

# Skylights

Newsletter of the Astronomical Society of Northern New England



**JULY 2024**

**Skylights Editor:**  
**Paul Kursewicz**



Member of NASA's  
Night Sky Network



**Astronomical League  
Member**

## ASNNE MISSION

ASNNE is an incorporated, non-profit, scientific and educational organization with three primary goals:

- 1) To have fun sharing our knowledge and interest with others.
- 2) To provide basic education in astronomy and related sciences to all who are interested.
- 3) To promote the science of Astronomy.

## What's Up In July

By Bernie Reim

**T**he month of July is named after Julius Caesar and was once the fifth month of the year when March was the first month. July always marks the first full month of summer for us in the northern hemisphere and the nights remain quite short.

There are a few interesting highlights this month that will be worth looking for even with the short nights and potential heat and bugs that will try to diminish your experience of the celestial beauty of the night sky. However, no more epic celestial adventures that can lift you right off the surface of earth and put you in tune with the cosmic like the April 8 total solar eclipse and the May 10 fantastic display of the northern lights, visible all the way down to parts of Texas and Florida, are scheduled for this month.

Some events are perfectly accurately and mathematically predictable for over 100,000 years into the future, like all the different kinds of eclipses and some events are just more likely to occur at certain times, like northern lights when the sun is more active, like right now and into next year. Then there are even less predictable events like when a new comet might appear that will become visible to the naked eye. Then there are extremely short term unpredictable events like any given bright and colorful fireball streaking through the sky. That could happen at any time through the night, but is more likely during a good meteor shower like the Perseids, Geminids, or Leonids.

Then you have another class of events that are predictable within a certain time frame like about half a year. We are looking for one of those right now with great anticipation and this will be an once-in-a-lifetime opportunity for most of us. A star in Corona Borealis, or the Northern Crown, T Corona Borealis, nicknamed the "Blaze star" is expected to get over 1000 times brighter sometime between now and September. This is called a recurrent nova, and this is the brightest one in the entire sky and undergoes this extreme brightening about every 80 years.

Discovered in 1866 by John Birmingham, this star has also been recorded to brighten so spectacularly 4 times already, in 1217, 1787, 1866, and 1946. Now we are ready for the fifth time. The physics is fairly simple, but still fascinating because of the huge scale involved and the other potential outcomes of a similar explosion. There is an extremely dense and small white dwarf, about the size of the earth which is being orbiting by a red giant star many times larger than the sun about 50 million miles away from the white dwarf. The whole system is about 3,000 light years away in the constellation of Corona Borealis, now easily visible right next to Hercules and just south of the Big Dipper. It is a semicircular upside down crown of 7 stars. The Blaze star will appear just below the second star from the left of this crown.

A white dwarf by itself is already an expression of an interesting quantum mechanical phenomenon called electron degeneracy. About 95 % of all the stars in our galaxy including our own sun will turn into a white dwarf, so it is important to learn more about them. As the electrons in this very dense remainder of a star keep getting pushed to higher energy states, they generate an actual pressure that holds these stars together. Once this pressure can no longer balance self-attraction of the strong gravitational fields, a part or all of the white dwarf has to explode. A white dwarf

by itself with no red giant star close to it is very stable and can live for hundreds of billions of years, much older than the entire known universe, which is only 13.8 billion years. When it no longer emits any heat at all, it will turn into a black dwarf.

Some white dwarves could have crystallized diamond cores since they are basically carbon under extremely high pressure. A white dwarf has nearly the mass of the entire original star compressed into the volume of Earth, which is 333,000 times less massive than the sun and over a million times less volume than the sun. Their density is around 1 million kilograms per cubic meter. By comparison, a neutron star is another 11 orders of magnitude more dense than a white dwarf, an entire sun shrunk down to the size of a single city. A single teaspoon of neutron star material would weigh about a trillion kilograms or 10 million tons.

There is an accretion disk around the very dense white dwarf as it is continually pulling hydrogen gas from the much larger and less dense red giant very close to it. This continues to build up until a brief and intense flare of nuclear fusion occurs about every 80 years, making the star about 1,000 times brighter, from its current 10<sup>th</sup> magnitude to the brightness of Polaris, which is 2.1 magnitude, making it only the 48<sup>th</sup> brightest star in our sky. As soon as the extra hydrogen is gone, the pair quickly returns to their normal state. So you will only have a short window to see this for yourself without any binoculars or telescopes.

The much more extreme case of this basic process is called a type 1A supernova. In that case the extra hydrogen gas forming the accretion disk doesn't just flare up into a temporary nuclear explosion involving only a small part of the star, but now it is a runaway nuclear explosion so powerful that it permanently destroys the entire system.

*"Continued on page 2"*

## Inside This Issue

Club Contact List	Pg. 2
Moon Data	Pg. 3-5
Observer's Challenge	
July's Night Sky	Pg. 6
Meteor Showers in 2024	Pg. 7
Club Merchandise for Sale	
Club Membership Dues 2024	
July's Night Sky Notes	Pg. 8,9
Moon & Sun Pictures & a Puzzle	Pg. 10-13
The Blaze Star	Pg. 14
ASNNE 2024 Public Star Parties	Pg. 15
Club Info & Directions to ASNNE	Pg. 16
ASNNE Club & Library Resources	Pg. 17
Become a Member	Pg. 18

## Club Contacts

### Officers:

#### President:

David Bianchi  
dadsnorlax@yahoo.com

#### Vice President:

Bernie Reim  
bernard.reim@maine.edu

#### Secretary:

Carl Gurtman  
cgurtman@maine.rr.com

#### Treasurer:

Ian Durham  
idurham@anselm.edu

#### Board of Directors:

Gary Asperschlager  
gasperschlager@gmail.com

April Nicholls  
april.nicholls@gmail.com

Bernard Valliere

#### Star Party

#### Co-ordinator:

Carl Gurtman  
cgurtman@maine.rr.com

#### Skylights Editor:

Paul Kursewicz  
pkursewicz@myfairpoint.net

#### Website Manager:

Paul Kursewicz  
pkursewicz@myfairpoint.net

#### NASA Night Sky Network

#### Co-ordinator:

Joan Chamberlin  
starladyjoan@yahoo.com

#### JPL Solar System Ambassador:

Joan Chamberlin  
starladyjoan@yahoo.com

#### E-mail coordinator

David Bianchi  
dadsnorlax@yahoo.com

## What's Up "Continued from page 1"

An Indian-American astronomer named Chandrasekhar won the Nobel Prize in physics in 1983 for the discovering the exact limit when this happens, along with many other important discoveries about the structure and evolution of stars, neutron stars, and black holes. The limit is 1.44 solar masses. Once you know this and can accurately measure the brightness of such a powerful explosion, which becomes billions of times brighter than the original white dwarf and red giant, then you can figure out its distance.

Type 1A supernovae are cosmic yardsticks or standard candles which can be used to accurately determine distances out to billions of light years near the "edge" of the known universe. Since these Type 1A supernovae appeared dimmer than they should have once all the other factors were ruled out, two science teams independently discovered that the expansion of the whole universe was accelerating in 1998 and won the Nobel Prize in physics for this great discovery in 2011. The exact cause of this continuing acceleration is unknown. We have simply called it "dark energy". It is not just the vacuum energy of empty space, because that is about 100 orders of magnitude more powerful than the observed energy.

The planets have spread out now and 2 of them have returned to grace our evening skies, Mercury and Venus. Look for Venus very low in our western sky right after sunset in Cancer the Crab, just to the left of Gemini. It will slowly get higher in our evening sky as the faster moving Venus is catching up with Earth in our orbits.

Then look for Mercury about 10 degrees above and to the left of Venus towards Leo the Lion. Notice that a very thin waxing crescent moon will be directly above Mercury and Venus 20 minutes after sunset on July 7.

Saturn now rises at midnight in Aquarius. Through a telescope you will notice that its rings are getting very thin now, only tilted 2 degrees from edge-on. The rings will open up a little through the rest of this year, and then they will close up again to exactly edge-on in March of 2025. This last happened in 1996 and it happens every 29 years, since that is the time it takes for Saturn to orbit the sun once. I remember seeing Saturn without its rings in 1996 when it looked more like Jupiter.

Mars rises next around 2 am in Taurus the Bull. Notice that Mars will have almost the same brightness and orange color as Aldebaran, the brightest star in Taurus at 0.8 magnitude. Since Aldebaran marks the eye of Taurus in the Hyades star cluster which marks the face of Taurus, Taurus will appear to have two orange eyes for this whole month.

Then Jupiter is the next one to rise around 3:30 am also in Taurus just to the left of Aldebaran. About one hour before sunrise on Tuesday, July 30, a waning crescent moon with earthshine will be visible just above Mars and Jupiter and just below the Pleiades open star cluster. You can also spot Uranus just to the right of the Pleiades and just above Jupiter and Mars with a pair of binoculars or a small telescope. Taurus is a busy region of the sky this month.

The largest and brightest asteroid, Ceres, will be easily visible in a pair of binoculars in Sagittarius near the center of our Milky Way galaxy all month long at 7.3 magnitude.

We will finally get the first good meteor shower since May of this year on the last day of this month as the southern Delta Aquarid meteor shower peaks. You can expect 25 meteors per hour emanating from its radiant in Aquarius just below where Saturn is now located. Caused by Comet 96P/Machholz, this is only one of 8 meteor showers related to this comet which has an orbital period of 5.3 years. This shower will be active from the middle of July into the middle of August. Also start looking for early Perseid meteors emanating from

Perseus the hero in the northeastern sky near Cassiopeia. They will peak on the 12<sup>th</sup> of August.

There are two comets visible right now in a small telescope. Comet C/2023 (Tsuchinshan-ATLAS) is traveling westward through Leo this month. It is only shining at 8<sup>th</sup> magnitude now, but it is on track to becoming easily visible to the naked eye in October when it reemerges from behind the sun. The other one is 9<sup>th</sup> magnitude 13P/Olbers which is traveling through Lynx and Leo Minor.

July 1. The moon passes 4 degrees north of Mars this morning.

July 3. The moon passes 5 degrees north of Jupiter this morning.

July 4. Henrietta Swan Leavitt was born on this day in 1868. She was part of the famous "Harvard Computers" who developed the spectral classification system of stars. She went farther and also discovered the period-luminosity of Cepheid Variables which allows us to use these rare and special stars as cosmic yardsticks or standard candles similar to Type 1A supernovae. However, since Cepheid variables are not nearly as bright, they are only good to a few hundred million light years instead of billion of light years. This is also called Leavitt's Law.

July 5. Earth is at aphelion or farthest from the sun for the year at 94.5 million miles today. New moon is at 6:57 p.m. EDT.

July 7. The moon passes 3 degrees north of Mercury this evening.

July 11. Skylab, our first space station, reentered our atmosphere on this day in 1979.

July 13. First quarter moon is at 6:49 p.m. EDT. Jupiter passes 5 degrees north of Aldebaran this morning.

July 15. Mars passes less than one degree south of Uranus this morning.

July 18. On this day in 1980, India became only the 7<sup>th</sup> nation to launch a satellite. India now has about 120 working satellites. China has about 550, Russia about 200, and we have over 4,000.

July 20. On this day in 1969 Armstrong and Aldrin became the first two humans to ever walk anywhere other than Earth. Only 10 more humans have ever walked on the moon since then up until December of 1972. Now we have the Artemis mission and are planning to go back to the moon on a permanent basis starting next year. Viking 1 landed on Mars on this day in 1976.

July 21. Full moon is at 6:17 a.m. This is also known as the Hay, Buck, or Thunder Moon.

July 27. Last quarter moon is at 10:52 p.m.

July 30. The southern Delta Aquarid meteor shower peaks.



## Moon Phases

**July 5**

New

**July 13**

First Quarter

**July 21**

Full

**July 27**

Last Quarter

## Moon Data

**July 1**

Mars 4° south  
of Moon

**July 2**

Uranus 4° south  
of Moon

**July 3**

Jupiter 5° south  
of Moon

**July 7**

Mercury 3° south  
of Moon

**July 12**

Moon at apogee

**July 24**

Moon at perigee

Saturn 0.4° south  
of Moon

**June 28**

Neptune 0.6° south  
of Moon

## Observer's Challenge\* – July 2024

by Glenn Chaple

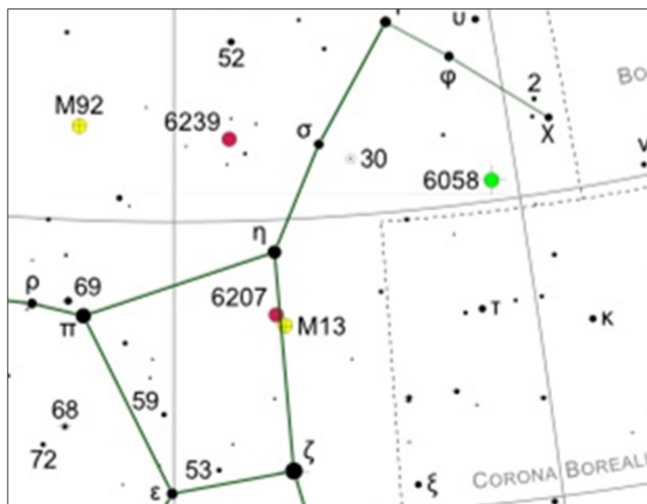
### NGC 6058 – Planetary Nebula in Hercules (Magnitude 12.9; Size 24" X 21")

This month's Observer's Challenge takes us to the northwest corner of Hercules and the planetary nebula NGC 6058. It was discovered by William Herschel on the evening of March 18, 1787. He considered it to be very faint and small and therefore entered it in his Catalogue of Nebulae and Clusters of Stars as his 637<sup>th</sup> Class III (Very Faint Nebulae) find.

NGC 6058 is located at the 2000.0 coordinates RA 16<sup>h</sup>04<sup>m</sup>26.5<sup>s</sup> and Dec +40°40'58.9". I found it by star-hopping a little less than 3 degrees southeast of the 4.6 magnitude star chi (χ) Herculis. Observing with a 10-inch f/5 reflector under magnitude 5 skies, I noted, "Located in neat Y-shaped asterism. Not seen with 39X. Visible as an out-of-focus star with 139X. Best view with 208X. No sign of color." I was unable to see the magnitude 13.6 central star.

Distances to planetary nebulae are often iffy at best. Recent Gaia data suggest that NGC 6058 is around 9000 light-years away.

NGC 6058 Finder Chart A

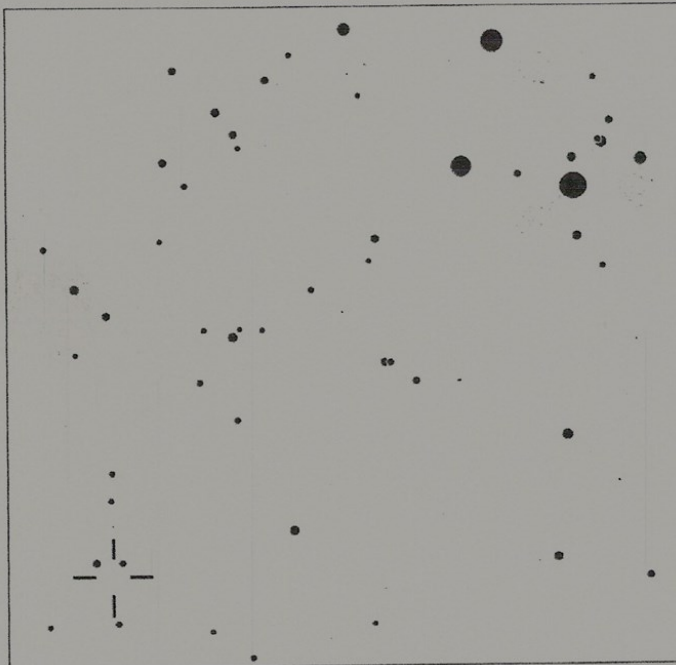


\*The purpose of the Observer's Challenge is to encourage the pursuit of visual observing. It is open to anyone who is interested. If you'd like to contribute notes, drawings, or photographs, we'd be happy to include them in our monthly summary. Submit your observing notes, sketches, and/or images to Roger Ivester ([rogerivester@me.com](mailto:rogerivester@me.com)). To find out more about the Observer's Challenge, log on to [rogerivester.com/category/observers-challenge-reports-complete](http://rogerivester.com/category/observers-challenge-reports-complete).

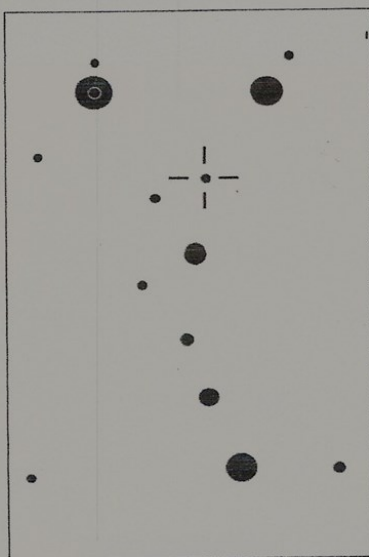
“Continued on page 4”

**NGC 6058 Charts B and C**  
(Charts created with AAVSO's Variable Star Plotter)

**Chart B. North up, 10.0 limiting magnitude, 3 degrees square**



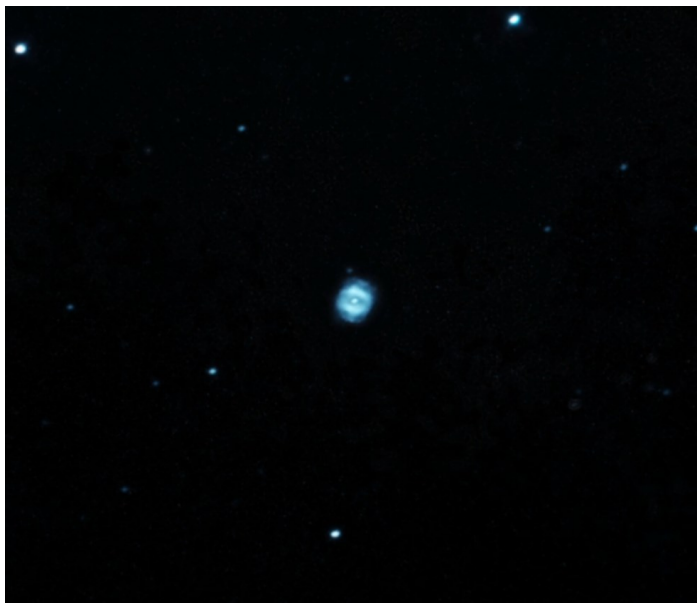
**Chart C. North up, 14.0 magnitude limit, 15' X 5'**



## NGC 6058 Image

Mario Motta, MD (ATMoB)

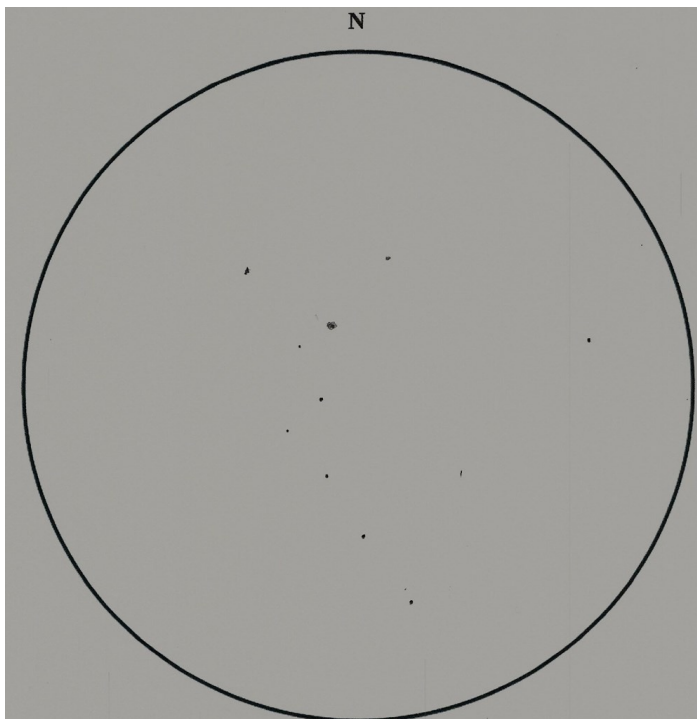
"Image taken with my 32 inch F6.5 relay telescope, 2.5 hours of imaging time total. NB filters of O3 and Ha used, very bright in O3 especially thus the intense blue color. I attempted some S2, but it was a very weak signal, and therefore not used. Combined and processed in Pixinsight. some interesting detail seen."



## NGC 6058 Sketch

Glenn Chaple (ATMoB)

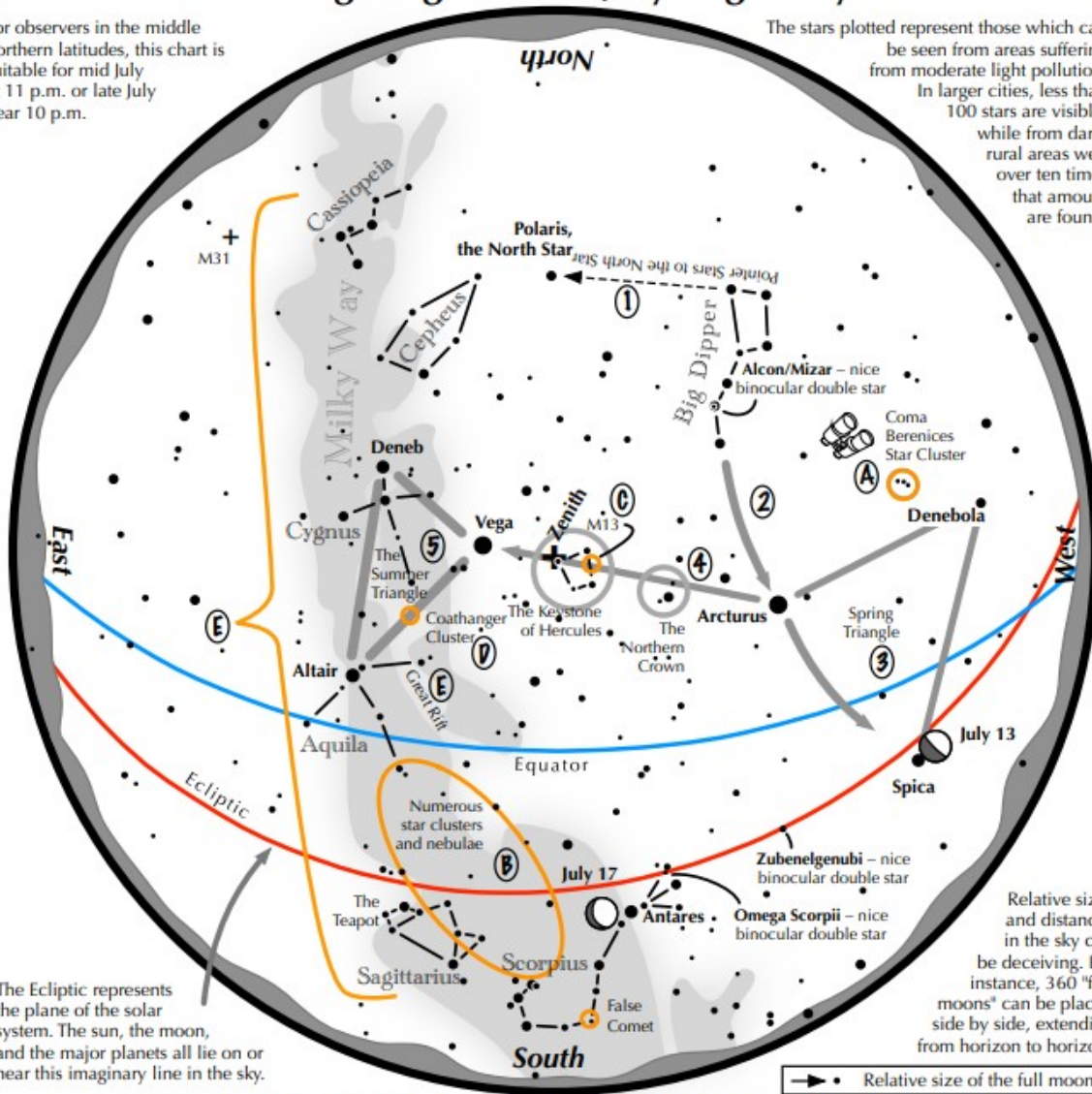
Observation made with 10-inch, f/5 reflector at 139X. FOV = 36'



## Navigating the mid July Night Sky

For observers in the middle northern latitudes, this chart is suitable for mid July at 11 p.m. or late July near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

### Navigating the mid July night sky: Simply start with what you know or with what you can easily find.

- 1 Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Follow the arc of the Dipper's handle. It first intersects Arcturus, the brightest star in the July evening sky, then continues to Spica. Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 3 To the northeast of Arcturus shines another star of similar brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
- 4 High in the East lies the Summer Triangle stars of Vega, Altair, and Deneb.

#### Binocular Highlights

- A: Between Denebola and the tip of the Big Dipper's handle, lie the stars of the Coma Berenices Star Cluster.
- B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
- C: On the western side of the Keystone glows the Great Hercules Cluster, containing nearly 1 million stars.
- D: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
- E: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.

Astronomical League [www.astroleague.org/](http://www.astroleague.org/); duplication is allowed and encouraged for all free distribution.



## Principal Meteor Showers in 2024

January 4  
Quadrantids

April 22  
Lyrids

May 6  
Eta Aquarids

July 30  
Delta Aquarids

August 12  
Perseids

October 9  
Draconid

October 21  
Orionids

November 9  
Taurids

November 18  
Leonids

November 26  
Andromedids

December 14  
Geminids

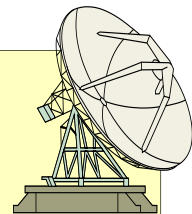
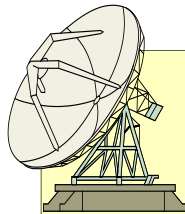
December 22  
Ursids

*Note: Dates are for maximum*

## MEMBERSHIP DUES

Membership fees are for the calendar year beginning in January and ending in December. Dues (see page 18 for prices) are payable to the treasurer during November for the upcoming year. New members who join during or after the month of July shall pay half the annual fee, for the balance of the year. Checks should be made payable to the Astronomical Society of Northern New England (A.S.N.N.E.). If you would like to mail in your dues, use the form on page 18. Or you can use PayPal via [asnne.astronomy@gmail.com](mailto:asnne.astronomy@gmail.com)

A Member who has not paid current dues by the January meeting will be dropped from membership, (essentially a two-month grace period.) Notice of this action shall be given to the Member by the Treasurer. Reinstatement shall be by payment of currently due dues.



Got any News?

Skylights Welcomes Your Input.

*Here are some suggestions:*

*Book reviews -- Items for sale -- New equipment --  
Ramblings -- Star parties -- Observing -- Photos.*

**Our Club has Merchandise for Sale at: [www.cafepress.com/asnne](http://www.cafepress.com/asnne)**



*All money raised goes to our operating fund.  
Any design can be put on any item.*

Contact David Bianchi [dadsnorlax@yahoo.com](mailto:dadsnorlax@yahoo.com) for further details.



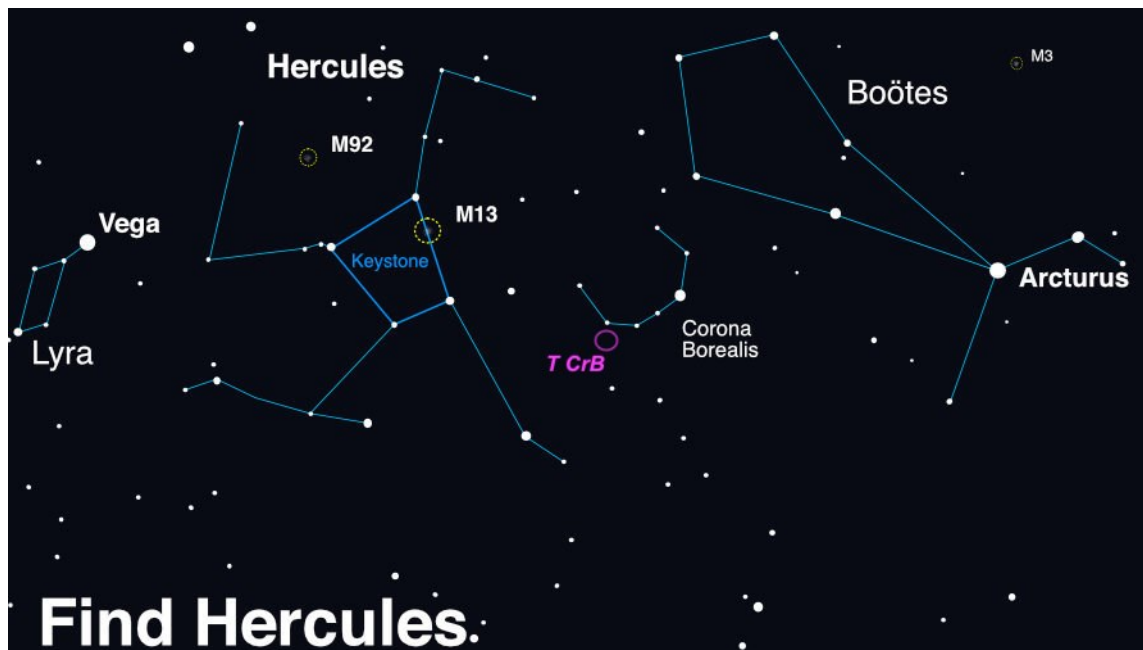
This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.org](https://nightsky.jpl.nasa.org) to find local clubs, events, and more!

## July's Night Sky Notes: A Hero, a Crown, and Possibly a Nova!

By Vivian White

High in the summer sky, the constellation Hercules acts as a centerpiece for late-night stargazers. At the center of Hercules is the “Keystone,” a near-perfect square shape between the bright stars Vega and Arcturus that is easy to recognize and can serve as a guidepost for some amazing sights. While not the brightest stars, the shape of the hero’s torso, like a smaller Orion, is nearly directly overhead after sunset. Along the edge of this square, you can find a most magnificent jewel - the Great Globular Cluster of Hercules, also known as [Messier 13](#).



**Find Hercules.** Look up after sunset during summer months to find Hercules! Scan between Vega and Arcturus, near the distinct pattern of Corona Borealis. Once you find its stars, use binoculars or a telescope to hunt down the globular clusters M13 (and a smaller globular cluster M92). If you enjoy your views of these globular clusters, you're in luck - look for another great globular, M3, in the nearby constellation of Boötes. Image created with assistance from Stellarium: [stellarium.org](https://stellarium.org)

*“Continued on page 9”*



Globular clusters are a tight ball of very old stars, closer together than stars near us. These clusters orbit the center of our Milky Way like tight swarms of bees. One of the most famous short stories, [Nightfall](#) by Isaac Asimov, imagines a civilization living on a planet within one of these star clusters. They are surrounded by so many stars so near that it is always daytime except for once every millennium, when a special alignment (including a solar eclipse) occurs, plunging their planet into darkness momentarily. The sudden night reveals so many stars that it drives the inhabitants mad.

Back here on our home planet Earth, we are lucky enough to experience [skies full of stars](#), a beautiful [Moon](#), and regular [eclipses](#). On a clear night this summer, take time to look up into the Keystone of Hercules and follow this sky chart to the Great Globular Cluster of Hercules. A pair of binoculars will show a faint, fuzzy patch, while a small telescope will resolve some of the stars in this globular cluster.



A red giant star and white dwarf orbit each other in this animation of a nova similar to T Coronae Borealis. The red giant is a large sphere in shades of red, orange, and white, with the side facing the white dwarf the lightest shades. The white dwarf is hidden in a bright glow of white and yellows, which represent an accretion disk around the star. A stream of material, shown as a diffuse cloud of red, flows from the red giant to the white dwarf. When the red giant moves behind the white dwarf, a nova explosion on the white dwarf ignites, creating a ball of ejected nova material shown in pale orange. After the fog of material clears, a small white spot remains, indicating that the white dwarf has survived the explosion. NASA/Goddard Space Flight Center.

*Bonus!* Between Hercules and the ice-cream-cone-shaped Boötes constellation, you'll find the small constellation Corona Borealis, shaped like the letter "C." Astronomers around the world are watching T Coronae Borealis, also known as the "Blaze Star" in this constellation closely because it is [predicted to go nova sometime this summer](#). There are only 5 known nova stars in the whole galaxy. It is a rare observable event and you can take part in the fun! The Astronomical League has issued a [Special Observing Challenge](#) that anyone can participate in. Just make a sketch of the constellation now (you won't be able to see the nova) and then make another sketch once it goes nova.

Tune into our mid-month article on the [Night Sky Network](#) page, as we prepare for the Perseids! Keep looking up!

## Point and Shoot Camera Astro-Imaging (no telescope)

Canon PowerShot SX50 HS

### Waxing Crescent Moon

JPEG, FL 762mm, ISO 800, f/5.6, 1/25 sec, 4-11-24

Single Image—Hand Held—Slightly Cropped



Thought I would highlight the Moon & Sun in this month's images since my picture of the Waxing Crescent Moon was taken just 3 days after the Total Solar Eclipse. I took this image of the 16% illuminated Moon from South Padre Island, Texas around 9:30 pm. The orientation of the crescent reminded me (appropriately), of a Texas Longhorn. On this day the Moon had an age of 3.60 days old. This number shows how many days it had been since the last New Moon.

*“Continued on page 11 ”*

## Sunrise at South Padre Island, Texas.

SPECS: JPEG, FL 182mm, ISO 800, f/5.6, 1/1250 sec, 4-12-24



Sunrise is usually defined when the limb of the sun is tangent with the horizon. In my image the sun is seen just peeking over the horizon. But this is not the actual sun. The actual sun is still below the horizon. What my picture is showing is an apparent image of the sun, due to the effects of atmospheric refraction (bending of light). Because of refraction, the sun may be seen for several minutes before it actually rises in the morning and after it sets in the evening.

*“Continued on page 12”*

**When the bottom of the Sun's disk appears to touch the horizon, the Sun's true altitude is negative.**

**SPECS: JPEG, FL 466mm, ISO 320, f/5.6, 1/1250 sec, 4-12-24**



The first rays of the sun that reach Earth's surface are called the "golden hour." The exact moment of sunrise differs for every location on Earth. Of course, the sun doesn't actually rise or set; it appears to do so due to Earth's rotation. I have a mathematical puzzle for you. Look at my date again as to when I took these images. I took them on 4-12-24. There is a mathematical pattern occurring with these numbers. The sequence is 4,12,24. So then, the next number in the sequence would be 40. What's the next number? The answer as well as an explanation is found on the following page.

*"Continued on page 13"*

**Here again, the actual Sun is still below the horizon.**

**SPECS: JPEG, FL 1800mm (digital zoom), ISO 200, f/6.5, 1/1250 sec, 4-12-24**



The sequence 4,12,24,40. What number should come next?

(1)  $1 \times 4 = 4$

(2)  $2 \times 6 = 12$

(3)  $3 \times 8 = 24$

(4)  $4 \times 10 = 40$

(5)  $5 \times 12 = 60$  [ANSWER]

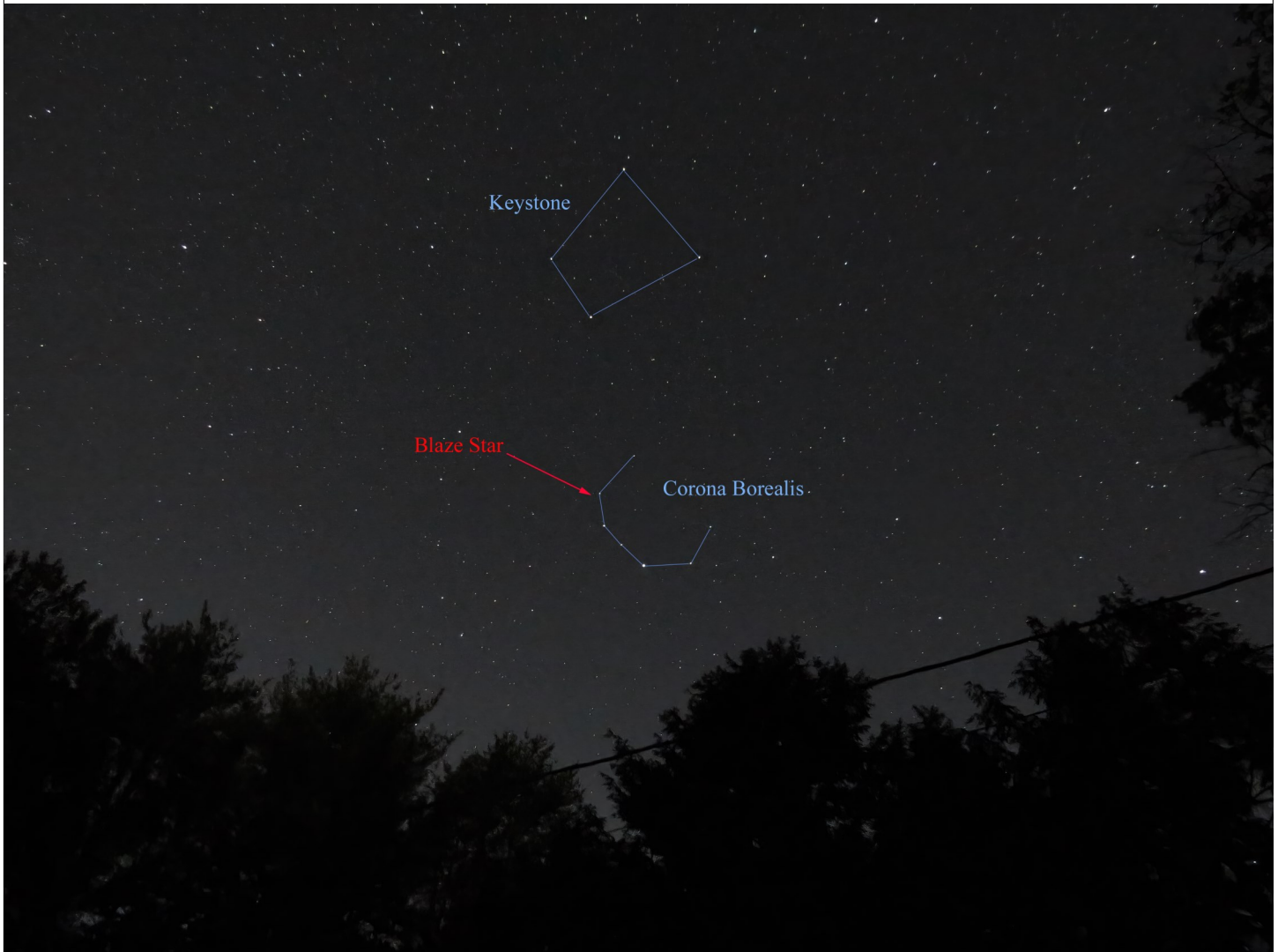
## Point and Shoot Camera Astro-Imaging (no telescope)

**Canon PowerShot SX50 HS**

*Image & write-up submitted by Paul Kursewicz*

### **The Blaze Star**

**RAW Mode, FL 26mm, ISO 1600, f/3.5, 30 seconds, 6-28-24**



I took this wide field picture from my yard facing West around 1:30 am. It represents a naked-eye view of the Blaze Star's location. At magnitude 10, T Coronae Borealis (nicknamed the Blaze Star) cannot be seen with the naked-eye. It's just to the left of Epsilon Coronae Borealis where my arrow head is pointing. The Blaze Star is a recurring Nova (reoccurring on average, every 80 years) in the constellation Corona Borealis. The "Keystone of Hercules" is seen just above the constellation. If indeed the Blaze Star does explode again it could rival the brightness of Polaris. Astronomers believe that the Nova could happen any time now until the end of 2026. Let's hope it occurs when the star is above the horizon and that the Moon is not in the sky. The naked-eye brightness of the Nova will probably only last about a week.

## **ASNNE 2024 Public Star Parties**

Submitted by Carl Gurtman

CONTACT:

Carl Gurtman, Secretary

cgurtman@maine.rr.com

207 363-4920

---

Astronomical Society of Northern New England

asnne.astronomy@gmail.com

PO Box 1338, Kennebunk, ME 04043

www.asnne.org

David Bianchi, Club President

FOR: THE COMMUNITY CALENDAR

**PUBLIC STAR PARTIES - AN OPEN INVITATION!**

The Astronomical Society of Northern New England (ASNNE) has set its schedule for Public Star Parties through August, 2024. ASNNE extends an invitation to the General Public to attend. ASNNE operates its own observatory, the Talmage Observatory at Starfield, on State Route 35, in West Kennebunk, Maine.

At Public Star Parties, held in as much as possible in the dark of the Moon, the General Public, as well as ASNNE Members, are most cordially invited to observe the heavens through our large Club telescopes, as well as Member telescopes. Stars, visible planets, and deep sky objects can all be viewed. Experienced ASNNE Members are on hand to guide the observing, explain what is being seen, and answer questions..

There is no fee.

The Talmage Observatory at Starfield opens at 7:30 pm for these events. Detailed driving instructions may be found at: <http://asnne.org/where-to-find-us.php>

The dates for the Public Star Parties are as follows:

April 12     Rain date: April 13

May 10      Rain date: May 11

June 8th    No rain date

July 5       Rain date July 6

August 9    Rain date August 10

ASNNE is a local association of amateur astronomers that meets monthly

at the New School, on Rte. 1, (York Street) in Kennebunk, Maine. Meeting are on the first Friday of each month; all those interested in astronomy are welcome; from stargazers and hobbyists, to serious observers, astrophotographers, and those interested in astronomical theory. The general public is also most cordially invited and welcome.

For more information about ASNNE, including directions and events, or to contact the Club, you may also visit us at [www.ASNNE.org](http://www.ASNNE.org).

## Club Meeting & Star Party Dates

Date	Subject	Location
<p><b><u>July 12</u></b></p> <p style="text-align: right;">Last Month</p>	<p><b><u>ASNNE Club Meeting:</u></b></p> <p style="text-align: center; color: red;">&gt;&gt;&gt;&gt;&gt;&gt;&gt;No Club Meeting on the 5th&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;&lt;</p> <p><b>Business Meeting starts prior to Club meeting.</b></p> <p><b>Club Meeting (in house &amp; on Zoom): 7:30-9:30PM</b></p> <p><b>Guest Speaker:</b> This month <b>Club Members</b> are invited to show their pictures of the recent Total Solar Eclipse, as well as the recent occurrence of the Northern Lights.</p> <p><b>Bernie Reim - "What's UP"</b></p> <p><b>Astro Shorts:</b> (news, stories, jokes, reports, questions, photos, observations etc.)</p> <p>Last month we had our meeting at The New School. A Zoom meeting was conducted also. Our guest speaker was Dr Fabian Kislat. He is a Professor at UNH and in his presentation he talked about his work studying the polarization of X-rays relative to neutron stars and black holes. Bernie gave his "What's Up" article.</p>	<p style="text-align: center;"><b>The New School, Kennebunk, Me.</b></p>
<p><b><u>July 5</u></b></p>	<p><b>Club/Public Star Party:</b> Dependent on the weather. Rain date July 6th.</p>	<p style="text-align: center;"><b>Talmage Observatory at Starfield West Kennebunk, Me.</b></p>

### Directions to ASNNE event locations

**Directions to The New School in Kennebunk** [38 York Street (Rt1) Kennebunk, ME]

For directions to The New School you can use this link to the ASNNE NSN page and then click on "get directions" from the meeting location. Enter your starting location to generate a road map with complete directions. It works great. [http://nightsky.jpl.nasa.gov/club-view.cfm?Club\\_ID=137](http://nightsky.jpl.nasa.gov/club-view.cfm?Club_ID=137)

**Directions to Talmage Observatory at Starfield** [Alewife Road, Kennebunk, ME]

**From North:**

Get off turnpike at exit 32, (Biddeford) turn right on Rt 111. Go 5 miles and turn left on Rt 35. Go 2 miles on Rt 35 over Kennebunk River to very sharp 90 degree left turn. The entrance to the Starfield Observatory site is at the telephone pole at the beginning of the large field on the left. Look for the ASNNE sign on the pole.

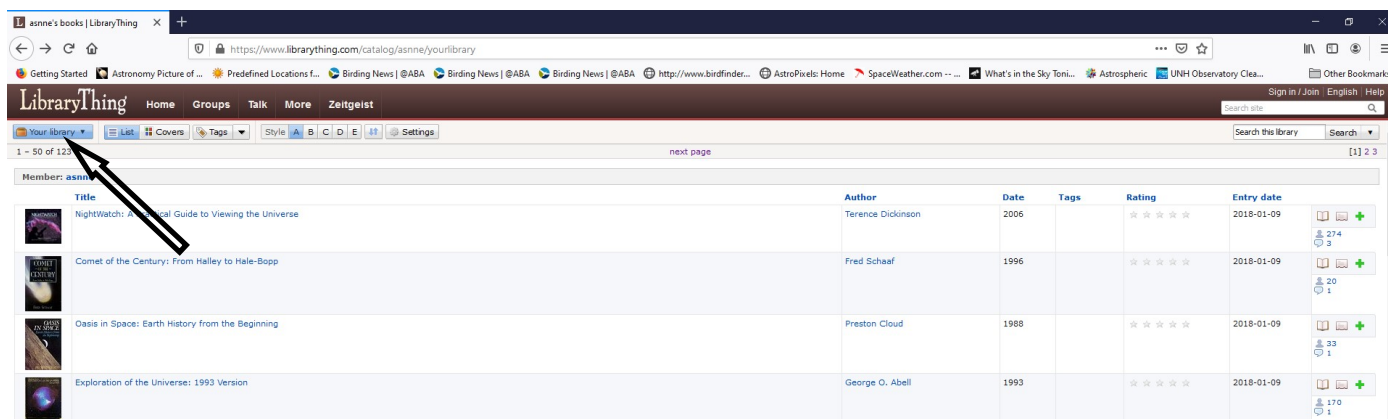
**From South:**

Get off the turnpike at exit 25 in Kennebunk. After toll both turn right on Rt 35. Go up over the turnpike and immediately turn right on Rt 35. About 4 miles along you will crest a hill and see a large field on your right. Continue until you reach the end of the field. Turn right into the Starfield Observatory site at the last telephone pole along the field. Look for the ASNNE sign on the pole. If you come to a very sharp 90 degree right turn you have just passed the field.



# Astronomy Club & Library Resources

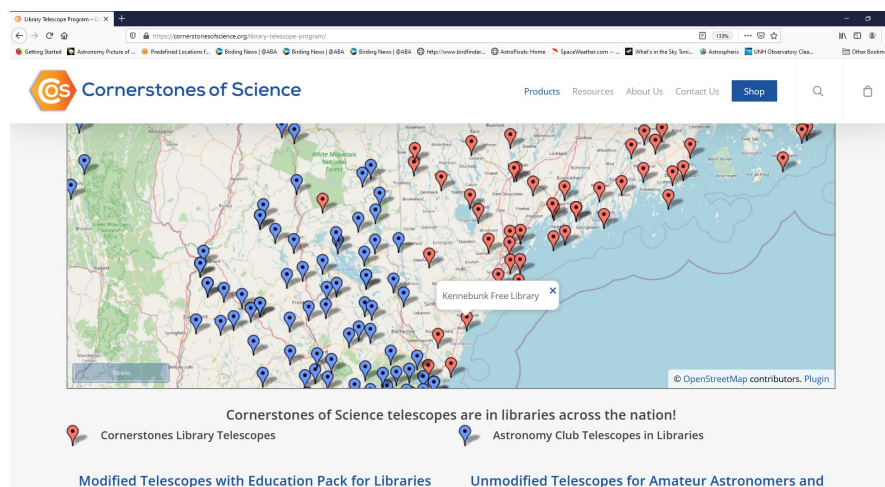
Our club has a library of astronomy books which are stored at The New School in Kennebunk, Maine (our monthly club meeting location). To request a book(s), contact one of the club officers. A listing of books is provided here: <https://www.librarything.com/profile/asmne> . After clicking on the link, a window will open. Click on “Your library” near the upper left corner (as shown by the arrow below). Then scroll down to the end of the page to go to the next page.



The screenshot shows the LibraryThing website interface. The top navigation bar includes 'Your library', 'List', 'Covers', 'Tags', 'Style', and 'Settings'. Below the navigation bar, there is a table of books in the user's library. The table has columns for Title, Author, Date, Tags, Rating, and Entry date. The first book listed is 'NightWatch: A Practical Guide to Viewing the Universe' by Terence Dickinson, published in 2006. Other books include 'Comet of the Century: From Halley to Hale-Bopp' by Fred Schaaf (1996), 'Oasis in Space: Earth History from the Beginning' by Preston Cloud (1988), and 'Exploration of the Universe: 1993 Version' by George O. Abell (1993). An arrow points to the 'Your library' dropdown menu in the top left corner.

Would you like to borrow a telescope? While many astronomy clubs may have a scope to lend out, there are also many libraries which have telescopes for their guests to use. Here are a couple of links.

The following link will bring up an active map (see screen shot below) of the USA showing the libraries which have telescopes to lend out: <https://cornerstonesofscience.org/library-telescope-program/>



The screenshot shows the Cornerstones of Science website. The main content is a map of the United States with numerous pins indicating library locations that have telescopes for loan. The pins are color-coded: red for 'Cornerstones Library Telescopes' and blue for 'Astronomy Club Telescopes in Libraries'. A legend at the bottom of the map explains the color coding. The website also features a navigation bar with 'Products', 'Resources', 'About Us', 'Contact Us', and 'Shop'.

The below link will show a list of known participating library locations for the state of Maine.  
<https://www.librarytelescope.org/locations/usa/maine>

To join **ASNNE**, please fill out the below membership form. *Checks should be made payable to: Astronomical Society of Northern New England (A.S.N.N.E).* For more details, please visit our website: <http://www.asnne.org>



Astronomical Society of Northern New England  
 P.O. Box 1338  
 Kennebunk, ME 04043-1338

**2024 Membership Registration Form**

(Print, fill out and mail to address above) or Use PayPal via [asnne.astronomy@gmail.com](mailto:asnne.astronomy@gmail.com)

Name(s for family): \_\_\_\_\_

Address: \_\_\_\_\_

City/State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Telephone # \_\_\_\_\_

E-mail: \_\_\_\_\_

Membership (check one):

Individual \$50 \_\_\_\_\_ Family \$ 60 \_\_\_\_\_ Student under 21 years of age \$10 \_\_\_\_\_ Donation \_\_\_\_\_

Total Enclosed \_\_\_\_\_

Tell us about yourself:

1. Experience level: Beginner \_\_\_\_\_ Some Experience \_\_\_\_\_ Advanced \_\_\_\_\_

2. Do you own any equipment? (Y/N) And if so, what types?  
 \_\_\_\_\_

3. Do you have any special interests in Astronomy?  
 \_\_\_\_\_

4. What do you hope to gain by joining ASNNE?  
 \_\_\_\_\_

5. How could ASNNE best help you pursue your interest in Astronomy?  
 \_\_\_\_\_

6. ASNNE's principal mission is public education. We hold many star parties for schools and the general public for which we need volunteers for a variety of tasks, from operating telescopes to registering guests to parking cars. Would you be interested in helping?

Yes \_\_\_\_\_ No \_\_\_\_\_

7. ASNNE maintains a members-only section of its web site for names, addresses and interests of members as a way for members to contact each other. Your information will not be used for any other purpose. Can we add your information to that portion of our web site?

Yes \_\_\_\_\_ No \_\_\_\_\_

