

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

Vol. 24, No. 4 **June 2020**

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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Reminder:

Membership dues - please turn ASAP if you have not already. \$15 by cash or check made out to FRAC or Flint River Astronomy Club. Send to Sean Neckel at 788 Rising Star Rd. Brooks, GA 30205.

Our Astronomical League dues will be invoiced this month. Any member not paid will be dropped from the official club roster. If you do not want to send a check and would prefer an alternate payment method such as PayPal or Venmo, contact me directly at the email address from which you received this newsletter.

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Club Calendar:

FRAC Meeting - June 11, 2020 - 7:30pm on zoom.us

- A Zoom meeting invitation will be sent to your email that you provided the club. If you have received this newsletter, you will have the link. See the President's Message below.

Astronomy in the Park at High Falls State Park, June 13, 2020 – Cancelled

Events not cancelled:

Club observing weekend - Friday and Saturday June 19-20, 2020, Joe Kurz WMA

Please remember that social distance and gathering restrictions still apply until otherwise stated. A maximum of 10 observers may gather, keeping a minimum 6 foot distance.

Please keep checking your email for updates regarding club events. There are likely to be additional cancellations or postponements

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Trivia:

1. How old is the solar system?
2. What 2 planets have no moons?
3. How many stars does the Milky Way have?

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President's Message:

Hello FRAC Members,

There is still no word from UGA about when the Garden will reopen for us to have meetings. I have been in contact with Wayne Gardner several times, and there is not a timeline when the facility will be available for us to use.

For the month of June, I'll be sending out a virtual meeting notice through Zoom. I've never done this before, but I have been part of quite a few virtual meetings at work and I think that it has turned out pretty well. Both of my kids were using Zoom for the past 3 months for their virtual classroom to finish out the school year. You do not need to sign up for an account to participate, only to host a meeting, and I will facilitate that. You will need to install an app on your PC, Mac, or phone. The instructions will all be part of the link that I send to you by email once I am all set up.

If you have not done a virtual meeting before, I'd like to share with you a few guidelines for the meeting:

- Please do not pass on the link or the invitation through email or social media sites (Facebook, etc.). Intruding on and disrupting virtual meetings has apparently become a thing. (WOW people are bored)
- Video is optional, though it sure would be great to see some faces after our time apart.
- If you are not the current speaker, mute your audio. Your computer mic will pick up everything and send it to everyone, and it will

pick up audio from your speakers and there will be an echo. This can make it difficult to communicate.

- There is a 'raise your hand' option - use it to speak up in the meeting.
- Please make an effort to attend. I am not making any promises about whether or not it will work, but I would like to try. This is a good opportunity to see what works and what doesn't. Once we are able to meet again in person, I am interested in adding an online component to our meetings, so that people can attend virtually as well.

For a free Zoom account (I will set up), we will be limited to a 40 minute meeting. Since we really do not have a plan for a program, this should be enough for us all to get together and see each other for the first time since February.

If this works out well (which I think that it will), I would like to try one of our programs that we had planned for this year for the July meeting. If anyone would like to give a presentation, please let me know. You can share presentations on your computer through Zoom, make signs in the background, etc.

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Previous Meetings/Activities:

FRAC Meeting: May 14, 2020 - was cancelled.

Springfest in the Garden, May 3, 2020 - postponed, no date set.

Astronomy in the Park at High Falls State Park, May 16, 2020 - cancelled.

Club observing weekend Friday and Saturday May 22-23, 2020, Joe Kurz WMA

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Solar System Observing - June 2020

Mercury is visible in the morning early in the month, and is at greatest elongation east of the sun (23.6°) on 6/4.

Venus will be in conjunction with the Sun, but visible in the pre-dawn sky late in the month.

Earth will be visible all month. Direct observation is better during daylight hours, though local topography and weather may limit visibility.

Jupiter and **Saturn** rise after midnight and are visible until sunrise.

Mars is visible throughout the early morning hours until sunrise.

Uranus is hidden in the dawn twilight early in June. It may be visible (with a telescope or binocs) before dawn later in June.

Neptune is east of the Sun and visible (with a telescope or binocs) in the early morning hours.

Moon: Full: 6/5 LQ: 6/13 New: 6/21 FQ: 6/28

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Classifieds:

This is a new section for the newsletter this month. If you have any astronomy related equipment, books, etc. that you would like to buy, sell, or give away, please let me know and I will include it here. This will be month-to-month, so if you do not sell your stuff, you must tell me to 'renew' the ad for the next month.

For sale:

Oberwerk Binoculars 11 X 70

Original shipping boxes and they are in like new condition.

FROM Oberwerk: "We consider the 11x70 to be the largest and most-powerful binocular that can be hand-held for astronomical viewing."

Listed for \$129.95, I am asking for \$90.00

Contact Felix Luciano at montb02@yahoo.com

For sale:

Celestron C90 Maksutov-Cassegrain reflector, with 45° diagonal, manual adjust tripod, 32mm eyepiece (can probably throw in a couple more if you need them), 8x21 finder scope, solar filters for the scope and the finder. Great portable scope. Asking \$125 for everything.

Contact Sean at stneckel@gmail.com.

Astronomy Facts:

Vega

- Vega is a star in the constellation of Lyra.
- A bluish white star with a surface temperature of 17,200F.
- 5th brightest star in the sky.
- 25 light years away, meaning we are seeing it as it was 25 years ago.
- The star rotates very fast at 274 km/sec. This is 93% of the speed that would break apart the star!
- Its mass is 2.3 times the suns.
- It has a diameter of 2.7 times the sun.
- It will become a red giant star in a half billion years.

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Trivia Answers:

1. 4.6 billion years
2. Mercury and Venus
3. 200 billion.

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Abell Galaxy Cluster 2065. Distance is over 1 billion light years away.

Photo from FRAC member Alan Pryor, taken from his home, total exposure time was over 5 hours.

The full resolution 4096 x 4096 pixel photo is available here:

<https://photos.app.goo.gl/jBNFPiSYEhA4XfNS8>

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Dues:

A last reminder for those who have not paid their club dues. FRAC will need to pay the Astronomical League membership in July. Please send your dues to Sean Neckel at 788 Rising Star Rd., Brooks, GA 30205. If you would prefer to send your dues through an electronic payment (PayPal), contact Sean at the email address from which the newsletter was sent.

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