

STARLIGHT JOURNAL

SEPTEMBER 2026



Little Sombrero Galaxy

Galaxies can take many shapes and be oriented any way relative to us in the sky. This can make it hard to figure out their actual morphology, as a galaxy can look very different from different viewpoints. A special case is when we are lucky enough to observe a spiral galaxy directly from its edge, providing us with a spectacular view like the one seen in this image.

NGC 7814 is a spiral galaxy about 40 million light-years away in the constellation Pegasus. It is also known as the “Little Sombrero.” Its larger namesake, the Sombrero Galaxy, is another stunning example of an edge-on galaxy. The “Little Sombrero” looks like a miniature version of Messier 104. It is about the same size as its bright namesake at about 60,000 light-years across, but as it lies farther away than M 104 at 28 million light-years and so appears smaller in the sky.

NGC 7814 has a bright central bulge and a bright halo of glowing gas extending outwards into space. The dusty spiral arms appear as dark streaks. - **Image and text by DMAS member JR Paulson**

SAVE THESE 2026 DATES!



September 5 Board Meeting (5:30) and Member Meeting (6:30)
 September 12 **"Journey to the Edge of the Universe"** by Jim VandeBerg 8:00 p.m.
 September 26 **"History of Apollo"** by Wade Johnson 8:00 p.m.
 October 8 -10 **Iowa Star Party**, Whiterock Conservancy

September 2026 – President's Report

The weather continues to be an issue during our public viewing nights. But how wonderful it is that many visitors still join us at Ashton Observatory despite the weather. We have had great programs presented by club members and our visitors enjoy learning more about the night sky. Thankfully, there have been moments of clear skies to view some objects through our telescopes. Visitors always enjoy seeing our large telescopes and learning how they function.

Our visitors also enjoy the many night sky images in our classroom, provided by DMAS Member JR Paulson. He recently replaced a few of the pictures with newer images and modified the museum lighting to better showcase the pictures. These are stunning images and we are fortunate to have JR share these with us. Thank You, JR!!

The new PlaneWave 14-inch telescope in the east dome is still a work in progress. We are able to use the new telescope during public viewing nights, and the images are very good. We currently do a small bit of manual alignment using the joystick on the handheld mount controller, which allows us to center an object. We just

need clearer skies to improve the views. The Observatory Committee continues to work on the alignment process

but needs clear skies for this portion of the alignment process. I see a theme here; we need less clouds in the night sky!!

As a member of DMAS, everyone has a voice in how our organization functions. This includes what we do, when we do events, equipment purchases, etc. If you cannot attend a club meeting, please contact a Board member to offer your thoughts, suggestions and/or concerns!!

DMAS members, please join us on Saturday evenings during the public viewing hours, spend time in the domes and look through our telescopes. We have the new PlaneWave in the east dome, have you seen it yet? Your vote helped to make the purchase. Come take a look!! Saturday evenings are not just for the public; members can enjoy the night sky views as well!!

JoAnn Cogil



The Des Moines Astronomical Society
Monthly Members' Meeting Agenda
September 5th, at 6:30 P.M.
at Ashton Observatory

- Call to Order – Introductions
 - Secretary's Report – August meeting minutes (printed in September Starlight Journal)
 - Treasurer's Report
 - Observatory Director's Report
 - Surplus equipment
 - Timberline Report
 - Other Business
 - Upcoming Board of Directors election
 - Dean Regas – Zoom presentations // zooms scheduled to begin at 6:00 P.M. CDT
 - October 6th – Monsters in the Sky – Constellations of Fall
 - November 3rd – Life and Death of Stars
 - December 1st – Exoplanets News
 - Drake Observatory – Fall Lecture Series, lectures begin at 8:00 PM
 - September 18 – Finding Your Way Around the Sky
 - September 25 – Johannes Kepler: God's Mathematician
 - October 2 – Astroarchaeology: Ethan Beacom, Science Center of Iowa
 - October 9 – Light is Weird
 - October 16 – Caroline Herschel: Dr. Laura Yost, University of Iowa
 - October 23 – Dark Universe: Does It Matter
 - October 30 – Native American Astronomy: Skywatchers of the High Desert, Dr. Rob Yost Kirkwood
 - November 6 – Open Discussion
 - November 13 – Moons: A Multitude of Worlds
 - November 20 – Building a Solar System
-
- Next Membership Meeting Date: October 3rd at Ashton Observatory
 - Time is 6:30 PM

Adjourn

The Des Moines Astronomical Society
Board of Directors Meeting Agenda
 September 5, 2026, at 5:30 P.M.
 at Ashton Observatory

- Call to order
- Secretary's Report – April 2026
Meeting Minutes (published in May 2026 Starlight Journal)
- Treasurer's Report
- Observatory Director's Report
 - Surplus equipment
- Timberline Update
- Upcoming Board of Directors Election
 - Nominating Committee
- Other Business
- Adjourn
-



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

Here are three ways to view this very interesting 7-minute video story:

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

<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>

Observatory Committee Report

September, 2026, Greg Woolever,
Observatory Director

August slips away, becoming September, Labor Day, and a new school year begins. The days get shorter.

Saturday Public Nights continue to get good attendance, whether classroom program or not.

As I think most DMAS members understand, our outreach to public visitors at Ashton is the main activity we do. I thank those members who operate telescopes and otherwise welcome visitors to Ashton. And it's most helpful to have members guiding visitors up into the domes, and keeping things moving so no one has to wait too long to have a turn looking through a telescope. And thanks to those in the yard who can point out constellations, stars, and all the things that "looking up" can reveal.

When our visitors are pleased with their experience (and they are), and vow to come again (they do), it's because of the whole

team of DMAS members spreading the welcome mat.

The observatory committee continues to work on setting up the Paramount mount to work with the PlaneWave CDK14 telescope. Challenges continue to arise, but progress inches forward.

Private groups have been less frequent this year. There are two scheduled in the coming weeks. That takes volunteers to help host, so let me know if you are interested in doing that.

Looking over the sign-in sheet from last Saturday I see we had one visitor from Germany, and another from France. It's true, our outreach indeed stretches across the state, the nation, and the globe!

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



Summer Star Parties in Our Region:

- 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

Sunrise/Sunset with Astronomical Twilight (CST)

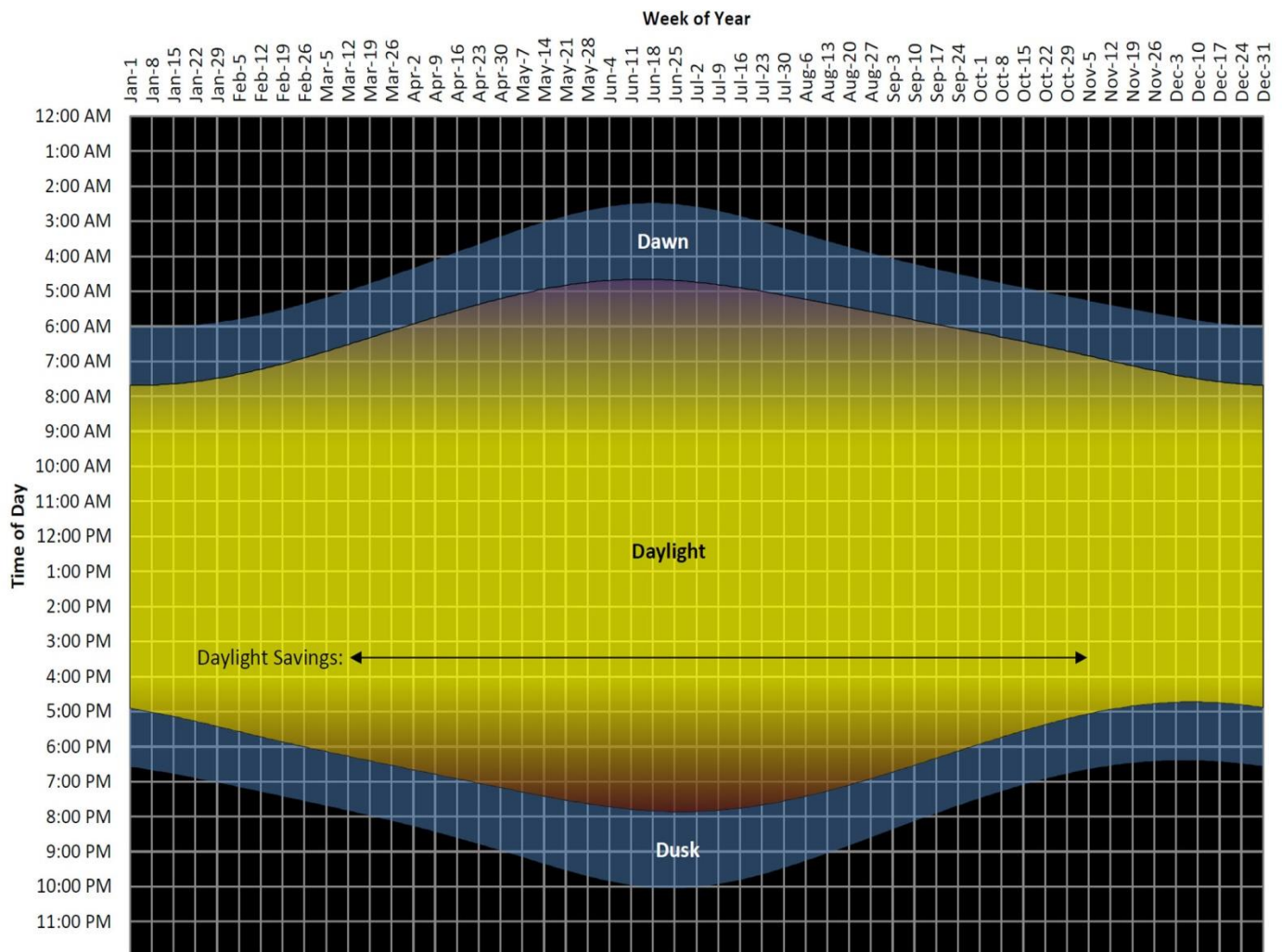


Chart courtesy of our Observatory Director, Greg Woolever

A **Sunrise/Sunset with Astronomical Twilight chart** is a visual or tabular tool that shows the exact times for **sunrise, sunset, and the start/end of astronomical twilight** for a given location and date. It's designed to help users plan activities that depend on precise light conditions, especially when the sky is still illuminated but the Sun is below the horizon.

The Night Sky for September 2026

By JoAnn Cogil

“The most important feature of any telescope is the imagination with which it is used.” – Vera Rubin,
American Astronomer

The week of September 6-14 is being called the “Week of the Planets” as our Moon meets (one-by-one) with Mars, Jupiter, Mercury and Venus.

Mercury - the Moon passes Mercury in the evening twilight of the 12th, both being visible for a very brief 20 minutes after sunset. This tiny planet joins Venus on the 30th as they are both low in the western sky.

Venus – is still our Evening Star, but it continues to set earlier each evening, shortly after sunset. On the 1st it shares the sky with the bright star Spica. Check out the thin crescent of Venus, Spica and the Moon as they gather together in the early evening at dusk on the 13th. (Image of 9/13 @ 8:00 PM CDT, credit: Stellarium)

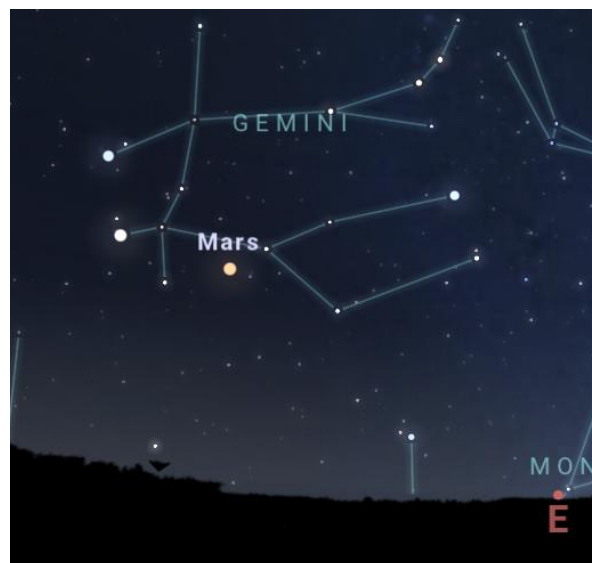
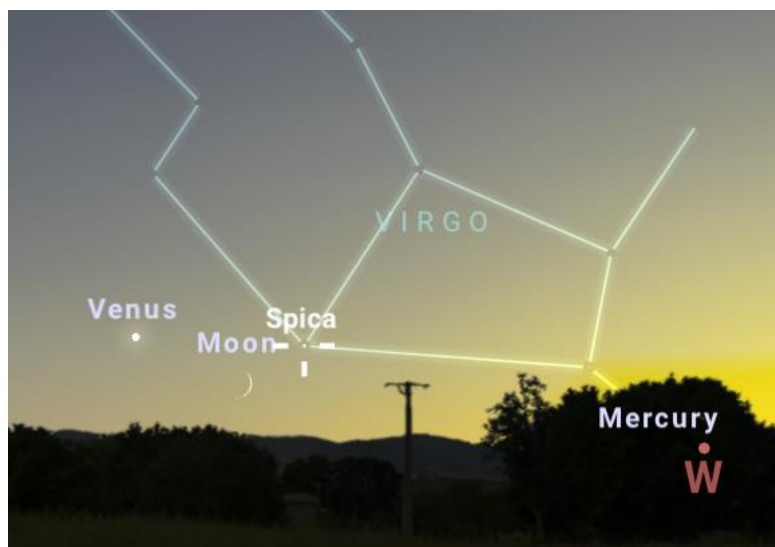
Then on September 22nd, Venus will be at its brightest of 2026 but is only at 22% illuminated, so it will appear as a small crescent. It is so bright while being so small due to it being so close to Earth.

Fun fact: When Venus shows in its full phase, it is actually at its farthest point from Earth, making it appear smaller and dimmer.

Earth – Autumnal Equinox happens on the 22nd at 7:05 PM CDT, providing equal hours of daylight and night. On this day, the Sun rises due east and sets due west.

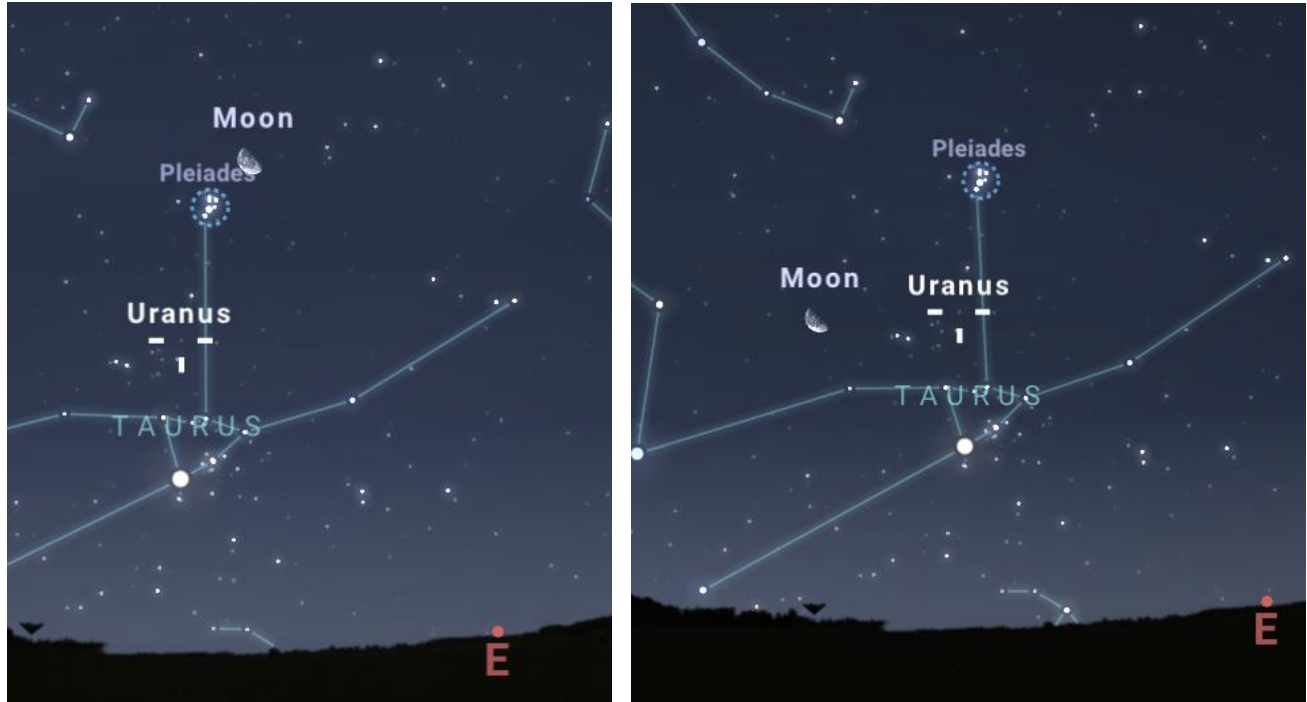
Mars – The red planet slowly brightens this month as it rises after 2 AM. Our Moon joins the planet in the early hours of the 6th. Then Mars sits near Pollux, in the constellation Gemini, on the 13th. (Image of 9/13 @ 3:00 AM CDT, credit: Stellarium)

Jupiter – Has moved into our morning sky as it now rises after 4 AM this month. On the 8th, the planet is near the Moon in the early morning hours. Ganymede, Jupiter’s largest moon, transits the planet the morning of the 29th. The transit is expected to start about 4:00 AM CDT and last almost 3 hours.



Saturn – We welcome back the beautiful ringed planet as it finally returns to our evening skies and rises earlier each night this month. We are excited to watch as the rings begin to open more. About midnight on the 25th, the Moon & Neptune join Saturn in our southern sky.

Uranus – both evenings of the 3rd & 4th we find Uranus in Taurus constellation with the Moon & the Pleiades (open star cluster) nearby. Notice the location of the Moon as it moves each night. (1st image of 9/3 @ 12:45 AM CDT, 2nd image of 9/4 @ 12:45 AM CDT, credit: Stellarium)



Neptune – is at opposition on the 25th at 8:28 PM CDT when it is at its closest point to Earth, although it is still only a tiny blue dot to see and too faint to see without binoculars or telescope. You have to rise early in the mornings to see Neptune this month.



Moon

4th – 3rd quarter

10th – NEW Moon @ 10:26 PM CDT

18th – 1st quarter

26th – FULL Moon @ 11:49 AM CDT. Known as the *Harvest Moon*, as the large, bright Moon guided farmers through the long evenings of work.

Comet

Comet 10P/Tempel 2 – The comet rises above the horizon after midnight and may have a magnitude of about 8. You may see this in binoculars, but is best in a dark sky location as it can be found low in the south. Tempel 2 was discovered in July 1873 and has a size comparable to the city of Boston, giving it about a 7 mile wide diameter. It is not classified as

potentially dangerous to Earth as it does not get close enough. It has an orbital period of about 5.5 years, which classifies it as a ‘short-period’ comet, and scientists expect this to be its best return to our area since the 1960’s.

Exciting 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 1: Along the Milky Way

Aug 5: Eclipse Chasing

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 11

(archived ... still available to DMAS members)

DMAS members will receive an email with free links to all of Dean’s programs!

THIS MONTH IN DMAS HISTORY

From the StarLight Journal 25 Years Ago, August 2001

Ms. Joanne L. Hailey
Secretary
Des Moines Astronomical Society
PO Box 6114
Des Moines, IA 50309

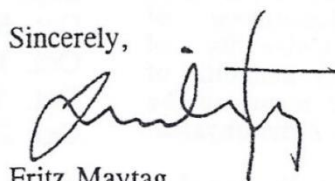
Dear Ms. Hailey:

As a trustee of The Fred Maytag Family Foundation, I am pleased to support the Des Moines Astronomical Society. Enclosed is a check in the amount of \$20,000 toward construction of a new classroom north of the Ashton Observatory.

I am interested in learning more about efforts to increase public outreach and to promote the activities of the Des Moines Astronomical Society. For example, has your Board of Directors considered the possibility of radio or newspaper advertisements in order to increase attendance at public events?

I look forward to hearing from you and hope you will keep The Fred Maytag Family Foundation updated on the progress of your plans to expand the Des Moines Astronomical Society's educational programs and facilities.

Sincerely,

A handwritten signature in black ink, appearing to read 'Fritz Maytag', with a stylized flourish at the end.

Fritz Maytag
Trustee

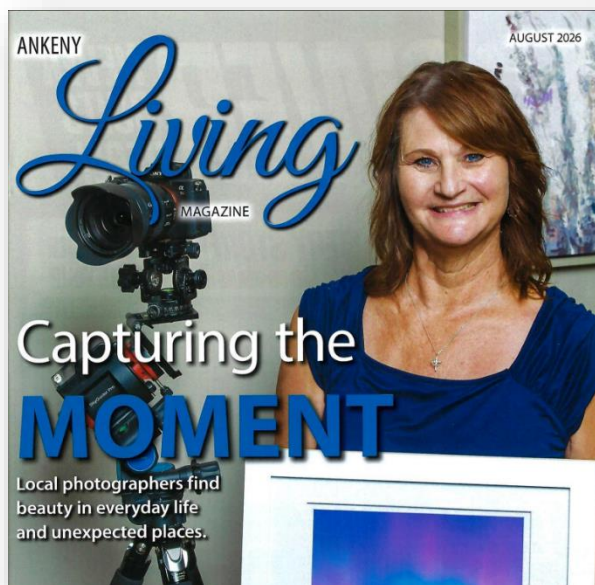
From the StarLight Journal 10 Years Ago, August 2016

Our Support of Dark Skies

Millions of migrating birds die each year from light pollution.	Millions of children will never see the Milky Way	
	Did you know that DMAS is a member of International Dark Sky Association? We regularly support the efforts of Dark Sky in working to protect the night skies for present and future generations. DMAS member Norm Van Klompenburg is our representative to Dark Sky. <u>The banners surrounding this message are some of the causes of IDSA</u>. This issue of online Dark Sky features an article about the American National Parks that have worked to achieve the title of Dark Skies Parks. Read the latest issue at www.darksky.org	Did you know light pollution can harm ecosystems of nocturnal animals?
Valuable resources are wasted every night due to bad lighting.	When is the last time you saw a starry sky?	
What would happen if we couldn't see the stars?		

*Signs and text from Dark Sky website. See more at darksky.org

DMAS member and astrophotography contributor, **Heather Johnson**, was featured in the August 2026 issue of Ankeny Living Magazine!



Iowa Star Party Schedule of Events

Whiterock Conservancy

October 8 - 11

2026 ISP Program ¹			
Date	Time	Where	Activity
Thursday	3:00 pm to 5:00 pm	Starfield or Oakridge	Set up and welcoming (Jesus Acosta). Receive your welcome kit!
	5:00 pm to 5:30 pm	Starfield	Night sky Tour plans (Night Sky tour: What would be in the night sky during the Star Party?)
	5:30 pm to 6:00 pm		IOWA Glowing Sign Installation!
	6:30 pm to 5:00 am		White lights off! Red lights are used only when necessary. Astronomical observations and astrophotography in progress (weather allowing).
Friday	4:00 pm to 5:00 pm	Starfield	Solar astronomy session (weather allowing)
	6:30 pm to 5:00 am		White lights off! Red light is used only when necessary. Astronomical observations and astrophotography in progress (weather allowing)
Saturday	12:00 pm to 1:30 pm	Bur Oak ²	ISP Banquet (please volunteer to set-up food and clean)
	2:00 pm to 3:30 pm		Amateur Astronomers short stories! Prize drawing for registered attendees
	4:30 pm to 5:30 pm	Starfield	Public Night set-up (please volunteer to coordinate logistics)
	5:30 pm to 6:30 pm	Starfield	Public Night featured talks ³ : - Protecting Iowa's Dark Skies by James Bruton - What is Variable Star Astronomy? by Irina Plaks Prize drawings!
	6:30 pm to 5:00 am		White lights off! Red lights are used only when necessary. Astronomical observations and astrophotography in progress (weather allowing)
	6:30 pm to 9:30 pm		Telescope viewing (we will make a telescope row for the general public to observe). If you want to participate, please bring your telescope and share views with people!
Sunday	9:00 am to 1:00 pm	Starfield	Cleaning, and wrapping up (Please pick up all your stuff and leave your spot as you found it)

¹Check trails and activities at Whiterock Conservancy: <https://www.whiterockconservancy.org/visit>.

²Bur Oak Multipurpose Room: 1436 Hwy 141 in Coon Rapids, Iowa.

³In case of rain, the Public Night talks will be presented at Bur Oak at 6:30 pm.



Amateur Astronomer Sweet Dreams!

DRAKE MUNICIPAL OBSERVATORY PUBLIC NIGHTS 2026

Dear friends and supporters of the Drake Observatory, dates for our expanded Fall Series are below, topics to be announced.

Drake seems to be updating our website, so I am sending you this information by email. As those of you who are able to attend regularly already know, we lost our usual summer public night series due to a conflict with summer golfing hours. I've been able to compensate for the lost public nights by expanding both the Spring and Fall series and adding a few observing nights during the Summer.

September 18th & 25th

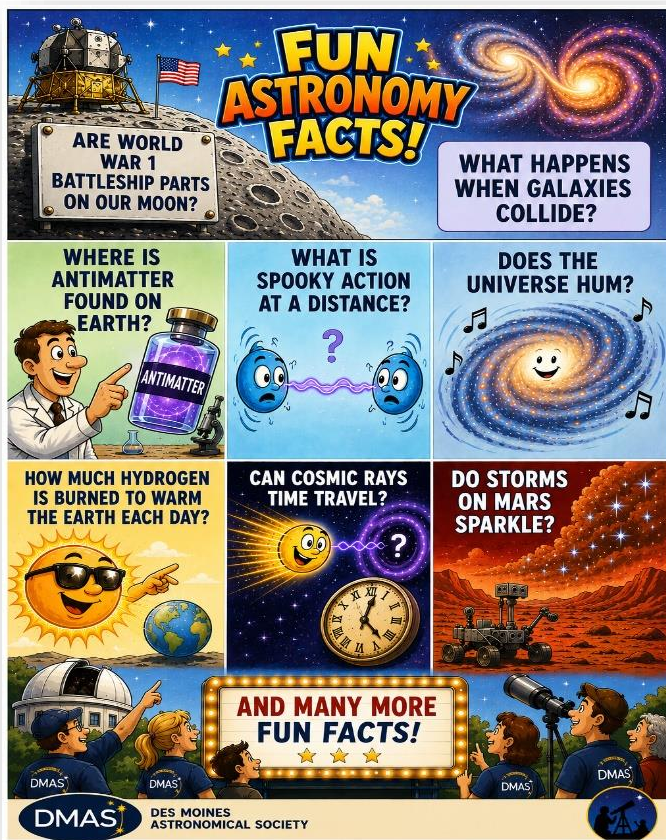
October 2nd 9th 16th 23rd and 30th

November 6th 13th and 20th

Looking forward to seeing you, Herb

DMAS member **JR Paulson** provided an interesting program on **"Our Address in the Universe"** on August 8th



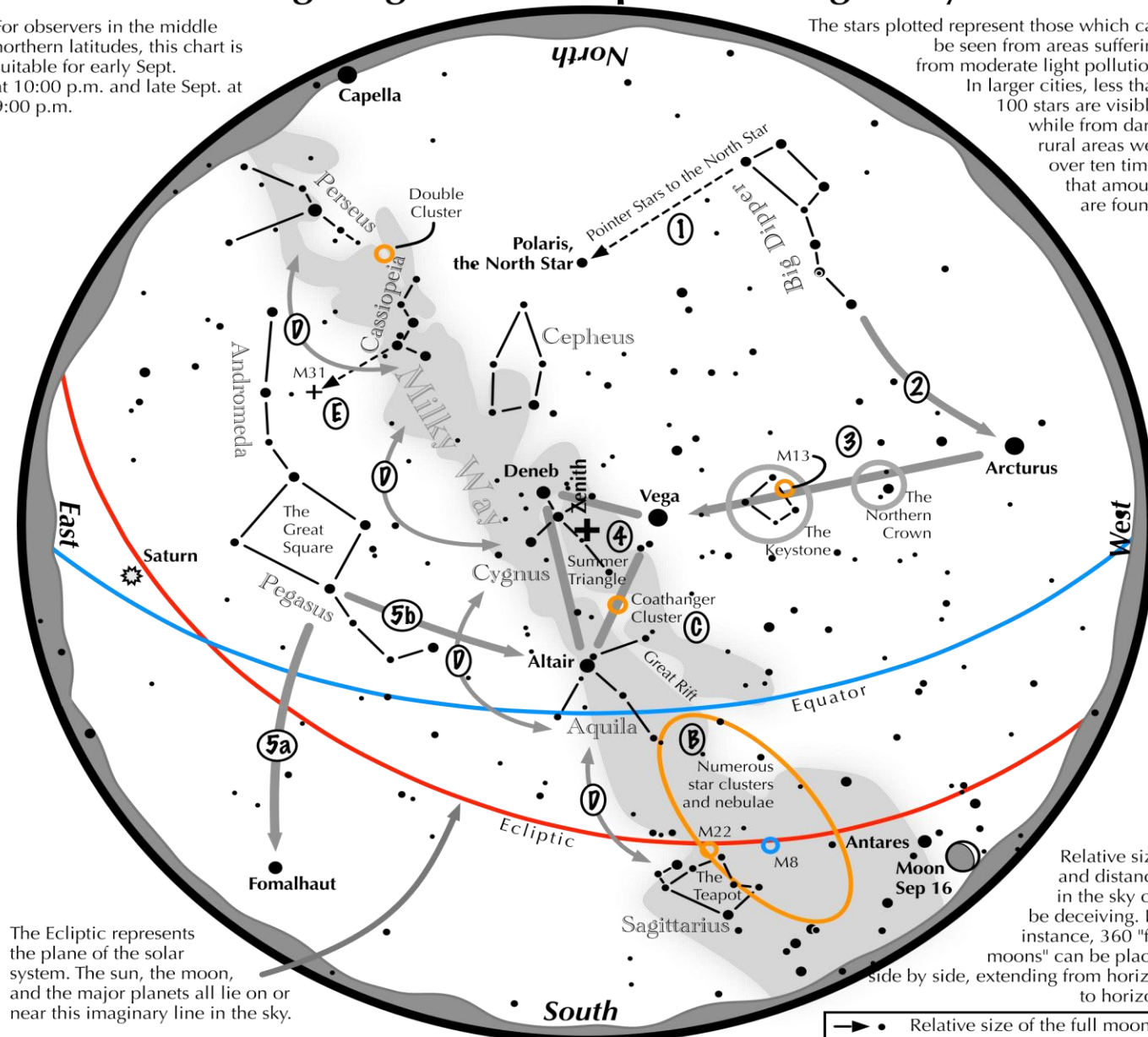


On August 22, DMAS member Jim VandeBerg provided a program called **“Fun Astronomy Facts!”**

Navigating the mid September Night Sky 2026

For observers in the middle northern latitudes, this chart is suitable for early Sept. at 10:00 p.m. and late Sept. at 9:00 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 September 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 September evening sky.
- 3 Nearly overhead shines a star of similar brightness as Arcturus, 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 The stars of the summer triangle, Vega, Altair, and Deneb, shine overhead.
- 5 The westernmost two stars of the Great Square, which lies high in the east, point south to Fomalhaut. The southernmost two stars point west to Altair.

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



Your 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

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
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