



# Mid-Hudson Astronomical Association

## January, 2021

Website: [www.midhudsonastro.org](http://www.midhudsonastro.org)

groups.io Group: [mhaa.groups.io](https://mhaa.groups.io)

**President :** Jack Chastain

**Secretary:** Jim Rockrohr

**Newsletter Editor:** Rick Versace

**Publicity:** Tim Denman

**Speakers:** Alexandra Passas

**Vice President:** Tim Denman

**Treasurer:** Eric Myers

**Membership Coordinator:** Rick Versace

**Webmaster:** Steve Dittmar

**Outreach:** Joe Macagne

**College Liaison:** Dr. Amy Bartholomew

**Directors:** Joe Macagne, Steve Carey, Willie Yee, Karl Loatman

**The next meeting is January 19, 2021, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.**

### **Speaker for January**

Seth McGowan

### **Entering Astrophotography Without Fear**

Astrophotography can be expensive, time consuming, and frustrating...but it doesn't have to be. Knowing what you need in order to get started can ease the pressure of those first few nights. This session is intended specifically for those who have been thinking about getting started, but have been intimidated by the jargon, equipment, and cost.

Starting with simple and easy to achieve set-ups a full description in easy to understand language will detail the components and their use. Progressively more advanced equipment will be added to demonstrate the possibilities of achieving better results.

Additionally, actual results will be shown of good, and more importantly, poor results using each set-up.



# Minutes of the monthly meeting of the Mid Hudson Astronomical Association, December 15, 2020

The meeting was called to order at 7:31 PM by President Jack Chastain on the online application Zoom.

The minutes of the November meeting were approved unanimously as published in the newsletter.

## **Officer's Reports:**

**President:** The meeting is being recorded on Zoom. We will be continuing on Zoom for the foreseeable future.

- Jack reminded everyone that Yahoo Groups has ended. All messages should move to Groups.io ([main@mhaa.groups.io](mailto:main@mhaa.groups.io)).
- Paid members can also sign up for Slack and join discussions there. Contact Jack or Eric Myers. (It was suggested to have a demo soon.)
- Jack noted that all of the images being presented during the meeting tonight (over 30!) are from our members. If you have any you would like to share, send them to Jack.
  - o All of the images are stored on Google Drive.
- We received a \$150 from "anonymous".

**Vice President:** Tim Denman was present. He thanked Jack and Willie Yee for their recent outreach events.

**Secretary:** Jim Rockrohr was present. No news to report.

**Treasurer:** Eric Myers was present.

- See the newsletter for the latest information.
- We received 1 new membership payment this month.
- T-shirts (\$15), sweatshirts (\$25) and pins (\$4) are available.
- Membership dues of \$25 per year can be paid by cash or check to Eric. Eric has PayPal set up which will cost \$1 more. Renewals are due in your anniversary month.

**Publicity:** Tim Denman was present.

- Let Tim know if you see any of our publicity.
- Star parties are published only on MeetUp to restrict attendance during the pandemic.

**Newsletter:** Rick Versace was present. No news to report.

**Webmaster:** Steve Dittmar was present.

- Almost ready to launch the public side of the new website.

**Outreach:** Joe Macagne was not present.

**Upcoming programs:** Alexandra Passas was present.

- January: Seth McGowan, Adirondack Astronomy.
- February: Katie Whitaker.
- See MeetUp page for the latest information.

**Membership:** (needs leader; Eric Myers is handling it for now but needs help.)

- Once new website is up and running Eric would like to have the membership job transition to a new person.
- 2 new members and some renewals.
- There is a Google Form for member applications.
- How to become a member? Read about it under "MORE" on MeetUp.

**Solar System Ambassador:** Willie Yee was present.

- Perseverance rover lands on Mars February 18.

## **Old Business:**

- The last star party was on Friday. Had about a 7 hour hole in the clouds.
  - o Used an IR camera to show telescopes. See YouTube.

- Did a virtual Starwalk on the Walkway using Stellarium last Sunday (12/13). Went well.

#### New Business:

- Officer nominations were presented and voted on via Zoom. No nominations from the floor. The candidates were elected unanimously (11 voting members). The officers for 2021 are:
  - President: Jack Chastain
  - Vice President: Tim Denman
  - Secretary: Jim Rockrohr
  - Treasurer: Eric Myers
  - Newsletter: Rick Versace
  - Directors: Karl Loatman, Willie Yee, Joe McCagne, Steve Cary
- Club scopes and cameras are available to paid members.
- Indoor meetings are not likely for quite a while due to SUNY guidelines.

#### Upcoming Events

- **Next Club Star Party:** January 15 at Lake Taghkanic State park. See MeetUp and YOU MUST RSVP with car make, model and license plate number to attend.
- **Jupiter-Saturn conjunction** closest on December 21 in southwest just after sunset.

#### Observing Reports:

- **Geminid Meteor Shower** peaked on December 13-14.

#### Visitors/New Members:

There were about 22 Zoom windows in attendance at the end of the business meeting.

The business meeting was adjourned at 8:00 PM. **The next meeting is January 19<sup>th</sup>, 2020, on Zoom. Check MeetUp for details and link. Link will be sent to all those that RSVP.**

The presentations that followed were by our club members as is traditional at the December meeting:

- Jack Chastain described the MHAA equipment for loan to members.
- Eric Myers discussed Stellarium landscapes that he has created and where to find them.
- Willie Yee presented his latest Star Trek magic show.

Submitted by James Rockrohr, January 16<sup>th</sup>, 2021.



### **MHAA Treasurer's Report for January 2021**

As of 16 January 2021 we have \$3,590.96 in our bank account and \$363.33 in our PayPal account, with the Treasurer holding \$69 in petty cash. We have one outstanding check for \$518 to pay for our event insurance, and I have one check to be deposited for \$25 for a membership renewal. Our monthly Zoom subscription was just paid, for \$14.99, from our PayPal account. I'm expecting a cash donation of \$20 which Jack Chastain received from a star party participant.

We are trying to stop using Member Planet but several members had their dues paid automatically at the first of the year via credit card through them. I've made adjustments to the settings there to try to prevent that from happening further (but they still get a renewal reminder). I encourage everyone to pay dues via PayPal or send me a check in the mail.

Rick Versace is taking over the duties of the Membership Coordinator. We have a system set up to exchange the information we each need from the other, and things are going smoothly.

We still need a reminder system to send out email to people when their membership needs to be renewed.

Respectfully Submitted,

Eric Myers

Treasurer



This article  
is distributed by NASA Night Sky Network

## Check Your Sky's Quality with Orion!

David Prosper

Have you ever wondered how many stars you can see at night? From a perfect dark sky location, free from any light pollution, a person with excellent vision may observe a few thousand stars in the sky at one time! Sadly, most people don't enjoy pristine dark skies – and knowing your sky's brightness will help you navigate the night sky.

The brightness of planets and stars is measured in terms of **apparent magnitude**, or how bright they appear from Earth. Most visible stars range in brightness from 1<sup>st</sup> to 6<sup>th</sup> magnitude, with the lower number being brighter. A star at magnitude 1 appears 100 times brighter than a star at magnitude 6. A few stars and planets shine even brighter than first magnitude, like brilliant Sirius at -1.46 magnitude, or Venus, which can shine brighter than -4 magnitude! Very bright planets and stars can still be seen from bright cities with lots of light pollution. Given perfect skies, an observer may be able to see stars as dim as 6.5 magnitude, but such fantastic conditions are very rare; in much of the world, human-made light pollution drastically limits what people can see at night.

Your sky's **limiting magnitude** is, simply enough, the measure of the dimmest stars you can see when looking straight up. So, if the dimmest star you can see from your backyard is magnitude 5, then your limiting magnitude is 5. Easy, right? But why would you want to know your limiting magnitude? It can help you plan your observing! For example, if you have a bright sky and your limiting magnitude is at 3, watching a meteor shower or looking for dimmer stars and objects may be a wasted effort. But if your sky is dark and the limit is 5, you should be able to see meteors and the Milky Way. Knowing this figure can help you measure light pollution in your area and determine if it's getting better or worse over time. And regardless of location, be it backyard, balcony, or dark sky park, light pollution is a concern to all stargazers!

How do you figure out the limiting magnitude in your area? While you can use smartphone apps or dedicated devices like a Sky Quality Meter, you can also use your own eyes and charts of bright constellations! The Night Sky Network offers a free printable Dark Sky Wheel, featuring the stars of Orion on one side and Scorpius on the other, here: [bit.ly/darkskywheel](https://bit.ly/darkskywheel). Each wheel contains six "wedges" showing the stars of the constellation, limited from 1-6 magnitude. Find the wedge containing the faintest stars you can see from your area; you now know your limiting magnitude! For maximum accuracy, use the wheel when the constellation is high in the sky well after sunset. Compare the difference when the Moon is at full phase, versus new. Before you start, let your eyes adjust for twenty minutes to

ensure your night vision is at its best. A red light can help preserve your night vision while comparing stars in the printout.

Did you have fun? Contribute to science with monthly observing programs from Globe at Night's website ([globeatnight.org](http://globeatnight.org)), and check out the latest NASA's science on the stars you can - and can't - see, at [nasa.gov](http://nasa.gov).



*The Dark Sky Wheel, showing the constellation Orion at six different limiting magnitudes (right), and a photo of Orion (left). What is the limiting magnitude of the photo? For most observing locations, the Orion side works best on evenings from January-March, and the Scorpius side from June-August.*

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## 2021 Star Party Schedule

|              |         |
|--------------|---------|
| January 15   | 4:30 PM |
| February 12  | 5:30 PM |
| March 12     | 6:00 PM |
| April 9      | 7:30 PM |
| May 14       | 8:00 PM |
| June 11      | 8:30 PM |
| July 9       | 8:30 PM |
| August 6     | 8:00 PM |
| September 10 | 7:00 PM |
| October 8    | 6:30 PM |
| November 5   | 5:30 PM |
| December 3   | 4:30 PM |

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## Directions To The Star Party Site

[Lake Taghkanic State Park](#) is in the town Ancram, NY. The park entrance is on the Taconic Parkway 10 minutes north of the exit used for Wilcox park.

Star Parties at Lake Taghkanic are held in the West Parking lot, next to the beach. The skies are darker than in Wilcox, with less stray light to deal with. The horizon is also much lower, especially to the south and east, making many more targets possible.

**IMPORTANT:** all events at Lake Taghkanic State Park require an **RSVP** which includes license plate number of the car you are bringing (please do so via [Meetup](#)). The park is patrolled by state police, and all non registered cars will be ticketed and risk our use of the park.

## General Information:

- ♦ Dates listed for star parties are the primary dates. The rain date is the following night unless otherwise noted. Only one session is held for a given weekend, usually on the primary date, Friday, unless postponed (usually due to inclement weather) to the backup date, Saturday. Exceptions to this are noted in the “Scheduled Events” section above.
- ♦ All outdoor events are FREE! All are welcome. If you bring small children, it is **your** responsibility to keep a close eye on them. Please do not bring white-light flashlights. Instead, bring a red astronomer’s flashlight or an ordinary flashlight covered with several layers of red cellophane. If in doubt about the weather, check the status of the event at [www.midhudsonastro.org](http://www.midhudsonastro.org).