

A sea in the sky? Yes, and in it you'll find a dolphin, a whale, fish, and a sea nymph.

A sea of stars



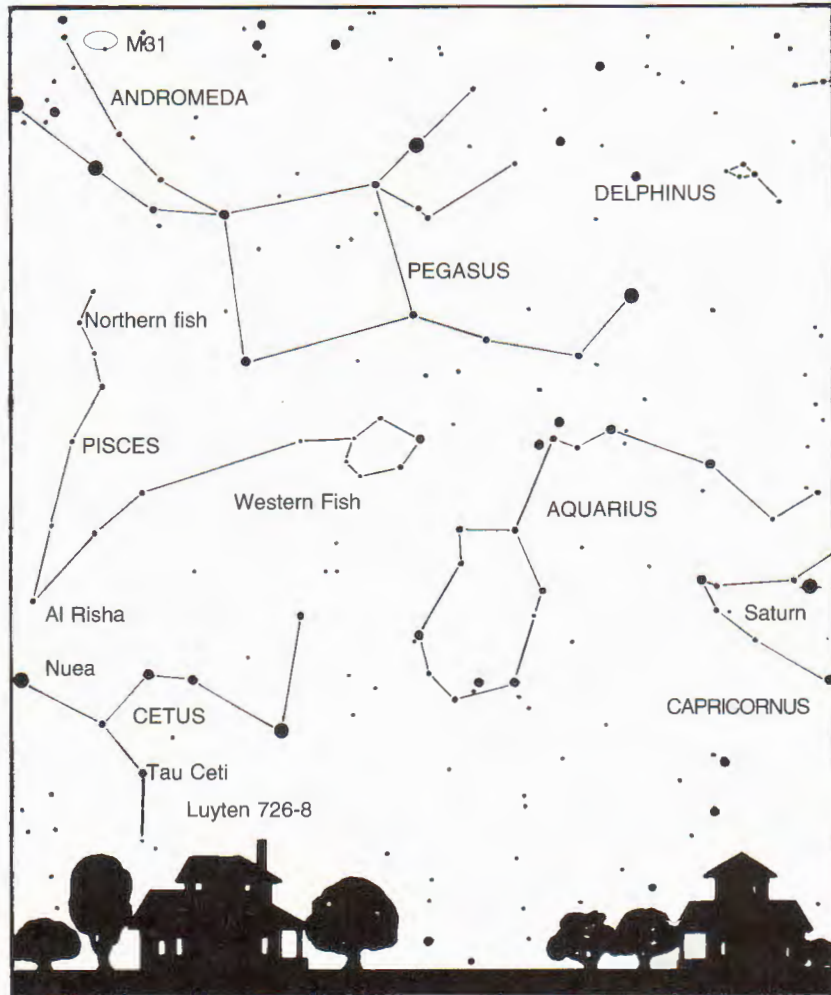
High in the night sky, over the south-southwest horizon, soars a constellation that looks like a small, diamond-shaped kite with a short tail. Most astronomical literature recognizes this constellation marked by five relatively bright stars as Delphinus the Dolphin. However, some cultures recognize the star pattern in a variety of other ways, as a frying pan, a predatory fish, a seal, a wooden bowl, or a camel.

Delphinus is appropriately located within the water worlds of the sky known as the "Sea." Nearby water-related creatures include Pisces the Fishes, Capricornus the Sea Goat, and Cetus the Whale.

The dolphin of love

For a long time, astronomers puzzled over the origins of the mysterious-sounding names designating two stars within Delphinus, Rotanev and Sualocin. It was known that Niccolo Cacciatore, the director of Palermo Observatory during the early nineteenth century, had chosen the names. Eventually scientists realized that the Latin form of Cacciatore's name, *Nicolaus Venator*, reversed gives the two star names, Rotanev Sualocin.

What lore surrounds Delphinus? According to one myth, Neptune created the constellation to honor the dolphin who helped him to win Amphitrite's hand in marriage.



LOOKING SOUTH AT 9 P.M. ON OCTOBER 15, 1992.

(Amphitrite, a sea nymph, was the daughter of Oceanus, who ruled the seas before Neptune came to power.) Apparently Neptune found it difficult to pursue Amphitrite, who was sworn to celibacy and continually evaded his amorous advances. To escape him, the sea nymph would hide, sometimes in deep water and sometimes on land. Often Neptune would ask the dolphin to track Amphitrite when she fled into the depths of the sea, an easy task for the dolphin. On many of the searches, the dolphin would meet and speak with Oceanus, telling him of Neptune's goodness. Amphitrite gradually began to trust

Neptune and eventually consented to marry him, winning Delphinus a place of honor in the sky.

Fathom that

Closer to the horizon and eastward of Delphinus are two faint star groups recognized as signs of the zodiac. Below Delphinus is Aquarius, a constellation historically associated with water—a logical connection thousands of years ago when the Sun sat in Aquarius during the Northern Hemisphere's rainy season. To the ancient Egyptians, Aquarius represented the source of all water flowing through the Nile.

Art by Max-Karl Winkler

Eastward from Aquarius, look for the faint stars of Pisces, depicted as two fish tied together by their tails. The star *Al Risha* marks the knot holding the western and eastern fishes together. During the March equinox, the Sun lies between the two fish. In astronomy jargon, we would say we're in the age of Pisces. ("The age of . . ." indicates the constellation where the Sun is located at the start of spring).

The monster's eyes

Variable stars appear to brighten and dim cyclically over time—some because of matter in space intermittently obstructing our view of the stars, others because of uneven combustion.(1)

An example of a variable star can be found within the boundaries of Cetus the Whale. Also known as the Sea Monster, Cetus peaks over the horizon just southeast of Pisces. According to mythology, Neptune had sent the monster to harass sailors and wreak havoc upon coastal Ethiopian villages and crops to punish Cassiopeia, the queen of Ethiopia, for constantly bragging about her beauty.

The variable star Mira pulsates in brightness over a 332-day period. When it is bright, it has a diameter of about 500 million miles, and when it is dim, its diameter shrinks to about 350 million miles. For example, this year, Mira reached its greatest brightness on July 30, appearing approximately as bright as the stars forming the upper line of Andromeda, and will dim to its minimum brightness during January (in 1993), when it will be invisible to the naked eye.

Both the Luyten star system and Mira are among the closest stars or star systems to our solar system. At a distance of 8.4 light-years, the Luyten system is the sixth closest star or star system, and Mira, at a distance of 12 light-years, is the eighteenth closest.

The equinox

On September 22, the equinox ushers in fall for the Northern Hemisphere and spring for the Southern Hemisphere.

Evening planets

Mars: Rises approximately mid-evening, and is visible all night.
Saturn: Rises before sunset, and is visible all evening.

Moon phases

September
 First Quarter - September 3
 Full Moon - September 11
 Third Quarter - September 19
 New Moon - September 26

October

First Quarter - October 3
 Full Moon - October 11
 Last Quarter - October 18
 New Moon - October 25

Reference

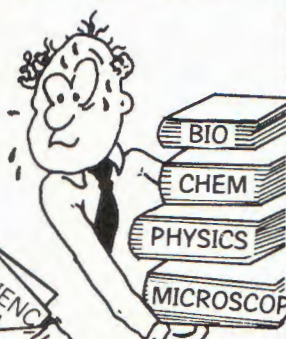
1. Jones, B. (1990). *The Practical Astronomer*. New York: Quarto Publishing.

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