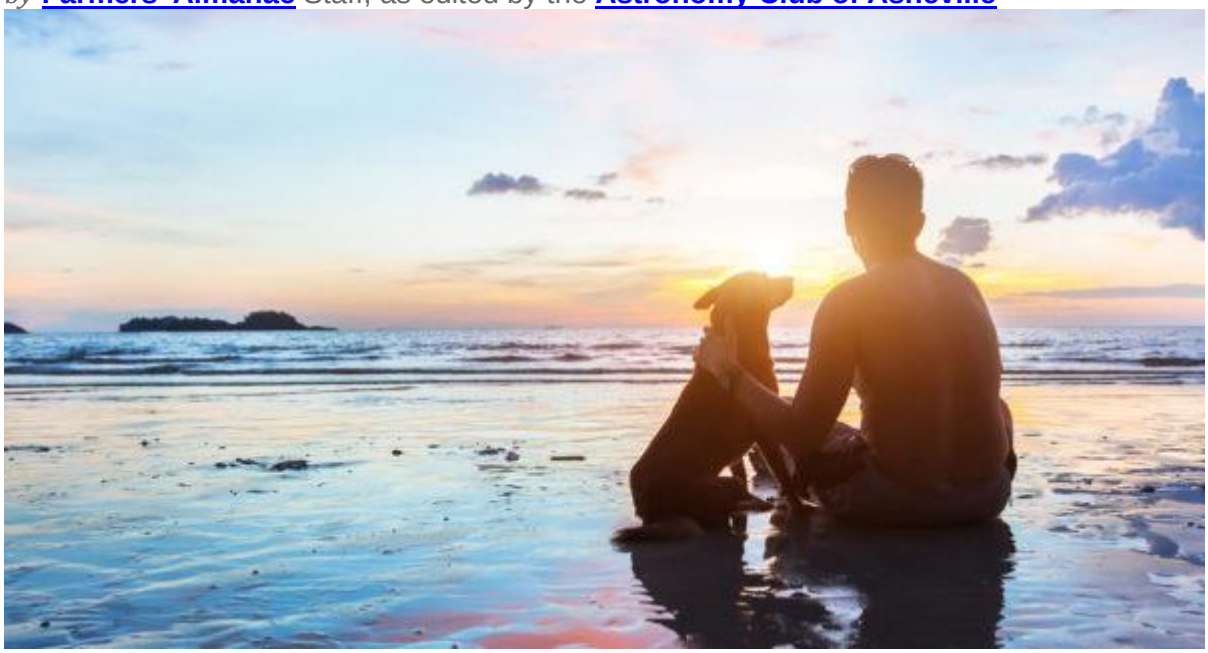
Why Are They Called The “Dog Days” of Summer?

by **Farmers' Almanac** Staff, as edited by the **Astronomy Club of Asheville**



We often hear about the “dog days” of summer, but few know what the expression means. Some say that it signifies hot sultry days “not fit for a dog”; others suggest it’s the weather in which dogs go mad. The Dog Days of Summer describes the most oppressive period of summer, between July 8th and August 17th each year. But where did the term come from? And what does it have to do with dogs?

The phrase is actually a reference to the fact that, during this time, the Sun occupies the same region of the sky as **Sirius**, the brightest star visible from any part of Earth. Sirius is part of the constellation Canis Major, the Greater Dog. This is why Sirius is **sometimes called the “Dog Star”**.

In the summer, Sirius rises and sets with the Sun. On July 28th, specifically, it is in conjunction with the Sun, and because the star is so bright, the ancient Greeks and Romans incorrectly believed that it actually gave off heat that reached Earth and added to the Sun’s warmth, accounting for the long stretch of sultry weather. They referred to this time as *diēs caniculārēs*, or “dog days”. Thus, the term Dog Days of Summer came to mean the 20 days before and 20 days after this alignment of Sirius with the Sun—July 8 to August 17.

Note that all dates are approximate for the latitude at Asheville, NC → 35.6º N.

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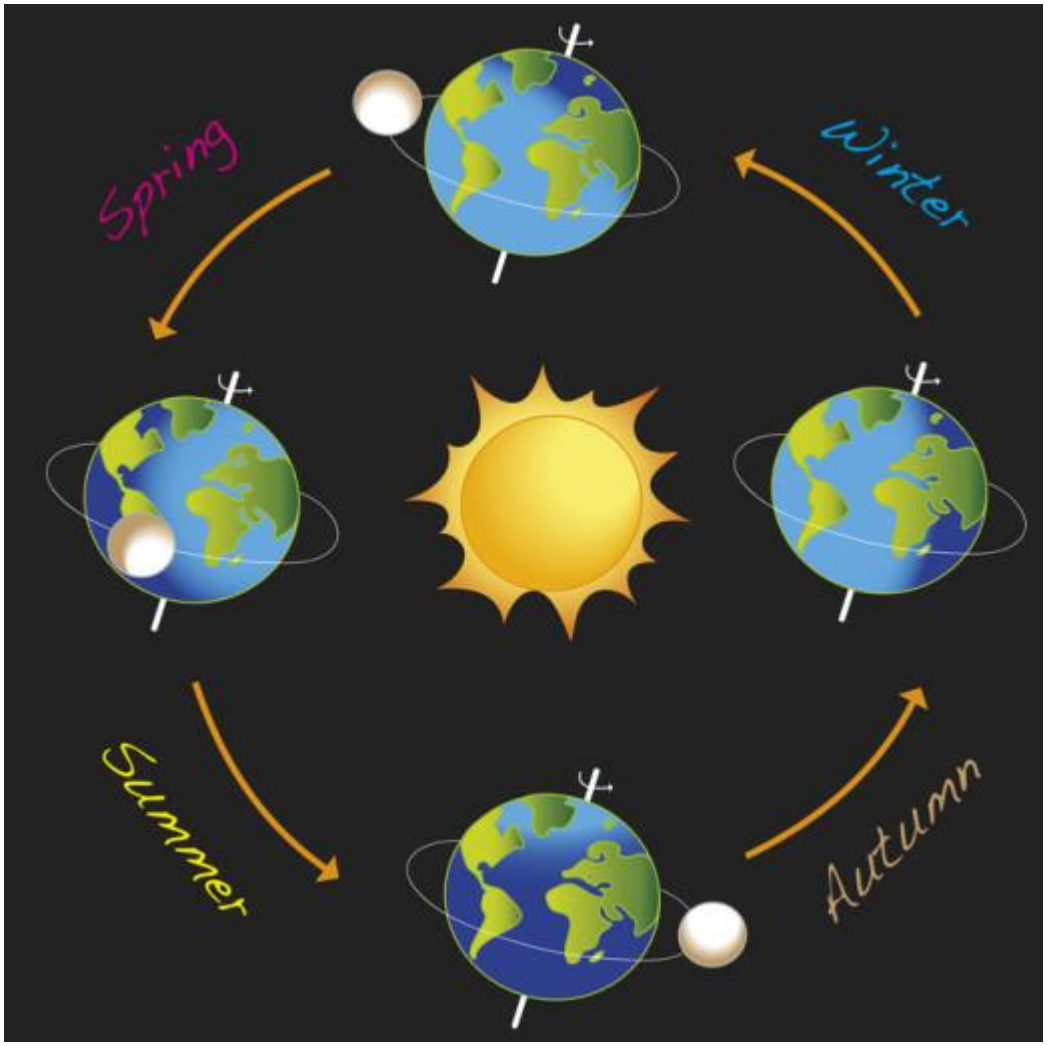
It's All About the Tilt

While this "dog day" period usually is the hottest stretch of summer, the heat is not due to any added radiation from Sirius, regardless of its brightness. Although a relatively close star, Sirius is located some 8.6 light years from Earth. That's about 5.88 trillion miles (approximate distance of one light-year) times 8.6, or some 51 trillion miles away!

The heat of summer is simply a direct result of the Earth's axial tilt of 23.5º. During summer in the Northern Hemisphere, the tilt of the Earth causes the Sun's rays to hit at a more direct angle, and for a longer period of time throughout the day. This means longer, hotter days.



Read more about the Dog Days of Summer and the "Heliacal Rising" of Sirius at this link.