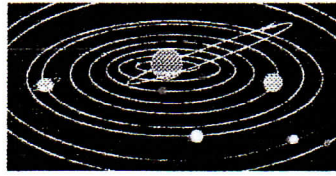


THE FLINT RIVER OBSERVER



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FLINT RIVER ASTRONOMY CLUB

March, 2002

Officers: President, **Steve Knight:** (770)227-9871, 114 Central Lake Circle, Griffin, GA 30223 <sdknight@bellsouth.net>; Vice President/newsletter editor, **Bill Warren:** <warren1212@mindspring.com>, (770)229-6108; Secretary/Treasurer, **Dawn Knight** (see above); AICor, **Neal Wellons**, and Web Site Coordinator, **Cody Wellons:** (770)946-5039; Librarian, **Tom Moore:** (770)228-6447. 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** promptly if you have a change of address or e-mail.

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Club Calendar. Tues., Mar. 5: Observing at Cotton Indian Elementary School (Stockbridge, 7:30-8:30); **Sat., Mar. 9:** FRAC meeting (Cox Field, 6:00); **Fri.-Sat., Mar. 8-9** and **Fri.-Sat., Mar. 15-16:** Cox Field observings (at dark) and Messier marathon (Chiefland, FL).

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President's Message. *Flash: New and Unknown Celestial Phenomenon Discovered By FRAC Member at Charles Elliott Wildlife Center!!!* The object, probably the strangest thing this reporter has ever seen (except for **David Ward** actually setting up in the daylight, that is), was previously undocumented and unknown to astronomy.

The phenomenon, discovered by alert FRACster **Larry Fallin**, was large, bright and green, and -- strangest of all -- it could only be seen through Larry's telescope.

Larry was set up near my truck, looking at **M51** through the glass window, when he

spotted the eerie, green glow. The effect was interesting, as was the scrambling among us to duplicate the view in Larry's 'scope until we discovered the source of the green glow: it was the reflection of the power plug in the bed of my truck, as seen by Larry through the window of my bedcap. Alas, there probably will be no Nobel prize in astronomy for Larry this time around. Sorry, man, I tried.

We're still going to Chiefland for the Messier Marathon on **March 15-16**; we'll meet at Home Depot at 8 a.m. and pull out around 8:30. After a stop for gas at I-16, we'll hit the road. The trip isn't all that long, and is well worth the effort. While the magazines aren't doing any Messier Marathon contests this year, FRAC is: we'll give our own certificates to anyone in FRAC who finds 50 or more, whether at Cox Field or Chiefland.

On **March 9th**, not only will our FRAC meeting be held at **Cox Field** at **6:00 p.m.**, but earlier that day I'll be the speaker at the Middle Georgia Astronomical Society's monthly meeting. Let me know if you'd like to go along; they're a good group of people and would love the visitors.

I want to take this opportunity to thank new member **Greg Potter** (2030 Steele Rd., Griffin, [770]412-9928) for offering to help with the "Dinner On The Grounds" for the Coxses, coming up in April. Greg is one of the nicest people you'll ever meet.

Also, let me welcome our other newest member, **Felix Luciano** (450 Washington Dr., Jonesboro, GA 30238, [770]471-4160, e-mail <Montbob@yahoo.com>). Felix is very enthusiastic and has a nice start in astronomy with a very nice XT8 'scope from Orion.

Finally, I'd like to thank those of you who attended the Cotton Indian observing on Feb.

until the meteor blinked off.

***Trivia Question #1:** *How many of the ten largest Messiers (apparent size) can you name?* If you can name six, you're better than **yr. editor**, who correctly identified five of them (but should have gotten six). The answers are on p. 5.

***Smitty**, noting with enjoyment **Dawn's** comment at our Feb. 8th observing that she had "too many clothes on," says a strip tease might be a good way to increase attendance at our observings.

Dawn's response: "Smitty, you aren't supposed to tell *all* of our observing night secrets. If they want to know what goes on at the field they will just have to show up...Although something like that would probably increase observing attendance." To which Smitty replied: "Dawn, as for attendance at observings, don't forget the remote control car stunt shows and yo-yo exhibitions!"

Smitty went on to tell us about his scheme to advertise "*Topless Mechanics*" working at his Harley shop awhile back: "The idea didn't go over too well...It was just me, shirtless, working on the Harleys." Ugh.

***Trivia Questions #2-3: M42, Orion Nebula**, appears on the lists of three A. L. observing clubs: the Messier, Binocular Messier and Universe Sampler (naked-eye option).

But that's not the problem, this is: *What deep-sky object appears on the most observing lists? How many clubs does it appear in?* (We'll give you a hint: it's **not** M42, and the answer, which appears on p. 5, contains a number higher than three.)

* * *

Upcoming Meetings/Activities. *Please Note:* Our **March** meeting will be held at **Cox Field** on **Sat., Mar. 9th**, at **6:00**. Since that evening is also part of our observing weekend package, the meeting will be brief and informal, with a cake to celebrate FRAC's sixth birthday. We'll meet at the end of the field near the hangar, and

then go to the observing area afterward.

Before then, though, we'll try again to conduct an observing for the students at **Cotton Indian Elem. School** in Stockbridge at **7:30** on **Tues., Mar. 5th**. To get to the school from Griffin, go N on Hwy. 19/41 to Hwy. 138, turn right, and stay on Hwy. 138 past I-75 and I-675, then bear right onto Hwy. 42 at Wal-Mart. 1-1/2 mi. past Wal-Mart you'll cross over a RR bridge "hump" and then turn left onto East Atlanta Rd. Go about 1/2 mi. on E. Atlanta Rd. and turn right at Old Conyers Rd. Go about 2 mi., and Cotton Indian will be on the left, in front of (and adjacent to) Stockbridge High School.

Our Cox Field observings will be held on **Fri.-Sat., Mar. 8th-9th**, and on **Fri.-Sat., Mar. 15th-16th**. (The new moon falls on the 13th.) As **Steve K.** noted, we'll be offering Messier Marathon achievement certificates for anyone who finds at least 50 Messiers in one night of observing, whether at Cox Field or Chiefland.

Re the Marathon: If, like Steve and others in FRAC, you're planning to do the Messier Marathon this month, you can download information about it at:

<<http://www.nerdnet.nl/~angelo/phoenix/messier/xtra/12months.html>>. And **Phil**

Harrington has an excellent article in the Mar. '02 issue of *Astronomy* (p.p. 64-71) telling you how to do a Messier Marathon.

For example, Phil suggests that, while you're waiting for the sky to get dark enough to go after the westernmost faint fuzzies on the Messier list (**M32, M32, M110, M77, M33, M79** and **M74**), you can start with the easiest ones that you can see before the sky fully darkens: **M45, M42, M43, M41** and **M35**. And once "rush hour" hits, Phil advises, don't waste more than 5 min. on any given Messier. Go on to something else, then go back to what you missed later if you have time.

* * *

The Sky in March. *Somebody Tell the UGA Astronomy Professor:* **Saturn** (mag. 0.1) will still be in *Taurus* in March, and **Jupiter** (mag. -2.4) will be in *Gemini*.

At around 11 p.m. on **Tues., Mar. 19th**, the

mag. 8 asteroid **Vesta** will pass within 2' (i.e., less than 1/2 pinky-width in your 25mm or 26mm eyepiece field of view) south of Saturn. Saturn's moon **Titan** (also mag. 8) will be the brightest object close to Saturn; Vesta will be the next closest bright "star" to Saturn.

Near the end of March, **Venus** will emerge as an "evening star" that sets 90 min. after sunset.

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Putting Heat in Its Place, Part II

astrotech article by Steve Knight

Last month we looked at the hows and whys of thermal management in Newtonian telescopes. This month we'll describe the installation process I used for my 14" Dob. (While the basic process will be the same for your telescope, there may be small differences.)

The first things you have to decide are, (a) How much airflow do you need?; (b) How do you want to mount the fans?; (c) Do you need to make exhaust holes?; and (d) Will it affect balance and performance?

After deciding how much airflow I wanted, it was time to find some fans. It turned out that CompUSA had exactly what I was looking for in two 43cfm ball bearing 12V fans and a thick mouse pad for insulation from vibration. The total cost of those items was under \$25.

A trip to Radio Shack provided a cigarette lighter plug for \$10 and Home Depot had the \$12 hole saw for the exhaust holes.

From there it was time to do the unthinkable, i.e., start drilling holes in my telescope tube. I put the fans slightly above the primary mirror, with the exhaust holes even with the mirror. This was where the old adage, "Measure twice, cut once," came into play. The last thing I wanted to do was find out I put the holes in the wrong place. Sonotube is hard to come by.

Using an air-powered sawzall, I made two 3-5/8" holes at the five and seven o'clock position (with the top of the tube being twelve o'clock). This was to make the holes the same size as the fan blades. Then I made seven

1-1/2" holes along the top of the tube to allow the air to escape the tube. (*Note: Remove the primary mirror before you drill the holes, and don't leave it close to where you're working or you'll get dust and shavings from the sonotube on it. [Incidentally, you may as well clean your mirror while you have it out of the tube.]*)

I attached the fans to the mouse pad with weather stripping adhesive, and used Velcro to attach the fans to the tube. From there I cut the blue wire off the fans, wired the fans in parallel to the cigarette plug, and routed the wires to the altitude bearing of the tube, allowing the wires to pivot with the tube. I considered wiring in a speed control, but since no vibration has been noted even at 640x I may not bother with it. I made a hanger out of wire to hang the battery on the base, and so far the battery runs for hours on a single charge.

The system is light enough that the balance was not affected, and stays out of the way so that it can stay on full time.

To determine what size fan is right for you, go to <http://www.sky&telescope.com/resources/software/cool.html> and download the simple program that gives a simple graph for deciding what size fan you'll need. The small file takes only a few minutes to download.

If you need any help installing a cooling fan on your telescope, I'll be happy to help you in any way I can (except paying for the parts).

(Author's Note: Next month's installment will cover the results of the system and how it helps images as soon as you get set up.)

* * *

(Editor's Note: Yr. beloved but bumbling editor, envious of Steve's facility with tools, had planned to tell you how to change the batteries in your Telrad, but I couldn't get the back off the thing to get to the batteries. Maybe next month. Anybody got a crowbar?)

* * *

***Answer to Trivia Ques. #1: 1. M31 (Andromeda Galaxy); 2. M24 (the Small Sagittarius Star Cloud); 3. M45 (the Pleiades); 4. M44 (Praesepe, the Beehive); 5. M42**

(Orion Nebula); 6. **M7**; 7. **M33** (Pinwheel Galaxy); 8. **M8** (Lagoon Nebula); 9. **M48**; and 10. **M25**. (Source: A. L. Messier Club)

For the record, **yr. editor** got #s 1, 3, 4, 5 and 7 correct; completely overlooked **M24** and was wrong on **M41**, **M51** (Whirlpool Galaxy), **M13** (The Great Cluster in Hercules), **M35** and **M27** (Dumbbell Nebula).

***Answers to Trivia Questions #2-3:** The **Double Cluster (NGCs 869 and 884)** appears on five observing club lists: the Caldwell Club

(#14), the Deep-Sky Binocular Club, the Herschel 400 Club, the Urban Club and the Universe Sampler.

*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, Caldwells, Herschel 400s and Double Stars are up. His January installment appears below.*

##

Constellations of the Month - March

	Messiers	Caldwells	Double Stars	Herschel 400
Cancer	M44 M67	C48 NGC 2775	Iota Cancri Zeta Cancri	NGC 2775
Lynx	none	C25 NGC 2419	12 Lyncis 19 Lyncis 38 Lyncis	NGC 2419 NGC 2683 NGC 2782
Puppis	M46 M47 M93	C71 NGC 2477	Kappa Puppis	NGC 2421 NGC 2422 NGC 2423 NGC 2438 NGC 2440 NGC 2479 NGC 2482 NGC 2489 NGC 2509 NGC 2527 NGC 2539 NGC 2567 NGC 2571
Pyxis	none	none	none	NGC 2613 NGC 2627

March Messier Marathon

See all the Messier Objects in one night.

Are you ready?