

# On the SCOPE the skies

How did stars like  
Betelgeuse and Procyon  
get their names?

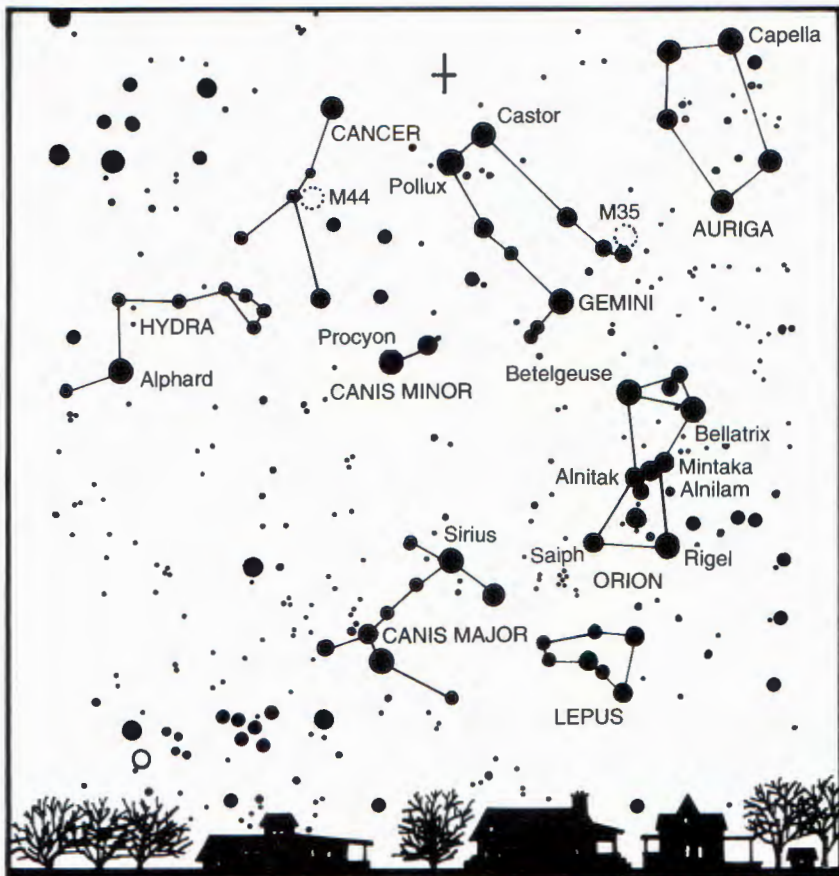
What is in a name? To some, the names Alnitak, Alnilam, and Mintaka might sound like a law office, or perhaps an accounting firm, but they are actually names of three bright stars that make up the belt of Orion the Hunter. Names of most stars are very ancient in their origins, and often are derived from the names of Greek and Arab astronomers and Roman poets of times long past. Many of the star names in use today are Arabic translations of Greek names subsequently transliterated by European cultures after the Dark Ages. Other ancient cultures likewise had names for the stars in their skies. Studying star names and their origins can be an interesting excursion into the histories and cultures of civilizations that laid the foundation for modern-day astronomers.

## Arabic origins

Part of the roots of Alnitak, the lower-belt star, and Mintaka, the upper-belt star, derive their names from similar Arabic root words meaning "the belt." Alnilam, the center star of Orion's belt, also derives from Arabic and means "the arrangement," or "string of pearls."

Surrounding Orion are four stars forming a rectangle. Betelgeuse, another Arabic word, means "armpit of Orion." The star Bellatrix is referred to as "the Warriorress" from a Latin derivative of the Arabic title *Al Najid*, "the Conqueror." The name of Rigel, the brilliant blue-white star, refers to the left leg of Orion, but is commonly accepted to mean "the foot." Saiph translates to mean "the sword" or "the bright one in the sword."

February is a month of transition, as winter begins to fade into spring. Looking toward the southern horizon during February, one can see this seasonal shift in our skies. Orion and the group of bright winter stars shift toward the southwest, while Cancer and the fainter stars of spring start to come into view over the southern horizon. This transition can also be seen in the name of the brightest star in the constellation of



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Hydra the Watersnake. The name Alphard derives from the Arabic *Al Fard*, meaning solitary, because it is one of the few bright stars that appears in the skies after winter.

## It's all Greek

Southeast of Orion is the giant star Sirius, belonging to the constellation Canis Major, the Greater Dog. Sirius comes from the Greek word *Seirrios*, meaning "scorching"—an appropriate name for the brightest star in the night sky. However, Sirius is often referred to as the Dog Star. The other dog constellation, Canis Minor, contains the bright star, Procyon. Procyon's name derives from a Greek phrase meaning "before the Dog Star," referring to the fact that it rises slightly earlier than Sirius.

## Faint clusters

High over the southern horizon, the constellation of Cancer the Crab can be found. While it is faint, you can see this Y-shaped group of stars in most city skies if you stand in shadows, away from street lights. In a myth concerning the exploits of Hercules, Juno sent a crab to prevent Hercules from killing the many-headed serpent, Hydra. Hercules crushed the crab underfoot and succeeded in destroying Hydra.

When the constellation Cancer was named, approximately 2,000–3,000 years ago, the Sun lay in the bounds of Cancer when it reached its northernmost point in the sky (the official start of summer for the Northern Hemisphere). To some ancient cultures, the Sun's seemingly hesitant motion north and then south

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was reminiscent of the scuttling back-and-forth motion of a crab, leading to the name Cancer for the area of the sky the Sun inhabited during this time of year.

Within the boundaries of Cancer is an open cluster of stars labeled M44 by the French comet hunter, Charles Messier. This cluster is also known as Praesepe, the Manger, and sometimes as the Beehive Cluster. It looks like a fuzzy, out-of-focus star when viewed with the naked eye; but through binoculars, many faint stars are revealed. A small, lopsided square of four stars roughly surrounds the Beehive, and has been thought of as four donkeys gathered around a pile of hay.

Another open cluster of stars, similar to the Beehive except that its name is not as interesting, can be found near the left foot of Castor, one of the Gemini twins. This cluster is known as M35, which was also identified by Messier and is visible with binoculars. Sharp eyes, under clear, dark skies, should also reveal this star group as another fuzzy out-of-focus "star."

### Evening planets

**Jupiter** is the only visible evening planet during January and February, rising several hours after sunset during January, and one to two hours after sunset during February.

### Moon phases

- New Moon - February 3
- First Quarter - February 11
- Full Moon - February 17
- Last Quarter - February 25

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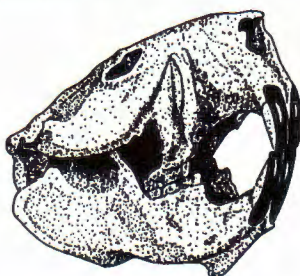
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