## South flank: Crook Peak and Axbridge

Parking is available along the road at the foot of Crook Peak, at King's Wood [ST 421 560], in Cross and at the foot of Shute Shelve Hill [ST 423 548]. Public toilets and refreshments are available in Winscombe and Axbridge.

This area comprises the southern flank of the Mendips from Crook Peak [52] [ST 38732 55838] in the west to Shipham Perch in the east. Wavering Down [53] [ST 40390 55981] and Axbridge Hill [54] [ST 42994 55410] form one of two ridges that noompass the Lox Yeo Valley, which occupies the eroded sandstone core of the Blackdown Pericline. Both ridges are made of Carboniferous Limestone that forms the limbs of the pericline. Wavering Down and Axbridge Hill are on the southern limb, and the limestone can be seen dipping gently to the south at many localities. The northern side of the ridge forms a steep scarp. To the north, Winscombe Drove and Barton Drove run along the outcrop of the softer Avon Group mudstone, which forms a small col or bench. Winterhead Hill and Church Knoll are small hills developed in the underlying Portishead Formation.

Outcrops of Mercia Mudstone and Dolomitic Conglomerate in the Lox Yeo valley (for example the roadside section on Church Road in Winscombe [55] [ST 41460 57241]) show that the core of the Blackdown Pericline was already eroded by Triassic times, and then subsequently infilled. The southern side of the limestone ridge is indented by several small valleys, many of which follow the lines of earlier Triassic valleys. Modern erosion has preferentially removed the softer Triassic rocks effectively recreating the Triassic landscape.

Much of the area is owned by the National Trust and is open access. The ridge is covered in limestone grassland with excellent views across the Somerset Levels and along the southern flank of the Mendips. In contrast, King's Wood, Rose Wood and Cheddar Wood are superb woodland habitats developed on the Carboniferous Limestone. There are several localities where the underlying bedrock can be seen in more detail. On the north side of Crook Peak is a small disused quarry [56] [ST 38639 56260] that admirably displays the southerly dipping, fossiliferous Black Rock Limestone. The vertical western face is aligned along a major joint or fracture.

Good exposures of the lower part of the Black Rock Limestone can also be seen in the southern approach cutting to the Shute Shelve railway tunnel [57] [ST 42174 55988], part of the Winscombe—Cheddar Railway Walk. The tunnel was on the line from Yatton to Cheddar, which opened in 1869. The northern half of the tunnel is in the older, softer Avon Group mudstone, which has necessitated lining part of the tunnel. The northern cutting is in red Triassic rocks overlying the mudstone. The line was finally closed on 10th June 1963 and the track lifted in October 1964.

The crags at the top of Crook Peak [52] [ST 38732 55838] are formed in the younger, gently dipping, pale grey Burrington Oolite, here with some crinoid debris. The same strata can be seen in the small disused quarries at the foot of the ridge south of Compton Bishop.

At Cross, a disused quarry [58] [ST 41404 54939] provides an excellent place to examine the lower part of the Clifton Down Limestone. The oolitic limestone is clearly exposed on a series of south-dipping bedding planes, and is fossiliferous in places.

The cutting at the western end of the Axbridge bypass [59] [ST 42495 54766] also shows part of the Clifton Down Limestone. The hillside above is dotted with numerous ochre pits, which were worked as late as the 1920s. When the mines were active, a tramway was constructed from Axbridge railway station up to an ochre pit [60] [ST 42688 55472], which is still accessible. Here, the ochre infilled a large water-worn rift, possibly of Triassic age, cut into the Burrington Oolite. The walls are pockmarked by dissolution. Fragments of yellow and red ochre, which consists of various iron oxide minerals including limonite, goethite and hematite can be found scattered around the area. Other ochre workings exist along the south flank of Axbridge Hill and in Cheddar Wood, one of which had a steel cableway linking it to the station.

One of the many small pits hidden within Rose Wood is the entrance to Shute Shelve Cavern [61] [ST 42393 55392]. Discovered in 1994 by local cavers, the small entrance opens up into a large relict phreatic passage up to 20 m wide. Part of the cave had been entered by the miners and it could be the 'Lost Cave of Axbridge' rumoured to exist on the hill.

Close by are the remains of an old miners' hut, and the entrance shaft of Carcass Cave. The nationally rare greater and lesser horseshoe bats roost within the caves and old mines in the area.

The south-facing slopes of Axbridge Hill and Wavering Down are superb wildlife habitats. Immature calcareous soils are dominant on many of the steeper slopes, and a rich limestone flora has developed. On parts of Crook Peak and Shute Shelve Hill, sparse, low-growing vegetation is exceptionally rich in places, and supports a number of rarities including honewort, Somerset hair-grass, Cheddar pink and several rare lichens.

Rock bluffs and limestone screes support a distinctive assemblage of species, including slender bedstraw, sea stork's-bill which is rare so far inland, dwarf mouse-ear and rusty-back, wall rue and maidenhair spleenwort ferns. Saxicolous (rock-dwelling) lichens, particularly Cladonia and bryophytes are very diverse on the bare rock and the thin soils associated with rock outcrops. The combination of rich vegetation and warm, south-facing aspect is highly attractive to butterflies.

In some areas, for example near the summit of Crook Peak and on the upper parts of Wavering Down, acidic loessic soils occur, which support dwarf-shrub heath with bracken, western gorse, heather and bell heather. Locally, a good mixture of scrub is present with gorse, hawthorn, blackthorn, roses, elder and hazel.

King's Wood [62] [ST 41862 55941] is an ancient woodland with a documented history reaching back to the 13th century. It is mostly semi-natural in character, and supports a very rich flora and fauna. Ash standards dominate, along with pedunculate oak, and small-leaved lime, the latter being especially abundant as standards and pollards near the old boundary banks. Limestone boulder scree is also common in the upper parts of the wood, and this is covered by dense growths of mosses. King's Wood also supports a number of notable epiphytic lichens and fungi.

Farther east, the summit of Callow Hill is dominated by Callow Rock Quarry. [63] [ST 44524 55738]. Named after the prominent crags of limestone on the skyline, this active quarry, covering 43 hectares is excavated in the chemically pure Burrington Oolite. This is used in the adjacent concrete block works, which supplies mainly a local market.

During construction of the block-works plant [64] [ST 44796 55932] the remnants of a sediment-filled cave were found. The sediment contained many rounded fragments of an unusual yellow-brown fossiliferous limestone. Ammonites from this rock indicate an Early Jurassic age. The nearest outcrop of rocks this age occur 4 km to the south-west at a much lower elevation and is unlikely to be the source area. Instead, the limestone probably came from outcrops which once infilled the Lox Yeo valley. This limestone has now been completely eroded away and no trace remains. The gravel was probably washed into the cave by a stream which once drained the Shipham area.

Several old quarries occur in Shipham Gorge. Although inaccessible, the lower of these at The Perch can be viewed from the road [65] [ST 45088 55533].

It shows a section through the Burrington Oolite. The prominent red gash at the top of the quarry is a rift that was eroded along a small fault and infilled with a red breccia of angular limestone blocks. At the foot of the hill, Axbridge [66] [ST 43233 54446] is sited on a broad spread of stony clay known as 'head', washed off the slopes north of the village.

## **Figures**

(Figure 64) View from Crook Peak, looking east. The peak is a crag of dipping Burrington Oolite limestone.

(Figure 65) Cross-section across Axbridge Hill. For abbreviations see map key. [ST 430 544] to [ST 430 575]. Vertical exaggeration x 2.

(Figure 66) Aerial phototograph of South flank: Crook Peak.

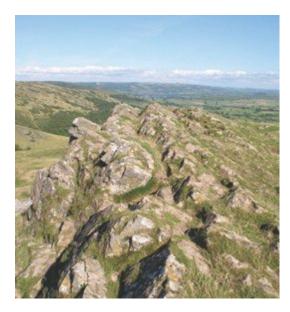
(Figure 67) Shute Shelve railway tunnel, a good exposure of the Black Rock Limestone on the cycle track between Axbridge and Winscombe.

(Figure 68) Fragments of yellow and red ochre, once dug from many small pits and mines on Axbridge Hill.

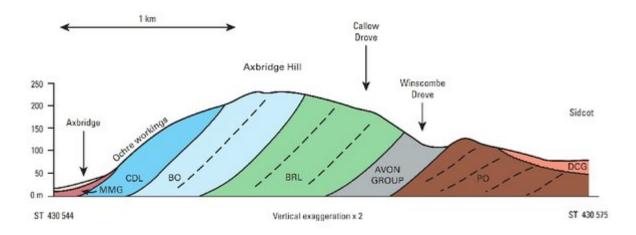
(Figure 69) Many small ferns and plants such as these love the thin rocky calcareous soils developed on the Carboniferous Limestone. © Sharon Pilkington.

(Figure 70) Shipham Perch Quarry. A small quarry in the Burrington Oolite, with a prominent red-stained fault breccia exposed at the top of the quarry.

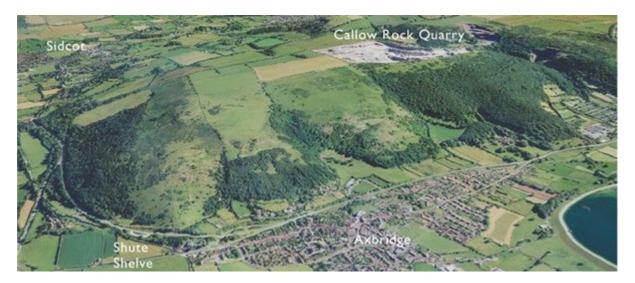
(Figure 71) Large vertical kilns at Callow Rock, Cheddar. © National Stone Centre.



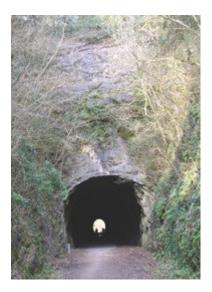
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(Figure 68) Fragments of yellow and red ochre, once dug from many small pits and mines on Axbridge Hill.



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(Figure 70) Shipham Perch Quarry. A small quarry in the Burrington Oolite, with a prominent red-stained fault breccia exposed at the top of the quarry.



(Figure 71) Large vertical kilns at Callow Rock, Cheddar. © National Stone Centre.