



Trail

## Out of the box

Explore the stories behind  
the scenery of Box Hill

**Time:** 45- 60 mins

**Distance:** 1¼ miles

**Landscape:** rural

A short journey from London and the suburbs, the Surrey Hills are some of southern England's most accessible countryside. Box Hill is one of their most popular spots.

The summit is famous for its spectacular views. Meanwhile the surrounding slopes, woods and river valley are ideal for walking, cycling and family days out.

This trail explores why Box Hill looks the way it does, how it was created in the first place, and why we can all enjoy it today.

**Location:**

Box Hill, near Tadworth, Surrey

**Start:**

Salomons Memorial viewpoint, KT20 7LB

**Finish:**

Box Hill Fort

**Grid reference:**

TQ 17971 51169

**Be prepared:**

There are steps and steep drops, also watch for exposed tree roots on the paths

**Keep an eye out for:**

Wildflowers, butterflies and rare box trees

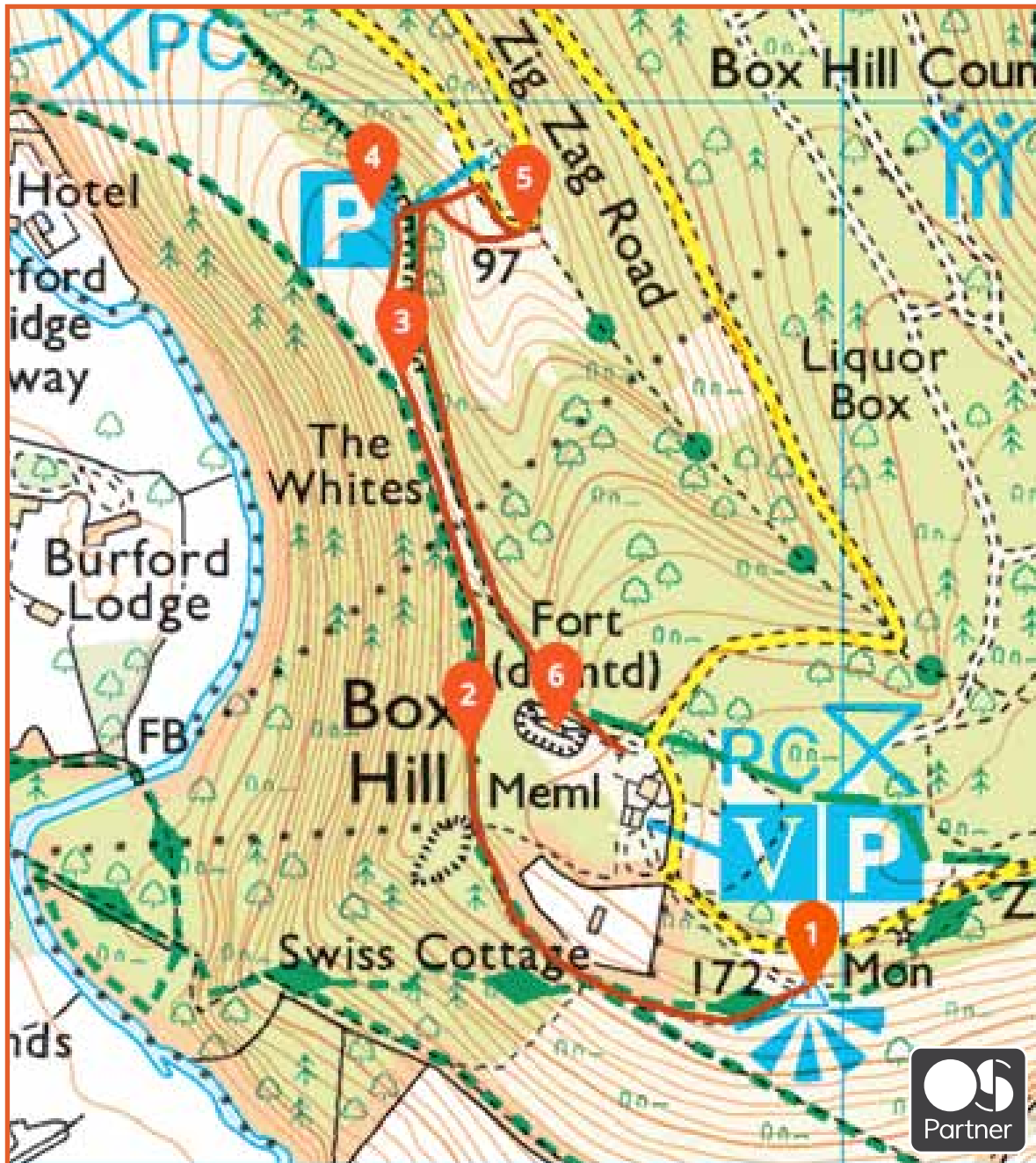
### Directions



To start the trail make your way to the Salomons Memorial viewpoint near the summit (there are signs to it throughout Box Hill Country Park). The Memorial itself is a couple of minutes walk from from the National Trust visitor centre.



## Route and stopping points



- 01 The Salomons Memorial
- 02 Major Peter Labelliere's grave
- 03 The Whites
- 04 Burford Spur
- 05 Zig Zag Road
- 06 Box Hill Fort

## 01 The Salomons Memorial

We start at the spot that makes Box Hill famous, the Salomons Memorial. The memorial marks the top of Box Hill, where the panoramic views has attracted visitors for centuries. Take time to enjoy them too!

Box Hill is one of the highest peaks of the Surrey Hills. These in turn are part of the North Downs, a ridge that stretches from Farnham in Surrey to the White Cliffs of Dover. On clear days we can gaze from here over parts of Surrey, East Sussex and West Sussex. We could also see the South Downs on the horizon, some 25 miles away.

There is much more to Box Hill than the view though.

Our first clue is the Salomons Memorial itself. It's named after Leopold Salomons, a local financier who bought Box Hill and gave the land to the nation to protect it from development. Box Hill is carefully protected today - but it hasn't always been. As we'll discover, people have exploited and altered this place for centuries.

Besides the view, look at the ground - especially around the bottom of the Memorial's outside wall. You should see some exposed white rock. This is chalk, the foundation stone of the Surrey Hills and North Downs.

Chalk is bright white because of the way it formed. If we were here around 90 to 65 million years ago, we would be underneath a warm shallow sea. Over millions of years, the remains of tiny sea creatures slowly built up on the sea floor. Their skeletons and shells were compressed under the weight of the water and each other. The result was hundreds of metres of chalk.

Today this distinctive soft white rock shapes the look, feel, and uses of the Downs. At Box Hill, chalk affects everything from the area's name to the shape of the roads. We will find out how as we continue.

### Directions

From the Salomons Memorial, keep the steep hillside drop on your left and follow the path towards the trees. Take your time and watch your footing as the path is lined with exposed tree roots. Continue along the path, passing through two wooden gates along the way. Stop when you reach a large gravestone to the right of the path.

## 02 Major Peter Labelliere's grave

After turning our back on a view we now meet an upside down man. This headstone belongs to Major Peter Labelliere, a local eccentric who asked to be buried upside down on Box Hill. He also insisted his landlady's children should dance at his grave!

This local landmark is not the only unusual feature here. Notice the canopy of trees. Hopefully you also saw their roots crossing the path. The roots are exposed because they struggle to grow far underground. This is because Box Hill's chalk produces very thin soils.

Besides chalk, at the top of Box Hill we can see a darker rock called flint. Flint formed from the remains of sea sponges and plankton that dissolved in the chalk. These creatures were rich in a chemical compound called silica, which solidified again to create pieces of flint.

Only certain trees can survive long in this dry ground with its thin, poor soils. Look around the headstone for small shrubby trees with waxy pointed leaves. These are Box trees. Some 40 percent of the country's native Box trees are in the Mole Gap. Their numbers here gave Box Hill its name.

Another tree that flourishes on the Surrey Hills is yew. They look a bit like Christmas trees. See if you can spot their tall, gnarled reddish-brown trunks and needle-shaped leaves.

Box and yew trees proved very useful to the first people who settled on the Surrey Hills. So did the flint that encouraged these trees to grow. We will soon find out why...

#### **Directions**

Continue following the path through the woodland. Again take care of the exposed tree roots. Ignore a path to the right with signs to Box Hill Fort. The trees clear away to a grassy slope, with a steep drop on your left and a grass bank on your right. Follow the path and stop when another path joins it from the right.

### **03 The Whites**

We are now on the highest point of Box Hill, some 194 metres (364 feet) above sea level. This ridge along the top is called The Whites. We can see why from the path of pure white chalk that streaks along the summit. Nearly a million people visit Box Hill every year. In places their footsteps constantly wear away the thin top soil to expose the chalk underneath.

Also look either side of the path. Compare the gentle slope to the right with the sharp cliff to the left. Notice the cliff (or 'scarp') is lined with more small box and yew trees. The scarp is so steep that only these trees can flourish - other plants soon collapse as their roots are too weak.

But why is one side of Box Hill so steep? The answer again is the chalk. Chalk is porous or 'permeable' which means water passes through it. This is why very few rivers flow on the Downs - the chalk absorbs rainwater like a sponge. But this hasn't always been the case.

Around twenty times in the past 2.5 million years Britain experienced very cold periods that lasted roughly 100,000 years each. The land from Scotland to the northern edge of London was covered in vast sheets of ice up to a mile thick. Together these periods make up the Ice Age. The last one ended around 10,000 years ago.

The Surrey Hills were never covered by the ice sheets but they became very cold, similar to the tundra in parts of Scandinavia and Alaska today. During the Ice Age, water froze solid in the pores of the chalk to great depths. When the ice melted, the frozen ground couldn't absorb it.

Instead this 'meltwater' was forced to flow across the surface of the land, often as a sludgy mix of loose rock, soil and water. This material cut through the chalk like a hot knife through butter, creating the valleys and scarps we can see in the Downs today.

#### **Directions**

Keep the steep cliff on your left and continue along the chalk path through another gate. Stop when the chalk path meets a grassy downhill slope. There will be small bushes to the right and a large wooded embankment ahead with a white house on the horizon.

### **04 Burford Spur**

We are now at the top of the Burford Spur, Box Hill's second panoramic viewpoint. The Burford Spur is a rare example of chalk downland. In summer months the grass becomes a colourful carpet of wildflowers. Over 400 flower varieties grow at Box Hill including bluebells, daisies and orchids. These in turn attract

birds and insects, such as 40 types of butterfly.

People have long enjoyed this landscape too. In the Victorian era, thousands of visitors crossed Burford Spur on the way to and from Box Hill railway station. One was the writer JM Barrie, whose hours sat on these grassy banks inspired him to create the story of Peter Pan.

Earlier writers who enjoyed the views included Daniel Defoe, John Keats and Jane Austen. Austen's 1815 novel *Emma* includes a picnic on the Spur: "Emma had never been to Box Hill; she wished to see what everybody found so well worth seeing".

The scene reminds us that Box Hill has been a visitor attraction for centuries. Whether solitary or sociable, our visits can affect places like Box Hill. Crowds especially can cause physical damage and spoil a landscape's character.

Maintaining Box Hill for people and wildlife is a delicate balance. Burford Spur is full of clues to this.

Notice the length of the grass. Sheep and cattle are regularly grazed here to keep it short. Without them, bushes would cover the slope and block out the light that wildflowers need to grow. Though this landscape looks natural it's actually carefully maintained.

Also look on the horizon for a large white house. This is Norbury Park, Leopold Salomons' home. In 1914 Salomons bought 230 acres of Box Hill for the nation. A century later the National Trust manages over 1,200 acres, including Burford Spur. Burford Spur is now a European Special Area of Conservation. Salomons' house overlooking it is a fitting reminder of how Box Hill became a protected place.

### Directions

With Norbury Park ahead, turn right and head towards the small bushes. Look for a path roughly in line with another path on the grass bank beyond. Continue down some wooden steps towards a stony track crossing horizontally. Cross the track and follow another set of steps that wind downhill.

Continue through a width restrictor and towards a curved road at the bottom. Before the road, turn right onto a path. Keep the road on your left and follow the path up to a wooden post at the sharpest point of the bend. You should be in a clearing with a banked hill ahead and woodland to the right.

## 05 Zig Zag Road

Crossing the steep chalk cliffs of the Surrey Hills has always been a challenge - something you'll appreciate if you've ever used Zig Zag Road. It's named after the sharp hairpin bends that climb the hill.

Zig Zag Road is another example of how chalk shapes the landscape and the ways we use it. This twisting road makes Box Hill very popular with cyclists and motorcyclists, especially at weekends. During the London 2012 Olympic Games it was part of the Cycling Road Race course. You may still spot graffiti that spectators left on the tarmac.

Zig Zag Road was laid out during the eighteenth century but is not the oldest route in the area. Look to the right and into the woodland. The grass clearing through the trees is a medieval parish path to the hilltop.

Now look on the bank behind Zig Zag Road for more paths in the grass - vertical ones made by people and fainter horizontal ones created by sheep. Why are there so many paths and roads here?

The answer is that we are in the valley bottom below Box Hill's slope. To save time (and energy!) the simplest and gentlest routes over hills follow valley bottoms for as long as possible.

The grass banks here were created around 5,000 years ago when Neolithic people cut down the trees for grazing land. They would have used hand tools made from the hilltop flint - a demanding task as the local Box and yews are very tough.

Notice the remaining greenery is quite different. The trees here are much larger, including ash, beech and oaks. They thrive because the valley bottom is lined with deeper and moister clay soils. These provide trees with more water than the chalk and allow roots to grow further.

### Directions

Retrace your way back up the steps. When you reach the stony track halfway up again, turn left and follow it. The track is uneven in places so take your time. Go through a gate and stop at the end of the track when you reach the information board beside Box Hill Fort.

## 06 Box Hill Fort

This stone complex sunk into the ground is Box Hill Fort. It was built in the 1890s after fears that southern England would be vulnerable to a European military invasion.

A series of forts were built in the Surrey Hills to take advantage of an ideal defensive site. The steep chalk ridges were natural barriers to entering London from the south coast. They also provided defending soldiers with good vantage points. The straight track we have just followed was a military road that troops took to and from the fort.

Box Hill Fort was stocked with large amounts of unstable gunpowder. The soldiers' heavy boots tramping around the stone building created the risk of explosions. So to prevent this, the men walked in and around the fort in their socks!

In the end the fort never saw military action. Today the building is a home for rare bats while a lawn of wildflowers grows on the roof. The military store rooms beyond the Fort are now the National Trust visitor centre and café.

Embedded in the chalk and surrounded by Box trees, this fort is an ideal place to conclude our walk. Throughout the route we have explored how people have used Box Hill over the centuries. From Neolithic farmers to Olympic cyclists, their activities have been shaped by the natural landscape - the Surrey Hills' chalk.

We found out how this chalk was formed and shaped. We explored how chalk created Box Hill's panoramic views and how these are protected. We also discovered how chalk encourages plants and wildlife, and even gave Box Hill its name. So there is more to Box Hill than a famous view and all of it is "well worth seeing".

### Directions

Do take time to explore Box Hill Fort. To return to the Salomons Memorial, pass the small car park beside the fort and head towards the National Trust Café and Visitor Centre. With these buildings on your right, follow the road as it sweeps to the left around the main car park. The Memorial itself will emerge on your right.