

NC Astronomers

Bringing Astronomy to the Public

Newsletter – July, 2025

All are welcome! Bring a friend!

President's Rant – June 25, 2025

I'm taking a break from trying to write something clever. As we don't have club meetings during the summer, the Rants will become our "What's Up" for the month. But in July there are slim pickins for events worth mentioning at our location. As discussed last month, because the moon moves rapidly across the sky, close conjunctions and especially occultations depend on longitude. We'll miss a few close conjunctions and fun occultations of Spica and Antares that will be seen elsewhere on planet earth.

But – coming soon at the end of June are the following:

June 26 (tomorrow) **Mercury** will be in conjunction with a thin crescent moon just after sunset above the north-northeast horizon. Mercury will be 3 degrees (about two finger breadths) to the left of the moon. They will be 12 degrees above the horizon at 9pm in twilight, and 7 degrees above the horizon at 930pm. If you've never been able to find Mercury before, the moon will lead you to it on this date if your horizon is clear and cloudless. Mercury will still be visible at that location over the next several days.

June 29 (Sunday) there will be a close conjunction of **Mars** with the crescent moon. They will be only 2 degrees apart, meeting just below the body of Leo who has been diving towards the western horizon as the summer progresses. They will be 25 degrees above the horizon at 930pm. See if you can still find Mercury at its prior location.

For those hearty early risers and insomniacs, **Venus** remains brilliant high in the predawn sky, and **Jupiter** will start rising towards it the last week of July. Together they will put on a show the morning of August 12. I'll remind you in next month's Rant.

Binoculars! Don't forget to take them with you.

The warmth of summer makes stargazing more pleasant, but the downside is that it doesn't get really dark out until 10pm. Thank Daylight Savings Time for one hour of that. But with the Summer Solstice behind us, sunset will start creeping in sooner, but not until the end of August does the sun set a whole hour earlier than it does now.

We will be bringing our telescopes to the hospital fundraiser **Starry Starry Night** on July 19. Join us if you can – details below.

Greg Ouligian

July – No Meeting!

As is our tradition, there will be no meeting in July, either in person or on Zoom. Please enjoy your summer time with family, and of course, remember that the night sky is still up there for gazing.

For the summer break, we are hoping to hold a meeting in August via Zoom. In-person (plus Zoom) meetings will resume in September, as usual.

**NC Astronomers Meets at 7pm on the first Wednesday of the month
Madelyn Helling Library Gene Albaugh Community Room
980 Helling Way
Nevada City, CA 95959
(September – May)**

**** Note ****

For the “Summer Season” (July and August) the NC Astronomers will be meeting on-line via Zoom.
Club members will receive the keys to the Zoom conference in their email via Groups.io.

**** NC Astronomers "YouTube" channel ****

Many of the presentations are recorded and posted to the club's YouTube channel.

Please see <https://www.youtube.com/@ncastronomers9981/videos>

Club News – Rod Brown

Volunteers with telescopes needed for Sierra Nevada Hospital Foundation Starry Nights fundraiser July 19th

We are looking for folks to come out with their telescopes to share views with the public at this fundraiser. We've done this a few times in the past, and it is a good opportunity to reach more members of the public and spread appreciation of the night sky. The event will be July 19th at the Nevada County Fairgrounds. If you can help out, please contact Rod Brown at rodney dot et dot brown at gmail dot com or via the club contact page (<https://ncastronomers.org/contact/>).

Borrow a telescope for a year for free!

Ready to try using a telescope, but not sure you want to purchase one? Then borrow a telescope for a year for free! Club loaner telescopes like this are a great way to get started observing. Eight club members are currently taking advantage of this program. You could be the next -- we have two telescopes available now.

One is a Meade ETX-90EC, a three-inch Maksutov-Cassegrain. The whole setup is light and easy to transport. All parts except the tripod fit into the included case. Also included with the telescope are four eyepieces, electronic hand controller, and a Wi-Fi module. The Wi-Fi module allows you to connect your phone or tablet and use a visual application like SkySafari to find objects.

The other is a Celestron Super C8. This is a classic eight-inch Schmidt-Cassegrain, a workhorse of amateur astronomers for years. It comes on a fork mount with motor drive and tripod and also includes eyepieces. It is bigger and heavier than the Meade above, but will gather much more light and allow you to see fainter objects.

If you would like to borrow either of these telescopes, please contact Rod Brown at rodney dot et dot brown at gmail dot com or via the club contact page (<https://ncastronomers.org/contact/>).

Rod Brown
Secretary/Treasurer

Outreach – Greg Dolkas for Ania Brandysiewicz

Coming in July: Starry Starry Nights

As Rod Brown noted in his report, the Sierra Nevada Hospital Foundation will be holding their annual fundraiser on July 19th, at the Nevada County Fairgrounds.

From dusk to about 11pm, we will be holding a Star Party for the event's guests. We're asking those who are available to share their telescopes and love of the night sky to contact Rod, either by email or through the club website's Contact Us page.

More information about the Foundation and this event is available on their website:
<https://supportsierranevada.org/starrystarrynights>

NC Astronomer members continue to enjoy the beer and blather, which will now be held at the 1849 Brewing Company. The beer selection at the brewery is quite comprehensive and they also have an on-premises cafe for your culinary delight. The environment allows for in-depth conversations on deeply philosophical questions.



Each month we discuss current topics in Astronomy and share our collective ignorance.

Meeting location:

Astronomy on Tap meets on
The third Wednesday of the month at 5pm

Come and join the conversation at
1849 Brewing Company - 468 Sutton Way in Grass Valley



This article is distributed by NASA's Night Sky Network (NSN). The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

July's Night Sky Notes: Spy the Scorpion

By: Kat Troche

As summer deepens in the Northern Hemisphere, a familiar constellation rises with the galactic core of the Milky Way each evening: Scorpius the Scorpion. One of the twelve zodiacal constellations, Scorpius contains many notable objects, making it an observer's delight during the warmer months. Here are some items to spy in July:



The star map of the Scorpius constellation highlights the star Antares and several notable deep-sky objects like the Rho Ophiuchi Complex, Messier 4, the Cat's Paw Nebula, and Caldwell 76, the Baby Scorpion Cluster. Credit: Stellarium Web

- **Antares:** referred to as “the heart of the scorpion,” this supergiant has a distinct reddish hue and is visible to the naked eye. If you have good skies, try to split this binary star with a medium-sized telescope. Antares is a double star with a white

main-sequence companion that comes in at a 5.4 magnitude.

- [Messier 4](#): one of the easiest globular clusters to find, M4 is the closest of these star clusters to Earth at 5,500 light years. With a magnitude of about 5.6, you can spot this with a small or medium-sized telescope in average skies. Darker skies will reveal the bright core. Use Antares as a guide star for this short trip across the sky.
- [Caldwell 76](#): If you prefer open star clusters, locate C76, also known as the Baby Scorpion Cluster, right where the 'stinger' of Scorpius starts to curve. At a magnitude of 2.6, it is slightly brighter than M4, albeit smaller, and can be spotted with binoculars and the naked eye under good sky conditions.



A digital map of the Rho Ophiuchi Complex. Credit: Stellarium Web

Lastly, if you have an astrophotography set up, capture the [Cat's Paw Nebula](#) near the stinger of Scorpius. You can also capture the [Rho Ophiuchi cloud complex](#) in the nearby constellation Ophiuchus. Brilliant Antares can be found at the center of this wondrous structure.

Manaiakalani

While many cultures tell tales of a 'scorpion' in the sky, several Polynesian cultures see

the same stars as the demigod Māui's fishhook, [Manaiakalani](#). It is said that Māui didn't just use his hook for giant fish in the sea, but to pull new islands from the bottom of the ocean. There are many references to the Milky Way representing a fish. As Manaiakalani rises from the southeast, it appears to pull the great celestial fish across a glittering sea of stars.

Measure Your Darkness

While you can use smartphone apps or dedicated devices like a Sky Quality Meter, Scorpius is a great constellation to measure your sky darkness with! On a clear night, can you trail the curve of the tail? Can you see the scorpion's heart? Use our free printable [Dark Sky Wheel](#), featuring the stars of Scorpius on one side and Orion on the other for measurements during cooler months. You can find this resource and more in the [Big Astronomy Toolkit](#).

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NC ASTRONOMERS

Meets

First Wednesday Of The Month

Madelyn Helling Library

Community Room

980 Helling Way

Nevada City 95959

NC ASTRONOMERS

302 Gethsemane St.

Nevada City, CA 95959

<http://ncastronomers.org>

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