

June 2024

Meetings at Highland Road Park Observatory and online through YouTube and Jitsi

<https://meet.jit.si/brasmeet>

Calendar:

- 30 MAY: 10AM Summer reading kickoff
- 10 June:
 - 6PM Light Pollution Committee
 - 7PM Monthly Member's Meeting
- 22 June: 9:45AM LASM Dino Days
- 26 June: 7PM Quarterly Officer's Meeting
- 30 June: 2PM Outreach Training Day at HRPO
- 15 July: 9:30AM St. Barnabas Episcopal (Lafayette) Day Camp

Index:

- 1—Vice-President's word
- 2—Outreach Report
- 4—Observatory Notes
- 8—Secretary's Summary
- 9—Skymap
- 10—Quick Picks
- 11—Looking Up
- 14—Bulletin Board
- 15—Contact Information

Vice-President's Word

Hi Everyone,

With Don on his Summer hiatus up North, this will also take the place of the regular President's Message. I hope you decide it's a good 2-in-1 deal and not that we're skimping!

First of all, I hope you'll join us on **Monday, June 10th at 7pm at the Highland Road Park Observatory** for our next monthly meeting. In keeping with the push to get more of our members doing some sky observing, we'll be having a presentation from Scott Cadwallader on Electronically Assisted Astronomy (EAA).

The realm of EAA has grown greatly over the last several years. From high end CCD cameras to a simple cellphone, there is something to fit almost any budget. This presentation will fill you in on many of those options and, weather permitting, we'll try to do some live demonstrations of what can be achieved with the help of an EAA device.

Side note: The June meeting will be when we raffle off the C8 scope that has been the ongoing raffle prize for the last few months. You can buy last minute tickets before we do the drawing.

Our May meeting was one for the books! Emergency Alert warnings going off every couple of minutes were just the start of a hectic evening. All was well, though, and those that braved the weather had a good time discussing the ins and outs of the Astronomical League's many Observing Clubs. Of course, the outdoor/observing portion of the evening was curtailed by the aforementioned weather, but maybe the LA weather will take pity on us for our June meeting.

Finally, the state of our club is robust. We continue to add new members as they discover the Observatory or just run across us at one of our outreach events. (We've added a few from our Sidewalk Astronomy events over the past months.) For all the new members and veteran members alike, I'll say that you can get as much out of this club as you're willing to take. We can seem a bit passive, but if there is anything you want help with or would like to do (as far as amateur astronomy goes!) you just need to let us know and we'll be happy to jump on board with you. We have members at all levels of experience (Zero to lots!) and we're all part of this club because we don't necessarily want to experience this hobby alone. I encourage you to come out to some meetings and/or outreach events and mingle. It's a great way to learn more about this interest that you have, and Roz usually brings cookies!

Clear Skies,
Ben Toman
Vice-President

Outreach Report

Hi Everyone,

Well, we had a nice farewell for the Summer at our latest Sidewalk Astronomy at Perkins Rowe. Plenty of happy people got to take advantage of a cloudless evening. The seeing/transparency were not very good and coupled with the light pollution, we really only had the Moon to look at since none of the bright planets were available. But that old Moon never fails to elicit "WOW"s from people!

We're entering into our down season now, but we still have a few things on the horizon. Probably by the time you receive this newsletter, we will have already had our outreach on May 30th (or it will be very soon.) We were also just invited to take part in Dino Days at the Louisiana Art and Science Museum. Finally, we will be taking a road trip to Lafayette to work with some kids at a Day Camp. The Assistant Director of the camp met Chris R. at one of his regular outreach events he does at Moncus Park and he told them about us. Chris and Annette come all the way from Lafayette for events so often, I thought it was only fair we return the favor and help out their immediate community.

We will also be having another Outreach:101 get together at the Highland Road Park Observatory on Sunday, June 30th from 2PM-4PM. We had started these sessions but got derailed by the pandemic. It's past time we get moving again!

The Outreach:101 session will be a great time to come learn what we do at outreach events. (Especially those events where we aren't providing telescope viewing.) You'll learn what our goals are and get some tips on working with the public. We'll also go through materials we have (Night Sky Network toolkits and other stuff we have in the closet) and work together to find easy and interesting ways to incorporate it into our events. (This will also be a good time to do some digging in the closet to find out just what materials we have hidden in there!)

Now, take a look at the events below and if you would like to help out, just let me know. As always, no experience necessary. We'll guide you along!

Clear Skies,
Ben Toman
Outreach Chairperson

Upcoming Events

Thursday, May 30th

10am-1pm

Summer Reading Kick-off and STEM Event

Main Library on Goodwood

(Solar observing and demo table)

Saturday, June 22nd

9:45am-2pm

Louisiana Art and Science Museum Dino Days

(Solar observing and demo table)

Monday, July 15th

9:30am-?

St. Barnabas Episcopal (Lafayette) Day Camp

(Solar viewing, demos)



Chris, Roz, and Troy closing out our Perkins Rowe Sidewalk Astronomy for the year. Ben (not shown) casts a shadow over the crew.

Observatory Notes

SCIENCE ACADEMY

Saturdays from 10am to 12pm.

for Cadets aged eight to twelve / \$5 per Cadet per week (\$6 if out-of-parish)

advanced registration via [WebTrac](#) strongly recommended

[activity #531990] / parents may stay with or leave Cadet

Four Cadet minimum and sixteen Cadets maximum per session.

1 June = “Radical Radioactivity” 8 June = “Solar Maximum II”

15 June = “Historic Experiments I”

EVENING SKY VIEWING

for ages six and older / no admission fee

Saturdays (1 and 29 June) from 7:30pm to 10pm

Fridays 7 June from 8:30pm to 10pm

Saturday 8 June from 8:30pm to 11pm

Friday 28 June from 9:30pm to 11pm

HRPO houses a 50-cm reflector, a 40-cm reflector and several smaller telescopes to bring the majesty of the night sky to the public. Trained operators, sharing duties via a rotating roster, work throughout the year in shifts. Each operator has a pre-planned list of objects to highlight. However, requests will be taken if there is time and if all present have viewed the previous target.

SOLAR VIEWING SPECIAL SESSION

Thursday 6 June from 12pm to 2pm

for ages six and older / no admission fee

Weather permitting, viewing of the Sun's image in three different manners—transferred onto a white surface, directly with safely-filtered optical light, and directly in safely-filtered hydrogen-alpha wavelength—will take place for two hours. Protective clothing and sunscreen are recommended.

FRIDAY NIGHT LECTURE SERIES

7:30pm / for ages fourteen and older / no admission fee

7 June = “Wonders of the Summer Sky” The temperature heats up as summer's constellations settle high overhead early in the night. BREC Education Curator Amy Northrop takes the audience on a fascinating tour of Baton Rouge's summer season. She highlights the celestial gems that will sparkle throughout the next three months—gems that visitors will be able to see live if they continue to visit HRPO!

LIGHT POLLUTION COMMITTEE

Monday 10 June from 6pm to 7pm

for ages fourteen and older / no admission fee

BATON ROUGE ASTRONOMICAL SOCIETY MEETING

Monday 10 June from 7pm to 9pm

for ages fourteen and older / no admission fee

THE DAYLIGHT DETOUR

Friday 14 June from 6pm to 9pm.

No admission fee. For ages six and older. No viewing during this event.

Whether it's taking advantage of a prorated BRAS membership; getting the status of all current NASA, LSU and HRPO plans; obtaining the latest information on asteroid Apophis; learning HRPO history or taking stock of which celestial events are on their way—this “alternate route” (planned due to Daylight Time) is your stop!

FORCES OF NATURE CAMP

17 June to 21 June / 8am to 5pm daily. For ages eleven to thirteen.

\$125 per EBR-parish camper / \$150 per other-parish camper

[Cost covers entire session; limit thirty per session.]

This one-week-only session focuses on the four forces of nature: the weak nuclear force, the strong nuclear force, gravity and the electromagnetic spectrum (gamma rays, x-rays, ultraviolet, color, infrared, microwaves and radio). Campers will investigate the spacecraft and instruments studying these forces, perform indoor and outdoor experiments demonstrating the presence of these forces in our lives and build basic devices connected to these inquiry! There will be special guests throughout the week to explain the process for obtaining an Amateur Radio Service license. Parents may register in person at HRPO or online at Webtrac. The activity number is 231180.

AMERICAN RADIO RELAY LEAGUE FIELD DAY

Saturday 22 June from 2pm to 10pm / No admission fee. For all ages.

(Solar viewing from 2pm to 5pm.)

One section of the electromagnetic spectrum gets all the love, as tens of thousands of “hams” ascend to the radio waves with “phone” (voice) and CW (Morse) in this exciting contact contest that stretches from coast to coast! Get on the GOTA station and make your own contact! Ham radio is awesome for parents and kids alike.

STEM EXPANSION: “Living in Space”

Saturday 29 June from 3:30pm to 7:30pm

for ages twelve to sixteen. / \$15 each per in-parish registrant; \$18 each per out-of-parish registrant. Advanced registration via [WebTrac](#) required [activity #531993]. Registrant is Part I is not a prerequisite.

This program offers advanced topics, topic extensions and all-new games and activities to an older crowd. Certificates will be earned, and a section of archived experiments, some not seen in over fifteen years (and some *never* performed on site) take place. There are also giveaways and door prizes.

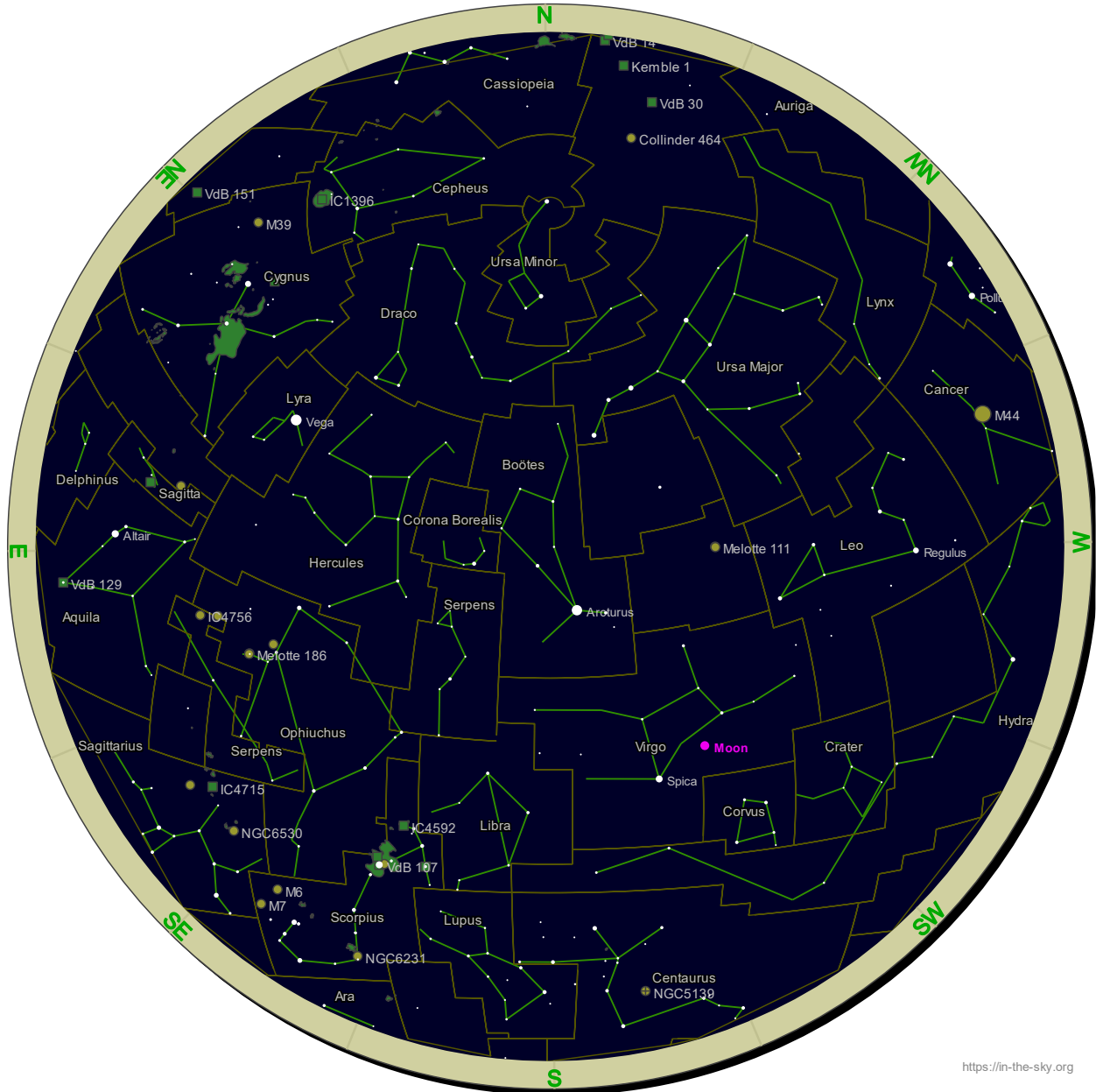
Secretary's Summary

- Meeting called to order, 16 people in attendance, 1 online
- Don is summering is off for the summer vacation
- Ben spoke of the upcoming outreaches
- Tornado alerts were received, a brief discussion of how to barricade ourselves from a pending tornado ensued
- Ben gave a presentation about Astronomical League Observing Programs. For more information, please visit <https://www.astroleague.org/observing-program-division/>
- Members were reminded that, weather permitting, we open the grounds up to members for observing after the monthly meetings for a couple of hours.
- Reminder was given that we still intend on doing quarterly star parties at HRPO, the summer event should be announced soon
- The raffle was had: the Classic Celestron C8 is \$5 per ticket



Last chance to win! \$5 per chance

Sky Map



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

Map centered on 10PM for 15 June 2024. For an interactive sky map, go to <https://in-the-sky.org>

Quick Picks—Events for June 2024

- Sun 2 [Moon](#) Perigee at 368,108 km.
- Sun 2 [Mars](#) 2.4°S of [Moon](#)
- Tue 4 [Mercury](#) 0.1° of [Jupiter](#)
- Tue 4 [Venus](#) in Superior Conjunction
- Thu 6 [New Moon](#)
- Sun 9 Pollux 1.7°N of [Moon](#)
- Mon 10 Beehive 3.2°S of [Moon](#)
- Tue 11 Regulus 3.3°S of [Moon](#)
- Thu 13 [Mercury](#) at Perihelion
- Fri 14 [First Quarter Moon](#)
- Fri 14 [Moon](#) Apogee at 404,078 km.
- Fri 14 [Mercury](#) in Superior Conjunction
- Sun 16 Spica 1.2°S of [Moon](#)
- Thu 20 Antares 0.3°S of [Moon](#)
- Thu 20 Summer Solstice
- Fri 21 [Full Moon](#)
- Thu 27 [Moon](#) Perigee at 369,292 km.
- Thu 27 Occultation of [Saturn](#) by the Moon
- Fri 28 [Mercury](#) 4.7°S of Pollux
- Fri 28 [Last Quarter Moon](#)

Events taken from Telescopius.com

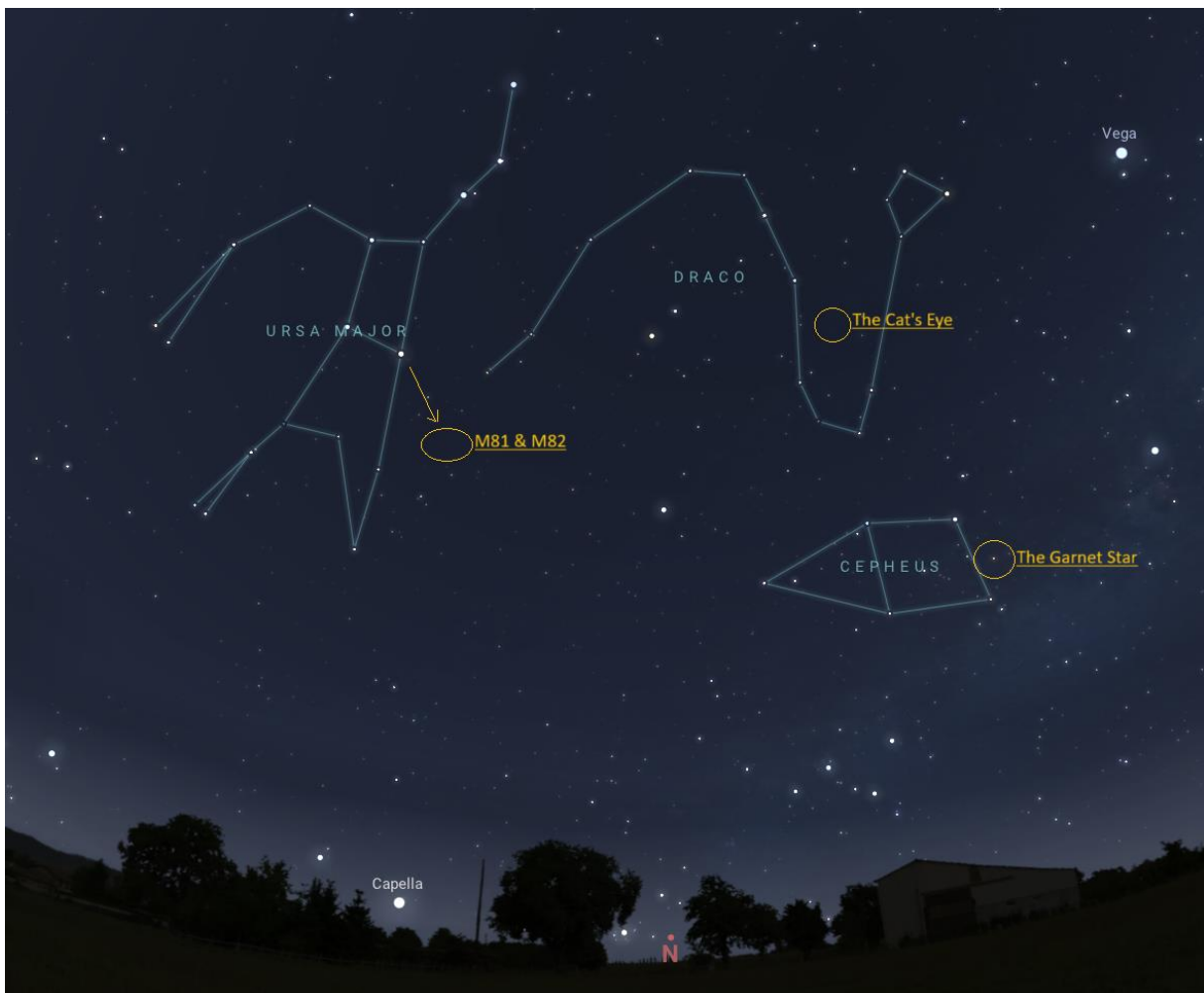
Looking Up



Constant Companions: Circumpolar Constellations, Part III

By Kat Troche

In our final installment of the stars around the North Star, we look ahead to the summer months, where depending on your latitude, the items in these circumpolar constellations are nice and high. Today, we'll discuss **Cepheus**, **Draco**, and **Ursa Major**. These objects can all be spotted with a medium to large-sized telescope under dark skies.



From left to right: Ursa Major, Draco, and Cepheus. Credit: Stellarium Web.

- **Herschel's Garnet Star:** Mu Cephei is a deep-red hypergiant known as The Garnet Star, or Erakis. While the star is not part of the constellation pattern, it sits within the constellation boundary of Cepheus, and is more than 1,000 times the size of our Sun. Like its neighbor

Delta Cephei, this star is variable, but is not a reliable Cepheid variable. Rather, its brightness can vary anywhere between 3.4 to 5.1 in visible magnitude, over the course of 2-12 years.



This composite of data from NASA's Chandra X-ray Observatory and Hubble Space Telescope gives astronomers a new look for NGC 6543, better known as the Cat's Eye nebula. This planetary nebula represents a phase of stellar evolution that our sun may well experience several billion years from now. Credit: X-ray: NASA/CXC/SAO; Optical: NASA/STScI

- **The Cat's Eye Nebula:** Labeled a [planetary nebula](#), there are no planets to be found at the center of this object. Observations taken with NASA's Chandra X-ray Observatory and

Hubble Space Telescopes give astronomers a better understanding of this complex, potential binary star, and how its core ejected enough mass to produce the rings of dust. When searching for this object, look towards the ‘belly’ of Draco with a medium-sized telescope.



The Cigar Galaxy. Credit: NASA, ESA, CXC, and JPL-Caltech

- **Bode’s Galaxy and the Cigar Galaxy:** Using the arrow on the star map, look diagonal from the star Dubhe in Ursa Major. There you will find Bode’s Galaxy (Messier 81) and the Cigar Galaxy (Messier 82). Sometimes referred to as Bode’s Nebula, these two galaxies can be spotted with a small to medium-sized telescope. Bode’s Galaxy is a classic spiral shape, similar to our own Milky Way galaxy and our neighbor, Andromeda. The Cigar Galaxy, however, is known as a starburst galaxy type, known to have a high star formation rate and incredible shapes. This image composite from 2006 combines the power of three great observatories: the Hubble Space Telescope imaged hydrogen in orange, and visible light in yellow green; Chandra X-Ray Observatory portrayed X-ray in blue; [Spitzer Space Telescope](#) captured infrared light in red.

Bulletin Board:

- BRAS is looking for a new webmaster to make occasional corrections to keep the webpage current.
- BRAS is seeking more active volunteers for future outreaches. Contact Ben or drop by our training session for more information.
- Requests for agenda items to be added to the June Officer's meeting should be submitted to Ben. All requests must be submitted at least one week prior to the meeting.

Contact Information

President-----Don Weinell president.braastro@gmail.com

Vice-President-----Ben Toman outreach.braastro@gmail.com

Secretary-----Scott Cadwallader secretary.braastro@gmail.com

Treasurer-----Trey Anding treasurer.braastro@gmail.com

Web: <http://www.braastro.org>

YouTube: <https://www.youtube.com/channel/UCS3Xkk1t7C9IRnB8GKrt9MQ>

Facebook: <https://www.facebook.com/Baton-Rouge-Astronomical-Society-122591151112271/>

Reddit: <https://www.reddit.com/r/BRAstro/>

Discord

Highland Road Park Observatory

13800 Highland Road

Baton Rouge, LA 70810

(225)-768-9948 // observatory@brec.org

