Headline: **Cosmic Ladders – Oh My!**

By Torney Van Acker

How far away is the moon? How far is it to Saturn? How distant is any one star in the sky? How far is it to the nearest galaxy? How big is the universe? Not a problem. “Just use the cosmic distance ladder” claimed astronomer Milt Roney from the Northern Virginia Astronomy Club (NOVAC) who gave a presentation on the subject to 30 participants in the August 22 dark sky event at the Rappahannock County Park. Milt explained that the ladder is a chain of five overlapping methods by which astronomers establish a distance scale for objects in the universe from planets to galaxies. By the end of his talk, the audience was 10 billion light years from earth.

The dark sky event was kicked off with a short presentation by Laura Greenleaf, Co-chair of the Virginia chapter of the International Dark Sky Association (IDA). Her presentation titled “Under the Same Sky - Worldwide Local Action for Night Sky Conservation” summarized the IDA’s work in various countries around the world. Laura congratulated the Park for earning a Dark Sky Park status and noted that the Park was the smallest certified dark sky park in the world.

Once the presentations were over, it was dark enough to observe the starry skies. But alas - heavy overcast blocked off all possibility of observations. Better luck next time! Instead, a video clip titled “Powers of Ten” was shown. The 1977 movie took the audience from a picnicking couple by a lake to the edge of the universe and back. Then it zoomed ever deeper into the man’s hand until it reached the shimmering protons in the nucleus of an atom. A short Q&A session followed.

Rappahannock County Park received a Silver Tier Dark Sky Park designation from the International Dark Sky Association in February 2019. It is the third Park in Virginia to earn that distinction and the third county park in the United States. The next Dark Sky event at the Park is planned for Saturday, September 19 starting at 7:00 pm.

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IMG\_3523.JPG: Milt Roney explaining the cosmic distance ladder to the audience.