

THE FLINT RIVER OBSERVER

Newsletter of the Flint River Astronomy Club
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Club Calendar. Fri. & Sat., Sept. 26-27: Cox Field observings (at dark); **Fri.-Sun., Sept. 26-28:** Tennessee Star Party; **Thurs., Oct. 9:** Club meeting (Beaverbrook, 7:30); **Fri., Oct. 10:** BB observing (at dark); **Fri.-Sat., Oct. 17-18** and **Fri.-Sat., Oct. 24-25:** Cox Field observings (at dark); and the Peach State Star Gaze (WhiteWater Express, **Wed.-Sun., Oct. 22-26**).

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President's Message. Shortly after you read this, **Dawn** and I will be 260 miles away, in Crossville, Tenn., attending the Tennessee Star Party.

Why travel so far for a 2-day event?, you might ask. Beyond the obvious answer -- *Why not?* -- there are several reasons. One of them is the opportunity to meet new people and strike up new friendships, but there are also the joys of seeing old friends again, and seeing familiar celestial objects from new places and different perspectives. Star parties are your best chance to do these things and more.

You can look at that expensive new widget that you'd like to have, or meet people who know how to find that faint no-see-um that's been dogging you for months. You can sit and talk about all things under the Sun, and everyone gets along fine because you're sharing common interests.

I got my first case of aperture fever at a star party (Peach State Star Gaze '99), and it comes back every time I visit Chiefland. I first saw the **Horsehead** visually at a star party (Chiefland Star Party '01), and stared at it in disbelief and joy till my back hurt. I acquired a taste for **NGC 891** at CSP '02 -- although I still hate it, **Larry** -- through a monster 36-inch 'scope. I've met fine people like **Tom Clark**, **David Levy** and **Rick Singmaster**, the latter of whom complimented my collimation ability, much to my surprise. I've bought eyepieces that were out of budget but worth every penny (PSSG '01) and used them at public observings because they make the most of every photon.

The best part for me, though, has been getting to sit down with people of all walks of life (some of whom, for various reasons, I would never have met outside a star party), and having them become valued friends. Or loaning equipment back and forth to test drive, maybe not even knowing what that person looks like till morning. Or sharing that special sense of camaraderie and feeling that I belong there with people whom I will see only once or twice a year.

Those are the kinds of things that keep me going back for more. They are why Dawn and I will be in Chiefland for the whole week of Nov. 19-26 -- and they are why we're planning our own FRAC star party for next spring. Such special events a few times a year offer something real and exciting to look forward to the rest of the year.

-Steve Knight

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Membership Renewals Due in October: Joe Morris. Please send your \$15 check payable to the Flint River Astronomy Club c/o **Steve Knight** at his address on p. 1.

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Last Month's Meeting/Activities. We had 11 members at our Aug. 22nd-23rd Cox Field observings: **Dawn & Steve Knight** (both nights), **Doug Maxwell** and **Felix Luciano** (Fri. night) and **Larry Fallin, Smitty, Joe Auriemma, Dan Newcombe** and **yr. editor** (Sat. night).

Dawn, Steve, Doug, John Wallace and **yr. editor** showed **Mars** and other celestial masterpieces to a crowd of about 75 Orrs Elementary children and parents on Aug. 26th. Said Doug, "Now, THAT'S what I call a successful public viewing! The kids were better behaved than most, and I think just about every one of the adults who were there thanked us for coming out and doing this. I couldn't guess how many people were there, but the lines were long at every 'scope. That's the most fun I've had since Astronomy Day at Kohl's (in Fayetteville)."

Scott Hammond, Doug and his wife **Laura** and **Smitty** were at Chiefland during the weekend of Aug. 29th-30th. To quote Doug (again), "Unbelievable...It was cloudy and rainy when we arrived at Chiefland Sat. afternoon (Aug. 30th), and at sunset it was completely overcast. Scott assured me it would clear off, and by 9:00 it was already starting to clear. By 11:00 I was absolutely lost and disoriented in the sensory overload of stars I've heard about on good Chiefland nights. I can't describe how clear it was, or how good the seeing was. It was overwhelming. I knocked out some more Caldwells, but spent most of my time looking at familiar things so I could show them to my wife under perfect conditions...I've only been to Chiefland one other time (for the Spring picnic) and it was pretty darn good, but last night I felt like I was in the New Mexico desert."

Scott Hammond added, "I had 3 of 3 good nights at CAV, whereas in the past I've been lucky to have 1 of 3...Doug and I did the all-nighter; ask **Smitty** what

he was doing." (*Doug and Scott will receive Zombie certificates for observing from dusk till dawn; somebody get Smitty a cuppa java or some No-Doz. – Ed.*)

Meanwhile, back home at Cox Field conditions were far less favorable. Clouds and lightning kept everyone home on the 29th, and only **Grady Dukes** and **yr. truly** braved the elements on the 30th. Grady did all the observing: yr. 5-thumbed editor's Telrad On-Off switch broke off and fell inside the Telrad.

We had 13 members and one guest – **Joyce Sullivan**, the 4th-grade teacher who arranged the Orrs observing – at our Sept. club meeting at Beaverbrook. **Yr. editor** moderated the astronomy quizbowl contest, **Dr. Richard Schmude** served as judge, **John Wallace** was the scorer/timer, and **Greg Potter** ensured that the quizbowl mechanism was working properly. (Wish he'd been at Cox Field on the 30th.) The team of **Smitty, Steve Knight, Joyce, Scott Hammond** and **Larry Fallin** narrowly defeated the team of **Erik Erikson, Doug Maxwell, Dawn Knight** and **Felix Luciano** for the title. It didn't really matter, though, since everyone had fun and all participants received a splendid trophy and certificate of achievement (suitable for framing). **Laura Maxwell** served as a lovely audience of one.

An unfortunate set of circumstances prevented most of Beaverbrook's students and parents from attending our Mars observing at the school, but they showed up (along with many others) at the Griffin WalMart Superstore parking lot the next day for our "Sun and Mars" day/night public observing. **Steve, Dawn, Felix, Doug, Tom Moore** and **yr. editor** had a good time showing, not just the Sun and Mars, but also the Moon (via TV) to everyone who dropped by for a visit.

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Felix Luciano: A Mars Observing Report.

Object: Mars. **Date:** Sept. 3, 2003, 22:10 EST (02:10 UT). **Location:** Jonesboro, Ga. **Seeing:** 4-5 (on a scale of 1-10), with a few clouds rolling in and out. **Equipment:** Orion XT8 Dob, focal length 1200.

Eyepieces: Radian (14mm, 85x; 8mm, 150x; and 4mm, 300x).

From *Sky & Telescope's* Mars Profiler website:

Apparent Visual Magnitude: -2.8 **Distance from Earth:** 0.38 a.u. **Angular Diameter:** 24.8 arc-min. **Central Meridian:** 304 degrees.

Mars is located above a line of trees to the SE, and it is extremely bright. I start with the 8mm Rad, and see a nice level of detail. Switch over to the 4mm Rad and it is also giving some solid views. I can easily distinguish several markings on the planet. One of my neighbors walks by and asks to take a look at Mars. She can't believe she is seeing so many dark bands on the planet. I am getting the feeling, *This is going to be a good observing run.*

The S&T Mars Profiler website tells me that I am seeing the following features: the **South Polar Cap** at the 11:00 angle, and right below it is a somewhat faint (but bright) oval area that seems to be the **Hellas** region. I can easily see dark "fingers" extending E-W across the southern hemisphere; I believe they are **Mare Tyrrhenum** to the W and **Mare Serpentis** to the E. There is a much wider finger extending from the one running E-W to the North. That feature is **Syrtis Major**. There is an extremely large, faintly whitish feature to the left of Syrtis Major; is it **Elysium**? Can't really tell, but there is no doubt that there is a large, oval shape at that location.

As some thin clouds cross the face of Mars, the features mentioned above are much more pronounced. I'm surprised to see such a change in contrast. When Mars is completely free of any clouds, the features are bright and not so pronounced: they sort of wash out some of the dark bands and detail I was seeing earlier.

(*Felix's article, "Preparing Observing Reports,"* appears on pp. 4-5. -Ed.)

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Upcoming Meetings/Activities. On **Fri.-Sat., Sept. 26th-27th**, we'll have Cox Field observings, with the new moon on the 26th. Meanwhile, **Steve & Dawn** (and possibly some other members as well) will be at the **Tennessee Star Party (Sept. 26th-28th).**

Our club meeting on **Thurs., Oct. 9th** (Beaverbrook, 7:30 p.m.) will feature **Dr. Richard Schmude** talking about **Mars**. On the next evening, **Fri., Oct. 10th**, we'll gather at BB to show the kids what the full moon looks like (pepperoni pizza).

After that, we'll have Cox Field observings on **Fri.-Sat., Oct. 17th-18th** and again on **Fri.-Sat., Oct. 24th-25th**, with the new moon on the 25th. Maybe the weather will cooperate and permit us to make up for some lost time – say, by starting our individual quests to conquer the **FRAC 50** observing list.

The **Peach State Star Gaze**, to be held at WhiteWater Express from **Oct. 22nd-26th**, will feature speakers **Dr. Brian Marsden** of the International Astronomical Union and FRAC's own **Dr. Richard Schmude**, newly elected Astronomical League secretary. We hope you've made your reservations already or will do so soon if you plan to attend, because the PSSG brochure says that "NO walkins" will be admitted.

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This 'n That. From the Fourth Grade Teachers at Orrs: "Dear Doc and the Flint River Astronomy Club: Thank you so much for coming to our school and setting up your telescopes so our students could observe Mars and certain constellations. This was a great opportunity for our children. It has sparked a great interest in them. Maybe we'll have a few astronauts from Orrs in the future. Thank you so much! (signed) **Joyce Sullivan, LeAnn Clark, Cindy Cumming** and **Nancy Kitchens.**"

*With at least four bright comets expected to take center stage between now and next summer, consider this: If you weren't around to enjoy the appearance of **Delavan's Comet** in 1914, don't lose hope: it's expected to return about 24 million years from now. Think how many "Freddy Vs. Jason" sequels mankind will have endured by then.

***Once upon a time, Smitty** made a couple of metal FRAC signs. One, which stayed up for about 3-4 years before someone removed it, was placed at Turner Rd. and Hwy. 362, near the street marker; the

other, which disappeared recently, showed visitors where the turnoff onto Cox Field from Turner Road is located. And now both of them are gone.

Here's a thought: *Wouldn't it be nice if someone in the club who possesses greater tech skills and manual dexterity than yr. editor* –and that includes virtually anyone who has managed to avoid destroying a harmless Telrad -- *were to volunteer to replace either or both of those signs?*

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The Sky In October. On **Oct. 7th**, **Mars** – still much brighter than normal – will lie 3-1/2 degrees SE of the mag. 5.7, green disk of **Uranus**. **Saturn** (mag. 0) rises about midnight in October, and **Jupiter** around 2 a.m. **Mercury**, 2.5 times fainter than Mars but 2.5 times brighter than Saturn, will be visible low in the E sky 45 min. before sunrise during the 1st week of Oct.

The **Orionids meteor shower**, which peaks during the pre-dawn hours of **Oct. 21st** and normally produces about 15 meteors per hour, will be somewhat hindered by the intrusive presence of a waning crescent moon. But if, at Cox Field on the weekends preceding or following that date, you happen to see a meteor that appears to be coming from the direction of **Betelgeuse** (i.e., from the E), it's probably an Orionid.

With the new moon on **Oct. 25th**, **Comet Encke** (mag. 10), the most frequently recurring cometary visitor – it returns every 3.3 years – will be an easy telescopic target during our **Oct. 24th-25th** Cox Field observings. On the 25th, *Sky & Telescope* (Oct., '03, p. 103) says, Encke will come “close to grazing the northern edge of M31, the Great Andromeda Galaxy.”

Incidentally, **Dawn K.** doubtless will be pleased to learn that Comet Encke was discovered by Mr. & Mrs. **Mechain**'s son **Pierre** in 1786, five years before Mr. & Mrs. **Encke**'s son **Johann Franz** was born. (Encke was the first to determine that the comet he saw in 1818 was in fact the same one that **Charles Messier**'s assistant Pierre Mechain saw in 1786.)

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PREPARING OBSERVING REPORTS

article by Felix Luciano

(In the brief span of two years, Felix has become one of FRAC's finest observers of the night sky. As his Mars observing report on p. 3 clearly reveals, Felix routinely achieves levels of detailed observation that most of us seldom reach.

Unsatisfied with simply observing objects, he consults references to identify or explain what he has seen or indicate what he should be seeing. Such intellectual curiosity and attention to detail will carry Felix as far in astronomy as he wants to go. –Ed.)

Ever since I purchased my Orion XT8 Dobsonian telescope two years ago, I've written down what I was seeing at the eyepiece. Back then, I had no idea that, two years into the future, I would be observing almost daily, including brief pre-dawn sessions of 5-10 minutes duration.

At first, I made notes on pieces of scratch paper. Soon, however, those pieces of scratch paper started to pile up and I found myself spending considerable time trying to get them organized. I bought a three-ring binder and some copy paper for my observing reports, but I was still using scratch paper to record my observations. Eventually, I switched to graph paper since I could write in straight lines with it, or sketch what I was seeing.

Meanwhile, in doing my observation writeups I wanted to develop a specific, standardized format that would include such basic information as location, date, time, temperature, seeing conditions, equipment, eyepieces, detailed descriptions of the objects I was observing, directions for finding the objects, etc.

As I read reports that other observers had posted in various Yahoo groups, I found that they often left out things I wanted to know – information such as what sort of tripod, mount, equipment, eyepieces or techniques the observer was using. As I read those reports, I began making mental notes on what I liked or wanted to use in terms of a particular outline for my own observing reports.

At the same time, I found myself torn between wanting to continue recording my observing sessions or just go out and enjoy the views. One of my

observing goals has been to find objects and then be able to find them again from memory at a later date, time or season. I am trying – still – to build up a memory bank of familiar objects. I enjoy being able to come back to an object and just navigate to it by memory and spend time with an old friend again.

After awhile, though, I decided in favor of keeping observing logs – but by now I had a format to follow. I made a basic template using my word processor so I wouldn't have to think about how to start my writeups. I bought a plastic clipboard and a mechanical pencil that I keep close to the eyepiece case.

I start my reports with the basic information that I mentioned earlier, so I'll have a record of what I was using that evening, and so I'll know whether I had any luck seeing or finding what I was looking for.

Next, I list the constellation I was in and the object(s) I observed, or just the object(s) and include brief notes of what I saw at the eyepiece. Later, in recording my observations, if I've come across some technical information from some other source I'll add it to the report, giving credit to the proper source(s). Those outside sources add credibility to my own observing reports, and they give me better insight into my own observing techniques and results. The next time I look at that object, I'll have a better idea of what I should be looking for, such as features that should have been visible but I did not recognize the first time around.

Oh, by the way: Lately I've started dictating my observing notes into a hand-held recorder. It reduces my time away from the eyepiece when I don't have to write down what I'm seeing. But I don't consider it a "must have" for observing.

A final – and important – note: As I go about doing my observings and writeups, I find that it is getting easier with practice. For instance, I can go back to a particular report, check my notes and find out quickly how to go back to a particular object or interesting sighting.

So there you have it. Something I had no idea I was going to start doing has now become a regular part of my observing routine. My next project will be to create a MS Access database where I can list my

reports and be able to do searches or queries for particular objects.

I hope all this has been of some help to you, and that one day we can compare notes – observing notes, that is.

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The (famous 1996) Hubble Deep Field (photo involved) a field in *Ursa Major* the size of a sand grain held at arm's length. The Deep Field captured objects down to 30th magnitude, about the brightness of a cigar's glow on the Moon as seen from Earth... Thanks to the newly installed Advanced Camera for Surveys, Hubble has taken an even deeper image... which shows objects down to 31st magnitude... 10 billion times fainter than the faintest stars you can see with your naked eye. (The photo) resolves 300,000 stars in Andromeda's halo.

-Robert Naeye
Mercury, Vol. 32, No. 4
(July-Aug., 2003), p. 12

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The greatest asset to the observer trying to find and see difficult objects is experience. As your eyes and brain become more experienced at looking for faint, diffuse deep-sky objects, you will find that seeing them actually becomes easier. Unfortunately, there is no way to speed up this process, other than just getting out and observing on as many clear nights as possible.

-Phil Harrington
THE DEEP SKY: An Introduction
Cambridge, Mass. (Sky Publishing
1997), p. 54.

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