

BBAA Astronomy Club meeting January 6, 2022. broadcast on Zoom.

Shawn Loescher called the meeting to order at 7:30 PM

Vice President Events Report, Samantha Erb

January 2022

- BBAA Club Meeting 1/6 via Zoom, 7:30 PM
- Garden Stars @ NBG, 1/11@ 7:00 PM
- Saturday “SUN”day@ Elizabeth River Park 1/15 @ 10 AM
- Corn Watch & Boy Scout Troop 407 Astronomy Merit Badge program @ Cornland Park, 1/21 6:00 PM
- Skywatch @ Northwest River State Park, 1/22 5:00 PM
- Corn Watch @ Cornland Park, 1/28
- Nightwatch @ Chippokes Plantation State Park, 1/29

February 2022

- BBAA Club Meeting, TCC (VB Campus) 2/3, 7:30 PM
- Corn Watch @ Cornland Park, 2/4
- Garden Stars @ NBG, 2/8 @ 7:00 PM
- Saturday “SUN”day@ Elizabeth River Park 2/12 @ 10 AM
- Girl Scout Star Viewing @ A place for girls, Cedar Rd, Chesapeake, VA, 2/12 @ 5:30
- Skywatch @ Northwest River State Park, 2/19 @ 5:00 PM
- Nightwatch @ Chippokes Plantation State Park, 2/26

The Kalamazoo astronomical society is presenting a five-part lecture series in amateur astronomy. They all happen on Saturdays every two weeks. The first lecture will be held on January 15th at 1:00 pm EST. You must register before January 15th at <https://www.kasonline.org/amastro.html>

Secretary’s report:

A motion was made to dispense in the reading of the minutes, which was approved.

Scholarship Report:

No report at this meeting.

Treasurer’s Report: (Richard Roberts):

General Fund:

Started 2021 with \$5,171.48

Income: \$5,150.87

Expenses: \$3,852.91

NET: \$1297.96

General Scholarship Fund:

Started 2021 with \$676.29

Income: \$1,984.00

Expenses: \$1,500.00

NET: \$484.00

GJ Scholarship Fund:

Started 2021 with \$1,604.00

Income: \$420.00

Expenses: \$1,000.00

NET: \$580

Ended 2021 with \$1,024.00

Membership:

164 on roster, 42 outstanding

60 new members in 2021

Astronomical League Report: (Bruce Powers)

Bruce is still trying to get the East Coast Star Party or whatever new name we want to give it, going once again. The Virginia State parks are receptive to us having a star party at Chippokes Plantation State Park or Staunton River State Park in 2022. Both parks are now officially International Dark-Sky Parks, so these would be ideal locations for the star parties. Bruce proposed a small committee to explore this with Shawn, Samantha, himself and anyone else who would like to join. George expressed interest in joining this group, so the number is now up to four. This is the DCR website for the state parks:

<https://www.dcr.virginia.gov/state-parks/dark-sky-parks?fbclid=IwAR1oRQQ8Bw9ItACbBYatPJTjdqtkqYj9el4qcYdSZpZLXtTu7cJBiBX4kK0>

New Business:

George Reynolds did go and picked up the BBAA apparel that was order and it is in his possession, so next time we meet in person, it will be distributed.

Observing Reports:

Richard Roberts is starting a new observing project with a person in Germany. They will be studying the polymers from the star. This star appears to have a dust cloud in front of it and it is pulsating. The light is polarizing and is out of phase with its cycle. Rich is going to run multi-band photometry, so they can get good color indices to understand how the light is being affected by the dust. This project will start in February.

Shawn Loescher was able to observe the Geminid meteor shower outside of Radford Virginia. Shawn reported that it was an extremely dark site and the longest he went without seeing a meteor was 16 seconds! The meteors were coming in from every direction.

Samantha Erb reports that she was able to see seven meteors in less than an hour in light polluted Norfolk from the same Geminid meteor shower.

Ben Loyola is captivated by watching the James Webb deploy the secondary mirror which will happen on Friday into Saturday morning.

Feature presentation:

Randy Regan, a NASA scientist and engineer gave a presentation on Barringer Crater, AZ - First Officially Recognized Meteorite Crater and The World's Best Preserved Meteorite Impact Site. The crater is located about 37 mi east of Flagstaff and 18 mi west of Winslow in the desert of northern Arizona. The crater was created about 50,000 years ago during the Pleistocene epoch, when the local climate on the Colorado Plateau was much cooler and damper. The area was an open grassland dotted with woodlands inhabited by mammoths and giant ground sloths. During the 1960s and 1970s, NASA astronauts trained in the crater to prepare for the Apollo missions to the Moon. Eugene M. Shoemaker, the famous geologist, that is probably best known for his co-discovery of Comet Shoemaker–Levy 9 with his wife Carolyn S. Shoemaker and David H. Levy, wrote his PhD thesis while attending Princeton on the impact mechanics at the crater. The Meteor Crater Visitor Center on the north rim features interactive exhibits and displays about meteorites and asteroids, space, the Solar System, and comets. It features the American Astronaut Wall of Fame and such artifacts on display as an Apollo boilerplate command module (BP-29), a 1,406 lb. meteorite found in the area, and meteorite specimens from Meteor Crater that can be touched. Closer to home, Randy spoke about the meteor crater that is now the Chesapeake Bay. One of the slides was the area mapped out as to where this impact occurred. Randy also spoke about the Chicxulub crater that is located off the Yucatán Peninsula. The date of the impact coincides precisely with the Cretaceous–Paleogene boundary (commonly known as the "K–Pg boundary"), slightly more than 66 million years ago, and a widely accepted theory is that worldwide climate disruption from the event was the cause of the Cretaceous–Paleogene extinction event, a mass extinction in which 75% of plant and animal species on Earth became extinct, including all non-avian dinosaurs.

Meeting adjourned at 8:53 PM