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.

June 2021

President's Report

by Jon Stewart-Taylor

New guidance from the CDC, and a new message from the Governor, basically say that if you're fully vaccinated and you're outside, you do not need to wear a mask. If you are not fully vaccinated, but can maintain distancing, you do not need to wear a mask. These changes have led us to restart public observing sessions at Carolina Beach State Park. The first is on July 19. See elsewhere in this issue for the 2021 public observing schedule.

We are also able to gather for our Solstice Celebration. This year the June Solstice is on the 20th. We plan to move it forward a day, and hold it in the afternoon and evening of June 19 at Carolina Beach State Park. We plan to hold some astronomical activities and a pot-luck picnic at a pavilion in the park, then transition to the public observing session as it gets dark. Again, there's an article with more information.

What we haven't been able to change is meetings. The UNCW web page says:

The university looks forward to welcoming external guests back to UNCW this summer. Campus spaces are being reset with furniture and, beginning June 1, the EMS online reservation will be available for fall reservations.

https://uncw.edu/news/2021/05/notice-uncw-announces-updates-to-covid-19-health-and-safety-protocols.html

We will be following up with Dr. Davis to see when (or if) we'll be able to use the DeLoach meeting room again. It does not look like our June meeting will be held at the campus. However, our July meeting might. This may depend on whether a COVID surge follows the loosening of restrictions, or whether enough people have been vaccinated to prevent a new surge. If you are not yet vaccinated, UNCW's web page also says:

For those individuals who have not yet been vaccinated, the Student Health Center continues to offer the one-dose Johnson & Johnson vaccine. Vaccines are available in DePaolo Hall with no appointment needed, Monday through Thursday from 8 a.m.-4 p.m. and Friday from 8-11 a.m. You will need to wait 15 minutes after your vaccination.

The Observatory SIG has been working hard, clearing the site for safety and low horizons, locating observing areas, installing permanent observing pads, and most recently installing an 8x12 ft shed for storage and getting out of the weather. The June presentation will be on the observatory location, status, and future plans.

I strongly feel that this is a very important presentation, and request that everyone who can, attend the June meeting on the 13th.

Due to the COVID-19 pandemic and NC Executive Orders:

** **Meetings will be via Zoom.**

** **Member observing as noted, with masks or "social distancing".**

June 2021

Date – Event – Time

02 Last Quarter Moon

04 Club Observing – Location TBD; 08:30 PM

05 Club Observing – Location TBD; 08:30 PM

10 New Moon

10 Solar Eclipse - not visible from the U.S.

11 Club Observing at Starfields; Shiloh Road Ivanhoe NC; 08:30 PM

12 Venus – Moon; Venus 1.5 degrees from moon; 20 deg from sun in evening sky

12 Club Observing at Starfields; Shiloh Road Ivanhoe NC; 08:30 PM

13 Cape Fear Astro Monthly Meeting; 07:00 PM; via Zoom

17 First Quarter Moon

19 Solstice Celebration; Carolina Beach State Park; 4 P.M. - 7 P.M.; picnic start: 5 - 6 PM

19 Public Observing Session; Carolina Beach State Park; after picnic when Moon is good to view (approx. 8 PM)

20 Solstice; 09:45 PM; June Solstice

24 Full Moon

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

Lone Pine and Milky Way

One of the advantages (the only advantage?) of being Editor is that you are pretty free to do what you want without getting **fired!**

That includes showing off your Photo Club entry for this month's assignment: Black & White.

I hope you think it is as good as I think it turned out!

It's a merger of 2 images, both of which started as color.

CHEERS!

Solstice Celebration

by Jon Stewart-Taylor

With the updated rules for COVID prevention, we are now able to gather in person for our Solstice Celebration. This year the June Solstice is on the 20th. We plan to celebrate it a day early, the afternoon and evening of June 19, 4-7 at Carolina Beach State Park. We plan some astronomical activities and a pot-luck picnic at a pavilion in the park. All are welcome at the picnic and activities, especially family members young and old.

Among the activities we might do (depending on interest and how many of what age groups we get) are:

- Model solar system
- Astronomical scavenger hunt
- Astronomy-themed board games
- Lunar geography quiz

Please post e-mail to the list if you'd like to do any of these, or if you have suggestions for an activity you'd like us to do.

The picnic should start between 5 and 6. Kathleen and I plan to provide hot dogs, hamburgers, and buns, as well as plates, cups, and utensils. If you are a vegetarian, please post e-mail letting us know! We'd be grateful if other members could bring salad(s), sides, and drinks. You might post an e-mail letting others know what you plan so as to reduce duplication.

When twilight approaches, we'll transition to the public observing session as it gets dark. We plan laser-guided tours, and lunar observing (since the moon will be at first quarter). With the bright moon, not many of the deep-sky objects will be available, but there'll be a few double stars and clusters available. If you prefer not to participate in the public observing session, that's fine. You can leave before it starts, or you can set up in another part of the park for a club-only session.

Hope you can make it. After so long, it'll be good to gather together as a club.

Public Observing Sessions Resume

by Jon Stewart-Taylor

With the increasing number of people vaccinated, and the most recent Governor's message, we are restarting public observing sessions in partnership with Carolina Beach State Park. The sessions are again the Saturday closest to the first-quarter moon, That way even if the weather is less than perfect, we should at least be able to show people the moon.

19 Jun
17 Jul
14 Aug
9 Oct
13 Nov

The starting time varies, because it's set for a half hour before sunset. The ending time also varies, because it's an hour after the park's official closing time, which varies seasonally. They park may lock the main gate before we're packed and ready to leave, but that's ok: there's a "secret exit" which remains open. If you haven't participated in public sessions at the park before, just follow one of the veterans out.

So, the first public session of 2021 is on Saturday, 19 June. I hope lots of you can come out for what is one of our basic purposes as a club: to share the heavens.

2 Books for the Novice

by Karl Adlon

Ben Steelman said: "Forgot to mention that "Secrets of Stargazing" arrived Tuesday. It's definitely the right length and good for what it is. My criticism is that it's really a "How to Use a Telescope" (And Shop With Our Advertisers) volume, with not too much on what newbies can discover in the night sky.

I [Ben] talked to Richard McColuman who manages the theater at the Morehead Planetarium and Science Center. His suggestion was "Astronomy: A Self-Teaching Guide" by Dinah Moche, published by Wiley; the paperback sells for $19.79 on Amazon. Trouble is that the most recent edition is in 2014, and since the author (a professor at City University of New York) died in 2018, there's unlikely to be another.

I [Karl] obtained a copy from thriftbooks.com and here are my quick scan comments:

Astronomy: A Self-Teaching Guide

by Dinah L. Moché

The title is very accurate! The book would be good for someone with little or no physics background who wanted to have a basic understanding of the many aspects of Astronomy with little of no outside help. Each section presents a topic in some detail, then asks questions – providing a space for your answer, and then provides the answer for your comparison. The book is about 370 pages, 9¼" by 7½" and soft bound.

Note: It has very little to help a novice observer learn their way around the sky.

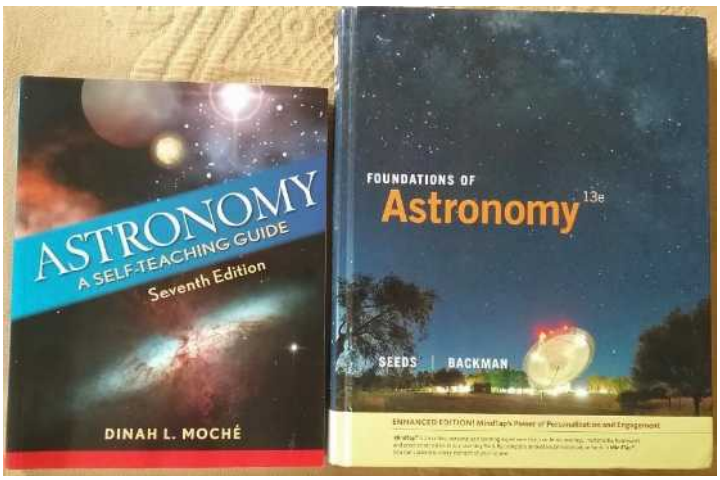
Foundations of Astronomy

by Seeds and Backman

For the Astronomy portion of the National Science Olympiad, this book is referenced often.

While Moché's book covers the same topics, I think this book does a little better job for the students. For example, the magnitude-distance formula was presented in 2 different manners making it easier to use the one appropriate for a given problem. The book is about 650 pages, 11¼" by 9" and hard bound.

Likewise, this book has very little to help a novice observer learn their way around the sky.

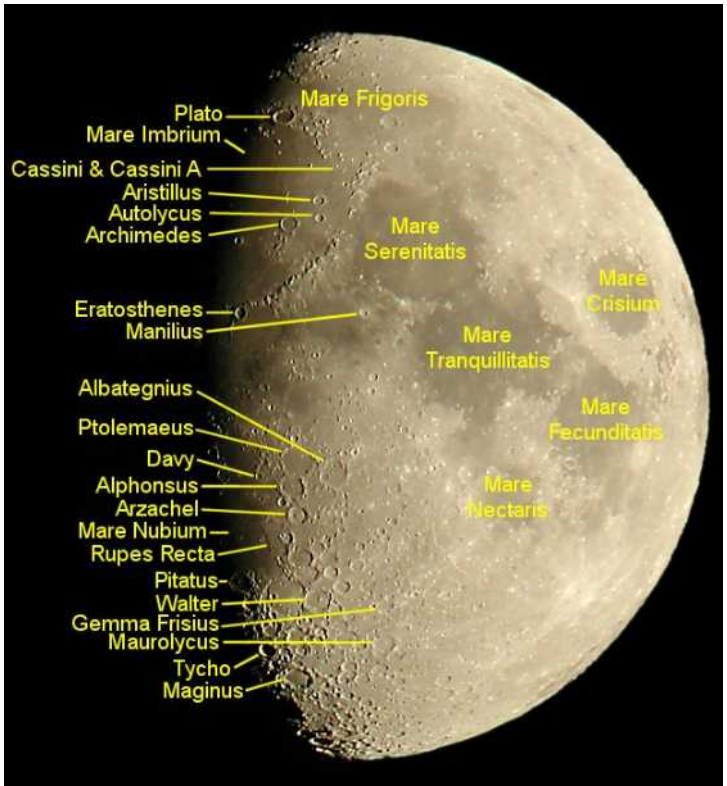


My Conclusion:

Both books are good and will help you gain a good understand of the subject of Astronomy.

I give a nod to Foundations, 1) for the additional detail, 2) the larger format, 3) being hard bound and 4) little price difference in the used book market.

June 19 CBSP Public Observing



Being mid-June and close to Summer Solstice, there is about as little dark hours as there can be. About the only thing to observe is the 9.3 day old Moon.

My Favorites Visible June 12

by Karl Adlon

I would guess that my favorites are many people's favorites and I view this article as a reminder to myself that, while June has the least amount of dark sky time, it only means a late start to observing these objects. I picked June 12 since the Moon is low in the west at 10 PM.

10 P.M. – Galaxies: **M81&M82** are 40º above the horizon in the NNW. Galaxies **M51** and **M101** are near the end of the Big Dipper's handle close to the meridian.

M13, the Hercules Cluster, is east of the meridian, but in a good location to observe now or later when higher.

NOTE: Times below are times where the objects listed are not too far from the meridian. Objects listed for later times are probably also visible but are to the east.

12 A.M.– **M4** is not a spectacular cluster, but is easy to find: just scan west of Antares ~0.1º. It is difficult, though, in poor skies.

2 A.M. -
Located above the spout of the Teapot, **M8** - The Lagoon Nebula is quite a sight under clear, dark skies and a little higher **M20**, The Trifid Nebula can also be seen in a wide angle eyepiece.
A little more than ½º east from M8, globular cluster **M22** can be found. In my 18" Dobsonian, I like it better than M13 which requires at least a step stool when high in the sky.
M17 is either the Omega or Swan Nebula, depending on whether your scope inverts the image or not. In the 18", it is quite obviously tThe Swan once I locate it in the sky.
M57, The Ring Nebula – a planetary nebula, is in Lyra, located between the 2 southern stars in the parallelogram. The better the skies and the larger the telescope, the more the nebula looks like a smoke ring.

4 A.M -
M27, a planetary nebula that is larger than M57, is a fuzzy patch in the sky. Larger scopes and photographs will show some detail.

Saturn & Jupiter are now high enough that good views are possible if the seeing conditions are good or better.

So, June may have the least amount of dark sky time, but don't let that stop you from observing if the skies are good - or better - great!

www.astroleague.org

Astronomical League Update

by Hank Lyon
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I mentioned last month about the AL's plans to hold the 2021 Astronomical League Convention (ALCon 2021) virtually this year. Since last month, the AL has launched the ALCon 2021 website (https://www.alconvirtual.org) where you are able to register for the convention, review the schedule of speakers and programs (still under development since checked in late May), review the growing list of door prizes (only offered to registrants) and see other details about the convention. ALCon 2021 will be offered via Zoom and the AL's YouTube channel so there is little excuse to miss it this year. I'll provide more information about ALCon 2021 speakers and programs as it is released. Almost forgot… yes, the virtual convention is free!

While you're on the AL website be sure to take a look at the June issue of the Reflector magazine. You'll find a link to it on the AL home page. As a reminder, all current CFAS members are also registered with the AL to receive a hard copy of the Reflector. The magazine is issued quarterly and will be mailed to the address you recently verified. From my recent communications with the AL, I understand that technical problems prevented some digital copies of the Reflector being issued last year. I've been told this has been corrected so if you'd like to also receive the digital issue via email (or prefer the digital over the hard copy), please let me know and I'll inform the AL of your preference. Keep in mind you can always download the Reflector from the AL website.

Editor's Note: Used in this Newsletter, "Cape Fear Astronomical Society" may be abbreviated "CFAS" or "CFAstro".

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.

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Dues:

Dues for 2021 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

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