

January 2024  
**Sleepy Dirt**  
By Eric Brosius



As kids growing up, many of us heard stories of the “Sandman”. Our parents would tell of the mythical character who would put people to sleep by sprinkling sand in their eyes so they could have wonderful dreams as they slept. We would wake up the next morning with “sleepy dirt” or “sand” in our eyes.

The Leidy Microscopical Society met up with the Philadelphia Society for Microscopy at the Delaware County Institute of Science on December 9, 2023, to introduce visitors, guests, and members to the magical microscopical world of sand and sand collecting.

Leidy Microscopical Society Vice President Karenne Snow gave a wonderful Power Point® presentation on “**Sands: Art and Science or How I became an arenophile and psammophile**”. Karenne began by defining an:

**Arenophile** – Is one who collects sand samples.

**Psammophile** – Is a plant or animal that prefers or thrives in sandy areas. Plant psammophiles are also known as psammophytes.

**Sand** – Is a granular material composed of finely divided mineral particles. It is defined by its grain size of .063mm to 2mm. Smaller than gravel but larger than silt. It also refers to textural class of soil.

There are several organizations that specialize in sand collecting. The International Sand Collectors Society (ISCS), [www.sandcollectors.org](http://www.sandcollectors.org) being the most prominent.

Sand collectors only require a few pieces of equipment to pursue the hobby: (spoon, 2mm sieve, magnifying loupe, small bottle for samples, small Ziplock bags for collecting samples, marker for documenting samples, and a small credit card or piece of plastic to scrape samples from the sieve.

Once sand is collected, cleaned, and sorted the arenophile will analyze the specimen under magnification. Karenne said, “To know sand is to know the Land”. Most sand is composed of quartz, feldspar, iron, metal oxides and heavy metals in varying amounts. The sand is a product of tectonism as weathered residue that originated from rocks, organisms, and mineral solutions.

Before retiring to view many of Karenne’s sand specimens under the microscope, she mentioned a couple of books for more information: **A Grain of Sand** by Gary Greenberg and **Sand** by Michael Welland.

A surprise to the group was the use of a new Leica EZ4W stereo microscope with digital camera to computer adapter that Philadelphia Society of Microscopy President Robert Carlton acquired on loan from I Miller Precision Optical, Inc., 315 Bustleton Pike, Feasterville-Treose, PA 19053, Phone: 215-925-2285 or website: [www.imillermicroscopes.com](http://www.imillermicroscopes.com).