

THE FLINT RIVER OBSERVER

Newsletter of the Flint River Astronomy Club
Vol. 8, No. 10 December, 2004

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

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Club Calendar. Fri.-Sat., Dec. 10-11: Cox Field observings (at dark); **Fri., Dec. 17:** Christmas dinner/meeting (Hong Kong II Restaurant, Griffin, 7:00).

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Editor's Message. With **Mr. Cox's** daughter's new house in the final stages of completion near the E end of Cox Field, it may be time for us to start thinking about finding a new club observing site.

More than a year ago, Mr. Cox told me that his daughter and her husband were considering building a home near the E end of the field. If they did, he said, he felt sure that they would be willing to turn off the lights on our side of the house on observing nights. (He didn't say whether they would be installing a security light, and I forgot to ask.) We'll just have to wait and see, I suppose – but in the meantime, we need to start thinking about where we might go if things don't work out.

Since Cox Field itself is a primitive site (i.e., no electricity, water or toilet facilities available), we won't need much in the way of amenities. Here's what we *will* need:

1. **A relatively dark site with good horizons and limited sky glow.** That eliminates practically everything N of Griffin, since we'd be moving closer to the sky glow of Jonesboro/Atlanta while adding the sky glow of Griffin to the S. Lacking a N view, we need an unobstructed S horizon and either an E or W horizon, although not necessarily an E *and* W view.

2. **Easy access.** On a broad level, this means that the farther we move away from Griffin, the more that people who live in the opposite direction will be inconvenienced, travel-wise. Of course, our members who live in McDonough, Stockbridge, Jonesboro, Conyers, etc., have always been inconvenienced in that regard, but at least part of their problem is unavoidable since a good observing site requires darker skies than can be found in or near urban areas.

As noted above, the best site would be located somewhere E, SE, S, SW or W of Griffin.

Of course, we'll probably wind up taking whatever we can get whenever the time comes to pull up our Cox Field roots, but we could minimize our travel problems by finding **two** sites, one E of Griffin and one to the W, and alternating between them on our observing dates.

On a smaller scale, *easy access* also refers to having good roads leading to the site. Turner Road

isn't paved, but it offers a fairly smooth ride if you drive slowly. Cox Field itself isn't dotted with potholes, ruts, fire ant mounds or other obstacles or driving hazards.

3. **We'll need a level observing site with room for at least 20-30 vehicles**, including space to set up comfortably and exit easily.

4. **We'll need long-term, free usage with the site at our disposal as needed.** The Coxses have always been wonderful in this regard. We've used their land for nearly eight years now, and they've always treated us as if it were theirs, and not us, who had first right of usage. We might not be so lucky next time, but we're looking for long-term, *free* usage, not for somewhere that we can rent or use for a few months before having to find a new site.

I'm not tilting windmills here – at least, I don't think so. We've literally been living on “borrowed” time at Cox Field for 7+ years now, because the land doesn't belong to us. Whether or not the present situation resolves itself to our satisfaction, a time will come when we'll have to consider moving. Finding a new site that meets our needs won't be easy, nor will it likely be done quickly. So we may as well start thinking about it *now*.

A relatively dark site. Good horizons. Easy access. A level field with space for about 2 dozen vehicles. Free, long-term usage possibilities. That's what we'll need when the time comes for us to move. Anything more than that is gravy; anything less will limit our ability to enjoy observing together under the night sky.

Who in your church, work or acquaintance owns land that meets the criteria listed above and might be willing to let us use it?

Finally, let me extend my apologies to **Smitty** and to **Matt & Suzanne McEwen** for inadvertently omitting from Smitty's November “President's Message” his welcoming remarks regarding the McEwens' being FRAC's newest members. The oversight was doubly embarrassing because my ties with Matt go back about 15 years, to a time when he was a student in my p.e. classes at Third Ward Elementary School.

So please accept our hearty welcome to FRAC, albeit belatedly, Matt & Suzanne. We hope that your time spent with us will be enjoyable, rewarding and fun.

-Bill Warren

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Membership Renewals Due in December: Tom & Katie Moore. Please send your \$2.50 check to **Steve Knight** at his address listed on p. 1.

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Last Month's Meeting/Activities. **Doug Maxwell** and **Felix Luciano** spent “three good hours” at Cox Field on Sat., Nov. 6th. Regarding the next night's observing (presumably at home), Doug wrote, “I just got in from 4 hours of Herschel 400 hunting, got 18 more tonight. (*His present total is 132. –Ed.*) I almost felt like I was in Chiefland because I had my Nextel with me and was constantly talking with **Scott** and **Steve**, who *are* there.

“We saw something quite unusual in the W sky tonight, a linear-shaped bright cloud just below *Aquila*. What was really strange was that *I was seeing it in Ga. while they were seeing it in Fla.*”

“Turned out it was some sort of rocket launch W of here that left a barium cloud. It was awesome.”

The home front had poor weather on our Nov. observing weekend (which coincided with Chiefland). In Florida, though, Sun. and Mon. nights were the kind of crystal-clear that Chiefland is legendary for; Sunday's added attraction was an aurora that delighted the viewers. The weather was off-and-on after that for the rest of the week.

FRAC's attendees included **Steve & Dawn Knight, Smitty, Scott Hammonds, Larry Fallin, John Wallace** and **Joe Auriemma**, the latter of whom immensely enjoyed taking his Sky Commander for its trial run through the universe. Three members won door prizes: John (a laser collimator), Smitty (an upright Rigel zero-power finderscope) and Larry (a sweatshirt).

Our Nov. meeting featured **Steve K.**'s excellent talk on “Installing a Heat Rope Dew-Removal System.” **Doug Maxwell** received his Double Star Club pin. **Tom Moore** won the door prize.

Other members in attendance included: **Dawn Knight, Bill Snyder, John Wallace, Smitty, Chuck Sims, Larry Fallin** and yr. editor.

FRAC is donating a year's subscription to *Night Sky Magazine* to Beaverbrook.

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Upcoming Meetings/Activities. Our Cox Field observings will be held on **Fri.-Sat., Dec. 10th-11th**.

FRAC's annual Christmas Dinner Party/Meeting will be at 7:00 p.m. on **Fri., Dec. 17th**, at the Hong Kong II Buffet Restaurant on Hwy. 19/41 in Griffin, just north of Blockbuster Video and across 19/41 from Racquethouse Health & Fitness Club.

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This 'n That. Beaverbrook media specialist **Louise Warren** would like to thank: **Dawn Knight** and Dawn's mother, **Sylvia Adams**, for collecting used computer print cartridges, Campbell's soup coupons and newspapers for the school; and **Dr. Richard Schmude**, for allowing BB teachers to use his remarkable *Colors of the Solar System* activity book in their classes. Your contributions are making a difference, folks!

***Smitty's Special Halloween.** Says Smitty, "My wife and her brother planned a big whoop-de-doo Halloween fest for family, friends and church members. We had a big bonfire with hot dogs and other eats, and different areas of the property were set up with scenes such as graveyards and other spooky things. Of course, some family members were conveniently missing – they played ghouls and spooks and jumped out and scared folks traveling the route.

"I set up my telescope just off the driveway and gave everyone views of the **Double Cluster, M31** and **Albireo**. I was dressed as a makeshift **Tycho Brahe**, with a wizard's robe, pointy hat and a piece of aluminum foil on my nose. The kids loved it.

"I was set up until about 10:30, and a good time was had by young and old alike."

*For many of us, at least, the skies were clear enough to witness – and in some cases photograph – the total lunar eclipse of Oct. 27th. **Smitty** and yr.

editor agreed that this was one of the darkest lunar eclipses we've seen.

Although alike in the way they develop, total lunar eclipses are unique in terms of brightness and color.

During totality, the only sunlight reaching the **Moon** is the small amount refracted through the edges of Earth's atmosphere along the line separating day and night; thus, the brightness and color of the eclipse depends on the cloud cover and types and amount of air pollution along that line.

This eclipse appeared to yr. editor's unaided eye during totality as a very soft, pastel orange color overlaid on smoky gray, with a brighter, yellowish band along the NE edge. The orange color was more pronounced in binocs, but it never achieved the coppery or reddish sheen that is often associated with brighter eclipses.

At any rate, what you see is what you get, and total eclipses are always fun. Three members – **Doug Maxwell, David O'Keeffe** and **Scott Hammond** – posted eclipse photos on our fracgroups and frac-a groups web sites.

***From our "Visions of Sugarplums..." Dept.:** When you tell Santa that you've been a good little boy or girl this year, don't forget to remind him that you really, *really* need a 40mm Coronado Personal Solar Telescope with a built-in H-alpha filter for viewing solar flares and prominences. He can get you one for only \$499 (optional tabletop mount \$129 extra) from any authorized Coronado dealer listed at info@coronadofilters.com.

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The Sky in December. The **Geminids meteor shower**, which peaks on the evening of **Dec. 13th-14th**, is usually pretty good, offering something like a meteor per minute. Unlike most meteor showers, the Geminids peak at night rather than during the early morning hours. Wherever you see them, they'll appear to be coming from the constellation *Gemini*, hence their name.

Comet C/2004 Q2 (which sounds like an IRS form but is actually **Comet Machholz**) will reach naked-eye visibility in Dec. A chart on p. 71 of *Astronomy* shows where to find it.

The planets will be morning targets in Dec. At **3:55 a.m.** on the 7th, the crescent **Moon** will occult (pass in front of) **Jupiter**. According to *Astronomy*, “Lunar occultations of planets happen rarely – few observers have seen more than ten in their lifetime.” (p. 58)

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Cruising Cassiopeia: The Eye of the Beholder

**a joint observing report by
Felix Luciano and Bill Warren**

(Editor’s Note: Felix’s November observing report featured, among other things, a group of six Herschel 400 open clusters in Cassiopeia. Since yr. editor cruised Cassiopeia in search of H400s a few years ago, he thought it might be fun to compare notes with Felix to show how, in many [if not most] cases, two people can look at the same things and see them differently, especially where open clusters are concerned.

At least three factors account for whatever differences exist: different sky conditions; different perspectives afforded by different magnifications; and different perceived patterns and configurations in what is seen.

Felix, observing at home in Jonesboro, used an 8-in. Orion Dob on Nov. 13, 2004 under fair observing conditions; Bill used a 10-in. Orion Dob at Cox Field over three nights in late Dec. ’97-mid Jan. ’98 under conditions that ranged from good to excellent.)

NGC 436

Felix (100x) – A small, bright cluster, irregularly shaped but in close formation, with 10-15 bright stars.

Bill (56x) – Small, has a vaguely oval shape with stars clustered at the ends and the center more or less open. The main body of stars are located at the juncture of 2 wedge-shaped lines of stars. About 30 stars in all, half of them brighter than the others.

NGC 559

Felix (150x) – A very small, faint cluster, irregular in shape and located near two bright stars. Averted

vision shows 7-8 stars engulfed in a faint glow. Very nice, a pretty cluster.

Bill (220x) – A beautiful mixture of 30 or more bright and faint stars at one end of a chain of stars, appears as 10-12 stars imposed on nebulosity at lower magnifications. Vaguely star-shaped in outline, with a tail of stars curving away from it to the NW.

NGC 637

Felix (120x) – A small, compressed cluster with two bright stars on one side and an open area breaking up the other side.

Bill (56x) – A small, compact arc of 18-20 stars, with 8-10 brighter than the rest. Three stars (two of them doubles) form a right angle to the arcing stars, like an arrow to a bow.

NGC 654

Felix (100x) – Direct vision shows a very faint cluster, averted vision shows a much brighter cluster with many more stars in a tight formation.

Bill (56x) – Similar in appearance to (but smaller, fainter and not as richly adorned with stars as) **M52** to the W. One star brighter than the rest in this small, compact cluster.

NGC 659

Felix (100x) – A faint, fuzzy patch of light barely seen as a dim glow. Averted vision shows 3-4 stars forming an arc. A nice, small, hazy glow.

Bill (147x) – 659 lies in the same low X field of view as **NGC 663** to the SW. Faint, smaller than 663 and not as bright. The six brightest stars form a neat little baseball diamond. 15-18 stars in all.

NGC 663

Felix (100x) – A large open cluster, irregularly shaped with an open area running along the middle. The N grouping of stars has more members and is spread out over a larger area than the S portion, which is more compressed and shows about 10 bright stars.

Bill (147x) – Large, bright cluster, prettier than **M52**. Contains 70-75 stars in all, with maybe 25 brighter than the rest. Background nebulous, center stunning. Contains several pretty doubles.

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Ask Professor Stargazer

You didn't really think we were going to close out this issue of the *Observer* without another insightful interview with **Professor Stargazer**, did you? That would be like holding a political convention without 150 consecutive speakers referring to "these United States" (as if there were some other United States that we don't know about).

At any rate, we caught up with the esteemed professor recently at the Chiefland Star Party, where he was applying his massive intellect to a cosmological question that has perplexed astronomers for thousands of years, i.e., "*Since stars generate millions of degrees of heat, why can't we see them through the clouds?*"

Smitty: What answer did you come up with, Professor?

Prof. Stargazer: My working hypothesis was that starlight *does* penetrate cloud cover, Smitty, but we can't see it because our mirrors and eyepieces are dirty. So I cleaned my optics, but the stars still didn't shine through.

My next hypothesis was that the culprit must be our eyes. When regular eyewash failed to improve the view, I switched to industrial-strength Drano.

Smitty: Did it work?

Prof. Stargazer: I'll tell you – but first, let me take off my sunglasses.

Smitty: You aren't wearing sunglasses, Professor.

Prof. Stargazer: Oh. Then why is it so dark? Are we having a total solar eclipse? (How long do they last, anyway? This one's been going on for two weeks!)

Next question?

Felix Luciano: I missed Chiefland this year, Professor, so I need to know: What are the chances of us having clear skies during next spring's Chiefland Picnic weekend?

Prof. Stargazer: Practically nil. Call it the "Curse of the Neutrino."

Matt McEwen: Where is the best observing site in the United States?

Prof. Stargazer: About 150 ft. uphill from the Playboy mansion swimming pool. I've found that 10x50 tripod-mounted binocs give the best view.

You know, **Hugh Hefner** must be about 90 by now, but he still has an observer's eye for heavenly bodies. That's probably where *Astronomy* and *Sky & Telescope* got the idea for centerfold star maps.

Steve Knight: I know you love cosmological questions, Professor, so here's a good one: If, as they say, the Big Bang occurred everywhere simultaneously, why is the universe said to be expanding in all directions? Shouldn't at least half of it be contracting?

Prof. Stargazer: I'm glad you asked me that, Steve. You'll find the answer on p. 149 of my latest best-seller, *COSMOLOGY FOR DUMMIES: The Complete Idiot's Guide to Completely Idiotic Questions*: "The universe is expanding in all directions because, like Prof. Stargazer, it eats too much."

Joe Auriemma: Professor, what caused the Tunguska Explosion that leveled trees for hundreds of miles around in Siberia in 1908? Was it a comet, or an asteroid?

Prof. Stargazer: Actually, Joe, it was a reindeer herdsman whose only food source during the long Siberian winter was pork and beans.

Mike Stuart: Let's see, Professor: There's *sunshine* and *earthshine*; is there any other kind?

Prof. Stargazer: There was until the cops raided my basement last weekend.

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