CAPE FEAR Skies

Monthly Newsletter
Cape Fear Astronomical Society
Serving Wilmington, NC and Surrounding Areas

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

May 2024

Vice President's Message

by Karl Adlon

Reminder: This Sunday, the 5th, is the May Meeting, including Gastronomy!

It is not the usual 2nd Sunday, which I expect you will spend celebrating Mothers' Day.

May 18th is our next Public Observing session at Carolina Beach State Park. Maybe we'll have more than the usual number of visitor following last month's State Wide Star Party – see page 4 for a report.

The July 14th Meeting does not yet have a Presentation, so you might think about doing one on that date.

See the blue highlighted dates on the next page's Calendar? Those are observing opportunities if skies are clear and there are many of them. And, of course, pop-up observing sessions are also possible. Most of these opportunities are at our club observing site, "Starfields", and I hope we all can get out there under clear dark skies.

What's new? A nova would be new. See the next to last page for information from the Astronomical League about an upcoming nova in the T Coronae Borealis system. See https://en.wikipedia.org/wiki/T_Coronae_Borealis for more information about this double star system.

Safety Fast!

Calendar

May 2024

Date – Event – Time

01 Last Quarter Moon

03 Club Observing @ Starfields (the Club Observatory); 7:00 PM; 3rd Quarter Moon

04 Club Observing @ Starfields (the Club Observatory); 7:00 PM; 3rd Quarter Moon

05 Eta Aquarid Meteor Shower; ZHR 50; Waning crescent

05 Moon-Mars-Saturn; Waning Crescent moon near Mars and Saturn: morning

05 ★ Cape Fear Astro Monthly Meeting ★
GAStronomy Meeting
Sunday, February 9, 5:00pm – 6:45pm
(Dinner, prior to the Monthly Meeting)
bdobo Mongolian grill
419 College Rd.

CFAS Monthly Meeting
7:00pm – 9:00pm - 212 DeLoach Hall; UNCW
Also simulcast via Zoom

06 Moon and Mercury; Waning Crescent moon near Mercury: morning

07 New Moon

09 Mercury at greatest western elongation (morning)

10 Club Observing @ Starfields (the Club Observatory); 7 PM; New Moon

11 Club Observing @ Starfields (the Club Observatory); 7 PM; New Moon

15 First Quarter Moon

18 Public Observing @ Carolina Beach State Park, can start observing the Moon about 7 PM

23 Full Moon

30 Last Quarter Moon

31 Moon and Saturn, Last Quarter Moon near Saturn: morning

31 Club Observing @ Starfields (the Club Observatory); 7:00 PM; 3rd Quarter Moon

2024 Public Events

May 18 – CBSP; park closes 10 PM

June 15 – CBSP; park closes 10 PM

July 13 – CBSP; park closes 10 PM

Aug 10 – CBSP; park closes 10 PM

Sep 14 – CBSP; park closes 10 PM
&
Sept. 14 - International Observe the Moon Night

Oct 12 – CBSP; park closes 9 PM

CBSP = Carolina Beach State Park

2024 Monthly Meeting Dates

May 5 - Mitchell Torlkelson and Jessie Townsend from UNCW on SeaHawk/HawkEye science and related work

Jun. 9 - Field Trip to Ingram Planetarium

Jul. 14 -

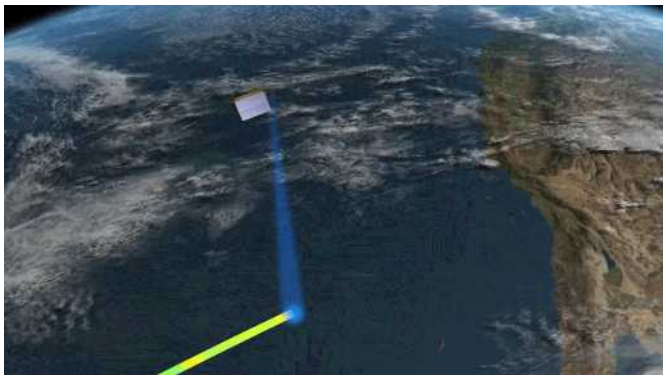
Aug. 11 - Kristin Hendershot (The Astro Ranger) will give a presentation on "Women in Astronomy".

Sep. 8, Oct. 13,

Nov. 10, Dec. 8

Astro phenomena from:
https://www.universalworkshop.com/astronomical-calendar-any-year/

May Monthly Meeting Presentation



Did you know that a UNCW Team built a CubeSat that is in orbit?

Mitchell Torlkelson and Jessie Townsend will talk about the SeaHawk-1 CubeSat with a HawkEye Ocean Color Sensor and the data that it is providing.

This will be, I'm quite sure, an interesting presentation that you don't want to miss!

March Public Observing

Steve and Skip are set to show visitors the Moon. Me too but no picture. It started cool and got colder, but we were all dressed appropriately.

By my recollection, we roughly 25 visitors. Most people left about 8:15 with the park closing at 9 PM, so we talked a bit and left before that.

April “SWSP” Public Observing

The weather was touch and go Friday evening, but in the end it mostly cooperated and we managed to show the moon to a lot of people. Perhaps someone else showed something else, but my TV-127is was on the moon all evening, utilizing a 7mm Pentax SMC eyepiece, providing a view at around 95x.

I stopped at the visitor's center on the way in and grabbed a Chik-Fil-A sandwich, waffle chips (I didn't know they made those), and some tea. Arriving at the site I was the first one there. I had only taken a few bites before a few others arrived. There was plenty of time to set up before anyone stopped by expecting a look.

Things started off well, with no obscuring clouds before dark. People were lined up and viewing the moon before sunset. At some point, clouds rolled in, and we were viewing through various sucker holes. A large bank hit at around 9 and I thought that it may be an early end. But no, the clouds cleared and the last 30 minutes until 10 were clear again. The last person viewed at around 10:05. Until then the line was always present as it is every year. Thankfully, I remembered my small step ladder for the little ones this year. - Terry

★★★★★

I was mostly using my Meade 8” SCT and 1.25” 20mm Plossl for 100X. Sometime after 9:30 PM I put the 31mm Hyperion in and aimed at M44, the Beehive open cluster. Almost everyone was gone but a couple managed to see what of it fit in the eyepiece. - Karl

Terry, at left, with his scope and some early visitors.

Steve, at right, with a few visitors.

These visitors took their time looking and talking before the number of visitors took a jump.

Jon did one Tour of the Solar System and then ran his Skyscanner 100, mostly on the Moon, but switching to Mizar and Alcor as the sucker holes showed them instead of the moon.

So, there were four Cape Fear Astro members, plus Nigel Henbest with his small refractor. Nigel joined at the last meeting.

And here they come! I quick took this picture, put the camera away and started showing the Moon. Some people were surprised they could see it while it was still light out.

With the small number of scopes and the large number of people, many just took a quick look and let the next person have a look. I hope next year a few more members will join us.

Attendance: Over 2000 per CBSP.

Ask!

by Jon Stewart-Taylor

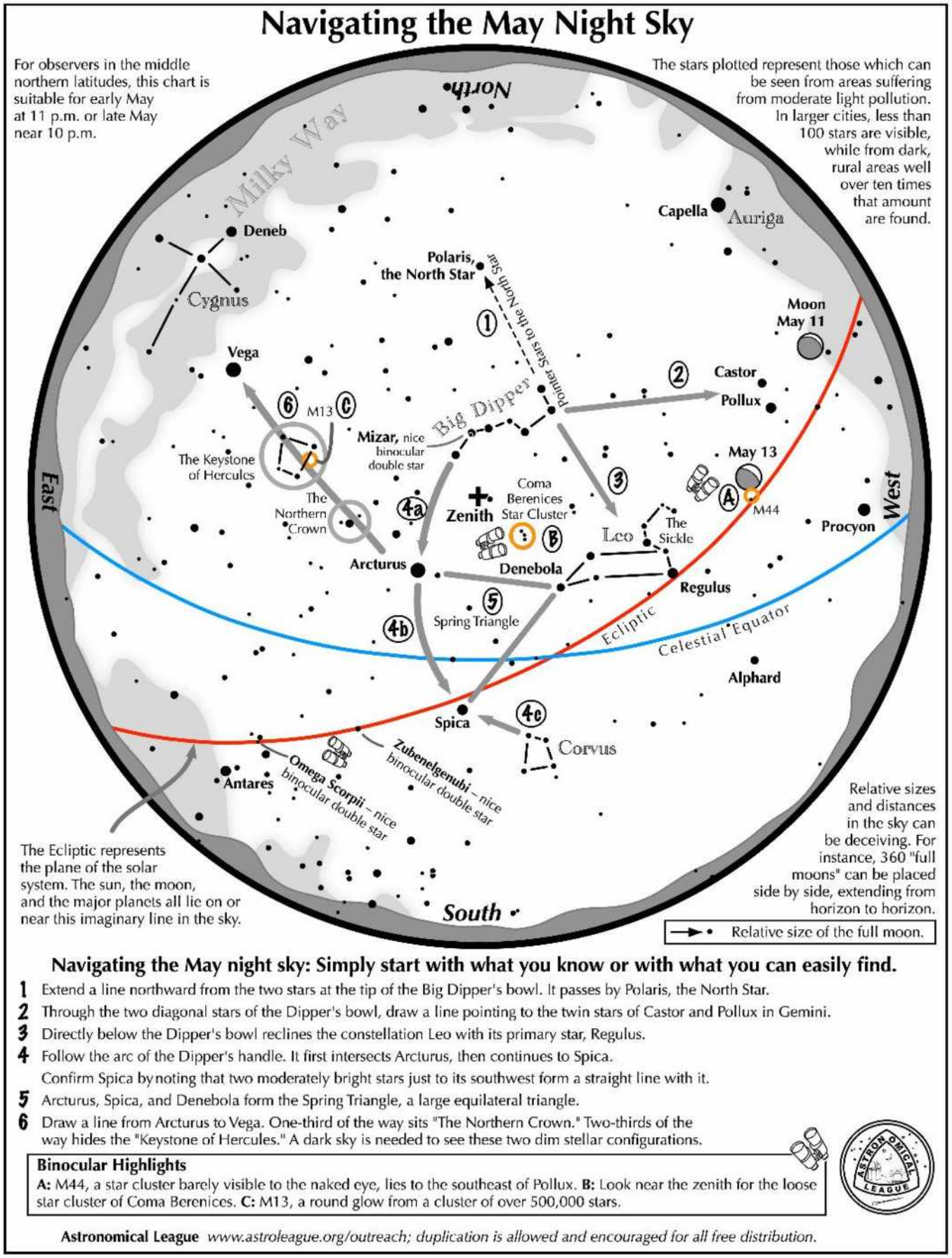
Amateur astronomy is a very large (astronomical) topic. It includes many different approaches to knowing about and understanding our universe. Many approach the universe with their eyes, often aided with special pieces of glass. Some use antennas and radios, or special cameras to augment human senses beyond what our eyes can reveal. Some employ chemistry and physics on meteorites and data from space probes. Some use their minds, thinking about the processes at work in the universe.

Here in Cape Fear Astro we tend to concentrate on visual astronomy, and especially on the use of telescopes to find and look at heavenly objects. We seem to have concentrations on the planets and the "deep sky" objects. Lately (especially with the advent of the Seestar "magic" telescope) we've been starting to do some significant imaging. To be fair, some of us have been doing some fairly serious imaging all along. We've tried to address the needs of "new astronomers" as well as more experienced ones. We haven't done a lot with radio, infra-red or ultraviolet wavelengths. We've spent some time on space exploration, and occasionally touched on cosmology and such.

Is this a good balance? Are there parts of amateur astronomy you'd like to investigate? Can the club help you in some way? Are we doing a good job on what we have been addressing? Is there something more we should be doing, or is there something we should be doing differently?

To sum up: Are we meeting your needs? Are you getting out of your membership in the club what you expected or wanted? How can we do better? This is your club, so please feel free to post on the e-mailing list about it, or to send me a direct email at stewarttaylorj@gmail.com.

From The Astronomical League



Navigating the May night sky: Simply start with what you know or with what you can easily find.

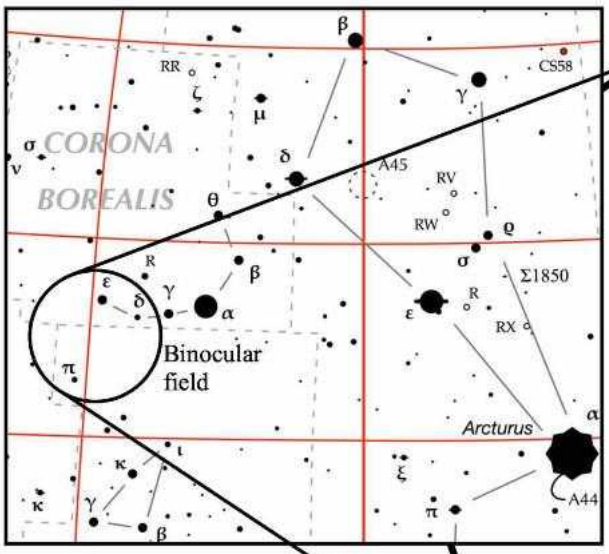
1. Extend a line northward from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
2. Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
3. Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
4. Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica.
   Confirm Spica by noting that two moderately bright stars just to its southwest form a straight line with it.
5. Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
6. Draw a line from Arcturus to Vega. One-third of the way sits "The Northern Crown." Two-thirds of the way hides the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.

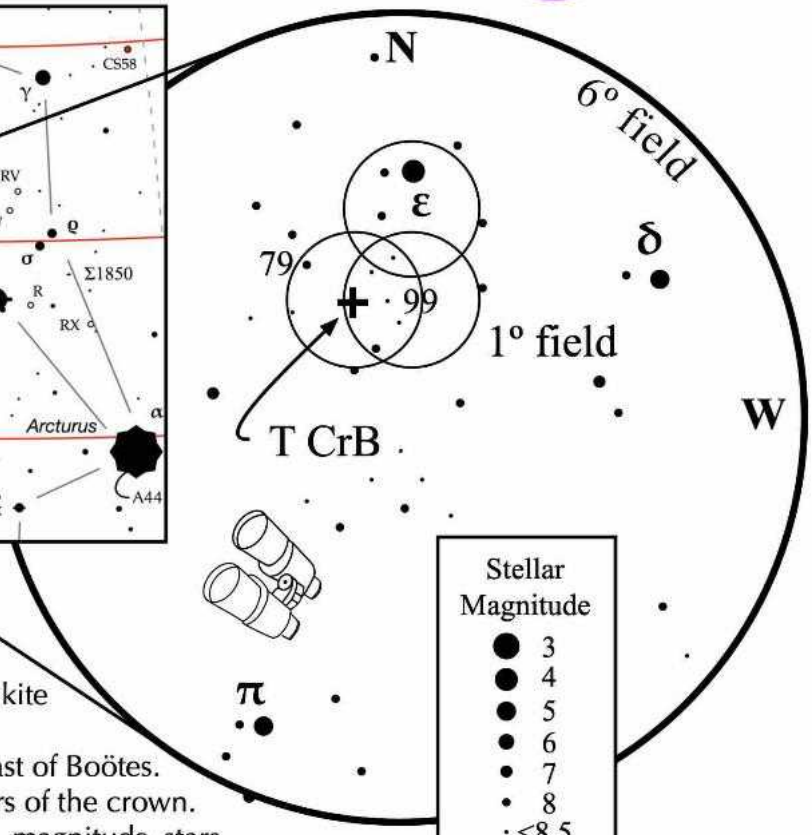
Binocular Highlights
A: M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux. **B:** Look near the zenith for the loose star cluster of Coma Berenices. **C:** M13, a round glow from a cluster of over 500,000 stars.

T Coronae Borealis

A nova waiting to happen – soon!

also known as HIP 78322 and the "Blaze Star"





How to find
T Coronae Borealis

A. Locate bright Arcturus and the kite shaped constellation Boötes.
B. Corona Borealis lies directly east of Boötes.
C. Trace the semi-circle of the stars of the crown.
D. Epsilon and Delta are fourth magnitude stars shining east of Alpha (Gemma), the brightest member of the crown.
E. Place Epsilon in the northern half of the binocular (or finder) field. Fifth magnitude Pi Serpentis lies near the bottom of the field.
F. T Coronae Borealis is about 1/4 the distance between Epsilon and Pi.
G. Move two low power eyepiece fields south of Epsilon.
H. Then move 1/2 low power eyepiece field east.
I. This is the vicinity of 10th magnitude T CBr.

- The star normally is magnitude 10.3.
- Ten years before its outburst, it rises to magnitude 9.8. It did this 10 years ago.
- It then dims to about magnitude 12 one year before outburst. It did this in April 2023.

Between now and September, T CrB is predicted to nova, quickly reaching 2nd magnitude and rivaling the brightness of Alpha CrB (Gemma).

- Its brightness rise will take one day or less.
- It will likely remain near maximum brightness (2nd mag.) for only a few days.

Get to Know YOUR Astronomical League

The Astronomical League (Astroleague or AL) is one of the largest amateur astronomical organizations in the world. The organization serves to encourage an interest in astronomy (especially amateur astronomy) and promote the science of astronomy by:

- ✓ fostering astronomical education;
- ✓ providing incentives for astronomical observation and research;
- ✓ assisting communication among amateur astronomical societies.

CFAS is one of over 300 member societies affiliated with the Astroleague. Your membership in CFAS allows you take full advantage of this relationship so periodically review the information below to see how the Astroleague can support your astronomical interests and endeavors.

Astroleague Home Page	www.astroleague.org
AL Observing Programs *(Alphabetical Listing)*	https://www.astroleague.org/alphabeticobserving/
Night Sky Tools	https://www.astroleague.org/navigating-the-night-sky-guides/
Astroleague Store	https://store.astroleague.org/
Current and Past Issues of *Reflector Magazine*	https://www.astroleague.org/reflector/
Additional AL News, Information and Reminders	Click HERE for the Astroleague News Page and be sure to check the Astroleague Home Page weekly for new and important posts. Contact Hank Lyon, hlyon8448@gmail.com, for any changes to your Reflector delivery preferences (US Mail or Email).

The Astroleague Correspondent (or ALCor) is your link between CFAS and the Astroleague. Don't hesitate to contact your ALCor if you need assistance with anything Astroleague related whether its general information or detailed coordination of observing program completions for certification. Check back each month to see any new links, postings or reminders.

CFAS Correspondence:

Please contact the society at: CFAS, P.O. Box 7685, Wilmington, NC 28406

Members are welcome and encouraged to submit articles or other input for *"CAPE FEAR SKIES"*. Submit any and all interesting items for publication to Karl Adlon, Editor (email kmja79@yahoo.com).

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

CFAS Officers:

President:	Ben Steelman
Vice-Pres:	Karl Adlon
Associate VP	Jon Stewart-Taylor
Secretary:	George Pappayliou
Treasurer:	Bill Cooper
ALCor	Hank Lyon

Dues: Dues for 2024 are $25 for Individual and $32 for Family Membership. Students dues are $5 per year.

Mail to: CFAS, P.O. Box 7685, Wilmington, NC 28406

Contact Us:

You can contact CFAS at info@capefearastro.org

Our website is http://www.capefearastro.org/