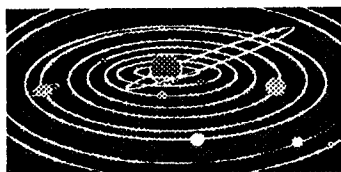


THE FLINT RIVER OBSERVER



Vol. 2, No. 6

FLINT RIVER ASTRONOMY CLUB

August, 1998

Officers: President, Larry Higgins (227-2233); 1st Vice President/newsletter editor, Bill Warren (229-6108 / e-mail: WE1212LW@aol.com; 2nd Vice President/Secretary-Treasurer, Ken Walburn (P. O. Box 1179, McDonough, GA 30253 / 954-9442; AlCor, Neal Wellons (946-5039); Librarian, Keith Cox (227-8171); Observing Chairman, Steven "Smitty" Smith (583-2200); Telephone 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.

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

Club Calendar. **Thurs., Aug. 13:** Club meeting (1212 Everee Inn Road, Griffin, 7:30); **Fri., Aug. 14:** Beaverbrook "First Light"/ FRAC joint observing (Fair Oaks Farm, at dark); **Fri.-Sat., Aug. 21-22:** deep-sky observings (Cox Field, at dark, see p. 3.)

Vice President's Message. We've accomplished a lot as a club in our first 18 months of existence -- but we could do better. Much better. In the months to come, we're going to make certain changes

in the way we do things, primarily in the area of trying to get more of you involved in club activities on a regular basis.

For starters, we're preparing a membership packet consisting of our by-laws, information about the club, a revised membership list and maps to lead you to our meeting and observing sites, to be mailed one per membership household. It's something that's long overdue in coming.

We're also adding another night of Cox Field observing for those of you who want or need more than one night of deep-sky observing per month or find it difficult to attend our Friday night Cox Field sessions. (Details on p. 3.)

Beyond that, we've named **Dan Pillatzki**, a newcomer to our club, as our Telephone Committee Chairman. Dan will be calling each of you every month to remind you of upcoming events and encourage you to come and join us. Outgoing and extremely likeable, Dan is ideally suited to the task. You'll be hearing a *lot* from and about Dan in the future, not just over the phone but in these pages.

We're happy to greet, not just Dan and his wife **Kathy** to our club, but also **Tommy Narron**, Dan's nephew, a youngster from Hampton; **Jim Kiker**, of McDonough; and **Susan, Benjamin** and **John Redden**, of Griffin, who joined FRAC on the night of our observing at Mt. Zion Methodist Church.

-Bill Warren

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July Meetings/Activities. Eight people attended our June 26th deep-sky observing at Cox Field, including new members **Dan Pillatzki** and **Tommy Narron**. The others were: **Katie and Tom Moore** -- Why should Tom always get first billing when I mention them? Katie's found more Messiers than her dad has -- and **Mike and Danielle Stuart, Smitty**, and last, but certainly least, **yr. nearsighted reporter** who managed to get Katie, Tom and Mike thoroughly confused in the Virgo Cluster.

We held two public observings since the last newsletter appeared. On June 23rd, a nice crowd of about 40 people showed up at the Fortson Public Library in Hampton to witness the wonders of the night sky through the 'scopes of **Katie and Tom Moore, Smitty, Neal Wellons, Mike Stuart, Jodi and Doyne Tallman**, and **yr. intrepid reporter**. The following night, June 24th, **Katie, Tom, Jod'i, Doyne**, and **yr. addled reporter** showed off the sky to a youth group at Mt. Zion Methodist Church -- at least, some of us did: someone who shall remain nameless to protect his reputation among club members who don't already know he's a buffoon as well as **yr. club reporter**, forgot to collimate his telescope before dark. Naturally, his 'scope was about 2° off plumb, sort of like his brain.

So June wasn't a particularly good month for **yr. club reporter**, except in the sense that those two observings netted us three new club members. Please don't tell them that the guy who seemed to be in charge of the observings is a FRAC vice president; the story I'm giving out is that he was Bozo the Clown, hired by FRAC to provide comic relief at our public observings.

Our pool party/club meeting on July 11th was a splashing success, its attendees stuffed to the gills from working their way partly through a 6' sub sandwich, 100 Buffalo wings, heaping helpings of potato salad and **Doris Walburn's** magical pork and beans -- heaven help us if **Larry H.** ever gets hold of her recipe! -- together with an ice-cold watermelon and a frosted pound cake. We finished the evening wrinkled like prunes from spending more time in the pool than an Olympic swim team. If you weren't able to attend (and thus defend yourself), we probably discussed *you* sometime during the evening, along with such diverse topics as astronomy, scuba diving, drive-in restaurants, **Denise Cox's** absolute refusal to get her toes wet, and other *very* important stuff. The revelers included **Denise and Keith Cox, yr. waterlogged reporter, Doris and Ken Walburn, Katie and Tom Moore, Louise Warren**, and **Dan, Kathy, Amanda and Megan Pillatzki**.

We had eight FRAC members -- **yrs. truly**, my blushing bride **Louise, Mike and Danielle Stuart, Katie and Tom Moore, Dan Pillatzki and Doyne Tallman** -- and one Beaverbrook student, 5th-grader **Mike Moroz**, who doesn't need observing training wheels -- at our July 10th Fair Oaks Farm observing. The skies were largely uncooperative and Katie was suffering the after-effects of dental work, but everyone had a good time. A group of about 15 Cub Scouts and their parents showed up about 11:00 after most of us had left -- they were on an overnight campout -- and we showed them how interesting potholes can be.

* * *

Here's an interesting little puzzler from

L. M. Boyd's "Curiosity Corner" in the *Griffin Daily News*: "The last TV episode of *Seinfeld* was seen by many (millions of viewers), and so was the last Super Bowl, but they drew nowhere nearly as huge an audience as something else that comes to mind. Can you name it?" (The answer appears on p. 5.)

* * *

Upcoming Meetings/Activities. On **Thurs., Aug. 13th**, our club meeting will be held at my house at **7:30**, not 7:00 as usual. (See the July *Observer* for directions.) **Larry H.** and **Smitty** will take you step-by-step through the process of cleaning your mirrors and eyepieces; if you're interested in hands-on experience, bring along your 'scope, a gallon of distilled or bottled water and a pan large enough to hold your mirror; and your eyepieces and some Q-tips.

Afterward, we'll have a "stay as long as you like" *Perseids Party* in my backyard, so bring a reclining chair -- No, **Ken Walburn**, not your La-Z-Boy -- and we'll lie back, look at the sky and solve the mysteries of the universe between glimpses of meteors streaking across the sky to their ultimate resting places. The Perseids meteor shower peaks on Aug. 11-12, but there'll still be enough late arrivals up there to make your hanging around for a couple of hours worthwhile.)

Our **Fri., Aug. 14th**, FRAC/First Light observing at Fair Oaks Farm will be better than usual, sky-wise, occurring a week after the full Moon and giving us several hours of unimpeded deep-sky viewing before the last quarter Moon takes over.

The lunar calendar is doing strange things to our observing schedule starting in August. We're moving our Cox Field deep-sky observings to **Fri.-Sat., Aug. 21-22**, at which time the Moon will not be

a factor all night long. From now on, we'll have *two* Cox Field observings on the weekend nearest to the new Moon. Plan to stay late on either or both nights whether you're looking for Messiers or trying to find the "Double-Double's Double" (*Astronomy*, July '98, pp. 103-4).

Our Cox Field observings are centered as closely as possible around the new Moon; changes in its scheduled appearances -- actually, non-appearances -- suggest the following dates for our deep-sky observings after August: **Fri.-Sat., Sept. 18-19; Fri.-Sat., Oct. 23-24; Fri.-Sat., Nov. 20-21; and Fri.-Sat., Dec. 18-19.** We will, of course, remind you of those changes from our regular Cox Field format in upcoming months, but it wouldn't hurt for you to mark them down on your calendar now.

A reminder: *You can, as a FRAC member, use Cox Field whenever you like, as long as you leave it in the same condition you found it.* If Mr. Cox comes out to investigate your presence, tell him that Larry and Bill said that he (Mr. Cox) said it would be all right for us to use the site. He's very nice, a friendly person, and if you feel uneasy about meeting him ask him to show you the electric train setup he has in the white building at the end of the field. It's fascinating, and he's understandably proud of it.

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Renewals. Club members whose renewal dates are 09/98 include: **Ron Harrison** and **John and Tamara Priear.**

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The Planets in August. Mighty **Jupiter** (mag. -2.8) dominates the night sky in August. Rising about 10 p.m. early in the

month, it will come up around 8 p.m. and be up all night by the end of the month, at which time it will be about as large (48") as it ever gets in our view. On the evening of **Aug. 22nd**, two of Jupiter's moons, **Callisto** and **Io**, will cross the planet. Look for their shadows on Jupiter between 10:20-11:40. Io's shadow will be easier to see.

Saturn rises about 80 minutes after Jupiter. Steadily brightening toward opposition in Oct., Saturn will be mag. 0 and, including its magnificent ring system, will span 42" of sky -- nearly as large as Jupiter -- in August. Look for the shadow of its rings cast on the planet. You may even be able to see four of its moons -- **Titan**, **Rhea**, **Tethys** and **Dione** -- although they won't be lined up in a row like Jupiter's.

Uranus and **Neptune**, both in *Capricorn*, rise around sunset and are highest around midnight. Skipping **Pluto**, which is up there but you won't find it, **Mercury** and **Venus** are still "morning stars," about 1° apart on **Aug. 4th**.

* * *

People You Should Know: Dan Pillatzki. Although new to stargazing, **Dan** already sports the tell-tale signs of becoming an obsessed observer: reading up on everything about astronomy that he can get his hands on (which isn't difficult since wife **Kathy** is a librarian at the Fortson Public Library in Hampton); eagerness to discuss what he has read, and to get out under the sky to see what's up there; and staying as long as it takes to get the job done. **Dan** already knows what the sky looks like at 3:30 a.m. (Bleary and bloodshot.)

Dan attended our Hampton observing last month, was intrigued by what he saw,

and joined the club that night. Since then, he has attended our Cox Field observing, been out to Cox Field four other times (including twice with me), and he tried to get me to go out there one other night just before the full Moon. When I explained that Moonlit skies aren't friendly to Messiers, **Dan** took his 4" Jason 'scope out in his yard to look at Jupiter instead.

Dan and **Kathy** live in Hampton. They have two children, **Amanda**, 7, and **Megan**, 3. Thus far, **Dan** has nabbed 20 Messiers with my telescope and found Saturn in his own 'scope, both of which qualify as major accomplishments. So here's a warning to **Kathy** and the rest of us: if and when **Dan** ever gets a telescope that matches his enthusiasm, there'll be absolutely no stopping him; he'll probably change his mailing address to Cox Field.

* * *

Attack of the Martian Mosquitos

by Steven "Saratoga Smitty" Smith

(Editor's Note: This article is reprinted from the May, '97 issue of the *Observer*.)

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 reason. 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!

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(The answer to the question on p. 2: "[Comet] Hale-Bopp was seen by an estimated 81% of all Americans.")

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Beginner's Star-Hops; August, 1996

By Art Russell

August normally heralds the "Dog Days" of Summer and brings the hope that cooler days may be ahead. For astronomers, this August brings other things as well. This will be a great month for viewing the Perseid meteor shower. The meteor show will peak at about 2 AM on the morning of 13 August, but expect that we may get great views anytime that previous weekend as well. Come on out to the Atlanta Astronomy Club's Perseid Meteor Shower Viewing event on the evening of 10 August to share the occasion with other club members. This event will take place at the Cahutta Overlook which provides a panoramic view of the horizon so bring your binoculars, picnic dinner, lounge chair, and stay for a while. August also marks your last opportunity to observe the greatest concentration of easy to observe MESSIER ("M") objects as the constellations Scorpius, Ophiuchus, Sagittarius, and Scutum slip pass the zenith and begin their inevitable descent into the western horizon, not to be seen until next year. I encourage anyone interested in getting a running start at their MESSIER CERTIFICATE to get out this month and scour these constellations for their 29 (of 110) MESSIER objects. Please give me a call if you are interested in working on your MESSIER CERTIFICATE. Our Beginners' Sessions will focus on observing the MESSIER objects with small scopes as a project for the next year. How many members can we get certified by the end of next Summer? Give me a call if you are interested (404-373-4119)! Incidentally, at the same time you are working on your MESSIER CERTIFICATE, you can also work on the club's Visual Impressions Program, since you'll see many of its targets at the same time!

This month's star hops will indulge my passion for globular clusters. Of the 142 globular clusters I know of, their greatest concentration is in the constellations Ophiuchus and Sagittarius. This month, we'll concentrate on Ophiuchus which lies above both Sagittarius and Scorpius. We'll start off the summer next year with the MESSIER objects in Sagittarius. A tip to easy observation of these objects is to view from the darkest skies possible and use the lowest power eyepiece you have. All of these objects are visible in binoculars, so don't hesitate to use yours if you have them as well!

Star-hop #1. M62, NGC 6266. We begin our tour of Ophiuchus' globular clusters by starting in the constellation Scorpius. First locate the star *Antares* ("The Rival of Mars"), *Alpha (α) Scorpii*. Then locate the next star in the constellations figure to the south, *Tau (τ) Scorpii*. Beginning at *Tau Scorpii*, extend an imaginary line to the star *45 Ophiuchi*. M62 is located about half way along, and south of this line. M62 appears very compact and disk shaped, but no stars are resolved in smaller telescopes.

Star-hop #2. M19, NGC 6273. Our next stop is M19. To find M19, return your scope to *Tau Scorpii* and then extend an imaginary line to the star *Theta (θ) Ophiuchi*. M19 lies a little more than half way along and south of this line, about 60% of the way to *Theta Ophiuchi*. Like M62, M19 also appears very compact with no resolved stars in smaller telescopes.

Star-hop #3. M9, NGC 6333. Constellation Ophiuchus. Starting at the star *Theta Ophiuchi*, the next star to the north in the constellation is *44 Ophiuchi*. Extend an imaginary line from *44 Ophiuchi* to the star *Sabik, Eta (η) Ophiuchi*. M9 is located about halfway along and just east of the line. M9 appears as a faint, but distinct, unresolved smudge in smaller telescopes.

Star-hop #4. M107, NGC 6171. To locate M107, we once again return to the constellation Scorpius for our starting point. First, locate the star *Beta (β) Scorpii* recognized as the highest of easily seen "Claws of the Scorpion." From *Beta Scorpii*, the next star higher in the constellation is *Nu (ν) Scorpii*. Extend an imaginary line from *Nu Scorpii* to the star *Zeta (ζ) Ophiuchi*. M107 lies 3/4 of the way from *Nu Scorpii* to *Zeta Ophiuchi* and just to the east of this line. In the club's 20 inch telescope, M107 appeared as a moderate sized globular with many resolved stars. A number of outlying stars were concentrated toward the west side of the cluster.

Star-hop #5. M12, NGC 6218. Start at the star *Zeta Ophiuchi* and extend an imaginary line to the star *Kappa (κ) Ophiuchi*. M12 lies a little less than half way from *Zeta Ophiuchi* to *Kappa Ophiuchi* and just to the east of this line. In the club's 20 inch telescope, M12 appears as a moderate sized globular cluster with many resolved stars. There appeared to be a main concentration of stars with a less organized patch apparently in the background to the northwest of the nucleus of the cluster.

Star-hop #6. M10, NGC 6254. Starting once again at the star *Zeta Ophiuchi*, extend an imaginary line to the star *Alpha (α) Ophiuchi*. M10 lies about 1/3 of the way from *Zeta Ophiuchi* to *Alpha Ophiuchi* and just to the east of this line. In the club's 20 inch telescope, M10 appeared as a relatively bright, moderate sized globular cluster. However, the cluster did not appear well organized and had many stars trailing away from its nucleus.

Star-hop #7. M14, NGC 6402. To locate M14, extend an imaginary line from the star *Sabik*, *Eta* (η) *Ophiuchi*, and the star *Cheleb*, "The Shepherd's Dog," *Beta* (β) *Ophiuchi*. M14 is located not quite 2/3 along the way from *Eta Ophiuchi* to *Beta Ophiuchi*, and just to the east of that line. In the club's 20 inch telescope, M14 appeared as a small to moderate sized globular cluster. Its stars were not well resolved, but the cluster seemed well organized. Additionally, a very faint arm of stars appeared to trail off to the northwest.

