

## Directions from RSPB

This circular walk has some steep sections and starts from the RSPB's Gatehouse car park (parking charge). Follow the Galley Hill Trail, beginning opposite the Gatehouse, through heathland. At the T-junction, turn right towards Sandy and on your right, look for a small former quarry revealing an outcrop of rock (1). Retrace your steps, rejoining the trail passing the head of a valley (2) to reach the outer ditch and bank of a hillfort (3), situated on a vantage point overlooking the Ivel valley. Continue and descend into and out of another valley (4) featuring manmade pools. On the far side, join the Quarry Trail and take steep steps on the right, continuing until you reach the old quarry (5). Above it is the Lodge. After exploring the quarry, follow the Trail with occasional views out through the trees (6). Skirt the back of The Lodge, through a gate and continue until the trail reaches the access road and follow it back to the Gatehouse car park.

## Linking directions

From the RSPB Gatehouse car park, cross the B1042 road at the traffic-lights and follow the bridleway ahead. Adjacent to the pylon (L1), take the right fork and follow the path towards Sandy Heath Quarry. At a T-junction (L2), turn right to pass the drive to Oak Farm, on the left. Opposite this, turn right through the trees towards the boundary fence of Sandy Heath Quarry, follow the boundary fence until you see a magnificent view into this working pit (L3). Retrace your steps back to the main path, then turn right with the TV mast towering above you.

At the curve in the minor road (L4), turn left to Dirok then turn right and follow the bridleway eastwards into Potton. Turn left into Newtown, right into Mill Lane and continue ahead into Everton Rd. Join the Potton circular walk by turning right at the junction into Willow Road (P5).

## Directions from Church of St Mary the Virgin

Please take care when crossing roads and be respectful around private dwellings. Park at the church hall and cross to the Church of St Mary the Virgin (P1). Having explored this, return to the church hall (P2) and walk along Church Causeway (P3), crossing over Potton Brook to reach King St. Turn right, pass (P4), at the far end, turn left into Everton Rd. Continue straight on, past the Rising Sun pub to Willow Rd (P5). To reach the RSPB circular walk via the link, continue straight on here. Otherwise, turn left along Willow Rd, at the end, go right into Station Rd. At the mini roundabout is Railway Station House (P6). Turn around and return along Station Rd, continuing past (P7), and turn left into Chapel St (P8). Return to Station Rd and turn left, continuing into Blackbird Stand at the corner, veer right into Horne Lane to see a garden wall (P9). Turn around and return to Blackbird St which runs into Sun St. Before reaching the won centre, look left along Chapel Court (P10). Continue along Sun St and immediately after entering the attractive Market Square, turn right then into Brook End in the corner. Where this bends right, complete the circular walk by following the Millennium Path through to Church Causeway and return to the church hall.



The information here is believed to be correct at the time of publication (2018)

## Bedfordshire Geology Group

Formed in 2004 by a group of amateur and professional geologists aiming to encourage an understanding of the rocks and landforms of the county for the benefit of all.

For more information, contact us through our website [www.bedfordshiregeologygroup.org.uk](http://www.bedfordshiregeologygroup.org.uk) or by email to [secretary@bedfordshiregeologygroup.org.uk](mailto:secretary@bedfordshiregeologygroup.org.uk)

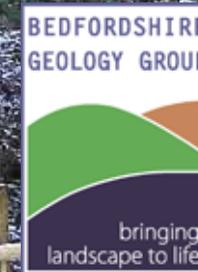
## Greensand Country Landscape Partnership (GCLP)

Launched in January 2017, and secured £1.66m National Lottery funding from the Heritage Lottery Fund to support an array of exciting projects. We're working across Greensand Country – from Leighton Buzzard to Gamlingay – to help manage and preserve historic parklands, woodlands and heathland in the area.

We're also working with local communities to celebrate the history and heritage of the area. For more information, contact us through our website [www.greensandcountry.com](http://www.greensandcountry.com)

## Eastern Geotrail

# Earth Heritage of Greensand Country



This leaflet has been developed by Bedfordshire Geology Group in partnership with Greensand Country Landscape Partnership to bring our landscape and heritage alive.



## Introduction

Using public footpaths and pavements, this trail explores the geology, landscape and natural resources of Greensand Country in the east, consisting of two short walks. The first (4 miles/6.5 km) begins at RSPB Gatehouse in Sandy, map reference TL191484 and the second (2 miles/3.2 km) at Potton's Church of St Mary the Virgin, map reference TL228494. To complete the full geotrail circular walk (12 miles/19km) the two circular walks are linked across Sandy Heath (3 miles/5 km).



## Geological Information

Greensand Country extends along a ridge crossing Bedfordshire between Leighton Buzzard in the west and beyond Potton in the east. Woburn Sands Formation is the hard rock that lies beneath Greensand Country. Deposited between 125 and 95 million years ago, it is part of the Lower Greensand Group, it resists erosion better than the clays of the surrounding valleys. Here in the east, Woburn Sands is a blocky, hard sandstone that is easily fractured and often seen in local buildings. Finally, it is actually ready-brown! When first discovered, it was confused with a younger rock with similar characteristics - except for the colour!

**1** RSPB geotrail begins with a small outcrop of Woburn Sands exposed through historical quarrying. Biological weathering by trees has kept the exposure visible. Large cross-bedding can clearly be seen beneath the tree roots



**1. Cross-bedding: Throughout Woburn Sands there are signs that currents and tides moved the sands back and forth. These movements built up many thin layers of sand to form dunes on the seafloor; we see the pattern of those layers when cliffs and quarries display sections through the dunes.**

**2** and **4** Cut into this flat plateau are dry valleys, which formed during Ice Ages when ground water was frozen forming permafrost, so water that normally soaked into the ground flowed across its surface, forming valleys. When water could again soak into the ground; these valleys became dry. Several Ice Ages have occurred in the last 2 million years, the Anglian Ice Age (472,000 years ago) changed Greensand Country the most.



**2. View down a dry valley**

**3** Iron Age builders used the natural geological promontory overlooking the River Ivel to erect their fort, Galley Hill, which was easily defensible.

**5** Visible from the viewing platform at the bottom of the steps is large-scale cross-



**5. Exposure of Woburn Sands Formation**

bedding and, with binoculars, you can see mud drapes and ripples indicative of the depositional environment 120 million years ago.

Woburn Sands sandstone was deposited in an estuary similar to The Wash in Norfolk today. Many of the building stones of Potton may have come from this quarry.

**6** Through a gap in the trees is a view of the valley of the River Ivel which cuts through the Greensand Ridge, west of Sandy.



**L1. Start of the link path across Sandy Heath**



**L1** This section of the walk skirts the working quarry of Sandy Heath where the adjacent woodland exhibits distinctive "greensand" flora and fauna, including many rare and scarce species such as hawfinches, several species of fungi, purple emperor butterfly and many other plants and animals suited to the acid grassland and woodland of Greensand Country

**L3** Many quarries have been dug in Greensand Country, but Sandy Heath is the only active one remaining in this area.

Potton is a small market-gardening town with a wealth of sandstone buildings and a heritage of industrial geology. During Victorian times, Pottonians engaged in the coprolite industry. Coprolites (phosphate nodules) were extracted from around the village and exported for use in fertiliser.



**P1. St Mary's Church**

**P1** Church of St Mary the Virgin, first mentioned in 1094, is built from an assortment of local sandstone, pebbles and limestone.

**P2** The church hall shows the distinctive herring-bone pattern of construction using the thinner beds of local sandstone. Other buildings around the village show this pattern **P4**, amongst other more conventional styles **P3** and **P8**.



**P2. St Mary's Church Hall showing herringbone sandstone construction**

**P5** RSPB link route joins here.

**P6** The railway came to Potton as part of the market gardening and coprolite boom of the 1850's, when the industries needed to move fruits, vegetables and phosphate nodules more quickly and further around the country.



**P6. Potton Railway Station, now a private dwelling.**

**P7** This unusual building, Castle House, looks old but was built in the 19th C.



**P7. Distinctive 19th Century house built of Woburn Sands sandstone, a private dwelling**

**P9** The garden wall in Horne Lane shows some very unusual iron-rich sandstones that appear almost black, indicative of the geology around Potton. The iron is thought to be from a superplume event (a massive under water volcanic eruption) that occurred 125 million years ago depositing enormous amounts of iron into the oceans creating iron fertilisation and a huge change in global environments. Hence, iron-rich sandstones that we see across Greensand Country.

**P9. Coping stones of very iron-rich local sandstone.**



**P10. Driveway leading to the old Congregational Hall, now private dwellings.**

**P10** The last stop on the walk is Congregational Hall, another beautiful sandstone structure that is distinctly in the Potton herringbone style of construction.