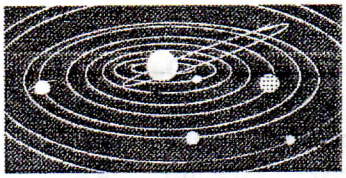
THE FLINT RIVER OBSERVER



Vol. 6, No. 2 **FLINT RIVER ASTRONOMY CLUB** **April, 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); AlCor, **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@yahoogroups.com>.

Please notify **Bill Warren** promptly if you have a change of address or e-mail.

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Club Calendar. Thurs., Apr. 11: FRAC meeting (Beaverbrook, 7:00); **Fri.-Sat., Apr. 12-13:** Cox Field observings (at dark); **Sat., Apr. 20:** Astronomy Day public observing (Kohl's department store, Fayetteville, 4:00-whenever).

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President's Message. $1.20.

A measly buck twenty.

After A.L. dues and FRAC expenses, that's how much is left over from your annual dues -- and that total doesn't include expenditures for door prizes, parties or any extras. We rely heavily on donations, volunteers, and members supplying door prizes and other things. We think it's better to ask for contributions to our door prize fund than to raise our annual dues.

On **Sat., Apr. 20th,** FRAC will be hosting Astronomy Day at **Kohl's** department store in Fayetteville. (Directions to the store appear on p. 2.) I hope you'll come out to help us show the Sun, Moon and wonders of the night sky to the folks in Fayette County. We'll set up at 4:00, using solar filters to show off the Sun, and we'll stay as long as there are people who want to see the sky as they've never seen it before.

It doesn't matter whether you're a beginner to astronomy or FRAC, or even whether you bring along a telescope or binoculars. We'll tell you whatever you may need to know. If you've never done this sort of thing before, I guarantee that you'll find it a thoroughly enjoyable experience.

Finally, I want to welcome FRAC's newest most valuable player to our club, **Doug Maxwell** (424 Price Road, Brooks, GA 30205, (770)719-7959, e-mail <dougmax1@bellsouth.net>.

-Steve Knight

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Last Month's Meeting/Activities. We had eleven at our FRAC Fifth Birthday Party at Cox Field on Mar. 9th: **Joe Auriemma, Larry Fallin, Steve & Dawn Knight, Tom & Katie Moore** -- and gosh, was it good to see Katie again! -- **David, Roxanne, Rachel & Melissa Ward,** and **yr. editor.** Roxanne's cake was typically splendid, as were her stories of other cakes she has made; and Dawn's mother's refreshment made specially for our party was simply "mouse"watering.

While **Steve, Dawn, Larry F.** and **Scott Hammond** were having a great time at Chiefland, things weren't so hot for us at home. Oh, Steve, Dawn, **Mike Stuart** and yr. editor tried Cox Field on the 8th to no avail, and on the 16th **Smitty** and yrs. truly enjoyed 90 min. of excellent observing conditions and three hours of clouds and sucker holes.

The Cotton Indian observing was cancelled.

* * *

Membership Renewals Due in April: Joe & Cody Hinton; Alex Langoussis; Dan Newcombe; and **Charles Sykes.** Please send your check for $12 payable to either Steve Knight or the Flint River Astronomy Club c/o Steve's address listed in the upper left hand portion of p. 1.

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This 'n That. Phil Sacco's new e-mail address is: <ppsacco@attbi.com>.

***Steve K. Reports on Chiefland: "Larry Fallin** and I bagged 109 Messiers, missing only **M30. Dawn** completed her Binocular Messier list and got 29 Deep-Sky Binocular objects. We got to take a few peeks through **Tom Clark's** famous 36" Tectron telescope. Despite Tom's fame and stature in astronomy, he and his wife **Jeannie** are two of the nicest people and most gracious hosts you'll ever run across. Getting to meet them was, in itself, worth the drive down.

"I'll say it now and say it loud, **Dawn and I are going back to Chiefland in November!**, and I hope that you'll want to come along. Ask **Larry** or **Scott Hammond** if it was worth it."

***And From Those Who Stayed Home, Part I: David Ward.** "Well, I set a new low for a Marathon: *2 Messiers.* Weather was lousy so I stayed at the house. I went out with the bino's to see if the comet was visible in the sucker holes and determined it was. I took out the 4" and observed the comet (nice tail) for about 20 min. from one sucker hole to the next. Took a quick look at **M45** and **M42** and then the clouds told me nothing else was going to happen here so I called it quits. A while later the bottom fell out and it flooded.

"Did anybody get stuck at Cox Field when the rain hit?"

***...And Part II: Smitty.** "I went out to Cox Field last night (Mar. 16th) and was joined shortly by **Bill Warren.** Partly cloudy, mostly cloudy -- the sky, that is, not Bill -- got sprinkled by rain twice, then almost totally clear around 10:30. Then, around midnight while I was picking them off in the Virgo Cluster, got totally socked in. Bill left and I stayed for awhile before finally packing it all up. After everything was put away I looked up and it's almost clear again. #%*@-#%!!!!! Naaah, I left for home." (Smitty got 48 Messiers, Bill four Herschel IIs, before the clouds got in the way.)

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Upcoming Meetings/Activities. Our FRAC meeting on **Thurs., Apr. 11th** (Beaverbrook, 7:00) will feature *"Steve & Smitty's Show and Tell,"* including Steve's home-made observing chair (that cost him about $40 to build and sells for $170 from Orion) and his telescope ventilation system (see p. 3) that gets rid of that bothersome smoke from telescope fires; and Smitty's nifty little binocular table mount (it cost him about $10 to make and is commercially available for $300+) that permits you to view the sky through binoculars while looking *down.*

Our Cox Field observings will be confined to the weekend of **Fri.-Sat., Apr. 12th-13th,** since the new moon falls on the 12th.

On **Sat., Apr. 20th**, we'll celebrate Astronomy Day by traveling to Fayetteville to hold an extended day/night public observing in the parking area in front of **Kohl's** department store. The observing will begin at 4:00 and will continue until well after dark.

To get to Kohl's from Griffin, follow Ga. Hwy. 92 (McIntosh Rd.) to Fayetteville, turn right at Ga. Hwy. 85 North in Fayetteville, and after about 3 mi. look for the **Fayette Pavilion** shopping complex on your left. Turn left onto the road through Pavilion, and Kohl's will be about 1/2 mi. on your left. It's the last store in that section.

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The Sky in April. It's a banner month for planetary observers, with all five naked-eye planets on display in April. An hour after sunset on the **15th, Venus** (mag. -3.9) will be low in the west to the lower right of the crescent Moon and **Mars** (mag. 1.5). Higher in line will be **Saturn** (mag. 0.1) above the face of *Taurus,* and **Jupiter** (mag. -2.2) in *Gemini.* By the **18th, Mercury** will set about

an hour after sunset.

Several of our members have already seen and admired the new, long-tailed **Comet Ikeya-Zhang,** which will be passing through *Andromeda, Cassiopeia* and *Cepheus* in April. It's gone as bright as mag. 3.4 so far, but which way its brightness will go from there is anybody's guess. For information, charts and updates on the comet (or anything else in the sky, for that matter), get on the Internet and type in <http://skyandtelescope.com/observing/>, and hit GoTo. Then check out "Sky at a Glance," which is updated on a weekly basis.

Incidentally, you might be interested to know that Comet Ikeya-Zhang was named after FRAC's own **Tom Moore,** *Ikeya-Zhang* being Tom's middle name. It's Mandarin Chinese for "with the intellectual capacity of a small rodent." Tom didn't actually discover the comet that bears his name, but he *did* accurately predict that a comet would show up somewhere in the sky, sooner or later.

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Putting Heat in Its Place (Part III)

technical article by Steve Knight

(Editor's Note: This is the third and final part of Steve's article on installing a ventilation system on his telescope to reduce cool-down time.)

After three months of testing -- timing cool-down time with and without fans -- I have to say that the positive results far outweigh the doubts I might have had initially about drilling ventilation holes in my tube. Being able to split close double stars, see planetary detail and pick out faint galaxies just a few minutes after setup has been fun. No more waiting for the 'scope to cool down, no more wondering if it's poor seeing conditions or heat in the tube that's causing you to miss faint galaxies. Knowing that the difference lies in turning on the fans is very satisfying and rewarding -- and knowing that I designed the system and put it to work is even better.

Cool-down times went from upwards of an hour to less than five minutes. Even when the mirror is warm to the touch, the images are clear and unwavering. I thought my 'scope cooled quickly beforehand, but those former cool-down times seem like an eternity compared with today. I probably gain 2-3 magnitudes during those brief cool-down periods, and the system helps all night long as the ambient temperature cools faster than the primary mirror does.

The fans helped to get me off to a flying start in my Messier Marathon at Chiefland last month, since the first objects I went after were galaxies, low in the western sky and two of them face-ons in the twilight. In my estimation, this is the best modification that can be done to visually enhance observing, short of increasing aperture. That's always nice, too.

* * *

(Of course, Steve could hardly have been expected to say that turning his telescope tube into a giant clump of black Swiss cheese was a wrong decision, could he?

All seriousness aside, though, we're proud of Steve for having the cojones and technical skills to pull off such a radically different and risky project, esp. with a 14" telescope that cost considerably more than a can of Beanie Weenies. If it hadn't worked out so well, ***Dawn*** *might have mounted their 8x50 finderscope on a Uzi to give Steve a Swiss cheese look of his own. -Ed.)*

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"Dude, We Gotta Hurry Up and Eat!"

observing report by Larry Fallin

Looking out of our makeshift dining hall -- two adjoining tent canopies -- I saw a beautiful sunset sliding slowly down the western horizon. It was time for **Steve (Knight)** and me to scarf down our steaks and get the Marathon underway.

Under ideal conditions in our light-polluted skies south of metro Atlanta, we normally would have had about another hour of twilight

to contend with before doing any serious observing. This wasn't the case, though, in Chiefland, Florida. Looking up, already we could see more stars in *Orion* than on a clear night at Cox Field! I knew immediately that this was the right place to do a Messier Marathon.

As we waited for the horizon to darken, we took a look at **Comet Ikeya-Zhang**. What a magnificent sight! I was impressed with views of the comet through 10x50 binoculars and a 4.5" Bushnell Voyager. These lower power views allowed excellent views of the comet's long tail.

Then, as twilight deepened, the green flag dropped. The stars of *Aries* slid into view. The race was on.

In February, Steve and I did a Marathon test run, observing the first 15 or so Messiers (i.e., those lying farthest to the west) early in the evening just to make sure we would get off to a good start. **M74** was easy.

A couple of months before that, we had observed a newly discovered supernova in M74. M74 was easy then, too.

So guess what? Tonight, of all nights, *we couldn't find M74!*

Both of us knew where it was located, but it wasn't there. The star *Eta Pisces* was clearly visible above the horizon, which normally would make locating M74 a cinch. No such luck tonight, though. I even double- and triple-checked my Rigel Quickfinder's alignment, but it was dead-on accurate.

Since the next five Messiers on the list were rapidly diving into the NW horizon, Steve and I decided to get them and then return to M74. **M77, M31, M32, M110** and **M33** presented no problems. We moved up to **M34** and **M76** in *Perseus* -- and then, with the rush hour objects out of the way, we went back to M74. Within ten minutes Steve located the star field we had used to locate M74's supernova. A quick look through the eyepiece confirmed that I had my 'scope pointed in the same neighborhood. After a few minutes of averted vision exercises, the stealth galaxy finally was located. Wow, it was faint!

We then worked our way east, 'scoping out our old Messier friends in *Orion* and *Canis Major*. Then we hopped over to *Cassiopeia, Taurus, Auriga* and *Gemini*. The skies at Chiefland allowed us to navigate quickly through those Messiers, and by midnight things began to slow down as we waited for constellations to rise in the east.

While we waited, we decided to take a close look at the globular cluster **NGC 5139 (Omega Centauri).** I was blown away! None of the globulars in the northern sky come close to the splendor of this incredible cluster. I turned my 'scope to **M13** in *Hercules* for a quick comparison and, for the first time ever, I found M13 disappointing. Omega Centauri is far superior to M13 in size *and* brightness, at least, when viewed from Chiefland.

When 4 a.m. rolled around, we buckled down for our marathon finale. I was surprised to find that we didn't have to make a mad dash to the finish line. We patiently observed the final objects as they rose one by one, and by 5 a.m. we had only four objects left: **M2, M72, M73** and **M30**, all of which were tougher than we'd expected them to be. Transparency had degraded slightly, and a little sky glow from downtown Chiefland lay low in the east.

Using two stars that by now were barely visible on the horizon, *Alpha* and *Beta Capricornus*, we finally located M72 and M73. This task was made difficult by fatigue, by mediocre transparency, and by my sore derriere, which was aching from my using a small stepladder all night as an observing chair. We located M2 by pointing our 'scopes in the direction of *Delphinus*, poised high above the eastern horizon, and slowly panning down to the horizon. It was a tedious process, but it worked.

By now, the eastern horizon was getting brighter. We panned the horizon just above the treeline, searching for M30, our last target. All of the stars in *Capricornus* were gone. So was M30. Thirty minutes of scanning and panning the emerging sunrise eliminated all hope of finding M30. After reviewing sky charts and talking with others at Chiefland who participated in the marathon, we discovered that the southern tip of Capricornus didn't rise above the horizon before sunrise.

So here's the bottom line:

109 Messiers found.
1 Messier missed.
Lots of fun had by all who participated.
Knowledge gained: To effectively participate in a Messier Marathon, a padded observing chair is a necessity, not a luxury!

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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 April installment appears below.*

##

Constellations of the Month - April

	Messiers	Caldwells	Double Stars	Herschel 400
Crater	*none*	*none*	*none*	NGC 3962
Hydra	M48 M68 M83	C59 NGC 3242 C66 NGC 5694	N Hydrae	NGC 2548 NGC 3621 NGC 2811 NGC 5694 NGC 3242
Leo	M65 M66 M95 M96 M105	C40 NGC 3626	54 Leonis Alpha Leonis Gamma Leonis	NGC 2903 NGC 3384 NGC 3628 NGC 2964 NGC 3412 NGC 3640 NGC 3190 NGC 3489 NGC 3655 NGC 3193 NGC 3521 NGC 3686 NGC 3226 NGC 3593 NGC 3810 NGC 3227 NGC 3607 NGC 3900 NGC 3377 NGC 3608 NGC 3912 NGC 3379 NGC 3626
Leo Minor	*none*	*none*	*none*	NGC 2859 NGC 3344 NGC 3486 NGC 3245 NGC 3395 NGC 3504 NGC 3277 NGC 3414 NGC 3294 NGC 3432
Sextans	*none*	C53 NGC 3115	*none*	NGC 2974 NGC 3166 NGC 3115 NGC 3169
Ursa Major	M40 M81 M82 M97 M101 M108 M109	*none*	Zeta Ursa Majoris	NGC 2681 NGC 3613 NGC 3982 NGC 2742 NGC 3619 NGC 3992 NGC 2768 NGC 3631 NGC 3998 NGC 2787 NGC 3665 NGC 4026 NGC 2841 NGC 3675 NGC 4036 NGC 2950 NGC 3726 NGC 4041 NGC 2976 NGC 3729 NGC 4051 NGC 2985 NGC 3813 NGC 4085 NGC 3034 NGC 3877 NGC 4088 NGC 3077 NGC 3893 NGC 4102 NGC 3079 NGC 3898 NGC 5322 NGC 3184 NGC 3938 NGC 5473 NGC 3198 NGC 3941 NGC 5474 NGC 3310 NGC 3945 NGC 5631 NGC 3556 NGC 3949 NGC 3610 NGC 3953