

# The Night Sky

## March

### Equipment you will need

Because of the darkness of our forest locations, you can see many wonders of the night skies with your naked eye, although your eyes will need a good 20 minutes to adjust to the darkness. Any bright lights, such as that from your torch, will set them back again. You can reduce this effect by putting a red filter on your torch. Equipment worth investing in includes:

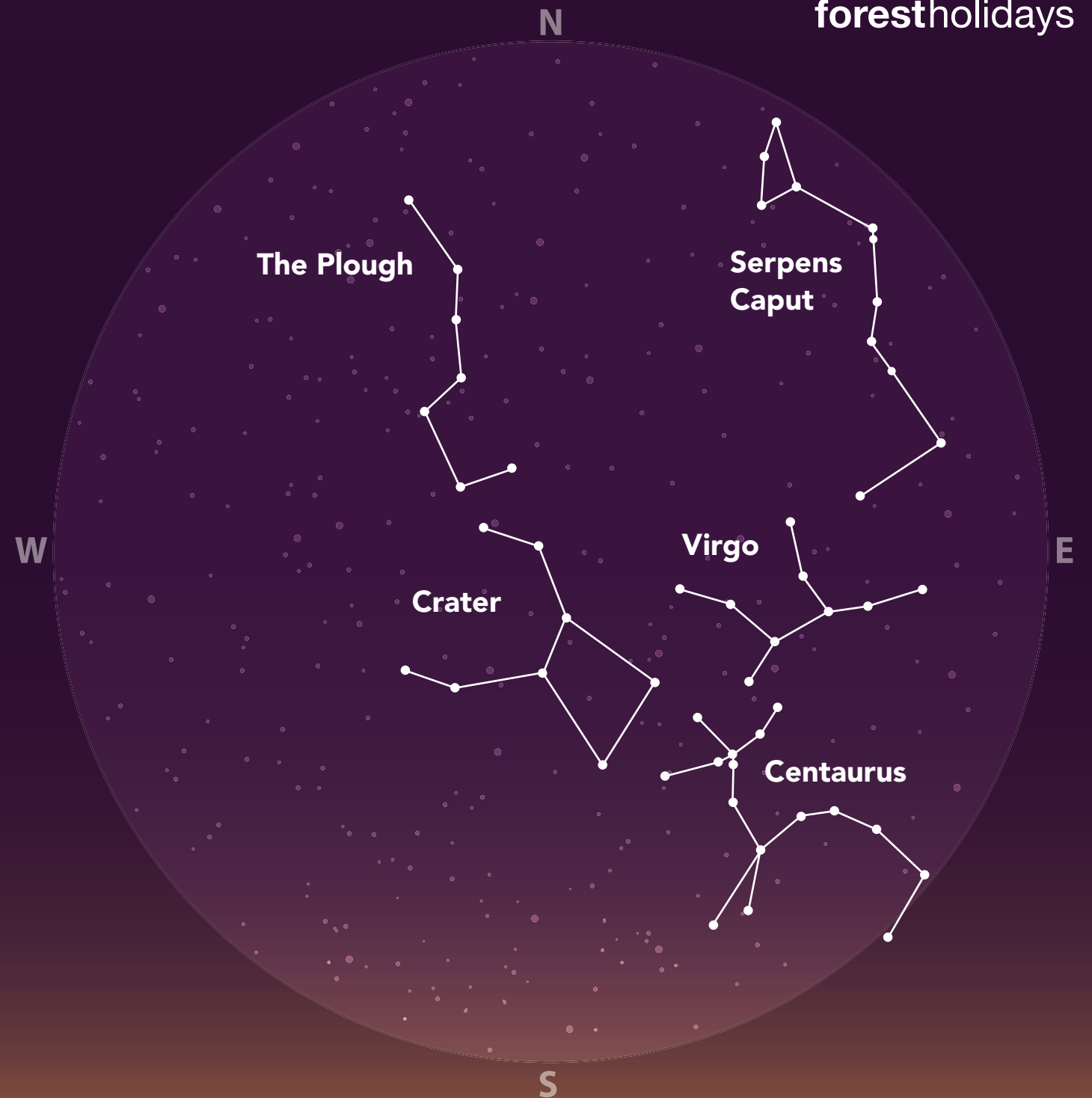
- **Binoculars** – cheaper and easier to carry than a telescope. Look for ones with glass lenses.
- **Camera** – to capture that fantastic star scene forever
- **Tripod** – essential for use with your camera
- **Telescope** – worth investing in for the really committed stargazer
- **Google Skymaps** – a superb free app, available for Android and iPhone. You point your phone towards the sky and it shows you the constellations and identifies the stars using inbuilt GPS

### Getting started – your first 5 constellations to spot

- **Ursa Major** (the Big Dipper) has been used by sailors since ancient times to locate the fixed-point Pole Star and navigate home
- **Leo** (the lion) is it a lion, as the Greeks decided? Or is it K9 from Doctor Who?
- **Cassiopeia** (the queen of Aethiopia) is one of the easiest constellations to locate and looks like a huge W, almost directly overhead
- **Cepheus** (the king of Aethiopia) is one of 48 constellations identified by 2nd century astronomer Ptolemy. Imagine a child's drawing of a house, complete with roof
- **Orion** (the hunter), with belt and sword, is perhaps the most famous constellation – and one of the few that actually bears some slight resemblance to its namesake

### Stargazing facts for kids

- You can see the International Space Station without using binoculars, and you can track it moving across the sky
- The sun is 300,000 times bigger than earth and 93 million miles away. If you could catch a plane to the sun, the journey would take 20 years
- We're more connected than you might think. The gravity of the sun and moon bring about the tides in our seas
- Footprints and tyre marks on the moon from the Apollo 11 mission will stay there forever – there is no wind to blow them away
- How much do you weigh? If you weigh 50kg here on earth you would only weigh 19kg on Mars because of lower gravity



#### Serpens Caput

Unique among modern constellations as it is split into two parts. Serpens Caput is the serpents head to the west and Serpens Cauda (the serpents tail) to the east. Between these two halves lies the constellation of Ophiuchus, the 'serpent-bearer'.

#### The Plough

Not a constellation but an asterism of seven stars that has been recognized as a distinct grouping in many cultures. The component stars are the seven brightest of the constellation Ursa Major.

#### Centaurus

Represents a centaur, a creature that is half man, half horse. It is one of the largest and brightest constellations containing several very bright stars because of its position in the Milky Way.

#### Crater

Its name is Latin for cup, in Greek mythology it is identified with the cup of the god Apollo.

#### Virgo

Lying between Leo to the west and Libra to the east, this is the second largest constellation in the sky after Hydra. Its brightest star, Spica, makes it easy to find. Follow the curve of the Plough to find it!