THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

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Please notify **Bill Warren** if you have a change of home address, telephone no. or e-mail address.

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Club Calendar. Fri.-Sat., July 2-3: Cox Field observings (at dark); **Thurs., July 8:** FRAC meeting (7:30 p.m., Stuckey Bldg. on the UGa-Griffin campus); **Fri.-Sat., July 9-10:** Cox Field observings (at dark); **Thurs., July 22:** UGa-Griffin lunar observing (6:00 p.m.).

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President's Message. I've said it before: the reason why the International Astronomical Union (IAU) reduced **Pluto's** status from planet to "dwarf planet" in 2006 was anti-American sentiment. If Pluto had been discovered by, say, **Sir Patrick Caldwell-Moore** (a Brit) instead of **Clyde Tombaugh** – an American – it would still be a planet and no one would be questioning Pluto's status.

The circumstances underlying Pluto's demotion are certainly suspicious. Instead of allowing all of its members to vote on such an important issue, the IAU limited voting to the 5% of its members who attended the 2006 convention in Prague. Many American members couldn't afford the time or expense of a weeklong stay in Europe.

I'm not the only one who finds the IAU's underhanded tactics deplorable. **S. Alan Stern,** principal investigator of the New Horizons probe that will reach Pluto in 2015, describes the IAU's actions as "stupid" and "idiotic" (quoted in **Richard Talcott,** "How We'll Explore Pluto," *Astronomy Magazine* [July, 2010], p. 27). Stern ignores the why's of the IAU decision, saying merely that "The IAU embarrassed itself."

I, however, am willing to speculate on why it was done. I've seen anti-Americanism before on the international scene.

In a secret ballot taken in Singapore in 2005, the International Olympic Committee voted to eliminate baseball and softball from the 2012 Olympic Games because those sports were "too American for the world sports stage." But if they were too American, why were they added in the first place?

And don't get me started on the United Nations, where the U. S. pays about 75% of the operating costs but has voting power roughly equal to Namibia.

So what does all this have to do with anything?

Well – nothing. Except that, while intelligent life may or may not exist elsewhere in the universe, it certainly is missing in the International Astronomical Union. Thumbing their noses at us in such a flagrant manner was meant to show us that, in their estimation, at least, our contributions to astronomy have been minor, and dwarfed by those of European astronomers.

Finally, here's a huge "**WELCOME BACK TO FRAC!**" to charter member **Keith Cox** and his wonderful wife **Denise.** Having them back in the club is a dream come true. Among other reasons, it gives me the chance to apologize to Keith for having

referred to him years ago in the *Observer* as "Keith (The Cloud Magnet) Cox."

Hey, it's not Keith's fault that the clouds like him enough to follow him around. He's a fun guy. (In fact, that's why we've had so many cloudy nights on Cox Field observing weekends in the years since Keith left the club: they were dropping by to see whether he had rejoined FRAC.)

-Bill Warren

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Last Month's Meeting/Activities. Our first Cox Field observing weekend was clouded out. Likewise the following Fri. night.

Ah, but Saturday night…

We had 15 fine attendees at our June "swimmin' & eatin' meetin'": **Roger Brackett; Steve & Betty Bentley** and their granddaughters **Brianna & Erin; Dwight, Betty & Laura Harness; Tom Moore; Larry Higgins; Cynthia Anderson; Carlos & Olga Flores** and their guest, **Olga Giserman;** and **yr. editor.** The weather was hot, the water cool in the Warren pool, and Chef Dwight managed not to drown, or to burn the burgers and dogs. The only business conducted was presenting Betty B. with a gift for all her hard work at **GSV '10.**

For what seems like the umpty-zillionth time, our Sun City Peachtree observing set for June 15th was cancelled due to storms passing through.

Not content to disrupt FRAC's observing schedule in such a violent manner, the storm also zapped the Warren computer, a TV, a lamp and alarm clock. So let's insert an addendum to **Art Russell's** famous warning for would-be observers ("The sky knows you're coming"): The sky also knows where you live.

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This 'n That. Steve Bentley reports that we have two leftover **GSV '10** pocket tee shirts available for purchase at $20 apiece, a Large and an XX Large.

*****Speaking of **Steve** (as we often do when he's not around to defend himself), he recently sent out an interesting article and photo/video link from Fox News involving a large fireball that lit up a small portion of the Jovian atmosphere at 4:31 p.m. EST on June 3rd. The event was recorded on video by **Christopher Go,** a Philippine amateur astronomer, and photographed by **Anthony Wesley (**the same Aussie who first spotted last summer's impact between **Jupiter** and what was later determined to have been a rogue asteroid).

The 2009 impact, which occurred in Jupiter's South Polar region, produced a dark, Pacific Ocean-sized scar that eventually faded away. No such scar has yet developed from the June event, which was seen as a circular white glow that appeared suddenly near the edge of the South Equatorial Belt, the feature that vanished a couple of months ago.

*Thanks, too, to **Jerry Williams** for sending via fracgroups a download link showing in slo-mo detail what the launching of a NASA rocket is like up close (i.e., very much like a tornado in terms of power and noise). The download seemed to take forever but, like a trip to Cape Canaveral to witness such an event, it was worth the wait.

***Tom Danei's** 87-year-old mother recently fell and broke her hip. Tom says she's doing well so far despite having undergone surgery to replace the ball socket in her hip. We'll keep her in our thoughts and prayers, Tom.

***Felix Luciano** wasn't able to attend our June pool party, so presenting him with his "Zombie Award" certificate will have to wait until the July meeting.

The Zombie certificate, designed by **Louise Warren,** is an outgrowth of a concept devised by **Larry Higgins** when he was observing chairman for the Atlanta Astronomy Club about an eon and a half ago. Larry's idea was to hold periodic "zombie star parties" in which members were invited to stay up observing all night from dusk till dawn.

The ideal time for zombie star parties is during the brief period in March when (in theory, at least) all 110 of the Messier objects can be seen in a single night. They're called "Messier Marathons," and **Harvard Pennington** even wrote an excellent book on the

subject, *The Year-Round Messier Marathon Field Guide* (Willmann-Bell, 194 pp.). It's one of the best books ever written on the Messiers, and it includes a listing of the Messiers in the order in which you should look for them, beginning immediately after sundown and ending just before dawn.

We don't do zombie star parties – but we *do* offer Zombie Awards to anyone in FRAC who, as Felix did at **Ga. Sky View,** stays up from sundown to sunrise. It doesn't have to be done at a star party: you can do it at Cox Field, at home, or anywhere else. And you don't have to do a Messier Marathon (or any other specific activity) during that time, either; a Marathon simply offers a reason to stay up observing all night if you need an incentive to do so.

To qualify for a FRAC Zombie Award, all you need to do is stay up observing all night, and then notify a club officer or board member and tell him when and where you did it.

***Strolling Down Memory Lane.** Two items from our Aug., 1999 *Observer:*

"In yet another dazzling display of attention to detail, **yr. editor** recently tried unsuccessfully to wipe away the heavy coating of dew on his lenses that made binocular observing impossible at Cox Field. It didn't work, but he now has the cleanest lens caps in the club.

"**Dan Pillatzki's** 3-yr.-old daughter **Megan** *(who is now 14 years old. –Ed.)* was worried during a July 4th fireworks display. 'Daddy,' she asked, 'is this gonna make the stars go away?' No, Megan, it won't. Clouds make the stars go away, and as everybody knows, clouds form when members buy new telescopes or accessories and want to try them out."

Upcoming Meetings/Activities. We'll start July with Cox Field observings on **Fri.-Sat., July 2nd-3rd.**

Our FRAC meeting on **Thurs., July 8th** will feature **Jessie Dasher** talking about **Deimos** and **Phobos,** the two diminutive moons of **Mars.** As usual, the meeting will be held at **7:30 p.m.** in the Stuckey Bldg. on the UGa-Griffin campus.

Our other Cox Field observing weekend will be **Fri.-Sat., July 9th-10th.**

On **Thurs., July 22nd,** FRAC will hold its monthly UGa-Griffin lunar observing on the lawn in front of the parking lot adjacent to the Stuckey Bldg. The observing will begin at 7 p.m.

On **Thurs.-Sat., July 29th-31st,** the Northeast Florida Astronomical Society will host a weekend conference of the Assn. of Lunar & Planetary Observers (ALPO) in Jacksonville, Fla. For details, Google <alpo-astronomy.org/> and scroll down to the yellow box with the link to the registration form and conference information. FRAC's **Dr. Richard Schmude** will deliver three talks at the conference (on Mars measurements, recent events on **Jupiter,** and the remote planets).

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The Sky In July. A smorgasbord of three planets – **Venus, Saturn** and **Mars –** form a rather close grouping in the W sky in July, with a fourth planet, **Mercury**, joining them during the last half of the month.

Venus (mag. -4.2) and Mercury (mag. -0.5), both of them lying closer to the **Sun** than the Earth is, are the first to set. Saturn (mag. 1.1) and Mars (mag. 1.4) stay up later but set before midnight – sort of like **Larry Higgins**.

Jupiter (mag. -2.6) and **Uranus** (mag. 5.8) rise in the E sky after midnight. On **July 5th, 8th & 18th,** all four Galilean moons – **Io, Europa, Ganymede & Callisto –** will be on the same side of Jupiter (which in turn will be the brightest "star" in the eastern morning sky. Uranus will lie 3^{o} – that's two finger-widths held at arm's length against the sky, or half a binocular field of view – to the right of Jupiter. Uranus is small and somewhat starlike, but its greenish color and disk-shape at high magnification gives it away.

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People You Should Know: Dwight Harness. Some people join FRAC and, for whatever reason, never advance beyond inactive status. Dwight Harness

definitely is *not* inactive. Since joining the club, Dwight has been involved in virtually all of our activities. He attended all three field trips (and served as coordinator for one of them, our trip to The Cove); he regularly attends our meetings and Cox Field observings; and he presently serves as observing chairman and arranges our public observings.

Dwight owns two pairs of binoculars and a 10-in. Orion Intelliscope. A lifelong skywatcher, he is working on a Messier Club certificate and pin and plans to earn a Lunar Club pin before advancing to the various galaxy observing clubs. "I'll do an Armchair Club if they start one," he adds. He cannot envision a time when he will lose his enthusiasm for the sky and its wonders.

"I'm constantly amazed by our universe, its size and complexity," he says. "I've learned a lot about astronomy in the past three years, and it still feels new to me. You guys in FRAC are the best teachers I've ever had. You make it fun, and you have the knowledge I need."

Dwight owns and operates Dishtec, a Griffin business in which he sells and services DirecTV, Dish Network, Hughesnet and Clear High Speed internet. He also sells backyard sheds and carports. He is very active in his church, and his other interests besides astronomy include auto racing, camping, fishing and reading.

Dwight's family consists of wife **Betty** and daughters **Christine** (28), **Elizabeth** (18) and **Laura** (13), so he knows a thing or two about waiting in line to use the bathroom.

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Article Review and Commentary by Bill Warren

Bob Berman is one of the best popular writers in astronomy today. For one thing, he is probably the only astronomy writer not serving as editor of this newsletter who dares to use humor to get his points across. Even when discussing extremely complex or arcane topics, Berman is never dull, as you already know if you read his monthly column, "Strange Universe," in *Astronomy.* It's one of the first places I look in every issue.

Berman's subject matter tends toward the more bizarre aspects of astronomy, but that's okay because our universe itself is bizarre. In the words of British biologist **John Haldane,** the universe is "not merely queerer than we imagine, but queerer than we *can* imagine."

In the June issue of *Astronomy* (Vol. 38, No. 6, p. 14), Berman's "Attention-Deficit Astronomy" tells how to show the night sky to astro-newcomers who have never before looked into a telescope. His advice is well worth summarizing here.

First, he says, show them "something bright and dramatic." His example is the **Moon.** "Supply one cool fact," he suggests, echoing advice that I've given for years. You may be the world's greatest authority on a given object – but your visitors aren't. They won't understand more than one or two "cool" (i.e., interesting) basic facts about anything you show them.

Tell them, he says, about the *terminator* – the area dividing light from shadow up and down the Moon's face – and how that moving shadow constantly offers new views of craters, mountains, etc.

Then show them a globular cluster like **M13** in *Hercules.* "But first," Berman says, "downplay their expectations." Tell them that it's faint – well, it *is* faint, compared to the Full Moon – and that, if they look closely, they may see a few of its half a million stars. (They will in fact see about a thousand stars in M13 from a dark site at high magnification on a clear evening.)

Third, he says, show your visitors a colorful double star like **Albireo** in *Cygnus.* Then ask them if they can tell which star is blue and which is gold. (This technique is far superior to asking – as I've done many times – what colors the stars are, since people who are unused to observing sometimes see them as brown, purple, green, etc. Correcting false impressions is not the best way to endear yourself to your visitors.)

Berman's next advice is to avoid at all costs showing your visitors anything that is faint or challenging. "Presented with a galaxy," he says, "the visitor too often says, 'That faint blur, is that what I'm supposed to see?' Their voices ooze disappointment."

That's why I like to show bright open or globular clusters. That faint galaxy blur represents the glow of

hundreds of billions of stars – but all the visitors see is a faint, blurry streak or circle. With a good open cluster such as **M24, the Small Sagittarius Star Cloud,** however, they'll see several hundred stars in the field of view. They'll have no trouble understanding *that* – and they'll enjoy the view.

Berman doesn't mention this, so I will: *asterisms* – open clusters or groups of stars that form recognizable shapes or patterns, such as **The Big Dipper** in *Ursa Major* – are always popular. (And while you're there, show them the naked-eye double star **Mizar/Alcor** in the Dipper's handle. (Mizar is the bright one.) Several ancient cultures including the American Indians used those stars as a test of visual acuity. (There's your "cool" fact.)

You can also show them **Polaris,** the **North Star,** and tell them how to find it. Start with the star at the bottom outside corner of the Big Dipper. Trace an imaginary line from there through and beyond the star at the upper outside corner of the Dipper, then extend that line to the next bright star along that line. That's the North Star. It's only the 49th brightest star in the sky – but because it lies due north, it's the only star that doesn't appear to move during the evening.

Berman recommends showing visitors no more than 5-6 objects. In an era in which attention spans seldom exceed 30 seconds, they'll get bored as you run through your carefully prepared list of 20 favorite spring or summertime objects. In showing them several examples of, say, globular clusters, you'll find yourself repeating yourself, which is about as effective as telling the same joke twice.

Finally, Berman recommends that, in the best Hollywood tradition, you should "Finish with a brilliant spectacle. Never use up all your favorites in the beginning so that the finale is a dim smudge. End with **Jupiter or Saturn** (if they're up.)" **Venus, Mars** or **Mercury** will do in a pinch if they're up, but they're better shown early.

The key to success here is planning. Any decent star atlas will show you what deep-sky objects are up tonight. The magazines or *Sky & Tel's* "The Sky This Week" online will tell you which planets are up, and when. Select bright, easy-to-find examples from five or six categories (e.g., the Moon, a globular cluster, a double star, a nebula if any bright ones are up, an open cluster, and Saturn). Show them in the order that Berman suggests. And that's it, show's over, thanks for coming, **Elvis** has left the sky.

As **Shakespeare** put it, "The play's the thing." You're putting on a show for your visitors, and they should always leave wanting more.

Berman winds up his article by pointing out that all of your visitors have seen sharp, colorful space photos. "You cannot compete (with them)," he concludes. "Don't try. Instead, play to your instrument's strengths, which reveal glories like M13 and lunar craters to perfection."

In other words, if it ain't bright, it's trite.

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Things We Conveniently Forgot to Tell You Before You Joined This Cockamamie Club

article by Bill Warren

(Editor's Note: This article appeared in slightly different form in the August, 1999 Observer.*)*

Okay, so here's what we already knew but didn't tell you about astronomy and observing until after your check cleared the bank when you joined FRAC:

***The weather often messes up observing.** From April through September, there are more than enough wonders in the night sky to occupy your observing time from here to eternity – but with the four Horrible H's (heat, humidity, haze and hinsects – not to mention clouds, rain, light pollution and **Larry Higgins** [the 5th horrible H?]), the months of late spring, summer and early fall can be somewhat less than ideal for observing, especially when Larry has eaten at Taco Bell before making his presence known at Cox Field.

***The Moon gets in the way of observing during part of every month.** This is true only if you want to observe something other than the Moon. (Actually, it's true anyway, since the Full Moon is so bright and

flat that it gets in its own way by hiding features that are easily observed at other times of the month.)

***All of those wonderful colors that I see in the astrophotos that appear in *Astronomy* and *Sky & Telescope* aren't there in my telescopic view.** Well, *Yes,* they are there – but your eyes don't detect or retain colors a night as well as opening the shutter of a camera for 30 min. or so does the trick. Blame your eyes for the lack of color, and us for not telling you.

If you want to see color in the night sky, look at:

(a) the planets (**Mars** is orange, with white polar ice caps; **Jupiter** has brown belts girdling it but is otherwise cream-colored; **Saturn** is pale yellow; **Neptune** sports a blue disk; and **Uranus** is greenish;

(b) stars (to see their true colors, put them slightly out of focus and the colors will leap out at you like **Hannibal Lecter** on LSD);

(c) planetary nebulas (many of them appear pale green or blue); or

(d) bright diffuse nebulas such as **M42 (Orion Nebula)** or **M20 (Lagoon Nebula** in *Sagittarius*). You won't see the lovely pinks or blues of long-exposure astrophotos or images – but you may see them as greenish-gray clouds.

***Practically all of the Messier objects are faint and fuzzy.** Hey, so is **Ken Walburn,** but that didn't stop him from landing a wife, **Doris,** who is anything but out of focus. If you want to see impressive Messier galaxies, take more than a few seconds before going on to something else next time you observe **M81/82** in *Ursa Major,* **M31** in *Andromeda* or **M104 (**the **Sombrero Galaxy)** in *Virgo.*

***You have to learn how to use your telescope before you can find things with it.** This is true even if you use a GoTo 'scope, since you have to align it properly before it will take you where you want it to go.

In either case, using Go To or finding things manually, you need to recognize what you see in the eyepiece, or else faint objects will slide by unnoticed. (Three tips: Use a low-power eyepiece to find things; scan slowly if you're finding things manually; and when you find what you're looking for, change eyepieces to determine which magnification shows the object best.)

If you're not using GoTo, you should learn how to use a planisphere to get you to the constellation you're looking for, and a star atlas that is large, simple, and yet detailed enough to show you precisely where to start looking. And you need to develop a scanning technique that will enable you to find things that aren't exactly where your finderscope or Telrad indicates they ought to be. It's a *big* sky up there, especially when you're looking for things that are fainter than the stars around them.

All of the above requires practice – and *regular* practice, not just a couple of hours at Cox Field or in your backyard every two or three months. As I've often stated in these pages, you'll get no more out of astronomy, this club, or stargazing than you're willing to put into it.

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Errata. On p. 4 of the June *Observer,* **Swan Nebula** in *Sagittarius* was incorrectly listed as M16**,** when (as every Messier chaser knows) the Swan is **M17.**

Still…

Prof. Stargazer -- always ready to support a losing argument -- hastens to point out that, if you round off M16, M17 and M18 to the nearest 17, all of them are M17.

"Hey," says the kindly old professor, who bears a startling resemblance to **yr. editor**, "I didn't get my doctorate for nothing. (Actually, it cost me $500 from the College of Research in Astro Physics, a prestigious online institution better known by its initials.)"

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If, as cosmologists contend, the universe is still expanding, why do I have so much trouble finding a parking space at UGa-Griffin when I arrive late for a meeting?

-Prof. Stargazer

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