

Skylights

Newsletter of the Astronomical Society of Northern New England



FEB 2025

**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 February

By *Bernie Reim*

The month of February is named for the word Februa, which are the ancient Roman rites of purification. We can all do some of that this month as we look up into the cold mid-winter skies to ponder what is really out there beyond the earth and to get more in tune with both the terrestrial and celestial wonders that we don't understand yet.

We have already reached the mid-point of winter every year on Groundhog Day on the second of this month. This is one of 4 cross-quarter days each year, marking the halfway points of our 4 seasons. Groundhog Day is also known as Candlemass, which is a Christian Holiday.

The highlights for this second month of the year include a continuation of the great planetary parade in our evening skies. Six of the seven planets will all be visible in the early evening sky, nicely lined up along the ecliptic which marks the plane of our solar system. They are concentrated towards the western half of our sky. The only remaining one, Mercury, will join the parade late this month very low in the western sky close to Saturn.

We will lose Saturn at the end of the month and Mars will end its retrograde motion on the 23rd. The moon will cross directly through the Pleiades open star cluster and a faint comet will be visible in Leo with a good telescope. There will be several nice conjunctions with the moon and planets this month forming some nice shapes since there are so many planets close together now. The remaining good highlight this month will be the zodiacal light. It will be best visible during the last week this month when the moon is close to new.

The word planet comes from the Greek word "planetes" which means wanderer. The planets seem to be wandering amongst the zodiac constellations as if they are lost, but they are actually very predictable for hundreds of thousands of years simply following some basic laws of math and physics as discovered by Isaac Newton in 1687, 78 years after the telescope was invented.

The planets are always aligned since they are all in the same plane of the solar system and moving in the same direction, but the unusual part is that they are all visible now at the same time in the early evening sky. You would need a telescope or good pair of binoculars to see Uranus and Neptune. That happens about every 5 or 10 years. They could also all be lined up in our morning sky or they could even be lined up in order from Mercury out to Neptune, which just happened in June about 5 years ago.

The exact positions of the planets in our night sky in relation to the stars and the moon is somewhat different every single night, so every single night is really unusual and special, but that by itself does not make it any more interesting than any other night. What is really exciting about every clear night is that we are here at all amongst the planets and stars and galaxies and able to contemplate them, even though there is so much we don't know about them yet.

Mars has retrograded back into Gemini now. Notice that this bright orange object has gone past forming a line with Castor and Pollux in Gemini, instead forming a triangle with these two stars. The red planet will end its retrograde or westward motion against the background of stars on the 23rd.

After that it will return to its normal eastward motion for the next two years until its next opposition in 2027. Mars had become as bright as the brightest star in our sky, Sirius in Canis Major back on January 16. Notice that it is slowly fading out a little each night now, but it will still be much brighter than usual for the rest of this winter and into spring.

Mars even went through a fairly rare occultation by the moon last month on the 13th. It was cloudy here, but I did catch a live feed of Mars popping back out from behind the moon around 10 pm from a telescope at Griffith Park in LA, currently under siege by those horrific wildfires that we are still battling. Anytime that a dramatic and photogenic event such as that one is not visible from your own location or you happened to experience cloudy or worse skies, remember that you can always catch a live feed of that event from somewhere on Earth. Slooh.com, the San Francisco Exploratorium, the Weather Channel, and National Geographic all run excellent video feeds along with many accomplished amateurs with the right equipment.

If you can get access to a telescope, you will be able to see some features on Mars now and for the next month or so while it is still fairly close to Earth. I have seen dark markings, both polar icecaps, a bit of the thin atmosphere on Mars which is only 1% of ours, and some people in our astronomy club have even seen both moons of Mars, Phobos and Deimos, when Mars was at its closest in 60,000 years back on August 27 of 2003 when it was only 35 million miles away. This time it only got as close to us as 60 million miles on January 16.

Now we continue our westward journey through this great parade of planets all wanting to be seen in our evening sky. The next one we encounter is Jupiter, one constellation to the west of Gemini.

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What's Up "Continued from page 1"

The King of the planets is now in Taurus, where it will be for one full year. Jupiter will end its own retrograde motion on February 4. Then it will seem to reverse direction in Taurus moving away from Aldebaran and the Pleiades again and towards Mars in Gemini. Jupiter was at opposition on December 7 of last year and it spends about 2 months on either side of its opposition in retrograde each year. Notice that you can see all 4 of Jupiter's large Galilean moons with just a good pair of binoculars.

Then there is a large gap until we reach Venus in Pisces, but the planets Uranus and Neptune, the last two planets in our solar system are hidden there, visible only in a telescope or good pair of binoculars. You would encounter Uranus first in Aries, near where the sun was back on April 8 of last year during that spectacular total solar eclipse where Maine had the best weather in all of North America against all the odds!

I saw that one and shared the unique experience with about 5,000 other people from the Height of the Land overlook in Rangeley, Maine. At an altitude of 1700 feet, I could see the moon's shadow starting to sweep over the dramatic landscape fringed with mountains and dotted with frozen lakes for about 20 seconds before it engulfed all of us like a tidal wave of pure darkness. The two brightest planets, Venus and Jupiter, became instantly visible along with a few of the brighter stars. Two feet of freshly fallen spring snow covered the landscape forming a wonderful terrestrial backdrop for the marvelous celestial event going on above us.

To stake out a good spot in this prized real estate, we had to get there early in the morning, about 8 hours before the eclipse even started in the afternoon. It was very peaceful and exciting at the same time to get to stare into the heart of nature at such a beautiful scene right on the Appalachian Trail for 8 hours. The time passed quickly as I talked to many people from around the world who gathered there peacefully and in harmony to share in this unifying show of nature's immense strength and power. People had cameras and telescopes set up, they were playing all kinds of games, several were playing different musical instruments or drawing the wonderful scenery to understand and remember it better. It was a true microcosm of the best the world has to offer and how well we can all get along when our focus is not on ourselves, but on nature's beauty that we are all part of or we could not even have become aware of it.

An eerie 360-degree sunset became visible all around us from this great vantage point for a couple of very short minutes as our brilliant life-giving sun was completely covered by the invisible new moon. We were right at the bottom of the 240,000-mile-long shadow cone of the moon as it barely reached the earth as it swept all the way from Mexico to Canada in about 2 hours at about 2,000 miles per hour. This shadow that is always there but not usually intersecting with the earth then lifted off again over Newfoundland just a few minutes after it swept over us in central Maine. The tenuous and ephemeral corona or atmosphere of the sun, extending many sun diameters beyond the normally visible 864,000 mile in diameter disk, blazed forth in all of its normally hidden glory for 120 seconds. Several brilliant deep crimson red solar prominences because visible and the sun and the whole landscape looked like nothing anyone had ever seen before.

I was lifted right off the earth to the edge of space, 62 miles up where the sky turns black since there are no more molecules of air to scatter out the short blue wavelengths of light from the sun. I had a glimpse into the inner workings of the solar system and got a sense of the vast scale and the immense and majestic motions always happening there, even though everything in the sky just looks static and fixed for us. Nothing could be further from the truth. It is ironic that the real beauty and power of our sun only becomes visible to humans for a few very short minutes every couple of years or so only when the sun gets perfectly and completely covered by the moon. We have to wait 55 years until 2079 to see that again over Maine, but the next total solar eclipse visible on Earth will happen over Greenland, Iceland, and Spain on August 12 of 2026.

Now we go back down to Earth to continue our little planetary journey from our limited viewpoint on the surface, while being more aware at the same time of what is really going on just above is in our solar system. The next planet we encounter one more constellation to the west in Pisces the Fish, is Venus. The slender waxing crescent moon will be just half a degree to the west of our

sister planet on the first of the month. Venus is about 30% illuminated by the sun now and looks like a small version of a waning crescent moon through a telescope.

Then we encounter the invisible last planet in our solar system, Neptune, also in Pisces. At nearly 3 billion miles away, or over 4 hours at the speed of light, Neptune is 4 times larger than Earth and takes 165 years to orbit the sun one time while traveling at 3.4 miles per second or about 7 times faster than a high velocity bullet. By comparison, we are constantly orbiting the sun at 18.6 miles per second, or 67,000 miles per hour, or 5 times faster than Neptune.

Now we are back to visible planets for the last two in our journey through the entire solar system from our own rapidly moving spherical platform, spaceship Earth. Saturn is rapidly sinking low in the western evening sky in Aquarius. Through a telescope you would notice that its rings are very thin now, since they are tilted nearly edge-on to our viewpoint. They will disappear completely next month, but Saturn will also be in conjunction with the sun, so we won't see it for several months until the ringed planet returns to our morning sky.

The last of our 7 -planet parade all visible in our evening sky at the same time is Mercury, also in Aquarius, our first planet in order from the sun. Mercury can only be seen for the last 4 days of this month very low in the western sky right after sunset just one and a half degrees past Saturn. It is 8 times fainter than Saturn which is about 200 times fainter than Venus. You will probably need binoculars and a perfect western horizon to see these last 2 planets.

The last good highlight this month is the zodiacal light. This phenomenon is visible for a couple of months each year when the angle of the ecliptic is steepest with the horizon. That happens about an hour after sunset in late winter and about an hour before sunrise in the middle of fall. This is also called the false dawn or false dusk. It is composed of trillions of tiny dust particles from comets and asteroids forming a torus around the ecliptic plane of our solar system. We can see it when the sunlight reflects off these particles, forming a pyramid-shaped cone of very faint and subtle light extending from the horizon to about 45 degrees high in the western sky about an hour after sunset. Even though there are no meteor showers now until the Lyrids on April 22, which is also Earth Day, we can actually see the combined effect of all of the dust from comets from thousands of years ago in this subtle and eerily glowing cone of faint light for a few nights twice a year.

Feb.1. The moon and Venus are just two degrees apart this evening.

Feb.4. Clyde Tombaugh was born on this day in 1906. He would discover Pluto on Feb. 18 of 1930. As of 2006 Pluto is no longer a full-fledged planet.

Feb.5. First quarter moon is at 3:03 am EST.

Feb.6.The moon is near Jupiter and Aldebaran in Taurus this evening.

Feb.8. Jules Verne was born on this day in 1828.

Feb.9. The moon is near Mars in Gemini tonight.

Feb.12. Full moon is at 8:55 am. This is also called the Snow or Hunger moon.

Feb.14. The Swiss astronomer Fritz Zwicky was born on this day in 1898. He was the first person to discover that there had to be something like dark matter to hold galaxies together way back in 1933.

Feb.15. Galileo was born on this day in 1564.

Feb.19. Copernicus was born on this day in 1473.

Feb.20. George Smoot was born on this day in 1945. He won the Nobel prize in physics in 2006 for his work with the cosmic background radiation, proved that cosmology is indeed a precise science. John Glenn became the first American to orbit the earth on this day in 1962. Last quarter moon is at 12:43 p.m.

Feb.23. Supernova 1987a was discovered on this day in the Tarantula Nebula in the Large Magellanic cloud, a satellite galaxy of the Milky Way located about 170,000 light years away. Pioneer 10 left the solar system on this day in 1990.

Feb.24. Mercury and Saturn are just over one degree apart low in the western evening sky right after sunset.

Feb.27 New moon is at 7:46 p.m. ★

Moon Phases

Feb 5
First Quarter

Feb 12
Full

Feb 20
Last Quarter

Feb 27
New

Moon Data

Feb 1
Venus 2° north
of Moon

Neptune 1.4° south
of Moon

Moon at perigee

Feb 5
Uranus 5° south
of Moon

Feb 6
Jupiter 5° south
of Moon

Feb 9
Mars 0.8° south
of Moon

Feb 17
Moon at apogee

Feb 28
Mercury 0.4° north
of Moon

Observer's Challenge – February, 2025

by Glenn Chaple

NGC 1964 – Spiral Galaxy in Lepus
(Magnitude 10.8; Size 5.6' X 1.8' [photographic], 1.6' X 0.6' [visual])

This month's Observer's Challenge takes us below the celestial equator to the constellation Lepus and the spiral galaxy NGC 1964. Discovered by William Herschel on November 20, 1784, it bears the Herschel Catalog identification H21⁴, his 21st Class 4 (Planetary Nebulae) entry. He described it as "Very small. stellar, very bright nucleus and very faint chevelure not quite central." "Chevelure" in Herschel-speak was the hazy glow surrounding a comet or star, which explains why he misclassified it as a planetary nebula.

NGC 1964 is located at the 2000.0 coordinates RA 5^h33^m21.8^s and DEC -21°56'43", about 1½ degrees southeast of the 3rd magnitude star beta (β) Leporis. This southerly location means that NGC 1964 transits the sky low above the southern horizon when viewed from mid-northern latitudes. The resulting atmospheric extinction dims the galaxy more than if it were at a higher altitude.

NGC 1964 might be considered to be two galaxies in one. Visual observers will see the oval-shaped glow of its nucleus which spans some 1.6 by 0.6 arc-minutes while imagers will capture that, plus the surrounding spiral arms which increase the galaxy's overall size to 5.6 by 1.8 arc-minutes. NGC 1964 has been glimpsed with apertures as small as 4 inches from rural dark-sky locations, but twice that aperture is recommended for suburban sites.

Most sources cite a distance to NGC 1964 of 65 to 70 million light years. An inhabitant of a planet in that galaxy and equipped with highly advanced optical equipment would be able to view the earth around the time of the extinction of the dinosaurs. With a diameter of around 100,000 light years, NGC 1964 is approximately the same size as our Milky Way.

"Continued on page 4"

NGC 1964 Finder Chart (the skylive.com)



“Continued on page 5”

NGC 1491 Image

Mario Motta, MD (ATMoB)

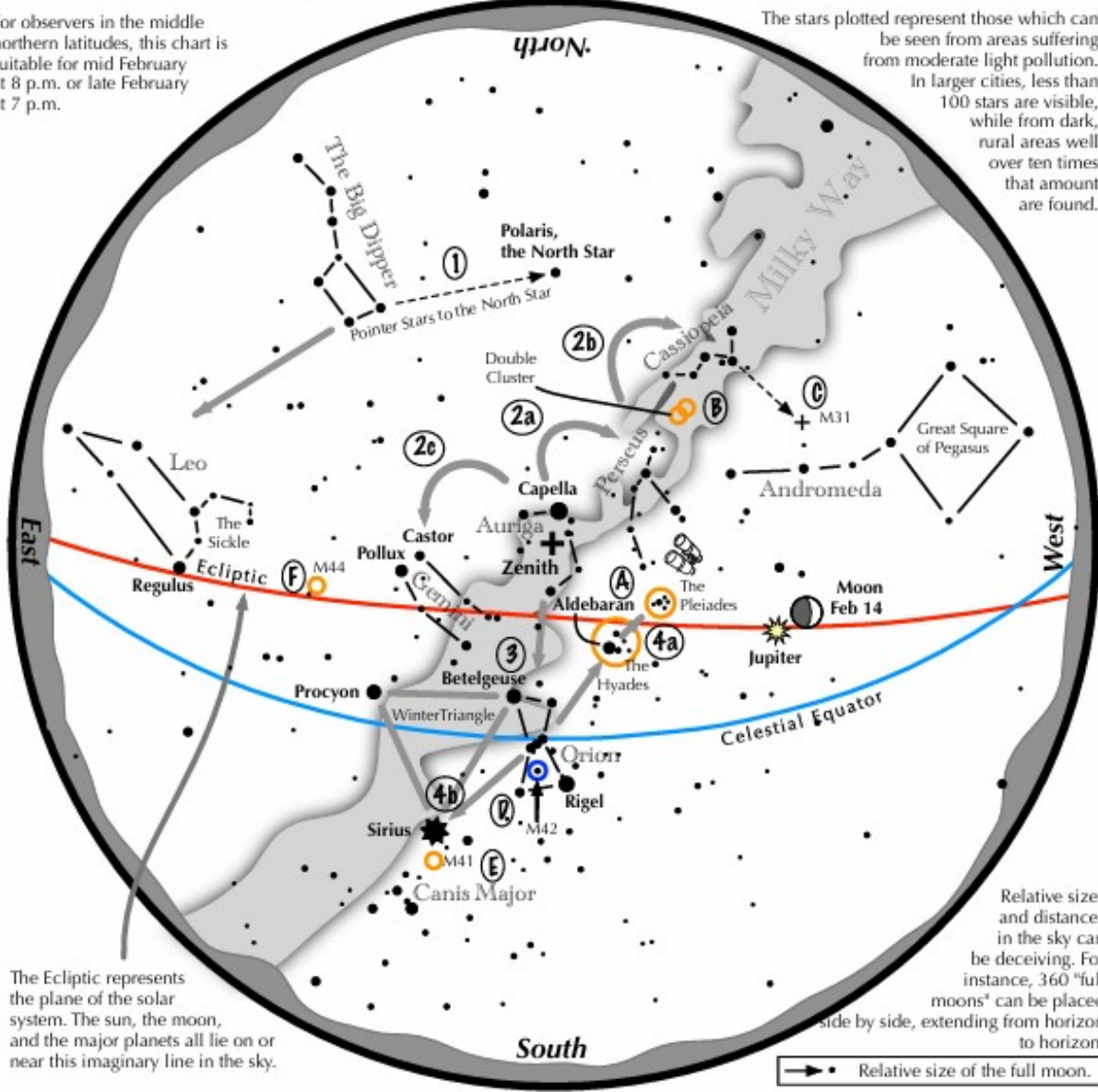
“Taken with my 32 inch F6 telescope, Lum filter, 16 subs, for a total of 80 minutes imaging stacked then processed in pixinsight. I used only the Lum filter here, as it was not above the horizon very long, and only had one night usable, thus could not do it color.”



Navigating the mid February Night Sky

For observers in the middle northern latitudes, this chart is suitable for mid February at 8 p.m. or late February at 7 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.

→ • Relative size of the full moon.

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

- 1 Above the northeast horizon rises the Big Dipper. Draw a line from its two end bowl stars upwards to the North Star.
- 2 Face south. Overhead twinkles the bright star Capella in Auriga. Jump northwestward along the Milky Way first to Perseus, then to the "W" of Cassiopeia. Next jump southeastward from Capella to the twin stars of Castor and Pollux in Gemini.
- 3 Directly south of Capella stands the constellation of Orion with its three Belt stars, its bright red star Betelgeuse, and its bright blue-white star Rigel.
- 4 Use Orion's three Belt stars to point northwest to the red star Aldebaran and the Hyades star cluster, then to the Pleiades star cluster. Travel southeast from the Belt stars to the brightest star in the night sky, Sirius, a member of the Winter Triangle.

Binocular Highlights

- A: Examine the stars of two naked eye star clusters, the Pleiades and the Hyades.
- B: Between the "W" of Cassiopeia and Perseus lies the Double Cluster.
- C: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.
- D: M42 in Orion is a star forming nebula. E: Look south of Sirius for the star cluster M41. F: M44, a star cluster barely visible to the naked eye, lies southeast of Pollux.



Astronomical League www.astroleague.org/outreach; duplication is allowed and encouraged for all free distribution.

Principal Meteor Showers in 2025

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

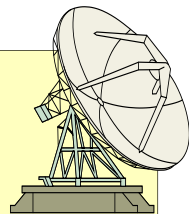
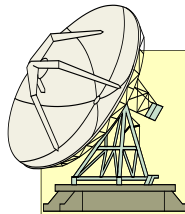
December 22
Ursids

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

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: <https://www.cafepress.com/shop/ASNNE/products>



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

Contact David Bianchi 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 to find local clubs, events, and more!

February Night Sky Notes: How Can You Help Curb Light Pollution?

By Dave Prosper

Updated by Kat Troche



Before and after pictures of replacement lighting at the 6th Street Bridge over the Los Angeles River. The second picture shows improvements in some aspects of light pollution, as light is not directed to the sides and upwards from the upgraded fixtures, reducing skyglow. However, it also shows the use of brighter, whiter LEDs, which is not generally ideal, along with increased light bounce back from the road. Image Credit: [The City of Los Angeles](https://www.cityoflosangeles.org/)

Light pollution has long troubled astronomers, who generally shy away from deep sky observing under full Moon skies. The natural light from a bright Moon floods the sky and hides views of the Milky Way, dim galaxies and nebula, and shooting stars. In recent years, human-made light pollution has dramatically surpassed the interference of even a bright full Moon, and its effects are now noticeable to a great many people outside of the astronomical community. Harsh, bright white LED streetlights, while often more efficient and long-lasting, often create unexpected problems for communities replacing their older streetlamps. Some notable concerns are increased glare and light trespass, less restful sleep, and disturbed nocturnal wildlife patterns. There is increasing awareness of just how much light is too much light at night. You don't need to give in to despair over encroaching light pollution; you can join efforts to measure it, educate others, and even help stop or reduce the effects of light pollution in your community.

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Amateur astronomers and potential citizen scientists around the globe are invited to participate in the [Globe at Night \(GaN\)](#) program to measure light pollution. Measurements are taken by volunteers on a few scheduled days every month and submitted to their database to help create a comprehensive map of light pollution and its change over time. GaN volunteers can take and submit measurements using multiple methods ranging from low-tech naked-eye observations to high-tech sensors and smartphone apps.

Globe at Night citizen scientists can use the following methods to measure light pollution and submit their results:

- Their own smartphone camera and dedicated app
- Manually measure light pollution using their own eyes and detailed charts of the constellations
- A dedicated light pollution measurement device called a Sky Quality Meter (SQM).

The free GaN [web app](#) from any internet-connected device (which can also be used to submit their measurements from an SQM or printed-out star charts).

Night Sky Network members joined a telecon with Connie Walker of Globe at Night in 2014 and had a lively discussion about the program's history and how they can participate. The audio of the telecon, transcript, and links to additional resources can be found on their [dedicated resource page](#).



Light pollution has been visible from space for a long time, but new LED lights are bright enough that they stand out from older streetlights, even from orbit. Astronaut Samantha Cristoforetti took the above photo from the ISS cupola in 2015. The newly installed white LED lights in the center of the city of Milan are noticeably brighter than the lights in the surrounding neighborhoods. Image Credit: [NASA/ESA](#)

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The [International Dark-Sky Association \(IDA\)](#) has long been a champion in the fight against light pollution and a proponent of smart lighting design and policy. Their website provides many resources for amateur astronomers and other like-minded people to help communities understand the negative impacts of light pollution and how smart lighting policies can not only help bring the stars back to their night skies but also make their streets safer by using smarter lighting with less glare. Communities and individuals find that their nighttime lighting choices can help save considerable sums of money when they decide to light their streets and homes "smarter, not brighter" with shielded, directional lighting, motion detectors, timers, and even choosing the proper "temperature" of new LED light replacements to avoid the harsh "pure white" glare that many new streetlamps possess. Their pages on [community advocacy](#) and on [how to choose dark-sky-friendly lighting](#) are extremely helpful and full of great information. There are even [local chapters of the IDA](#) in many communities made up of passionate advocates of dark skies.

The IDA has notably helped usher in "[Dark Sky Places](#)", areas around the world that are protected from light pollution. "[Dark Sky Parks](#)", in particular, provide visitors with incredible views of the Milky Way and are perfect places to spot the wonders of a meteor shower. These parks also perform a very important function, showing the public the wonders of a truly dark sky to many people who may have never before even seen a handful of stars in the sky, let alone the full glorious spread of the Milky Way.

More research into the negative effects of light pollution on the [health of humans](#) and the [environment](#) is being conducted than ever before. Watching the nighttime light slowly increase in your neighborhood, combined with reading so much bad news, can indeed be disheartening! However, as awareness of light pollution and its negative effects increases, more people are becoming aware of the problem and want to be part of the solution. There is even an episode of PBS Kid's [SciGirls](#) where the main characters help mitigate light pollution in their neighborhood!

Astronomy clubs are uniquely situated to help spread awareness of good lighting practices in their local communities to help mitigate light pollution. Take inspiration from [Tucson, Arizona](#), and other dark sky-friendly communities that have adopted good lighting practices. Tucson even reduced its skyglow by 7% (as of 2018) after its own [citywide lighting conversion](#), proof that communities can bring the stars back with smart lighting choices.

Originally posted by Dave Prosper: November 2018

Last Updated by Kat Troche: January 2025

Point and Shoot Camera Astro-Imaging (no telescope)

Canon PowerShot SX50 HS

Submitted By Paul Kursewicz

Fish Head Nebula (IC 1795)

RAW Mode, FL 1200mm, f/4, ISO 1600, 46 x 3min, 10-5-24



The **Fish Head Nebula (IC 1795 and or NGC 896)** is located in the constellation Cassiopeia, approximately 6,000 light-years from Earth, and is adjacent to the much larger Heart Nebula. It's nicknamed the Fish Head because its shape resembles that of the head of a fish (in my image facing/swimming left). The Nebula is located in the Perseus Arm of the Milky Way. And oh, by the way, it's 70 light-years across making it the biggest fish that I have ever caught!!!

Point and Shoot Camera Astro-Imaging (no telescope)

Canon PowerShot SX50 HS

Submitted By Paul Kursewicz

Lunar Occultation of the Planet Mars

Wide Field Image: focal length 42mm / Close-up Image: focal length 1142mm (1-13-25)

9:15 PM

9:17 PM



On Monday, January 13th the full “Wolf Moon” occulted Mars (which was at its brightest). Unfortunately, clouds prevented me from seeing Ingress. At 9:15 pm the last bit of a clear sky opening started to close up. At 9:17 pm I zoomed into the Moon and took my last Ingress shot. Mars is located at its lower left (did not have time to zoom in closer). Now here’s the good news, Egress was perfectly clear. That allowed me to see and image Mars reappearing from behind the Moon (see the following page).

“Continued on page 13 ”

Point and Shoot Camera Astro-Imaging (no telescope)

Canon PowerShot SX50 HS

Submitted By Paul Kursewicz

Lunar Occultation of the Planet Mars

Auto Focus, JPEG Mode, FL 4800mm (Digital Zoom), f/6.5, ISO 400, 1/800 sec, 1-13-25

10:39:50 PM



10:40:46 PM



On this night Mars was approximately 60 million miles away (250 times more distant than the Moon), and reached its closest approach to Earth on January 12th. And on the 16th it reached opposition bringing it opposite the sun. To get images like these I had my camera attached to my camera tracker, which was attached to a fixed tripod. Auto focus worked perfectly, focusing on the Moon and at the same time getting good focus on Mars. Notice the southern polar ice cap on Mars. And, some of its dark surface features. I zoomed the camera's lens to its maximum focal length — 4800mm digital zoom.

Point and Shoot Camera Astro-Imaging (no telescope)

Canon PowerShot SX50 HS

Submitted By Paul Kursewicz

Saturn & Venus Conjunction

JPEG Mode, FL 123mm, f/5, ISO 6400, 1/4 sec, 1-17-25 [Handheld Night Scene]



Around 5:40 pm I took this image of Saturn & Venus. Venus was easily visible during bright twilight, but Saturn did not appear until the sky darkened more. The pair was nearly 30° above the southwest horizon, with the “Evening Star” 2.3° to the right of the “Ringed Planet.” Although the planets are close together in the constellation Aquarius, they are nearly 900 million miles apart in space. Venus revolves around the sun every 584 days, while Saturn’s year is nearly 30 Earth years. The under-exposed star to the lower right of the planets is Hydor, 73 Aqr, a magnitude 3.70 star.

Club Meeting & Star Party Dates

Date	Subject	Location
Feb 7	<p><u>ASNNE Club Meeting:</u></p> <p>Business Meeting starts prior to Club meeting.</p> <p>Club Meeting (in house & on Zoom): 7:30-9:30PM</p> <p>Guest Speaker: No guest speaker this month. Topic TBD.</p> <p>Bernie Reim - "What's UP"</p> <p>Astro Shorts: (news, stories, jokes, reports, questions, photos, observations etc.)</p>	The New School, Kennebunk, Me.
Last Month	<p>Last month we met at The New School and also had a Zoom meeting. Paul Kursewicz gave a presentation on his visit to NASA's Space Center Houston, Johnson Space Center, and the U.S. Rocket & Space Center located in Huntsville, AL. Bernie gave his What's Up. Astro shorts were shared.</p>	
<u>TBD</u>	Club/Public Star Party: TBD	Talmage Observatory at Starfield West Kennebunk, Me.

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

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:

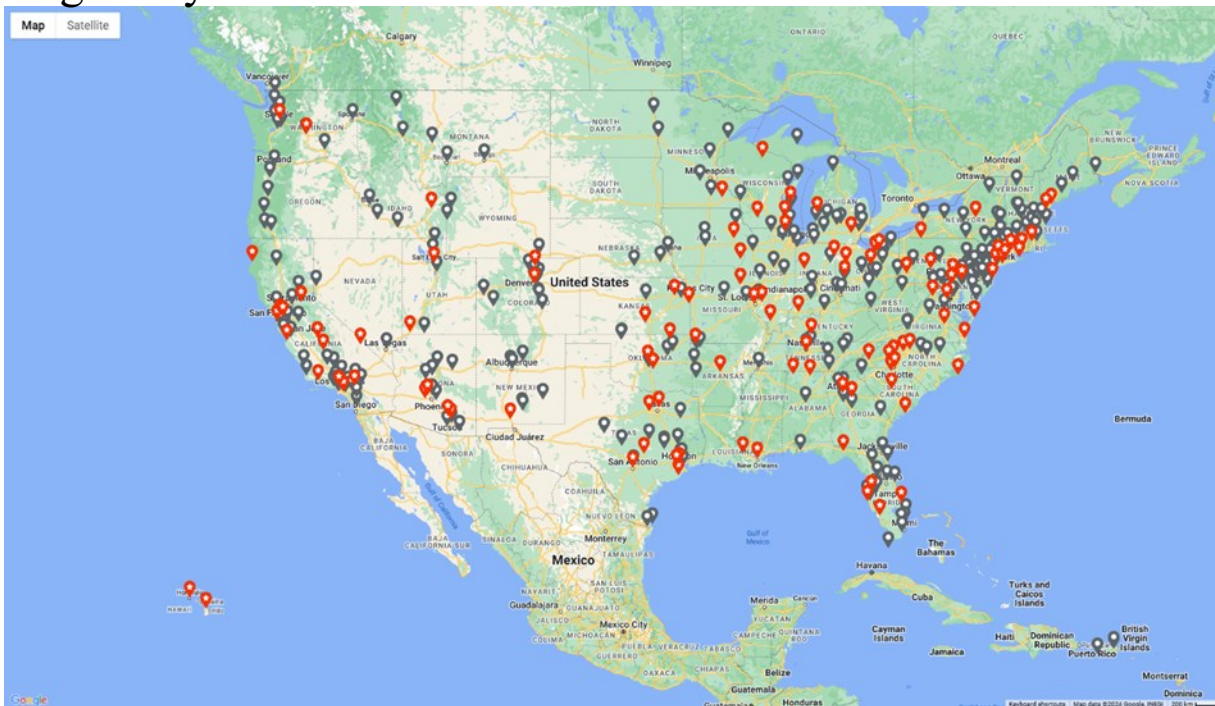
Get off the turnpike at exit 25 in Kennebunk. After toll both turn right on Rt 35. Go up over the turnpike and immediately turn right on Rt 35. About 4 miles along you will crest a hill and see a large field on your right. Continue until you reach the end of the field. Turn right into the Starfield Observatory 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.

NSN also hosts archived video trainings on these toolkits and other topics via its YouTube channel and a [monthly webinar series](#) with scientists from various institutions worldwide. Lastly, a monthly segment called [Night Sky Notes](#) is produced for clubs to share with their audiences via newsletters and mailing lists.

Sharing the Universe

In 2007, a National Science Foundation grant funded further research into astronomy club needs. From that came three club resources: the [Growing Your Astronomy Club](#) and Getting Started with Outreach video series, an updated website with a national calendar, and club and event coordination. Now, you can find [hundreds of monthly events](#) nationwide, including virtual events you can join from anywhere.

Night Sky Network: Current and Future

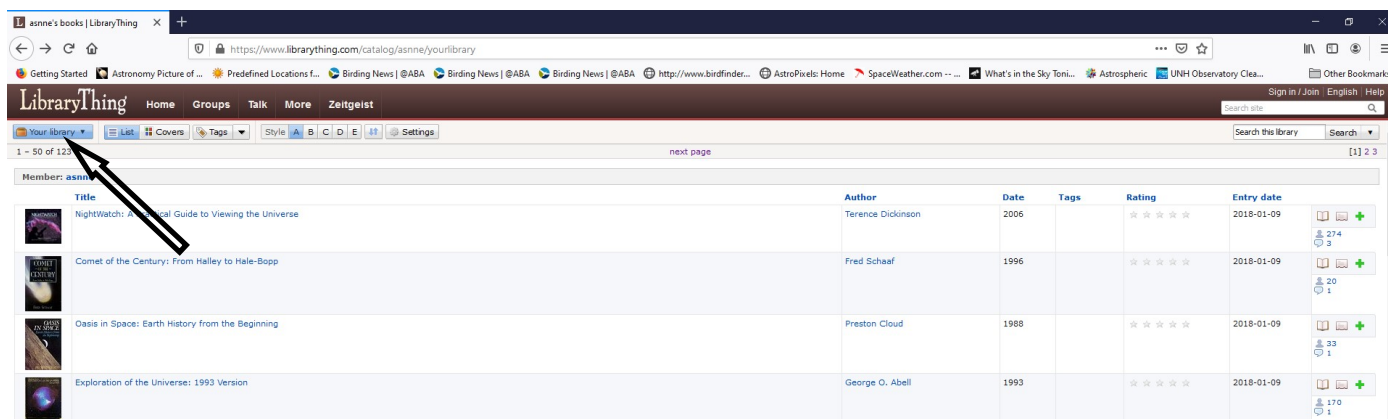


Map of Night Sky Network clubs within the United States as of November 2024

As of November 2024, NSN has over 400 clubs as far north as Washington State, west as Hawaii, and south as far as Puerto Rico. Astronomy clubs worldwide share the wonder of the day and night sky with their communities, and the Night Sky Network is happy to support US clubs with public engagement tools. Through their outreach efforts, member clubs have reached more than 7 million people to date, and the community is still going strong. Find an upcoming star party near you on our [new public website](#).

Astronomy Club & Library Resources

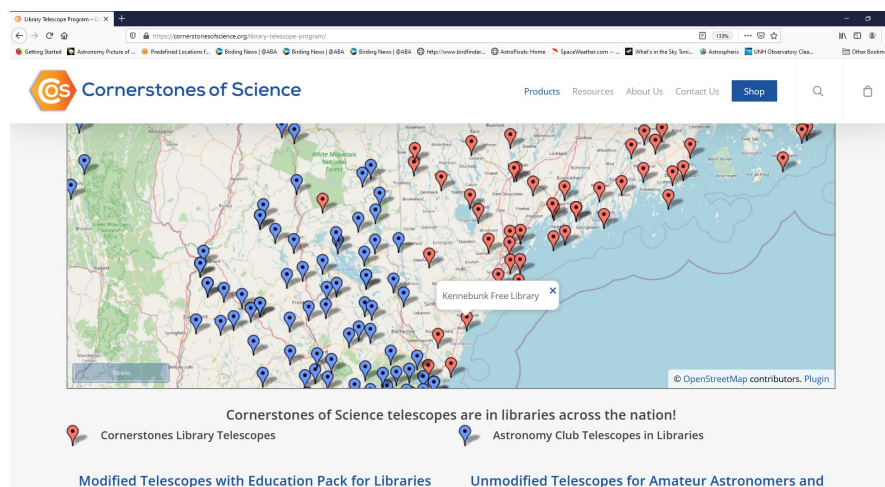
Our club has a library of astronomy books which are stored at The New School in Kennebunk, Maine (our monthly club meeting location). To request a book(s), contact one of the club officers. A listing of books is provided here: <https://www.librarything.com/profile/asmne> . After clicking on the link, 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.



Title	Author	Date	Tags	Rating	Entry date
NightWatch: A Practical Guide to Viewing the Universe	Terence Dickinson	2006		☆☆☆☆☆	2018-01-09
Comet of the Century: From Halley to Hale-Bopp	Fred Schaaf	1996		☆☆☆☆☆	2018-01-09
Oasis in Space: Earth History from the Beginning	Preston Cloud	1988		☆☆☆☆☆	2018-01-09
Exploration of the Universe: 1993 Version	George O. Abell	1993		☆☆☆☆☆	2018-01-09

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/>



Cornerstones of Science telescopes are in libraries across the nation!

- Cornerstones Library Telescopes
- Astronomy Club Telescopes in Libraries

Modified Telescopes with Education Pack for Libraries Unmodified Telescopes for Amateur Astronomers and

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

2025 Membership Registration Form

(Print, fill out and mail to address above) or Use PayPal via 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 _____

