

# Skylights

Newsletter of the Astronomical Society of Northern New England



SEP 2023



Member of NASA's  
Night Sky Network



Astronomical League

## 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 September

By Bernie Reim

The month of September always marks the beginning of fall for us in the northern hemisphere. This year that will happen at exactly 2:50 a.m. EDT on Saturday the 23<sup>rd</sup>. The autumnal and the vernal equinoxes are the only two days each year that the sun will rise due east and set due west for everyone on Earth except for the poles. Within a few days of those dates the days will also be exactly 12 hours long for everyone on earth except for the poles. They are off by a few days since we orbit in ellipses and not perfect circles and we are tilted at 23.5 degrees on our axis.

Our famous flaming fall foliage will also begin in earnest this month and peak for us in southern Maine around the middle of October. A small percentage of our often unnoticed background of green foliage is already starting to stand out and differentiate itself in a wide array of brilliant reds, oranges, and yellows, which will only intensify as the month progresses.

Autumn tends to be our best season for viewing the heavens since there is less humidity and more clear days and it is not too cold yet to enjoy the ever-lengthening nights. There are several good highlights to see this month including Saturn still near its best for the year, Jupiter getting a little brighter and closer each night, Venus at its greatest brilliancy in the morning sky, the best morning apparition of Mercury for the year, a fairly bright telescopic comet, and the beginning of the zodiacal light becoming visible in the morning sky for several months.

Saturn was at its best and brightest and closest for the year at the end of last month. So it now rises just a few minutes earlier each night, but it is still visible almost all night long reaching its highest point in the sky around midnight. The ringed planet is getting slightly dimmer and farther away each evening, but you won't really notice that until near the end of this month.

Look for its soft golden glow in Aquarius the water bearer. Through a good telescope you may even see some of the white spots in its atmosphere which signal the beginning of another season of mega storms which occur every 25 to 30 years, or about the time it take for Saturn to orbit the sun once. They are caused by higher concentrations of ammonia falling as rain or hail from its upper atmosphere into its lower atmosphere. I have seen them several times.

A bright waxing gibbous moon will be near Saturn on the 26<sup>th</sup>. Notice that its rings are fairly narrow now at only 9 or 10 degrees. They can be tilted at a maximum angle of up to 27 degrees. They are on their way down to zero now, which it will reach in 2025. Then they will reach their maximum angle

again by 2039, halfway back to its next 29 year cycle around the sun. Humans will most likely be walking around on Mars by the time Saturn's rings reach their maximum angle again.

Jupiter is not far behind since it now rises around 10 pm early this month and it will rise by 8 pm by the end of the month. The king of the planets begins its retrograde or westward motion against the fixed background of stars on Sept. 4 in the constellation of Aries the Ram, two constellations to the east of Saturn in Aquarius. Jupiter will reach its own opposition on November 3 of this year.

Remember that these two bright gas giants were less than one tenth of a degree apart in Capricorn on the winter solstice of 2021. That was their closest approach in 800 years, when the world was a very different place during the Dark Ages. They are getting a little farther apart each night now. They get fairly close together from our perspective on Earth about every 20 years.

Venus will be at its greatest brilliancy for the year on the 19<sup>th</sup> at minus 4.8 magnitude, or almost 100 times brighter than Saturn and still 7 times brighter than Jupiter. Through a telescope you will notice that it is a thin crescent only 11% lit by the sun at the beginning of the month and it will grow all the way to 36% lit by the end of the month. It will slowly be getting dimmer again after the 19<sup>th</sup>, but it will continue to get more illuminated even as it is getting smaller and farther away from us.

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## Club Contacts

### Officers:

#### President:

Ian Durham  
idurham@anselm.edu

#### Vice President:

Bernie Reim  
berniereim@kw.com

#### Secretary:

Carl Gurtman  
cgurtman@maine.rr.com

#### Treasurer:

Ian Durham  
idurham@anselm.edu

### Board of Directors:

Gary Asperschlager  
gasperschlager@gmail.com

Larry Burkett  
larrybu32@yahoo.com

Keith Brown  
silverado93@twc.com

### 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"

Venus rises around 5 am and it will be just below a slender waning crescent moon on the 11<sup>th</sup> in Cancer the Crab. Look for M44, the Beehive open star cluster, just above Venus and then move up about another 10 degrees, or one fist at arm's length, and you will see Pollux and Castor in Gemini.

The Beehive, also known as M44 or Praesepe, which means the manger or crib in Latin, has about 1000 stars in it that are about 600 light years away. They are fairly young, about 600 million years old, which is only one seventh as old as our sun. That cluster is also related to the Hyades open cluster in Taurus based on a common origin for the stars and a similar speed that they are moving away.

Then watch for Mercury to pop back into the morning sky one week into this month after its inferior conjunction with the sun. Look for our first planet below Regulus in Leo the Lion by the middle of the month below and to the left of Venus and then it reaches its greatest western elongation from the sun at 18 degrees. It will be at its brightest on the 29<sup>th</sup> when it will reach 9 degrees high above the eastern horizon half an hour before sunrise.

There should be many brighter than tenth magnitude comets visible to us over the coming year. The one for this month should reach 8<sup>th</sup> magnitude and will be closest to us on Sept 25 and 26 in the constellation of Auriga which marks the top of the winter hexagon. It is named 103P/Hartley 2. It orbits the sun every 6.5 years and was discovered by Malcolm Hartley on March 15 of 1986. It will be just 5 degrees above the colorful California Nebula in Perseus during the middle of this month, which would be a great time to get a picture of this ancient and primordial cosmic interloper if you have the equipment. Otherwise, just look for it in a pair of binoculars around the middle of the month since it will be new moon on the 14<sup>th</sup>.

The zodiacal light will become visible again in the morning sky starting late this month into November. This faintly glowing pyramid of ghostly light is caused by sunlight bouncing off trillions of tiny dust particles in the ecliptic plane of our solar system. This dust ring is always there, but is best visible to us when the angle of the ecliptic to our horizon is at its steepest, which is about one hour before sunrise in the fall and one hour after sunset in the spring.

There will not be any major meteor showers this month, so instead of watching a few grains of comet dust getting vaporized at the edge of space 60 miles high, you can now see a little of this permanent ring that is made up of all the comet dust caught in our ecliptic plane along with other interplanetary dust and debris.

Sept. 1. The moon passes 1.4 degrees south of Neptune at 3 in the morning.

Sept. 2 Venus is stationary at midnight. It started its retrograde or westward motion against the fixed background of stars on July 22 this summer. Venus retrogrades every 18 months, spending about 40 days seeming to move backwards.

Sept. 3. On this day in 1976 Viking 2 landed on Mars. Viking 1 landed there a few weeks earlier.

Sept. 4. The moon passes 3 degrees north of Jupiter this afternoon. Jupiter is stationary and then begins its retrograde motion at 5 pm EDT.

Sept. 6. Mercury is in inferior conjunction with the sun today at 7 am.

Sept. 7. James van Allen was born on this day in 1914. He discovered the van Allen radiation belts in 1958, a zone of energetic charged particles caused by the solar

wind and captured by the earth's magnetic field. The inner belt forms at about 1000 to 8000 miles above the earth and the much wider outer belt can be found from 12,000 to 25,000 miles high. Our GPS satellites orbit at 12,500 miles and our geosynchronous satellites orbit at 22,300 miles high so that they always remain above the same spot on Earth. I interviewed his son and grandson for my radio show on WMPG 90.9 FM called Scientifically Speaking that is on live every Friday morning from 11:30 to noon that I co host with Sarah Chang.

Sept. 11. The moon passes 11 degrees north of Venus this morning. On this day in 1985 the ICE satellite (International Cometary Explorer) flew by Comet 21P/Giacobini-Zinner. This was the first satellite to orbit in the L1 Lagrange point located about 1 million miles away between the sun and the earth. The L2 point is about that distance beyond the earth away from the sun. There are five Lagrange points in the sun-earth system where the gravitational forces of this two body system perfectly balance. There are 3 very important satellites orbiting the L2 point right now, the JWST, GAIA, which is mapping over a billion stars in our galaxy with great accuracy, and the newly arrived EUCLID mission that will look for dark matter and dark energy. The WMAP and PLANCK satellites orbited there recently. They carefully mapped the cosmic microwave background and helped narrow down the age of the universe. At least 7 more great space telescopes and missions are scheduled to orbit there in the near future. These include the Nancy Grace Roman telescope, PLATO, LiteBird, ARIEL, the Comet Interceptor, LUVOIR, and ATHENA. They will study everything from biosignatures in planetary atmospheres to looking for footprints of gravitational waves in the cosmic microwave background.

Sept. 14. Mercury is stationary, ending its latest retrograde that lasted from August 23 to now. It goes into retrograde for about a month at a time about 3 times each year. New moon is at 9:40 p.m. EDT. The new moon next month will create an annular solar eclipse visible from Oregon to Texas on Saturday, October 14. It will be a partial solar eclipse for the rest of the country and we will only see about 5% here in Maine. Use it as a warm-up eclipse for the big total solar eclipse over northern Maine on Monday, April 8 of next year. Make sure you get some good solar filters or eclipse glasses before then and practice so that you will be ready to capture a little of its great beauty. I will write much more about them next month.

Sept. 16. The moon passes 0.7 degrees north of Mars this afternoon.

Sept. 17. On this day in 1789 William Herschel discovered Mimas, the 7<sup>th</sup> largest moon of Saturn at 250 miles in diameter. Saturn has at least 145 moons now. Mimas is a very strange moon that has a huge crater covering one third of its surface that is 4 miles high.

Sept. 19. Venus is at greatest brilliancy at magnitude minus 4.8.

Sept. 21. The moon passes near Antares in Scorpius this morning.

Sept. 22. Mercury is at greatest western elongation from the sun at 18 degrees this morning. First quarter moon is at 3:32 p.m.

Sept. 23. The autumnal equinox is at 2:50 a.m. EDT.

Sept. 26. The moon passes 3 degrees south of Saturn tonight.

Sept. 29. Full moon is at 5:58 a.m. This is the famous Harvest moon since it is close to the equinox. The Harvest moon only rises about half an hour later each night instead of the usual 55 minutes later because the angle of the ecliptic to the horizon is very shallow now.



## Moon Phases

**Sept 6**  
Last Quarter

**Sept 14**  
New

**Sept 22**  
First Quarter

**Sept 29**  
Full

## Moon Data

**Sept 1**  
Neptune 1.4° north  
of Moon

**Sept 4**  
Jupiter 3° south  
of Moon

**Sept 5**  
Uranus 3° south  
of Moon

**Sept 11**  
Venus 11° south  
of Moon

**Sept 16**  
Mars 0.7° south  
of Moon

**Sept 12**  
Moon at apogee

**Sept 26**  
Saturn 3° north  
of Moon

**Sept 27**  
Moon at perigee

## **OBSERVER'S CHALLENGE\* – September 2023** by Glenn Chaple

### **NGC6891 Planetary Nebula in Delphinus (Magnitude 10.5, Size 18")**

There are three reasons why a deep-sky object can be a challenge for the visual observer. It may be large and faint, it may be small and star-like, or it may be situated far from any bright guide star and hard to find. The latter two hurdles apply to this month's Observer's Challenge, the planetary nebula NGC 6819 in Delphinus.

Its 2000.0 coordinates are: RA 20<sup>h</sup>15<sup>m</sup>08.8<sup>s</sup>, Dec +12°42'15.6", about 2 ½ degrees south of 4.9 magnitude rho (ρ) Aquilae and 5 degrees east and slightly south of 5.4 magnitude eta (η) Delphini. I used the latter route when tracking down NGC 6891 with a 10-inch f/5 reflector just after midnight on July 20, 2023.

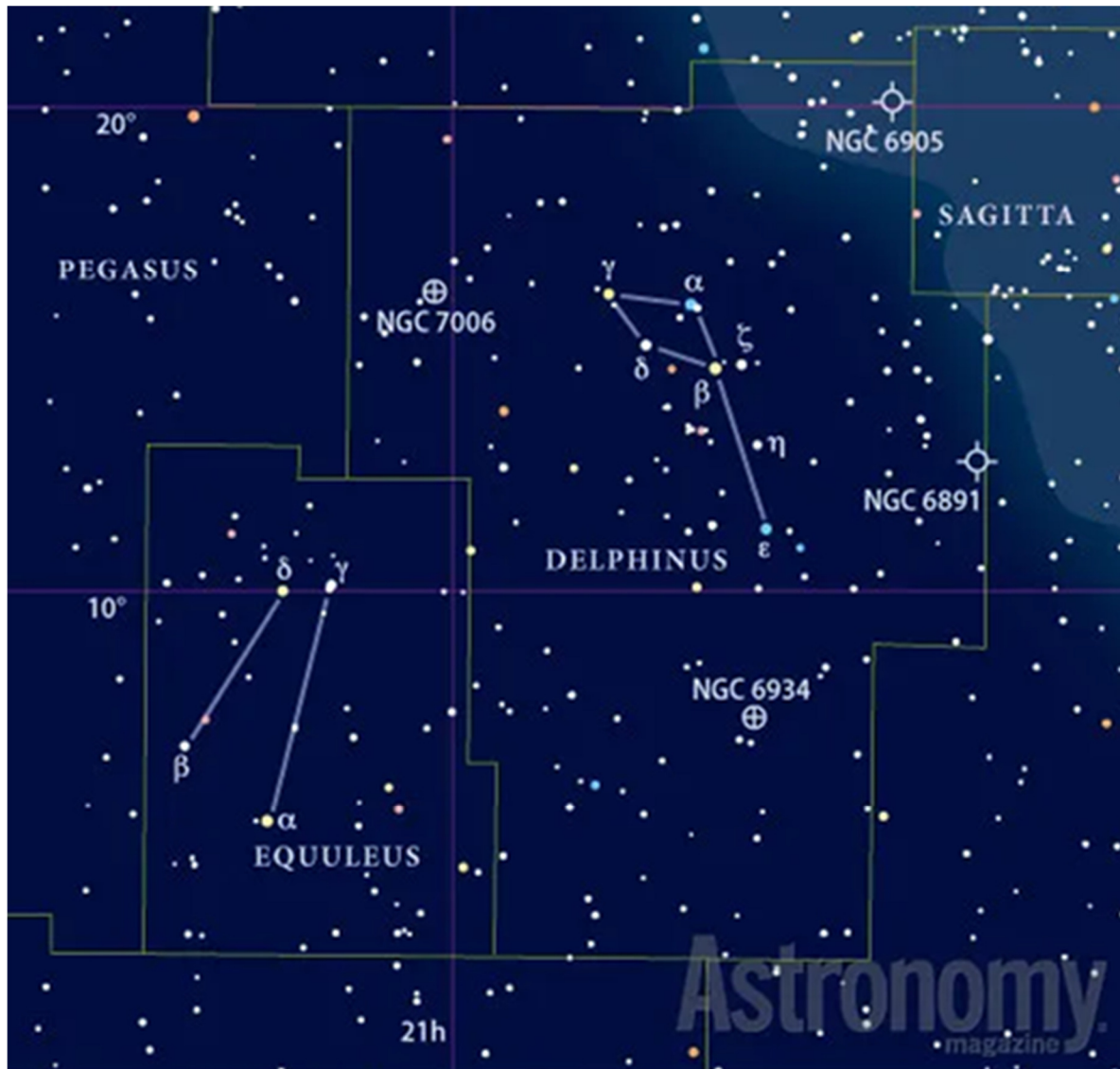
Because I use low magnification when star-hopping, I might have mistaken NGC 6891 for a 10<sup>th</sup> magnitude star had I not known its precise location. Even when viewing with a magnifying power of 208X, all I could make out was what looked like an out-of-focus star. It was only when I moved an OIII filter between eye and eyepiece and the object remained bright while a 9.5 magnitude field star dimmed did I confirm its identity as a planetary nebula. I was unable to make out the magnitude 12.5 central star. NGC 6891 is described as a "triple-shell planetary nebula." It's likely I viewed just the bright inner shell, which spans roughly 10 arc-seconds. Perhaps under darker skies, I might have made out the 18 arc-second-wide middle shell. A faint outer halo, some 80 arc-seconds across, might be picked up with large-aperture instruments.

Before leaving the area, aim your scope about one degree to the ENE. This should bring you to the pretty double star Struve 2664 (STF2664 or Σ2664). Medium aperture scopes will bring out the golden yellow hues of its magnitude 8.1 and 8.3 component stars, which are separated by 28 arc-seconds. They were a "nice sight" when I split them with a 3-inch f/10 reflector at 60X back in the fall of 1978.

NGC 6891 was discovered on September 22, 1884, by the English-born astronomer Ralph Copeland. Sources place its distance at about 12,000 light years, but recent GAIA data indicate a closer distance of 8400 light years.

*"Continued on page 4"*

## NGC 6891 Finder Chart



\*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 5"*



## NGC 6891 Image

Mario Motta, MD. (ATMoB)

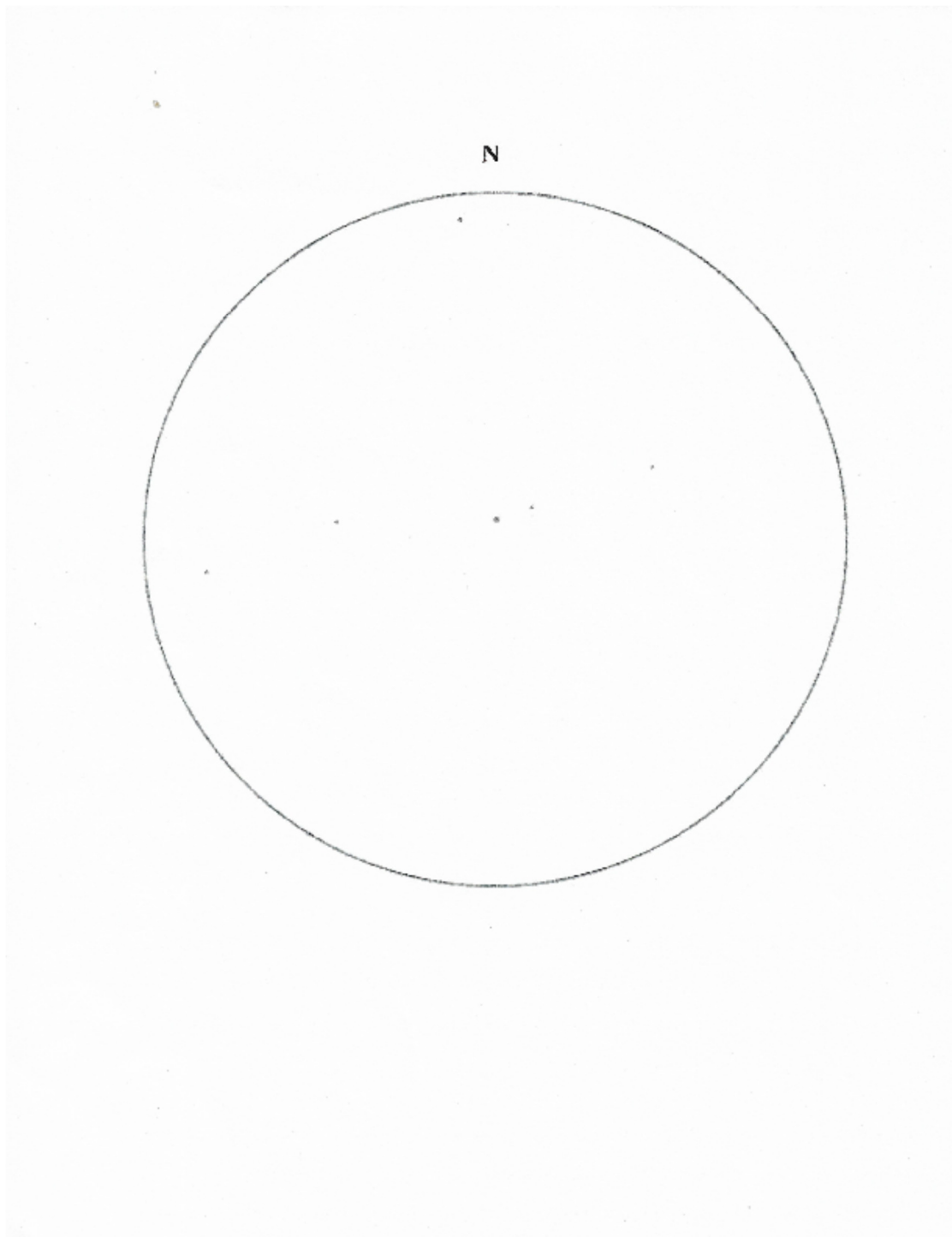
“Taken with 32 inch telescope and ZWO ASI 6200 camera, and with NB imaging using Ha, O3, and S2 filters. 2.5 hours total imaging time. I noticed in O3 filter faint outer ejected material, so I pushed the O3 with extra frames, and stretched to enhance this outer material. Interesting outer structure seen this way. ”



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## NGC 6891 Sketch

Glenn Chaple (ATMoB) July 20, 2023, 12:20am EDT 10-inch f/5 reflecting telescope with 6mm Radian eyepiece (208X,  $0.3^\circ$  field) "Looks like out-of-focus  $10^{\text{th}}$  magnitude star. Confirmed when OIII filter placed in front of eyepiece. 9.5 mag star in field faded while NGC 6891 suspect remained bright."



## Principal Meteor Showers in 2023

**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

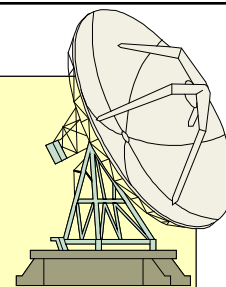
**December 14**  
Geminids

**December 22**  
Ursids

*Note: Dates are for maximum*

## Got any News?

### Skylights Welcomes Your Input.



*Here are some suggestions:*

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

#### Benefits of Membership

- Attend our monthly meetings and club star parties
  - Our Monthly Newsletter: *Skylights*
  - Discounts on *Sky & Telescope*. and *Astronomy* magazine subscriptions
  - Automatic subscription to the Astronomical League's quarterly newsletter, *The Reflector*
  - With proper training, access to the equipment at ASNNE's Talmage Observatory at Starfield.
  - By special arrangement, free admission to the Southworth Planetarium at USM in Portland
- Enjoy sharing your interest and have fun learning about Astronomy!

**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!

## Looking Beyond the Stars

Brian Kruse

Looking up in awe at the night sky, the stars and planets pop out as bright points against a dark background. All of the stars that we see are nearby, within our own Milky Way Galaxy. And while the amount of stars visible from a dark sky location seems immense, the actual number is measurable only in the thousands. But what lies between the stars and why can't we see it? Both the Hubble telescope and the James Webb Space Telescope (Webb) have revealed that what appears as a dark background, even in our backyard telescopes, is populated with as many galaxies as there are stars in the Milky Way.

So, why is the night sky dark and not blazing with the light of all those distant galaxies? Much like looking into a dense forest where every line of sight has a tree, every direction we look in the sky has billions of stars with no vacant spots. Many philosophers and astronomers have considered this paradox. However, it has taken the name of Heinrich Wilhelm Olbers, an early 19th century German astronomer. Basically, Olbers Paradox asks why the night sky is dark if the Universe is infinitely old and static – there should be stars everywhere. The observable phenomenon of a dark sky leads us directly into the debate about the very nature of the Universe – is it eternal and static, or is it dynamic and evolving?

It was not until the 1960s with the discovery of the Cosmic Microwave Background that the debate was finally settled, though various lines of evidence for an evolving universe had built up over the previous half century. The equations of Einstein's General Theory of Relativity suggested a dynamic universe, not eternal and unchanging as previously thought. Edwin Hubble used the cosmic distance ladder discovered by Henrietta Swan Leavitt to show that distant galaxies are moving away from us – and the greater the distance, the faster they're moving away. Along with other evidence, this led to the recognition of an evolving Universe.

The paradox has since been resolved, now that we understand that the Universe has a finite age and size, with the speed of light having a definite value. Here's what's happening – due to the expansion of the Universe, the light from the oldest, most distant galaxies is shifted towards the longer wavelengths of the electromagnetic spectrum. So the farther an object is from us, the redder it appears. The Webb telescope is designed to detect light from distant objects in infrared light, beyond the visible spectrum. Other telescopes detect light at still longer wavelengths, where it is stretched into the radio and microwave portions of the spectrum. The farther back we look, the more things are shifted out of the visible, past the infrared, and all the way into the microwave wavelengths. If our eyes could see microwaves, we would behold a sky blazing with the light of the hot, young Universe – the Cosmic Microwave Background.

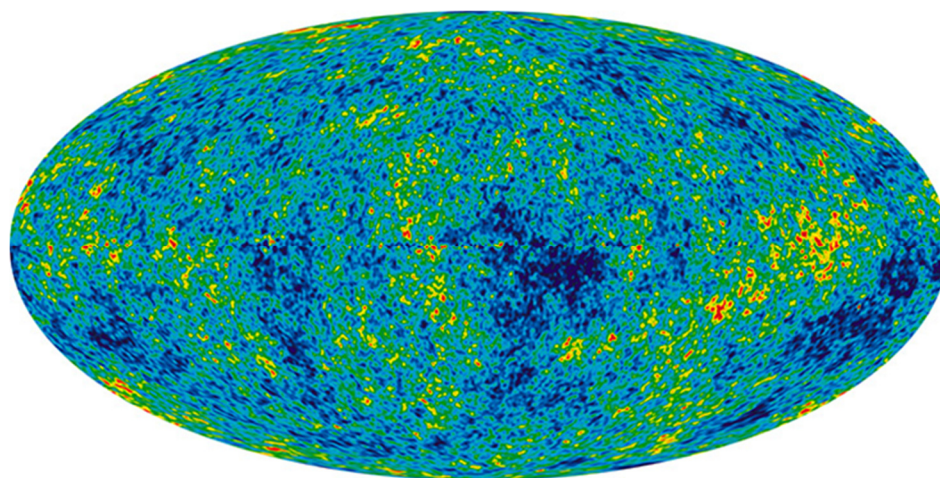
The next time you look up at the stars at night, turn your attention to the darkness between the stars, and ponder how you are seeing the result of a dynamic, evolving Universe.

*“Continued on page 9”*





NASA's James Webb Space Telescope has produced the deepest and sharpest infrared image of the distant universe to date. Known as Webb's First Deep Field, this image of galaxy cluster SMACS 0723 is overflowing with detail. This slice of the vast universe is approximately the size of a grain of sand held at arm's length by someone on the ground. (Image Credit: NASA, ESA, CSA, STScI) <https://bit.ly/webbdeep>



The oldest light in the universe, called the cosmic microwave background, as observed by the Planck space telescope is shown in the oval sky map. An artist's concept of Planck is next to the map. The cosmic microwave background was imprinted on the sky when the universe was just 380,000 years old. It shows tiny temperature fluctuations that correspond to regions of slightly different densities, representing the seeds of all future structure: the stars and galaxies of today. (Image credit: ESA and the Planck Collaboration - D. Ducros) <https://go.nasa.gov/3qC4G5q>

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

### Canon Powershot SX50 HS

*Image & write-up submitted by Paul Kursewicz*

### M51 (Whirlpool Galaxy) & NGC 5195

RAW Mode, FL 1200mm, ISO 2000, 16 x 2 min, 4-3-21 (re-edited on 8-21-23)

Original Image 4-3-21



Revised Image 8-21-23



I took the upper image back in 2021 with a total exposure time of 32 minutes. I would like to double that next time out in order to flesh out more detail in the spiral arms. August gave us another month of horrible weather for picture taking. So, I decided to go into my archives again and do a re-edit of M51 using techniques and software that were not known to me then. First, I did a slight crop to my image then edited it. The lower image shows my final result. NGC 5195 is the yellow dwarf galaxy that's interacting with the Whirlpool. It is actually passing behind it. Both galaxies are located approximately 25 million light-years away in the constellation Canes Venatici. NGC 5195 spans about 20,000 ly, where as M51 spans about 60,000 ly.



## Impromptu Star Party 8-11-23

On the morning of the 11th Dave sent out a request to club members asking if someone could be at the observatory that night. A grandmother's grandson was visiting her and he was interested in looking through our telescopes. Wayne and I said we could be there. Seven visitors attended. And to my surprise, so didn't Dave. So in all, there were ten of us. Later in the night Bernie and then Bern showed up. We had very clear skies all night long.



*“Continued on page 12”*



## STARLINK SATELLITE TRAIN



As darkness set-in that evening one of our visitors asked: “Is that a Chemtrail overhead?” When I looked up, I saw that it was a straight-line train of about 20 Starlink satellites. I took a picture of it with my cell phone (left image). However, it was just dark enough out for the camera to automatically do a long exposure, thus streaking the satellites. Each satellite was just as bright as the ISS. We watched the train travel across the sky for over a minute with each satellite traveling in unison. Eventually the train disappeared into the eastern sky. The image on the right (which I got off the web) is what the train actually looked liked. The only difference was that each satellite was a brilliant yellow color.



I took some pictures that night and in one of my frames I caught a Persied (lower center). The bright star seen in the lower left of my image is Altair, one of three bright stars that make up the Summer Triangle. Over a course of two hours I was able to see 10 Persieds.

*“Continued on page 11 ”*



Before any guest arrived at the observatory Wayne (seen in the picture) trimmed both sides of our observatory driveway road and cut the grass.



This is our small shed behind the observatory, a creative product of design. Nature shows the same kind of creativity in these two hornet nests which are located under the eave...works of art!



[Astronomical Society of Northern New England \(ASNNE\) Membership Meeting](#)  
[Minutes of 4 August 2023](#)

**Record Note:** This Meeting had been planned to be held at the Talmage Observatory at Starfield, and was to be a Barbeque. (Not the Barbeque that's held in conjunction with Starfest in September.) Weather intervened in the form of a very severe thunder & lightning storm. So, the fall-back option was followed, a Regular Meeting, usual time, at the New School in Kennebunk. Between the storm and the change of venue, very few people showed up.

**Business Meeting:** The Business Meeting was called to order at 7:25 by Vice-President Bernie Reim.

**Directors Present:** Bernie Reim, Vice-President  
Carl Gurtman, Secretary  
Gary Asperschlager, Director  
Bern Valliere, Director

**Others Present:** There were an additional three people present at the Business Meeting.

**Treasurer's Report:** There was no Treasurer's Report. But Bernie reported that he has received a check for \$400 from Huttopia, and that Huttopia had been invoiced for another \$600.

**Secretary's Report:** The previous Minutes had been e-mailed out. There were no comments. The Secretary's Report was accepted.

**Old Business:**

Updates on some items discussed at last month's Business Meeting:

Ron sold our redundant Cub Cadet mower for the \$250 we advised. Thank you, Ron!

Ian suggested that we perform an inventory, and after, decide what to keep and what to sell. Gary brought that subject up. The Board agreed that it would be practical to perform the inventory on the same day as our regular Star Party, whether 18 August, or, 19 August, (depending on the weather). Those who want to help could just come earlier in the day for the inventory.

To reiterate, the Board had previously agreed that there was enough Member interest in *Reflector* to maintain Astronomical League Membership.

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Ian will look into alternate ways to sign-up for Membership, not using paper forms and mailing checks. If this is accomplished, we can eliminate our PO Box, which costs us \$460 annually. No progress reported. Action: Ian

In regards to marketing our Presentations as a way for ASNNE to make money, Carl committed to contact other "glamp-grounds" in the area, and actively market our Presentations. Carl has generated a list of glamp-grounds, but has not yet contacted any. Action: Carl. Bernie mentioned Sandy Pines, where Bernie & Carl got rained out last year - but, we got paid anyway.

Carl has all of his old ASNNE Meeting Minutes. But he does not know how to upload them to our "io" account. Educate Carl on how to upload the past Minutes. Action: Ian

Regarding our rained-out August Barbeque, Carl's Press Release, based on last year's Press Release, did invite members of the General Public.

### **New Business:**

The major New Business item was to fix the dates for Starfest as Friday, 15 September 2023, through Sunday, 17 September 2023. The Event lasts from noon Friday, until early afternoon Sunday. There will be a cookout Saturday. This usually starts about 3:30 pm.

Starfest takes place instead of September's usual Regular Meeting on the first Friday of September at the New School.

ASNNE will rent a Port-a-Potty for Starfest. Otherwise, there will not be a Port-a-Potty available through the year.

We are hopeful that Alyson will, once again, be in overall charge, and coordinate all the people bringing items, as well as everything else. Alyson, Thanking you in advance!

Carl reported that he will invite Dr. Elizabeth McGrath to give a Presentation at ASNNE in the Fall. Dr. McGrath last spoke to us in June, 2018.

The Business Meeting was adjourned at 7:49 pm.

**Regular Meeting:**

**Regular Meeting:** The Regular Meeting was called to order at 7:52 pm by Vice-President Ian Bernie Reim.

**Directors Present:** Bernie Reim, Vice-President  
Carl Gurtman, Secretary  
Gary Asperschlager, Director  
Bern Valliere, Director

**Others Present:** There was a total of seven people physically present. Zoom was not set up.

**"What's Up?":**

Bernie gave his usual thorough, comprehensive, and complete discussion of what's in store for us in the skies of August, a month named for Augustus Caesar.

The highlights for the month of August are the Perseid Meteor Shower, peaking about 13 August - but meteors from that shower are visible before and after that date. Over a hundred meteors per hour are expected and the Moon is only a thin crescent.

Also, there are two full Moons in August. Both "supermoons". Carl reported he went to see the first full Moon on 1 August, but missed the actual moonrise, because the Moon rose south of where he expected it by between 60 and 90 degrees. The Moon looked very red, but the "Moon illusion" where the Moon looks much larger when near the horizon, was muted, since the rise was over the ocean.

Bernie's excellent presentation, in its entirety, can be found, this month, and every month, in *Skylights*, ASNNE's professional-quality newsletter; [editor, Paul Kursewicz]. Since "What's Up?" already exists in print. I will no longer excerpt it in the ASNNE Minutes. *Skylights* may be found at: <http://www.asnne.org/newsletter.php>

**Presentation:** There was no Presentation this month.

**Astroshorts:** There were no Astroshorts.

*“Continued on page 17”*



**Next Meeting:**

ASNNE's next Meeting will be Starfest, Friday, 15 September 2023, through Sunday, 17 September 2023, at the Talmage Observatory at Starfield. The Event lasts from Noon Friday, until early afternoon Sunday. There will be a cookout Saturday.

The Regular Meeting was adjourned at 8:40 pm.

After the Meeting, the Members present engaged in several heated, although always friendly discussions, about a variety of subjects. Some topics were actually related to astronomy.

Respectfully submitted,

Carl Gurtman

## Club Meeting & Star Party Dates

Date	Subject	Location
<p><b><u>Sept 15,16,17</u></b></p>	<p style="text-align: center;"><b><u>STARFEST WEEKEND</u></b></p> <p><b>Our September Club Meeting will take place during Starfest Weekend. <u>No club meeting at The New School.</u></b></p> <p style="text-align: center;"><b>Might want to bring a chair and or a table.</b></p> <p><b><u>FRIDAY:</u></b> Starfield Observatory gates open in the morning. Tent set-up in the afternoon. Solar Viewing during the day. And night viewing all night if you would like. Campfire.</p> <p><b><u>SATURDAY:</u></b> <b>Day Time:</b> - BBQ 3 PM, Solar Viewing, Raffle Table, What's Up, Tent Talks, Show &amp; Tell, Astro Shorts. <b>Night Time:</b> - Observing, Campfire.</p> <p><b><u>FRI/SAT:</u> Astro "B" Movie Theater (conditional).</b></p> <p><b><u>SUNDAY:</u> Clean-up. TYO Trash.</b></p>	<p><b>Talmage Observatory at Starfield West Kennebunk, Me.</b></p> <p style="text-align: center;"><b>Feel free to camp in the field.</b></p> <p><b><u>SATURDAY'S</u> keynote speaker will be club member <b>Bern Valliere</b>. His presentation will be on the Cosmic Distance Latter.</b></p>
<p><b>Last Month</b></p>	<p><b>Because of severe weather the club picnic was cancelled and we met at The New School. Only 7 people attended. There was no Zoom and no guest speaker. Bernie did "What's Up."</b></p>	
<p><b><u>Sept 15,16</u></b></p>	<p><b>Club/Public Star Party:</b> Dependent on the weather.</p>	<p><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:**

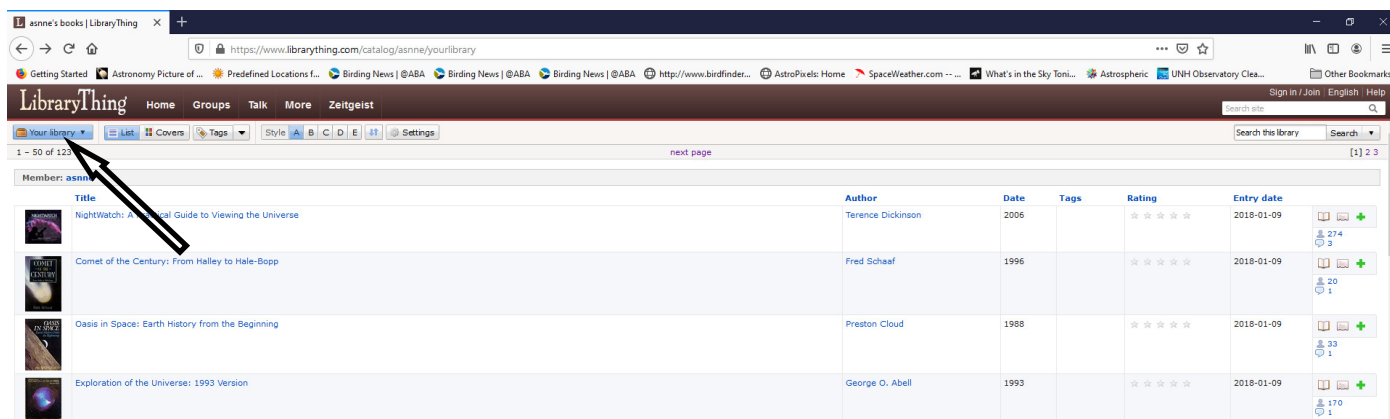
Get off turnpike at exit 32, (Biddeford) turn right on Rt 111. Go 5 miles and turn left on Rt 35. Go 2 miles on Rt 35 over Kennebunk River to very sharp 90 degree left turn. The entrance to the Starfield Observatory site is at the telephone pole at the beginning of the large field on the left. Look for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

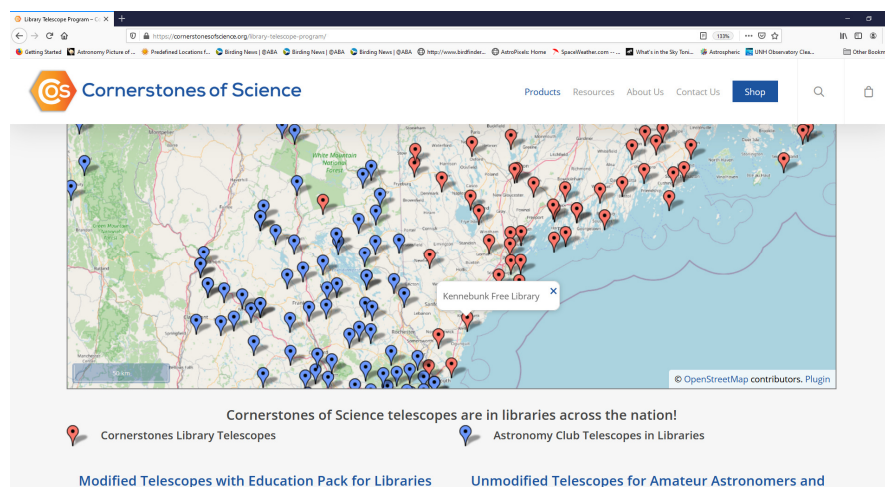
# Astronomy Club & Library Resources

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.



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 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

**2023 Membership Registration Form**

(Print, fill out and mail to address above)

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

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

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

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

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

Membership (check one):

Individual \$35 \_\_\_\_\_ Family \$ 40 \_\_\_\_\_ 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 \_\_\_\_\_

