

Stars over Sisters

By Ron Thorkildson
Correspondent

After the sun, the closest star to the earth is Rigil Kent, the brightest star in the constellation of Centaurus. Better known as Alpha Centauri, this celestial luminary (third brightest in the entire heavens) is actually a triple-star system. The distance to the two brightest stars is about 4.4 light-years from the earth, while the much dimmer third member of the system, Proxima, lies at a distance of 4.2 light-years. Unfortunately, this star is situated deep in the southern sky and not visible from our latitude.

However, the second-nearest star to us is well above the southern horizon this time of year when darkness falls. That's the good news. The bad news is this object is a low-mass red dwarf star that's far too dim to be seen by the naked-eye. Even so, it does have some redeeming qualities.

Located in the northern part of the constellation Ophiuchus, Barnard's "Runaway Star" possesses the highest proper motion of any known star. This means that relative to our solar system, no other star moves through space at a faster clip. Although he wasn't the

first to discover it, in 1916 American astronomer E.E. Barnard measured the proper motion of the speeding star at a whopping 10.3 arcseconds per year. Since the direction of its motion is bringing it closer to the sun, about 10,000 years from now the star will be 3.8 light-years away, closer than Alpha Centauri is today.

Just because the light shining from Barnard's Star is too dim to be detected by the unaided human eye doesn't mean it can't be seen at all. At magnitude 9.5 (a measure of the star's brightness), it is within the range of most backyard telescopes on a dark night. But you would need a good finder chart to be sure that you identified the right star. Begin by locating the bright star Beta Ophiuchi; Barnard's Star is about three degrees east from here.

Summer arrives in the northern hemisphere at 9:39 a.m. PDT on Sunday June 21, when the earth's axis of rotation is most inclined toward the sun. The longest period of daylight in a 24-hour day occurs at this time. This is not necessarily good news for the

serious stargazer, a situation made even worse when, on March 8, most of the country went on Daylight Saving Time. So, on the first day of summer, it doesn't really get dark until around 10:30 to 11 p.m. in the mid-latitudes.

When the light of summer finally does give way to dusk, the first two objects to pop into view are Venus and Jupiter, the nearest planet to the earth and the largest planet in the solar system, respectively. Throughout the month of June the apparent distance between Venus and Jupiter will diminish, until on June 30 the two planets will be separated by just 0.3 degrees.

The largest angular distance between Venus and the sun (called greatest elongation) occurs on June 6. During this time the disk of the planet will appear half lit (similar to a quarter moon phase) when viewed through a telescope.

On June 3, at 9:58 p.m. PDT, Ganymede, the largest moon in the solar system, will cast its shadow on Jupiter. Then on June 10, from 9:55 to 10:18 p.m., Ganymede

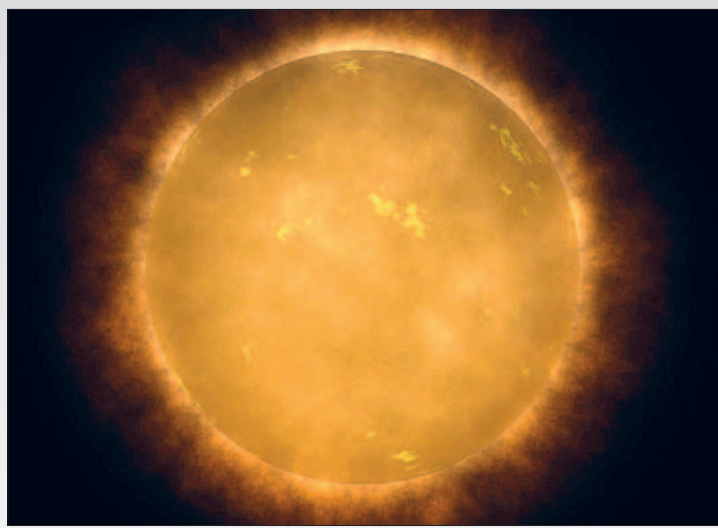


PHOTO COURTESY NASA

An artist's depiction of how a red dwarf star might appear, such as Barnard's Runaway Star in the constellation of Ophiuchus.

occults (moves in front of) Io, Jupiter's inner-most moon. A medium-size telescope is necessary to view these events. By mid-month Saturn, with its beautiful ring system and largest moon Titan, rises at about 6:30 p.m., but doesn't hit the meridian until 11:22 p.m.

The lunar phases begin with the Full Strawberry Moon on June 2, followed by last quarter on June 9, new on

June 16 and first quarter on June 24.

The next Stars over Sisters starwatch is scheduled for Saturday, July 18 at the Sisters Park & Recreation District building, beginning at 9:30 p.m. It's an opportunity to view the wonders of the night sky through telescopes provided by members of the Sisters Astronomy Club. Everyone is invited to this free event.

**YEAR-ROUND
FIREWOOD
SALES
KINDLING**

**SISTERS
FOREST PRODUCTS**
541-410-4509
SistersForestProducts.com

RODEO TACOS!
5 MINI CHICKEN OR
BEEF TACOS FOR \$7
JUNE 5-13

TACOS EL COMAL
NEW SUMMER HOURS 8 A.M. TO 8 P.M.
411 N. CASCADE AVE. 541-549-6759
(IN FRONT OF RICHARD'S PRODUCE)

**Locals
Special**

\$47*
Walking

\$57*
With Cart

Enjoy pristine course conditions, stunning scenery and unparalleled golf on two of Oregon's best courses.

Black Butte Ranch
THERE IS A PLACE

* Mondays and Tuesdays through June 25, 2015. Available to Deschutes County residents. Valid ID requested. Not valid for groups.

TEE TIMES 877.570.5818 | BLACKBUTTERANCH.COM



THINKING OF A SPORTS PHYSICAL?

A well youth visit is a comprehensive wellness exam that includes updating immunizations and addressing preventative health issues. Your child's sports physical exam can be done in this well youth visit - just bring the sports physical form with the questionnaire filled out to the appointment. Well youth visits are covered by most insurances.

Call for an appointment today.

Sisters Clinic | 231 East Cascades Avenue
Call 541.382.4900 to make an appointment.

