



NATURE NOTES

Dedicated to the Enjoyment and Conservation of the Natural Beauty of Sun City Texas at Georgetown
VOLUME 24 Issue 8 August 2022

Tuesday, August 16, 2:30 p.m., SCB
The Songbirds of Williamson County
Presented by Martin Byhower

Tuesday, September 20, 2:30 p.m., SCB
The Parks of Georgetown
Presented by Kimberly Garrett

SAVE THE DATE!

Mark your calendars now and save the date.
December 5 – Nature Club Holiday Party
More information coming as we approach the date!

MEMBERSHIP DUES: \$6 for 2022

Dues include our monthly programs and all Special Interest Group programs and activities.

SPECIAL INTEREST GROUPS (SIGs)

Nature Club activities are posted on the [Nature Club](#) website calendar. E-mails are sent to Club members only.

REPTILES & MAMMALS

SIG Chair: Open



REPTILE ID, RELOCATION & MAPPING

FREE service, call:

- Jim Christiansen 512-868-3504
- Steve Kelley 512-639-0539
- John Leek 713-825-0145
- Joe Plunkett 774-226-0810
- City of Georgetown Animal Control 512-930-3592



We encourage residents to leave harmless, beneficial reptiles in their landscapes, but call us so we can identify and map all reptiles.

ASTRONOMY SIG

No Meeting in August
Mon., **September 26**, 7:00 p.m., CCF, Program *TBA*



Check the Calendar for up-to-date info and watch for Special Viewing announcements.

SIG Chair: Richard Wagoner

BIRDING SIG

No SIG meeting in August
Tues., **September 6**, 2:30 p.m., ACA –
“Birding the Granger Lake Area” presented by Tim Fennell



BIRD WALKS

Bird walks will resume Wed., **September 21**. All walks 8:00 a.m., meet at LHPP parking lot near the lake. Any changes will be emailed.

SIG Chairs: Ed Rozenburg & Martin Byhower

BUTTERFLY/MOTH SIG



Tues., **August 2**, 2:30 p.m., ACA – *“State of the Monarchs”* presented by Ed Rozenburg
No SIG Meeting in **September**

BUTTERFLY WALKS

Butterfly walks resume Wed., **September 28**, 10:00 a.m. Meet at the Tranquility trailhead off Lone Star.

SIG Chair: Ed Rozenburg

GEOLOGY SIG

Tues., **August 23**, 4:00 p.m., ACA. *“Practical Geology”* presented by Dave Weinberg
Tues., **September 27**, 4:00 p.m., ACA. *“Ol’ Man River, The Mighty Mississippi”* presented by James Cooper



SIG Chair: Paul Swetland



Living With Wildlife SIG

Fri., **August 19**, 1:00 p.m., ACA, *“The Music of the Night”* Presented by Mary Ann Melton
Fri., **September 23**, 10:00 a.m., ACA, - *“Lakeway’s Past, Present and Future Wildlife Management”* Presented by Ted Windecker
SIG Chairs: Nancy Wagoner and Barbara Meisner

NATIVE PLANTS SIG

There will be no plant walks in August.
Thurs. **September 8** and Mon. **September 12**. All plant walks start at 8:00 at the Rocky Hollow Trail Head Parking Lot.
SIG Chair: Pat Garren



Dive into the purpose and significance of James Webb Space Telescope's first collection of full-color images and data, released on July 12, 2022.

After six months of [unfolding](#), [instrument testing](#), and finally, data gathering, the James Webb Space Telescope (JWST) mission released its first collection of full-color images and other data on July 12, 2022. This collection demonstrates that the telescope is working properly and showcases what it can do—reveal a universe unlike anything we have seen before.

Before the First Images

As the largest and most complex observatory ever launched into space, JWST went through an extended period of preparation before it could begin science work. Due to JWST's unprecedented design and unique unfolding process post-launch, the pre-science [commissioning process](#) received lots of attention. Remarkable [images](#) gave the public a window into the world of JWST engineers and instrument scientists as they worked to align the 18 primary mirror segments, including the telescope's social media-ready "selfie" images.

These evaluation images served as an exciting pre-show for JWST's first full-color images and spectroscopic data, which showcase the telescope's full capabilities for the first time, with the mirrors aligned and all [instruments](#) fully operational. The first images serve as a kickoff for JWST's operational phase, previewing the science to come.

Creating JWST's First Images

Deciding what JWST should look at first was a project many years in the making. The task was an international partnership between NASA, ESA (European Space Agency), the Canadian Space Agency, and the Space Telescope Science Institute (STScI). Since the late 1980s, JWST has evolved from just an idea – “What's next?” – to a premier flagship mission launching December 2021. The goals: showcase JWST's unprecedented capabilities and deliver a “wow” for both astronomers and the public, to kick off science operations and build excitement for the future.

Once JWST was launched and in space, each of its instruments had to be tested in several operating [modes](#). These modes include standard imaging as well as telescope to detect faint sources of light next to very bright ones. Once each of JWST's four science instruments and seventeen modes was fully tested and given the green light by their science and engineering teams, the first images and other data were captured and delivered to the imaging team for processing. All raw data from telescopes [go through processing](#) so that the scientific features can be separated from visual static and effects from the hardware itself.

A multidisciplinary team of more than 25 people at STScI—including instrument scientists, imaging specialists, writers, and artists followed a carefully planned schedule for a month to produce the collection of first images and spectroscopic data—the detailed information that JWST can [read in wavelengths of light](#).

What's Next?

Science! A portion of JWST's observing time in its first five months is dedicated to the Early Release Science program, and that data is made available to the astronomy community immediately so that they can learn about JWST's capabilities and how to make the best use of its instruments.

Astronomers who worked on developing JWST and its instruments are guaranteed time to use the observatory for science during its first three planned observation cycles. These Guaranteed Time Observation programs further explore and demonstrate JWST's capabilities, covering a wide range of science topics, including “deep field” observations—the type of long looks at one patch of sky made famous by the [Hubble Space Telescope](#).

Members of the general astronomy community applied and have been approved for time to use JWST during its first cycle of science observations, called the [General Observer programs](#). These scientific studies mark the official beginning of JWST's general science operations—the work it was designed to do. Astronomers will use JWST to observe the universe, analyze the data collected, and publish scientific papers on their discoveries.

Beyond what is already planned for JWST, there are the unexpected discoveries astronomers can't anticipate. One example: In 1990 when the Hubble Space Telescope launched, [dark energy](#) was completely unknown. Now it is one of the most exciting areas of astrophysics. What will JWST discover?



NASA's JWST Reveals Cosmic Cliffs, Glittering Landscape of Star Birth. (NASA) For more photos from JWST click this [link](#)

From [WebbTelescope.org](#), July 12, 2022