

Stars over Sisters

By Ramsey Schar
Correspondent

As 2018 advances into the second-to-last month of the year, the sky orients itself in new ways, bringing with it spectacular starry treats. There are new things to see and discover in our dark, infinite sky.

Coming up in mid-November is the annual Leonid meteor shower. Over the years this spectacle has produced some of the most appreciable displays in history and is considered an incredible event to watch when this occurs.

As the earth crosses the orbital path of comet Tempel-Tuttle, it intercepts some of the comet's debris which is vaporized as it enters the earth's atmosphere. The Leonids are bright and often deep blue in color and travel at speeds of around 44 miles per second, making them some of the fastest streakers in the sky.

Every 33 to 34 years the earth passes through a particularly dense cloud of cometary rubble that lights up the sky with thousands of meteors per hour. When this happens, the event is known as a meteor storm. A display must generate at least 1,000 meteors an hour to be called a storm. The latest Leonid storm occurred in 2001 and many of those who witnessed it described meteors that fell like rain because of how many there were. The next chance for a storm won't come again until the year 2034 or 2035.

This year's shower will produce only about 15 meteors per hour, best viewed at midnight on November 17 through the morning of November 18. A waxing gibbous moon, however, will reduce this paltry rate.

Autumn is an ideal time to view the beautiful Andromeda Galaxy. Also known as M31, this object is classified as a deep sky object and is located in the constellation of Andromeda. It lies between Pegasus to



PHOTO BY SEAN M. SABATINI

Meteors "rain" over Monument Valley Utah during the Leonid meteor storm of 2001.

the south and the northern constellation of Cassiopeia and can be seen without optical aid under dark skies. Look for a dim blur or hazy oval.

The Andromeda Galaxy is the largest member of the Local Group of galaxies that includes it, our Milky Way Galaxy and the Triangulum Galaxy (M33), another spiral galaxy. By way of comparison, our galaxy is approximately 100,000 light-years in diameter, while M31 in Andromeda is more than twice as big. The smallest member of the group is M33 at just 60,000 light-years in diameter.

Lying at a distance of just 2.5 million light-years, many astronomers believe the Andromeda Galaxy and our own Milky Way will collide in about four billion years.

The five brightest planets, known as the naked-eye planets, consist of Mercury, Venus, Jupiter, Mars, and Saturn. All of these can be seen without optical aid, explaining why they are called the naked-eye planets. All of them are visible for most of the year but are typically not seen all in one night. The position of a planet moderately changes against the background every night, helping to distinguish it from a star.

Early in November, both Jupiter and Mercury hug the southwestern horizon 30 minutes after sunset. Using

a pair of binoculars will greatly improve your chance of locating them. Still hanging out in the constellation of Sagittarius, Saturn is an easy evening find. But it's ruddy Mars, shining brighter than a first-magnitude star, that continues to put on the best show as it hangs in the sky until about 1 a.m. local time before setting.

The first week-and-a-half of the month is a good time to plan your nighttime observing because skies will be dark. As the month progresses, however, a waxing moon will gradually brighten the night sky, culminating in a Beaver Full Moon on November 22.

Sisters Country birds

By Douglas Beall
Correspondent

The high-pitched trill heard within tall Northwest conifers in spring is often the Townsend's warbler 'Setophaga townsendi.

Arriving early, the male will sing to mark his nesting territory. When the females arrive they form monogamous pairs and the female builds a nest on the end of a confer branch well up in the canopy. Bark strips, grass, moss, and twigs are used for a small cup nest that is lined with feathers and hair.

The female incubates 3 to 7 white-brown speckled eggs for 11-14 days and then

both parents feed insects to the young for 10 days who then fledge the nest. Insects, including spiders, are the majority of the Townsend's diet, although they visit suet feeders during winter months.

The Townsend's warbler will occasionally crossbreed with the Hermit warbler when the nesting areas are close together only in our Northwest forests.

Warblers are referred to as a "fall," a "bouquet," "a "confusion," or a "wrench" of warblers.

To view more, visit <http://abirdsingsbecauseithasong.com/recent-journeys>.



PHOTO BY DOUGLAS BEALL

Townsend's warbler.



Partners In Care
Community Education

Grief and the Holidays

You're invited to this educational training event to learn more about grief support for yourself and your loved ones during the holiday season.

*Presented by Dr. Patrick Arbore,
Founder of the Friendship Line*

November 16

Friday, 11:30am-1:30pm

**No cost. RSVP required.
Light lunch provided.**

Call (541) 382-5882
to reserve your space.

Community Education
meets at Partners In Care,
2075 NE Wyatt Court
Bend, OR 97701

Hospice • Home Health • Hospice House • Transitions • Palliative Care PartnersBend.org

Projects Small Or Large Start With Our Dream Team of Building Pros

GOT QUESTIONS? Lumber • Paint
Hardware • Tools • Siding • Doors
Windows • Fencing • Decking
Plumbing & Electrical Supplies

**HOYT'S HARDWARE
& BUILDING SUPPLY, Inc.**

**FREE Local
Delivery**
Serving Sisters
Since 1976

Hours: M-F 8-5, Sat. 8-4:30, Closed Sundays
440 N. Pine St. • 541-549-8141 • www.hoyts.net



World's Children
*Helping vulnerable
children since 1965*

World's Children supports orphaned, unwanted, and HIV/AIDS affected children living in 31 orphanages in three countries.

**We're in Sisters! Stop by our office and meet our staff, 8:30 a.m. to 5 p.m.,
Monday through Friday, 473 E. Hood Ave., Ste. 201 (upstairs).**

www.worldschildren.org

This ad sponsored by The Nugget Newspaper