

February 2024

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

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

February 2024 Calendar:

- 12 February:
 - 6PM: Light Pollution Meeting
 - 7PM: Member's Meeting
- 15 February: Sidewalk Astronomy at Ascencion Parish Library
- 20 February: Sidewalk Astronomy at Perkins Rowe
- 29 February: Officer's Meeting

- 8 March: Winter Star Party at HRPO
- 9 March: Rockin' at the Swamp
- 6 April: Zippity Zoo Fest

President's Message—1
This Month—3
Outreach Report—4
Secretary's Report—6
Observatory Notes—9
Sky Map—13
Looking Up—14
Quick Picks—17
Contact Information—18
Joke—42

President's Message

February 2024

January was a bittersweet month for BRAS. We said goodbye to one of our club's original founders, Craig Brenden. For over forty years Craig has been a fixture of BRAS. He served at one point or another in all of the club's leadership positions (with the possible exception of Treasurer). Before departing, Craig left us with a time capsule that he and Wally Pursel assembled at the time of Halley's Comet's last visit in 1986. The plan is to open the time capsule when the comet returns in 2061. I may not be around to see it but, hopefully, many of you will. Craig, you will be missed and we wish you nothing but the best in your new home in St. Louis.

January also saw the return of an annual BRAS tradition: the Rockefeller Road Trip. Nobody can recall exactly when our club's first trip to Rockefeller refuge was, but I believe it was around 1999 or 2000. We were definitely there in 2003 because that was where we first heard the news of the Columbia Shuttle disaster. It's one of those days that you remember clearly for years after the event. Anyway, after a three-year hiatus due to storm damage from Hurricane Laura, we were back. So were the mosquitoes, but only as an annoyance. On Saturday night the clouds rolled in early, so we only got about an hour of clear skies after dark. On Sunday night the viewing was as good as I've ever seen it there. We got about three hours in before exhaustion overtook us. The planets we observed were Saturn, Jupiter, and Uranus. Deep sky objects included the Andromeda Galaxy, the Orion Nebula, the Double Cluster in Perseus, and the globular cluster M79 in Lepus. Many of us spent the daylight hours birding. We made side trips to the Cameron Prairie and Lacassine Wildlife Refuges.



Dorm facility at Rockefeller Refuge



Rockefeller Road Trippers



A great night of observing

This Month

Hi Everyone,

Last month we had a great turnout from the membership despite having to reschedule at the last minute due to the freeze. Thanks to those that shared their cool new equipment with us. From straight visual to amazing astro-imaging, we got a little taste of everything. (Enough to make me want to buy more stuff, unfortunately!)

This month's meeting will ROCK! Chris and Annette Raby are going to share their OTHER passion with our club by giving a presentation on rocks and minerals. We'll learn about the makeup of the Earth's crust and even how supernovae played a part in our existence. Many rocks and minerals will be on display as well as their fluorescent minerals which will be shown using Ultraviolet lights. (I've seen those once before and they are AWESOME!)

I hope you'll all be able to make it out on **Monday, February 12th** at 7pm at the Highland Road Park Observatory to give a big welcome to Chris and Annette. They will also be joined by their friend Catherine, a certified mineralogist and artist that makes hand-crafted jewelry from various rocks, gems and minerals. Maybe you can find a last minute Valentine's Day gift!

It should be a fun, educational meeting. Also, who's bringing the King Cake?!

Clear Skies,
Ben Toman
Vice-President

Outreach Report

Hi Everyone,

Well, 2024 started with a big freeze as far as Outreach goes. All three of our events were either cancelled or postponed due to the freezing weather that hit us. The good news is, we have a second chance this month at all three events! (See below.)

Of course, coming up again will be the annual Rockin' At The Swamp event at the Bluebonnet Swamp and also Zippity ZooFest out at the Baton Rouge Zoo. These are all-day events so it's nice to get a good group of volunteers that can work shifts throughout the day to make it easier on all of us. (Note: I am listing the ZooFest event even though I haven't listed the March/April Sidewalk Astronomy events just to save some space. They will happen, though!)

A word on ZooFest...This year the Zippity ZooFest is on April 6-7. We usually just commit to Sunday, but with the Eclipse being on the 8th, I anticipate a lot of our regular volunteers will NOT be available to do this outreach on Sunday (if at all.) I am going to move our participation to Saturday, April 6th with hopes of catching some help before everyone splits for Texas for the Eclipse. Please let me know ASAP if you will be able to help out. If we don't have any volunteers in town, we may have to miss ZooFest this year, sadly.

Please take a look at the list below and let me know if you'd like to help out for any of these events. We always have a good time and it's a great way to get to know some of your fellow club members better, especially if you aren't able to make it out to the monthly meetings very often!

Upcoming Events

Thursday, February 15th

6pm-7:30pm

Sidewalk Astronomy at Ascension Parish Library in Gonzales

Tuesday, February 20th

6pm-9pm

Sidewalk Astronomy at Perkins Rowe

Wednesday, February 21st

5pm-6pm

MSA West Academy STEM Night (Plaquemine)

Demos and Info/Telescope

Saturday, March 9th

9am-4pm

Rockin' At The Swamp (Bluebonnet Swamp and Nature Center)

Demos, info and Telescope

(Several people needed for shifts throughout the day)

Saturday, April 6th

9:30am-5pm

Zippity ZooFest (Baton Rouge Zoo)

Demos/Solar Observing

(Several people needed for shifts throughout the day)

Clear Skies,

Ben Toman

Outreach Chairperson

Secretary's report of past meeting

- Meeting called to order—21 Members in attendance, 1 online
- New Member's were asked to say hello—Larry introduced himself
- Craig transferred custody of the Haley's Comet time capsule to Ben for safekeeping until the coming return.
- Don talked about the upcoming star gaze at Rockefeller Wildlife center. Discussion ensued about past events, fond recollections of stargazing, bird watching, and crab poaching were had.
- Purpose of the meeting was to show off our favorite new astro stuff:
 - Larry showed off his 72mm Skywatcher and 68° eyepieces along with a lightweight tripod.
 - Brian showed off his Seestar50 automatic astrophotography system—we later went outside while he stacked images of various deep sky objects for wowed members.
 - Karen talked about a new book on White Holes she acquired
- Don showed off modifications he has made to an old EQ telescope donated to the club so that it could be donated to the Ascencion Parish Library—including the purchase of a very stable Dobsonian style base.
- AL awards were presented
- Various items from the BRAS closet were raffled off
- Several members went outside to enjoy a little stargazing before heading home.



During the December meeting, outgoing president John Nagel presents founding member Craig Brenden with a plaque of appreciation for his years of devotion. (It is almost correctly spelled, too!)



From the January Meeting, Don presents Scott Cadwallader with a certificate for his completion of an Astronomical League Observing Program.

Secretary's report of Business meeting

- 8 March was set for the winter star party at HRPO—Members can show up starting at 7 and are encouraged to stay as late as possible. We want to open this event to the public, so we are encouraging attendance.
- Discussion of creating a new dark sky site for the club was had. It was suggested that we create a policy of having anybody who has a sufficient site and is willing to allow the club to use it should email the club president to start discussion of what that would involve.
- It is being discussed whether or not to move the Rockefeller stargaze to March, as the mosquito population is dangerously underfed at that time of year, but mostly because certain restrictions are lifted and the climate is more comfortable (this is also peak Messier season).
- After inquiry, it was stated that Joel has agreed to serve as BRAS closet custodian for the year.
- Upcoming outreaches were discussed. We're hoping we have enough people left in town to field a team for the Zoo festival.
- Chris has asked for an archived copy of the old BRAS forums.
- Brief talk was had about the reasons for setting up of new emails for the officers. President, vice-president, secretary, treasurer, outreach, and public relations all have club managed gmail addresses now.

Observatory Notes

INTRODUCTION TO SKYGAZING

Friday 2 February from 5:30pm to 8:30pm

for ages ten to eighteen / no admission fee / binocular recommended

Our special module for teachers, parents and students has been renamed but the goal remains the same: get youth outside and looking at celestial marvels.

EVENING SKY VIEWING

for ages six and older / no admission fee

Fridays (2, 9, 16 and 23 February from 8:30pm to 10pm)

Saturdays (3, 10 and 24 February) from 7:30pm to 10pm)

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.

SCIENCE ACADEMY

Saturdays from 10am to 12pm.

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

walk-ins welcome, but advanced registration via [WebTrac](#) strongly recommended

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

Four Cadet minimum and sixteen Cadets maximum per session.

3 February = “What is a Volcano?”

10 February = “120 Years of Flight”

17 February = “Volcanic Risks”

LEARN YOUR SKY

Saturday 3 February from 3:30pm to 7:30pm

Registrants must be aged eighteen or older / \$15 per in-parish registrant; \$18 per out-of-parish registrant

This class is an introduction to the unaided-eye Baton Rouge sky. We'll even go outside for some practice, weather permitting. Also included will be an overview of all major sky events for the next twelve months. *This one-day course focuses specifically on the unaided-eye Baton Rouge sky. **Limit thirty registrants. All registrants must be over eighteen; children are not allowed.***

FRIDAY NIGHT LECTURE SERIES

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

9 February = “The Constellation Orion” The most famous pattern of stars in the sky, Orion can be seen by most civilizations, has numerous myths attached to him and is inherently a signpost to other celestial treasures.

16 February = “STEREO Shows the Sun” The mission was revolutionary: place two spacecraft at different vantage points to record our parent star simultaneously. BREC Center Supervisor James DeOliveira shows the fascinating science that prepared us for this year’s extreme level of activity. [*postponed from 15 September*]

24 February = “Radio Waves” The longest waves of the electromagnetic spectrum are used for entertainment and emergencies. One-way radio informs while two-or-more-way radio keeps us connected with others near and far. From early shipping to the ISS, radio is everywhere!

PLUS NIGHT: “Love in the Ether”

Saturday 17 February from 7pm to 10pm

for ages six and older / no admission fee / binocular recommended

During Plus Nights and extra features are available to the public...

*The well-known marshmallow roast takes place at the campfire ring (weather-dependent).

*Six to eight of HRPO’s collection of over fifty physical science demonstrations will be on hand to perplex and amaze. Which demos will it be?

*An unaided eye sky tour takes place, showing the public major features of the sky for that month.

*Filters are inserted into the viewing mechanisms, to show patrons “hidden” details of the Moon, Mars and Jupiter (when they are available).

*Reveal your age, and be shown any “birth stars” in the sky at that time.

SOLAR VIEWING

Saturday 24 February 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.

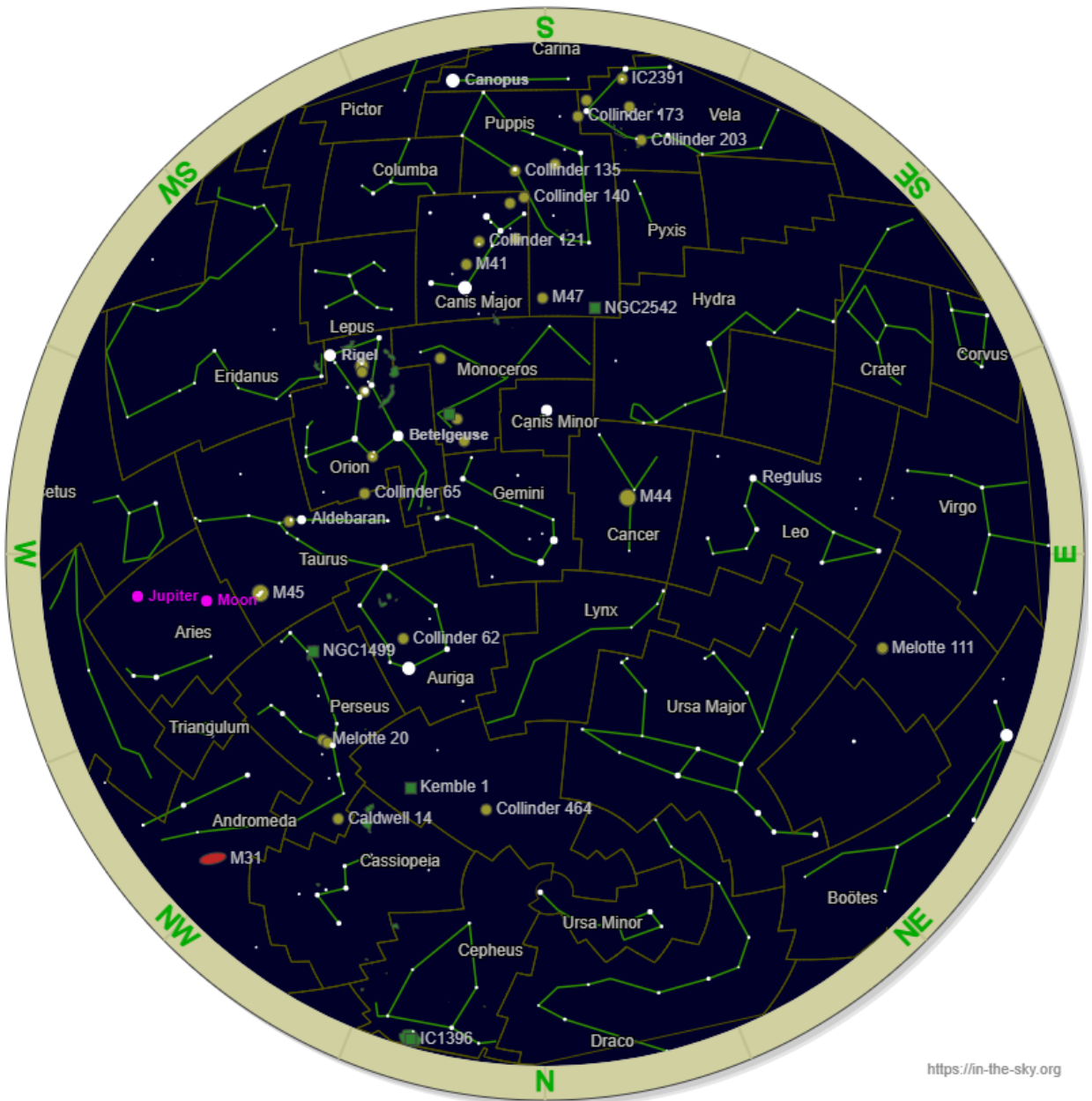
STEM EXPANSION: “Astrophysics”

Saturday 24 February 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].

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.

Sky Map



Map centered on 10PM CST on 15 February 2024.

For an interactive sky map, go to <https://in-the-sky.org>

Looking up:



This article is distributed by NASA's Night Sky Network (NSN).

The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

Constant Companions: Circumpolar Constellations, Part I

By Kat Troche

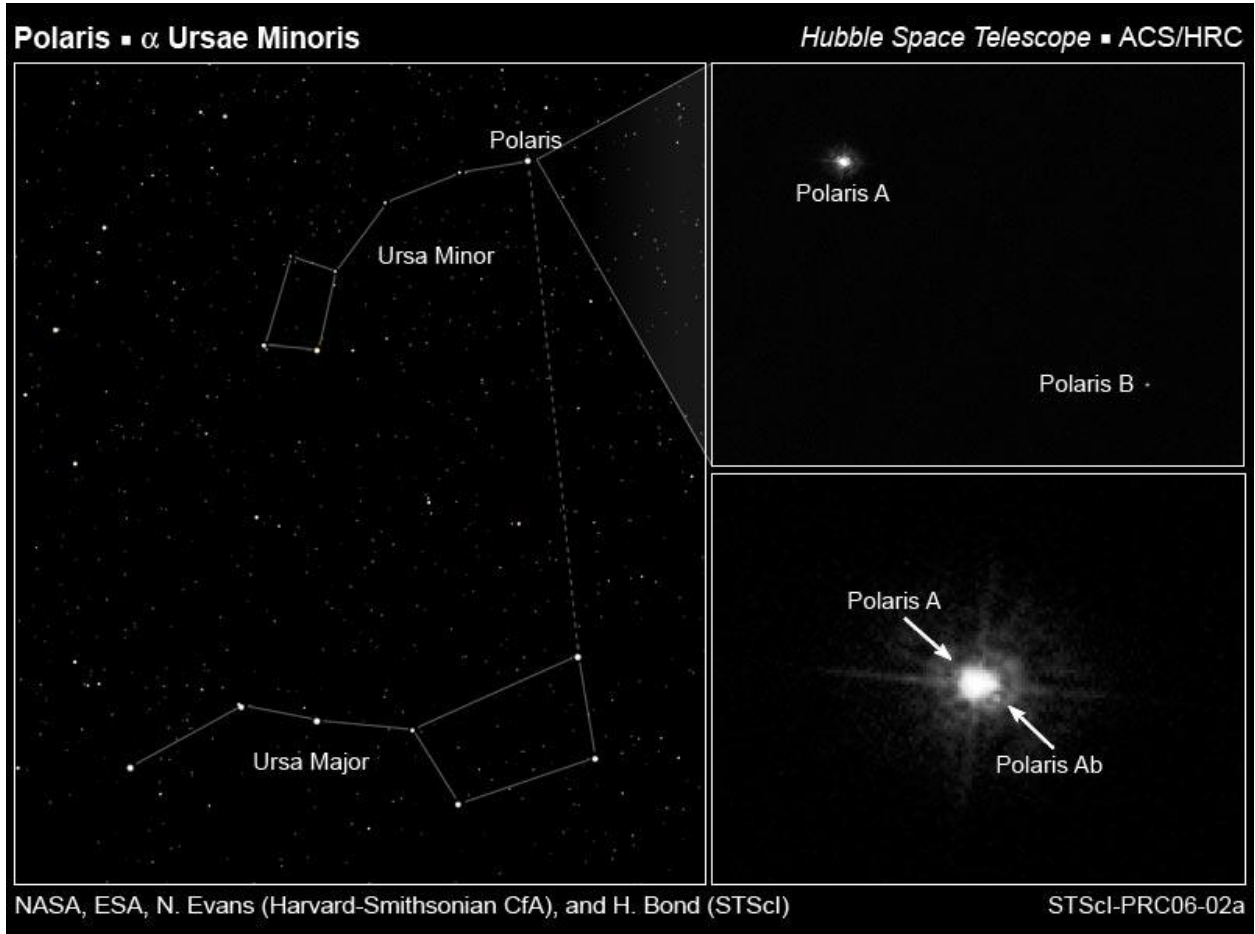
Winter in the northern hemisphere offers crisp, clear ([and cold!](#)) nights to stargazers, along with better views of several circumpolar constellations. What does circumpolar mean when referring to constellations? This word refers to constellations that surround the north and south celestial poles without ever falling below the horizon. Depending on your latitude, you will be able to see up to nine circumpolar constellations in the northern hemisphere. Today, we'll focus on three that have gems within: **Auriga, Cassiopeia, and Ursa Minor**. These objects can all be spotted with a pair of binoculars or a small to medium-sized telescope.



The counterclockwise circumpolar constellations Auriga, Cassiopeia, and Ursa Minor in the night sky, with four objects circled in yellow labeled: Pinwheel Cluster, Starfish Cluster, Owl Cluster, and Polaris. Credit: Stellarium Web

- **The Pinwheel Cluster:** Located near the edge of Auriga, this open star cluster is easy to spot with a pair of binoculars or small telescope. At just 25 million years old, it contains no red giant stars and looks similar to the Pleiades. To find this, draw a line between the stars Elnath in Taurus and Menkalinan in Auriga. You will also find the **Starfish Cluster** nearby.
- **The Owl Cluster:** Located in the ‘W’ or ‘M’ shaped constellation Cassiopeia, is the open star cluster known as the **Owl Cluster**. Sometimes referred to as the E.T. Cluster or Dragonfly Cluster,

this group of stars never sets below the horizon and can be spotted with binoculars or a small telescope.



A black and white image from the Hubble Telescope of the Polaris star system, showing three stars: Polaris A, Ab, and Polaris B.

Credit: NASA, ESA, N. Evans (Harvard-Smithsonian CfA), and H. Bond (STScI)

- **Polaris:** Did you know that [Polaris is a triple star system](#)? Look for the North Star on the edge of Ursa Minor, and with a medium-sized telescope, you should be able to separate two of the three stars. This star is also known as a [Cepheid variable star](#), meaning that it varies in brightness, temperature and diameter. It's the closest one of its kind to Earth, making it a great target for study and [conceptual art](#).

Quick Picks—Events for February 2024

- Thu 1 Spica 1.7°S of [Moon](#)
- Fri 2 [Mercury](#) at Aphelion
- Fri 2 [Last Quarter Moon](#)
- Sun 4 Antares 0.6°S of [Moon](#)
- Wed 7 [Venus](#) 5.4°N of [Moon](#)
- Thu 8 [Mars](#) 4.2°N of [Moon](#)
- Fri 9 [New Moon](#)
- Sat 10 [Moon](#) Perigee at 0 km.
- Thu 15 [Jupiter](#) 3.2°S of [Moon](#)
- Fri 16 [First Quarter Moon](#)
- Fri 16 Pleiades 0.6°N of [Moon](#)
- Tue 20 Pollux 1.6°N of [Moon](#)
- Wed 21 Beehive 3.4°S of [Moon](#)
- Fri 23 Regulus 3.6°S of [Moon](#)
- Sat 24 [Full Moon](#)
- Sun 25 [Moon](#) Apogee at 0 km.
- Wed 28 [Mercury](#) in Superior Conjunction
- Wed 28 Spica 1.5°S of [Moon](#)
- Wed 28 [Saturn](#) in Conjunction with the Sun

Events courtesy of <https://telescopius.com>

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