiest and most fun observing pin program.

*In late Jan., 2009, we e-mailed everyone a copy of the broadly amended FRAC Bylaws that yr. editor has been working on. In accordance with the existing Bylaws, the amended Bylaws will be discussed and voted on at the March meeting.

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Upcoming Meetings/Activities. Our final Cox Field observing weekend in Feb. will be on **Fri.-Sat., Feb. 27th-28th**. The New Moon is on the 24th.

We've rescheduled our Jackson Road Elementary School observing for **7 p.m. on Tues., Mar. 3rd**, with an alternate (rainout) date of **Thurs., Mar. 5th**. A large crowd of 2nd Graders, their parents and teachers is expected. Last year's JRE observing brought out about 80 attendees.

The easiest way to get to the school from the S, E or N is via I-85. Get off the Interstate at Ga. Hwy. 16 (Exit 205) and head E toward Griffin. After about ½ mi. you'll come to Jackson Rd. on the right. Turn there, and stay on that road for about 7 mi. The school will be on the right at the top of a long, steep hill. Turn into the campus and drive behind the school. When the road ends at a traffic circle, bump up the curb and drive onto the large, open field beyond the playground equipment. That's where we'll set up our 'scopes.

These are the folks who sold hot chocolate last year and gave FRAC the \$80 in proceeds. We don't know whether they'll do that again this year, but regardless we want to make it a very special evening for them.

Our club meeting will be at **7:30 p.m. on Thurs., Mar. 12th** in the Stuckey Bldg. on the UGa-Griffin campus. Due to recent changes in **Doug Maxwell's** work schedule, he will be unable to speak at our Mar. meeting. Instead, yr. editor will take us on a stroll down memory lane with a talk entitled "1997-98: FRAC's First Year." My, how the world (and FRAC) has changed since then.

Our Cox Field observing weekends will be on **Fri.-Sat., Mar. 20th-21st** and **Fri.-Sat., Mar. 27th-28th**. The New Moon will be on the 26th, so both weekends should be excellent.

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People You Should Know: Tom Moore. Tom joined FRAC back in Dec., 1997 because his 14-year-old daughter **Katie** joined the club, and that made him a member, too. Katie told her dad that he could either drive her to our meetings, or she'd hitchhike. He chose the former, fortunately for everyone involved.

Tom and Katie became FRAC's co-librarians (*we abandoned our club library a few years ago due to logistical problems of the sort you're about to read about. –Ed.*), and at every meeting Tom thoughtfully held the door open for Katie while she lugged about 50 lbs. of books from their car.

Early on, Tom remained largely hidden in the glare of Katie's meteoric rise in astronomy (e.g., her being named the A. L.'s "Horkheimer 2000 Award for Exceptional Service by a Young Astronomer" winner as a senior in high school). During that period, Tom bore the persona of a really funny, very likeable guy who was somewhat off-beat in his thinking. (Tom: "Why do we use red-beam flashlights in the dark at Cox Field? Why don't we use regular lights and wear red goggles?") But back then Tom was regarded, first and foremost, as "Katie's dad."

After Katie went off to college to study physics and astronomy at the Univ. of Arizona, though, Tom gradually revealed another side of himself that few members beyond his closest friends in FRAC knew existed. He's still as off-the-wall, "Larry the Cable Guy" funny as he ever was – his excuse for not having finished the Lunar Club program he started on 11 years ago is, "The Moon changes every night, so I have to start over" -- but he's also a board member and the caretaker of our website, a highly organized problem-solver who works as hard on FRAC's behalf as anyone in the club ever has.

It was Tom who named our star party, and he'll tell you in a heartbeat that "It's not 'Georgia Sky View,' but '**Georgia Sky View – A Stellar Experience.**'" Nobody calls it that but Tom – but since he's our webmaster, you'll find that title on our website.

Finally, here's a Lunar observing tip from Tom: "If you're observing the Moon from beside a tree and the feature you're looking for is hidden in shadow, move to the other side of the tree."

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The Sky in March. **Venus** will continue to dominate the early evening sky throughout the first part of March, setting 3 hrs. after the **Sun** on Mar. 1st and one hr. after the Sun on Mar. 20th. Venus's disk will steadily decline during that period, from 45% lit

on the 1st to a paper-thin crescent that is only 3% lit on the 20th. As a result, it will lose ½ mag. in brightness, fading from mag. -4.8 to -4.3.

There's more (and better) good news in March: **Saturn** (mag. 0.5) returns to the night sky with a vengeance, staying up all evening throughout the month. **Charles Boils** and **yr. editor** observed Saturn in mid-January, and the rings' edge-on tilt caused the planet to look like it had a broomstick running through it and protruding on either side. It's not a view that you get to see very often.

On Mar. 5th, **Comet Lulin** will pass a mere 2° S of the large open cluster **M44 (Praesepe, the Beehive)**, and on Mar. 14th it will share a low-power telescopic fov with the bright planetary nebula **NGC 2392 (the Eskimo, or Clown Face, Nebula)**.

Regarding the former, Praesepe is fairly easy to spot via naked-eye if you know where to look and what to look for. Looking E, start at the bright, 7-star backward question mark that forms *Leo's* head and mane. Once you've found that, move your gaze slowly W from where *Leo's* eyes should be: *Leo* is looking directly at the Beehive, which will appear to your naked-eye view as a faint, circular cloud about 1-1/2 times as large as the naked-eye **Moon**. Due to Praesepe's large size, it is best observed in binocs unless you have a rich-field telescope or wide-angle eyepiece.

Regarding the latter, Eskimo Nebula lies about 2° E of 4th-mag. **Delta Gemini**, which in turn lies about 40% of the way from mag. 2 **Pollux (Beta Gem)** to 3rd-mag. **Gamma Gem**. Put the W edge of your Telrad on Delta, and the Eskimo should be in or very near your low-power fov, a small, gray disk.

Sky & Telescope's **Fred Schaaf** writes at length about Eskimo Nebula on pp. 47-48 of the Mar. '09 issue, which also includes a finder chart. Be warned, though: NGC 2392 is small, and you won't see (except in photos and ccd images) the features that "suggest a human head inside a fur-fringed hood." (p. 47)

A final word or two about Schaaf's excellent article ("A Chilly Face in Space: Look to Gemini for Winter's Brightest Planetary"): please note how he experiments with various eyepiece magnifications and filters to find out what gives him the best view of his

target. It's a technique that all of FRAC's best observers routinely practice.

As for Comet Lulin – well, the old gray mare, she won't be what she used to be in Feb., having faded to about mag. 7 by early March. But that's still bright enough to observe it in binoculars, although it'll look much better in a telescope.

If you decide to look for Lulin – and you should, since comets are always fascinating – the Mar. issue of *Astronomy* (p. 42) has a finder chart to help you. And if you can find time to do it on Tues., Mar. 5th (our Jackson Road Elem. observing rainout date) or on Wed., Mar. 13th, you'll have the added incentive of observing one of the night sky's finest open clusters or winter's brightest planetary nebula while you're in the area.

The other planets are either “morning stars” (**Mercury** and **Mars**), or no-shows (**Uranus** and **Neptune**). But that's the nature of the game, isn't it? We take what the sky gives us.

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THE GREAT MARS HOAX

article by **Bill Warren**

If you were involved in astronomy back in 2003, you'll probably recall that, in that year, **Mars** came closer to the Earth than it's been in more than 59,000 years.

On August 27, 2003, Mars was a scant 34.6 million miles from Earth. It was the closest the two planets have come to each other since the year 57,617 B.C.

The close encounter was a delight for astronomers. Even those of us with – brace yourself for the bad pun – less than stellar vision could see a variety of surface features on Mars, and not just the polar ice caps, either. I can recall my shock at being able to identify *Syrtis Major*, a V-shaped dark patch, as a large, black blob on Mars's surface. And because Mars didn't suddenly leap into such proximity but took its time getting there and leaving again, the viewing was splendid for about a month on either side of Aug. 27th.

The magazines forewarned us, of course: a big event like this was hardly likely to be overlooked by *Sky & Telescope* or *Astronomy*.

Unfortunately, however, another source, a widespread e-mail message that was circulated in Aug., 2003 under the title “Mars Spectacular” brought less desirable results.

The e-mail was remarkably well written, except for one sentence that, due to its being widely misinterpreted, contributed in part to the e-mail's later status as a hoax. Here's the text of that 2003 message. See if you can spot the particular sentence that elevated the e-mail from mere junk mail to a full-blown hoax that has been repeated four times since 2003:

“The Red Planet is about to be spectacular! This month and next, Earth is catching up with Mars in an encounter that will culminate in the closest approach between the two planets in recorded history. The next time Mars may come this close is in 2287 (A.D.). Due to the way Jupiter's gravity tugs on Mars and perturbs its orbit, astronomers can only be certain that Mars has not come this close to Earth in the last 5,000 years, but it may be as long as 60,000 years before it happens again.

“The encounter will culminate on August 27th when Mars comes to within 34,649,589 miles (55,763,108 km) of Earth and will be (next to the moon) the brightest object in the night sky. It will attain a magnitude of -2.9 and will appear 25.11 arc seconds wide. At a modest 75-power magnification Mars will look as large as the full moon to the naked eye. Mars will be easy to spot. At the beginning of August it will rise in the east at 10 p.m. and reach its azimuth at about 3 a.m.

“By the end of August when the two planets are closest, Mars will rise at nightfall and reach its highest point in the sky at 12:30 a.m. That's pretty convenient to see something that no human being has seen in recorded history. So mark your calendar at the beginning of August to see Mars grow progressively brighter and brighter throughout the month. Share this with your children and grandchildren. **NO ONE ALIVE WILL EVER SEE THIS AGAIN.**”

Most of the facts in the e-mail were true. The problem, of course, is with the third sentence in the second paragraph. That sentence would have been true if it had read, "In a telescope at 75-power magnification, Mars will appear as large as the Moon looks without a telescope or binoculars." But it didn't say that, or at least it wasn't interpreted that way. Possibly due to an unfortunate line break in the middle of that sentence in the original e-mail message, what most people who were not associated with astronomy thought the message said was, *Mars will be as large as the Moon*.

Since then, the e-mail has resurfaced in 2005, 2006, 2007 and 2008 – and probably will be re-circulated this summer, too. With each successive mailing, the "facts" have moved progressively farther away from the truth.

For example, last August my wife **Louise**, an elementary media specialist, called me from school one day to ask if she should notify the teachers and students that, on a certain date, Mars would be so large that it would look like we were having two moons in the sky.

The version of "Mars Spectacular" that Louise received contained essentially the same data as the 2003 message, including the now-false data regarding Mars's distance from Earth. But the 2008 e-mail also said (among other things), "Two moons on 27 August"; "(Mars) will look as large as the full moon to the naked eye"; and "Mars will fill a telescope's 75-power field of view." It also displayed separate photos of Mars and the Moon, side-by-side, in which they were the same size. I told my wife that No, she shouldn't say anything about it because it was just another reoccurrence of the Great Mars Hoax.

Here's the truth about Mars: It *never* appears larger to the naked eye than a bright star or planet. Never has, never will. In 2003, Mars was about the same size as Jupiter telescopically. That's large as planets go, but small in terms of the amount of space it takes up in your telescopic or binocular fov.

Beyond that, Mars and the Earth are in constant motion in their orbits around the Sun. Due to the eccentricity of their orbits, the distance between them varies from 33.9 million mi. to 249 million mi. That

distance changes, not just from one year to the next, but from one day and one hour to the next.

So if you read anything differently, especially from an unsubstantiated source such as an e-mail, don't believe it – and for gosh sakes don't pass it on!

Anyway, here's what bothers me most about the "Great Mars Hoax": it makes everyone in astronomy look bad.

The first time it appeared might have been a simple case of misunderstanding – but not the others. The use of words like "perturbs," "arc seconds" and "azimuth" indicate that the original writer, whoever it was, was intimately familiar with astronomy. And since the original message clearly indicated that the Mars 2003 flyby was a once-in-a-lifetime event, the only possible reason for sending it out four times in the next five years was to deceive people who wouldn't know better.

I believe the original message was an honest attempt by a well-meaning amateur astronomer – professionals don't have time for that sort of thing – to alert people who might not otherwise know about it to a unique upcoming celestial event. The other messages in subsequent years were either the result of an incredibly stupid reading of the original e-mail, or else a malicious attempt by someone not associated with astronomy to raise false hopes among people who accept as true whatever they read on the Internet.

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One night I went for a walk by the sea along the empty shores. It was not gay, but neither was it sad – it was – beautiful. The deep blue sky was flecked with clouds of a deeper blue of intense cobalt, and others of a clearer blue, like the blue whiteness of the Milky Way. In the blue depth the stars were sparkling, greenish, yellow, white, rose, brighter, flashing more like jewels than they do at home, even in Paris: opals, you might call them, emeralds, lapis, rubies and sapphire.

-**Vincent Van Gogh**, in an 1888 letter written to his brother Theo

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