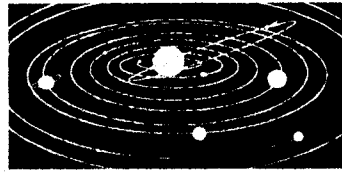


THE FLINT RIVER OBSERVER



Vol. 3, No. 4

FLINT RIVER ASTRONOMY CLUB

June, 1999

Officers: President, **Steven (Smitty) Smith** (583-2200); Vice President/newsletter editor, **Bill Warren** (229-6108 -- or, if you prefer e-mail: warren1212@mindspring.com); Secretary-Treasurer, **Ken Walburn** (P. O. Box 1179, McDonough, GA 30253 / 954-9442; AlCor, **Neal Wellons**, and Web Site Coordinator, **Cody Wellons** (946-5039); Librarians, **Tom and Katie Moore** (228-6447); Telephone/Hospitality Committee Chairman: **Dan Pillatzki** (707-0270). Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. All of these phone numbers have 770 area code prefixes. FRAC web page address: <http://welcome.to/frac>.

Please notify **Bill Warren** promptly if you have a change of address.

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Club Calendar. Thurs., June 3: FRAC meeting (Beaverbrook media center, 7:30); **Fri., June 4:** Beaverbrook "First Light"/FRAC joint observing (BB, at dark); **Fri.-Sat., June 11-12:** FRAC deep-sky observing (Cox Field, at dark).

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President's Message. We have as many new members this month as major stars in the constellation *Auriga*, and I would like to welcome them to FRAC. **Joe Herbert**, **Donald Harden** and **Dr. Stephen Mann** are from Griffin and were introduced to our club through our display at this year's Mayfling Festival. **Joseph Auriemma** is from Senoia and found us via the Peach State Star Gaze. **Eric Shelton**, of Dunwoody, is already a friend to many of us since he's been an active member of the Atlanta Astronomy Club for

quite some time. We're glad to have you in our club, gentlemen. May your voyage with us through the cosmos be a long and fruitful one.

I want to thank **Larry Higgins** for organizing FRAC's participation at Mayfling this year, and for providing the shade canopy for our exhibit. (I still ended up with a sunburned nose, but without Larry's canopy all of us would have been char-broiled!) I also want to thank all the other members who helped with this event. As I see it, this is "sidewalk astronomy" at its finest and I salute you for your participation.

Getting astronomy out in front of the public is one of the foundation blocks of FRAC; sad to say, many astronomy clubs do not perform any type of public outreach. The late **Dr. Carl Sagan** was a huge benefit to astronomy and science. A professional astronomer, he explained all the technical mumbo-jumbo to the public in ways they could understand. He did an excellent job and has been greatly missed since his passing. What we are doing in working with the public is very similar, though with a twist. We are common, everyday people exposing other common, everyday people to the wonders and workings of the universe, and it surprises some of them! At Mayfling, I remember one 30-somethingish young woman who looked at the unmagnified Sun through a hand-held filter we provided and exclaimed, "I didn't know the Sun looked like that; it's so *round!*" She had always thought the Sun had angled points around it, like the drawings we all made in grade school.

Granted, many people we show the sky to may not have or ever will have a deep interest in astronomy, but they've now seen a little bit of "what's up there" first-hand and for real, thanks to FRAC. Of the hundreds of people at

Mayfling who viewed the Sun through our filters and telescopes, there will be a few whose astronomical interests will have been sparked. It may not be immediate: in some cases it may take months or years, but some of them may find themselves buying an astronomical magazine or a book about stars that they saw in the grocery or a bookstore. Eventually we will have another astronomer who will gaze in wonder at the heavens, thanks to FRAC.

For those of you who have donated your evenings to participate at our public observings with schools, scouts, churches, etc., or have volunteered your time at daylight events such as Mayfling, it is you who I see as an elite group of astronomers. You are at the forefront of the public's eye in their quest for knowledge and answers. Those of you who haven't been to one of our public viewings yet, come on out and play! We'll show you how easy it is and that you know more than you think you do!

"Warp factor three, **Mr. Wallace**, the universe awaits!"

-Steven (Saratoga Smitty) Smith

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In Memoriam.

Who ran to help me when I fell
And would some pretty story tell,
Or kiss the place to make it well?
My mother.

-Ann Taylor, "My Mother." (1804)

Our heartfelt sympathies are extended to the family of **Larry Higgins**, whose mother died shortly after the May issue of the *Observer* was prepared for distribution.

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Last Month's Meetings/Activities. Nine members worked at our club booth at Mayfling on May 1-2: **Smitty, Larry & Toni Higgins, Katie & Tom Moore, Ken Walburn, John Wallace, Neal Wellons** and yr. **astute (but not very cute) reporter**. The weather was splendid, and we showed folks the Sun three ways: through a hand-held plate of #14

welders' glass; via solar projection (**Neal Wellons**); and through the solar filter of **Smitty's U. S. S. Saratoga**. Mayfling and the PSSG brought us four new members this month.

Eleven members attended **Smitty's** slide and transparency presentation on solar observing at our May meeting. **Katie Moore** picked her own number to win the door prize, a complete set of Nagler eyepieces valued at \$1775. (That wasn't *really* the door prize, of course; we just wanted to make you feel bad if you weren't able to attend. Actually, the prize was a 12" Meade LX 200 Schmidt-Cassegrain telescope with more accessories than the HST.) Next month's door prize: two fabulous, all-expenses-paid evenings at the renowned Cox Field observing facility on **June 11-12**. B.Y.O.B. (Bring Your Own Binoculars.)

Smitty, Ken Walburn, new member **Joe Auriemma** and ye **olde reporter** showed up at Cox Field on June 14th. **Mars** was incredible, Ken W. only so-so.

The joint was hopping the next night, though, when twelve people took full advantage of a *beautiful, cloudless night* at Cox Field. Attending were: **Smitty, Larry H., yrs. truly, Tim Astin, Tom & Katie Moore** (who's up to 107 Messiers now), **Robert Hall, Rich Jakiel, John Wallace**, and new members **Joe Auriemma, Donald Harden** and **Eric Shelton**. The evening was a howling success, starting when Eric realized that my cigar was about to incinerate the fabric covering his 18" truss-tube telescope. (Welcome to FRAC, Eric!) You need to see the universe through his incredible'scope before I burn it down -- and while you're at it, check out the telescopes belonging to Joe A. and Robert H., too. Nice. *Very* nice.

AL observing club activity among FRAC members is picking up. In addition to numerous awards already received by our members in recent months, we have **Smitty** working on the Planetary and Meteor clubs, **John Wallace** and **Mike Stuart** going after Binocular Messiers and Double Stars, **Larry Higgins** tracking down asteroids (now, *there's* an appropriate pairing!), **Tim Astin** in hot pursuit of Messiers, **Dan Pillatzki** chasing

Messiers and Binocular Messiers, and **Tom Moore** looking for a quiet place to take a nap. Several of the aforementioned are quietly collecting Herschel 400s, too.

Activity is the life's blood of any club. By that standard, for a small club FRAC is doing very well indeed!

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For Sale. A 6" Celestron SPC-6 Newtonian reflector (750mm f. l.) with Super Polaris mount. Also included: 3 eyepieces (18mm, 12.5mm & 7.5mm) and a 2x Barlow. Call **Joe Fambro** at (770)502-9542 and make him an offer.

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Membership Renewals Due in June: None. But everyone who chips in \$10 apiece anyway to help me buy a 27mm Televue Panoptic eyepiece, solar filter or something equally extravagant will receive an autographed photo of **yr. humble reporter** receiving his Herschel 400 pin from **Smitty**. Donors of \$20 or more will have their names spelled correctly in future issues of the *Observer*.

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Upcoming Meetings/Activities. **Ken Walburn**, who doesn't always grasp subtle differences, told us he doesn't plan to attend the June meeting because, as he put it, "I just don't see why an astronomy club has to have a guest speaker talking about hair styling." Ken changed his mind, though, when we told him that **Neal Wellons's** talk at our **Thurs., June 3rd** FRAC meeting will be about *cosmology*, not *cosmetology*.

Our BB/FRAC joint observing will be held on **Fri., June 4th**, in front of the Beaverbrook gym. Our Cox Field deep-sky observings will be held on **Thurs.-Fri., June 11th-12th**, two days before the new moon.

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The Sky in June. On **June 12th**, bright (mag. -4.4) **Venus** will lie along the N edge of

Praesepe (M44, the Beehive Cluster) in the W sky.

During the last half of June, **Mercury** will shine at about mag. 0 at its highest point in the W sky (i.e., less than 17° above the horizon after sunset). On **June 15th**, Mercury will form an equilateral triangle with the crescent Moon and the bright star *Pollux* (Beta Geminorum).

Jupiter and **Saturn** rise in the E between 2-4 a.m. in June, **Neptune** and **Uranus** even later.

But **Mars...** my, has the Red Planet been putting on a show! **Smitty** has gotten some wonderful views of Mars by a number of methods, most notably by stacking two red filters under his high-power eyepiece instead of using aperture stops. Surface features have been noted by various club members with *and without* filters. Ask **Smitty** to show you his Mars drawings; then take your telescope out and give Mars a try yourself. You can't miss it if the sky is clear: it's the bright orange "star" lying less than 5° -- three finger widths held at arm's length -- from the bright star *Spica* (Alpha Virginis). Mars can take all the magnification your 'scope can handle. Light pollution and the size of your telescope won't hinder your view, either, although a red filter will improve it. The foldout section of the June, '99 issue of *S&T* plots the day-by-day retrograde/eastward motion of Mars in May and June.

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TOM MOORE: Mooning the Night Sky

humor by **Bill Warren**

As everyone whose intelligence and perception surpass that of a kumquat knows, **Katie Moore** is prettier, smarter and infinitely superior in searching/observing skills to her father **Tom**. But **Tom** is not without talents of his own, most notably the ability to come up with good excuses for not completing his Lunar Club search. **Tom** has more prepared alibis than a Mafia hit man. At his present rate of progress, **Tom** will get his Lunar pin a few months after

Ray Charles and Stevie Wonder receive theirs.

Here, then, are Tom's 14 most creative excuses for not getting his lunar pin:

14. "Every month there's a new moon and I have to start over."

13. "There's a tree in my yard, and when I stand behind it I can't see the Moon at all."

12. "I can't pronounce *Eratosthenes*."

11. "My binoculars are out of focus."

10. "I don't have a Moon filter and Katie says I look ridiculous wearing sunglasses at night."

9. "The dog ate my observing form."

8. "Bill and Smitty won't let me identify all 100 features as 'something brown, gray, white or black.'"

7. "The full moon looks like pizza, and pizza gives me heartburn."

6. "The dog ate my lunar map."

5. "I keep one eye closed in viewing, and sometimes I forget which one it is."

4. "I saw the Moon this time last month, and nothing's changed."

3. "The dog ate my telescope."

2. "Katie is too tired when she gets home from school and cheerleader practice to set up the telescope for me."

And the #1 reason why Tom hasn't finished his Lunar Club search:

1. "At Cox Field, Bill uses my telescope tube as an ash tray; at home, the birds use it as a Port-O-Potty."

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Attack of the Martian Mosquitos

article by Steven "Saratoga Smitty" Smith

(Editor's Note: This timely article is reprinted from earlier issues of the Observer. Its reminders bear repeating.)

Now that warmer weather is here, mosquitos, redbugs, gnats and other pesky insects aren't far behind. They can turn a potentially great evening of stargazing into an ordeal of annoyance, pain or downright misery. Skywatchers and their guests at springtime and

summer observing sessions should begin preparing to combat flying insect pests before heading for the observing site.

Odors attract bugs. Wearing after-shave lotion, cologne, perfume, or any strongly scented powder is an open invitation for insects to inspect the exposed areas of your fair and tender body at point-blank range. Similarly, you might want to consider bathing and changing clothes before going out to observe; by doing so, you will eliminate your "natural" odor that attracts insects and repels friends and observing companions during an evening of stargazing.

Shorts, tank-tops and sandals may be comfortable attire for the hot, humid summer months -- but you should bear in mind that the temperature drops when the sun goes down, and dress accordingly. Wear (or at least bring along) a long-sleeved shirt, long pants made of a light, cool material, and shoes or sneakers. Enclosed footwear will protect your toes from unexpected encounters with unseen rocks and sticks in the darkness, and prevent your feet from getting cold and wet when dew settles on the grass.

Spray your clothes lightly and evenly with insect repellent, but not to the point of saturating your clothing or feeling greasy. Have someone spray vulnerable areas that you cannot reach. Read the application instructions and warnings for your repellent, and avoid getting any on your eyelashes or in your mouth, nose or eyes.

After using insect repellent, wipe your hands thoroughly with a cloth or paper towel before handling your observing equipment. Most repellents contain powerful chemicals that can melt plastic parts in flashlights, Telrad finders, binoculars and telescopes; they can even dissolve the protective anti-reflection coatings on lenses in binoculars, telescopes and eyepieces! You should always avoid touching your lenses with your fingers, of course -- but you should also be aware that your eyelashes can foul your eyepiece with harmful amounts of repellent. Eyepiece coatings are so expensive to repair that it's usually cheaper to replace the eyepiece!

Do not use spray fogger when you're

observing at home, either, for the same reasons. I'm not sure what its chemical effects might be on your optical coatings, but I suspect that you might find it expensive to find out.

A final caution regarding insect repellents: If you spray yourself at the observing site, first move downwind and far enough away from other observers that the resulting mist will not reach or settle on your own observing instruments or anyone else's.

Although they may be attractive in your backyard for cookouts or parties, you should avoid the temptation to burn citronella candles or oil lamps in the area where you're observing. First, they constitute a fire hazard; second, the light from even a red-shielded flame will adversely affect your night vision; and third, burning such items fills the air with small waxy, greasy particles, some of which are bound to find their way onto the optics of your observing instruments.

Keeping your optics clean for good light delivery to your eye is very important -- but that's a subject for another article. Until then, keep an eye out for those Martian mosquitos, and for those June bugs from the Whirlpool Galaxy. Word has it that they are using cloaking devices to hide their approach, and the repellents we're currently using to stop them are as useless as a Telrad with dead batteries!

* * *

The Lunatix Challenge Series: #3

by Philip Sacco (Lunatic #82)

(Editor's Note: This is the 4th in a series of 12 monthly "Challenges" devised by AAC's Phil Sacco to make your Lunar Club award quest more interesting. Remember: If you miss a given feature one month, you can always look for it next month; and you can look for naked eye or binocular targets with a telescope or binoculars if you prefer to do so.)

Naked-Eye Targets. 1. *Mare Serenitatis*: Sea of _____? 2. *Mare Fecunditatis*: Sea of _____? 3. (Challenge) *Simus Aestuum*. (This could be tough, need sharp

eyes!)

Pickering's Naked-Eye Challenge. Can you see: 1. *Mare Nectaris*: Sea of _____? (This is a 2-rated Pickering's Challenge.) 2. The area of *Gassendi* without an optical aid? (This is a 5-rated Challenge.)

Binocular Targets. 1. Crater *Maurolycus*: How many days after 1st quarter must you wait to see this crater? 2. Crater *Gassendi*: What "Sea" is it near? Can you see any features in it? 3. Crater *Eratosthenes*: At the end of what mountain range is it found? 4. Crater *Vendelinus*: How old must the moon be to see this crater in sunset lighting? 5. (Challenge) Crater *Aristoteles*. (Hint: A frigid area!)

Telescopic Targets. 1. *Vallis Schroteri* (Schroter's Valley): What type of sport field or court does the rough isolated area around *V. Schroteri* appear like under sunrise lighting? 2. *Lacus Mortis*: Lake of _____? (Hint: Something more than a dream!) 3. *Palus Putredinus*: Marsh of _____? 4. (Challenge) *Promontorium Heraclides*: What naked-eye feature is it part of? (Hint: What a place to see a rainbow!) For whom is this feature named, and what "unusual" idea did he espouse? 5. Calculate the appropriate date and best time for viewing the crater *Hedervary* during lunar sunrise or sunset. Draw this feature and a surrounding detail.

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Errata. "Pickering's Dozen," a list of 12 lunar features used to test naked eye visual acuity, was devised by **William H. Pickering**, and not his brother and long-time Harvard College Observatory director E. C. Pickering, as reported in last month's "Lunatic Challenge." The error was **yr. mistake-prone editor's** fault, and not Phil Sacco's.

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