

# THE FLINT RIVER OBSERVER



Vol. 1, No. 3

FLINT RIVER ASTRONOMY CLUB

May, 1997

**Officers:** President, Larry Higgins (227-2233); 1st Vice President/newsletter editor, Bill Warren (638 Pinehill Rd., Griffin, GA 30223/ 770-229-6108); 2nd Vice President/Secretary-Treasurer, Ken Walburn (954-9442); AlCor, Melanie Handy (228-6214); Librarian, Keith Cox (227-8171); Hospitality Chairman, Lee Russell (228-0704). Club mailing address: 2431 Old Atlanta Road, Griffin, GA 30223

**Club Calendar:** **Thurs., May 8:** Club meeting (7:30, Beaverbrook media center); **Fri., May 9:** Club observing session, Beaverbrook Elem. (at dark); **Fri., May 16:** "Relay for Life" observing session (7:30, Flynt Middle School, see map); **Fri., May 30:** Deep-sky observing session, Cox Field (at dark).

**President's Message.** I'm happy to announce that FRAC has become a "Partner in Education" with Beaverbrook Elementary School. Our support will be educational, not financial: we intend to work with principal **Ken Bozeman** in promoting a love for astronomy among Beaverbrook students by showing them the beauty and wonder of the night sky at observing sessions at the school, helping **Louise Warren** to organize an astronomy club at the school next fall, and providing speakers and other resources for their club and PTA meetings whenever possible.

When you come to our May 8th meeting and/or our May 9th observing session at

Beaverbrook, look at the signs to your right as you turn off Birdie Road onto the school drive. Our sign is up there, along with Beaverbrook's other Partners in Education. Frankly, I think ours is the best of all.

Starting this month, we'll have two observing sessions a month: our regular club observing at Beaverbrook, and a special deep-sky observing at Cox Field. We hope you'll plan to attend both observings -- but if you have to miss one of them, you'll still have the other one to fall back on. This month's observings are May 9th at Beaverbrook and May 30th at Cox Field. Be sure to read the Club Calendar section of the newsletter every month.

-Larry Higgins

**April Observings..** We had 27 people, 2 dogs, 3 deer (2 of which I almost hit in leaving), 13 telescopes (including Art Russell's huge 18-inch Dobsonian), and an assortment of binoculars at our Hale-Bopp observing at Cox Field in Williamson on April 3rd -- not bad for a Thursday night observing! (We'll get back to our regular Friday observing schedule in May. See Club Calendar.) The weather, Hale-Bopp, and Larry H. all behaved nicely, and a good time was had by all.

Overcast skies forced cancellation of our special observings for students at Beaverbrook (Apr. 11), Gordon College (Apr. 14), and East Coweta H. S. (Apr. 25). Thanks anyway to those who showed



up to help out: **Larry, Randi, Smitty, Mitch, Jordan, Keith, Denise, John, and Bill.**

**April 10 Meeting.** This was our first club meeting in Beaverbrook's media center, a facility that offers seasonal heating/air conditioning, bathrooms, a large variety of a/v equipment for our speakers' use, and a nice observing site behind the school.

We had 14 present for **Rich Jakiel's** terrific presentation on the Virgo Cluster of galaxies. Rich showed us how to find the "Smiley Face" cluster of galaxies (M84 & 86, NGCs 4387, 4388 & 4402), and spoke of "looking in on M87 (a massive galaxy with a black hole in its core) to see what stars it had for lunch today." Lovely.

At the meeting, **Larry Higgins** proposed that Article 4 of our Bylaws be changed to exclude mention of any specific meeting or observing sites. We'll bring it to a vote at the May meeting. If passed, the amendment will read: "Section 1. Monthly meetings shall be held on the 2nd Thursday of each month. Section 2. Observing sessions shall be held twice a month, weather permitting." The change was necessitated by our move from Sunnyside to Beaverbrook.

**Lee Russell** volunteered to serve as chairman of our Hospitality Committee. If you haven't met Lee yet, by all means do so. He looks like horror writer Stephen King -- but, unlike King, Lee isn't going to turn into a vampire or werewolf at observing sessions when the Moon is up. At least, we hope not.

**Upcoming FRAC Meetings.** Our guest speaker at the May 8 club meeting will be **Dr. Richard Schmude**, astronomy and chemistry professor at Gordon College. Dr. Schmude's topic will be the planet Mars. Bring your telescopes: after his talk

we'll go out back to the observing site where Dr. Schmude will tell us how to observe Mars.

Prior to his talk, members will vote on the proposed change in the Bylaws referred to earlier. It's no big deal, but merely a formality to reflect the change in meeting/observing sites. (And if you don't vote FOR the amendment, a couple of 285-lb. goons who have to take off their socks to count to twelve will collimate your telescope with a hammer, free of charge.)

**Art Russell** will be our speaker in June. We're hoping that, as with Dr. Schmude, Art will take us outside to conclude his presentation with a visual tour of the Spring sky.

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**There's One More Star in the Heavens.** Our deepest sympathies are extended to **Melanie Handy** and her family in the passing of her brother, **Gary Childs**, on March 23rd. Gary attended our March observing session at Sunnyside, and by all accounts enjoyed himself immensely. We wish we could have known him longer and better.

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**Keith Cox** reminds club members that their contributions of astronomy books, magazines, tapes, charts, or other materials for the club library will be appreciated and gratefully accepted..

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**Observing at Hightower Trail Elem.**

by Joe Sheppard

It all began last Halloween. I thought it



would be entertaining to set up my 8" Dobsonian so trick-or-treaters could experience Saturn's rings along with their chocolate candy. One of the visitors that night was a local school teacher with her two daughters. She thought the impromptu observing session was a great idea and asked if I would consider repeating the performance at her school in Rockdale County, north of Conyers. I couldn't turn down such an opportunity, and on March 27th, under partly cloudy skies, I arrived at Hightower Trail Elementary, set up my Dob and began answering questions from the crowd. I was soon joined by two members of the Atlanta Astronomy Club. We showed the students Hale-Bopp in the west, and also M42, M44, M41, Tau CMa, M51, M65-66, M35 and Mars. The principal remarked that it was the best special event she had witnessed at her school.

In all, about 65 students, teachers and parents attended the observing session.

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### **Attack of the Martian Mosquitos**

by Steven "Saratoga Smitty" Smith

Now that warmer weather is here, mosquitoes, redbugs, gnats and other pesky insects aren't far behind. They can turn a potentially great evening of stargazing into an ordeal of annoyance, pain or downright misery. Skywatchers and their guests at springtime and summer observing sessions should begin preparing to combat flying insect pests before heading for the observing site.

Odors attract bugs. Wearing after-shave lotion, cologne, perfume, or any strongly scented powder is an open invitation for insects to inspect the exposed areas of your

fair and tender body at point-blank range. Similarly, you might want to consider bathing and changing clothes before going out to observe; by doing so, you will eliminate your "natural" odor that attracts insects and repels friends and observing companions during an evening of stargazing.

Shorts, tank-tops and sandals may be comfortable attire for the hot, humid summer months -- but you should bear in mind that the temperature drops when the sun goes down, and dress accordingly. Wear (or at least bring along) a long-sleeved shirt, long pants made of a light, cool material, and shoes or sneakers. Enclosed footwear will protect your toes from unexpected encounters with unseen rocks and sticks in the darkness, and prevent your feet from getting cold and wet when dew settles on the grass.

Spray your clothes lightly and evenly with insect repellent, but not to the point of saturating your clothing or feeling greasy. Have someone spray vulnerable areas that you cannot reach. Read the application instructions and warnings for your repellent, and avoid getting any on your lips or eyelashes, or in your mouth, nose or eyes.

After using insect repellent, wipe your hands thoroughly with a cloth or paper towel before handling your observing equipment. Most repellents contain powerful chemicals that can melt plastic parts in flashlights, Telrad finders, binoculars and telescopes; they can even dissolve the protective anti-reflection coatings on lenses in binoculars, telescopes, and eyepieces! You should always avoid touching your lenses with your fingers, of course -- but you should also be aware that your eyelashes can foul your eyepiece with harmful amounts of repellent. Eyepiece coatings are so expensive to repair that it's



usually cheaper to replace the eyepiece!

Do not use yard spray fogger when you're observing at home, either, for the same reason. I'm not sure what its chemical effects might be on your optical coatings, but I suspect that you might find it expensive to find out.

A final caution regarding insect repellents: if you spray yourself at the observing site, first move downwind and far enough away from other observers that the resulting mist will not reach or settle on your own observing instruments or anyone else's.

Although they may be attractive in your backyard for cookouts or parties, you should avoid the temptation to burn citronella candles or oil lamps in the area where you're observing. First, they constitute a fire hazard; second, the light from even a red-shielded flame will adversely affect your night vision; and third, burning such items fills the air with small waxy, greasy particles, some of which are bound to find their way onto the optics of your observing instruments.

Keeping your optics clean for good light delivery to your eye is very important -- but that's a subject for another article. Until then, keep an eye out for those Martian mosquitos, and for those june bugs from the Whirlpool Galaxy. Word has it that they are using cloaking devices to hide their approach, and the repellents we're currently using to stop them are as useless as a Telrad with dead batteries!

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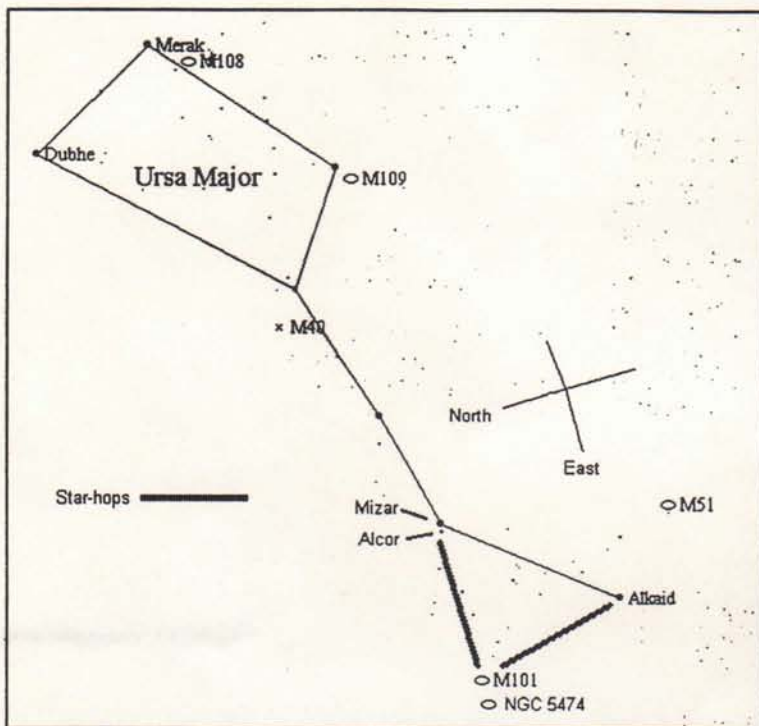


## Beginner's Star-Hops; April, 1997

By Art Russell

Have you noticed what's happened in the northern skies over the past few months? Hale-Bopp, its Not. Every year, at this time, we begin to notice that the **Big Dipper** has turned up-side down. In a sense, I guess it fits with mythology. The dipper turns up-side down and empties its water onto the Earth below; the real reason for April Showers! At the same time, as the **Big Dipper** rises higher into the northern skies, it also raises its circumpolar star fields high enough for prime viewing.

This month we'll spend our time with two of the many deepsky objects in the area of the **Big Dipper**, the **Mizar-Alcor** double star system, and the face-on spiral galaxy, **M101**.



We start at the noted double star system of **Mizar** and **Alcor** (**Zeta** ( $\zeta$ ) **Ursa Majoris** and **80 Ursa Majoris**). **Mizar** is easily located as the star at the bend in the handle of the **Big Dipper**. Once you've found **Mizar**, you've found **Alcor** as well. Historically, at least since the 14<sup>th</sup> century Persians, the ability to separate **Mizar** and **Alcor** was held as a measure of good vision. Not surprisingly the **Mizar - Alcor** system was the first double star system to be studied with a telescope. As a result, it was discovered that they are really part of a multiple star system. **Mizar** has its own companion star, **Mizar b**. The observation of these two stars, **Mizar a** and **Mizar b**, is

relatively easy with any good telescope and is quite striking given their relative magnitudes, 2.4 and 4.0, and wide separation of 14 arc seconds.

Our sole star-hop for this month is to **M101**, **NGC 5457**, a face on spiral galaxy. Take your time trying to find this galaxy, but be warned. You'll want to be under dark skies in order to do so! **M101** is located about 5 degrees (about the distance spanned by three fingers held at arm's length against the sky) east of **Mizar-Alcor** and 5 degrees northeast of **Alkaid**, **Eta** ( $\eta$ ) **Ursa Majoris**, the last star in the handle of the **Big Dipper**. **M101** is a low surface brightness galaxy which covers an area equal to about 2/3 of the full Moon's. However, remember that this galaxy will be very dim and easy to miss. Never the less, you can find it with small telescopes and binoculars under a dark(!) sky. In medium size telescopes at moderate magnifications, **M101** appears about 20' in diameter and has a very low level of surface brightness and is best seen in averted vision, with a hint of stellaring on northern portion of the galaxy. If you have access to a larger scope and or darker skies and are feeling adventuresome, try to find the HII regions associated with **M101**, **NGCs 5447**, **5461** and **5462**. Additionally, you'll find many other galaxies in the area as well. **NGC 5474** is located about 1/2 degree south of **M101** and in a large scope and high power may appear marginally visible in direct vision as a soft low surface brightness object. In averted vision, its surface appears mottled with scattered stellarings. The trip to **M101** is also worthwhile if you are working on one of the several **Astronomical League** sponsored observing club certificates. **M101** is one of the target objects of both the **Messier Club**, **Binocular Messier Club**, and the newly formed **Arp Peculiar Galaxy Club**. **NGC 5474** is a target object for the **Herschel 400 Club**. Observe **M101** and its companions and you'll be well on your way to becoming a seasoned observer!