The Prairie Astronomer

July, 2025 Volume 66, Issue #7

IN THIS ISSUE:

THE NEWSLETTER OF THE PRAIRIE ASTRONOMY CLUB

The Prairie Astronomer

Next meeting: Tuesday July 29th 7:30pm at Hyde Observatory

NEXT MEETING

Program: a review of the Nebraska Star Party. Please send your photos to Jason O'Flaherty as soon as possible.

CONTENTS

Cover: This image of the Vela Molecular Ridge was captured by NASA's SPHEREx (Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer) and was part of the mission's first public data release on July 2, 2025.

M31 by Brett Boller

Most of our club meetings are held at Hyde Memorial Observatory in Holmes Park.

The Observatory is owned and maintained by the City of Lincoln Parks and Recreation Department, but is operated by volunteers, many of whom are also members of the Prairie Astronomy Club.

CALENDAR

July PAC Meeting
Tuesday July 29th, Hyde Observatory
Program: Nebraska Star Party Review

August PAC Meeting
Tuesday, August 26th, Hyde Observatory

September PAC Meeting
Tuesday September 30th Hyde Observatory

PAC Google calendar:
https://www.prairieastronomyclub.org/event-calendar/

2025 STAR PARTY DATES

	Date	Date
January	24	**31**
February	21	**28**
March	21	**28**
April	3/18	**25**
May	16	**23**
June	20	**27**
July	18	**25**
NSP	7/20	7/25
August	15	**22**
September	**19**	26
October	17	**24**
November	14	**21**
December	12	**19**

Dates in BOLD are closest to the New Moon.

CLUB OFFICERS

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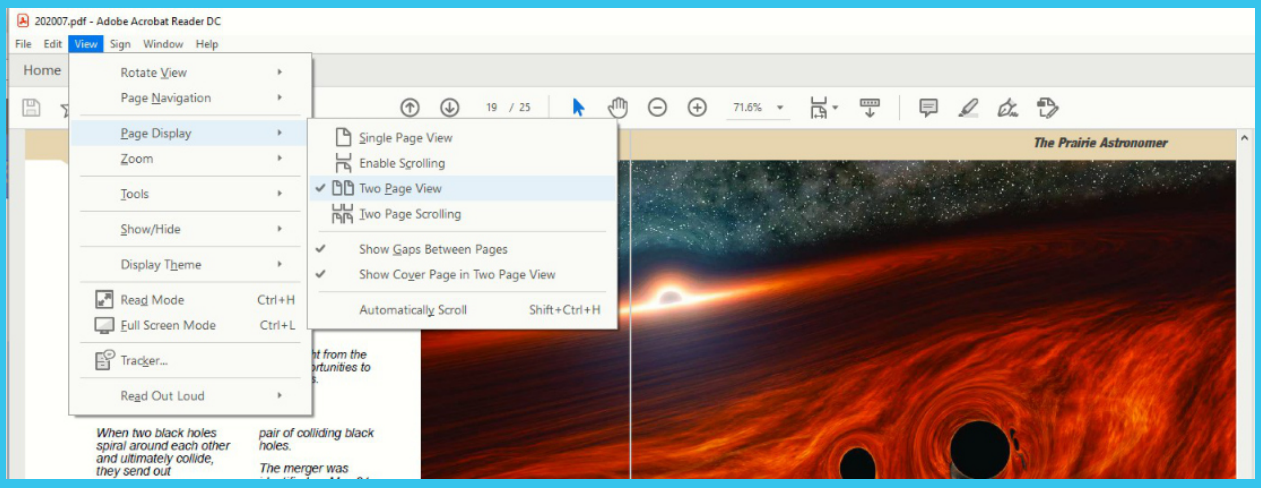
NOTICES

Newsletter Page View Format

How to Adjust Adobe Acrobat Settings for Two Page View



To view this newsletter in magazine spread format in Acrobat, select View ->Page Display->Two Page View. Acrobat will then show two pages side by side. Also make sure the checkboxes "Show Cover Page in Two Page View" and "Show Gaps Between Pages" are checked. If you have it setup correctly, the cover page will be displayed by itself and subsequent pages will be side by side with the odd numbered pages on the left.

Pay Dues Online

https://www.prairieastronomyclub.org/pay-dues-online/
If you're already a member and are renewing within 30 days of your anniversary date, select the early renewal option for a discount.

PAC-LIST

Subscribe through GoogleGroups or contact Mark Dahmke to be added to the list. You'll need a Google/ gmail account, but if you want to use a different email address, just associate that address with your google account to access Google Groups. Once subscribed, you can view message history through the GoogleGroups website. To post messages to the list, send to this address: pac-list@googlegroups.com

The President's Message

Dear PAC Members,

Welcome to summer! We've been fortunate to get some much-needed rain amid the hot weather. While that may have interfered with a few observing opportunities, I hope you're all enjoying the season.

Our June club meeting was delayed by one week and ultimately took place on the first day of July, which we used to host a solar observing party. We had a solid turnout, although we were a bit short on scopes, and the Sun wasn't particularly active that day. Still, a big thank you to the two members who brought their solar scopes. We enjoyed good conversation and all the ice cream cones we could eat!

Looking ahead, July is all about the Nebraska Star Party (NSP), which runs from July 20 to 25. Many of our members will be attending, and several are volunteering and organizing the event. Early registrations suggest this could be one of the most well-attended NSPs in its 30+ year history. For more details, visit https://nebraskastarparty.org. If you're attending, keep an eye out for fellow PAC members, especially newcomers, and extend a warm welcome to them. As a reminder, our group usually sets up on "The Hill."

Our July club meeting will take place the week after NSP wraps up, on Tuesday, July 29th, at 7:30 p.m. at Hyde Observatory. We will have a regular club meeting. However, in lieu of a formal presenter, we'll be sharing photos and stories from NSP.

If you attend NSP, please send your photos along with a brief description to me at jason@oflaherty.contact so I can include them in the slideshow. They can be of any activities during the event, not just the night sky.

Take care, drive safely, and enjoy the rest of your summer.

Clear skies,

Jason O'Flaherty

Nearest Star Party

July 1st

Photos by Mark Dahmke

Photos by Jason O'Flaherty

ARP 82

The Mantrap Skies Image Catalog

Arp 82 consists of two NGC galaxies. NGC 2535 is the big galaxy, NGC 2536 the small companion. NED and Seligman classify 2535 as SA(r)c pec while the NGC Project simplifies it to Sc pec. NED and Seligman classify 2536 as SB(rs)c pec while the NGC Project says simply Sbc pec. Both are about 200 million light-years distant. The (r) indicates a ring structure. Note the arms come off the ring in both cases not and not the cores of the galaxies. Both were discovered by Édouard Stephan on January 22, 1877. Arp put them in his category for spirals with large, high surface brightness companions. In this case, it appears that he got it right.

See the annotated image for information on other galaxies and quasars (Q) in the image. If NED shows only a position for a name of a galaxy I've used G rather than the long position name to keep label clutter to a minimum.

Three asteroids are identified in the annotated image. Since I took color data after the first four luminance frames then went back for four more luminance frames their trails have a break in the middle.

Rick Johnson

Rick Johnson, a founding member of the Prairie Astronomy Club, passed away in January, 2019. His legacy lives on through his comprehensive catalog of over 1600 images at www.mantrapskies.com.

Focus on Constellations: Sagittarius

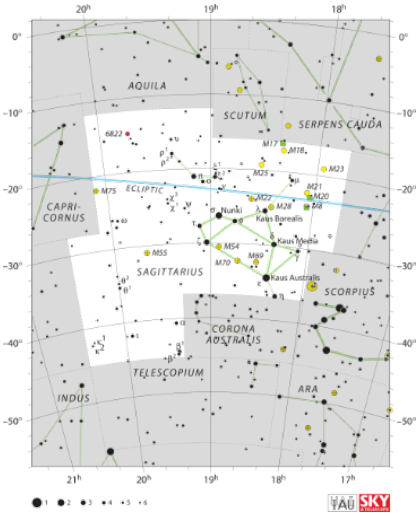
Jim Kvasnicka

Sagittarius, the Archer, covers 867 square degrees. Toward Sagittarius lies the center of our Galaxy and the bulk of the cool dust that lies along the spiral arms of our Milky Way. Because most of the 150+ globular clusters are congregated around the central hub of our Milky Way, Sagittarius is rich in globular clusters. Sagittarius contains 15 Messier objects, more than any other constellation. Most of these Messier objects are famous and well known. They include M8, The Lagoon Nebula; M17, The Swan or Omega Nebula; M20, The Trifid Nebula; and M22, one of the best globular clusters in the sky. Sagittarius contains a large variety of objects, enough to keep any observer busy for a while. The constellation Sagittarius is best seen in August.

<u>Showpiece Objects</u>
Globular Clusters: M22, M28, M55, M75
Planetary Nebulae: NGC 6818 (Little Gem)
Open Clusters: M21, M23
Dark Nebulae: B86 (Ink Spot)
Bright Nebulae: M8 (Lagoon), M17 (Swan), M20 (Trifid)

<u>Mythology</u>
Two Centaurs are immortalized among the stars. The Centaur represented by Centaurus, and the Centaur Sagittarius, one of the zodiac signs. In Greek-Roman mythology, Sagittarius was the Archer-Centaur who slew the scorpion that had killed Orion.

<u>Number of Objects Magnitude 12.0 and Brighter</u>
Galaxies: 3
Globular Clusters: 20
Open Clusters: 23
Planetary Nebulae: 16
Dark Nebulae: 9
Bright Nebulae: 3



Sagittarius Constellation Map: IAU and Sky & Telescope magazine (Roger Sinnott & Rick Fienberg), CC BY 3.0 <https://creativecommons.org/licenses/by/3.0>, via Wikimedia Commons

August Observing

Jim Kvasnicka

Planets

Mercury: Morning planet difficult to see.
Venus: Morning planet, conjunction with Jupiter on August 12th.
Mars: Not visible in the bright evening twilight.
Jupiter: Morning planet. On August 12th only 52" from Venus.
Saturn: Morning planet.
Uranus and Neptune: Morning planets.

Meteor Showers

Perseids: Peaks the night of August 12-13. Expect 50-100 meteors per hour. The waning gibbous Moon will interfere.

Messier List

M6/M7: Open clusters in Scorpius.
M8: The Lagoon Nebula in Sagittarius.
M9/M10: Class VIII and VII globular clusters in Ophiuchus.
M12/M19: Class IX and VIII globular clusters in Ophiuchus.
M20: The Trifid Nebula in Sagittarius.
M21/M23: Open clusters in Sagittarius.
M62/M107: Class IV and X globular clusters in Ophiuchus.

Last Month: M3, M4, M5, M53, M68, M80, M83
Next Month: M13, M14, M22, M28, M54, M69, M70, M92

NGC and other Deep Sky Objects

NGC 6717: Palomar 9, Class VIII globular cluster in Sagittarius.
NGC 6741: Planetary nebula in Aquila.
NGC 6781: Planetary nebula in Aquila.
NGC 6818: Little Gem, planetary nebula in Sagittarius.
B86: The Ink Spot, dark nebula in Sagittarius.

Double Star Program List

Struve 2404: Close pair of orange stars in Aquila.
57 Aquilae: Pair of white stars.
Beta Cygni: Albireo, gold and blue stars.
31 Cygni: Yellow primary with a blue secondary.
61 Cygni: Two orange stars.
Epsilon Lyrae: The Double Double.
Zeta Lyrae: Yellow pair.
Beta Lyrae: Yellow primary with multiple

Club Outreach

Don Hain
dhain00@gmail.com
402-440-5318

As mentioned in last month's newsletter, at least one of the cub scout troops in town is hoping some of us can visit them at a camping/astronomy nighttime activity later this year. Let me know if you are interested in getting involved (dhain00@gmail.com or by phone to 402 440 5318).

Upcoming event(s):

Camp Erin - Youth Overnight Camp

When: September 27-29, 2025 (exact night still to be determined)

Where: Carol Joy Holling Center- 27416 Ranch Rd, Ashland, NE 68003

Sponsored by: Mourning Hope

PAC Co-ordinator for this event: Bob Kacvinsky

Hoot 'n Howl - Spring Creek Prairie

When: usually in October (date won't be set until sometime later)

Where: Spring Creek Prairie Audubon Center - 11700 SW 100th St Denton, NE 68339

Sponsored by: Spring Creek Prairie

Needs: 2 or more volunteers are hoped for

Crete Public Library - Intro to Astronomy presentation and viewing of the night sky

When: planning for early November (after Daylight Savings Time ends)

Where: Crete Public Library, 1515 Forest Ave, Crete NE 68333

Sponsored by: Crete Public Library

Needs: 5 or more are hoped for to bring scopes for the night sky viewing - contact dhain00@gmail.com

Hyde Observatory: OPEN

When: Saturday nights

Where: Hyde Observatory

Sponsored by: Lincoln Parks and Rec / Hyde Board of Directors

Needs: volunteers willing to work out on the deck or manage the shows in the classroom about one Saturday per month

see https://www.hydeobservatory.info/volunteer/ for more information

see https://forms.gle/ZKr4ivapvUhfejwL6 for the volunteer form to get paperwork with the city started. Since Hyde offers the activity through city government a background check is needed. Submission of this form will get that going.

July's Night Sky Notes: Spy the Scorpion

Kat Troche

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 go.nasa.gov/nightskynetwork to find local clubs, events, and more!

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:

- Antares: referred to as "the heart of the scorpion," this supergiant has a distinct

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

Night Sky Notes, continued

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

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

Night Sky Notes, continued

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.
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.

Ever-changing Universe Revealed in First Imagery From NSF–DOE Vera C. Rubin Observatory

From distant stars and galaxies to asteroids whizzing through the Solar System, this next-generation facility unveils its first imagery and brings the night sky to life like never before

The NSF–DOE Vera C. Rubin Observatory, a major new scientific facility jointly funded by the U.S. National Science Foundation and the U.S. Department of Energy's Office of Science, released its first imagery today at an event in Washington, D.C. The imagery shows cosmic phenomena captured at an unprecedented scale. In just over 10 hours of test observations, NSF–DOE Rubin Observatory has already captured millions of galaxies and Milky Way stars and thousands of asteroids. The imagery is a small preview of Rubin Observatory's upcoming 10-year scientific mission to explore and understand some of the Universe's biggest mysteries.

"The NSF-DOE Vera C. Rubin Observatory demonstrates that the United States remains at the forefront of international basic science and highlights the remarkable achievements we get when the many parts of the national research enterprise work together," said Michael Kratsios, director of the White House Office of Science and Technology Policy. "The Rubin Observatory is an investment in our future, which will lay down a cornerstone of knowledge today on which our children will proudly build tomorrow."

"NSF–DOE Rubin Observatory will capture more information about our Universe than all optical telescopes throughout history combined," said Brian Stone, performing the duties of the NSF director. "Through this remarkable scientific facility, we will explore many cosmic mysteries, including the dark matter and dark energy that permeate the Universe."

"We're entering a golden age of American science," said Harriet Kung, acting director of DOE's Office of Science.

"NSF–DOE Rubin Observatory reflects what's possible when the federal government backs world-class engineers and scientists with the tools to lead. This facility will drive discovery, inspire future innovators and unleash American excellence through scientific leadership."

The result of more than two decades of work, Rubin Observatory is perched at the summit of Cerro Pachón in Chile, where dry air and dark skies provide one of the world's best observing locations. Rubin's innovative 8.4-meter telescope has the largest digital camera ever built, which feeds a powerful data processing system. Later in 2025, Rubin will begin its primary mission, the Legacy Survey of Space and Time, in which it will ceaselessly scan the sky nightly for 10 years to precisely capture every visible change.

The result will be an ultrawide, ultra-high-definition time-lapse record of the Universe. It will bring the sky to life with a treasure trove of billions of scientific discoveries. The images will reveal asteroids and comets, pulsating stars, supernova explosions, far-off galaxies and perhaps cosmic phenomena that no one has seen before.

Rubin Observatory is named in honor of trailblazing U.S. astronomer Vera C. Rubin, who found conclusive evidence of vast quantities of invisible material known as dark matter. Understanding the nature of dark matter, dark energy and other large-scale cosmic mysteries is a central focus of Rubin Observatory's mission. Dark energy is what scientists call the mysterious and colossally powerful force that appears to be

Above: This image combines 678 separate images taken by NSF–DOE Vera C. Rubin Observatory in just over seven hours of observing time. Combining many images in this way clearly reveals otherwise faint or invisible details, such as the clouds of gas and dust that comprise the Trifid Nebula (top) and the Lagoon Nebula, which are several thousand light-years away from Earth. Credit: NSF–DOE Vera C. Rubin Observatory

Rubin, continued

causing galaxies in the Universe to move away from each other at an accelerating rate. Although dark matter and dark energy collectively comprise 95% of the Universe, their properties remain unknown.

Rubin Observatory will also be the most efficient and effective Solar System discovery machine ever built. Rubin will take about a thousand images of the Southern Hemisphere sky every night, allowing it to cover the entire visible Southern sky every three to four nights. In doing so, it will find millions of unseen asteroids, comets and interstellar objects. Rubin will be a game changer for planetary defense by spotting far more asteroids than ever before, potentially identifying some that might impact the Earth or Moon.

The amount of data gathered by Rubin Observatory in its first year alone will be greater than that collected by all other optical observatories combined. This treasure trove of data will help scientists make countless discoveries about the Universe and will serve as an incomparable resource for scientific exploration for decades to come.

To learn more about Rubin Observatory, download educational resources for teachers and students, and find out how you can get involved as a citizen scientist, visit the NSF–DOE Vera C. Rubin Observatory website.

Rubin Observatory is a joint program of NSF NOIRLab and DOE's SLAC National Accelerator Laboratory, who will cooperatively operate Rubin. NOIRLab is managed by the Association of Universities for Research in Astronomy (AURA).

"Releasing our first scientific imagery marks an extraordinary milestone for NSF–DOE Rubin Observatory. It represents the culmination of about two decades of dedication, innovation, and collaboration by a global team," said Željko Ivezić, Director of Rubin Observatory Construction. "With construction now complete, we're turning our eyes fully to the sky — not just to take images, but to begin a whole new era of discovery."

The LSST Camera at the heart of Rubin Observatory captures extremely fine features in distant galaxies, stars, and other celestial objects. A team of scientists, engineers, and technicians at SLAC National Accelerator Laboratory designed and constructed the camera, which is roughly the size of a small car and weighs almost 6200 pounds (2800 kilograms). Each image taken by the LSST Camera covers an area

Rubin, continued

on the sky as big as 45 full Moons.

"Making the world's largest digital camera will let scientists explore the cosmos in new ways, and at a scale that enables discoveries that should fundamentally change our understanding of the Universe," said Aaron Roodman, Director of the LSST Camera and Deputy Director of NSF–DOERubin Construction from SLAC National Accelerator Laboratory. "Just as you would with the camera in your phone, it is finally time to point and shoot — our science begins now."

"I want to extend my gratitude to the brilliant and dedicated team of people who made this milestone possible," said SLAC Director John Sarrao. "Rubin Observatory, and the LSST Camera at its heart, are unprecedented tools and a testament to the expertise, partnerships and leadership that drive discoveries forward, benefiting the nation and the world."

During its ten-year survey, Rubin will generate approximately 20 terabytes of data per night, plus an additional 15 petabyte catalog database. In 10 years, Rubin data processing will generate around 500 petabytes, and the final dataset will contain billions of objects with trillions of measurements. With regular data releases, scientists will be able to conduct their own investigations into Rubin's data remotely, enabling and expediting countless discoveries about our Universe and advancing science in ways we can't yet predict.

"We are so thrilled to share NSF–DOE Rubin Observatory's first images with the world — it's a proud moment for our whole team," said Sandrine Thomas, Deputy Director of Rubin Construction and Associate Director of Rubin Observatory for Rubin Summit Operations, "While we still have a few important months of commissioning and testing ahead, everything we learn now brings us closer to full science operations later this year. Today is just the beginning!"

Rubin also brings the power of astronomical data and interactive learning to educators and students around the world through an online public engagement platform developed by a team of astronomers, educators, and web design experts, which provides tools and activities to engage and interact with a subset of Rubin Observatory data.

Rubin Observatory's First Look images were also shared with over 300 public and private Watch Parties hosted by partner institutions, planetariums, observatories, museums, libraries, amateur astronomy societies,

Rubin, continued

schools, and universities around the world.

"It is not every day that a revolution stares you in the face, but that is precisely what the Rubin Observatory team — together with our colleagues at the NSF and DOE — has delivered with these first images. Astronomy is on the brink of transformation!" said Matt Mountain, AURA President. AURA is the managing organization for the Rubin Construction project and NSF NOIRLab. "Congratulations to the entire team for mastering the complexity of a fully active telescope and a pioneering optical system — imaging vast swaths of the sky with extraordinary precision with the world's largest astronomical camera, and streaming data into an audacious real-time processing system. Everyone at AURA is proud to be part of this landmark moment — and the incredible science that now lies just ahead."

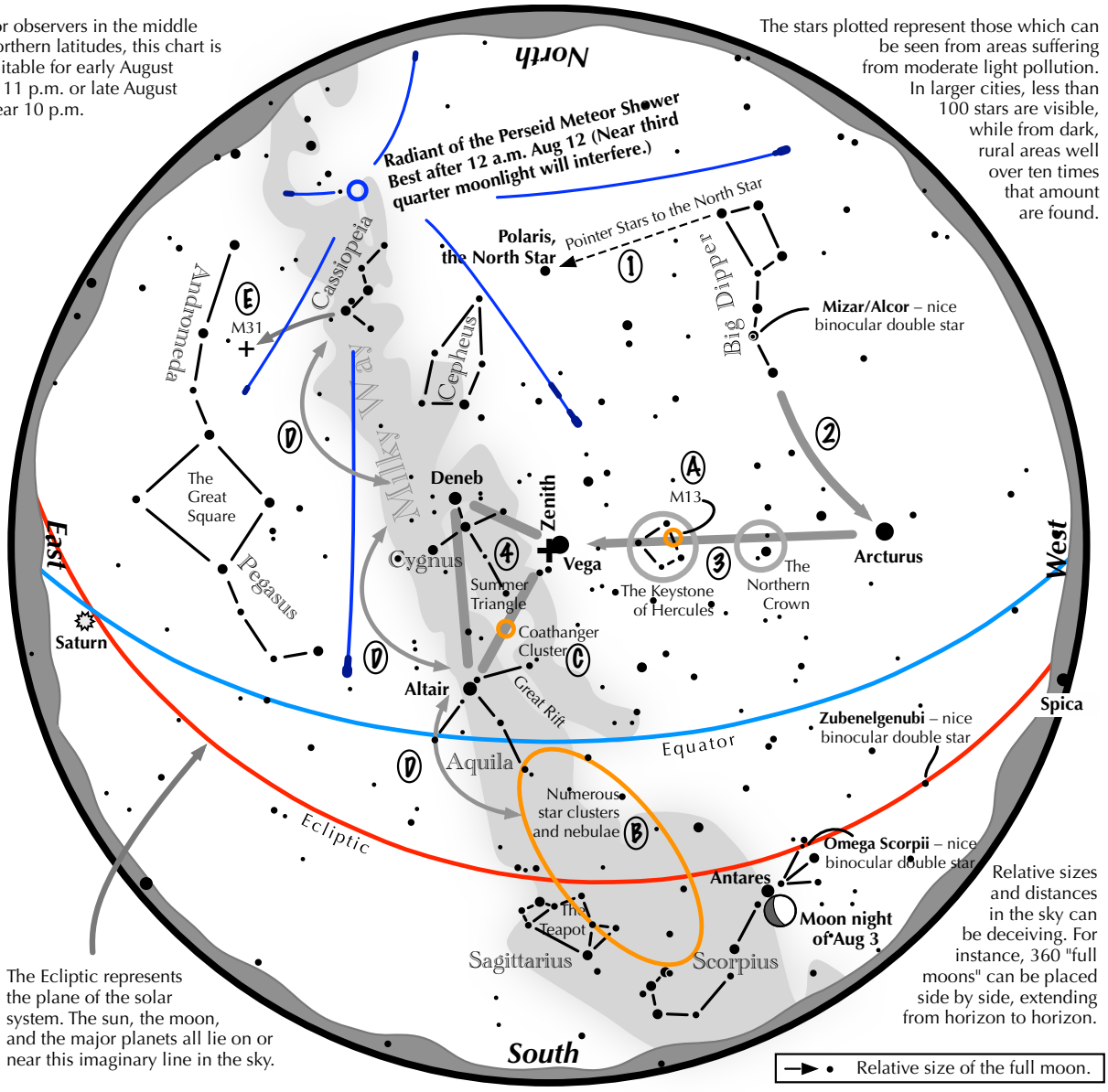
More information about the imagery included in this release — along with additional First Look images and videos — can be found on rubinobservatory.org. Rubin is also introducing its interactive, easy-to-use SkyViewer app, which offers both guided and free-form exploration of select Rubin images.

The public is also invited to experience Rubin Observatory's wide and deep image of the cosmos through sound. An interactive sonification, available in the SkyViewer app, lets users drift across Rubin Observatory's ultra-detailed view of the cosmos, translating the colors and brightness of distant galaxies and stars into an immersive, never-ending soundscape.

Navigating the mid-August Night Sky

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

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



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

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

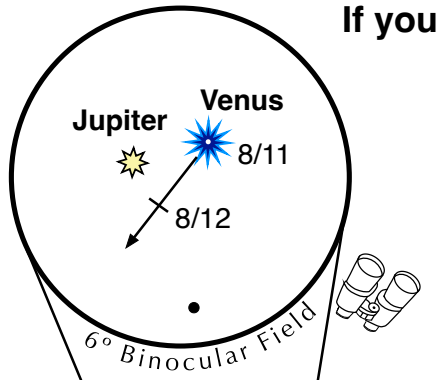
Relative size of the full moon.

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

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

Binocular Highlights
A: On the western side of the Keystone glows the Great Hercules Cluster.
B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
C: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
D: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
E: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.

Astronomical League Outreach



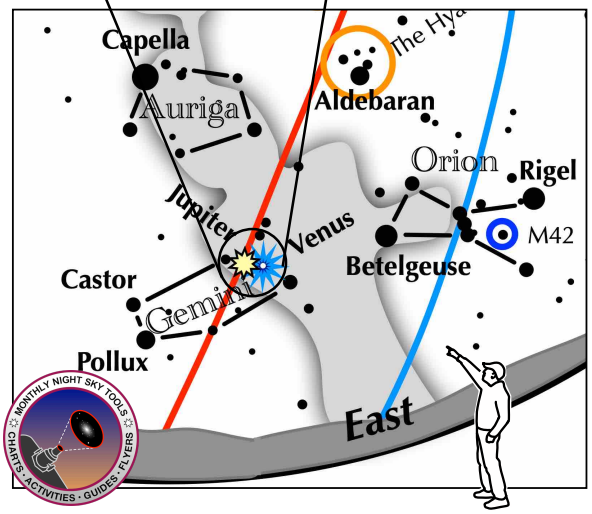
If you can view only one celestial event this month, view this not this one, but these two!

1. Look to the east 90 minutes before sunrise on August 11 and 12.
2. Find Venus and Jupiter shining left of Orion. They will be next to each other.
3. Use binoculars to separate them.

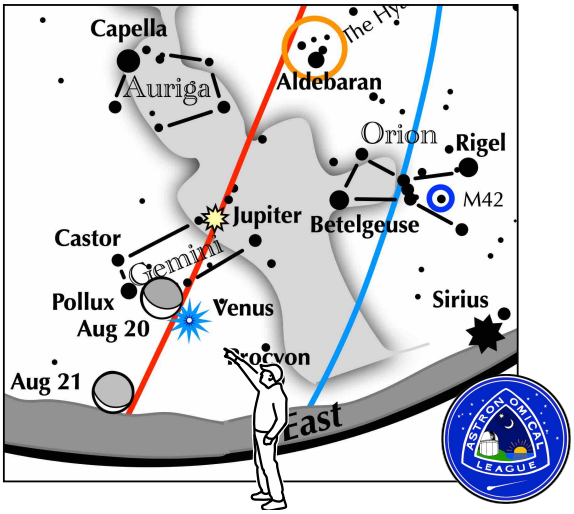
4. On August 20 and 21 about 90 minutes before sunrise look to the east-northeast.
5. On the 20th, the crescent moon, full with earthshine, floats near Venus.
6. On the 21st, a thinner crescent rises shortly before sunrise.
7. You will also see Sirius and Procyon rising.

What great way to start your day!

August 11 & 12



August 20 & 21



Astronomical League Outreach

Yes, it really does resemble the outline of a coat hanger.

Brocchi's Cluster or Collinder 399
(but everyone calls it the *Coathanger*)

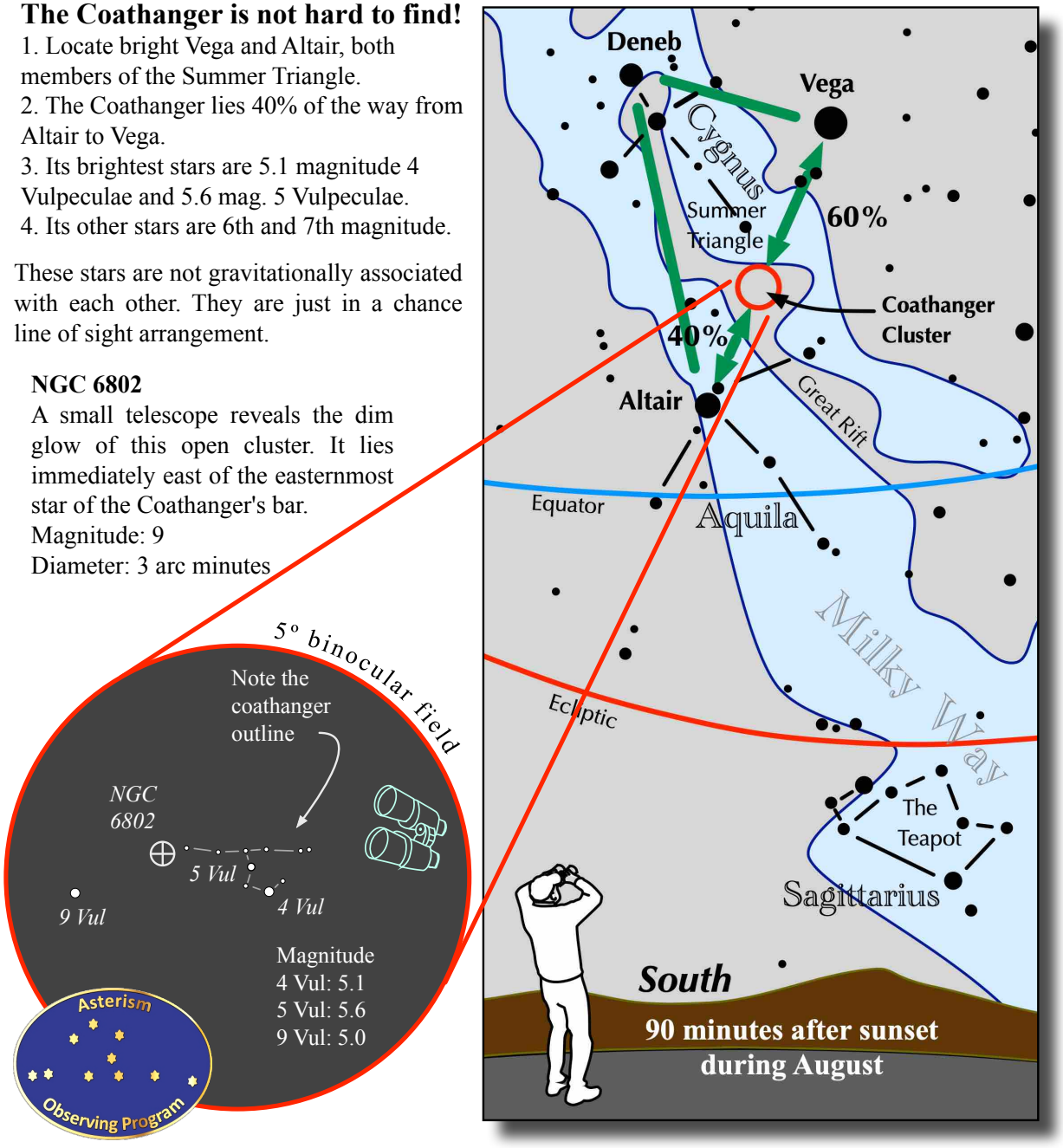
New to stargazing?
This is a wonderful object to observe through binoculars.

The Coathanger is not hard to find!

1. Locate bright Vega and Altair, both members of the Summer Triangle.
2. The Coathanger lies 40% of the way from Altair to Vega.
3. Its brightest stars are 5.1 magnitude 4 Vulpeculae and 5.6 mag. 5 Vulpeculae.
4. Its other stars are 6th and 7th magnitude.

These stars are not gravitationally associated with each other. They are just in a chance line of sight arrangement.

NGC 6802
A small telescope reveals the dim glow of this open cluster. It lies immediately east of the easternmost star of the Coathanger's bar.
Magnitude: 9
Diameter: 3 arc minutes



Astrophotography

Celestial Whirl by Leona Barratt
Multiple photos processed in star trails software.
Nikon Z6 - tripod - 26mm f4.0 ISO 400

From the Archives, July, 1995

The June 27th PAC meeting was rather quick with several brief reports. The Atlas Site news is that a light shield will be (is?) purchased and installed to cover the bright obtrusive light as discussed, motioned, and carried at the May meeting. Thank you Randy Volk and Larry Hancock! Erik Hubl and Carroll Moore recently attended a meeting with the Game and Parks Commission authorities. They discussed lighting in parks throughout the state as it pertains to prevention of light pollution. Details will probably be forwarded at a future PAC meeting. The NSP registration table/ traffic control/ site set up/ meeting room volunteers list was passed around. There is (was) plenty of preparation yet in the few remaining days before NSP 95. Next year's Nebraska Star Party will be August 10-17, 1996 to encompass the Perseid meteor shower on Monday and new moon on Wednesday. Look for NSP 95 photographs and articles in autumn issues of ASTRONOMY and SKY & TELESCOPE magazines as some attending members will outline these during NSP and will submit them soon for publication. Earl and Marge Moser attended the Mid-States Astronomical League Convention in Little Rock, Arkansas, where Earl read the annual PAC report of activities and number of PAC memberships.

The July PAC meeting is CANCELLED due to NSP. The next PAC meeting will be August 29th. The next scheduled Mahoney Star Party is August 4th at the soccer field of the Mahoney State Park. It will start at about sunset as usual. Bring your telescopes, but most importantly bring yourself. If you don't have a telescope you can be of great help anyway, because there are many questions asked by the general public. I was kept very busy during the last Mahoney Star Party with such questions and found the subsequent discussions to be very rewarding. The annual PAC picnic is scheduled for August 26th at Hyde Memorial Observatory at 6:00 pm and will be followed by a star party at the Atlas Site weather permitting. Please ignore the August 19th picnic date, as this is incorrect. Prairie Peace Park Announcement Prairie Peace Park, located on exit 388 (Crete/ Pleasant Dale) on 1-80, was one year old on June 10th this year. During Earth Day in the month of May the park director, Lincoln Justus, inquired whether anyone would be interested in constructing a outdoor scale solar system model. Interested? He may be reached at Prairie Peace Park at (402) 795 2144.

ADDRESS

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MEMBERSHIP INFO

REGULAR MEMBER - $30.00 per year. Includes club newsletter, and 1 vote at club meetings, plus all other standard club privileges.

FAMILY MEMBER - $35.00 per year. Same as regular member except gets 2 votes at club meetings.

STUDENT MEMBER - $10.00 per year with volunteer requirement.

If you renew your membership prior to your annual renewal date, you will receive a 10% discount.

Club members are also eligible for special subscription discounts on Sky & Telescope Magazine.

CLUB TELESCOPES

To check out one of the club telescopes, please contact a club officer. Scopes can be checked out at a regular club meeting and kept for one month. Checkout can be extended for another month if there are no other requests for the telescope, but you must notify a club officer in advance.
100mm Orion refractor: Available
10 inch Meade Starfinder Dobsonian: Available.
13 inch Truss Dobsonian: Needs repair.
10 inch Zhumell: Needs mount.

Buy the book! The Prairie Astronomy Club: Fifty Years of Amateur Astronomy. Order online from Amazon or lulu.com.