



# STARS IN THEIR EYES

## Fun with Summer Astronomy

By Lorraine Payette

There is something about looking up into the heavens on a perfect summer's night that can take you on a breathtaking trip beyond the reaches of your everyday life. Whether seeking familiar constellations, wondering about the moon, chasing comets or lying breathless on a hillside during a meteor shower or display of the northern lights, there is always something waiting for you after dark on a clear night.

All you need to get started are your eyes and some dark sky away from the lights of houses and streets. If you can, head out to the country and get permission to use an open field or woodland area with a large expanse of sky. Bring a flashlight to guide you in, a notebook and a pen to take notes, a star finder and a penlight or night-vision eye piece. Make sure you know where you are and how to get home again, and always carry rain gear. It is amazing how fast a cloudless night can become overcast and stormy.

Summer holds some fun celestial events to put on your calendar. For those who enjoy "falling stars", there are the Delta Aquarids Meteor Shower from July 28-29, and the Perseids Meteor Shower from August 11-12. Although the showers actually run far longer than this, these are the projected peak periods for viewing. Sadly, the Delta Aquarids (which usually produce about 20 meteors per hour at their peak) will be hard to see due to a second quarter moon throwing off a lot of light, but there should be great viewing for the Perseids after midnight when the moon has set. The Perseids can bring up to 60 meteors per hour, many of them quite large and bright. The showers radiate out from their appropriate constellations, but they can appear anywhere in the sky and create an amazing natural light show.

To find the constellations, you need to know what they look like and where they are. Look on-line for good basic star charts

that you can print. These will show you the constellations in your area and where they will be in the sky at different times. See how many constellations you can find. Learn the stories behind their names, and tell them as you observe the stars – it adds to the fun.

You can also make small study projectors using flashlights and various materials. A simple homemade star projector can be found at [https://www.youtube.com/watch?v=\\_0iZ104HFew](https://www.youtube.com/watch?v=_0iZ104HFew) and uses cereal boxes and cylindrical containers. Images of the constellations can be copied from star maps, or found at various sites on-line such as <https://www.pinterest.com/pin/27232772719553361/>. Simply copy the constellations onto cardboard that has been cut into a circle to fit the end of your cylindrical container, punch holes with a push pin where you would find the stars, mount the disk onto your cylinder and turn on your flashlight from the other end. Do this in a dark room (making sure you have the stars facing in the right direction), and project the constellations on your wall.

David H. Levy, world famous amateur astronomer and discoverer of many comets and asteroids, spent a lot of time in this area observing the night skies as a member of the Royal Astronomical Society of Canada. He was always delighted to take young people out to a convenient dark location and share the night sky with them.

"I became an astronomer not to access the facts about the sky but to see and feel its majesty," he said. May this majesty become a part of you. **LH**