



# The Eyepiece

Neville Public Museum Astronomy Club

Volume 35, Issue 3

March 2023

## What's Up March 2023

March is here. A transition month, as we move from winter to spring in both the weather we experience and the night objects we can observe. Early in the month the evening sky awakens with Sirius in the southern sky and Venus on the western horizon. Between them the Pleiades and the Orion Constellation are still high enough to provide good viewing conditions. In the eastern sky we have the constellation Leo rising above the horizon. In Leo and following it are a large number of galaxies that are visible with moderate sized telescopes making spring galaxy season. Some of my favorite astrophotography targets are the Leo Triplet and the Markarian's Chain. If you are looking for a nebula to observe you can try the Rosette Nebula. This large HII region in the constellation Monoceros is an interesting object for short focal length telescopes. A hydrogen alpha filter helps to increase the contrast of this object.

Over the course of a full night this month the majority of the Messier objects will be visible making March the month that most Messier Marathons are scheduled. This year our event is scheduled for Saturday March 18th at the Brillion Nature Center. Bill Hennessy has contributed a nice introduction and invitation to attend this event and it is presented on page 2 of this newsletter. For those of us who think we are not ready for this observing challenge I have included on page 3 of this newsletter information on the Astronomical League's Binocular Messier Observing Program. This program requires the observation of any 50 Messier objects using any size binocular. While the program does not have to be completed in one night, it could be a fun challenge to do so during our Messier Marathon. At the end of this newsletter I have included a list of all 110 Messier objects in order of their right ascension. This is one suggested order for trying to observe the majority of the Messier objects over the course of one night.

A close approach of Venus and Jupiter occurs on the first of March as they pass less than one degree apart during the early evening. Venus, at a magnitude of -3, will be the brighter and larger of the two planets this evening. Hopefully, we will have a clear sky for this fun alignment of two planets. Later in the month a 3.5 day old crescent Moon will pass about seven degrees above Venus making for an photo opportunity for these two on March 24th. On the 25th the Moon will pass about two degrees below the Pleiades and on the 28th the Moon will pass about six degrees above Mars.

This month we have two major dwarf planets in opposition. On the 21st, Ceres, the largest dwarf planet in the asteroid belt, will lie on the eastern horizon early in the evening with a magnitude of 7.5 making it visible for a small scope or binoculars as it sits about a degree to the lower left of the galaxy M100. If you are into dwarf planets of the Kuiper Belt try looking for Makemake when it is at opposition on March 29. This dwarf planet will only make it to a magnitude of less than 17 on this opposition so a very large scope or long exposure will be needed to pick it out. The double star HIP64365 will be the closest bright object to Makemake at about one degree to the upper right in the constellation Coma Berenices.

Have a good month.

### March Meeting

When: Wed. March 1  
6:30-8:30

Speaker: Wayne  
Kuhn  
Drake Equation

Location:  
Neville Public  
Museum

### Messier Marathon

When: Saturday,  
March 18

Location:  
Brillion Nature  
Center.

## **34th Annual Messier Marathon by Bill Hennessy**

It's time once again to dust off your equipment and get ready for the Messier Marathon! This first major NPMAS observing event of the year is coming soon. The event is **Saturday, March 18 at the Brillion Nature Center.** This is the same venue as the previous years.

The Messier Marathon is a combined social event and observing session. Last year's Marathon brought back the MM potluck. Despite the less than optimum observing weather, we shared great food and good company.

The BNC has a beautiful 100 seat room in their facility that is a perfect venue for our event. There is a kitchen with numerous outlets and a sink, folding chairs and tables, lots of room and a large stone fireplace. The BNC is giving us the site at **no charge** in exchange for a NPMAS public observing event.

The object of this star-party is to try and observe as many of the 110 Messier objects as possible in one night. For new members, here is a little history for you: Charles Messier was a French astronomer who hunted comets in the 18<sup>th</sup> century. During his searches he often was fooled by objects that looked like comets but were not. He eventually compiled a list of these "false comets" so he and other astronomers could avoid mistaking them for the real thing in the future.

Not many people think about the comets Charles Messier discovered but his list of rejects is well known and revered throughout the astronomy world. It contains the best of the best deep-sky objects to view including the brightest nebula, galaxies, and star-clusters in the night sky. The NPMAS will provide observing forms for both telescope and binocular observing so you can log your observations. Certificates will be awarded to everyone who observes 5 or more objects. Even though this is potentially an all night event you can come and go when you like. Just keep your car headlights off and use a red flashlight. If you are coming after dark, please use the first parking lot - it is a little distance away from the buildings and your headlights won't be as much of a distraction. You can bring a telescope, binoculars or just yourself and buddy-up with other observers.

The doors will open by 5 PM so get there early to score the best observing spot! This will also give us plenty of time to set up our scopes before the fun begins after sunset (around 6 pm). This is a potluck party that lasts throughout the night **WHETHER THE SKY IS CLEAR OR CLOUDY**. Everyone is encouraged to bring a dish or dessert to share. It can be anything from crock-pot chili to your favorite dessert. The club will provide plates, bowls, cups and plastic ware - just bring your own beverages.

All members of the NPMAS and NEWSTAR are invited. **The Brillion Nature Center is located at W1135 Deerview Road, Brillion, WI 54110.** It's a bit off the beaten path: once you turn off of Cty. PP onto Deerview Road you will travel past a farmer's yard and continue on a small, winding gravel road until it dead ends at the nature center. There are several parking areas on the property and plenty of places to set up telescopes near the buildings. If you have any questions, please give me a call or text at 920-323-3307, email [astrobill57@gmail.com](mailto:astrobill57@gmail.com), or contact any club officer.

Please join us for this always-fun event!

## The Astronomical League Binocular Messier Observing Program

<https://www.astroleague.org/al/obsclubs/binomess/binomess.html>

To qualify for the Binocular Messier Certification, observe 50 or more Messier objects using only binoculars. Any 50 of the 110 recognized Messier objects may be observed. Any pair of binoculars may be used, but those with objectives between 20MM and 80MM in diameter are recommended. To record your observations, you may use the log sheets found in the back of the Astronomical League's manual "Observe: A Guide to the Messier Objects", or any similar log sheet. The required information for each observation is:

- the name of the object
- date and time
- latitude and longitude
- an estimate of the seeing and transparency
- the size and power of the binoculars used
- and perhaps, a brief description of what you saw.
- 

Suggested objects for small binoculars.

Appendix A - 7x35, 7x50, and 10x50 Binoculars

I. Easy Messier Objects:

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 52, 55, 67, 92, 93, 103. Total = 42.

II. Tougher Messier Objects:

14, 19, 28, 30, 33, 40, 49, 53, 62, 63, 64, 78, 79, 80, 81, 82, 83, 94.  
Total = 18.

III. Challenge Messier Objects:

1, 9, 26, 32, 51, 54, 56, 65, 66, 68, 71, 75, 97, 101, 104, 106.  
Total = 16.

Grand Total = 76.

## 2023 Schedule of Events for NPMAS

### January

- 11 Holiday Party
- 20-22 Camp U-Nah-Li-Ya Winter Weekend

### February

- 1 Monthly Meeting – John Briggs
- 13-19 Winter Star Party

### March

- 1 Monthly Meeting  
Drake Equation
- 11 Sheboygan Swap-n-Sell,  
Sheboygan Airport
- 18 Messier Marathon

### April

- 5 Monthly Meeting  
Amy Hannon Drew
- 15 Messier Marathon backup date
- 28-30 NCRAL Convention  
Bloomington, IL
- 29 Public Observing  
Bay Beach Wildlife Sanctuary

### May

- 3 Monthly Meeting  
James Webb Telescope
- 19-20 Parmentier Observing Weekend

### June

- 7 Monthly Meeting  
Jerry Schaefer
- 9-10 Parmentier Observing Weekend
- 15-18 Wisconsin Observers Weekend  
Waupaca, WI
- 16-17 Parmentier Observing Weekend

### July

- 5 Monthly Meeting  
Dick Francini
- 12-16 Pike River Starfest  
Amberg, WI
- 14-15 Parmentier Observing Weekend
- 16-22 Nebraska Star Party  
Valentine, NE

### August

- 2 Monthly Meeting  
Barlow Planetarium
- 11-12 Northwoods Starfest  
Fall Creek, WI
- 11-12 Parmentier Observing Weekend
- 16-20 Northern Nights Starfest,  
Palisade, MN

### September

- 6 Monthly Meeting  
Jerry Schaefer
- 15-16 Parmentier Observing Weekend
- 23 Public Observing  
Brillion Nature Center

### October

- 4 Monthly Meeting – TBD
- 13-14 Parmentier Observing Weekend
- 21 Public Observing  
Bay Beach Wildlife Sanctuary

### November

- 1 Monthly Meeting – TBD

### December

- 6 Monthly Meeting  
Year in Review

# Sky Events - March 2023

## March Moon Phases

Full Moon, Warm Moon	March 7
Third Quarter	March 15
New Moon	March 21
First Quarter	March 29

## March Meteor Showers

Name	Peak Dates	# per hour
No major northern hemisphere meteor showers this month		

## 2023 Planet Opposition Dates

Mars	next in 2025
Jupiter	Nov. 3
Saturn	Aug. 27
Uranus	Nov. 13
Neptune	Sept. 19

<https://www.space.com/39240-when-to-see-planets-in-the-sky.html>

## Astro Twilight Times

Date	Ends	Begins
March 1	19:15	4:50
March 15	19:34	4:24
March 31	19:58	3:51

## Rise Time / Set Time for the Brighter Planets

Planet	3/1	3/15	3/31
Venus	7:38/20:14	8:19/21:48	8:00/22:27
Mars	10:36/2:14	11:06/2:46	10:37/2:16
Jupiter	7:42/20:15 (sets 2 hour and 36 minutes after sunset)	7:54/20:37 (sets 1 hour and 39 minutes after sunset)	6:59/19:53 (sets at sunset)
Saturn	6:07/16:34 (behind sun)	6:16/16:47 (behind sun)	5:17/15:53 (behind sun)

Source: [in-the-sky.org](https://www.in-the-sky.org)

A nice web site that gives the current relative positions of the planets, dwarf planets, moons, comets, and space crafts is <https://solarsystem.nasa.gov/planets/overview/>

## 2023 Star Parties

For a complete listing of the 2023 Star Parties go to: ([www.go-astronomy.com/star-parties.htm](http://www.go-astronomy.com/star-parties.htm))

February 13 - 19 Winter Star Party, Big Pine Key, Florida Keys Hosted by Southern Cross Astronomical Society. [www.scas.org/winter-star-party](http://www.scas.org/winter-star-party)

May 14 - 21 Texas Star Party, Fort Davis, Texas. [texasstarparty.org](http://texasstarparty.org)

June 15 - 18 Wisconsin Observing Weekend, Waupaca. [www.new-star.org](http://www.new-star.org)

July 16 - 22 Nebraska Star Party, Valentine NE [www.nebraskastarparty.org](http://www.nebraskastarparty.org)

July 12 - 16 Pike River Starfest, Amberg WI

Aug. 18 - 20 Northwoods Starfest, Fall Creek, WI. Hosted by Chippewa Valley Astronomical Society, [www.cvastro.org/northwoods-starfest/](http://www.cvastro.org/northwoods-starfest/)

August 16-20 Northern Nights Starfest, Palisade MN Hosted by Minnesota Astronomical Society, [www.mnastro.org/events/northern-nights/](http://www.mnastro.org/events/northern-nights/)

Sept. 8 - 16 Okie-Tex Star Party. Camp Billy Joe. Hosted by the Oklahoma City Astronomy Club, [www.okie-tex.com/index.php](http://www.okie-tex.com/index.php)



*Markarian' Chain*

## Club Monthly Meetings

The NPMAS monthly meetings are open to the public and are held at the Neville Public Museum on the first Wednesday of each month from 6:30 to 8:30 PM.

## TELESCOPE WORKSHOP

Before each monthly meeting Gerry Kocken is offering to meet with club members who have questions about their telescopes or have telescopes that need adjustments or repairs. If you would like to meet with Gerry for this service he requests that you contact him prior to the meeting so that he knows what he needs to bring and to schedule his time. You can contact Gerry at [gerryk@kockenwi.com](mailto:gerryk@kockenwi.com)

## New Member Welcome

**Kyle Webster and Alex Webster**

## A Note From Bob Nelezen

We did an outreach at the Howard Library on January 9. It was well received by the attendees. We had about 25 people there. Tom and Wendy came along to assist, and Tom brought his scope.

## CLUB PUBLIC OUTREACH

The education of the public about astronomy is one aspect of our mission. Our public viewing sessions are one way we achieve this goal. Another is by accommodating requests from organizations in the region for astronomy related speakers or demonstrations. Types of organizations that have made requests are schools, public libraries, and scout troops. The club is always looking for individuals who would like to contribute to these activities. Ways that individuals can contribute is by preparing or giving presentations, assisting at public viewing sessions or by answering questions from the public. If you are interested in contributing to the club's public outreach activities you can contact any of the board members or the Public Outreach Coordinator Robert Nelezen at [robertn330@gmail.com](mailto:robertn330@gmail.com).

## Loaner Telescopes

NPMAS members are welcome to use, free of charge for a one month period, one of the six club telescopes. Please contact one of the board members to make arrangements. The six telescopes available are:

- 10 inch Dobsonian Telescope
- 60 mm Bushnell Voyager
- 12 inch Orion SkyQuest IntelliScope
- Meade ETX125 Cassegrain Telescope with AutoStar
- 4" Meade Schmidt Cassegrain
- 8" F10 Celestron Schmidt-Cassegrain

## NPMAS OBSERVING SITES

### Parmentier Observatory

Parmentier Observatory is home to a 30 inch classical Cassegrain telescope, the largest private observatory in Wisconsin. Members may view through the 30 inch or setup their own telescopes in the adjoining field.

Address:

N4175 Doell Road  
Luxemburg, WI 54217  
Observatory Representative  
Mike Monfils – 920-435-7350

## Club Library

NPMAS has a collection of astronomy related books and videos covering a wide variety of topics including observing, the solar system, stars and more. Items can be checked out at monthly club meetings or by contacting Tom Cashman at 920-432-2261

## NPMAS BOARD

### Officers

President  
Gerry Kocken  
[president@npmas.org](mailto:president@npmas.org)

Vice President  
Scott Dickson  
[vicepresident@npmas.org](mailto:vicepresident@npmas.org)

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[treasurer@npmas.org](mailto:treasurer@npmas.org)

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[secretary@npmas.org](mailto:secretary@npmas.org)

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Historian .....George McCourt  
Holiday Party .....Dick Francini  
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Messier Marathon ..... Bill Hennessy  
Museum Exhibit Coordinator George McCourt  
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Observatory Key Holders .....Dick Francini  
.....Wayne Kuhn  
.....Brian Chopp  
.....Gerry Kocken  
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Website .....Scott Dickson  
Newsletter Editor .....John Lyon

### The Eyepiece

Editor : John Lyon  
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Submissions can be emailed to [LYONJ@UWGB.EDU](mailto:LYONJ@UWGB.EDU) or mailed to N6618 Hillside Rd. Casco, WI 54205  
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Messier marathon Observing Order					
Messier Number	NGC Number	Constellation	Type	Magnitude	Difficulty
M77	1068	Cetus	Gal	8.9	Hard
M74	628	Pisces	Gal	8.5	Hard
M33*	598	Triangulum	Gal	5.7	Hard
M31*	224	Andromeda	Gal	3.4	Easy
M32	221	Andromeda	Gal	8.2	Medium
M110	205	Andromeda	Gal	8.0	Hard
M52*	7654	Cassiopeia	OC	6.9	Medium
M103*	581	Cassiopeia	OC	7.4	Easy
M76	650	Perseus	PN	10.1	Medium
M34*	1039	Perseus	OC	5.2	Easy
M45*	-	Taurus	OC	1.5	Easy
M79*	1904	Lepus	GC	7.7	Medium
M42*	1976	Orion	N	3.7	Easy
M43	1982	Orion	N	6.8	Medium
M78*	2068	Orion	N	8.0	Medium
M1*	1952	Taurus	SNR	8.0	Medium
M35*	2168	Gemini	OC	5.1	Easy
M37*	2099	Auriga	OC	5.6	Easy
M36*	1960	Auriga	OC	6.0	Easy
M38*	1922	Auriga	OC	6.4	Easy
M41*	2287	Canis Major	OC	4.5	Easy
M93*	2447	Puppis	OC	6.2	Medium
M47*	2422	Puppis	OC	5.7	Easy
M46*	2437	Puppis	OC	6.1	Medium
M50*	2323	Monoceros	OC	5.9	Easy
M48*	2548	Hydra	OC	5.8	Medium
M44*	2632	Cancer	OC	3.1	Easy
M67*	2682	Cancer	OC	6.0	Medium

Messier Number	NGC Number	Constellation	Type	Magnitude	Difficulty
M95	3351	Leo	Gal	9.7	Hard
M96	3368	Leo	Gal	9.2	Hard
M105	3379	Leo	Gal	9.3	Hard
M65*	3623	Leo	Gal	8.8	Medium
M66*	3627	Leo	Gal	9.0	Medium
M81*	3031	Ursa Major	Gal	6.9	Medium
M82*	3034	Ursa Major	Gal	8.4	Medium
M97*	3587	Ursa Major	PN	9.9	Medium
M108	3556	Ursa Major	Gal	10.0	Hard
M109	3992	Ursa Major	Gal	9.8	Hard
M40*	Win4	Ursa Major	DS	9.0/9.6	Easy
M106*	4258	Canes Venatici	Gal	8.3	Hard
M94*	4736	Canes Venatici	Gal	8.2	Medium
M63*	5055	Canes Venatici	Gal	8.6	Hard
M51*	5194	Canes Venatici	Gal	8.4	Medium
M101*	5457	Ursa Major	Gal	7.9	Hard
M102	5866	Draco	Gal	10.0	Medium
M53	5024	Coma Berenices	GC	7.7	Medium
M64*	4826	Coma Berenices	Gal	8.5	Medium
M3*	5272	Canes Venatici	GC	5.9	Easy
M98	4192	Coma Berenices	Gal	10.1	Hard
M99	4254	Coma Berenices	Gal	9.9	Hard
M100	4321	Coma Berenices	Gal	9.3	Hard
M85	4382	Coma Berenices	Gal	9.1	Hard
M84	4374	Virgo	Gal	9.1	Hard
M86	4406	Virgo	Gal	8.9	Hard
M87	4486	Virgo	Gal	8.6	Hard
M89	4552	Virgo	Gal	9.7	Hard
M90	4569	Virgo	Gal	9.5	Hard
M88	4501	Coma Berenices	Gal	9.6	Hard
M91	4548	Coma Berenices	Gal	10.1	Hard
M58	4579	Virgo	Gal	9.6	Hard

Messier Number	NGC Number	Constellation	Type	Magnitude	Difficulty
M59	4621	Virgo	Gal	9.6	Hard
M60	4649	Virgo	Gal	8.8	Medium
M49*	4472	Virgo	Gal	8.4	Hard
M61	4303	Virgo	Gal	9.6	Hard
M104*	4594	Virgo	Gal	8.0	Medium
M68*	4590	Hydra	GC	7.6	Hard
M83*	5236	Hydra	Gal	7.5	Medium
M5*	5904	Serpens	GC	5.7	Easy
M13*	6205	Hercules	GC	5.3	Easy
M92*	6341	Hercules	GC	6.5	Easy
M57	6720	Lyra	PN	8.8	Easy
M56*	6779	Lyra	GC	8.4	Medium
M29*	6913	Cygnus	OC	6.6	Easy
M39*	7092	Cygnus	OC	4.6	Easy
M27*	6853	Vulpecula	PN	7.3	Medium
M71*	6838	Sagitta	GC	8.0	Hard
M107	6171	Ophiuchus	GC	7.8	Medium
M12*	6218	Ophiuchus	GC	6.8	Medium
M10*	6254	Ophiuchus	GC	6.6	Medium
M14*	6402	Ophiuchus	GC	7.6	Medium
M9*	6333	Ophiuchus	GC	7.8	Medium
M4*	6121	Scorpius	GC	5.4	Medium
M80*	6093	Scorpius	GC	7.3	Medium
M19*	6273	Ophiuchus	GC	6.8	Easy
M62*	6266	Ophiuchus	GC	6.7	Medium
M6*	6405	Scorpius	OC	4.2	Easy
M7*	6475	Scorpius	OC	2.8	Easy
M11*	6705	Scutum	OC	5.3	Easy
M26*	6694	Scutum	OC	8.0	Easy
M16*	6611	Serpens	N	6.0	Easy
M17*	6618	Sagittarius	N	6.0	Medium
M18*	6613	Sagittarius	OC	6.9	Easy
M24*	6603	Sagittarius	SC	2.5	Easy
M25*	IC 4725	Sagittarius	OC	4.6	Easy

Messier Number	NGC Number	Constellation	Type	Magnitude	Difficulty
M23*	6494	Sagittarius	OC	5.5	Easy
M21	6531	Sagittarius	OC	5.9	Easy
M20	6514	Sagittarius	N	6.3	Medium
M8*	6523	Sagittarius	N	3.0	Medium
M28*	6626	Sagittarius	GC	6.9	Medium
M22*	6656	Sagittarius	GC	5.2	Easy
M69	6637	Sagittarius	GC	7.4	Medium
M70	6681	Sagittarius	GC	7.8	Medium
M54*	6715	Sagittarius	GC	7.2	Medium
M55*	6809	Sagittarius	GC	6.3	Medium
M75*	6864	Sagittarius	GC	8.6	Medium
M15*	7078	Pegasus	GC	6.0	Easy
M2*	7089	Aquarius	GC	6.3	Easy
M72	6981	Aquarius	GC	9.2	Hard
M73	6994	Aquarius	OC	8.9	Easy
M30*	7099	Capricornus	GC	6.9	Medium

The observing order was obtained from [astronomy.com \(https://astronomy.com/magazine/2006/01/run-the-marathon\)](https://astronomy.com/magazine/2006/01/run-the-marathon) and is based upon the right ascension of each object. This is the order that the objects will set over a 24 hr period of time.

Difficulty was assigned by Michael Swanson and presented on the web page <https://nexstarsite.com/OddsNEnds/MessierDifficultyRatings.htm>. Easy items can be seen with any size telescope even in light polluted skies. Medium items require a small aperture telescope under dark sky conditions and a large (8 inches or more) under light polluted skies. Hard items are difficult to see with a small aperture telescope under dark sky conditions or a large aperture scope under light polluted skies.

Items with an asterisk are included in the Binocular Messier Program