

Sussex

Click on a picture and use the navigation tip to progress forwards or backwards. SUSSEX AND KENT

GEOLOGY

The area is dominated by the Wealden anticlinal structure which results in a mirror image of the outcrop of the rock sequence in the north of the area appearing also in the south. The oldest rocks occurring are located in the middle of the area where some horst structures result in the Purbeck Beds (late Jurassic) being brought to the surface just north of a line drawn from Heathfield to Battle, East Sussex. The progression, to the north and to the south is Hastings Beds (subdivided into Ashdown Beds, Wadhurst Clay and Tunbridge Wells Sand), Weald Clay, Lower Greensand, Gault, Upper Greensand (not always present) and Chalk (all of which are of Cretaceous age). A small area of Reading Beds occurs in the south, covering the Chalk Downs adjacent to the town of Newhaven.

Little of the area is covered with Drift and superficial deposits, only relatively small areas of Clay-with-Flints occurring over the Chalk Downs and alluvium in the river valleys. Some extensive River Gravels occur in the valley of the River Medway from the west of Tonbridge to the eastern boundary of the area. Marine gravels exist along the sea coast with the greatest extent occurring just to the east of Eastbourne. A note on the gypsum and anhydrite mine at Brightling. Gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) [calcium sulphate] and the anhydrous form, anhydrite (CaSO_4) are worked from marine evaporite deposits at the base of the Purbeck Limestone of the Jurassic. Mining at Mountfield started in 1876 and in the 1960s another mine was opened at Brightling. The Mountfield Mine was abandoned in 1990. Mined material is conveyed from Brightling to the Mountfield site (now the Robertsbridge Works) by an overland conveyor (previously an aerial ropeway to 1989). Four evaporite seams occur but generally only two are worked. No 4 seam is given as the one currently used, 4-5 metres thick, and some 100 to 300 m below ground. Mining is undertaken by the room and pillar method with access from two drifts. The main product is plasterboard utilised in the building industry.

PURBECK {gallery}purbeck{/gallery} HASTINGS BEDSASHDOWN BEDS - WADHURST CLAY - TUNBRIDGE WELLS SAND

{gallery}hastingsbeds{/gallery} WEALD CLAY {gallery}weald{/gallery} LOWER GREENDSAND No pictures

GAULT No pictures

UPPER GREENSAND No pictures

CHALK {gallery}chalk{/gallery} READING BEDS {gallery}reading{/gallery} RECENT DEPOSITS {gallery}recent{/gallery}