

# THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT  
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

**Vol. 27, No. 2** **February 2023**

**Officers:** President, **Sean Neckel**; Vice President, **Aaron Calhoun**; Secretary / ALCOR **Mark Grizzaffi**; Treasurer, **Steve Hollander**; Board of Directors: **Dwight Harness, Felix Luciano, and George Ruff**; Program/Observing Coordinator: **Sean Neckel**; Facebook Coordinator: **Aaron Calhoun**; Webmaster: **Tom Moore**; Newsletter Editor: **Dawn Chappell**; NASA Contact: **Felix Luciano**

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## Club Calendar:

**FRAC Meeting:** Thursday, February 9, 2023, 7:30pm at the UGA Gardens in Griffin. We will have officer elections and select a new observing chair.

## Public Observing Events:

Friday, February 24, 2023, 7:30pm. Fayette County Rec Department public observing at Lake Horton in Fayetteville. Weather date is Saturday, February 25, 7:30pm.

## FRAC Observing Events:

Friday and Saturday nights, February 17-18, 2023 from sunset until whenever at Joe Kurz Wildlife Management Area.

Please keep checking your email for updates regarding club events.

## President's Message:

Hello FRAC Members,

Just a reminder to renew your fishing or hunting license if you have not already. A valid Georgia DNR pass of some kind is required to enter Joe Kurz WMA.

We will start collecting club dues at the February meeting. Dues are \$15 for the year and can be paid by cash or check made out to Flint River Astronomy Club.

Thanks,  
Sean

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## Club Projects:

### Starry Skies South

The Starry Skies South meeting is on Thursday, February 2, at 8pm EST on Zoom. Link is below: <https://uab.zoom.us/my/frizzle>

## FRAC T-Shirts

T-shirts are still available. They are \$20 at all future FRAC gatherings.

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## Astronomy Trivia:

1. What is the largest dwarf galaxy that orbits the Milky Way?
2. What is the name of the cluster of galaxies that include the Milky Way?
3. What is the furthest object from the Earth that can be seen by the naked eye?
4. Polaris has not always been the 'North Star'. Which star was most recently the north star before Polaris?
5. What is the largest globular cluster in the Milky Way?

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## Previous Meetings/Activities:

### January Events:

FRAC Meeting - January 12, 2022 - 7:30pm at the UGA Gardens.

- Due to the severe weather on our meeting date, the UGA Gardens were closed and our meeting was on Zoom only.

- 12 members attended the Zoom meeting. Sean and Chelsea Neckel, Mark Grizzaffi, John Cruickshank, Wade Simmons, Bill Evans, David Stone, Alan Pryor, Ben Barker, Erik Henderson, Brent Summers, and Felix Luciano. 1 guest (and potential new member) joined us, Adi Pophale.
- We discussed voting for the AL officers, FRAC elections and the observing coordinator position, and various other topics.

**Welcome New Members!**

FRAC would like to welcome our newest members, Brent Summers, Erik Henderson, Ken and Ashley Taylor, and Larry and Twila Dove. Hope to see you at a meeting or in the field soon!

**FRAC Observings:**

January 20-21, 2023 were both cloudy messes.

**Public Observing Events:**

No events were scheduled for January.

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**Solar System Observing – February 2023**

**Mercury** is visible in the morning, low on the eastern horizon starting about 6am...

**Venus** is visible in the evening, starting around 5:30pm.

**Earth** did not want to cooperate with FRAC in January.

**Mars** just passed opposition, and is visible from dusk until about 2am..

**Jupiter** is visible from dusk until around 10pm.

**Saturn** is not visible, as it is nearing solar conjunction.

**Uranus** is visible with a telescope at around 7pm until 1am.

**Neptune** is visible in a telescope starting around 7pm until 9pm.

**Moon:** Full: 2/5 LQ:2/13 New: 2/20 FQ: 2/28

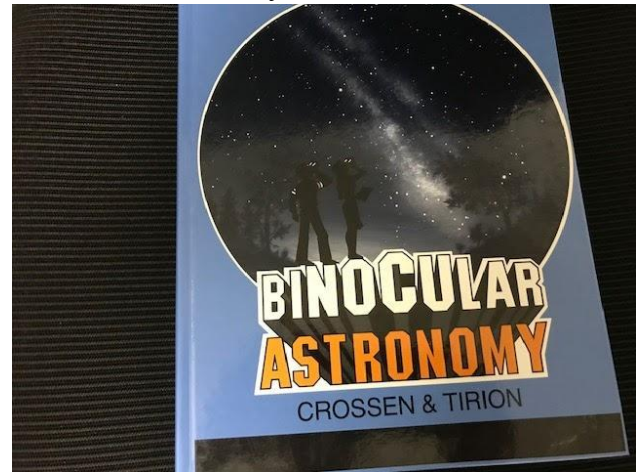
<https://in-the-sky.org/>

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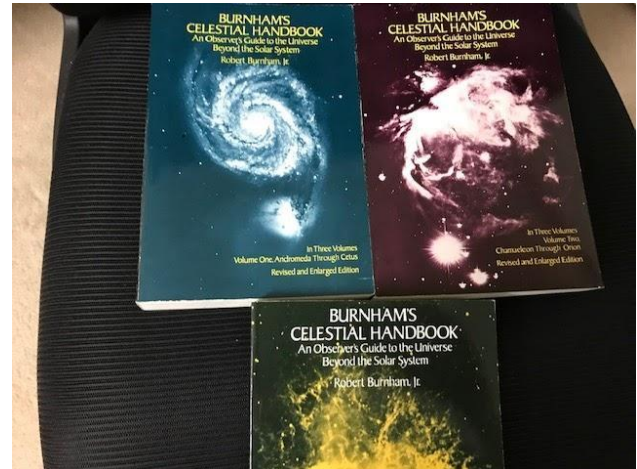
**Classifieds:**

**Books for sale:** Contact Felix Luciano at [montb02@yahoo.com](mailto:montb02@yahoo.com) for details.

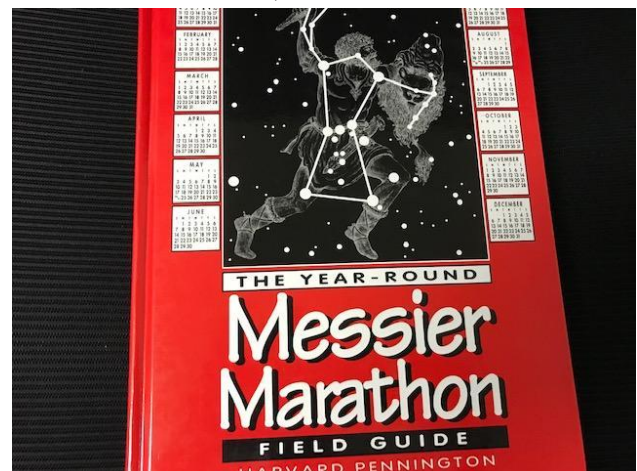
Binocular Astronomy - \$20.00



Burnham's Celestial Handbook (set of three, soft cover) - \$25.00.



Messier Marathon - \$20.00



If you have something you would like to buy, sell, or trade, email the specifics, including your contact information to [stneckel@gmail.com](mailto:stneckel@gmail.com)

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The Bowtie Nebula, NGC40, Courtesy of Alan Pryor.

NGC 40 is also known as the Bow-Tie Nebula or Caldwell 2. It is a planetary nebula in the constellation of Cepheus. It is about 4,000 light-years away and has a magnitude of 12.3. You will need dark skies and about a 14 inch telescope to see it. It lies about 6 degrees east of the north most star in Cepheus, Errai. The star that caused the planetary nebula ejected its outer atmosphere. That central star has a surface temperature of about 90,000 F, and its high energy radiation is exciting the ejected atmosphere causing it to glow. It is believed that the planetary nebula will fade away in about 30,000 years. One unusual aspect of this planetary nebula is that it appears red. Many of the planetary nebulas are green in color.

A full size image of NGC 40 can be seen at [NGC 40](#).

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Trivia Answers:

1. The Large Magellanic Cloud.
2. The Local Group. It consists of approximately 80 galaxies and dwarf galaxies spanning 10 million light years.

3. The Triangulum Galaxy. At a distance of 3.2 million light years, with an apparent magnitude of 5.2, this galaxy can be seen in exceptionally dark and clear skies.
4. Alpha Draconis, also called Thuban, was the north star from about 4000-2000 BC. At  $0.2^\circ$ , it was aligned closer to the north pole than Polaris is now ( $0.5^\circ$ ).
5. Omega Centauri has a diameter of 150 light years, and contains 10 million stars.

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