Applegater Fall 2015 7

THE STARRY SIDE Moon movements

BY GREELEY WELLS

We are all familiar with the various moons we see each month. Some are big and full in the eastern evening sky, with partial moons waning to crescents in the west at the end of day. Morning moons are approximately the same (the phases are just reversed), but they're so early that few of us see them.

Most of my life I have been **confused** by *where* those moons are found in the sky. Sometimes the full moon is high, sometimes low. Well, I finally figured it out a few years ago. We all know where to find the sun over the course of a year: high in the summer and low in the winter. Well, the moon is similar, but on a monthly schedule. In summer when the sun is high, the full moon is low on the horizon. Partial moons in summer months work their way up the sky till the little crescents are very high up. The reverse happens in the winter: when the sun is low the full moon is high! And again, partial moons, ending with the crescents, get lower and lower.

Now that you know *that*, you'll be able to figure out that in the fall or the spring the full moon's location will be sort of in between the low summer and the high winter.

This amazing solar system (and universe and cosmos) has such strange and wonderful, weird and interesting mechanics that can blow your mindand then, after you get the hang of it, astonish you. It's nice to be familiar with its workings. So now I can explain what the moon does, but I can't yet explain *why* it does this. Maybe some day.

Here are some highlights in the sky for you this fall season. As you receive this in September (the month of my 72nd birthday), the sky has moved to other favorites of mine and perhaps yours. As I talk about these, as a general rule I'm describing what things look like at about 10 pm. (Everything is farther east before 10 pm and earlier in the season; everything is farther west after 10 pm and later in the season.)

The Summer Triangle with the Milky Way is still up and high in September, then moves through the season to become low in the west in November (it's off-center to summer, coming late and overstaying its summer welcome). One of its great gifts is the Northern Cross, Cygnus the Swan, standing bolt upright on the northwestern horizon in fall/early winter. The triangle is followed by the huge square of Pegasus, prominent and overhead all fall and into winter too.

My favorite part of Pegasus is its northerly corner, facing the "W" of Cassiopeia. This corner of Pegasus begins the sweeping, curved triangle of Andromeda. She then heads towards Cassiopeia with three sets of two stars,

each set farther apart, widening into a August until beautiful, graceful arch. The second set of two stars shows us the Andromeda galaxy: look overhead toward the northeastagain, about the same distance that exists between the first two stars. It's just barely visible, a small fuzzy spot, but it's the only galaxy we can see with naked eyes. Although it's tiny, the concept of glimpsing another galaxy thrills me. **Other events of note**

In August, Venus plunged into the sunset sun in the west and will emerge in the mornings of October.

Jupiter also sank into the sun in

the end of the year, when it shows up at

dawn. The autumnal equinox occurs on September 23 and the full moon on September 28. October 15 marks the Muslim New Year. October's full moon is on the 27th. On November 1 we need to turn our clocks back one hour ("fall back") to standard time. Then look for a full moon on November 25.

Wishing you clear, dark night skies and bright stars.

Greeley Wells • greeley@greeley.me

Illustration: Guy Ottewell's Astronomical Calendar 2014.







Greeley Wells

175 E. California • P.O. Box 359 • Jacksonville, OR 97530-0359 541-899-1900 • 1-800-321-9344 jvinn@mind.net • www.jacksonvilleinn.com



Cell: 541.864.9168annissa@goodbean.com

541.779.6466





Wednesday Night Live Music

Lodge 541-846-6690 Restaurant 541-846-6082 Wedding/Special Events 541-660-0244 www.applegateriverlodge.com



CCB# 201660

BLACKBERRY & BRUSH REMOVAL EROSION CONTROL & CULVERTS 8' DEER FENCING **DUMP DELIVERIES RETAINING WALLS**

541-890-5553







2366 WEST MAIN ST. MEDFORD, OR 97501 (541) 245-5872

235 BARNETT ROAD MEDFORD, OR 97504 (541) 245-6778