# **Meeting Minutes**

Date: February 16, 2022

By: Jean Davids, Secretary/Treasurer

We had 8 out of the now 17 members that attended this meeting which was led by Heather Reinhart. Counting Mike Shaw, we had 9 people in attendance. We met in person once again. We missed it for the two months we did zoom this time.

We discussed a few topics before hitting into the main topic for the night. First, the members approved donating to the Tri-County Humane Society in Deanna Hall's (Anthony Hall member) honor. We also approved donating to that in honor of Jim Fleming (Lynne Fleming member). Since then I checked with Lynne and she says she would like the \$50 (\$50 for each member's spouse) to Beyond Sanctuary Inc. She gave me all the pertinent information for this non-profit animal rescue. I will complete these donations soon.

We discussed upcoming elections to see if there are any volunteers for the President (Heather Reinhart) and Board member (Kevin Juliot) roles. Bot the current officers are willing to stay on so I guess that closes elections.

Let everyone know that club dues are coming up and can be paid at the April or May meeting or by mail. The dues are \$12 per year.

Our assignment was Edited photos. No one submitted photos. Steve Fowler brought in some photos for Winter/Snow. He said he did them using **Birefringence** which is the optical property of a material having a refractive index that depends on the polarization and propagation direction of light. In his case it was ice. We suggested maybe he could do a presentation on it so we can understand it more. They were very cool looking. Mike Shaw said he would like to hear more about it too. This is a sample of this type of photo.



The topic for tonight was Getting Started with Astrophotography. Mike Shaw of Mike Shaw Photography (<a href="https://www.mikeshawphotography.com">https://www.mikeshawphotography.com</a>) presented. Here is the link to the gear that he uses: <a href="https://www.mikeshawphotography.com/photography-gear-and-apps">https://www.mikeshawphotography.com/photography-gear-and-apps</a>.

Here are some of the highlights that Mike Saw talked about tonight. They are what I could write down as fast as I could for taking notes so apologies for brevity. I tried to hit the highlights.

## Types of things to shoot:

- The Milky Way season generally runs from end of March to beginning of October. In May the full view of the Milky Way is near dawn. As the months pass, the view is seen earlier in the morning to late night for September/October. In October you can view the Milky Way straight overhead.
- <u>Aurora Borealis</u> can been seen any time of year. The Aurora Summit is being held in WI this year. Here's a link: <a href="https://theaurorasummit.com">https://theaurorasummit.com</a>. Mike highly recommends his summit.
- Star Trails all rotate around the north star which is part of the Big Dipper.
- Mercury and Venus are viewable and appear close to each other.
- The <u>International Space Center</u> passes overhead regularly. Here is a link I found related to locating when the space station is viewable: <a href="https://www.space.com/how-to-track-the-international-space-station">https://www.space.com/how-to-track-the-international-space-station</a>.
- <u>Big Dipper</u>, the <u>crescent moon</u>, <u>Lunar Eclipse</u> and other satellites as well as the <u>Andromeda Galaxy</u> are other examples of objects to photograph.

To find items in the sky, Mike recommends the Star Tracker app which is free on Google Play store and Apple's App store.

## Types of astrophotography include:

- Nightscapes nightscape plus foreground object.
- Deep Sky objects
- Night Sky (larger scale)

#### Camera:

Use Manual exposure

Use Manual Focus

Use red head lamp to protect your night vision

#### Recommendations:

- ISO 3200
- F4.0 or 2.8 if possible (the more wide open the better)
- Shutter at 10-20 seconds to keep out the star trails (unless that is what you are shooting for)
- Adjust as needed

#### Lenses:

- Wide Angle for fuller view of sky
- 24-70 mm zoom
- 50 mm prime
- Telephoto for deep sky objects

Milky Way gets started in April in early morning. Shoot the Milky Way during a new moon to get best results. The darker the sky the better.

Star Trails use 14 mm lens, 3200 ISO, F3.5, 5 seconds shutter speed.

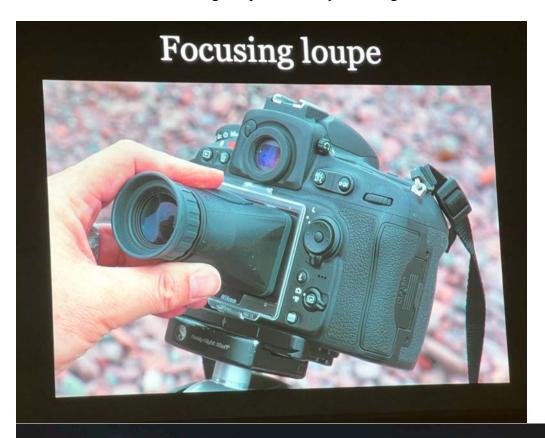
Moon shots are best just before it is full or just after it was full.

To determine your maximum shutter speed, use this equation – Rule of 300 = 300/Focal Length.

ISO - 1600 to 12800

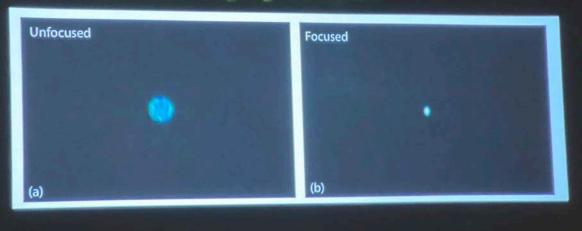
20 seconds, or 10 seconds

Recommends use of a Focusing Loupe to insure you have good focus on stars.



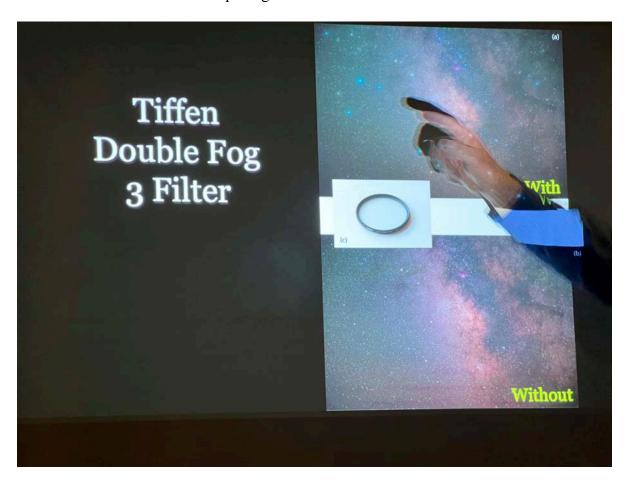
# Focusing at night - Plan A

- Use Live View, magnify on screen to maximum possible
- Find bright star and focus directly on it
- Adjust focus ring to get best focus:



Using a Remote Shutter Release can be helpful. One trick he mentioned that helps with repetitive shots of certain length for each shot is to set the camera to Continuous Shutter for certain number of seconds, press release and hold on shutter release, assuming it has one, and then it will continue to shoot on its own until you stop it manually. This is another way to accomplish the same thing you would with a shutter release with time lapse functionality.

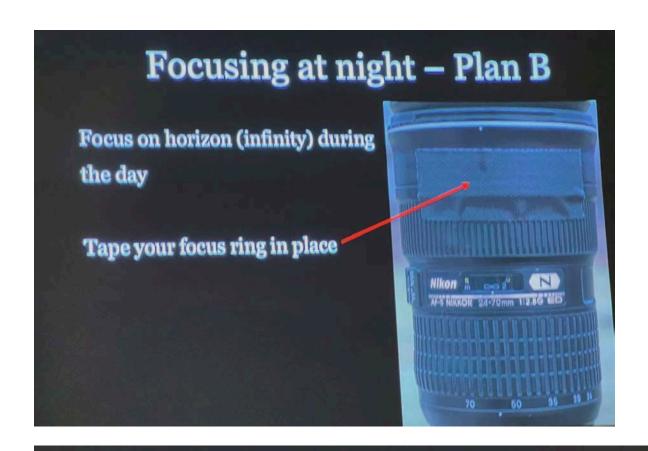
Uses a Tiffen Double Fog 3 filter. This diffuses the light to give it more color. Seems counter intuitive to spend all the time focusing exactly to then just sort of blur the image but it works. Here is a screen copy of an image Mike shared. You will see the top image has more colors to the stars than the bottom ones.



For focusing, Mike recommended using Live View to magnify the view. Use spot focusing. Stars twinkle so you have to be careful not to catch it at the wrong part of the twinkle.

Zoom has different focus point than prime shorter mm lenses.

Alternate focusing method is to focus on horizon/infinity during the day and then put it in manual focus and put gaffers tape over it so that you keep the focus you want at night.



# Night Photography Etiquette

# When you are near others:

- No cellphone screen, white flashlight, or other white light usages
- Red headlamps only, aimed away from the scene locations (opposite direction from cameras)
- · Dim the LCD screens on your cameras
- Place tape over any green or red indicator lights on camera backs
- Park your vehicle so its headlights shine away from the group in case of an early exit

There was one more item for etiquette but I missed that one.

A fun thing to try in October, you can point your camera at the end of a long straight road and get a photo of the Milky Way lined up vertically with it. Use Star Tracker or other app to plan this out.

A good free website to use for planning astrophotography projects can be found at Stellarium.org. It is free and shows views of the night sky.

# Your First Night Under the Stars

- Confirm camera battery and memory card are in the camera
- Check red headlamp is handy
- Arrive 1 hour before sunset to set up and compose before dark
- Tighten tripod securely
- Confirm manual exposure & settings (ISO 3200, 10 seconds, f4.0)
- Confirm manual focus set to infinity, tape focus ring
- Compose your image, click!
- Email Mike@MikeShawPhotography with your story!

This is as good as I could do for notes. I hope that it helps. Now let's get taking photos. Night photo is the assignment for April. See what you can do.

# Future topic ideas were discussed:

- Photographic noise ISO noise types and discussion of eliminating it or adding it. When is it an issue?
- Demo on derefringence Steve Fowler
- How to take close-up or macro shots of Bugs on Flowers Bob Somerville on Close-ups, Jean Davids on Macro.
- Town Festivals motion example would be Motion shots like at Spud Fest or other local festivals.

## 2022 Camera Club Meeting Dates and Topics

#### April 20

- Assignment: night photo
- Topic: Personal Safety in Photography Jean Davids

#### May 18

- Assignment: spring photo (hopefully)
- Topic:

#### June 15

- Assignment:
- Topic:

### July 20

- Assignment:
- Topic:

## August 17

- Assignment:
- Topic: Travel Photography Matthew/Sarah Breiter (tentative)

### September 21

- Assignment:
- Topic:

#### October 19

- Assignment:
- Topic:

# November 16

- Assignment:
- Topic:

# December 21

• Assignment: Top photos of 2022

• Topic: Holiday party, open discussion