



Viewpoint

## A white lie



Time: 15 mins

Region: South East England

Landscape: coastal



### Location:

View of the Seven Sisters, Coastguard Cottages, Cuckmere Haven, East Sussex BN25 4AR

### Grid reference:

TV 51392 97684

### Mind your step:

There are sheer drops along the coast path - keep away from the cliff edges

### Keep an eye out for:

Coastal birds and wildflowers

Directly facing Europe, southern England's chalk coastline is an international landmark. The 'White Cliffs' have become an enduring image of Britain, immortalised in Shakespeare plays and the songs of Vera Lynn. As a result we think of these famous cliffs as a symbol of British fortitude.

But the Seven Sisters, nearly 80 miles west of Dover, probably look more familiar. It is these cliffs that often appear in films and television shows.

**Why have the Seven Sisters become a symbol of Britain?**



Topped with green and splashed by blue sea, from a distance the Seven Sisters almost look like a streak of squeezed toothpaste. On a clear day you can see Belle Tout Lighthouse, which stands beyond them on Beachy Head.

You may also have spotted these cliffs onscreen. They have appeared in films including Robin Hood: Prince of Thieves, Harry Potter and the Goblet of Fire and Atonement. But why does this section of the chalk cliffs appear on TV and film so often?

First, look at the way the cliffs roll up and down towards the horizon. The 'sisters' or peaks (from left to right) are called Haven Brow, Short Brow, Rough Brow, Brass Point, Flagstaff Point, Flat Hill, Baily's Hill and Went Hill Brow. The troughs are valleys that were carved into the chalk during the Ice Age by summer meltwater from the frozen soils. The valleys are roughly at right angles to the current coastline.

You may have already spotted something odd. Look at the cliffs and read the names again. Though called the Seven Sisters, there are technically eight peaks. The cause is erosion by the sea. Constant erosion means the Seven Sisters are retreating by between half and one metre each year. As they recede, the appearance and position of the undulating troughs and hills will change. Centuries from now there may be several new 'sisters' exposed by the cliff erosion.

Chalk is a soft rock that water can pass through easily. Sea waves batter the bottom of the cliffs and wear the chalk away. This makes the cliff faces unstable, leading to landslips. These landslips create the Seven Sisters' bright white colour. What you can see are fresh layers of exposed rock.

By comparison Dover's White Cliffs are not especially white. Dover's strategic location, large town and huge port mean defences have been fitted to protect them. As a result Dover's cliffs often become dirty and overgrown.

The Seven Sisters meanwhile are allowed to erode naturally. As a result the coastline is undeveloped, with no visual clutter. This is why the Seven Sisters often appear on screen, especially in period or fantasy films.

## Overseas cousins

When they appear onscreen the Seven Sisters usually provide an image of Britain's natural beauty. But how British are they?

Similar chalk cliffs line the French coast at Calais, the Danish islands Møn and Langeland plus the German island of Rügen. This is because the cliffs of Southern England were once joined to Northern Europe by an area called Doggerland.

Britain's chalk cliffs formed around 136 million years ago when they were part of a larger chalk continent. Britain separated from Northern Europe after earthquakes and floods broke up the chalk. The English Channel then emerged at the end of the last Ice Age, around 15,000 years ago. Rising sea levels, caused by the ice melting, meant Doggerland was submerged by 6,500 years ago.

Though often presented as an image of Britishness, the cliffs are truly international.