

# THE FLINT RIVER OBSERVER

Newsletter of the **FLINT RIVER  
ASTRONOMY CLUB**  
(an affiliate of the Astronomical League)

**Vol. 12, No. 7** **October, 2008**

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Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. Web page: [www.flintriverastronomy.org](http://www.flintriverastronomy.org); discussion group at [FRAC@yahogroups.com](mailto:FRAC@yahogroups.com).

Please notify **Bill Warren** if you have a change of home address, e-mail address or telephone number.

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**Club Calendar. Fri.-Sat., Sept. 26-27:** Cox Field observing (Fri. at dark, Sat. at 5:30 p.m. for the postponed picnic followed by observing at dark); **Fri.-Sat., Oct. 3-4:** Cox Field observing (at dark); **Thurs., Oct. 9:** Club meeting (7:30 p.m., Stuckey Bldg., UGa-Griffin campus); **Sun., Oct. 19:** Wetumpka trip (meet at Waffle House on the NW side of Griffin at 7:00 a.m. for breakfast); **Fri., Oct. 24:** Futral Rd. Elem. School observing, 7:30 p.m.; **Fri.-Sat., Oct. 31-Nov. 1:** Cox Field observing (at dark).

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**President's Message.** Okay, it's set: FRAC will visit the Wetumpka (Ala.) meteor crater on **Sunday, October 19<sup>th</sup>**. We'll meet in the parking lot by the Waffle House on the NW side of Griffin on Ga. Hwy. 16 at 7:00 a.m., at which time we'll have breakfast and decide whose vehicles we'll carpool in.

(The Waffle House is located on the right (south) side of Ga. Hwy. 16, just beyond the 2<sup>nd</sup> stoplight from the Griffin Hwy. 19/41 Bypass. To get there from, say, Jonesboro or McDonough, come S on 19/41 like you're going to Cox Field, only get off the Bypass at the Griffin-Newnan exit and turn left on Hwy. 16. Or, conversely, if you're coming from, say, Barnesville, go one exit past the Williamson Rd. exit -- Ga. Hwy. 362 -- and bear right at the Ga. Hwy. 16 exit. Once you're on Hwy. 16 East, the above directions apply.)

The trip will take 2-1/2 to 3 hrs., and we'll arrive in Wetumpka at 9:30-10:00 a.m. CDT, which is one hour earlier than it is here. We'll meet **Dr. David King** -- or, in the event that he is unable to attend, a graduate student from Auburn's geology dept. -- at the Hardee's on U. S. Hwy. 231, and the tour will proceed from there. Dr. King has assured me that the two sites we most want you to see -- the area of upheaval where the earth's crust folded back on itself behind what is now a CVS pharmacy, and the panoramic vista across the crater to the eastern rim from Bald Knob Scenic Overlook along the NW rim -- will both be available.

Because Dr. King's tour is somewhat longer than the one in Feb. sponsored by the Wetumpka Chamber of Commerce, we'll take a lunch/restroom break, probably around noon their time, before resuming the tour. We'll probably be finished around 3:30 p.m. EDT, and will return to Griffin around 6:30 p.m. These figures aren't etched in stone, but they should give you some idea of the time frame we're expecting.

Aside from the possibility of violent weather, the show will go on as planned. Bring along a raincoat and umbrella, on the grounds that it's better to have them and not need them than...well, you know the rest.

Since the trip is being sponsored by Auburn Univ., Dr. King requests that we send him a check by Oct. 10<sup>th</sup>. (Club treasurer **Steve Bentley** will send the check.) The tour will cost \$20 per person, with the

proceeds going to the Auburn Geology Dept.'s Wetumpka Impact Crater Research Fund, not to Dr. King. If you didn't pay Steve B. at the sept. meeting, please send your check (made out to FRAC in the proper amount, no cash please) c/o: Steve Bentley, 950 Boxankle Rd., Forsyth, GA 31029.

-Bill Warren

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**Last Month's Meeting/Activities.** On Sat. Aug. 23<sup>rd</sup>, 15 members – **Jessie Dasher** & son **Alexander**, **Alan Pryor** & daughter **Cassandra**, **Carlos Flores**, **David O'Keeffe** & daughter **Sarah**, **Dwight Harness**, **Charles Turner**, **Joel Simmons**, **Tom Danei**, **Larry Higgins** and yr. editor –and visitors **Cynthia Queen** & daughter **Sophia** – attended our Cox Field observing. The skies cooperated nicely, allowing three of us to stay till 2:15 a.m.

Four members showed up for our Fri., Aug. 29<sup>th</sup> Cox Field observing: **Charles Turner**, **Joel Simmons**, **Dwight Harness** and yr. editor. Overcast skies greeted us – hardly a surprise, given the generally awful observing conditions that have plagued us this summer – but the clouds began to clear out around 10 p.m., giving us some much-needed observing time.

The following weekend was typically awful, weather-wise, but because somewhere along the line yr. **addle-pated editor** decided that our long-delayed picnic observing was scheduled for Sat., Aug. 30<sup>th</sup> (it wasn't: as you'll see, it's scheduled for Sat., Sept. 27<sup>th</sup>), **Steve & Betty Bentley**, **Larry Higgins** and yrs. **truly** showed up anyway. The sky never cleared, but it wasn't a total loss: the gossiping was non-stop – if you weren't there, we probably nailed your fair and tender carcass to the wall somewhere along the way. Betty and Larry enjoyed some of the Colonel's chicken, and Larry and yr. editor devoured enough of Betty's delicious carrot cake to feed a battalion of hungry soldiers. Larry furtively suggested that we ought to tell Betty every month that we're having a picnic.

**Alan Pryor** did some solo observing at Cox Field on Fri., Sept. 5<sup>th</sup>. His goal was to see the "Pillars of

Creation," made famous in the 1995 HST astrophoto. (The "pillars" are the dark, dusty material that form the eagle's partly spread wings in **M16, Eagle Nebula**.) Alan writes, "It was easy to find the open cluster, and after putting on an H-beta filter the nebulosity became apparent. I could see the clouds of gases in the area, but I was unable to pick out the eagle. Hey, it was still fun being there."

The following evening, **Steve & Betty Bentley**, **Dwight & Laura Harness**, **Kevin Murdock**, **Steve Knight & Angela Smith** and **Alan & Vicky Pryor** were at Cox Field until about 11:30 p.m. The heavens were so-so, but the fellowship among friends was heavenly.

Twenty members, including **Steve & Betty Bentley**, **Alan & Sally Bolton**, **Steve Knight**, **Carlos & Olga Flores**, **Tom Moore**, **Jerry & Bev Williams**, **Joel Simmons**, **Felix Luciano**, **Dwight Harness**, **Kevin Murdock**, **Charles Turner**, **Mike Stuart**, **Joe Auriemma**, **John Wallace** and yr. editor attended **Dr. Richard Schmude's** fascinating Wetumpka talk. It was hands down – or perhaps we should say "*palms down, then palms up*," after his demonstration of how the earth folded back at impact to reveal an underground layer – one of his finest presentations. Everyone owes a big "Thanks!" to **Steve Knight** for loaning Dr. Schmude his power point projector.

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**This'n That.** From **Steve Bentley**: "I wrote another letter to the editor of the *Monroe County Reporter*, a weekly newspaper. We need to encourage our members to do this. Unless we start fussing about the light pollution, it'll only get worse."

And here is Steve's letter:

"To the Editor:

"As reported in the Aug. 27 *Reporter*, Monroe County is growing by leaps and bounds. Not only is this growth occurring in the residential arena, but in the commercial arena as well. Growth is a good thing in most cases, but there are also some downsides to it.

"One area of particular concern is the increased demand for electrical power. Within this category of increased electrical power usage is an increase in outdoor lighting. Neither the State of Georgia nor

Monroe County has any regulatory codes where outdoor lighting is concerned. There are no regulations concerning the type, size or mounting of outdoor electrical fixtures. This lack of regulation can and does result in two forms of light pollution known as *sky glow* and *light trespass*.

“Sky glow is the dome of light that extends into the sky above a populated area or industrial site at night. This is the result of light being transmitted in an upward direction. Light trespass is unwanted light shining into any area. The best example of this is your neighbor’s yard light shining into your window at night.

“Monroe County, as well as the State of Georgia, needs to address this problem with at least some sort of rudimentary lighting codes. Requiring the use of fully shielded lighting fixtures would prevent the problems associated with sky glow and light trespass.

“Through the use of International Dark Sky Association (IDA) approved lighting fixtures, these problems can be avoided. These fixtures are designed to lower energy usage, thereby saving money and they keep the light on the ground where it’s needed, not in the sky. Let’s keep Monroe County’s skies dark so that we can continue to enjoy the stars.”

\*At writing, **Steve Bentley** still has seven 2009 *Astronomy* calendars left. At only \$10 apiece, they make ideal Christmas gifts for hard-to-shop-for relatives and friends, or as attractive attention-getters for your workplace.

\*It wouldn’t be at all surprising if right about now some A. L. officials are regretting their decision to add an Outreach Club to the list of observing pin programs to increase participation in public observing. While it’s a good idea in principle, it has quickly turned into a paperwork nightmare due to a structural defect within the program’s requirements.

In order to earn a pin, one must have participated in at least five public observing during the past 5 years.

We don’t know for a fact that a huge backlog of qualifiers for the certificate and pin exist, but it’s probably an accurate assumption since (a) even a small club like FRAC has 12 qualifiers, (b) there’s no

mention of Outreach Award recipients in the “Observing Awards” section of the Sept. ’08 issue of the *Reflector*, and (c) Outreach Club coordinator **Mike Reynolds** hasn’t responded to our letters, e-mails or phone calls requesting information re the status of our 12 applicants. Dr. Reynolds had a heart attack last Dec., and this fiasco is probably pushing him toward another one. (This isn’t an attempt at humor at Dr. Reynolds’s expense, but just a statement of fact: he is also president of the huge, Jacksonville-based Northeast Florida Astronomical Society, and your own present and past presidents will verify that astronomy clubs don’t run themselves.)

The problem eventually will be resolved, one way or another. Meanwhile, please be patient and bear in mind that we’re still trying to find out what’s going on and where we stand re the status of our Outreach Awards.

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**Upcoming Meetings/Activities.** Our last Sept. Cox Field observing weekend will be on **Fri.-Sat., Sept. 26<sup>th</sup>-27<sup>th</sup>**, with the latter date representing another attempt to stage the picnic/observing that originally was scheduled for July 4<sup>th</sup>. The gluttony will commence at 5:30, bring a food or soft drink and whoever in your family would like to attend. (If you’re unsure of what to bring, call coordinator **Steve Knight** at (770)616-2672 or e-mail him at [saknight1@comcast.net](mailto:saknight1@comcast.net).)

We’ll have two more Cox Field observings on the following weekend, **Fri.-Sat., Oct. 3<sup>rd</sup>-4<sup>th</sup>**.

Our club meeting will be at 7:30 p.m. on **Thurs., Oct. 9<sup>th</sup>**, on the 2<sup>nd</sup> floor of the Stuckey Bldg. on the UGa-Griffin campus. Our program will be “Trivia II,” another team trivia contest prepared by **yrs. truly**. Everyone who participates will be a winner and receive an award certificate celebrating the occasion, since we’ll divide up into three teams vying for 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place honors.

Trivia II is both shorter and easier than the trivia contest we held at GSV ’08. (The last question is probably the hardest: the correct answer is “Octans.” You might want to remember that.)

Our Wetumpka tour is slated to leave the parking lot by Waffle House (see pp. 1-2) no later than 8 a.m. on **Sun., Oct. 19<sup>th</sup>**, so please don't be late.

The cancelled Futral Rd. Elementary School "Starry Night" observing has been re-scheduled for 7:30 p.m. on **Fri., Oct. 24<sup>th</sup>**. Hundreds of students and parents are expected to attend this schoolwide event, so we hope you'll do your dead-level best to attend. Rather than repeating the directions to the school from the Sept. *Observer*, we'll post directions in a group e-mail prior to the observing.

We'll finish up Oct. with Cox Field observing on **Fri.-Sat., Oct. 31<sup>st</sup>-Nov. 1<sup>st</sup>**. See below for our observing plans for Halloween evening. We think it'll be a lot of fun.

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**The Sky in October.** Instead of talking about which planets are up this month, we're offering instead a ghastly, ghostly witches' brew for Halloween, an observing scavenger hunt by FRAC's own Midnight Master of the Macabre, **Phil Sacco**. C'mon out to Cox Field on Halloween night (Oct. 31<sup>st</sup>) and let's see how many of Phil's morbid menagerie of menacing monsters we can find!

\* \* \*

### Howl-eeen Fun

#### **an observing project from Philip Sacco**

*(Editor's Note: This article first appeared in the October, 2000 issue of the Observer.)*

Well, it's that time of year again: the time for witches, ghosts and goblins and things that go bump in the dark... Yeep!...

Hard to believe it's almost Halloween again. This is a time of year when we prepare ourselves for the unusual, the scary things that present themselves. But more curious than that is the fact that many of us will go out of our way to do something a little unusual or even spooky in the "Spirit of the Season."

If you are one of those individuals who like to hunt out the unusual and scary...then this "Halloween Trick-or-Treat List" will be right up your alley! So fix yourself a cup of hot witches' brew, put on something warm and take a trip on the Dark Side with a friend for an evening of a Howl-eeen good time.....!

#### **The Howl-eeen Hunt, or 13 Unlucky Objects.**

Let's do a little observing warmup activity before we get to the "13 Un-Lucky Objects" -- a little naked-eye hunting to get in the mood of the evening. If we're going to have ghosts and goblins and such creatures of the night...everything has a beginning and "the end," and this is no different. So to start off this seasonal pleasure...something needs to be laid to rest.

1. First stop will be somewhere high overhead by mid-evening. Commonly known as the constellation *Delphinus* and located just NE of the Eagle (*Aquila*), this little constellation was at one time called "**Job's Coffin**." I figure the name comes from the odd, old-timey coffin shape of this small group of stars.

2. The second constellation to hunt down is just south of *Pegasus*...Find the **Sea Monster** (*Cetus*).

3. The third easy monster to hunt down is the constellation *Draco* (the **Dragon**).

A little hunting through some old star atlas will be required to locate the following lost constellations, but to the intrepid hunter of the obscure, these will bring you satisfaction once you have learned them and found them...After all, this *is* a Hunt!

4. **The False Cross.** (I'll give you a hint: **Iota** and **Epsilon Carinae** and **Kappa** and **Delta Velorum**.) Good luck, these are "deep in the ground," so to say...heehheehheeh...Or is that..."Ah-Haa-Haaaaa!"?

5. **The Horse and Rider.** (**Zeta** and **80 Ursae Majoris**...)

6. **The Sickle.** Just try to find this one at this time of year...This one's a real Trick!

7. **Cerberus** -- the three-headed dog, guardian of hell...I'll give a Halloween treat to anyone who can tell me where to avoid this beast...Welllll, I did say you may have to get out an old atlas, didn't I? (This is

a very uncommon constellation; after all, how many three-headed, flesh-eating dogs have YOU seen? Find this one and you will have a real treat to share with others...)

8. This last constellation I have included not so much for its content – *Tubus Herschelii Minor* – but rather for the fact that it was created by a Jesuit astronomer named **Father Maximilian Hell!**

9. Now, if you began this trek about 9 p.m., you should now be approaching the “Witching Hour,” so let’s get to the good stuff...after one last easy naked eye object. Turn your attention to the constellation *Perseus* and hunt down the “demon star” commonly known as **Algol**. This star is a short term variable star, and can be seen to brighten and dim in the course of just a few days!

Okay, it’s dark out now and the sky is full of creatures of the night, you just need to spy them out: it’s time for the “**Thirteen Objects for a Howl-eeen Good Time!**”“ A telescope will be required for these little monsters; after all, they would rather you didn’t see them, and they can only be found under the cover of night!

1. **Markarian’s Chain (M84/M86/M88, etc.)**. You’ll have to hunt early to find this chain in a woman’s hair! Welll...it was a LOT of hair so maybe a chain was necessary?

2. **The Dragon Nebula (NGC 5623, M8)**. Reputed to live in a tea pot!

3. **The Ghost of Jupiter (NGC 3242)**...Under the tail of *Hydra*... Good luck!

4. **The Cat’s Eye (NGC 6543)**. Can be found under the first curl of the Dragon.

5. **The Owl Nebula (NGC 3587, M97)**. You’ll have to crawl under the belly of the Big Bear to find this guy...

6. **The Owl Cluster (NGC 457)**. This one is a treasure of a Queen!

7. **The Veil (NGC 6960)**. Just slipped off Job’s coffin!

8. **The Blinking Nebula (NGC 6826)**. Be careful, or this one will drop on your head when you’re not looking...or rather when you can’t see it!

Tricky little fella, now ya see him, now ya don’t! Flies with swans...

9. **The Ghost Ring (IC 5148)**. Heeheehee, Happy Hunting! Dig REAL DEEP to find this one...and up comes a GHOST...BOO!

10. **Mirack’s Ghost (NGC 404)**. This guy is related to a chained-up Princess...Monster Meat, if you will, he’ll be hovering overhead soon...

11. **The Spider (NGC 5829)**. No tellin’ where you will find this guy...Try looking under your chair!

12. **Medusa**. This one is an unable **Abell 21**...Are you sure you want to look for this one?

13. **The Witch Head Nebula (IC 2118)**. This one will be up early in the morning, near the right foot of *Orion*.

Well, there you are! Looks like you made the trip OK...

You *did* make it OK, didn’t you?  
AH-HAA-HAAAA!

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### FRAC’s Four Greatest Backyard Observing Discoveries

humor by Bill Warren

*(Editor’s Note: In Aug., 2008, Astronomy Magazine published an article by **Richard Talcott**, “The 10 Biggest Discoveries of the Last 35 Years” [pp. 36-43]. Not to be outdone, we have compiled a list of the 4 greatest discoveries by FRAC members in the past 12 years. [They are presented in reverse order, the way Talcott did it.] We think it’s fair to say that these discoveries have forever changed the way outsiders look at FRAC.)*

4. **Tom Danei Discovers a New Use for Telescopes**. “I was out in my backyard one evening last month with one of my telescopes,” Tom said, “when I noticed this strange-looking object at one end of the tube. It was round, and there was a little glass hole in the middle. I looked in the glass, and darned if I didn’t see stars in there. After experimenting for

awhile, I found that I could see other things like galaxies, nebulae and clusters.

“I was shocked. I didn’t know you could do things like that. I thought what you did was buy telescopes and spend your evenings setting them up and taking them down. I didn’t know you were supposed to look for things, too.”

**3. Dan Pillatzki Discovers the Moons of Mercury.** Like most astronomers, you probably weren’t aware that Mercury has any moons. And that’s all right, too: no one knew about Mercury’s moons until Dan Pillatzki came along.

Using image-stabilizing 10x50 binoculars from his 2<sup>nd</sup>-floor bedroom window on the evening of Jan. 7, 2002, Dan discovered that he had direct access to the shower rooms of the Mercury Medical School Nurses Dormitory across the street from his house.

“I was really getting into it, looking at some pretty incredible moons,” Dan said, “until my wife **Kathy** came in and asked me what I was doing.

“After that, my images weren’t very stable for several weeks, until the bruises went away and the swelling went down.”

**2. Ken Walburn Discovers a New Aurora.** “It all began for me on Oct. 26, 1998,” Ken says, recalling the night that changed his life forever.

“I was in my yard with my telescope, looking at the globular cluster **M4** in *Scorpius*. Then I saw it: a shimmering curtain of light that rippled slowly while I watched, like a flag waving in a gentle breeze.

“I’d seen the Northern Lights before, so I knew this was an aurora. But you see auroras at the *poles*, not in *Scorpius*.

“*I’ve discovered a new aurora!*, I thought excitedly. I ran to my car, got my cell phone and called **Brian Marsden** at the International Astronomical Union to report the discovery of **Aurora Walburnalis**.

“After I reported what I’d seen to Mr. Marsden, he excused himself to go check it out. He was gone for about ten minutes. By that time I was getting sorta antsy, thinking, *Hey, man, this is a long distance phone call, y’know!*

“But then he came back to the phone and said, “I think you called the wrong number, Ken. From what you’ve told me, it sounds like you should have dialed 911. Your house is on fire.”

**1. Tom Moore Discovers a Previously Unknown Meteor Crater.** After 11 years in which he managed to locate 65 of the 100 objects on the A.L.’s Lunar Club observing list, Tom Moore recently decided to take his ‘scope out in his backyard and see if the **Moon** was still up there.

“It’s still there,” he reported, “although it had moved to another part of the sky and changed shape since the last time I saw it six years ago. But that’s not what captured my attention that night.”

No, what captured Tom’s attention was the meteor crater he literally fell into while crossing his backyard in the dead of night. He named it **Godfrey Daniel Crater** after the phrase he shouted as he fell.

“I’m surprised that **Cathy** and I didn’t hear it or feel the impact when it landed,” Tom said. “It had to have happened in the last 24 hours, because the crater wasn’t there the previous night.”

He had already set up his telescope, Tom says, “and I was heading for the shed where I store my astronomy stuff to get my other equipment.

“Suddenly, I was falling.

“I landed head-first after a short fall, but the landing was surprisingly soft. I had just seen a meteor zip by overhead, so I immediately knew what this was. I was thinking, *Hey, meteorites are worth their weight in gold!* So I began scrabbling around in the debris, feeling for meteors, but the ones I found were soft and crumbly.

“They also smelled bad. I remembered **Stephen King’s** line from the movie where he found a meteorite and got slime from it on his hands: *‘Meteor crud!’*

“That’s when **Cathy** came outside. It was so dark that we couldn’t see each other.

“Tom, you need to be careful where you walk out here,” she called out. “The Roto-Rooter people were out here today to clean our septic tank, and they didn’t finish the job. They’re coming back tomorrow to put the lid back on and finish up.”

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