

### We're heading toward spring

**By Vernon Whetstone**

*Amateur Astronomer*

Here is hoping that each of you had a wonderful and enjoyable Christmas. Now, down to business.

Okay, okay, enough with the correction notes. Contrary to popular belief, I do know the difference between a solstice and an equinox; it is just that I get them confused once in awhile, okay, almost always (here insert very large grin).

Seems last week I said that on Friday, Dec. 21, the Sun would be crossing the celestial equator on its way south marking the winter solstice.

What I meant was the Sun had reached the Tropic of Capricorn—an imaginary line roughly 23.5 degrees south of the equator which marked the winter solstice.

Several of you caught me on that one, for which I humbly admit my error. I mean, I am getting on in years, they don't call me "The Stargeezer" for nothing. Confession may be good for the soul, but it is bad for the reputation.

The corresponding latitude for the northern boundary is the Tropic of Cancer, located an equal distance north of the equator. When the Sun reaches that point it is called the summer solstice.

The word solstice is from the Latin meaning "Sun stands still."

When the Sun crosses the equator it is either the autumnal or vernal (spring) equinox.

In any case, the Sun has reached its southern-most point and is now traveling back north making the days longer and the nights shorter on its way to the vernal equinox, or the first day of spring on March 20.

It may be past Christmas, but we can still look at two of my favorite Christmas astronomical objects.

The first is an easy find. Look west about two hours after local sunset for Cygnus, the Swan, or as it is also called, the Northern Cross.

At present it appears the swan is doing a nose-dive into the western horizon, or the depiction of the cross is standing upright just above the horizon.

Go out again at about four hours after local sunset to your favorite dark-sky place with your binoculars and look east for the small constellation Cancer, the Crab.

If you put an imaginary circle around it, the stars would look like what my generation called "The Peace Symbol." Or, as some have said, it looks like a hood ornament from a Mercedes-Benz automobile.

In any case, Cancer is shaped like a large letter "Y" just above the horizon.

Now, use your binoculars to examine the area around where the lines of the "Y" meet for a very nice open star cluster called M-44, or, The Beehive.

There is another name for the cluster, "Praesepe," or The Manger.

Since Christmas is the celebration of the birth of Jesus, I like to think that the sky is still showing reminders of what He did; being born in a manger and dying on a cross.

Also, notice something else about Cygnus, the Milky Way runs right through it. At present the Milky Way, the edge of our home galaxy, runs from east to west. If you remember our star-viewing sessions last summer, the Milky was running north to south.

SKY WATCH: Full moon, Friday, Dec. 28. As the day turns from Jan. 1 to Jan. 2 Earth will be at its closest point in its orbit to the Sun. Then why is it so cold? Well, that could be a topic for a future discussion.

NEXT WEEK: Next time, I promise, the winter triangle, circle, and rectangle, and more astronomical blathering.