

The Night Sky

October

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:

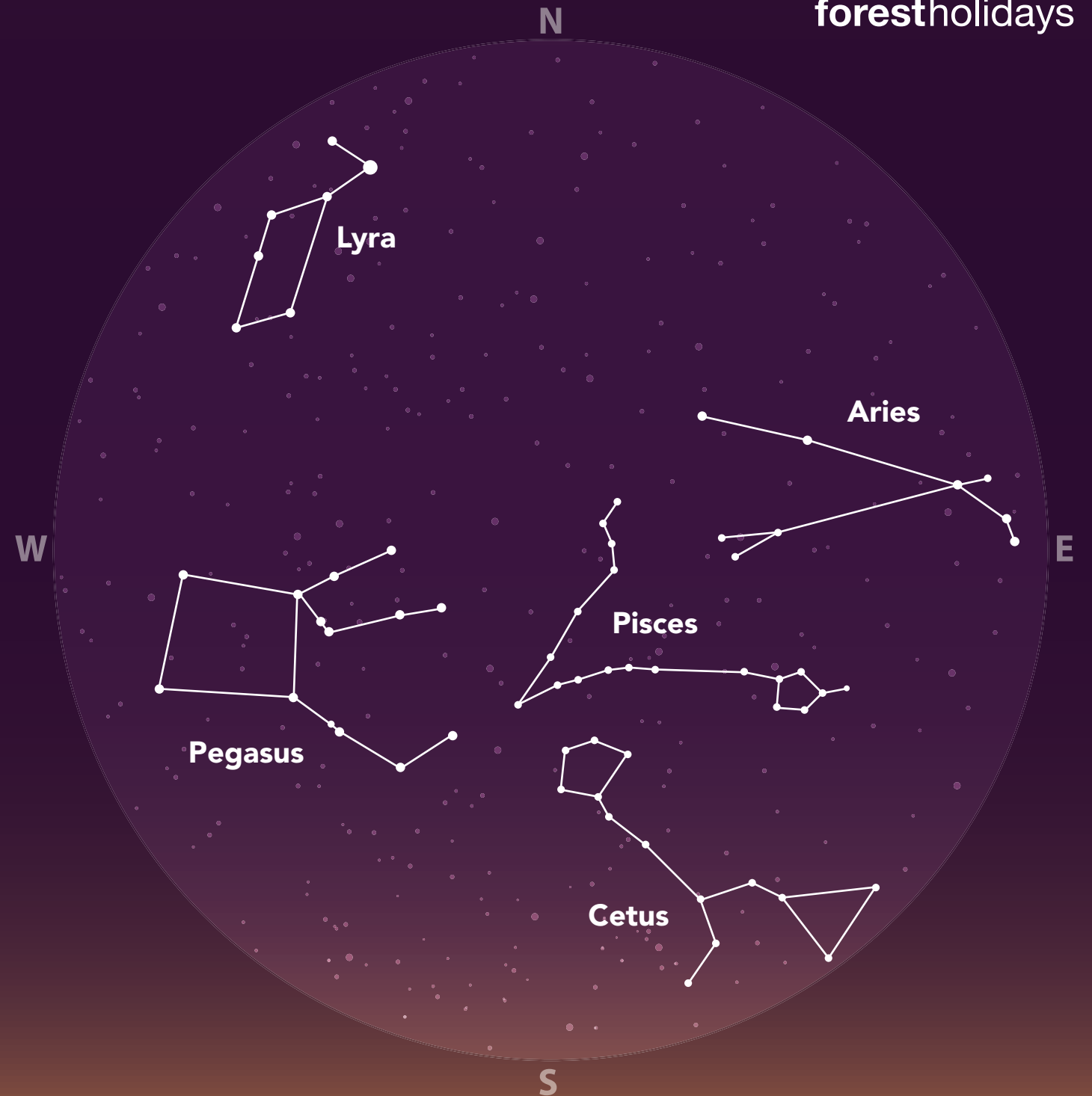
- **Binoculars** – cheaper and easier to carry than a telescope. Look for ones with glass lenses.
- **Camera** – to capture that fantastic star scene forever
- **Tripod** – essential for use with your camera
- **Telescope** – worth investing in for the really committed stargazer
- **Google Skymaps** – 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



Pegasus
A constellation in the northern sky, named after the winged horse Pegasus in Greek mythology.

Lyra
Although a very small constellation, its principal star, Vega (a corner of the Summer Triangle) is one of the brightest stars in the sky

Pisces
A constellation of the zodiac, lying between Aquarius to the west and Aries to the east. Its name is the Latin plural for fish.

Aries
The name Aries is Latin for ram, it came to represent specifically the ram whose fleece became the Golden Fleece of Ancient Greek Mythology.

Cetus
Cetus is a sea monster in Greek mythology, although it is often called 'the whale' today. It is located in the region of the sky that contains other water-related constellations such as Aquarius and Pisces.