Skylights

Newsletter of the Astronomical Society of Northern New England

MAY2024

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 May

By Bernie Reim

The month of May is named after Maia, the Roman goddess of the earth who is also the mother of Mercury and the daughter of Atlas. We are halfway into spring now and our landscape is just beginning to be transformed by the hue of fresh grass and the tender light green leaves appearing once again on the trees. Many more birds will return this month and the spring peepers and wood frogs are getting louder as they add their sonic contributions to the symphony involving all of your senses that is the reawakening earth in spring.

Many people attained a much wider perspective on the great beauty of this natural symphony as it extends out to the moon, sun, and planets in our solar system on April 8. About 60 million people experienced this much awaited total solar eclipse and over 30 million people already lived right in its narrow path. Maine was very lucky and had some of the best weather in the whole country for this epic and rare event.

You can really see how the ancients developed their powerful mythological characters to help explain what they observed but could not understand. Now we know most of the science behind what causes eclipses and how the planets orbit and how the sun shines, but that does not diminish in any way the pure magic one experiences when you make the effort to personally enter that perfect alignment of the sun, moon, and earth.

During those few fleeting moments when the earth suddenly enters the darkness during a normal bright sunny day a new window on the entire solar system opens as you finally intuitively understand what is really happening with the constant motions of the planets and our moon and how the sun is always interacting with the earth as it is continually maintaining and sustaining all forms of life on our precious planet. A great sense of gratitude overwhelmed me for everything that all of nature on Earth is always doing and providing for us.

I felt tiny and huge at the same time as every cell in my body became alive with this vision of the interconnectedness of all of nature and all of humanity on earth, since we are part of nature and the universe. I was lifted right above the earth and the wonderful scenic overlook in Rangeley where I spent 8 great hours of making new friends and conversing with a few of the 5,000 or so people that I shared that scenic spot with for that unforgettable day. There is no reason that all 8 billion of us currently sharing this little planet could not get along much better once we understand our own true nature and how we move in space and the great energies always surrounding us.

I watched an eclectic village grow all around me on that scenic overlook, a true microcosm of the humans on Earth. Everyone shared what they had, whether it was knowledge or food or equipment or joy for being here at the right place and the right time with perfect weather and sharing such a memorable experience with so many others.

Watching this celestial spectacle unfold all day long really gave me a good sense of how the earth rotated and moved through space and how the sun moved from east to west due to our rotation at about the speed of sound even as the moon was continually moving from west to east at about three times the speed of sound rushing towards its inevitable yet extremely brief encounter with the sun roughly every year and a half.

This great spot with an altitude of 1700 feet and about 50 miles of visibility to the west across the mountains and lakes was also right on the Appalachian Trail, just 200 miles from its final destination on Mt. Katahdin, another perfect site for viewing this eclipse in Maine. Each one of us is on a trail of our own life's journey, so it was fitting that about 5,000 of these trails would intersect right at this time and place on one of this countries' greatest trails as the moon, earth, and sun also intersected on their own journeys on their trails through space.

Just as the Appalachian Trail shows off some of the beauty of the eastern United States from Georgia to Maine on Earth, this total solar eclipse showed off a little of the beauty of our sun and moon and the two

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

brightest planets in our solar system, Venus and Jupiter.

The anticipation grew palpable as the big moment approached. The sun was slowly being covered by the moon for over an hour, but then everything happened very quickly. All the shadows became super sharp, shadow bands from the sunlight's interaction with our atmosphere, the same effect that makes stars twinkle at night snaked and rippled across the gleaming white snow, and I could see the lower end of the moon's 240,000 mile-long tapered shadow cone racing in from the west covering those 50 miles in just over one minute, turning the whole landscape into an eerie and alien sunset all around us as most of the light and energy disappeared from the earth.

A deafening roar of appreciation went up from the crowd as the diamond ring flashed from the sun, infinitely more precious that all the diamonds on earth, and plunged everything and everyone into darkness. Our source of life then seemed to turn into an all-devouring black hole for a few minutes, demanding everyone's complete attention as the expansive solar corona or halo blazed forth reaching 4 million miles into space.

All of space and time completely disappeared and I felt like I could reach out and touch this wonderful four and a half billion year old source of all life on earth for just a moment. I stared right into the heart of this evanescent ever-changing living corona with my binoculars for a few minutes to enhance the experience and better appreciate the nature of this mysterious two million degree atmosphere of the sun that is always present but seldom seen. Two brilliant deep carmine red prominences extended 10 to 15 earth diameters into space from around the limb of the sun. These are not solar flares, which are quite rare. Solar prominences are always there and can be seen anytime with a hydrogen alpha filter even when the sun is not being eclipsed by the moon.

Then, just as suddenly as it began, it was all over. A blinding flash of brilliant sunlight pierced the darkness, the second diamond ring on the other side as the moon continued on its journey past the sun. All the surroundings returned nearly back to normal even though the sun was still 99% covered. A little sunlight goes a long way. Most of the people immediately started packing up and vacated this beautiful scenic overlook with nothing left but a few pictures that can never even begin to capture such an epic experience. Everyone present that day did attain indelible memories of the greatest spectacle that nature can throw at us without any damaging effects like volcanoes, earthquakes, tidal waves, hurricanes and tornadoes.

If you missed this all-consuming and enlightening natural spectacle for any reason, you can see another version of it in just over two years over parts of Greenland and Iceland, Portugal and northern Spain near sunset as the moon's shadow cone will lift off the earth again over the middle of the Mediterranean Sea. This will happen on Wednesday, August 12 of 2026 with the Perseid meteor shower thrown in for good measure as a bonus.

All the normal highlights of any given month will always pale in comparison to such a fairly rare event like a total solar eclipse, but I will cover a few of them here. All the planetary action returns to the morning sky as we will lose Jupiter in the evening sky just a few days into May. The King of the planets, ten times bigger than Earth and still ten times smaller than the sun, will be in conjunction with the sun on May 18 and then it will just reappear in the morning sky next month.

Venus, which was visible just to the right and below the sun when it was covered during the eclipse at about the same distance that Jupiter was visible to the left and above the sun, is now also too close to the sun to be visible at night. It will approach superior conjunction with the sun in mid-June when it is fully illuminated but not at its brightest since it is so much farther away than when it reached inferior conjunction. Then Venus will return to our evening sky in July.

Saturn will be the first to rise in the morning sky about an hour before sunrise in Aquarius followed closely by Mars in Pisces. Then keep following the ecliptic and you will spot Mercury low on the horizon. A very slender waning crescent moon will join Mercury on May 6 about 40 minutes before sunrise. Neptune is half way between Saturn and Mars now, but you would need a small telescope or good binoculars to see it.

Comet 13P/Olbers should reach 8th magnitude this month, comparable to the Crab Nebula in Taurus which will be close this comet. It will also pass through Auriga in the upper part of the Winter Hexagon and very close to some nice open star clusters. This comet was first seen by Heinrich Olbers in 1815. He is the person after whom the famous Olber's Paradox is named "Why is the sky dark at night?" That simple fact proves that the entire universe is expanding.

There is a recurrent nova in Corona Borealis about 3000 light years away that should become visible to the naked eye for a few days sometime between now and September. This happens to the star system every 80 years and it last happened in 1946.

The last good highlight will be the Eta Aquarid meteor shower on the 5th of May. These are tiny sand grain-sized pieces of Halley's Comet burning up in our atmosphere at about 70 miles up and moving 40 miles per second, or twice as fast as the earth is always orbiting around the sun. You could see about 50 meteors per hour since it will be new moon. We cross the debris trail of this most famous of all comets a second time each year on October 21, which creates the Orionids. There will be a bonus thrown in this year as we will pass through a thread of denser material from this comet on Friday, May 3 which was left in 985 B.C. which would increase the rate dramatically. So be sure to look for that if it is clear.

May 1. Last quarter moon is at 7:27 a.m. EDT.

May 3. The moon passes less than one degree south of Saturn this morning. Pluto is stationary in Capricornus. It spends nearly 21 years in each constellation since it takes 248 years for one orbit.

May 4. The moon passes near Mars this morning.

May 5. The Eta Aquarid Meteor shower peaks. On this day in 1961 Alan Shepard became the first American in space aboard Freedom 7 on a suborbital flight.

May 6. The moon passes near Mercury this evening.

May 7. New moon is at 11:22 p.m.

May 12. The Adler Planetarium in Chicago opened on this day in 1930 becoming the first planetarium in the western hemisphere.

May 14. George Lucas was born on this day in 1944. He created Star Wars and Indiana Jones. Skylab was launched on this day in 1973. It crashed back to Earth on July 11 of 1979.

May 15. Pierre Curie was born on this day in 1`859. He won the Nobel Prize in physics with his wife Marie in 1903 for their discovery of radioactivity.

May 23. Full moon is at 9:53 a.m. This is also known as the Flower, Milk, or Planting Moon.

May 26. Sally Ride was born on this day in 1951. She became the first American woman in space in 1983.

May 30. Last quarter moon is at 1:13 p.m.

May 31. Moon passes near Saturn again this morning. ★

Moon Phases

May 1
Last Quarter

May 7
New

May 15
First Quarter

May 23
Full

May 30
Last Quarter

Moon Data

May 3
Saturn 0.8° north of Moon

May 4
Mars 0.2° south of Moon

Neptune 0.3° north of Moon

May 5
Moon at perigee

May 6
Mercury 4° south of Moon

May 17
Moon at apogee

Observer's Challenge* – May 2024

by Glenn Chaple

Hickson 68 - Galaxy Group in Canes Venatici

NGC 5350 (Barred Spiral; Mag. 11.4; Dim. 3.2' X 2.6)
NGC 5353 (Lenticular; Mag. 11.1; Dim. 2.8' X 1.5')
NGC 5354 (Lenticular; Mag. 11.5; Dim. 2.3' X 2.0')
NGC 5355 (Lenticular; Mag. 13.1; Dim. 1.5' X 0.9')

Last month's Observer's Challenge was the galaxy group Hickson 44 - one of 100 compact galaxy groups cataloged during a systematic study of the Palomar Observatory Sky Survey red prints by Canadian professional astronomer Paul Hickson and his colleagues in the early1980s. Another of his compact galaxy groups that can (mostly) be reached with 6-inch scopes and up is Hickson 68, a five-galaxy cluster located in the eastern part of Canes Venatici.

The brightest member of the quintet, the lenticular galaxy **NGC 5353, is located at the 2000.0 coordinates RA 13h53m26.7s and Dec +40°16'59".** I star-hopped there, starting at the showpiece double star Cor Caroli (alpha [α] Canum Venaticorum) and then moving 4 degrees ENE to an asterism comprised of four 5th and 6th magnitude stars. From there, I made a 7 degrees jump further east and slightly north to a magnitude 5.9 star. Just 1½° ESE of this star is a yellowish magnitude 6.5 star that lies at the center of Hickson 68 (refer to accompanying finder charts).

Using a 10-inch f/5 reflecting telescope and magnifying power of 139X under magnitude 5 suburban skies, I was immediately able to pick out the two brightest members, the oval-shaped lenticular galaxy NGC 5353 and the roundish spiral NGC 5350. The latter was somewhat veiled by the mag 6.5 star. As my eyes dark-adapted I was able to glimpse lenticular NGC 5354 immediately north of NGC 5353. I was unable to detect the faint lenticular galaxies NGC 5355 and NGC 5358. Before leaving the area, I directed my gaze ½° east and slightly north of NGC 5353 to the neighboring spiral galaxy NGC 5371. Similar in brightness to NGC 5350 but slightly larger, it required averted vision.

Using an 18.7-inch reflector, William Herschel came across NGC 5350, 5353, 5354, and 5355 on the evening of January 14, 1788. The faintest Hickson 68 member, the lenticular galaxy NGC 5358, remained undiscovered until June 23, 1880, when the French astronomer Édouard Stephan captured it with a 31-inch reflector. The entire group is about 100 light years away.

*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). To find out more about the Observer's Challenge, log on to rogerivester.com/category/observers-challenge-reports-complete.

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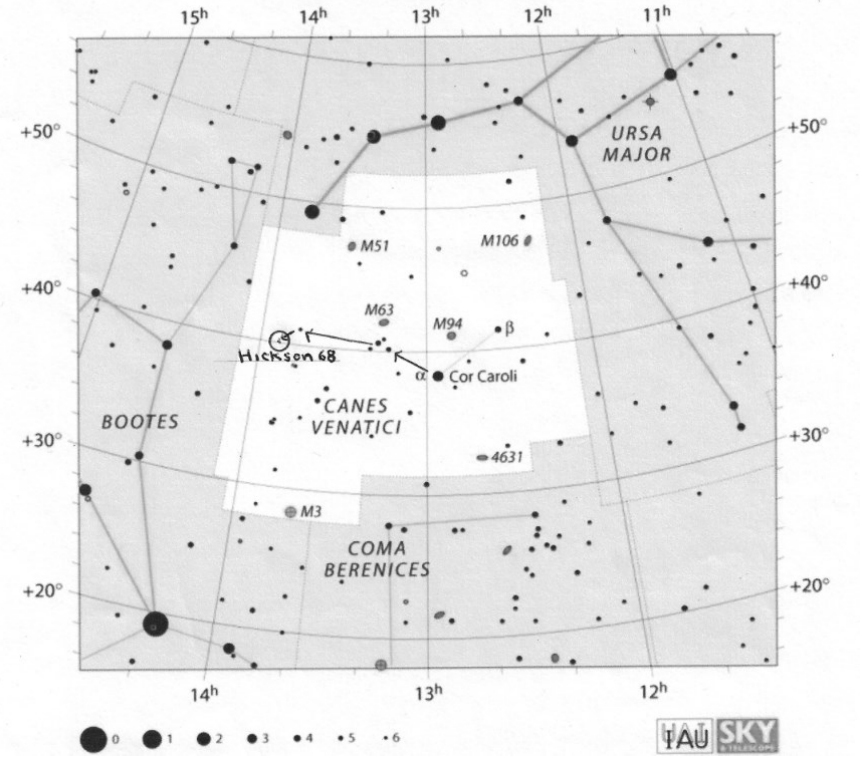
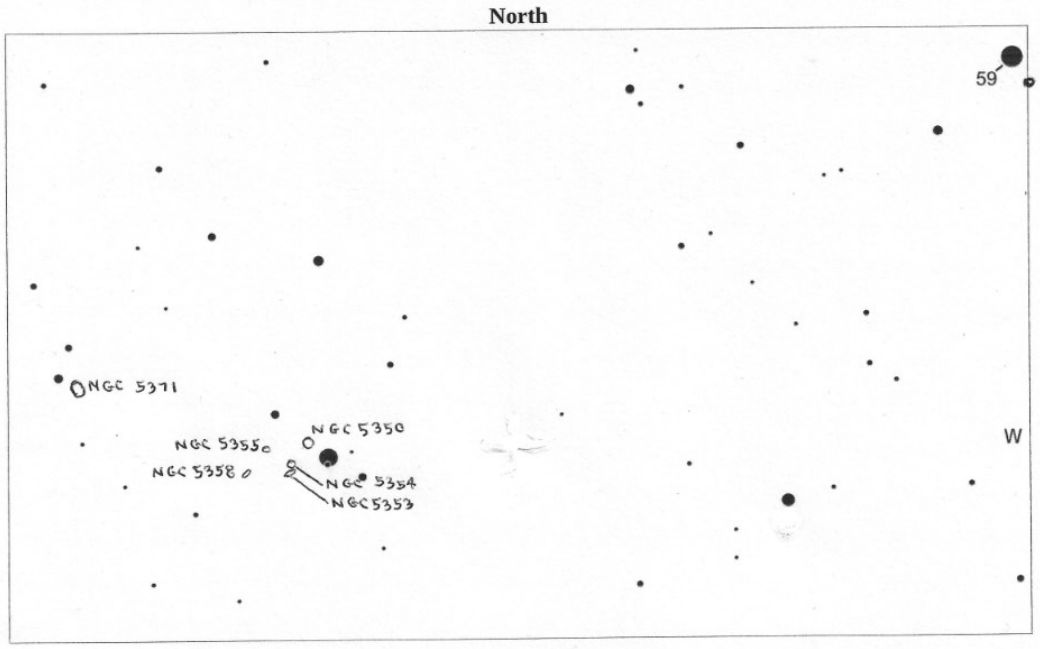
Hickson 68 Finder Chart A

(www.constellation-guide.com)



Hickson 68 Finder Chart B

(Chart from AAVSO Variable Star Plotter. Number is magnitude, decimals omitted. Magnitude limit is 12 in this 2 by 1 degree field.)



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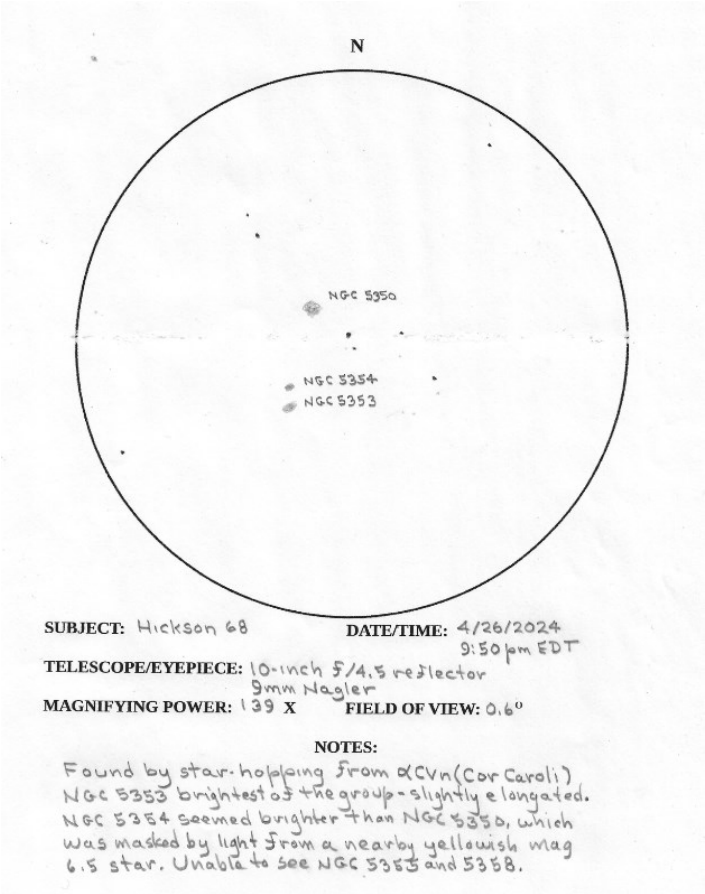
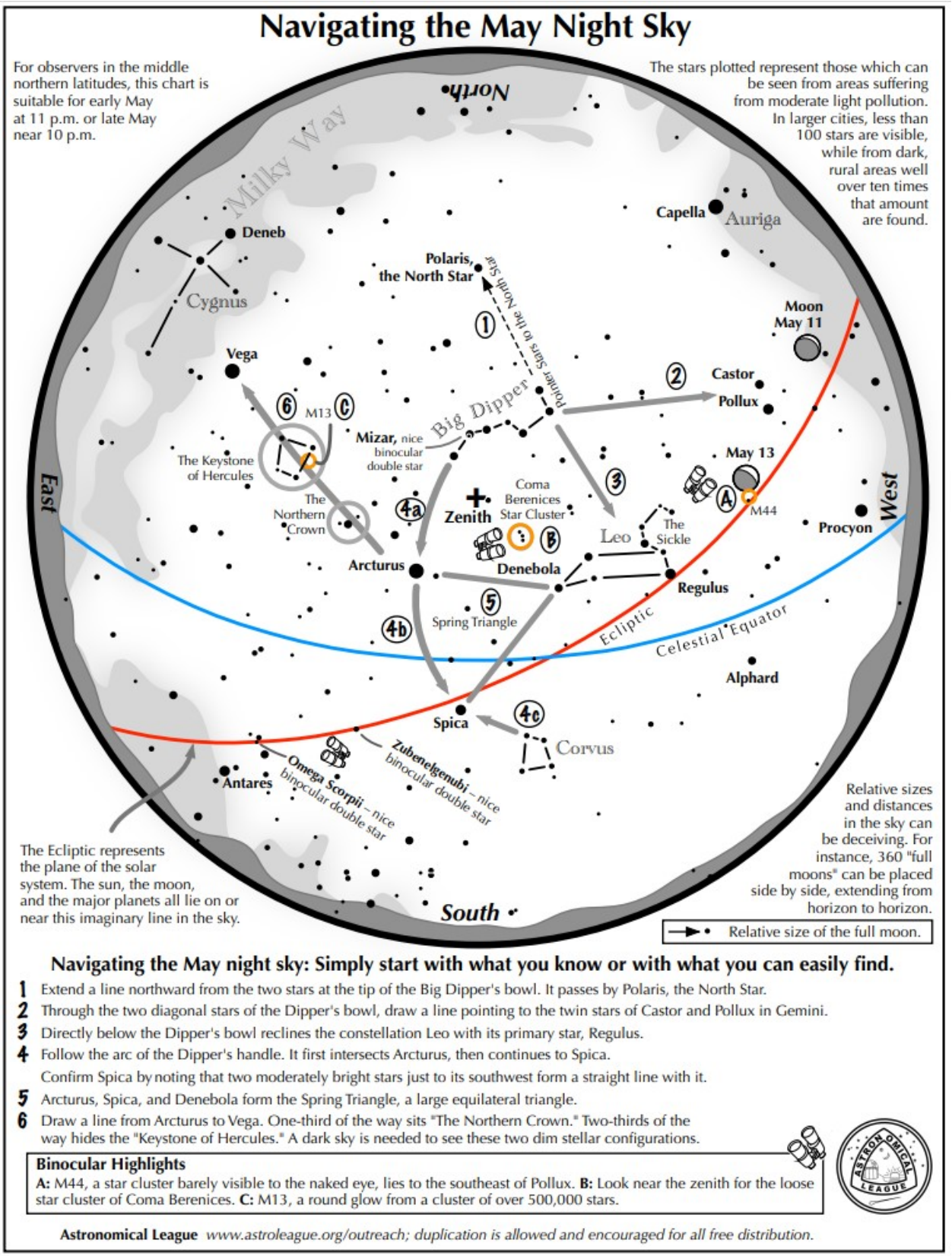
Hickson 68 Image

Mario Motta, MD (ATMoB)

"This was taken with my 32 inch F6.5 scope from Gloucester, using Lum, and RGB filters, for a total of about 3 hours imaging, then processed in PixInsight.'



Sketch by Glenn Chaple



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

1. Extend a line northward from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
2. Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
3. Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
4. Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica.
   Confirm Spica by noting that two moderately bright stars just to its southwest form a straight line with it.
5. Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
6. Draw a line from Arcturus to Vega. One-third of the way sits "The Northern Crown." Two-thirds of the way hides the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.

Binocular Highlights
A: M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux. **B:** Look near the zenith for the loose star cluster of Coma Berenices. **C:** M13, a round glow from a cluster of over 500,000 stars.

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

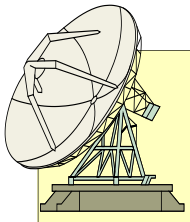
December 22
Ursids

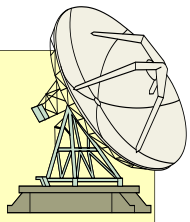
Note: Dates are for maximum

MEMBERSHIP DUES

Membership fees are for the calendar year beginning in January and ending in December. Dues (see page 23 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 23. 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: 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 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!

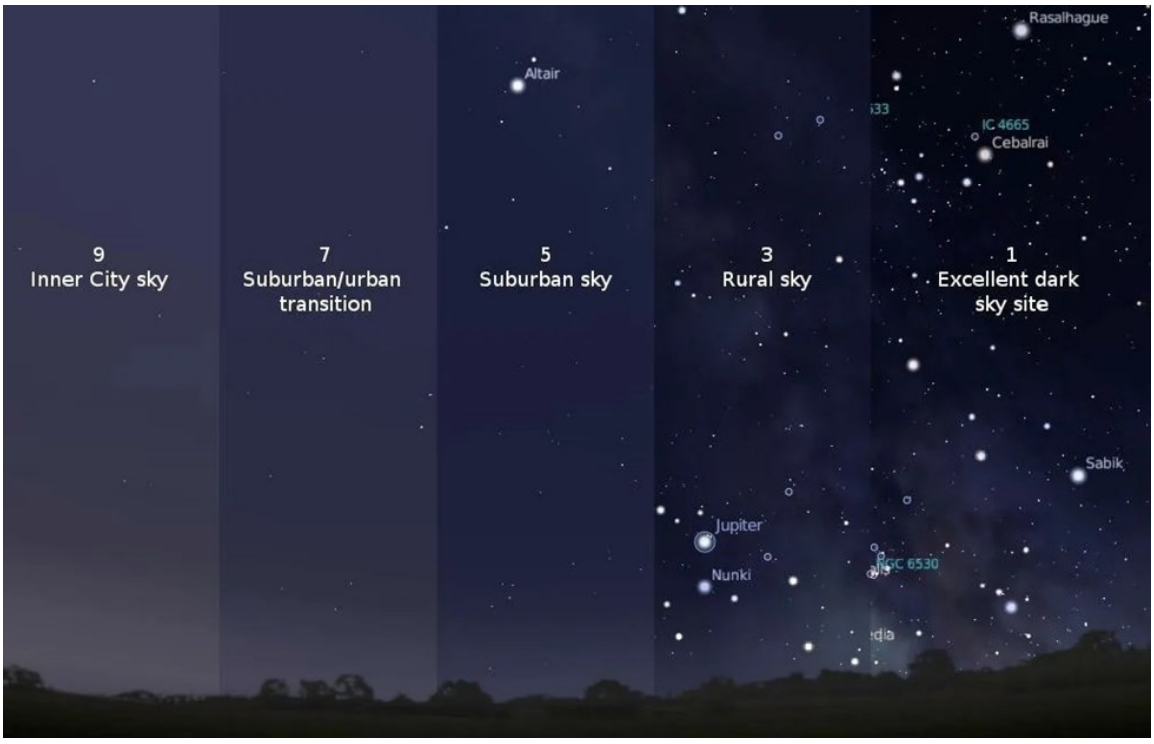
May's Night Sky Notes: Stargazing for Beginners

By Kat Troche

Millions were able to experience the solar eclipse on April 8, 2024, inspiring folks to become amateur astronomers – hooray! Now that you've been 'bitten by the bug', and you've decided to **join your local astronomy club**, here are some stargazing tips!

The Bortle Scale

Before you can stargaze, you'll want to find a site with dark skies. It's helpful learn what your Bortle scale is. But *what is* the Bortle scale? The Bortle scale is a numeric scale from 1-9, with 1 being darkest and 9 being extremely light polluted; that rates your night sky's darkness. For example, New York City would be a Bortle 9, whereas Cherry Springs State Park in Pennsylvania is a Bortle 2.



The Bortle scale helps amateur astronomers and stargazers to know how much light pollution is in the sky where they observe. Credit: International Dark Sky Association

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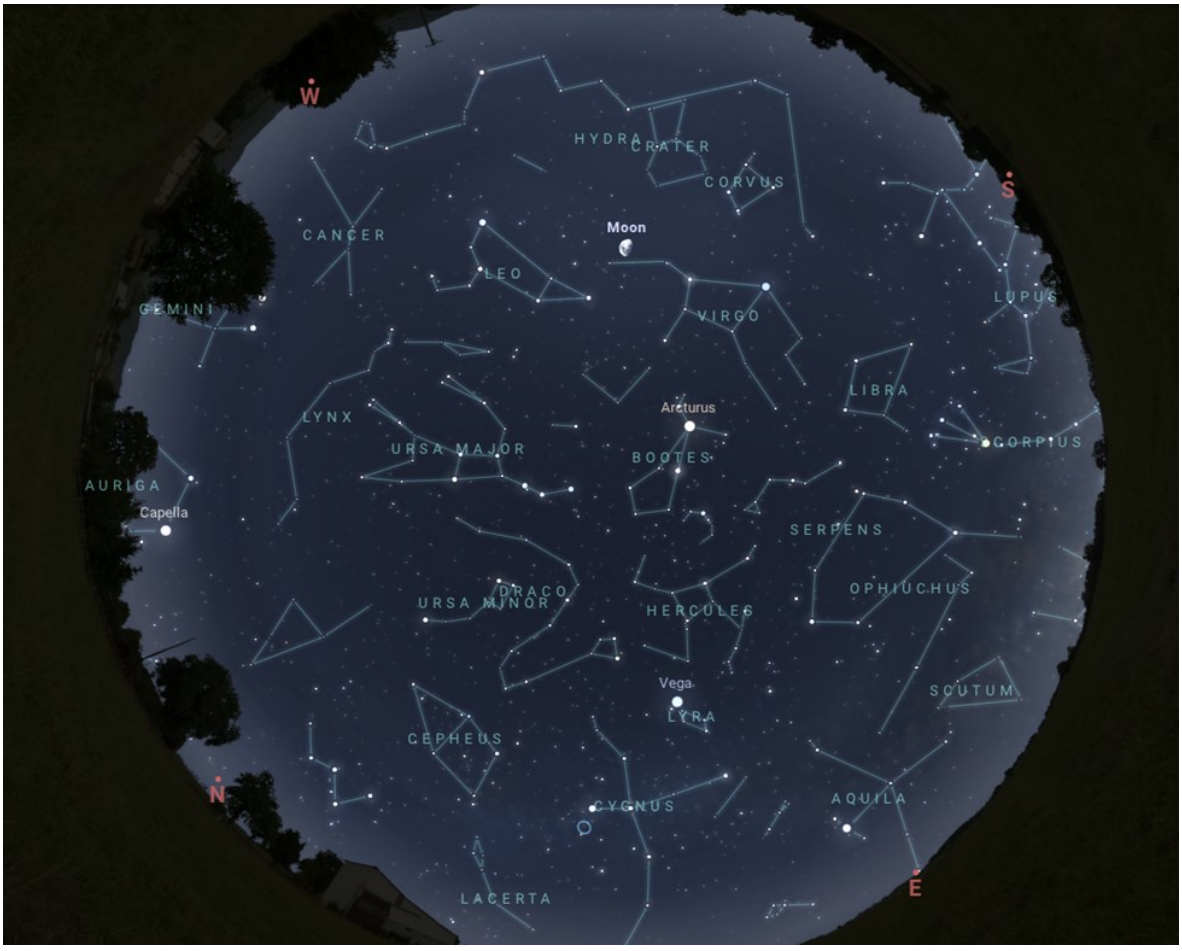
Determining the Bortle scale of your night sky will help narrow down what you can expect to see after sunset. Of course, other factors such as weather (clouds namely) will impact seeing conditions, so plan ahead. Find Bortle ratings near you here: www.lightpollutionmap.info

No Equipment? No Problem!

There's plenty to see with your eyes alone. Get familiar with the night sky by studying star maps in books, or with a planisphere. These are great to begin identifying the overall shapes of constellations, and what is visible during various months.



A full view of the northern hemisphere night sky in mid-May. Credit: Stellarium Web.

Interactive sky maps, such as Stellarium Web, work well with mobile and desktop browsers, and are also great for learning the constellations in your hemisphere. There are also several astronomy apps on the market today that work with the GPS of your smartphone to give an accurate map of the night sky.

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Keep track of Moon phases. Both the interactive sky maps and apps will also let you know when planets and our Moon are out! This is especially important because if you are trying to look for bright deep sky objects, like the Andromeda Galaxy or the Perseus Double Cluster, you want to *avoid* the Moon as much as possible. Moonlight in a dark sky area will be as bright as a streetlight, so plan accordingly! And if the Moon is out, check out this Skywatcher's Guide to the Moon: bit.ly/MoonHandout

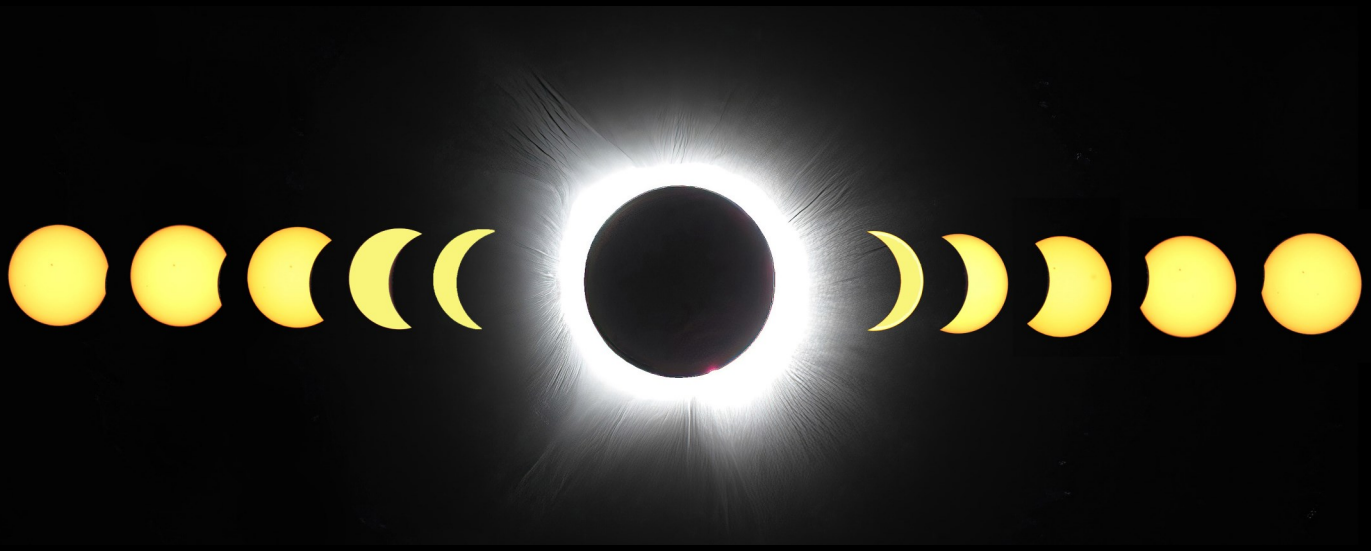
Put On That Red Light

If you're looking at your phone, you won't be able to see as much. Our eyes take approximately 30 minutes to get dark sky adapted, and a bright light can ruin our night vision temporarily. The easiest way to stay dark sky adapted is to avoid any bright lights from car headlights or your smartphone. To avoid this, simply use red lights, such as a red flashlight or headlamp. **The reason:** white light constricts the pupils of your eyes, making it hard to see in the dark, whereas red light allows your pupils to stay dilated for longer. Most smartphones come with adaptability shortcuts that allow you to make your screen red, but if you don't have that feature, use red cellophane on your screen and flashlight.

Up next: why binoculars can sometimes be the best starter telescope, with Night Sky Network's upcoming mid-month article through NASA's website!

Total Solar Eclipse April 8, 2024

Images & Eclipse Story submitted by Paul Kursewicz



Composite Image: I used two Canon PowerShot SX50 HS cameras to create this image. One camera to capture totality, and the other camera to capture the partial phases (which I reduced in size).

Our eclipse story/experience actually began on April 1st. On that day we began our 21 day road trip. We visited 23 states and drove a distance of 5,218 miles. It was a great trip. In that allotted amount of time we saw many amazing things. I had made plans to see the eclipse in Arkansas. To get there we needed to go on the NY State Thruway and head West. For over 400 miles along this route we saw about 40 electronic highway signs advertising the eclipse. NY had record-setting numbers of visitors for this solar eclipse.

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The state of NY wanted the tourism to arrive early and stay late! Nearly one million people visited New York State Parks from April 6 to April 9. Toll transactions were recorded. The peak day was Tuesday, with more than 1.2 million toll transactions.

On April 5th my wife and I arrived in St. Joe, Arkansas which is located in the Ozark Mountains. At this time the weather forecast was not looking good for the day of the eclipse. Thankfully, we were blessed with mostly clear skies on eclipse day.

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This was our fourth Total Solar Eclipse. In each of the previous eclipses we were encircled with large groups of people. While that type of environment can be quite exhilarating, we wanted to experience this eclipse differently, by being alone, and connecting with God in nature. Being outside and experiencing nature is how I have always connected best with God (and was one of the reasons why I joined ASNNE).

For four nights this ranch house was home base for the eclipse. It's located on a private 185 acre nature preserve. We pretty much had this entire place to ourselves during our stay. There were hiking trails on the property which we enjoyed. The open field to the right rises up a bit and is where I set-up my equipment for the eclipse. Also, that is where I did my nighttime observing and some astro-imaging.

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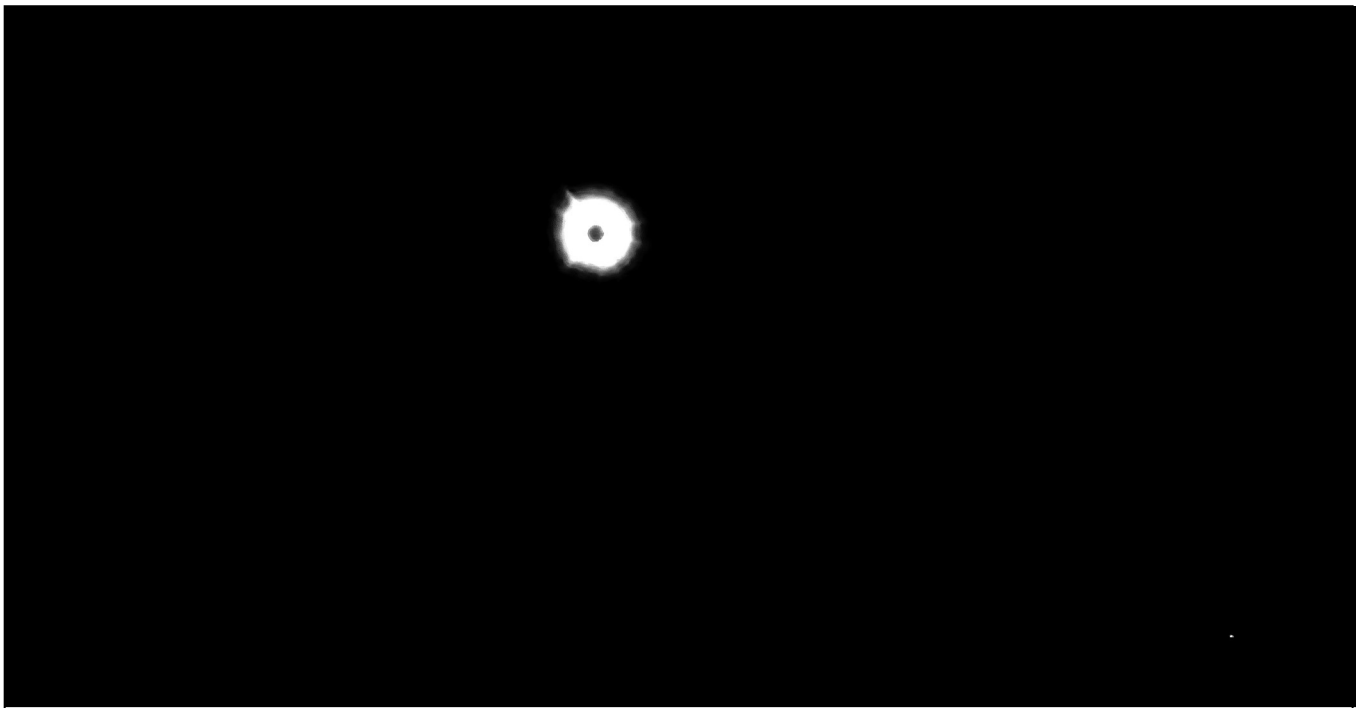
Set-up: On the left I have a camera tracker mounted onto a tripod. Attached to the tracker is my SX50 camera. On our first night I went out and polar aligned the mount with Polaris. I drove in 3 metal camping tent stakes in front of each tripod foot. Now, I could set up this mount in the day time and be polar aligned. My system worked well keeping the sun centered in my field of view for the entire length of the eclipse. The tripod beside it has my other SX50 camera mounted onto it. I had to weigh it down with rocks because it was really windy at times. I had a 3rd small pocket size camera mounted on a tripod (top right) that was pointed towards the other two set-ups. I used this camera to video record the landscape scene and on-coming darkness.



Totality: Taken with my 4th camera — my cell phone. Venus is at the lower right-hand corner.

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Eclipse Day Arrives!

When first contact occurred our attention was focused on how God formed His beautiful creation, with intention and precision. The moon has to be just the right size, orbiting a planet just the right distance from its host star. And, it so happens that although the sun is 400 times bigger than the moon, it's also 400 times further away. For us, this is not a numerical coincidence. It is just one example of many that reminded us of the fine-tuning of our universe. The eclipse also reminded us that our place in the cosmos is designed for discovery. A Total Solar Eclipse was used in validating Einstein's theory of relativity. Some people are still frightened by an eclipse. My wife and I would tell them that eclipses are a necessity involved in the very plan by which God governs the universe. That the beauty of an eclipse is just the beginning, for as King David said, "The heavens declare the glory of God, and the sky above proclaims His handiwork."

Darkness Arrives!

Having this place all to ourselves made us more aware of our natural surroundings. Birds were constantly singing all around us. Other than that, it was very quiet and still. Darkness came upon us abruptly (I am never ready for that). My wife said, that for her this was our darkest eclipse. I would agree. Because when darkness came the first words out of my mouth were, "I should have had my red flashlight at the ready because I'm having a hard time seeing my camera." At this time the birds had stopped their singing. Also, the temperature dropped a few degrees. Then off to our right, a pack of coyotes started howling. Soon after, off to our left, an owl started hooting. Nighttime had begun for these creatures. When the sunlight returned the birds began to sing again**,** and once more the sun warmed our face.

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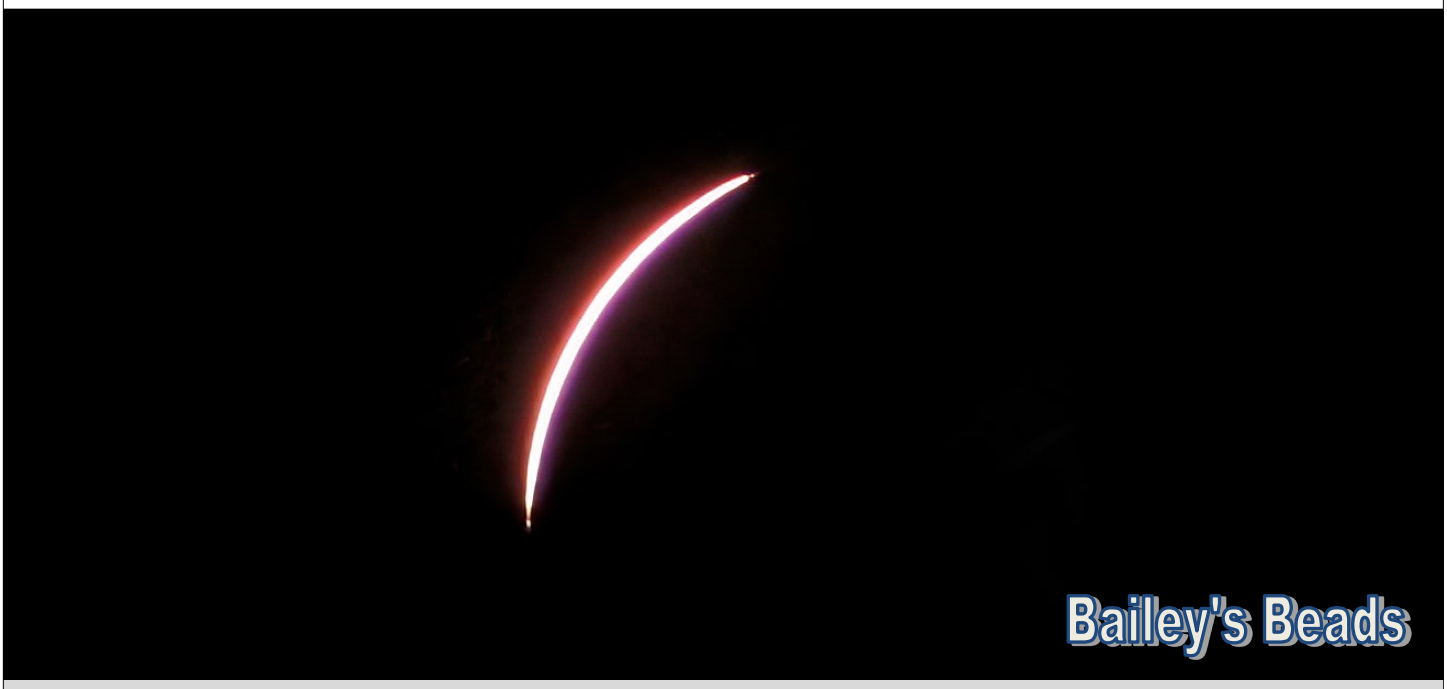

Just seconds prior to 2nd contact I was able to capture Bailey's Beads (appearing at both ends of the arc). At this point I have removed my solar filter. This image is just one frame from a video clip. With my SX50 mounted to my camera tracker I video recorded all of totality, starting just before Diamond Ring. I used a focal length of 1200mm.

This image of Diamond Ring was captured near 3rd contact. I used my SX50 which was mounted on a stationary tripod. I zoomed the lens out to 433mm. I also used the camera's bracketing setting (using "P" Mode). As it turned out, it was the under-exposed images that gave the best image results.

"Continued on page 17"

Totality

"Continued on page 18"

Chromosphere?

Composite Image:

Not too sure what is happening here in this close-up image. My guesses are 1.) The sun's chromosphere is being reflected across the moon's limb. 2.) Refraction of light is taking place. I'll explain my composite using my first explanation. The upper left chromosphere happened seconds after 2nd contact (just after Diamond Ring). The upper right chromosphere happened seconds before 3rd contact (just before Diamond Ring). I used two separate frames from a video clip and combined them. My camera lens was zoomed out to a focal length of 1200mm.

Astronomical Society of Northern New England (ASNNE) Membership Meeting Minutes (Notes) of 5 April 2024

NOTE:

On 4 April, 2024 there was a violent nor'easter in our area, bringing very heavy rain, strong winds, and in almost all locations, heavy, wet, snow. Many of our Members lost power, and telephone, and internet service. In the interests of safety, President David Bianchi called off the in-person Meeting, in favor of one held only on Zoom. No Speaker had been scheduled for the April Meeting.

Needless to say, not everyone got that word. Three Members did go to the New School in Kennebunk. There, they joined the others on Zoom.

The Zoom Meeting was unstructured, with wide-ranging conversations.

Next Meeting:

ASNNE's next Meeting will be on Friday, 3 May, 2024, at the New School, in Kennebunk, at 7:30 pm. The Business Meeting; same location, starts at 7:00 pm. All are welcome to attend the Business Meeting.

Professor Francois Foucart, who specializes in performing numerical simulations of colliding black holes and neutron stars, will be giving a Presentation at our May Meeting.

Dr. Foucart is an Associate Professor at the University of New Hampshire. In his presentation, Dr. Foucart will discuss what nearly ten years of gravitational wave observations have told us; not only about colliding black holes and neutron stars, but also about element formation, nuclear physics, and the history and evolution of the Universe.

Respectfully submitted,

Carl Gurtman

Secretary, ASNNE

ASNNE 2024 Public Star Parties

Submitted by Carl Gurtman

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207 363-4920

Astronomical Society of Northern New England

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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.

Club Meeting & Star Party Dates

Date	Subject	Location
May 3	**ASNNE Club Meeting:** **Business Meeting starts prior to Club meeting.** **Club Meeting (in house & on Zoom): 7:30-9:30PM** **Guest Speaker:** Our guest speaker will be **Dr. Foucart**. He is an Associate Professor at UNH. In his presentation Dr. Foucart will discuss what nearly ten years of gravitational wave observations have told us. **Bernie Reim** - "What's UP" **Astro Shorts:** (news, stories, jokes, reports, questions, photos, observations etc.)	**The New School, Kennebunk, Me.**
Last Month	Last month our meeting at The New School was cancelled due to bad weather. A Zoom meeting was conducted instead.	
May 10/11	**Club/Public Star Party:** Dependent on the weather.	**Talmage Observatory at Starfield West Kennebunk, Me.**

Directions to ASNNE event locations

Directions to The New School in Kennebunck [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

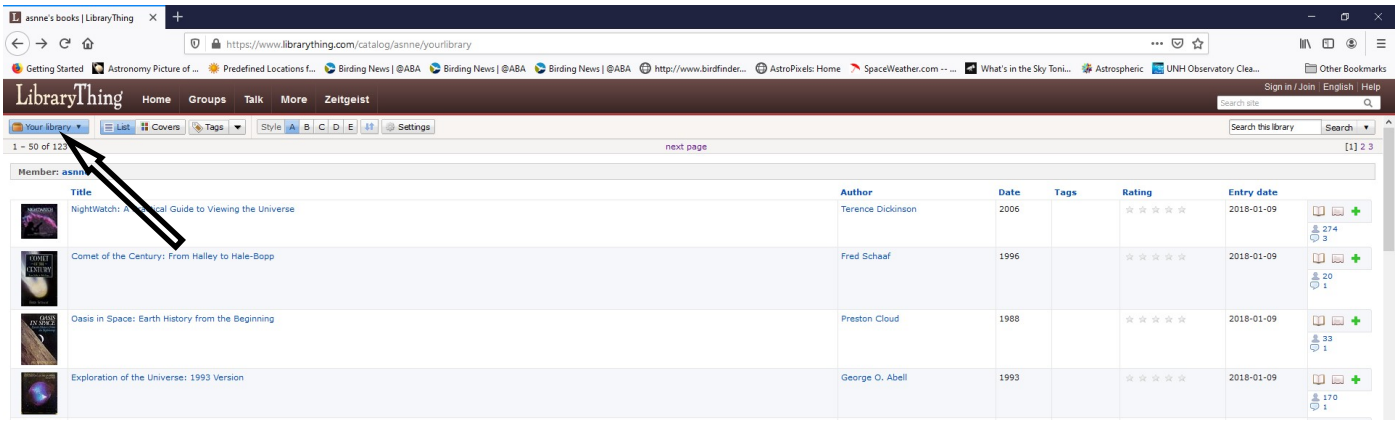
Directions to Talmage Observatory at Starfield [Alewive Road, Kennebunk, ME]

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.

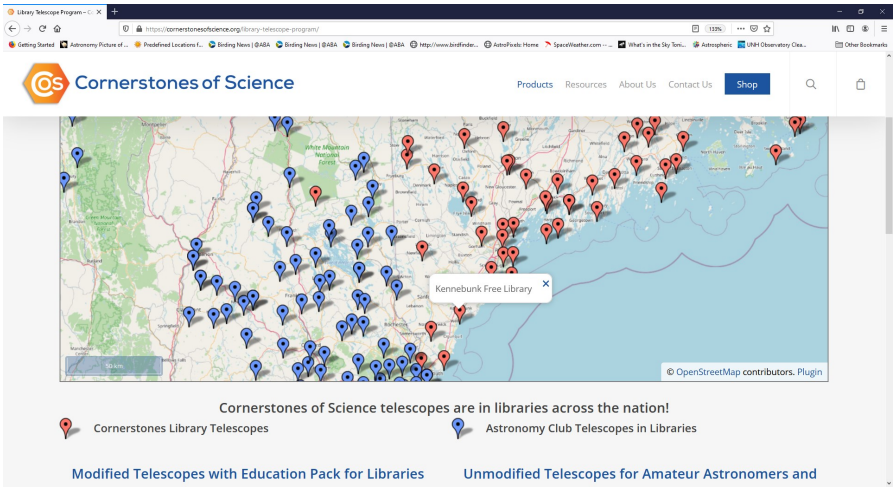
Astronomy Club & Library Resources

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/asnne . 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

2024 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_____