

Bob Frostick called the meeting to order at 7:30pm.

The KVAS meeting scheduled for 7/29/12 was originally going to be held at Breezy Point Observatory, where we were to host visitors from the Kanawha County Library in a Star Party. But since the rain threatened, the Star Party was cancelled and our meeting was moved to the Hansford Center. The Star Party will be rescheduled in the Fall.

Night Sky – Dan Pleska

Since Brent Ogle could not attend, Dan shared the monthly Night Sky presentation. The handout will be posted on the KVAS website.

The July / August Night Sky handout highlights features from the constellations Cepheus, Lacerta, Capricornus, Aquarius, Delphinus, and Equuleus. Brent's summary contains both the mythology of the constellations as well as astronomical highlights.

Asteroid / Meteorite Presentations

Bob shared two presentations from the Night Sky Network.

The first was a video called "Bullets or Building Blocks", and gave an overview of asteroids, with a focus on vulcanoids. Binary asteroids, pulled apart by tidal forces from major planets, were explained, as well as the potential for asteroids to impact Earth. In the future, asteroids may be used as stepping stones for travel to Mars, given their resources (including water) that could be mined, and the prospect for easy re-launch due to their low gravity.

Bob also presented a narrated slide show from the Night Sky Network, which included a summary of earth impacts from meteoroids.

Chuck Spann then discussed and presented 4 meteorites from Argentina. He pointed out their high density and highlighted "thumbprints" on the meteorites, caused by abating as they travel through the atmosphere. It is important to coat asteroids with some form of oil to prevent oxidation and rust.

Chuck also pointed out the high kinetic energy that meteor contains, since they travel at high speeds and kinetic energy increases as the square of velocity ($E = \frac{1}{2} m v^2$).

This website

<http://muller.lbl.gov/teaching/Physics10/old%20physics%2010/physics%2010%20notes/meteorKE.html>

gives an example that shows that a meteor has about 100 times as much energy per gram as TNT! So a one-ton meteor has the energy of 100 tons of TNT.

Chuck will bring some stony-iron meteorites to show us at our next meeting.

Observatory Update

Grounds surrounding our Breezy Point Observatory were mowed recently. Damage from the derecho was minimal – only some branch blown down with no significant damage.

Blackwater Falls Preparation

The I Pad we will use for one of our raffle prizes at Blackwater Falls has been purchased from Best Buy. Bob got a gift receipt so the winner can upgrade if desired. Cost was \$499.99. Tickets will be available soon so we can start selling.

Chuck offered to try to pick up the telescope that we will use for another raffle prize. After he picks it up, Chuck will develop a description to use for the raffle.

We discussed how we might provide support for speakers. The Park provides free room and board for the keynote speakers – other speakers generally make their own arrangements. We could offer speakers use of cabin space if members do not fully occupy the cabins. We discussed trying to offer support for the Concord University professor, as a way to strengthen our relationship and partnership with Concord. No other specific ideas of support were discussed.

Treasurer's Report

We have \$12,160.72 in our Treasury (after purchase of the I Pad). We will be buying hot dogs and other goodies for the September picnic.

Voting on Telescope Replacement Options

Only 14 ballots had been returned indicating preferences for telescope replacement options. Bob had previously mailed information and a ballot to all members. Please return your ballot as soon as possible, so we can have the best indication possible of members' desires.

Attendance at the July meeting.

Those who signed in (my continuing apologies to anyone missed) –

Carol Hilleary	Cat Pleska
Janet Willson	Dan Pleska
John Willson	Robert Dean
Sandy Blair	Chuck Spann
Danny Blair	Bob Frostick
Michael Riggs	Rodney Waugh
Glen Taylor	Judy Waugh
Janie Taylor	
Clarence Bowman	
Linda Bowman	

The meeting was adjourned at 8:30 pm.

Minutes submitted by John Willson, Secretary