



New

# Larry's Celestial Calendar & Newsletter

by Eric Erickson

313<sup>th</sup> Edition

Volume 26, Number 8

Braunfels

Astronomy

Club

BECAUSE IT'S OUT THERE

August 16<sup>th</sup> to September 20<sup>th</sup>, 2023

NOTE: WE NOW MEET ON  
WEDNESDAY AT TYE PRESTON  
MEMORIAL LIBRARY

Bob Keyser

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Cover Story> Bob Keyser

Bob Keyser

# New Braunfels Astronomy Club

BECAUSE IT'S OUT THERE

August 16<sup>th</sup>, 2023  
Meeting 287  
Agenda

- Open meeting and introduce new members (get names, email).
- Interesting observations, experiences.
- Show and tell.
- Current news and what's in our sky this month: *Member input, Newsletter.*
- Events, Outreach, Planning.
  - April 8, 2024 total solar eclipse planning
  - Winter/Spring Astronomy Night Schedule
    - **Our Next Astronomy Night at TPML is September 16**
- Business
- Main Event

Coming up: **OUR 288<sup>th</sup> ASTRONOMY CLUB MEETING**

**September 20<sup>th</sup>, 2023, from 6 - 8 pm**

**Tye Preston Memorial Library, Canyon Lake**

[astronomynbtx.org](http://astronomynbtx.org)

Email: [admin@astronomynbtx.org](mailto:admin@astronomynbtx.org)



Astronomy Friends New Braunfels.....

[facebook.com/groups/354953995432792/](https://facebook.com/groups/354953995432792/)



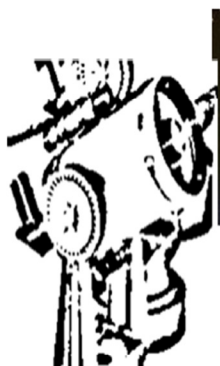
Comal County Friends of the Night Sky.....

[facebook.com/groups/166098014710276/](https://facebook.com/groups/166098014710276/)

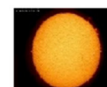
[comaldarksky.org/](http://comaldarksky.org/) Email: [admin@comaldarksky.org](mailto:admin@comaldarksky.org)

# Astronomy Night at Tye Preston Memorial Library

## Canyon Lake, TX



Date	Doors Open	Note
1/21/2023	7:00 PM	
2/18/2023	7:30 PM	
3/25/2023	8:30 PM	
4/22/2023	8:30 PM	
5/20/2023	2:00 PM	<i>Sun Party - wear sunscreen and sunglasses!</i>
9/16/2023	8:00 PM	
10/14/2023	8:00 PM	
10/21/2023	7:30 PM	International Observe the Moon Night
11/18/2023	6:30 PM	Crescent Moon
12/9/2023	6:30 PM	



Tye Preston Memorial Library  
New Braunfels Astronomy Club

[tpml.org](http://tpml.org)

[astronomynbtx.org](http://astronomynbtx.org)



Astronomy Friends New Braunfels

There will be surprise giveaways at some evnts so join us!!

**Comal County Friends of the Night Sky supports and encourages Astronomy Night**

Website: [comaldarksky.org](http://comaldarksky.org) Email: [info@comaldarksky.org](mailto:info@comaldarksky.org)



Comal County Friends of the Night Sky Group



# Astronomy Night at Tye Preston Memorial Library

## Canyon Lake, TX



Proposed Date	Doors Open	Moon Phase/Alternate Dates
1/13/24	6:00 PM	<b>2 days past N</b> ; 01/06 3 days past last Q; 01/20 3 days past 1st Q, 01/27 2 days past F
2/10/24	6:30 PM	<b>1 day past N</b> ; 02/03 1 day past last Q; 02/17 1 day past 1st Q, 02/24 F
3/9/24	7:00 PM	<b>1 day before N</b> ; 03/02 1 day before last Q; 03/16 1 day before 1st Q, 03/23 2 days before Full, 03/30 waning crescent
4/8/24		<b>Sun Party? Total Eclipse</b> ; 04/06 2 days before N, 04/13 2 days before 1st Q, 04/20 3 days before F; 4/27 4 days after F
5/4/24	2:00 PM	<i>Sun Party?</i>
9/14/2024	8:00 PM	<b>09/14 IOMN</b> ; 09/07 4 days until 1st Q; 09/21 4 days past F;
9/28/2024	7:30 PM	<b>09/28 4 days before N</b>
10/26/24	7:00 PM	<b>2 days past last Q</b> ; 10/05 3 days past N; 10/12 2 days past 1st Q, 10/19 2 days past F
11/30/24	6:00 PM	<b>1 day before N</b> ; 11/2 one day after N; 11/09 1st Q; 11/16 1 day past F; 11/23 1 day past last Q
12/21/2024	6:00 PM	<b>1 day before last Q</b> ; Winter Solstice; 12/07 1 day before 1st Q; 12/14 1 day before F; 12/28 2 days before N





# AUGUST/SEPTEMBER 2023

SUN                      MON                      TUE                      WED                      THU                      FRI                      SAT

<div>On the Cover: Two astrophotos by Bob Keyser. Top: May 2022 Total Lunar Eclipse collage Bottom: M42 portrait</div>			<div><div>AUG 16</div><div>NBAC Meeting 6:00 TYE PRESTON MEMORIAL LIBRARY, CANYON LAKE</div></div>	<div><div>17</div></div>	<div><div>18</div><div>Arcturus BOÖTES VIRGO Spica Mars Moon Mercury Aug. 18, 30 minutes after sunset Looking west</div></div>	<div><div>19</div><div>Astronomy</div></div>
<div><div>20</div></div>	<div><div>21</div></div>	<div><div>22</div><div>Saturn is at opposition</div></div>	<div><div>23</div></div>	<div><div>24</div><div><div>☾</div></div></div>	<div><div>Dusk, Aug 24 and 25 1 hour after sunset</div><div>Sky &amp; Telescope Moon Aug 25 Antares Occultation for some! Moon Aug 24 SCORPIUS SEP 01 Looking South-Southwest</div></div>	<div><div>26</div></div>
<div><div>27</div><div>Neptune AQUARIUS Sadalmelik Saturn Deneb Algedi Fomalhaut PISCIS AUSTRINUS CAPRICORNUS SAGITTARIUS Moon Aug. 27, 1 A.M. Looking south</div></div>	<div><div>28</div><div>AQUILA Astronomy</div></div>	<div><div>Dusk, Aug 29 and 30 1 hour after sunset</div><div>Sky &amp; Telescope AQUARIUS CAPRICORNUS Moon Aug 29 Saturn Moon Aug 30 Looking East-Southeast</div></div>	<div><div>30</div><div><div>☾☾</div><div>2nd full moon of the month SUPERMOON BLUE MOON</div></div></div>	<div><div>31</div></div>		
<div><div>Sept 3-5 5:55 pm</div><div>Sky &amp; Telescope ARIES Moon Sept 3 Moon Sept 4 Jupiter Pleiades Moon Sept 5 TAURUS Aldebaran Looking East</div></div>	<div><div>04</div></div>	<div><div>05</div><div>Castor Pollux GEMINI Procyon CANIS MINOR Moon M44 CANCER Jupiter LEO Regulus HYDRA Sept. 11, 1 hour before sunrise Looking east</div></div>	<div><div>06</div><div><div>☾</div></div></div>	<div><div>07</div></div>	<div><div>08</div></div>	<div><div>09</div></div>
<div><div>Dawn, Sept 10-13 1 hour before sunrise</div><div>Sky &amp; Telescope CANCER Moon Sept 10 Moon Sept 11 Moon Sept 12 Moon Sept 13 Regulus Venus Looking East</div></div>	<div><div>13</div></div>	<div><div>19</div><div>Neptune is at opposition</div></div>	<div><div>20</div><div>NBAC Meeting 6:00 TYE PRESTON MEMORIAL LIBRARY, CANYON LAKE</div></div>	<div><div>14</div><div><div>☾☾☾</div></div></div>	<div><div>15</div></div>	<div><div>Dawn, Sept 16 30 minutes before sunrise</div><div>Sky &amp; Telescope Venus LEO Regulus Mercury Looking East</div></div>

# Solar System Happenings

## WHEN TO VIEW THE PLANETS

**EVENING SKY**  
Mars (west)  
Saturn (southeast)  
Neptune (east)

**MIDNIGHT**  
Jupiter (east)  
Saturn (south)  
Uranus (east)  
Neptune (south)

**MORNING SKY**  
Mercury (east)  
Venus (east)  
Jupiter (southwest)  
Uranus (southwest)  
Neptune (west)

Astronomy

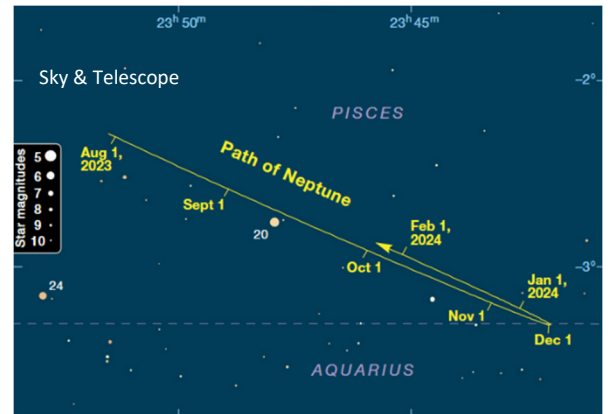
- ✚ **Mercury** is hanging about 5° above the horizon just after sunset, is in inferior conjunction with the Sun on September 6, then becomes a morning planet in mid-September.
- ✚ **Venus** low in eastern morning sky, rising about an hour before the Sun. Still impressive. On September 11<sup>th</sup>, Venus, M44 (the Beehive cluster), a thin waning crescent Moon share the eastern pre-dawn sky. Use binoculars to catch M44.
- ✚ **Earth** still spins, and we are still here to marvel at it all.

**Best ISS viewing for Canyon Lake/New Braunfels** - From [Heavens Above](#)

Date	Start Time	Start Loc	Max Alt °	End Loc	Note
09/08	18:59	SW	83	NE	Passes by Crux on rising. Enters Earth's shadow in Cygnus.
09/10	18:58	WSW	18	NNE	Low along the horizon
09/13	04:55	NNW	38	SE	East of Capella, west of Venus
09/14	04:09	NE	16	ESE	Exits Earth's shadow at 04:09:20. Passes just west of Venus

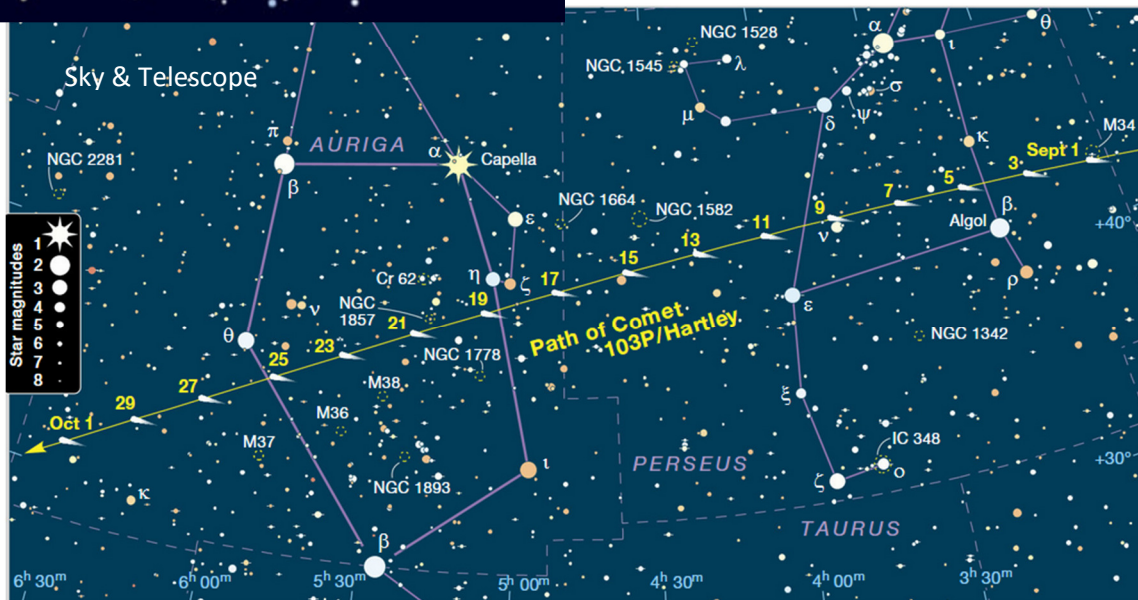
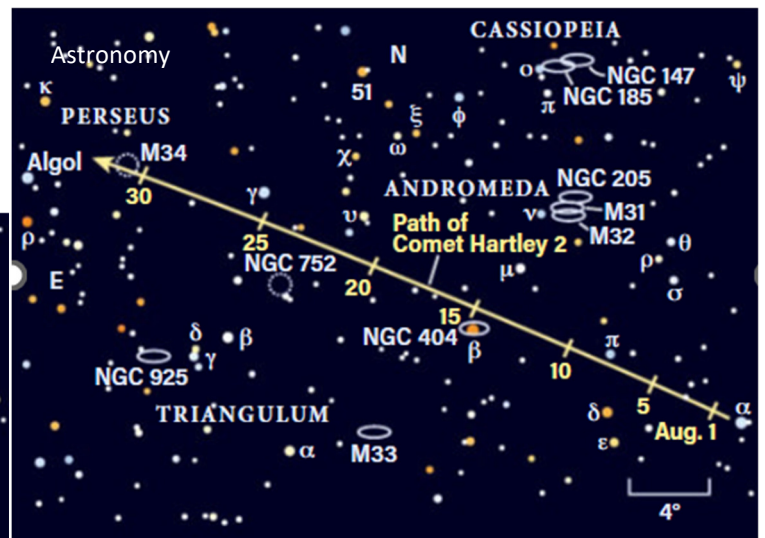
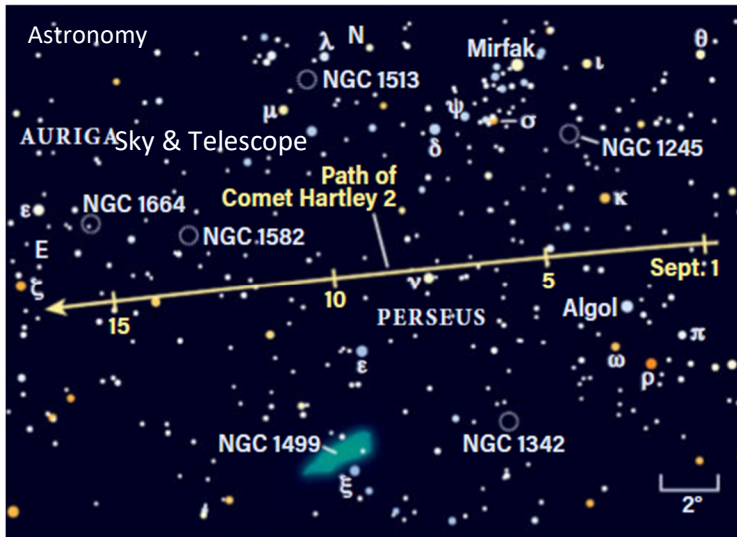
- ✚ **The Moon** dances with planets and stars. **August** enjoys two full Moons; both are at PERIGEE when they become full, so both are **SUPERMOONS**. The second full Moon is a **BLUE MOON** too.
  - There are two general definitions for a Blue Moon. The original is two full Moons in one month during an *astronomical season*, that is, each three-month span between equinox and solstice. A more recent definition is two full Moons in any month.
- ✚ **Mars** is continuing to dim and drop, getting more challenging to spot in the post sunset sky as it works its way toward solar conjunction in November.
  - **CHALLENGE**: A thin waxing crescent Moon occults Mars on September 16<sup>th</sup> – in midafternoon! First, find the Moon. Then try to spot Mars as it gets close-below the Moon, around 1:45 pm CDT.
- ✚ **Jupiter** rises around 10pm and is well placed by midnight.
- ✚ **Saturn** is at opposition on August 27<sup>th</sup> and already risen by sunset. Its rings are tilted by a modest 9-10°
- ✚ **Uranus** shows up around 7-9 degrees northeast of Jupiter, in Aries.

✚ **Neptune** reaches opposition on September 19 and is well placed now for view. It is traveling through Pisces, just north of Aquarius.



✚ **Comets:**

- Comet 103P/Hartley 2 is a short period comet (6.5 years) and while a fairly dim magnitude 10, it's catchable in small instruments. Larger glass will bring out more of its character.





# My Celestial Pick:

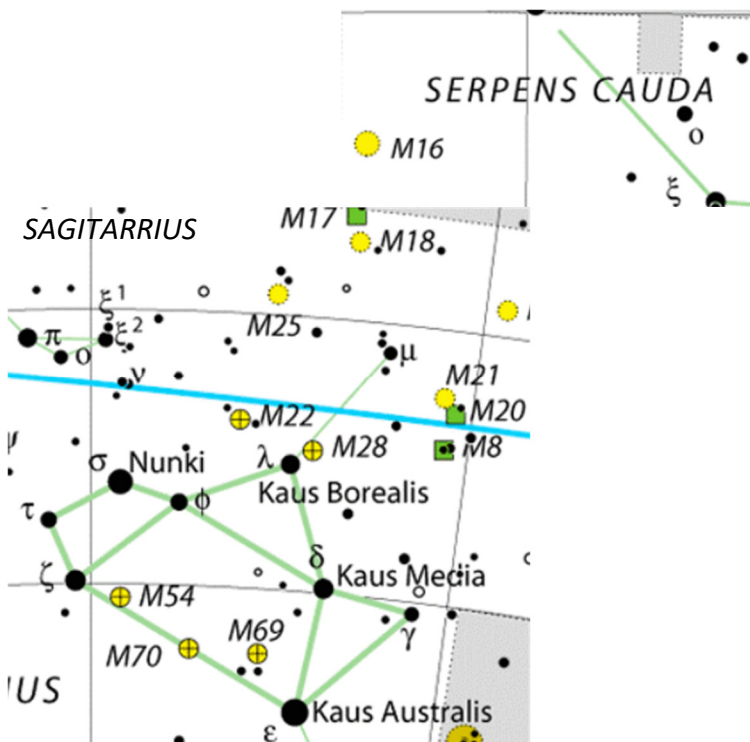
## The Eagle and The Swan, Birds of a Feather?

They are birds, for sure, but one is a bird of prey and the other...prey. While eagles prefer fish they will go after waterfowl, even large birds like swans. However, a swan can be a formidable opponent to an eagle so there certainly is risk involved if the eagle attacks.

In the case of these nebulae, they are birds of a feather, both being vast molecular cloud star factories.

M16 The Eagle and M17 The Swan/Omega nebulae are nice targets for small instruments and beautiful targets in large instruments. And they are close to each other. They are located just 10° northeast of the famous Lagoon (M8) and Trifid (M20) nebulae. While not as impressive initially, both have distinctive morphology. Their morphologies are not very apparent in small instruments, but some can be teased out (especially M17) with careful observation. Big binoculars make a difference. Larger (> 8" diameter) instruments will increasingly show their beauty and unique shapes. I have seen M17 in 24" and 36" instruments and I have to say, I preferred the view in the 24". Maybe the 36" was a little too bright, or atmospheric conditions made it more of a challenge to see its shape clearly.

In any event, they are nice targets for binoculars, especially larger, 60+ mm objectives and even smaller telescopes. What the heck, check out M8 and M20 while in the neighborhood. They also are molecular cloud star factories.



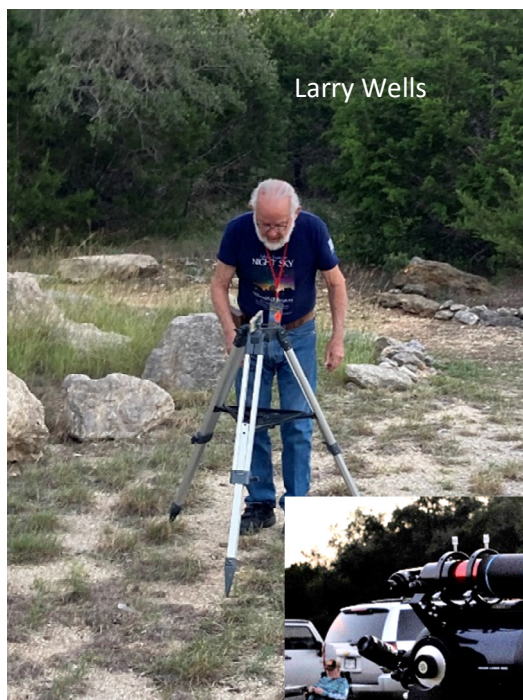
## Cover Story> Bob Keyser - Friend, Mentor

Anyone who knew Bob Keyser knows he was as welcoming and helpful a human as can exist. When I first came to NBAC (2013) I was welcomed by its founder and fearless leader, Larry Pratt and by all the members present. But it was Bob who made it personal, offering to help me hit the ground running in any way he could. Everyone seemed to rely on Bob for his opinion and I soon realized why, he knew stuff. His experience in engineering and astronomy set a broad table, a smorgasbord of knowledge. Whether observational astronomy, astrophotography, astrophysics, or cosmology, Bob kept us up to date. His personality gave communications with everyone a closeness. His sense of humor disarmed disagreeable feelings.

Bob entertained even the most seemingly oddball topics if they were brought up and usually clarified them with logic. He didn't disparage, and his discussions usually taught us something.

Bob's influence on NBAC is now part of its DNA, part of its fabric, part of the space we inhabit.

Eric Erickson







Paula Pratt – from the July  
2005 meeting at CRRC  
Clockwise from left:

Linda Perkins  
Dan Riding  
Bob Keyser  
Harriet Bishop  
Larry Pratt  
Lorrie Pratt  
Paula Pratt



Dan McNeill



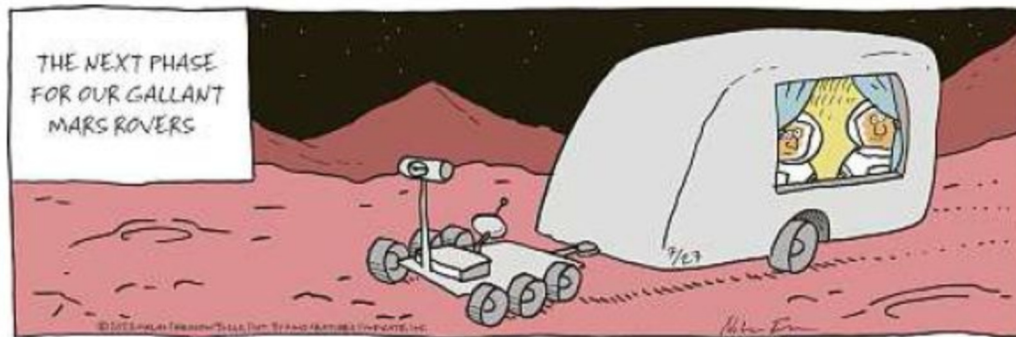
# Lagniappe

WUMO

BY WULFF & MORGENTHALE



## CARPE DIEM



## JUMP START



## JUMP START



**CARPE DIEM**



**SHOE**



**SPEED BUMP**

