



M104 imaged by the Victor Blanco Telescope (note the enormous cloud of stars outside of the disk)

The Sombrero Galaxy is one of the showpieces of the Virgo cluster of galaxies, about 28 million light years away. It is seen tilted 6 degrees and has a diameter of over 50,000 LY making it about half the size of our galaxy. In 1913, Vesto Silpher of Lowell Observatory became the first astronomer to detect rotation in a galaxy other than our own. It has a very dense nucleus and tightly wound spiral arms. The Sombrero lies at the southern edge of the rich Virgo cluster of galaxies and is one of the most massive objects in that group, equivalent to 800 billion suns. Any inhabitant of the Sombrero would see “their” Milky Way as a haze of faint stars filling the entire sky rather than the narrow band we see. Surrounding this galaxy can be seen very faint globular clusters orbiting it. Our galaxy has over a hundred, but M104 has over 2,000 globular clusters. At its center is a massive black hole with a mass of over 1 billion suns. – JR Paulson

SAVE THESE 2026 DATES!

June 6 – Member Meeting at Ashton Observatory 6:30 p.m.

June 13 – Program at Ashton **“Starry, Starry Night”** by JoAnn Cogil 8:00 p.m.

June 27 – Program at Ashton **“Inspiring Astronomer – Herbert Howe”** by Jim VandeBerg 8:00 p.m.

October 8 -10 **Iowa Star Party**, Whiterock Conservancy

June 2026 – President’s Report

Excitement had been building during the month of May as we eagerly awaited the delivery of our new Planewave telescope for the east dome. And that day arrived!! Thank You to Brennan Jontz for being our point of contact for the deliveries. Our Observatory Committee has been planning installation of the new scope and now it has been successfully installed and is working well. What a sight!! We are blessed with the kind contributions to our organization.

Nine DMAS members attended the NCRA Eastern Iowa Cosmic Conference in Cedar Rapids mid-May. It was good to connect with other astronomers in Iowa and surrounding states. We enjoyed touring the observatory for the Cedar Amateur Astronomers club, known as the EIOLC, Eastern Iowa Observatory & Learning

Center. Speakers talked about the Sun, solar cycles, the Parker Solar Probe, auroras, star formation and galaxies. Some of our members then



participated in tours on Sunday morning arranged by the Cedar Astronomers club.

At our June membership meeting I will be sharing information about DMAS logo apparel.

JoAnn Cogil

DMAS

**The Des Moines Astronomical Society
Monthly Membership Meeting
June 6th, at 6:30 P.M.
at Ashton Observatory**

- Call to Order – Introductions
- Secretary's Report – May meeting minutes (printed in June Starlight Journal)
- Treasurer's Report
- Observatory Director's Report
- Timberline Report
- Member Comments
- Other Business
 - Logo Apparel
 - NCRAL 2026
 - NCRAL 2027
- Dean Regas – Zoom presentations // zooms scheduled to begin at 6:00 P.M. CDT
 - June 2nd – Webb & Rubin Telescope Update – recording available
 - July 7th – Along the Milky Way
 - August (date TBA) – no topic announced as yet
- July 4th – Ashton Observatory open for Public Viewing
- July 11th – DMAS Annual Summer Picnic
 - Time is 6:00 PM
 - No Membership meeting this date!
 - Program to follow the picnic – Finding Distances to Stars & Objects
 - 8:00 PM
- Next Membership Meeting Date: August 8th at Ashton Observatory
 - 6:30 PM
- Adjourn

Observatory Committee Report



June 2026, Greg Woolever, Observatory Director

Wow ... June already! Activities are going well. I hope you got to attend the last

Saturday Public Night classroom program given by Jim McGraw. Jim did a wonderful job describing various campsites around Iowa and their darkness conditions, and how to combine camping and stargazing. He titled his talk "Stars & S'mores," and had great detail and a warm engagement with our audience. All our other presenters have done a similarly great job, so thanks to all!

The big news since last month is that the PlaneWave CDK14 telescope arrived and we have mounted it in the east dome. The final physical configuration is still evolving, but we have used it one Saturday Public Night so far. There are adjustments that we need to do to control pointing of the Paramount mount, but the views through the CDK14 are spectacular in my opinion. "It takes a village" as the saying goes, so I want to thank all the members of the Observatory Committee for their

contributions bringing the new telescope to Ashton. And most recently, the lifting of heavy telescopes was helped enormously by park officer, Jerry Ratliff and his assistant, Jacob Arrowood. We aging DMAS members knew we should get some lifting help this time. Thanks Jerry!

Greg Woolever & the Observatory Committee: Dave Heck, Norm Van Klompenburg, Jim VandeBerg, JoAnn Cogil, Greg Woolever.



Greg, Dave and Norm fastening the new scope to the mount.



Greg and Norm balancing the new scope.



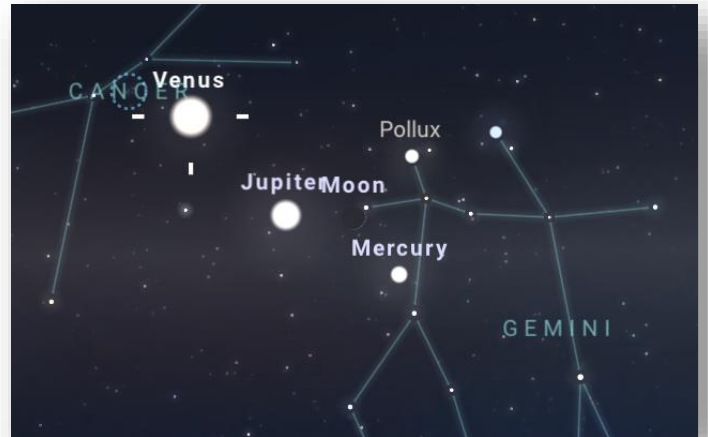
*The new scope with dust shroud attached.
Assembly crew: Norm Van Klompenburg, JoAnn
Cogil, Dave Heck and Greg Woolever and Jim
VandeBerg (behind the camera)*

The Night Sky for June 2026

By JoAnn Cogil

Our days are getting to their longest point as we approach the beginning of Summer, which means less hours to enjoy the night sky. I just continue to hope for clear skies!!!

Mercury - has its best evening showing this month but drops below the western horizon shortly after sunset. This little planet pairs nicely with Venus & Jupiter this month, so watch the western horizon near sunset. It reaches its greatest elongation (longest distance from the Sun as viewed from Earth) on the 15th. June 16 at 10 PM. (Image credit: Stellarium)



Venus – This month our Evening Star displays a 77% disk. Early in the month it leads Jupiter to the western horizon but then lets Jupiter take the lead by mid-month. On the 17th there will be a daytime occultation of Venus by the Moon at about 2:45 PM CDT. Try using binoculars to watch this event. Venus occultations are fairly uncommon with the last one seen in the US in April 2024.

Earth – SUMMER SOLSTICE happens on the 21st at 3:25 AM CDT.



Mars – The red planet rises about 90 minutes before sunrise and should have a good viewing opportunity on the 12th. Look for Mars near the Pleiades in the E-NE on the 23rd. June 12th at 4:30 AM. Neptune is in the top right corner of this image. (Image credit: Stellarium)

Jupiter – Continues to head towards a solar conjunction next month at the end of July. Best viewing this month is shortly after sundown, usually with Venus nearby.

Saturn – Remains in our eastern morning sky, so set your alarm clock for those early morning hours to see this beauty.

Uranus – Is not visible the first half of June but finally shows itself by the 15th as it rises about an hour before sunrise.

Neptune – This blue planet finally appears in the night sky after midnight.



Moon

8th – 3rd / Last quarter

14th – NEW Moon at 9:54 PM CDT and is called a “Super New Moon” as it is at its closest point to Earth.

21st – 1st quarter

29th – FULL Moon at 6:56 PM CDT, known this month as “Micro Full Moon” as it is at its furthest distance from Earth.

The Full Moon this month is also named the Rose Moon, Flower Moon and Strawberry Moon.

Comets

Comet 10P / Tempel (Tempel 2) – is predicted to have its best showing since 1967. It is expected to reach peak brightness in early August. It was discovered in 1873. It takes about 5.4 years for it to complete one orbit around our Sun.

Best viewing will be late in the night into the early morning hours, after it gains altitude above our southeastern horizon. Scientists suggest one could use binoculars and/or small telescopes to easily see this comet.

Meteor Showers

None this month of June.

Astronomical League

Explore these Rewarding and Educational Observing Programs

The **Astronomical League** is an umbrella organization of amateur astronomy societies. Currently their membership consists of over 330 organizations across the United States, including the **Des Moines Astronomical Society**. You can find numerous useful astronomy resources on their website: [Home - Astronomical League](https://www.astronomicalleague.org/)



Educational Opportunities

Dean Regas is **an astronomer, public speaker, author, and podcaster** who brings the complicated universe down to Earth for audiences of all ages.

Dean is an honorary member of the Des Moines Astronomical Society.

He is also the host of the “Looking UP” podcast.

Visit Dean at his astronomy website: <https://astrodean.com/>



Free Online Zoom Classes in 2026 with Astronomer Dean Regas

Feb 11: Life and Times of Galileo

Mar 11: Comets and Meteors

Apr 7: Top 10 Things to See in the Night Sky

May 5: It's About Time - How We Use the Sky

June 2: Webb and Rubin Telescope Updates

July 7: Along the Milky Way

Aug: TBD (depending on the itinerary of my eclipse trip)

Sep 1: Ancient Greek Astronomy

Oct 6: Monsters in the Sky - Constellations of Fall

Nov 3: Life and Death of Stars

Dec 1: Exoplanets News

(still available)

DMAS members will receive an email with free links to all of these programs!

June 2026 Ashton Classroom Programs – 8:00 p.m.

Saturday June 13 – Program at Ashton **“Starry, Starry Night”** by JoAnn Cogil

Saturday June 27 – Program at Ashton **“Inspiring Astronomer – Herbert Howe”** by Jim VandeBerg



Summer Star Parties in Our Region:

- o W O W 2026 (Wisconsin): June 11–14, 2026
- o Northern Nights Star Fest (Minnesota): September 9–14, 2026
- o Northwoods Starfest (Wisconsin): September 11–13, 2026
 - o Eastern Iowa Star Party, IA: September 11-13, 2026
 - o Illinois Dark Skies Star Party, IL: October 8-10, 2026
 - o The 2026 Iowa Star Party, IA: October 8-11, 2026

Please give a warm welcome to these new DMAS members:

**Ben Sinclair
James Rankin
Julie Walker
James Bruton
Sally Cone
William Cone
Bryn Clarke & Family (lifetime)
Eric Song
Marv Lind**

The Des Moines Astronomical Society is on Facebook

Recent notices, articles and images are posted on our Facebook page. Be sure to like us when you visit our DMAS Facebook page.



Space Tourism Guide Lists Ashton Observatory!

The on-line **Space Tourism Guide** has considerable information about space and stargazing.

Their mission is to “help every traveler find wonder among the stars.”

They recently published **10 Incredible Spots for Stargazing in Iowa**, including Ashton Observatory.

Click on this link to see which 10 spots they chose in Iowa for stargazing!

<https://spacetourismguide.com/stargazing-in-iowa/>

North Central Region of the Astronomical League Conference



DMAS 2026 NCRAL Attendees

Back Row: Cole Skinner, Bruce Drummond, Greg Woolever, Derrick Bennett, Jim VandeBerg

Front Row: Katie Price, Mary Woolever, JoAnn Cogil

The **Cedar Amateur Astronomers** in Cedar Rapids delivered an exceptional experience hosting the 2026 **North Central Region Astronomical League Conference** — the *Eastern Iowa Cosmic Conference*. Every element of the event stood out: the quality of the presentations, the smooth organization, and the memorable activities at the **Eastern Iowa Observatory**.

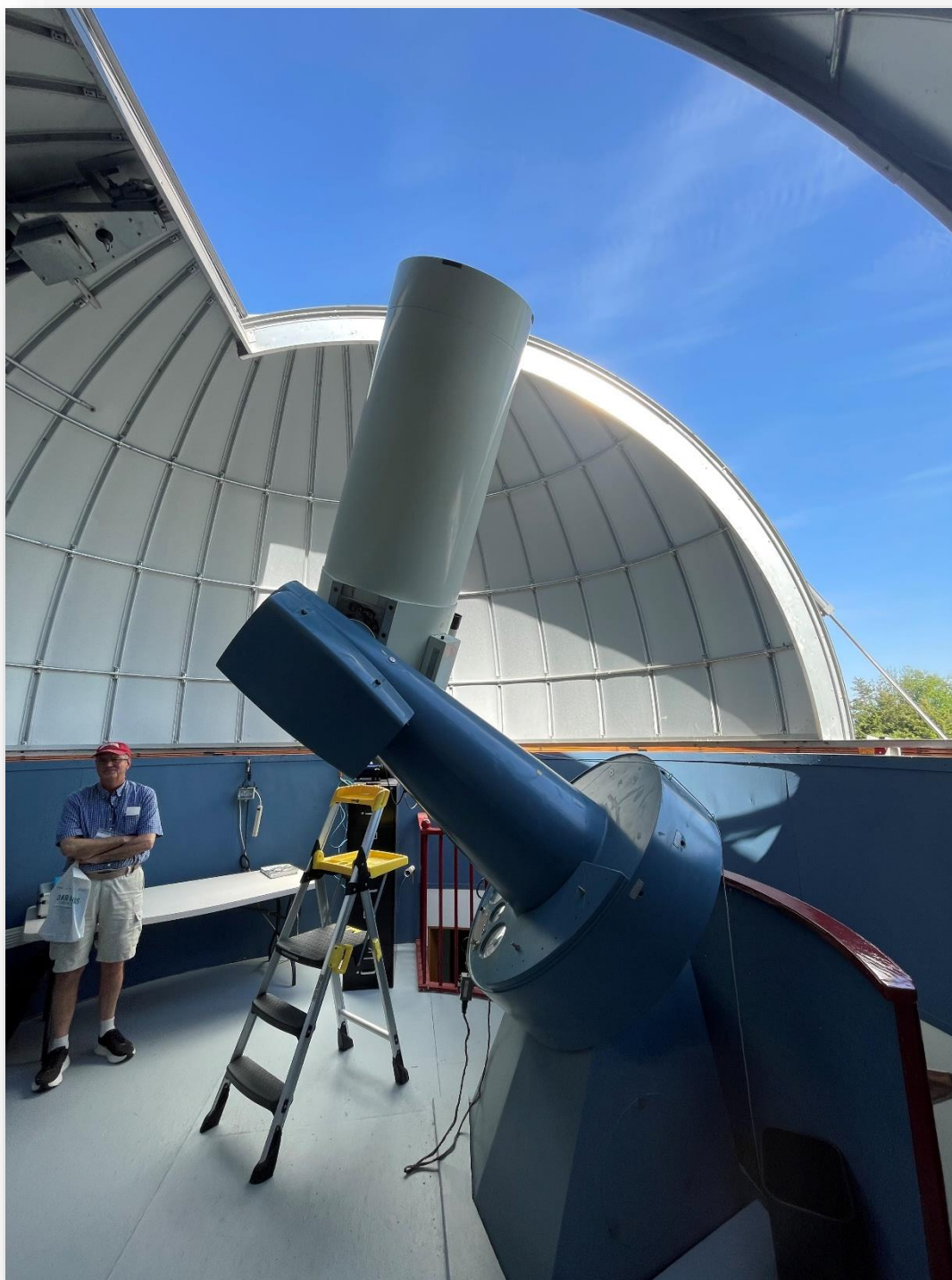
Attendees from Des Moines agreed that this gathering was not just well-run, but genuinely inspiring. It offered a rare opportunity for amateur astronomers across the region to connect, learn, and celebrate the night sky together.



*Some of the Buildings at
the Cedar Amateur
Observatory Site*

*Friday evening Banquet at
the Cedar Amateur
Observatory Classroom*





The 24-inch Boller & Chivens telescope at the Cedar Amateur Observatory

Iowa PBS Dark Sky Program

Protecting Iowa's Night Sky: Light Pollution and Dark Sky Solutions

Here are some ways to view this 7-minute video story:

<https://www.youtube.com/watch?v=9Y3juy5dNDY>

<https://www.pbs.org/video/dark-sky-iowa-ziyon0>

<https://www.iowapbs.org/shows/iowalife/clip/14116/protecting-iowas-night-sky-light-pollution-and-dark-sky-solutions>

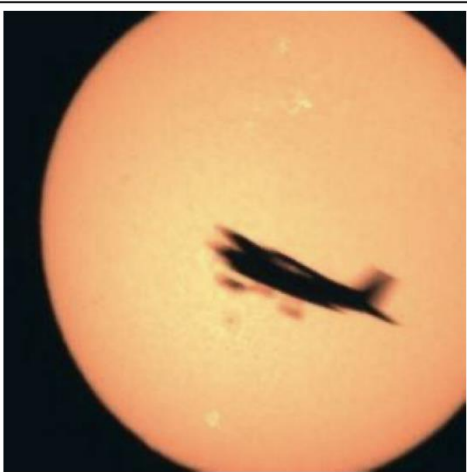


This Month in DMAS History

From the StarLight Journal 25 Years Ago, June 2001

There are no StarLight Journals in the online archives for January through June of 2001.

From the StarLight Journal 10 Years Ago, June 2016



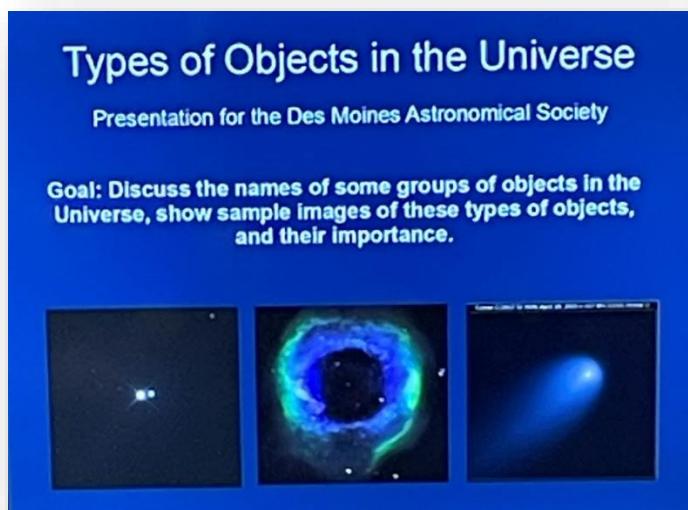
Plane in the Sun by Luis Angel Martinez and project partner

"It's been about a year since I was last at Ashton. I have been away at college in California but I have not stopped star-gazing! For one of my final projects my partner and I wanted to image a plane flying in front of the sun and we were successful in doing so. I hope everybody enjoys it."

Luis has just completed his first year studying -at last report- physics and math at Harvey Mudd College in California, and pursuing a doctorate degree. While at Lincoln-Central Campus High School in Des Moines Luis spent more than five weeks in New Mexico with other high school students studying advanced courses in science *and astronomy*.



Luis's Lincoln-Central Campus high school graduation picture.



On May 9, DMAS member **Paul Caligiuri** provided the public lecture: **Types of Objects in the Universe**

DRAKE MUNICIPAL OBSERVATORY PUBLIC NIGHTS 2026

Lectures start at 8:00 p.m.

4898 Observatory Road, Des Moines, IA**September 19:** The Sky (Fall & Winter)**September 26:** Drake Municipal Observatory: A Century of Public Astronomy**October 3:** The Herschels: A Remarkable Family**October 10:** Are We Inside a Gigantic Black Hole?**October 17:** The Hubble Tension: Why is Hubble So Tense?**October 24:** The History of Spectroscopy: Guest Speaker Dr. Robinson Yost**October 31:** Open Topic Night**November 7:** Extraterrestrials: Where Are They?

Dear Observatory Family,

Tell your friends and family, and as usual it is free and open to all.

All the best,

Herb Folsom

Drake.edu/observatory/publicevents/**Historical Astronomy Events that Happened in June**

1178 June 18 – Five monks in England observe an impact on the Moon.

1633 June 19 – The first sketch of Saturn is drawn.

1655 June 13 – Christiaan Huygens discovers Saturn's largest moon, Titan.

1908 June 30 – An asteroid about 180 feet in diameter explodes above Tunguska, Russia

1949 June 14 – US Army puts the first monkey into space.

1978 June 22 – Pluto's largest moon Charon is discovered.

1985 June 11 – Vega 1 space craft lands on the surface of Venus

2002 June 4 – Dwarf planet Quaoar discovered.

2002 June 6 – A 33-foot meteor explodes over the Mediterranean Sea

2008 June 20 – Phoenix probe confirms water ice on Mars' north pole.

2012 June 5 – The last transit of Venus across the Sun until 2117



Here is an image taken with my Dwarf 3 scope set for about 5 degrees by 3 degrees of the sky. The image is of Markarian's Chain of galaxies in Virgo. This is about a 58-minute total imaging time of 232 fifteen second images stacked and processed by Dwarf tools. There are about 19 total galaxies and maybe 17 in this view of the Virgo Cluster. - DMAS member Paul Caligiuri

On May 23 DMAS member **Jim McGraw** provided an informative classroom program called
“Stars & S’mores: The Perfect Camping Combination.”

NINE EAGLES STATE PARK

Davis City • Bortle Class 2 • Iowa's Darkest Sky

- Iowa's only Bortle Class 2 rated public location
- Two hours south of Des Moines
- Three campgrounds and cabin (hook-ups, dispersed & primitive)
- 1,100 acres of rolling hills and oak forest
- 64-acre lake for fishing
- Nine miles of hiking trails
- 300-year-old trees provide windbreaks
- Best for: Milky Way, deep-sky objects, astrophotography

CLASS 2

Bortle Scale Rating

Tip

Stay overnight to catch the best views between midnight and 4 AM when the sky is at its darkest.

PARK RESERVATION TIPS

State Park Reservation System: <https://iowastateparks.reserveamerica.com>

IA State Parks Info

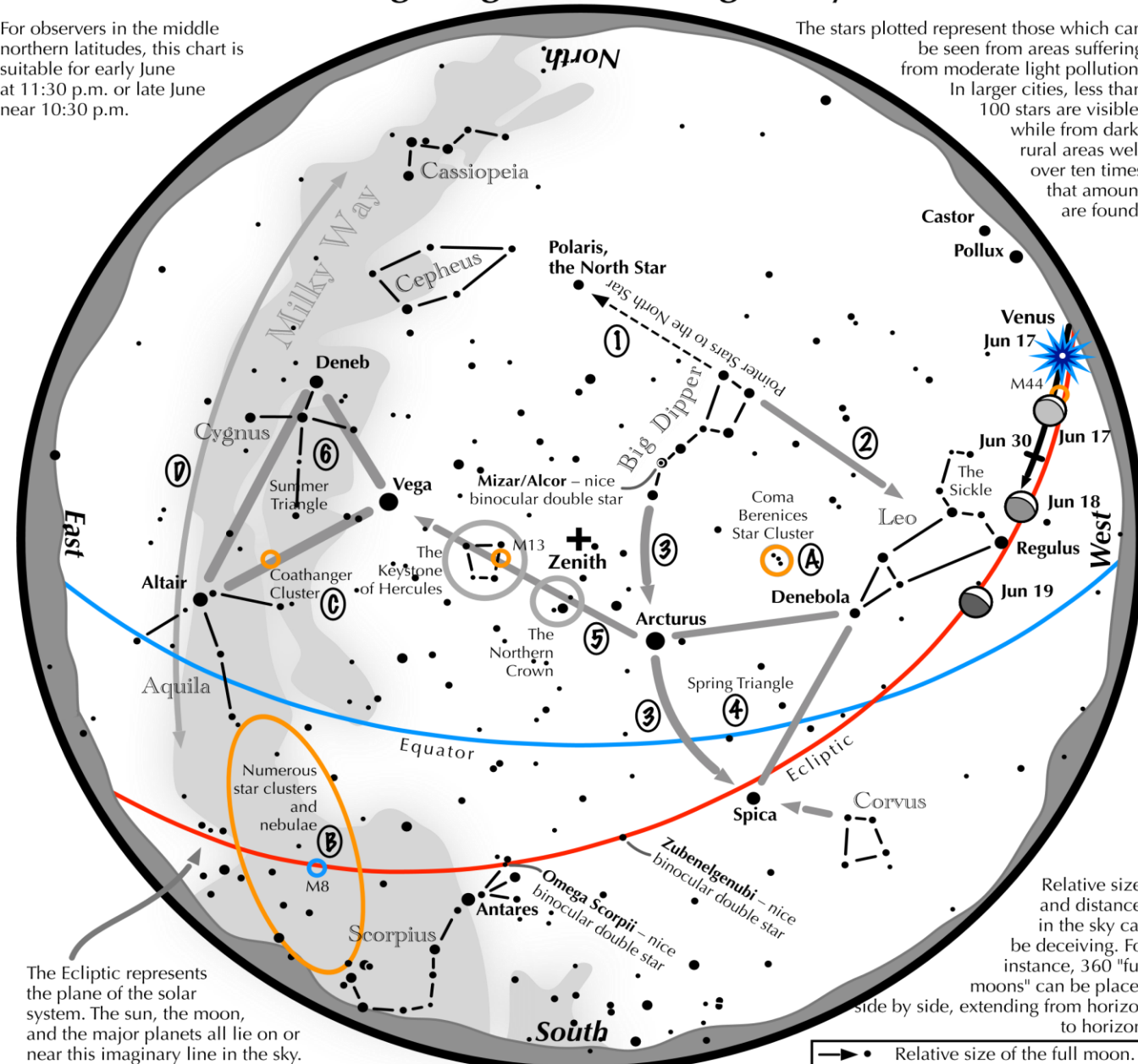
- Can reserve up to 3-mths in advance
- Camping: Min 2-night stay for weekends – May 1 to Oct 31
 - Min 3-night stay Memorial and Labor Day weekends
- Cabins: Min 2-night stay
 - Some require weeklong stay during peak season
- Weekdays always best time to go, especially during peak season (more availability, fewer campers)
- Parks close at 10:30 pm for visitors

Navigating the June Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for early June at 11:30 p.m. or late June near 10:30 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.



Navigating the June 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 Draw another line in the opposite direction. It strikes the constellation Leo high in the west.
- 3 Follow the arc of the Dipper's handle. It first intersects Arcturus, the brightest star in the June evening sky, then Spica.
- 4 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 5 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.
- 6 High in the east are the three bright stars of the Summer Triangle: Vega, Altair, and Deneb.

Binocular Highlights

- A: Between Denebola and the tip of the Big Dipper's handle, lie the stars of the Coma Berenices Star Cluster.
- B: Between the bright stars of 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.

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





Our 2026 Des Moines Astronomical Society Officers, Directors & Observatory Committee

President: JoAnn Cogil

Vice-President: Pat Meade

Secretary/ALCor: Jim VandeBerg

Treasurer: Bruce Mumm

Observatory Director: Greg Woolever

At Large Director: Norm Van Klompenburg

At Large Director: Jessica Weinreich

At Large Director: Dave Bailey

Observatory Committee: Greg Woolever, Norm Van Klompenburg, Dave Heck, JoAnn Cogil and Jim VandeBerg

Contact us at:

info@DMastronomy.com

The *Starlight Journal* is the monthly newsletter of the **Des Moines Astronomical Society, Inc.** P.O. Box 111, Des Moines Iowa 50301-0111. Our Observatory is located in Ashton Wildwood Park, 8755 West 122nd Street North. Founded in 1970, we are a non-profit, 501(c)(3) organization. Our website is DMastronomy.com. More information and photos can be found on our Facebook page.

Article Deadline: Before the 21st of the month, please send your articles, photos, sketches, poems, cartoons, and news to Jim VandeBerg (FinePineCabin@gmail.com) Articles may be edited to fit the

allotted newsletter space. Copyrighted material must have permission from the copyright holder. Views and opinions expressed within submissions are those of the author and not necessarily those of the Des Moines Astronomical Society, Inc.

The Purpose of our Society

- Secure the pleasure and benefits of an association of persons interested in amateur astronomy
- Promote the science of astronomy
- Encourage and promote activities of an astronomical nature
- Foster observational, computational, technical, and creative skills in various fields of astronomy
- Pursue activities with other amateurs and professionals
- Educate the public

Des Moines Astronomical Society
PO BOX 111
Des Moines, Iowa 50301

