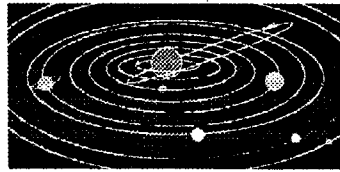


THE FLINT RIVER OBSERVER



Vol. 3, No. 11

FLINT RIVER ASTRONOMY CLUB

January, 2000

Officers: President, **Steven (Smitty) Smith** (583-2200); Vice President/newsletter editor, **Bill Warren** (229-6108 -- or, if you prefer e-mail: warren1212@mindspring.com); Secretary-Treasurer, **Ken Walburn** (P. O. Box 1179, McDonough, GA 30253 / 954-9442; AlCor, **Neal Wellons**, and Web Site Coordinator, **Cody Wellons** (946-5039); Librarians, **Tom and Katie Moore** (228-6447); Telephone/Hospitality Committee Chairman: **Dan Pillatzki** (707-0270). Club mailing address: 1212 Everee Inn Road, Griffin, GA 30224. All of these phone numbers have 770 area code prefixes. FRAC web page address: <http://welcome.to/frac>.

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

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Club Calendar. Fri.-Sat., Jan. 7-8: FRAC deep-sky observings, Cox Field at dark; **Thurs., Jan. 13:** FRAC meeting (BB media center, 7:30); **Fri., Jan. 14:** Beaverbrook observing (behind the school, at dark).

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President's Message. I welcome all FRAC members to the first newsletter of the 21st century. Whether you consider the new millennium to start this year or on Jan. 1, 2001, we've still flipped our calendar over to one BIG mathematical number.

FRAC has been in existence for almost 3 years now. As I think back to our very first meeting I wonder, how many of us charter members are still here? My mind is filled with a blur of different faces, names and voices in the dark. Some I can recognize as members

today, but others are lost in the dark nebular patches of my memory...

(Editor's Note: Of the 18 people who attended our inaugural Feb., 1977, meeting, eight are still in FRAC: Steven Byous, Keith Cox, Larry & Randi Higgins; Smitty; Ken Walburn; John Wallace; and Bill Warren.)

Those of you who are active members that I see regularly, I hope you remain active in the club. May you never get tired of the wonders of astronomy. Those of you who I don't see very often, I hope you will consider becoming maybe a little more active. Come on out to a meeting or an observing and rub elbows with us or trip over a tripod or two. We'll be glad to see you.

This club has always stressed the observing part of astronomy. It's what and who we are, active observers who enjoy letting the public observe through our 'scopes. Some of you may not enjoy getting out in the cold of winter or with the insects of summer to observe. You may consider yourselves "armchair astronomers" and enjoy astronomy through books, magazines and computers. That's fine, too, but I hope you'll come see us from time to time. Hey, we all have an interest in anything astronomical and some of us can "armchair" with the best.

On a personal note, I'd like to apologize to those of you who helped with the November public observings held at Cotton Indian and Oakland Elementary Schools for my not being there. Children have always been a big reason for FRAC's existence. While we enjoy exposing the public to the universe, it's the youngsters who get a thrill in looking through our 'scopes and it gives us much pleasure seeing their excitement. I could not be there because I am a foster parent and I was taking

care of a 10-year-old girl who had been separated from her family. While she was in our home, I gave her a couple of backyard tours of the night sky and she was really impressed with what she could see in a telescope. Sometimes I can't be at these important public observings with FRAC because other duties call me away, but my thoughts are always with you.

As we enter another year and another century, FRAC is doing well and is on solid ground. I am honored to be your president at this point in time. I hope you'll keep up the good work, everyone, because it is "U" who makes FRAC "us," and not "I".

-Saratoga Smitty

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Last Month's Meetings/Activities. Eleven members and 6 guests attended our Dec. 3-4 Cox Field club observings: **Dawn & Steve Knight** and yrs. truly (both nights); **Smitty; Joe Auriemma; Chuck Hancock** and his happy feet; **Katie & Tom Moore**; and visitors **Larry & Veronica Fallin**; Dawn's mom, **Sylvia Adams**, and nieces **Kristin & Brittany**; and **Grant Whitehurst**.

Steve and Dawn -- whose value to our club grows with every passing month (although you'd never know it from the ribbing they receive in these pages) -- also came to our Beaverbrook observing on Dec. 10, Steve sporting new growth of neatly trimmed facial hair and Dawn in curlers, fuzzy Playboy bunny slippers and a housecoat. (Not really, but the image boggles the mind.) **Katie Moore** also showed up briefly at BB -- but that was okay, since five minutes with Katie beats a year with **Tom**.

Our Dec. Christmas Party was a rip-roaring success with the Smith clan -- **Smitty, Deborah** (Mrs. Smitty), **Steven Jr.**, and foster children **Felicia, McKinzy & Ethan** -- in attendance, along with **Dan, Kathy, Amanda & Megan Pillatzki; Terry & Bunny Jones** (Kathy's parents); **Claude Martin; Joe Auriemma; Katie Moore; Mike & Danielle Stuart; Randy Kanipe; Robby Mask;** and

yr. faithful reporter (who, incidentally, won the *Deep Map 600* door prize). We spent at least half our time outside in Dan's backyard, seeing the sky through 'scopes belonging to Randy K., yrs. truly and Dan P. -- and yeah, you read it right: Dan is the proud new owner of an Orion SkyQuest 8" Dob, a combination birthday/early Christmas present.

Dan & Kathy were wonderful hosts at the Christmas party, and we hope they'll invite us back on a regular basis -- say, once or twice a month -- for further fun, food and frolicking fellowship (at their expense, of course, and not the club's).

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The sky knows you're coming.

-Art Russell
Atlanta Astronomy Club

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Question: Can you name a *very* well-known deep sky object that doesn't appear on any of the AL's observing club lists? (The answer can be found on p. 5.)

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Membership Renewals Due in January: **Robert Hall; Randy Kanipe; Quimby Melton III; and Mark Mosely.** Send your \$10 check to Ken Walburn at the address listed on p. 1.

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Upcoming Meetings/Activities. Our Cox Field deep-sky weekend observings will be on **Fri.-Sat., Jan 7th-8th**, just after the new moon. It'll be a perfect opportunity for **Tom Moore** to fail to add to his Lunar Club totals.

Our club meeting will be held in the BB media center at 7:30 on **Thurs., Jan. 13th;** **Smitty** will enlighten us about light pollution and what the Int'l. Dark Sky Assn. is doing to combat this growing problem. (Applying her keenly analytical mind to the problem, **Dawn**

Knight suggests that they paint the sky black, but leave room for the stars and other things we like to observe to shine through.)

Our Beaverbrook observing will be held behind the school on **Fri., Jan. 14th.**

Neal Wellons will return to FRAC's center stage in February to show and tell us about the large array of telescopes on Mauna Kea (including the twin Kecks, presently the largest optical telescopes on earth). Since Neal apparently is either (a) too stingy or (b) too afraid of losing his job to take us all to Hawaii at his (or his employer's) expense to conduct the meeting on site and write it off as a legitimate business expense, we'll have to settle for a talk and videotape presentation from Neal in the BB media center. Rats.

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The Sky in January. A total lunar eclipse on **Thurs., Jan 20th**, will help to usher in the new year, beginning at 9:03 p.m., entering totality at 11:05 p.m., leaving totality at 12:22 a.m. and ending at 2:34 a.m. You won't need a moon filter, since the Earth's shadow will do the filtering for you. Its early beginning means the whole family can enjoy at least part of it, including watching an orange to coppery glow slowly spreading across the surface. If you miss this one, it'll be 3 years before you'll see another total lunar eclipse without traveling abroad.

On the night of **Mon.-Tues., Jan. 3rd-4th**, one of the best of the annual meteor showers, the **Quadrantids**, peaks (50-150 meteors per hour) at about 1 a.m. during a nearly new moon. Look for the radiant to be located in the constellation *Bootes*, near the handle end of the Big Dipper.

Planet watchers should have a ball this month. On **Thurs., Jan. 6th**, three of **Jupiter's** moons -- **Io, Europa & Callisto** -- will form a close trio at 8 p.m. **Saturn's** shadow cast on its rings will be especially clear in Jan. **Mars** will still be in the SW: on **Mon., Jan. 10th**, it will be 2-1/2° NW of the Moon. Having faded in brightness over the past few months -- sort of like **Ken Walburn** -- Mars is now shining at mag. 1.1. Ken is mag. 13.5

and, like Mars, sinking rapidly in the W.

If the open cluster **M21** in *Sagittarius* is on your list of Messier objects to find, you can find it near bright **Venus** on the morning of **Tues.-Wed., Jan. 25th-26th.** (Or, conversely, if you're looking for Venus you'll find it near M21 on those mornings.)

Since the constellation *Gemini* (the Twins) is a prominent feature in the wintertime night sky, here's an easy way to tell which of its two brightest stars is **Castor**, and which is **Pollux**. Just think: *Castor and Capella, Pollux and Procyon*. Capella, the 6th brightest star in the sky, is the bright star NW of Castor in the constellation *Auriga*. Procyon, the 8th brightest star in the sky, is the bright star S of Pollux in *Canis Minor*. Find Castor and Pollux, and then Capella, and you'll know which one of the twins is Castor. (The other one will be Pollux, **Dawn**.)

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An Open Letter to the Editor of S&T

by Smitty

(Editor's Note: The following letter was recently submitted to the editor of Sky & Telescope magazine; because the letter, while important, may or may not be published in the magazine, we wanted to include it here for the benefit of our readers.)

To the Editor:

The Jan. 2000 *S&T* test report, "Six 8-Inch Dobsonians," (pp. 60-69) was the best such evaluation I have ever read. Not only were the 'scopes' strengths and weaknesses completely discussed, but they were also vividly displayed in clear pictures that anyone could understand. The how's and why's were accurate and in depth, yet easy to comprehend.

The fixes and upgrades for some of the shortcomings were a welcome addition to this article, and I concur with Mr. MacRobert when he states that "We were especially baffled that most of the problems we found were needless, stemming not from cost-control measures but from inattention to well-known design issues

that would have cost little or nothing to do right." John Dobson's whole idea was an economical, easy-to-use instrument with Newtonian optics that would give you very fine views of the heavens. A portable but solid, steady mount with smooth, fluid motions in both axes was Mr. Dobson's creation. Both Mr. Newton's optics and Mr. Dobson's mount are time-tested, proven designs and not rocket science. So why do commercial manufacturers have trouble producing this type of 'scope? It makes one wonder if they ever use their own Dobsonians.

The only thing lacking in this report was its exclusion of the Coulter 8-inch f/7 and 8-inch f/4.5 telescopes. This report was a comparison of 8-inch f/6 models but, with the addition of these two telescopes, all of the popular commercially available 8-inch Dobsonians would have been tested. I hope you will test them in the same way in the very near future. I am often asked, as are many experienced observers, "Which Dobsonian should I buy?" With test reports such as this, I can let my inquirers choose their own Dob.

-Steven (Saratoga Smitty) Smith
President, Flint River Astronomy Club

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Print Resources for Your Messier Quest

article by Bill Warren

We usually try to point newcomers to our club and the night sky toward the AL's Messier Club or Binocular Messier Club observing programs. Participating in either of these programs is useful in four ways: it will familiarize you with the constellations (many of the northern ones, anyway), in each successive season; it will help you in developing search-and-scan techniques; the constant practice involved will familiarize you with your observing instrument(s); and you'll learn what objects in each of the four categories of deep-sky objects are likely to look like in your own 'scope or binoculars.

There are several valuable print resources available to help you in tracking down the

Messiers.

For starters, you already have at least one first-rate deep-sky resource to help you in working your way through the Messier list: Art Russell's excellent article, "Recording Deep-Sky Observations," that appeared in last month's *Observer*. And all it cost you was your annual FRAC dues.

Second, the over-sized *Seasonal Star Charts* (which is also sold under the title *Celestron Star Maps*) offers (a) a planisphere for locating the constellations and (b) 8 seasonal finder charts -- 2 for each season, one showing the N sky and the other showing the S sky -- on thick, laminated pages to help you locate the Messiers on a broader scale than other, smaller beginners' books do the job. *SSC* costs about \$20; while it contains a number of minor errors that you probably won't notice until 2-3 years later, it can significantly reduce the amount of time necessary for you to earn your Messier pin. I still use my *SSC* almost every time I observe.

I especially like *SSC*'s use of lines between the major stars in each constellation to show how that constellation is shaped. For example, although *Auriga* has many stars only five of them form its distinctive pentagonal shape; and *SSC* shows it. That's a major reason why I don't consider *Norton's Star Atlas 2000* or *The Cambridge Star Atlas* to be beginners' books: they show the stars, but they don't show those shapes.

Guy Consolmagno and Dan M. Davis's *Turn Left At Orion, 2nd ed.* (Cambridge Univ. Press, \$24.95) is an excellent beginners' book, esp. for those who use finderscopes rather than Telrads -- but its value to Messier chasers is limited because it contains only 57 Messiers.

Then there is the AL's *Messier Objects: A Beginner's Guide*. (Astronomical League, \$7). While its drawings and photos are limited and it does not contain finder charts, its descriptions of the Messier objects are very useful. They will start you thinking about ways to describe and compare the objects in each category (e.g., how is M13 (The Great [globular] Cluster in *Hercules*) different from M15 in *Pegasus*?).

When given, directions for finding the

Messiers are usually expressed in degrees from certain stars or other objects, or in "same field of view as..." relationships.

Two resources that accomplish the same objective in different ways are Stephen James O'Meara's *The Messier Objects* (Sky Publishing, \$34.95) and the Messier poster from Sky Publishing (\$9.95). The latter offers small but generally useful black & white photos of all of the Messiers. O'Meara's book offers photos, too -- but he also provides *drawings* that look even more like what you can expect to see than the photos. O'Meara describes each of the Messiers and provides useful data and information to tell you what you're seeing. He also offers finder charts of the constellations for each target -- but these charts won't be very helpful for beginners who don't know how to find the constellations.

If you take the time to study rather than just quickly scan *The Messier Objects* and/or *Messier Objects: A Beginner's Guide*, you'll begin to recognize and understand differences in size, brightness, compactness, numbers of resolved stars and their appearances, and other features of the sort that render each Messier object unique from all the rest.

This isn't just idle talk, either. If you know beforehand what you can expect to find in terms of the type of object, its size, appearance, brightness, etc., you're far more likely to find it than if you simply note its location on a chart and look for it without knowing what to expect.

If you don't already have a Sky Publishing catalog, you can get one free by calling 1-800-253-0245 or e-mailing them at www.skypub.com. If you've got the money, honey, SkyPub's got the books.

(Next Month: "Print Resources for Your Herschel 400 Quest.")

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The Lunatic Challenge Series: #11

by Philip Sacco (Lunatic #82)

(Editor's Note: This is the 11th in a series of 12 monthly "Challenges" devised by AAC's

Phil Sacco to make your Lunar Club award quest more interesting. Remember: If you miss a given feature one month, you can always look for it next month; and you can look for naked eye or binocular targets with a telescope or binoculars if you prefer to do so.)

Naked-Eye Targets. 1. How many successful manned moon landings were made? 2. What is the largest amount of lunar material returned by an Apollo mission? Which Apollo mission? 3. How is crater *Proclus* different from most? 4. What moon exploration event took place near crater *Littrow*?

Binocular Targets. 1. Crater *Walter*. 2. Crater *Langrenus*. 3. Crater *Fracastorius*.

Telescopic Targets. Crater *Proclus*: How is this crater different from most? 2. Crater *Littrow*: What moon exploration event took place nearby? 3. Crater *Lambert*. 4. Crater *Hippalus*. 5. Crater *Billy*. 6. (Challenge:) Ghost crater *Lambert R.*

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Answer (from p. 1). Located about 1/2° S of *Alnitak* (*Zeta Orionis*), the easternmost star in Orion's Belt, the **Horsehead Nebula** (Barnard 33) is by far the most famous of all dark nebulae. There are no dark nebulae in any of the AL observing club lists.

Bearing an unmistakable resemblance to its namesake in long-exposure astrophotographs, the Horsehead is composed of dark matter, dust and non-luminous gases. Its diameter is about 1.1 light years. Your only hope of seeing it at the 'scope is to place *Alnitak* out of your telescopic field of view on a very dark, clear evening and use an H-Beta filter (Lumicon sells them for \$99.50), which for obvious reasons is sometimes referred to as a "Horsehead filter." Under conditions such as those described above, the Horsehead has been seen in quality telescopes as small as 5"-6".

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