

# The night sky in March

LOOKING north during the evenings this month we find the familiar group of stars forming the Plough (sometimes called the Dipper or, alternatively, Charles's Wain) swinging up to its highest point above the Pole Star. In former times they served to mark the passing hours of the night, like the hands of a celestial clock, as the carrier in Henry IV reminds us, while Falstaff spoke in a similar vein: "We that take purses go by the moon and the seven stars."

The middle star of the three forming the handle of the Dipper is Zeta, called Mizar by the Arabs who taught us much of our star lore, and in the telescope it is revealed as a fine double or binary star. Close to Mizar is a smaller star, Alcor, reputed to have been at one time a test of eyesight, though now clearly visible. A field-glass, though it will not reveal the two components of Mizar, will show another faint star in the group. The Dipper is part of the larger Ursa Major constellation.

The two bears, Ursa Major and Ursa Minor, have been famous in the mythology of the stars for ages. They represent the nymph Callisto, beloved of Jupiter, and her son Arcas, who were turned into bears by Juno. Jupiter, though unable to restore their form, placed them among the stars.

In the southern sky the departure of Orion has left a somewhat barren scene, and the meridian is occupied by the less conspicuous group of Cancer, the Crab. Its two brightest stars are named the Aselli, the Ass's Colts, and between them lies the misty cloud of faint stars called Praesepe, the Manger, or sometimes the Beehive. This cluster was a fam-

ous weather portent in the time of Aratus and Homer:

*A murky manger with both stars*

*Shining unaltered is a sign of rain.*

Galileo, the first observer to turn a telescope to the sky, recorded his delight at seeing the faint cluster of the Manger resolved into over 40 separate points of light and the view in a small telescope or a binocular is indeed an attractive one.



The Crab holds an added interest this year since it marks the position of the planet Uranus, first of the three major planets to be discovered in modern times. Uranus was first recognised as an object of unusual appearance by the famous astronomer-musician, William Herschel, on March 13, 1781. Herschel's home-made reflecting telescope revealed a disc which could not possibly be that of a star, though it had been previously

recorded as such at least four times before Herschel's observation.

Though just within naked-eye visibility, Uranus is too distant to present much of a spectacle in the telescope, with its faintly illuminated disc and barely-seen markings.

Beneath Cancer is the long straggling constellation of Hydra, the water-snake, a kind of celestial River Nile to the Egyptians, with its oddly-assorted burden consisting of Crater and Corvus, the Cup and the Raven. Below the head of Hydra is part of the ship Argo, the main body of which belongs to the southern heavens. Its brightest gem, Canopus, is too far south to be seen in these latitudes.

Venus remains conspicuous in the western sky all through the month with Jupiter brilliantly adorning Leo the Lion, close to its brightest star, Regulus. The ringed planet Saturn and Mars are visible low in the southern sky in the early morning.

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Oxford here 1956  
Beginning of 'Night Sky' Series

## THE NIGHT SKY IN APRIL

*In sowing, some think, you must have regard to the Moore,*

*And to sow and set in the increase and not in the wane.* (Barnaby Googe, 1540).

IF Arnold's scholar gipsy valued the hours of April sunshine, the star-watcher finds the pellucid spring evenings no less rewarding. The two stars in the Plough which are sometimes called the Pointers because they indicate the place of the Pole star, show in the opposite direction the way to the prominent constellation of Leo, the Lion.

Leo is easily recognised by the bright group of stars forming the shape of a sickle, concave to the west, and with the first-magnitude star Regulus at the lower end of the handle.

Most of the ancient world saw the form of a lion in Leo's stars. To the Greeks it was the creature slain by Hercules, while in Hebrew mythology it was the symbol of the tribe of Judah.

Leo had an unfortunate reputation for its supposed influence upon the weather, for the heat of summer prevailed when the sun was in that part of its apparent annual path, the ecliptic, which crosses the stars of the Lion.

*Most scorching is the chariot of the sun,  
And waving spikes no longer hide the furrows,*

*When he begins to travel with the Lion*

A little to the north-west of Regulus is Jupiter, four of whose 12 moons can be seen in a binocular

The movements of these satellites were instrumental in showing that light did not travel instantaneously but took a measurable period of time. Three centuries ago a Danish astronomer, Roemer, noted certain discrepancies in the times when the satellites were eclipsed by the planet. The eclipses occurred earlier than the predicted times when Jupiter was nearer to the earth and later when it was at a greater distance.



Roemer, though not the first observer to mark the discrepancies, was first to attribute them correctly to the varying interval of time taken by the light rays to reach the earth from Jupiter.

In recent months great interest has arisen following the recording at Washington and Sydney of radio noise emissions from Jupiter. The attempts to link these with certain visible disturbances and markings in the atmosphere of the planet have brought amateur drawings and records into importance.

Between the two stars Gamma and Zeta in the sickle of Leo is the present position of the little planet Pluto. It lies far beyond the reach

of the unaided eye—almost 4,000m. miles from us—moving in a path which takes 250 years to complete. Hence it has covered little more than a tenth of its orbit since its discovery in 1930.

Pluto was first discovered on a photographic plate examined in an instrument called a blink comparator. This reveals the movement of a planetary object among the stars which keep their relative positions for long periods. The name Pluto was suggested to the late Prof. Turner of Oxford by an 11-year-old girl.

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