

STARLIGHT JOURNAL

JULY 2026



The Ring Nebula (M57) is an outstanding target for astronomers in July. At the middle of the month, M57 is high in the east about 2 degrees west of Vega. It was discovered in 1779 by Charles Messier in the constellation Lyra. Under dark skies, with a small telescope a faint ring structure can be seen. Colors will emerge with a SeeStar telescope or similar image-stacking telescope. (Image courtesy NASA)

SAVE THESE 2026 DATES!

July 1 **Along the Milky Way** program by Dean Regas 7pm EDT (see below)

July 11 – **Annual DMAS Picnic** 6:00 p.m.

July 11 – Classroom Program **Finding Distances to Stars and Objects** by Paul Caligiuri 8:00 p.m.

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

July 2026 – President's Report

The new Planewave telescope has been installed, and the Observatory Committee continues to make adjustments with the alignment process. Both a finder scope and a red dot finder scope have been added to the optical tube. We have used the new scope the past few Saturdays during public viewing evenings, weather permitting. The clouds and rain have not been kind the past few weeks, but we do what we can. And let me tell you, the views through our new scope are fantastic!! Stop by the east dome any Saturday for your chance to see the newly installed scope and have a turn observing the telescope in action.

Our summer picnic is just around the corner, so 'Save the Date' as it is scheduled for Saturday, June 11th, beginning at 6:00 PM at Ashton Observatory. This is always a nice event for club members to gather and enjoy conversation.

As a registered club member, I encourage you to attend DMAS club meetings. Meetings are always on the first Saturday of the month, except for July due to the 4th of July holiday. These meetings allow members to stay up to date on club activities, observatory events and needs, allow you to vote on items that need membership approval and you have an opportunity to share your thoughts and suggestions with everyone. Yes, you can stay up to date by reading the meeting minutes, but

attending club meetings provides you a chance to be more involved with club activities and decisions that are made.

On occasion I am asked how many members we have in DMAS club. Today there are 76 currently registered members, including honorary and lifetime memberships. We have several folks who have not renewed their membership in the last 1-2 years, which is fine as life gets busy, etc. And so far, this year, eleven new members have joined the Society. If you want to know if you are current or not, please contact either Greg Woolever, Observatory Director, or myself.

I hope everyone has been safe during the many severe storms that have passed through our area of late and no one has damaged property. We know there will be storms during our spring and summer seasons, and we are used to these storms, but still want everyone to be okay. Keeping my fingers crossed for clear night skies ahead!!

- JoAnn Cogil



Observatory Committee Report

July, 2026, Greg Woolever, Observatory Director



So far the season has gone well. Admittedly, skies have frequently been clouded, but most nights they provided gaps that allowed our visitors to have exciting views of Jupiter and Venus, and many other targets. Private groups typically have ended with visitors excited to come again when skies are ideal. I call that success!

Progress with the PlaneWave CDK14 telescope continues. The big step most recently is to mount the electronic focuser onto the CDK14, and rebalance the assembly. Our usual visual operation continues with this setup, but we still need to revise the pointing model that governs the Paramount ME II mount that carries the CDK14 scope. Doing that recalibration will require work getting a camera to connect to the setup, and then have a night of clear skies to enable images of at least 50 stars to build the pointing model. Until then, our operators are able to center the views manually.

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

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=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>



DES MOINES ASTRONOMICAL SOCIETY SUMMER PICNIC!



The annual **DMAS Summer Picnic** will be Saturday, July 11 starting at 6:00 p.m. at Ashton. Bring your own ingredients to grill and non-alcoholic drinks.

The charcoal grill will be fired up. Disposable plates, cups, tableware, and napkins will be provided. If you wish to bring a side dish to share that is up to you

but not required. This is for DMAS members and their families and guests. A program on **Finding Distances to Stars and Objects** will be presented at 8:00 p.m. by Paul Caligiuri followed by stargazing.

See you on Saturday to renew our enduring friendships and shared love of the sky!!

The Night Sky for July 2026

By JoAnn Cogil

July brings warm weather which makes it nicer to be outside at night to look at our night sky.

Mercury - by the last few days of July, this little planet returns to our morning sky after an inferior conjunction (when it stands between the Sun and Earth) on the 12th.

Venus – remains our ‘Evening Star’ until October. For now, it continues to shine brightly in the west, but you may need to catch it quickly in the evening twilight as it sets soon after sunset. The bright star Regulus in Leo is near

Venus on the 1st day of the month about one hour after sunset with the 2 becoming closer together on the 8th.



Earth – on the 4th, we celebrate the 250th Anniversary of the signing of our Declaration of Independence!!

Mars – the red

planet draws closer to Earth this month as it continues its orbit around the Sun, which allows this tiny planet to slowly brighten in our skies. On the 11th, look for a wonderful grouping of Mars, Uranus, Moon and the bright star Aldebaran in the E-NE sky about 4:00 AM. The Pleiades star cluster looks on from above. (Image credit: Stellarium)

Jupiter – we say ‘goodbye’ to this beautiful planet and its moons as it leaves our evening skies after July 9th. Has a solar conjunction on the 29th.

Saturn – continues to rise earlier each night which puts it into darker skies instead of rising closer to sunrise. By mid-month, it will be rising after midnight.

Uranus – has a close encounter with Mars on the 4th; try looking for Mars first, then Uranus.

Neptune – still need binoculars &/or a telescope to see this pretty blue planet with best viewing after 3 AM as it stays near Saturn.





Moon

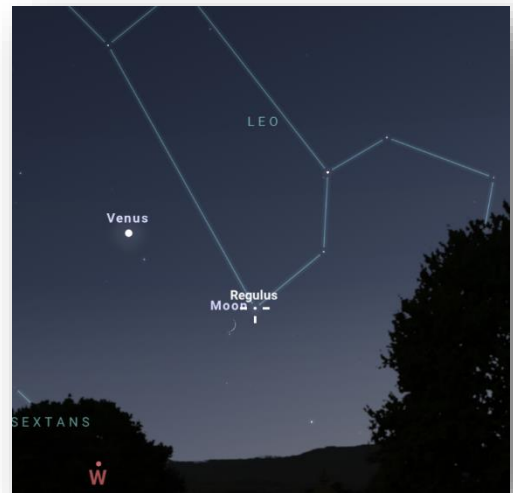
7th – 3rd quarter

14th – NEW Moon @ 0443

21st – 1st quarter

29th – FULL Moon @ 0935

The full moon this month is known as the 'Buck Moon' for the new antlers that are beginning to emerge on the buck deer. Also known as the 'Thunder Moon' and 'Hay Moon'. On the evening of the 16th, our Moon, at a waxing crescent phase with only a slim lunar disk showing, sits next to Regulus, the bright star in the constellation Leo the Lion. The pairing of the Moon and Regulus is always a nice event to see. This night we get the added fun of Venus nearby.



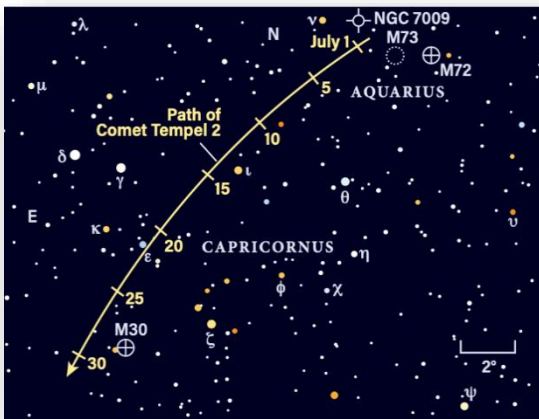
Comets

Comet

10P/Tempel
(or Tempel 2)

– can be
found above
the southern
horizon in the

constellation Capricornus by mid-July. It is best seen after midnight. By August 2nd, it has its closest approach to the Sun and then will be closer to Earth a couple days later. This could be the brightest showing of this comet since 1967.



Meteor Showers

Perseids meteor shower – begins the middle of July with its course running from 7/14 to 8/24. It will peak on the night of August 12th & 13th which is exciting as this is the night of a new moon, so our night sky will be dark. We could see anywhere from 30-50 meteors per hour, even upwards of 90-100 due to the darkness of the sky on peak night. Meteors from this shower can be colorful & bright with possible

persistent trains. The Perseids is the most popular meteor shower of the year. Meteors come from *Comet 109P/Swift-Tuttle* which was discovered in 1862. It has an orbit around the Sun of about 130-133 years and was last seen from Earth in 1992. Scientists predict this comet could be seen by our eyes without the use of telescopes in 2126, only a century away.

Image credit: [Garth Battista](#) of New York state, took this photo of a Perseid meteor over the Catskill Mountains on August 13, 2020.



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](#)



Fun Educational Opportunity!

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/>

“Along the Milky Way”

Wednesday July 1, 7pm EDT

Explore the Summer Night Sky and travel along the cosmic river, The Milky Way.

Astronomer Dean Regas will help you identify the major stars and constellations as well as dive deep into the deep sky objects you can find with just binoculars.

<https://us06web.zoom.us/j/89232762090?pwd=RS7VcPz4y8ItY3E22Sab8sqcUhm6an.1>

Passcode:435211

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: 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

(archived ... still available)

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

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

July 11 – **Finding Distances to Stars and Objects** by Paul Caligiuri

July 25 – **Protecting our Dark Skies** by JR Paulson

Summer Star Parties in Our Region:

- o Northern Nights Star Fest (Minnesota): September 9–14, 2026
- o Northwoods Star Fest (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
Mason Winger (associate)
Bruce & Verlane Edwards**

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.



Weary King Cepheus comes home to another Celestial Family Problem

In ancient Greek lore, King Cepheus and Queen Cassiopeia governed the realm of Aethiopia. Though stunningly beautiful, Cassiopeia possessed an overwhelming vanity. She committed a fatal act by bragging that she and her daughter, Princess Andromeda, surpassed the Nereids—the sea-nymph daughters of Poseidon—in loveliness. This arrogant boast invited divine fury, forcing King Cepheus to salvage his kingdom from the catastrophic wrath of the sea god.

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/>

This Month in DMAS History

From the StarLight Journal 25 Years Ago, July 2001

Drake Observatory Work Progressing Nicely

After what seems a lifetime, the dome doors are now in place and new copper sheeting has been placed over them. At the present there are no plans to remove the "green" patina of the rest of the dome so we could have several colors competing here. There is still a lot of work to be completed in the building itself. The first-floor bathroom is complete and the lecture room walls and ceiling have nice fresh paint jobs. The furnace and air conditioner are installed but I don't know if the hook up is complete. After so many years of neglect, the old observatory is starting to look presentable again.

From the StarLight Journal 10 Years Ago, July 2016

AMA Adopts Community Guidance to Reduce the Harmful Human and Environmental Effects of High Intensity Street Lighting (excerpt)

CHICAGO - Strong arguments exist for overhauling the lighting systems on U.S. roadways with light emitting diodes (LED), but conversions to improper LED technology can have adverse consequences. In response, physicians at the Annual Meeting of the American Medical Association (AMA) today adopted guidance for communities on selecting among LED lighting options to minimize potential harmful human and environmental effects.....

“High-intensity LED lighting designs emit a large amount of blue light that appears white to the naked eye and create worse nighttime glare than conventional lighting. **Discomfort and disability from intense, blue-rich LED lighting can decrease visual acuity and safety, resulting in concerns and creating a road hazard.**

In addition to its impact on drivers, blue-rich LED streetlights operate at a wavelength that most adversely suppresses melatonin during night. **It is estimated that white LED lamps have five times greater impact on circadian sleep rhythms than conventional street lamps.**

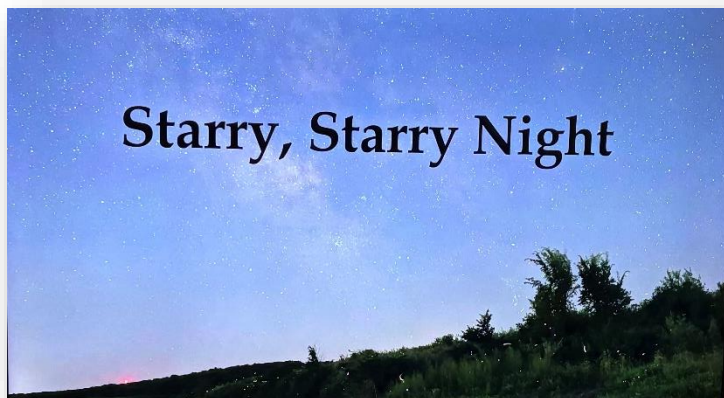
Recent large surveys found that brighter residential nighttime lighting is associated with reduced sleep times, dissatisfaction with sleep quality, excessive sleepiness, impaired daytime functioning and obesity.



A great observing target in July is the waning gibbous to last quarter moon. The best time for observing is about 2:00 in the morning from July 5th through the 9th.

If you want to view the spectacular craters of the moon earlier in the night, the waning gibbous to first quarter moon can be seen around 10:00 pm from July 17 to 23.





On June 13, JoAnn Cogil presented an interesting lecture called "Starry, Starry Night." Sky viewing was not favorable on Saturday, but the lecture was wonderful.



DRAKE MUNICIPAL OBSERVATORY PUBLIC NIGHTS 2026

Dear friends and supporters of the Drake Observatory, just a reminder that our first summer public night will be on Friday, **June 26th** starting at 9:00 in cooperation with the Science Center of Iowa. We also plan to have one the evening of **July 17th**. Both will be an open house, whether clear or cloudy, and observing after dark. 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

September 25th

October 2nd

October 9th

October 16th

October 23rd

October 30th

November 6th

November 13th

November 20th

Looking forward to seeing you this Friday,
Herb



I took this picture of the Moon, Venus and Jupiter with my cell phone camera from our front yard last night (June 17) around 10:00 p.m. – Vern Naffier

A beautiful conjunction tonight of the crescent moon and Venus was seen in central Iowa. (June 17, 29026

This photo was taken from my driveway in Des Moines, IA. Photos were taken with my Google Pixel 8a Smartphone, hand held. – L. Allen Beers



A conjunction of Venus and Jupiter on
June 8, 2026.
Taken just north of Urbandale, Iowa.
Smartphone photos, hand held. – L Allen
Beers

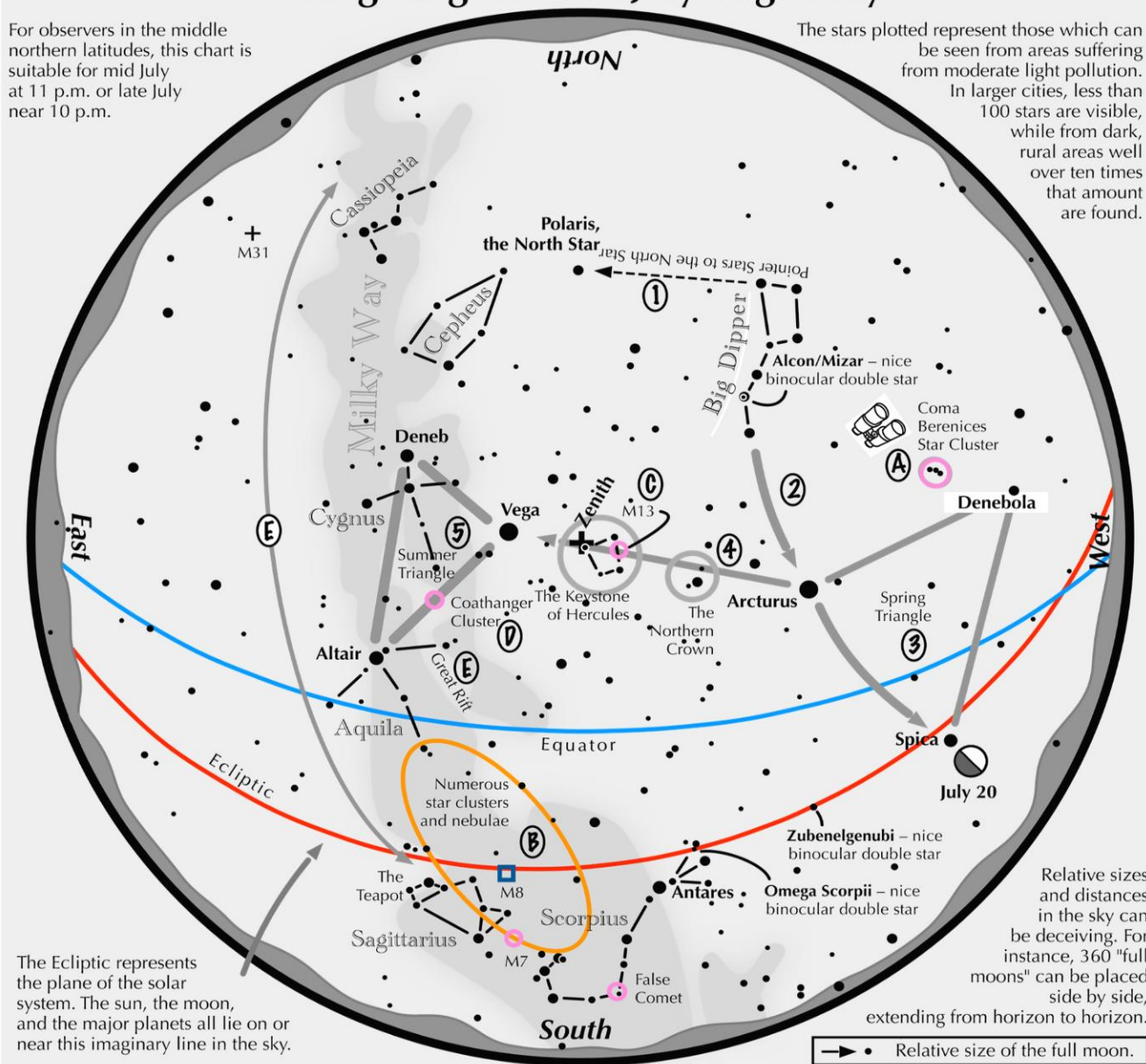


Navigating the mid July Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for mid July at 11 p.m. or late July 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.

Navigating the mid July 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 first intersects Arcturus, the brightest star in the July evening sky, then continues to Spica.
- 3 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 4 To the northeast of Arcturus shines another star of similar 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.
- 5 High in the East lies the Summer Triangle stars of 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 Antares and Altair, hides an area containing many star clusters and nebulae.
- C: On the western side of the Keystone glows the Great Hercules Cluster, containing nearly 1 million stars.
- D: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
- E: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.

Astronomical League - www.astronomicalleague.org - 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

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

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