
Blackdown

Parking is available at Charterhouse [ST 505 556], Burrington Ham [ST 489 581], Burrington Combe [ST 476 587] and Tynings Farm [ST 470 564].

Blackdown is the highest point in the Mendips, rising to 325 m [24] [ST 48450 57266]. Formed of sandstone, this upland area is distinct from the surrounding limestone plateau. From the summit on a clear day you will have superb views across the Somerset Levels to the Quantocks and Exmoor, the Bristol Channel and south Wales, as well as Blagdon, Chew Valley and Broadfield Down. To the east, the other sandstone summits of North Hill and Pen Hill (with its distinctive TV mast) can be seen rising above the flat Mendip plateau.

The Portishead Formation forms the higher ground because the hard, red-purple sandstone, conglomerate and quartzite are immune from dissolution and resistant to erosion. Lumps of the sandstone can be found scattered all over Blackdown, in which it is still possible to find evidence of ripple marks and cross-bedding formed by the ancient river system that deposited them 360 million years ago.

The sandstone gives rise to acidic, wet soils, with peat developed on the summit ridge. Either side of the summit, the soil is slightly deeper and contains wind-blown silt known as loess (see Ice Age). The change in soil type is easily seen in the distinct change from heathland vegetation to bracken.

These acidic soils support one of the largest stands of dwarf-shrub heath on the Mendips. Land higher than 300 m is dominated by mature heather and typical heathland grasses. Grassland forms a fringing mosaic in places, and on the acidic soil is characterised by common bent, western gorse, pill sedge, green-ribbed sedge and foxglove among other typical plants. The summit of Blackdown is also a good place to pick bilberries in summer. A few small mires are also present, providing suitably wet and acidic conditions for sphagnum mosses and a host of other interesting wetland plants, including the creeping, pink-flowered bog pimpernel and star sedge. Dense bracken has become established on the northern side of the hill, a consequence of occasional wildfires and reduced grazing pressure. Bracken produces a thick litter and excludes most other species.

Blackdown supports many heathland insects and birds, many of them nationally rare and/or declining. Sharp-eyed visitors may see meadow pipits, stonechats and skylarks. Barn owls can also sometimes be glimpsed hunting over the site at dusk.

The curious hummocks, tumps and straight lines on the summit are the remains of a World War II bombing decoy. They were designed to draw enemy bombs from the intended points of attack by mimicking potential targets in Bristol such as railway stations and marshalling yards.

Several small streams drain off the sandstone on the south side of the hill, and across the mudstone outcrop before disappearing underground on reaching the Black Rock Limestone. The outcrop of the Avon Group is marked by a band of marshy damp ground, which forms a marked contrast to the well drained limestone to the south. Occasional exposures can sometimes be seen in roadside ditches, but it is generally poorly exposed. Just south of the road, 700 m east of Tynings Farm, is the Somerset Wildlife Trust's GB Gruffy Field Nature Reserve [ST 476 562] [25] [ST 47588 56230].

These two fields contain a selection of nationally important karst landforms developed at the contact between the Avon Group and the Black Rock Limestone. They include stream sinks, spectacular sinkholes and several caves, plus a wide variety of plant species and evidence of former lead mining. The area is a SSSI for its caves and karst landforms, as well as for its wildlife.

The main stream sinks at the end of a blind valley. The water can be seen again in GB Cave, whose entrance lies at the western side of the field. This is one of the most studied caves in Britain. Accessible only to cavers, it is almost 2 km long and descends to a depth of 135 m. It follows the typical Mendip pattern of several inlets uniting to form a single streamway. The main passage includes one of the largest chambers in any Mendip cave. Comprehensive dating of the

wealth of superb stalagmite formations has provided much information about cave development and the climatic oscillations during the Pleistocene. It is thought that cave development here may have begun more than 700 000 years ago.

The large, fenced depression on the hilltop just to the south of the stream sink marks the site of a major collapse into the cave directly below [25] [ST 47588 56230], which was caused by torrential rainstorms in 1968. The sides of the depression are formed of the fine-grained wind-blown loess, which covers much of the reserve. Another stream sink lies 150 m to the east; this water flows into Charterhouse Cave [27] [ST 47760 56205]. Discovered in 1984, this 430 m-long cave is similar to, but not connected with, the neighbouring GB Cave.

Evidence of lead mining during the 16th to 18th centuries is still very apparent in the southern field. The miners were seeking galena occurring in veins within the underlying limestone. Pits, spoil heaps and old mine shafts create a hummocky terrain known as gruffy ground, now rare due to agricultural improvement. Lead-tolerant plant species including the nationally scarce alpine penny-cress, and spring sandwort occur here, as does the limestone-loving hairy rock-cress and the nationally scarce dwarf mouse-ear. Well-developed ant hills made by the yellow meadow-ant occur on the unimproved limestone pasture. The caves and larger sinkholes provide humid and sheltered conditions ideal for a wide range of ferns, including soft shield-fern, brittle bladder-fern and broad buckler-fern. Badgers have excavated extensive setts in the soft loessic soil.

The dry-stone walls here are good places to examine the fossiliferous Black Rock Limestone. Examples of crinoids, brachiopods and corals can be seen here, but please take care not to damage the stone walls!

Loessic soils over mudstone in the northern half of the site support damp, species-rich neutral to acidic pasture, with bracken and rushes. Neutral to acid, species-rich grassland also occurs with plants such as devil's-bit scabious, meadow thistle and lousewort. Dormice are present in the hazel copse and hedges, while lesser horseshoe bats are known to roost in the caves.

The northern side of Blackdown is described in the Burrington Combe section. To the west, footpaths lead through Rowberrow Warren to Shipham and south to Charterhouse and Cheddar. The summit is on common land and can be reached by numerous footpaths.

Figures

(Figure 36) The summit of Blackdown, 325 m above sea level.

(Figure 37) Aerial phototograph of the Blackdown area.

(Figure 38) Heathland developed on the impermeable Portishead Formation sandstone.

(Figure 39) View from the top of Blackdown towards Dolebury Warren.

(Figure 40) Plan of GB Cave and Charterhouse Cave, after University of Bristol Spelaeological Society.

(Figure 41) A deep sinkhole, formed when the ground collapsed into the underlying cave after heavy rain in 1968.

(Figure 42) Bat Passage, GB Cave. © Peter Glanvill.

(Figure 43) Black Rock Limestone with abundant fossil crinoid fragments.

(Figure 44) Mineshaft, GB Gruffy Field Nature Reserve.



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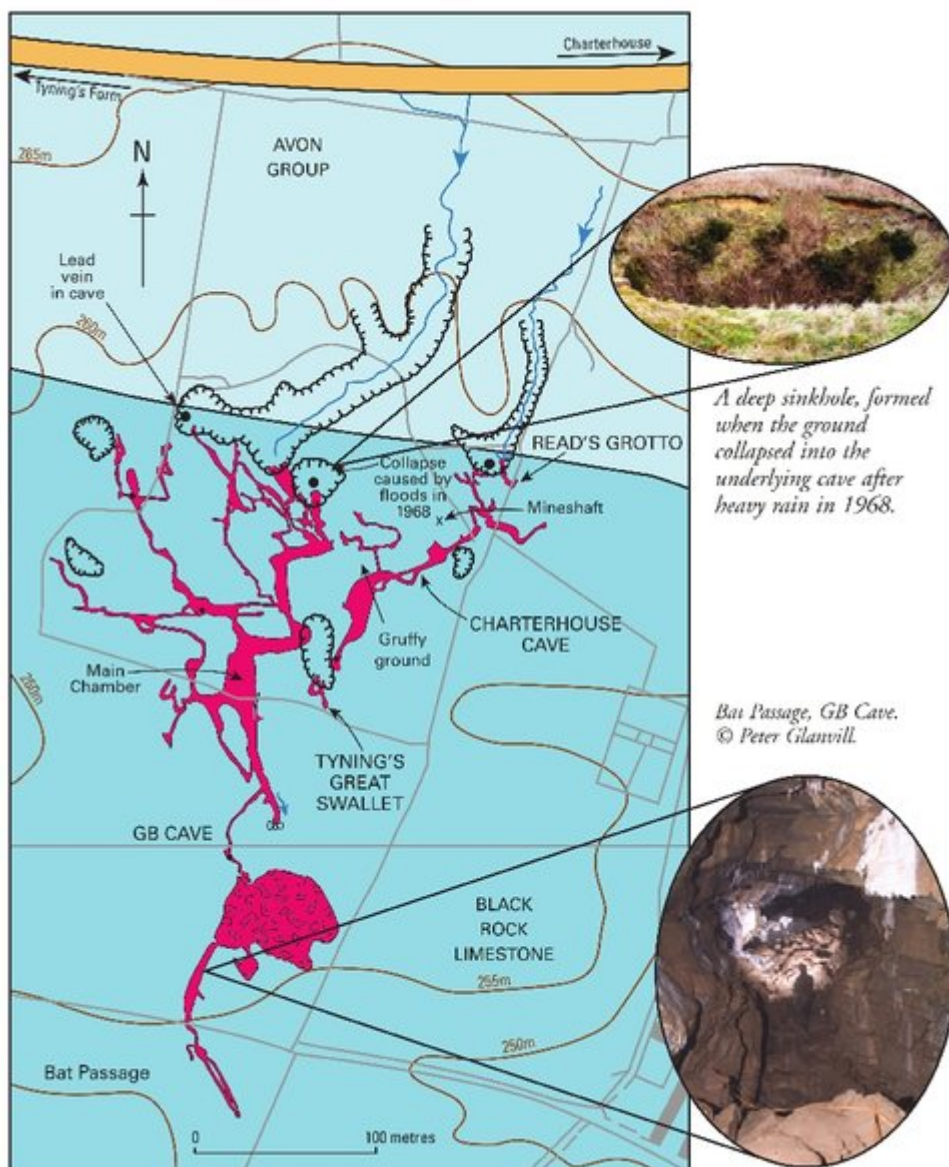
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