

FOR: Immediate Release

FROM: Lake Afton Public Observatory

WSU Fairmount Center for Science and Mathematics Education Robert Henry, 316.978.3991 or Greg Novacek, 316.978.3854

DATE: July 30, 2012

RE: Perseid Meteor Shower

Get Set for a Celestial Light Show!

The Perseid Meteor shower occurs annually when the Earth passes through material left behind by comet Swift-Tuttle. As the month of August begins, you may begin to notice more shooting stars than usual streaking across the night sky appearing to come out of the constellation Perseus. The meteor shower activity will peak during the early morning hours of Monday, August 13. In the dark skies of outlying areas around Wichita or other Kansas cities, peak activity should reveal as many as 30 to 60 meteors/hour; in other words, an average of one meteor every minute or two.

For this special event, the Lake Afton Public Observatory will open its doors at 11:00 p.m. Sunday night, August 12 and will remain open until 2:00 a.m. Monday morning, August 13. Of course, meteors cannot be observed through a telescope so, instead, the Observatory's big telescope will be available to observe star clusters, clouds of interstellar gas and dust, and distant galaxies. If you just want to observe the meteor shower outside, there is no charge but you may also want to go inside the observatory to see what is being shown through the big telescope. If you do, regular admission charges will apply, however, in honor of the meteor "shower", anyone who comes in with some form of appropriate shower attire – a rain coat, an umbrella, a bar of soap, a towel, etc. – will receive \$1 off regular admission. The best advice for meteor watchers is to find a dark sky, lay back and patiently watch the sky so, bring your blankets, lawn chairs, bug spray, and friends to watch this celestial light show at the Lake Afton Public Observatory.

Background

Almost everyone has looked up at the sky and seen a falling star. Of course you are not actually seeing a star that's falling. What you are seeing is a meteor. On any given clear, dark night, away from the lights of the city, a person may see up to a half-dozen meteors every hour.

These meteors you see are just bits of rock that burn up when they run into Earth's atmosphere. Most of them are no larger than a grain of sand and they burn up in a fraction of a second. If you happen to see a bright meteor that lasts for more than a fraction of a second, you've probably seen something that is pebble-sized. A meteor that is fist-sized or larger will not only put on a spectacular light show but will likely survive the trip to the ground.

A couple of dozen times each year, you can go out and see anywhere from a dozen to a few dozen meteors per hour. These are considered meteor showers. The best known and usually most intense of these is the Perseid meteor shower which occurs each year around August 12th.

To understand where the particles that make up meteor showers come from we have to understand a little bit about comets. The easiest way to describe a comet, especially when it is in the frigid depths of the solar system, billions of miles away from the sun, is to think of a dirty snowball that's 10 miles across. This dirty snowball is the nucleus of the comet. As this comet nucleus approaches the sun, the sun's heat warms its surface, and it begins to boil. As the ice boils off, gas and dust particles are released and pushed away from the comet's nucleus by sunlight and the solar wind to form a tail. If this particular comet orbits the sun, then the dust particles that form the tail will continue to orbit the sun in roughly the same orbit as the comet from which they came. When Earth passes through one of these particle streams, the dust particles run into our atmosphere and we have a meteor shower. Every year, in the middle of August, Earth passes through the trail of dust particles left by the comet Swift-Tuttle, giving us the Perseid meteor shower.

Location

The Lake Afton Public Observatory is located about 20 miles southwest of downtown Wichita on MacArthur Road at 247th Street West in Lake Afton County Park. It is immediately north of the lake, just off MacArthur Road.

Admission

Admission to the Lake Afton Public Observatory is \$5.00 for adults and \$3.00 for children ages 6-12; children under 6 are admitted free. We also have a special family admission where 2 adults and their immediate minor children or grandchildren get in for just \$15.00.

Program Information

Current evening programs and times along with events taking place in the sky are available in a recorded message at WSU-STAR (978-7827) or by going to our website at http://webs.wichita.edu/lapo. You may also want to become a friend of the Lake Afton Public Observatory on Facebook.

The Lake Afton Public Observatory is operated by the Fairmount Center for Science and Mathematics Education, a part of the Fairmount College of Liberal Arts and Science at Wichita State University. Additional support is provided by Sedgwick County.