

= Blackdown Hills =

The Blackdown Hills are a range of hills along the Somerset @-@ Devon border in south @-@ western England , which were designated an Area of Outstanding Natural Beauty (AONB) in 1991 .

The plateau is dominated by hard chert bands of Upper Greensand with some remnants of chalk , and is cut through by river valleys . The hills support an extensive range of wildlife leading to the designation of 16 Sites of Special Scientific Interest (SSSIs) .

There is evidence of human occupation since the Iron Age . Fortifications include the remains of ancient hill forts , Norman motte @-@ and @-@ bailey castles and Second World War airfields . There are also religious buildings such as Dunkeswell Abbey and village churches . The hills are crossed by a network of minor roads with major transport routes including the M5 motorway running around the periphery .

= = Natural region = =

The Blackdowns form a natural region that has been designated as a national character area - No. 147 - by Natural England , the public body responsible for England 's natural environment . Neighbouring natural regions are : the Devon Redlands to the west , the Vale of Taunton and Quantock Fringes to the north , the Mid Somerset Hills to the northeast , the Yeovil Scarplands to the east and the Marshwood and Powerstock Vales to the southeast .

= = Geography = =

Straddling the borders of Somerset and Devon , the Blackdown Hills AONB covers an area of 370 square kilometres (143 sq mi) . Heavily cut with sharp valleys , the hills reach their highest point of 315 metres (1 @,@ 033 ft) above sea level at Staple Hill in Somerset . The hills in the southern part of the area , near Honiton in Devon , are more gentle . The Blackdown Hills are a sparsely populated area ; much of the land is used for dairy farming .

The River Culm rises at a spring (grid reference ST2205016050) near Culmhead and flows west through Hemyock , then Culmstock to Uffculme before joining the River Exe on the north @-@ western outskirts of Exeter . The name of the river is thought to mean ' knot ' or ' tie ' , in reference to the river 's twists and loops ; or is derived from a Celtic river @-@ name meaning winding stream . The River Otter rises near Otterford , where a stream feeds the Otterhead lakes : (ST225152) . It then flows south for 32 kilometres (20 mi) through East Devon to the English Channel at the western end of Lyme Bay . The Permian and Triassic sandstone aquifer in the Otter Valley is one of Devon 's largest groundwater sources , supplying drinking water to Taunton . The other rivers are the River Yarty and the Corry Brook .

Villages in the northern , Somerset part of the hills include Staple Fitzpaine , Buckland St Mary , Whitestaunton , Wambrook and Churchstanton . The larger , more southerly area in Devon includes Dunkeswell , Upottery , Smeatharpe , Hemyock , Blackborough , Yarcombe , Membury , Stockland , Sheldon and Cotleigh .

= = Geology = =

The geology of the Blackdown Hills together with the adjoining East Devon AONB is unique in south @-@ west England , forming part of the only extensive outcrop of Upper Greensand in the region .

The Blackdown Hills form a flat plateau dominated by hard chert bands , made up of clay with flints , of Upper Greensand with some remnants of chalk . The cretaceous rocks rest over eroded Jurassic and Triassic beds , with an outcrop of Rhaetian beds . In the western areas the Upper Greensand is devoid of calcareous material but the sands yield fossils of marine bivalves and gastropods (snails) preserved in silica .

= = Climate = =

Along with the rest of south @-@ west England , the Blackdown Hills have a temperate climate that is generally wetter and milder than the rest of England . The mean temperature is approximately 10 ° C (50 ° F) and shows a seasonal and a diurnal variation , but because of the modifying effect of the sea the range is less than in most other parts of the United Kingdom (UK) . January is the coldest month with mean minimum temperatures between 1 ° C (34 ° F) and 2 ° C (36 ° F) . July and August are the warmest months , with mean daily maxima around 21 ° C (70 ° F) . December is normally the most cloudy month and June the sunniest . High pressure over the Azores often brings clear skies to south @-@ west England , particularly in summer .

Cloud often forms inland , especially near hills . The average annual sunshine totals around 1 @,@ 600 hours . Rainfall tends to be associated with Atlantic depressions or with convection . In summer , convection caused by solar surface heating sometimes forms shower clouds , and a large proportion of rain falls from showers and thunderstorms at this time of year . Average rainfall is around 35 ? 60 inch (900 ? 1500 mm) . About 10 @-@ 20 days of snowfall is typical . From November to March , mean wind speeds are highest ; winds are lightest from June to August . The predominant wind direction is from the south @-@ west .

= = Ecology = =

There are 16 Sites of Special Scientific Interest (SSSIs) in the Blackdown Hills ranging from the 156 @-@ hectare (390 @-@ acre) Black Down and Sampford Commons to Reed Farm pit at just less than 1 @-@ hectare (2 @.@ 5 @-@ acre) . In total they cover 640 hectares (1 @,@ 600 acres) , or just under 2 % of the AONB . Of these SSSIs 79 % are deemed by English Nature to be being positively managed . SSSI is a conservation designation denoting a protected area in the United Kingdom , selected by Natural England , for areas with particular landscape and ecological characteristics . It provides some protection from development , from other damage , and (since 2000) from neglect , under the Countryside and Rights of Way Act 2000 .

The grasslands , heathland , meadows and mire support extensive populations of birds such as barn owls (*Tyto alba*) and nightjar , with butterflies including marbled white (*Melanargia galathea*) , green hairstreak (*Callophrys rubi*) and the gatekeeper butterfly (*Pyronia tithonus*) . The flora includes the heath spotted @-@ orchid (*Dactylorhiza maculata*) , corky fruited water dropwort (*pimpinelloides*) , green @-@ winged orchid (*Anacamptis morio*) , heather (*Calluna vulgaris*) , lousewort (*Pedicularis*) and birds foot trefoil (*Lotus corniculatus*) . The hedgerows and woodlands are made up of ash , hazel (*Corylus*) , grey willow (*Salix cinerea*) and pedunculate oak (*Quercus robur*) which support populations of dormouse (*Gliridae*) , common lizards , siskin , stinking iris (*Iris foetidissima*) and the purple hairstreak butterfly (*Neozephyrus quercus*) . The rivers and streams are home to kingfisher , otter and the Daubenton 's bat .

Blackdown and Sampford Commons have extensive surviving examples of the heathland , carr woodland and marshy grassland habitats that have developed on the acidic soils overlying the Greensand and Keuper Marls of the Blackdown Hills . The heathland supports a typical invertebrate fauna , including a wide variety of butterfly species , and with spiders notably abundant . The site is regionally important for birds which favour heathland habitats .

Quants , a grassland clearing in a forestry plantation well known for its butterflies including Duke of Burgundy , marsh fritillary and wood white , is a candidate for Special Area of Conservation (cSAC) . These are designated under the European Commission Habitats Directive (92 / 43 / EEC) as internationally important habitats .

= = History = =

Palaeoenvironmental studies have shown that organic material began to accumulate on the Blackdown Hills in the Mesolithic and Neolithic periods with areas of open meadow , grass land with

small woodland components being identified . There are several Bronze Age burial sites including Robin Hood 's Butts near Otterford .

Notable archaeological sites include the Iron Age hill forts at Membury Castle , Hembury and Castle Neroche . Hembury is a Neolithic causewayed enclosure near Honiton . It dates to the late fifth and early fourth millennia BC and is believed to have been the capital of the Dumnonii tribe . The fort is situated on a promontory to the north of and overlooking the River Dart at approx 178 m (584 ft) above sea level . It has given its name to some of the earliest Neolithic pottery in southern Britain . An Iron Age hill fort was later built on the same site . There has been archaeological evidence found on the site of Roman Military occupation , suggesting a Fort within the existing Iron Age site . It is now a Scheduled Ancient Monument .

Fourteen hill slope enclosures , dating from the Iron Age have been identified on the Blackdown Hills , and prehistoric remains , from about 100 BC , have been found in Hemyock .

Castle Neroche is a Norman motte @-@ and @-@ bailey castle on the site of an earlier hill fort near Staple Fitzpaine . The hill rises to 260 metres (853 ft) on the northern escarpment of the Blackdown Hills . The castle was probably built by Robert of Mortain in the 11th century and probably went out of use in the 12th century . Around the crossroads at Staple Fitzpaine there are several large sandstone boulders . They are called devilstones and are said to have been thrown by the Devil from Castle Neroche . According to legend if you prick them with a pin they draw blood . English word ' Stapol ' means pillar or post and it is thought likely that this gave the village the first part of its name . The second part of the name comes from the Fitzpaine family who owned the manor between 1233 and 1393 .

A Roman bath house and Edwardian folly in the village of Whitestaunton were excavated by the archaeological television programme Time Team . There is also evidence of iron workings in the Romano @-@ British period , at Dunkeswell , which radiocarbon dating has placed in the 2nd century . It has been suggested that these and other iron @-@ based technologies gave the hills a fairly industrial landscape during the Romano @-@ British period , providing a source of the name Blackdown Hills . Local iron ores were smelted at Hemyock in small bloomeries (furnaces) to produce pure iron until the Middle Ages .

At Simonsburrow a battle between the native Britons and King Ine 's Saxon army , put an end (temporarily) to the Kings expansion to the west . In 710 , Ine and Nothhelm fought against Geraint of Dumnonia , according to the Anglo @-@ Saxon Chronicle ; John of Worcester states that Geraint was killed in this battle . Ine 's advance brought him control of what is now Devon , the new border with Dumnonia being the river Tamar .

Just to the north of Culmstock , at Culmstock Beacon , is one of a chain of Elizabethan beacons built to warn of possible invasion by the Spanish Armada . On 5 November 1380 , King Richard II granted Sir William and Lady Margaret Asthorpe a licence to crenellate the Hemyock manor house , meaning the permission to fortify it . Over the centuries , Hemyock Castle had many notable owners including Lord Chief Justice Sir John Popham . During the English Civil War it was held for Parliament , subjected to a brief but brutal siege and eventually slighted to destroy its military value . Parts of the castle walls , towers and moat still remain . They are a scheduled ancient monument and include displays of history and archaeology . The castle was also owned by General Sir John Graves Simcoe the first lieutenant @-@ governor of Upper Canada in 1792 . He is buried at Wolford Chapel near Dunkeswell . The chapel is now owned by the Province of Ontario .

Early attempts were made by Charles I to enclose parts of the Blackdowns in the 1630s however this was opposed by the local lord and the commoners . He managed to enclose 1 @. @ 634 acres (6 @, @ 610 m2) and soon sold these , but many of the hedges and fences were removed during the English Civil War . This was followed by further attempts at enclosure in 1658 but again only about a third was successfully enclosed , which remained the situation until 1833 when the rest of the hills were enclosed .

Coldharbour Mill was built around 1800 to exploit the available water power of the River Culm and was used for wool and yarn production until its commercial closure in 1981 . It is now managed by an educational trust and plays a role in telling the industrial history of the area .

The Wellington Monument is located on Wellington Hill at grid reference ST137171 , 3 km (1 @. @

9 mi) south of Wellington , Somerset . It was erected to celebrate the Duke of Wellington 's victory at the Battle of Waterloo . The foundation stone was laid in 1817 , on land belonging to the Duke , but the monument was not completed until 1854 . Its design was inspired by an Egyptian obelisk , but in the shape of the type of bayonet used by Wellington 's armies . It is now owned by the National Trust , and is floodlit at night .

The artist Robert Polhill Bevan worked in the Blackdown Hills from 1912 ? 1925 as a guest of landowner and amateur artist Harold Harrison . Until the end of his life Bevan continued to paint in the Bolham valley and nearby Luppitt his angular style sitting well with the strong patterning of the landscape . Many of the images that he produced in the area are now in national museums .

In the Second World War , airbases were built at Dunkeswell , Upottery and Culmhead . Dunkeswell Aerodrome (IATA : N / A , ICAO : EGTU) was built in the Second World War by the RAF , briefly used by the USAF , and then the Fleet Airwing 7 of the USN . It was the only American Navy air base commissioned on UK soil during the Second World War .

According to local legend , the Holman Clavel Inn is the home of a hearth spirit called Chimbley Charlie .

= = Government and politics = =

The Blackdown Hills have , since 1991 , been designated as an Area of Outstanding Natural Beauty (AONB) . As they have the same landscape quality , AONBs may be compared to the national parks of England and Wales . AONBs are created under the same legislation as the national parks : the National Parks and Access to the Countryside Act 1949 . However , National Parks , unlike AONBs , have their own authorities and have special legal powers to prevent unsympathetic development . By contrast , there are very limited statutory duties imposed on local authorities within an AONB . Further regulation and protection of AONBs was added by the Countryside and Rights of Way Act 2000 .

The total population of the Blackdown Hills AONB in 2001 was 13 @, @ 300 ; of which 10 @, @ 500 live in Devon and 2 @, @ 800 within Somerset . Many of the villages have their own parish councils which have some responsibility for local issues . The Blackdown Hills AONB is managed by a partnership of public bodies , local organisations and voluntary groups with an active interest in the hills . Funding is provided by Devon and Somerset County Councils , East Devon , Mid Devon , South Somerset and Taunton Deane Councils and Natural England .

The AONB straddles the borders of three parliamentary constituencies : Tiverton and Honiton , Taunton Deane and Yeovil . The area is also part of the European Parliament 's South West England constituency .

= = Religious sites = =

Dunkeswell Abbey , a Cistercian monastery and offshoot of Forde Abbey , was founded in 1201 by William Briwere . The abbey was closed in 1539 and granted to Lord Russell . It was mostly demolished promptly , though a section remained in domestic use until the 19th century . In 1842 , a parish church was built on a part of the site . Some surviving fragments of monastery include the partial end wall of the cellars range and parts of a gatehouse . Some carved fragments survive within the Victorian era church .

The Church of St Peter in Staple Fitzpaine was originally built in the Norman style , and has a Norman doorway reset in the south aisle . The chancel dates from the 14th century ; the north aisle was added and the church refenestrated in the 15th century . The tower dates from about 1500 . The south porch and the vestry are much more recent , dating from 1841 . The crenellated 3 @-@ stage tower , has merlons pierced with trefoil headed arches set on a quatrefoil pierced parapet . The church has been designated by English Heritage as a grade I listed building .

= = Transport = =

The Blackdown Hills are crossed by a network of minor roads . There are several major roads including the A30 , A303 and A35 . The M5 motorway is at the northwestern boundary of the AONB . The Bristol to Exeter line and the remains of the Grand Western Canal run , quite close in places , to the west of the M5 motorway but do not pass through the Blackdown Hills .

The Culm Valley Light Railway opened in 1876 , having been built by local enterprise . The line was purchased by the Great Western Railway , which had operated it from the start , in 1880 . The line closed to passengers in 1963 but served the milk depot at Hemyock until its closure in 1975 .

Dunkeswell Aerodrome (IATA : N / A , ICAO : EGTU) is now a busy civilian airfield with a mix of light aircraft , microlights and parachuting .

= = Economy = =

The Blackdown Hills AONB is unique in that there are no towns or cities within its boundary . Employment opportunities are concentrated in the surrounding towns and in a number of small @-@ scale industrial parks ? notably around Dunkeswell airfield . A resurgence of interest in local and sustainable food production has led to significant growth in the number and variety of small @-@ scale food and drink businesses in the area in recent years . Tourism is also a significant contributor to the local economy with visitors attracted by activities such as walking and riding .

The Blackdown Hills Business Association was established as a member organisation in 2002 to encourage and support all businesses that are based in or serve the Blackdown Hills . Membership stands at around 400 businesses .