

Conservation Corner

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“ . . . and a whirlwind came out of the north, a great cloud, and a fire infolding itself, and a brightness was about it, and out of the midst thereof as the color of amber, out of the midst of the fire.”

This vivid description from Ezekiel 1:4 will introduce our first celestial friend for 2017 – the northern lights. Perhaps you know them as the aurora borealis, the name given them in 1619 by Galileo after the Roman goddess of the dawn and the Greek name for the north wind.

For millennia people have gazed in awe at the many wonders of the night sky, including the mystical northern lights. In China, they were associated with dragons. In Finland, they were known as *revontulet* or Fox Fires, created by magical snow foxes whose swishing tails sent snow spraying into the skies. In Norwegian folklore, they represented the souls of old maids now dancing and waving across the skies. Did you know the bridge that connected Earth and Åsgard in Norse mythology was modeled after the northern lights?

In North America, the northern lights were seen as campfires in the far north, heroes or warriors battling in the night, or torches of the friendly giants of the North who speared fish by aurora light. The Eskimos imagined the dancing spirits of humans or animals, especially the deer, seals, salmon, and beluga whales, while the Inuits pictured the auroras as a celestial “walrus skull” ballgame played out across the night sky field.

Today, of course, we know these spectacular lightshows do not arise from fox tails or walrus skulls but rather from charged particles within solar winds. As these particles enter the upper atmosphere, the Earth’s magnetic field accelerates them and sends them flying towards the poles where they collide with atoms of gas. These collisions cause them to not only release their gained energy but also to emit photons or light particles. It is the varying wavelengths of these light particles that result in the brilliant displays of dancing colors we call the northern or southern lights.

Yes, this phenomenon also occurs in the southern hemisphere, where it is called the aurora australis. And even though auroras are usually confined to their respective polar regions, strong geomagnetic storms may cause their aurora ovals to expand. One of my childhood memories include the night Dad led us kids through the grove and down the north lane to view the northern lights. While a rare occurrence here in Iowa, aurora sightings in Alaska were also memorable experiences for our son Neil, who never tired of falling under the spell of the northern lights.

People still gaze in wonder at the mysteries of the night sky. PCCB will be setting up the digital star lab in the multi-purpose room at the Pocahontas Catholic School this coming Sunday, Feb. 5, from 3:00 to 4:30 p.m. People of all ages are welcome to join us as together we explore the wonders of the night sky.

