

# On the SCOPE skies

Marching into spring, we see a crow, a watersnake, but not a cat.

## Signs of spring

This year, spring officially starts in the Northern Hemisphere at 2:51 CST on Friday, March 20, when the Sun's apparent path along the ecliptic places it within the boundaries of Pisces, the Fishes. Figure 1 shows where the Sun resides during the equinox. The Sun is located at a point where the ecliptic path crosses the celestial equator. At this point, the Sun has celestial coordinates of 0 hours and 0 degrees. On this date, the Sun's position in space with respect to the Earth's surface is directly over the Earth's equator. For most locations on Earth, the Sun rises due east and sets due west on this day.

In the North, the time that the Sun crosses the equator is typically called the vernal or spring equinox. However, in all fairness to those living in the Southern Hemisphere, it should best be called the March equinox. In terms of astronomy, we say that spring in the Northern Hemisphere starts when the Sun is in the constellation of Pisces.

## Age of Pisces

For some ancient cultures, the equinox marked the start of a new year. Because spring ushers in more favorable seasons for growing and acquiring food, as well as for most daily activities, much significance was placed on the constellation that housed the Sun at this time of year. Several thousand years ago, ancient cultures noted that the Sun lay within Aries the Ram at this time and the equinox was known as the First Point of Aries, or the Age of Aries.

A closer examination of Figure 1 will show that the Sun is no longer within Aries during the equinox, but is nearly through the region of Pisces. In fact, over the years, the Sun will continue to slowly shift westward into the constellation of Aquarius, eventually bringing us into the age of Aquarius—an astronomical age that a 1960s popular song miscalculated by several centuries.

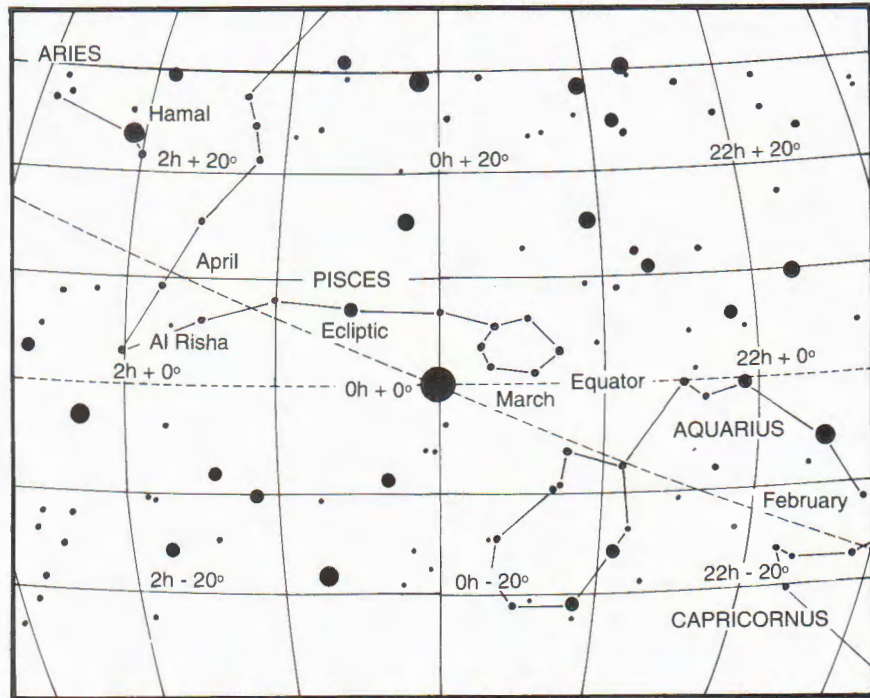


Figure 1. Position of the Sun at the March equinox.

## Slaying Hydra

Rising up from the eastern horizon during early spring is the constellation Hydra the Watersnake, known in mythology as the many-headed snake that Hercules battled. The constellation's great length represents the long time it took for Hercules to defeat Hydra. Hydra had nine heads, and as Hercules found out, simply cutting off each of its heads was not sufficient to slay the snake. For as soon as one head was cut off, two more would grow back in its place. So, in order to defeat Hydra, Hercules had to burn each decapitated stump. The Sun's progression in the skies down the length of the constellation Hydra represents Hercules' progress in killing the snake.

During the summer, the Sun is in Cancer the Crab as Hydra's head rises in the East. As the Earth revolves around the Sun, the Sun appears to move from Cancer eastward into Leo, and then into Virgo. Both Leo and Virgo stretch end to

end, parallel to the snake's body. Throughout this period, the Sun's light drowns out more and more of the stars in Hydra—the fire sears the stumps as Hercules continues to successfully cut off additional heads.

## Screeching and scratching

Corvus the Crow and Crater the Cup are two inconspicuous constellations riding on the back of Hydra. These two constellations have been associated with the god Apollo. Crater has been known as Apollo's goblet, and Corvus has been known as the bird of Apollo that sometimes performed special deeds for him. (See last year's April issue of *Science Scope* for an explanation of why Corvus was changed from a happy white bird with a beautiful singing voice into a black bird with a screeching caw, eternally trying to quench his thirst, but unable to reach Crater the Cup.)

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Toward the end of March, a constellation that is no longer recognized can be located in the sky. Toward the southern horizon, the faint stars below Crater, Corvus, and Hydra outline a star pattern named during the early 1800s by the French astronomer La Lande. Felis the Cat, the name of La Lande's own cat, was a tribute to his fondness for cats, and perhaps a personal joke as well. (The constellation was so faint, it looked like nothing more than a scratch his cat might make on a star chart, and La Lande knew his capricious name choice would be honored because of his reputation as an eminent astronomer.)

*I am very fond of cats. I will let this figure scratch on the chart. The starry sky has worried me quite enough in my life, so that now I can have a joke with it.*

Felis the Cat, also called Katze or Gatto, appeared on several star charts during the nineteenth century, but no longer appears on modern star charts.

### Evening planets

**Mercury:** Sets shortly after sunset, low over the western horizon, but is no longer visible in April.

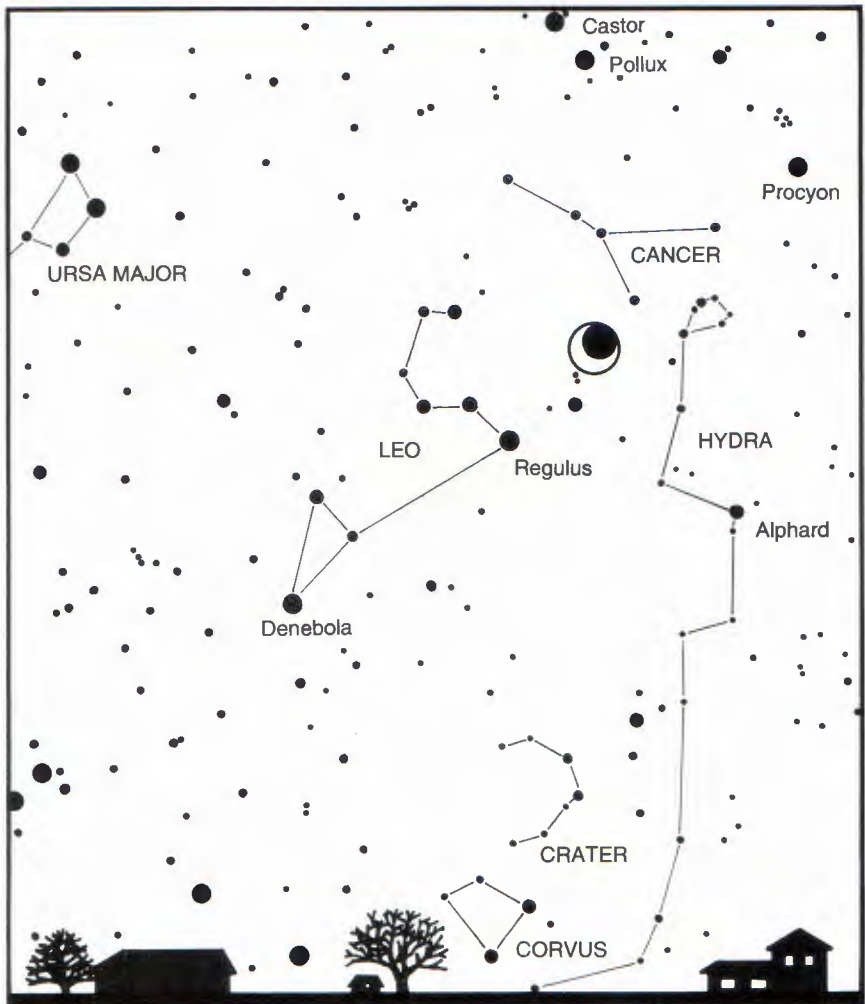
**Jupiter:** Rises above the southeastern horizon at sunset, and is visible throughout the night.

### Moon phases

New Moon - March 4  
 First Quarter - March 11  
 Full Moon - March 18  
 Third Quarter - March 26

New Moon - April 3  
 First Quarter - April 10  
 Full Moon - April 16  
 Third Quarter - April 22

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LOOKING SOUTHEAST ABOUT 9 P.M. ON MARCH 15, 1992.

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