

Big Dipper can point you to other constellations

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I'm probably the least knowledgeable member of the Popular Astronomy Club. I "married into" astronomy more than 41 years ago when I married Roy, a passionate amateur astronomer.

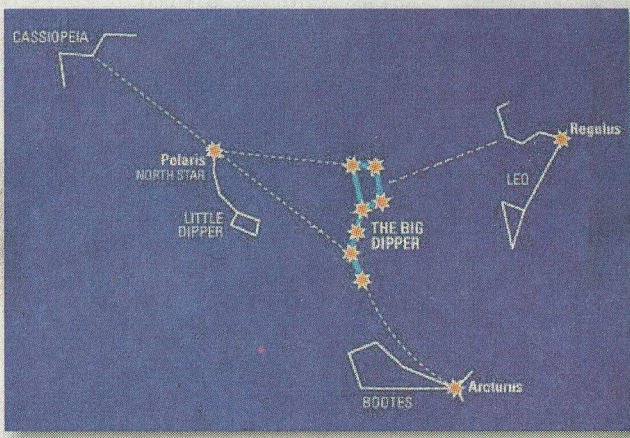
We're fortunate to live in a rural area where we can see many stars — and the Milky Way — at night. I remember our first walks at night, when my husband would point out the various constellations, but the only one I could identify by myself was the Big Dipper.

I now use the Big Dipper to "star hop" to find other constellations. I have since learned that the Big Dipper is not actually one of the 88 official constellations, but is an "asterism," which means it's just part of the larger constellation, Ursa Major (the Big Bear).

The first star we're going to "hop to" is Polaris, better known as the North Star (see illustration). Polaris is the only star in the night sky that doesn't appear to move as the Earth rotates; because it's directly above the North Pole, you always find it in the same spot in the northern sky.

The Big Dipper rotates around Polaris. To find Polaris, mentally draw a straight line connecting the two stars on the far side of the bowl of the dipper, extend it five times, and you will arrive at Polaris.

Polaris is at the end of the handle of the Little Dipper. The Little Dipper, officially named Ursa Minor (the Little Bear), is quite faint, so depending on viewing conditions, you may only see Polaris and the two stars on the far side



Submitted

This illustration shows how you can use the Big Dipper to find other constellations in the night sky.

QUAD-CITIES SKY WATCH

of its bowl.

Throughout the year, the two bowls appear to be pouring their liquid back and forth.

Now let's look for the constellation Cassiopeia, which looks like an "M" or a "W," depending on the time of night and the season. If you draw an imaginary line from the second star in the Big Dipper's handle through Polaris, you will come to Cassiopeia.

The ancient Greeks named the constellations thousands of years ago and, according to Greek mythology, Cassiopeia was the queen of Ethiopia, but was placed in the sky as punishment because she was very vain and constantly bragging about her beauty.

Part of the night she sits upright, regally administering her kingdom, but part of the night she hangs upside down, hanging on for dear life.

Another constellation easily found using the Big Dipper as a starting point is Leo (the Lion). Just pretend there is a leak in the bowl of the Big Dipper, and the drips land right on Leo's head, which is shaped like a backward question mark.

The last constellation we will find by using the

Big Dipper is Bootes (the Herdsman). Follow the curve of the handle away from the bowl and "arc to Arcturus," the brightest star in Bootes and the fourth brightest star in the sky. Bootes is shaped like a kite, and Arcturus is at the bottom of the kite.

By knowing just the Big Dipper, you can find many items in the sky. A good map for finding your way around the sky can be found online at skymaps.com.

Come take a look

On June 18 at dusk, come to the monthly public viewing of the Popular Astronomy Club at Niabi Zoo in Coal Valley, where experts can help you find your way around the night sky, and you can view the moon, planets and stars through a telescope.

