

THE FLINT RIVER OBSERVER



Vol. 6. No. 9

FLINT RIVER ASTRONOMY CLUB

November, 2002

Officers: President, **Steve Knight:** (770)227-9871, 114 Central Lake Circle, Griffin, GA 30223 <sdknight@bellsouth.net>; Vice President/newsletter editor, **Bill Warren:** (770)229-6108; <warren1212@mindspring.com>; Secretary/Treasurer, **Dawn Knight** (see above); Webmaster, **David Ward** (770)989-5021, <dward51@bellsouth.net>; Alcor/Librarian, **Tom Moore** (770)228-6447; <tmoores@dfiequipment.com>; Event Photographer, **Doug Maxwell** (770)719-7959; <dougmax1@bellsouth.net>. Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. Web page: <<http://welcome.to/frac>>, discussion group at <FRAC@yahoo.com>. Please notify **Bill Warren** if you have a change of address, telephone no. or e-mail provider.

Club Calendar. **Fri.-Sat., Nov. 1-2:** Cox Field observings, at dark; **Fri.-Sat., Nov. 8-9:** Cox Field observings, at dark; **Thurs., Nov. 14:** FRAC meeting (Beaverbrook, 7:30); **Tues., Nov. 19:** Leonids meteor shower (5:46 a.m.); and **Fri.-Sat., Nov. 29-30:** Cox Field observings, at dark.

President's Message. There's something about a star party that really takes it out of you: fresh off the PSSG as this is being written, I still haven't unpacked my truck.

We had 3 days and nights of occasional rain at White Water Express, but overall things went all right. Long walks to the facilities over fairly rough terrain made for some adventurous treks at night. The meeting hall and observing field needed work, too, but the biggest problems involved observing: an airport beacon to the SW that flashed every few seconds, and sky glow from Copperhill to the W that washed out

that part of the sky. To the N and E, though, the skies were very good, and this year's speakers, **David Levy** and **Wil Tirion**, were magnificent. Did that make up for the rest? I'm not sure. Ah well, maybe next year will be better.

As for our own star party, I'm afraid we've hit a serious snag. Seems that ISSP is already booked up for all but 3 weekends in 2003, and the only one that is anywhere near the new moon is the July 4th weekend. I'm looking for an alternative field now if necessary, I'll work on it until February, and if nothing pans out by then maybe we can put on a show in '04.

The bylaws and observing rules were passed by unanimous votes at our last meeting, making it easier for us to make changes in the ways that the club grows and thrives in the future. The bylaws were updated, expanded and modernized. The rules aren't much more than reminders of good manners, but having them down on paper is a good way for everyone to know where we stand on certain issues. I'll have copies of both, and they have been posted on our web site for download. (See p. 3. -Ed.)

We'll vote on the **club logo** at this month's meeting, and in November I'll have a full report on the Chiefland star party for those who don't go. Engage warp drive, **Mr. Fallin**, and onward to *Orion*, it's **Horsehead** season!

-Steve Knight

Last Month's Meeting/Activities. Our scheduled observings in October were erased by bad weather. The PSSG weather was hardly better, but it didn't bother **Smitty** and **Chuck Hancock**, who stayed up till 4 a.m. Sat. night chatting with **David Levy**. **Steve K.** managed not to burn down his 'scope or burn up his vehicle (although he almost drove it into a creek), and **Larry Fallin** took a series of photos of the site

that can be seen, in lovely panoramic form, on the fracgroups site.

Because **yr. editor's** loaned-out copy of the *Observe the Sun* manual never showed up and efforts to purchase a new one were stymied at the A. L.'s end until too late to use it, we had to change our scheduled program for the Oct. meeting virtually at the last minute. Everyone present seemed to enjoy the substitute program anyway, though: a nostalgic look back at the first year of FRAC's existence – 1997 – telling why and how FRAC came into being.

Incidentally, one fact that was inadvertently omitted from our list of "FRAC Firsts" was that, in Sept. '97, **yr. editor** became the first FRAC member to earn an A. L. observing pin through our club – his Messier pin, achieved after 32 months of searching the night sky. **Smitty** earned two pins during that period, one of them earlier than ours, but he received them through the AAC rather than FRAC.

Also at our Oct. meeting, **Dawn Knight** and **yr. editor** received their Caldwell pins and three items personally autographed by Sir Patrick Caldwell-Moore. **Larry Fallin** (who won our door prize) pointed out the answer to a nifty trivia question, namely, *Of the 19 A. L. observing clubs, which is the only one that offers a pin with a photograph on it?* The Caldwell Club, of course, which features a photo of **Cat's Eye Nebula (NGC 6543)**.

FRAC attendees at the Peach State Star Gaze included **Smitty**, **Little Smitty** (who ain't so "little" anymore), **Steve & Dawn Knight**, **Larry Fallin**, **John Wallace**, **Doug & Laura Maxwell** and **Chuck Hancock**.

Those present at our Oct. meeting included **yr. editor**, **Louise Warren**, **Steve & Dawn**, **Smitty**, **Larry**, **Doug**, **Tom Moore** and **Felix Luciano**.

Membership Renewals Due in October: Mark & Bryan Christopher; Bob Greenfield; and Mike & Danielle Stuart. Please send your check for \$12 payable to either Steve Knight or FRAC c/o Steve's address listed in the upper left hand portion of p. 1.

This 'n That. Four new documents and forms have been posted on our FRAC web site: our newly revised bylaws, our rules and guidelines for observing, the text of last month's meeting ("FRAC's First Year" [1997]), and a membership application form. Webmaster **David Ward** advises: "Let me know if you can't see them. Remember, you may need to upgrade your Adobe Acrobat reader to 5.0 to read them. (It's free at www.adobe.com, or you can follow the Document Download link on the site.)"

In case you don't already know it, our web site address is listed in the upper left hand corner of p. 1.

*Our tentative plans for a Ga. Sky View 2003 star party have gone awry, at least temporarily. **Steve K.** wants to shoulder the blame for our not getting Camp McIntosh, but the truth is far different from that. If anyone is to blame at our end, it's **yr. editor**, who, as coordinating chairman of the event, could have attempted to reserve the site anytime between mid-July and now, but didn't. That we didn't do so is because, when we discussed our plans with the gentleman on duty at ISSP in July, we were led to believe that, no matter when we applied prior to Jan. 1, 2003, the final decision would not be made regarding acceptance of one of our 3 alternate dates until *after Jan. 1st*.

Trouble was – and we weren't told this at the time – reservations are made, not through ISSP, but through the Ga. State Parks office in Atlanta, and those folks don't play by the same rules. Apparently (as Steve found out when he called State Parks in early October), they fill reservations immediately on a first-come, first-served basis. So while Steve and **Grady Dukes** were dealing with problems like liability insurance, federal tax-exempt status and forging an agreement with the Middle Ga. Astronomical Society (MGAS), whatever weekend dates in 2003 might have existed in July were no longer available in October.

Upcoming Meetings/Activities. We'll have three Cox Field observings this month: **Fri.-Sat., Nov. 1st-2nd**; **Fri.-Sat., Nov. 8th-9th**; and **Fri.-Sat., Nov. 29th**.

9th. That's the sort of thing you come to expect when the Moon messes with the calendar.

Our FRAC meeting will be at Beaverbrook at 7:30 on **Thurs., Nov. 14th**. Because last month's talk on FRAC's First Year was so well received, **yr. editor** has decided to extend it a month and offer, in November, "FRAC's 2nd Year and Beyond," continuing our look at how we got to where we are now. We'll also vote on a club logo at that meeting.

Also, for those who are hardy enough to venture forth in the early morning hours, we'll be at Cox Field to watch the **Leonids Meteor Storm** during the early morning hours of **Tues., Nov. 19th**. Hope to see you there, too.

By the way, several of us – including **Steve, Dawn** (who also answers to either of her Native American names, "Dances With Bears" or "Grizzly Adams" [ask her about it]), **yr. editor, Larry Fallin, Felix Luciano, Doug Maxwell** and probably others who we don't know about – will be attending the **Chiefland Star Party** during the week of **Nov. 3-10** and will miss the Nov. 8th-9th Cox Field observing sessions. Don't let that stop you from going out there, though.

* * *

The Sky in November. If you miss every other celestial event this month, this year – or, for that matter, this *lifetime* – there's one coming up in November that you **don't** want to miss: the **Leonids Meteor Storm**, which makes its final curtain call this go-around during the pre-sunrise hours of **Tuesday, Nov. 19th**.

The same highly reliable experts who accurately predicted that the 1998, 1999 and 2000 Leonids would not rise above "shower" status in the U.S. – and also that 2001 would produce a meteor *storm* of epic proportions – are predicting rates of between 2,600-3,500 meteors per hour at maximum in this, the final installment in the present Leonids cycle. If you can't stand the idea of missing a few minutes of sleep around 5:30 a.m. on the morning of Nov. 19th to see something like 430-580 meteors *per minute*, you probably oughta abandon your binoculars, sell your scope, turn in your Telrad and take up a less

demanding hobby such as knitting, folks, because in amateur astronomy it doesn't get any better than this.

Take it from four of us who were at Cox Field to witness last year's storm: it's the sort of thing you'll remember for the rest of your life! Between us, **Mark & Bryan Christopher, Bob Greenfield** and **yr. editor** saw well over a thousand Leonids meteors between 5-6:00 a.m. Over at Gordon College, **Dr. Richard Schmude** counted more than 1,500 meteors – and this year's display is predicted to be 2-3 times better than last year's!

All you need to watch the display are (a) clear skies, (b) a reclining lawn chair (so your neck won't get a crick in it from looking upward), (c) some insect repellent if the weather is warm, and (d) warm clothing (and possibly a blanket as well) if the weather is cool. And that's it. You don't need a telescope or binoculars (which would narrow your field of view and cause you to miss a lot of meteors), or a pencil and paper unless you're logging Meteor Club observations. You don't even need horizon-to-horizon open skies to enjoy the show: last year, **Louise Warren** stayed home and "saw at least 50" meteors in 30 min. of observing in an area of overhead sky that was no larger than our swimming pool.

Just lie back, preferably facing E, and let the show begin. Because they travel faster than any other known meteors – about 159,000 mph – and because the vast majority of them are no larger than grains of sand – Leonids meteors tend to appear as what **yr. editor** calls "*zips*" – little streaks of bright light that travel, on average, about 1-2 inches across your line of sight before they "blink off" (i.e., burn up in Earth's atmosphere). Occasionally you'll see larger ones that stay longer than a second or two, of course – last year, for instance, we saw a **bolide**, or "fireball," that was about 2 magnitudes brighter than **Venus**. Most, though, will zip across, especially along the outer edges of your vision, and even as you turn your head to look at them, they're gone like last month's paycheck. Some of the brighter ones leave vapor trails behind them that linger for minutes at a time.

Normally, it doesn't matter much which direction you look during a meteor shower, since at maximum the Earth has entered the trail of dust and other tiny

particles that comprise the meteors. Incoming particles may flash anywhere in the sky. This time, though, there'll be a full moon lying low in the W sky to bleach out all but the brightest meteors in that direction. Place a tree, house, etc., between you and the Moon, and sit facing East, toward the constellation Leo and its distinctive, 6-star backward question mark or sickle; that's where all but the sporadic (occasional) meteors will appear to be coming from, no matter where you see them in the sky.

So you'll know what you're seeing: the Leonids meteors are debris left behind in the passing of periodic **Comet Tempel-Tuttle**, which comes by every 33 years and deposits untold billions of tiny particles that are frozen until the comet draws near the Sun. Those particles, stretched out into streams by the conflicting gravities of the Sun and the comet, assume orbits of their own around the Sun, and the resulting meteor showers or storms arise when Earth passes through them every year around Nov. 18th. The showers become "storms" for a few years after each succeeding visit by Tempel-Tuttle, the last of which occurred in 1998. Experts predict that the next "storm" comparable to this one probably will occur in 2098 – or as early as 2065, if we're lucky. Best advice here is, *Go for it this time around*. Don't count on being around 63 years from now unless you know something about longevity that the rest of us don't. The peak is supposed to come at 5:46 a.m., with the action picking up dramatically for 4-5 minutes during that time and then falling off as sunrise draws nearer.

You need to be outside and ready when the peak occurs. You can bet that yrs. truly will be out at Cox Field that morning if the sky cooperates. (We'll probably go out there about 2 a.m. and stay until sunrise.) C'mon out and keep us company.

A Personal Aside to Everyone in FRAC from Yr. Editor. Between our July and October meetings, it gradually dawned on me that, where I was concerned, at least, one of FRAC's three original goals wasn't being met, namely, "having fun." I've often expressed my sincere belief that "If you aren't enjoying FRAC, you shouldn't be in FRAC" – but in

the past I was always referring to someone else, not myself.

My solution lay, not in quitting FRAC as **Larry Higgins** (an ex-president and co-founder of FRAC) did, but in resigning my post as coordinating chairman of **Ga. Sky View 2003**.

I didn't mind the planning – I'm good at that sort of thing – but the *waiting* for things to happen over so long a time (from July through March) was extremely difficult for me to handle. A lot of people put a lot of hard work into **GSV '03**, and I've let them down. I know that, just as I know that I did the best I could under the circumstances. At every step along the way, I did what I thought was in the club's best interests, including stepping down when I realized that I'm not emotionally equipped to live with the attendant pressures for so long a time, especially not when I'm also functioning as vice president and newsletter editor.

I spent literally scores of hours working on the project and, while FRAC's bid for a 2003 star party at Camp McIntosh was unsuccessful, the planning that has already been done by me, **Tom Moore, Dawn Knight, Larry Fallin, Smitty** and **Greg Potter** offers a solid foundation for a star party of our own, whether in '03 or '04 – only with someone else at the helm. That would be, I think, an excellent project for the newly elected Board of Directors to adopt, applying (and adapting, as necessary) the existing groundwork to whatever site is selected. It's inconceivable to me that four people couldn't do an infinitely better job than I've done in providing leadership and vision for this project.

I will, of course, work hard along with others in FRAC to ensure that our star party, whenever and wherever it occurs, is an event that everyone in FRAC will be proud of. I simply prefer to let someone else call the shots from now on. I'm not proud of that decision, but it's one that I can live with.

-Bill Warren

SMITTY'S SNIPPETS

by Steven "Saratoga Smitty" Smith

The swiftest object we humans have created is a spacecraft called Pioneer 10, launched from earth way back in 1972. About twelve years ago it departed the solar system, zipping along at twenty-five miles a second, a pretty stout speed... Having left our relatively crowded solar system behind, Pioneer 10 now finds itself sailing through a vast vacancy, as solitary as a clam. Even traveling at 90,000 miles an hour, it is moving 7,500 times slower than the speed of light!

-Richard Shatner
 Star Trek: I'm Working On That
 (2002), p. 16

It turns out that (Stephen) Hawking is also a Star Trek fan. Several years ago he was in

California and arranged to visit the set of *Star Trek: The Next Generation*. As he toured the soundstage, he passed through the Enterprise engineering room and paused near the warp engines. Indicating the engines, he smiled and, in his synthesized voice, said, "I'm working on that."

-Richard Shatner
ibid., p. 7

(Editor's Note: Are you having trouble organizing your monthly searches for objects in the night sky? If so, Larry Fallin offers a monthly guide to which Messiers, Caldwell's, Herschel 400s and Double Stars are up. His November installment appears below.)

##

Constellations of the Month - November					
	Messiers	Caldwells		Double Stars	Herschel 400
Andromeda	M31	C22	NGC 7662	Gamma Andromedae	NGC 205
	M32	C23	NGC 891		NGC 404
	M110	C28	NGC 752		NGC 752
					NGC 891
				NGC 7662	
				NGC 7686	
Cassiopeia	M52	C8	NGC 559	Eta Cassiopeiae	NGC 129
	M103	C10	NGC 663	Sigma Cassiopeiae	NGC 136
		C11	NGC 7635		NGC 185
		C13	NGC 457		NGC 225
		C17	NGC 147		NGC 278
		C18	NGC 185		NGC 381
					NGC 436
					NGC 457
		NGC 559			
			NGC 637		
			NGC 654		
			NGC 659		
			NGC 663		
			NGC 1027		
			NGC 7789		
			NGC 7790		
Pisces	M74	none		65 Piscium	NGC 488
				Alpha Piscium	NGC 524
				Psi 1 Piscium	
				Zeta Piscium	
Triangulum	M33	none		Iota Trianguli	NGC 598