

With only one planet visible, seven bright stars form the chief attraction for stargazers in the evening skies of June. The planet is Saturn, which appears low in the west as the sky darkens. On June 1, it sets nearly four hours after the sun and about two hours after that at the month's end. A little higher, and farther south, is the constellation Leo, whose brightest star is Regulus. However, it's only about half as bright as Saturn.

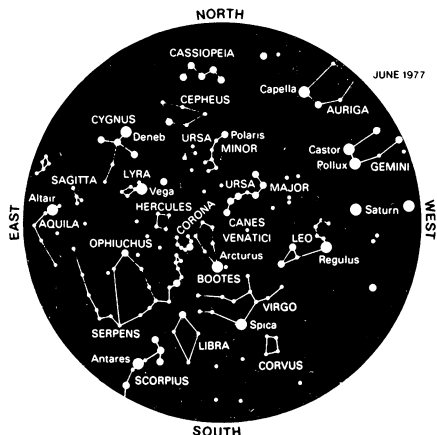
Overhead stands Boötes with Arcturus, the brightest star visible on June evenings, which is in the southern part of the group. Its northern end is close to the end of the handle of the Great Dipper, which is in the northwest, a part of Ursa Major. All but one of the seven stars of the Dipper are second magnitude. Starting at the end of the handle their names are Benetnasch, Mizar, Alioth, Megrez (third magnitude), Phad, Merak and Dubhe (to the right).

Below Arcturus, in the south, look for Spica in Virgo, to the left of Leo. Farther left you'll find the faint group shaped like a pentagon and called Libra. To the left of that is Scorpius, low in the southeast. Red Antares is its brightest star. Leo, Virgo, Libra and Scorpius are constellations of the zodiac, the belt of twelve that form the distant background of the sun, moon and planets.

Toward the east is Lyra, with Vega, almost as bright as Arcturus. However, they are difficult to compare as they differ in color. Vega has a blue tinge, while Arcturus is somewhat reddish, but not as much as Antares. Below Lyra is Cygnus. Some of the stars in this group form a cross, lying on its side. At the top, toward the north, is Deneb. Astronomers rate this

JUNE STARS

BY JAMES STOKLEY



To use star map hold over head with directions oriented as indicated.

June 1	11:00 am EDT	Moon nearest
	4:31 pm	Full moon
3	9:00 am	Venus south of Mars
4	6:00 pm	Jupiter behind sun
8	11:07 am	Moon in last quarter
12	7:00 pm	Moon south of Mars
	11:00 pm	Moon north of Venus
14	5:00 pm	Moon farthest
15	3:00 am	Venus farthest west of sun
16	2:23 pm	New Moon
20	5:00 pm	Moon south of Saturn
21	8:14 am	Sun farthest north, beginning of summer in North America
24	8:44 am	Moon in first quarter
29	8:00 pm	Moon nearest, Mercury behind sun
30	11:24 pm	Full Moon

as first magnitude but when it's so low, atmospheric absorption of its light dims it considerably. The same is true of Altair in Aquila, which is farther right than Cygnus, and a little lower.

There are some constellations which are easily located even though they have no stars as bright as first magnitude. Ursa Major is a very good example. Another is Hercules, in the east, as well as Draco and Cepheus, which are to the north of Hercules.

While Saturn remains visible in the evening sky and will continue to do so for another month, the other naked-eye planets that shone so brightly on spring evenings have moved to the early morning sky. For a couple of hours before sunrise Venus dominates the east. It will be farthest west of the sun, and will rise earliest, on June 15. Mars stands nearby. Although as bright as first magnitude it is only about a hundredth as brilliant as Venus.

On June 4, Jupiter passes behind the sun. By the month's end you may get a glimpse of it very low in the northeast at dawn, shining about 12 times as brightly as Mars. Mercury passes behind the sun June 29.

Summer begins in North America on June 21 at 8:14 a.m., EDT. This is the solstice when the sun reaches its most northerly point in the sky. For us its noon position is highest of the year. It rises earliest and sets latest, making the 21st the longest day and shortest night. At the moment of the solstice the sun will be directly above a point on the Tropic of Cancer in the Republic of Mali in West Africa. In the Southern Hemisphere, the sun is lowest in the north on the 21st. □

June 1 (PBS) NOVA—"Linus Pauling: Crusading Scientist" tells the story of Linus Pauling, the first person to ever win two unshared Nobel Prizes—one for chemistry, and later, the Nobel Peace Prize for his campaign against nuclear testing.

June 3 (PBS)—"Guess Who's Pregnant" attempts to add perspective to the statistic that one out of every 10 teenage girls will become pregnant in 1977.

June 8 (PBS) NOVA—"Inside the Shark" introduces "the monster of the deep"—the shark—as a money-making friend of Hollywood. It also examines the U.S. Navy's antishark weapons.

June 11 (ABC)—"Nuclear Power: Pro and Con" will be the subject of an hour-long, two-segment report providing opposing views. Howard K. Smith will introduce the program and offer a comment.

End hiltonism

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"Inside the Shark"

June 12 (ABC)—"The Hidden Universe: The Brain" is a News Special providing a composite of research compiled from the work of top neuroscientists. Special stroboscopic and infrared photography, electron microscopy and computer animation will be used to explore areas of the brain. Innovative technology in treating mental illness will be demonstrated.

June 14 (PBS)—"The Animals Nobody Loved" is a National Geographic documentary about the mustang, coyote and rattlesnake—once the undisputed masters of the American West—and now the subject of dispute between ranchers and environmentalists.

June 15 (PBS) NOVA—"Predictable Disaster" examines the science of earthquake predictions and the question dealing with whether or not poor prediction is better than no prediction at all.

June 15 (PBS) NOVA—"Across the Silent Barrier" explores the world of deafness in a society that takes language for granted.

June 29 (PBS) NOVA—"The New Healers" examines the reasons why rural poor around the world are largely unaffected by Western medicine.