

The Fen Edge Trail

Walk: Swaffham Bulbeck to Reach

4.3 miles (6.9 km)

The route: 'along the edge of the chalk hills'

'These two villages are amongst the most picturesque and historically rich in the area'

Reg, Cambridgeshire Geological Society Geosites team

Hillshade map and

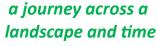
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Contains OS data

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This walk completes the part of the Trail between **Stow cum Quy and Reach**. Having travelled across low-lying fenland to arrive in **Swaffham Bulbeck**, the Trail continues north east, skirting the **Chalk escarpment**, and then runs northward through **Swaffham Prior** before striking north west along the 5m contour to curve in behind the historic hamlet of Reach. Swaffham Prior lies astride the edge of the escarpment, along the line of the harder **Totternhoe Stone**. The proximity of the spring line is marked by the number of public metal pump stanchions to be seen. As you walk towards Reach, the land slopes up to the right to a Chalk hill which has been mined extensively for local building stone. You enter **Reach** via the **Roman port** which was important for many centuries. The other reason for the hamlet's existence is that it is at the Fen end of the **Devil's Dyke** - an Anglo-Saxon (6th or 7th century) defensive earthwork stretching up to **Wood Ditton** on the 'forested highlands to the East'.



Practicalities As with all of the walks along the Fen Edge Trail, you can complete the full length of any walk using transport one way or choose a short or long round trip option, or just visit some of the places on the route. The walk is divided into numbered parts as shown on the two maps. Photo numbers refer to the part they relate to and the order they are seen e.g. ph5.3f is the third photo relating to part 5 (f = on this front page, g = with the Geology, Landscape and Wildlife information overleaf).

Length of walk (one way) approx. 4.3 miles (6.9 km). Walking guide time 2hrs 30mins minimum plus stops. The GPS track is available—please email us. Grid ref for start TL559625. Maps O.S. Explorer 227. BGS Geology Map 188 Cambridge (1:50,000 New Series). Free, easy to use online geology map viewer (and phone app) on **www.bgs.ac.uk/discoveringGeology**.

Transport and services There are buses from Cambridge to Swaffham Bulbeck and Reach www.stagecoachbus.com (but limited times only). Train services at Cambridge (8 miles). Some street parking available in Swaffham Bulbeck and Reach. Car park near the Devil's Dyke, Reach. Please park only where permitted and in consideration of others. Pubs and shops in Swaffham Bulbeck, Swaffham Prior and Reach. The website has links to places of interest, services and local organisations.

Safety Be aware of risks you may encounter and take note of warnings given by landowners or on pathways. The terrain is generally flat, with some muddy ground. Take particular care with uneven terrain, when near water, on soft or slippery ground, in the presence of livestock or walking along or crossing roads. **DO NOT APPROACH ANY CLIFFS if visiting quarries.** Some paths can be overgrown, long trousers advised. Ensure your dog is kept under control as needed. All Fen Edge Trail walks are on publicly accessible routes.

Places of interest along the Trail

Geology, Landscape and Wildlife

This part of the Fen Edge Trail is a good example of the **transition** from the fenland of north and central Cambridgeshire to the Chalk hills that are characteristic of the south of the county. The 5 metre contour roughly marks the edge of the chalk escarpments lying to the south east. To the north east of the contour are the low lying peat, silt and river deposits of the fenland. The **bedrock** at the surface here is of Cretaceous age. Further out in the fen, it is Gault Clay but on the fen edge it is the Chalk. Cambridge **Greensand** (source of

phosphate nodules) occurs in

Group Formation Name Age Ma Flintsappear 91.8 Above here Holywell Nodular Middle Chalk /White Chalk Melbourn Rock Zig Zag Chalk Totternhoe Stone Spring line Lower Chalk / Grey Chalk West Melbury Marl Break in sequence called an unconformity Cambridge Greensand A section showing Selborne Group Gault clay the succession of bedrock in the area

areas where the overlying Chalk has been eroded. The Chalk here is from 101 to 91 million years old and belongs to the Grey Chalk Group (older than the White Chalk further to the south east). The oldest chalk 'layer' here is the **West Melbury Marly Chalk**, followed by **Totternhoe Stone**, a harder rock which forms a marked visual geomorphological feature to the south of Swaffham Bulbeck. Above this is the **Zig Zag Chalk** and then, after the relatively thin layer of **Melbourn Rock**, the **Holywell Nodular Chalk** on the higher ridges.

Lodes are man-made drainage and navigation channels and in this area they are partly fed by water from the many **chalk springs** that arise where there is a change in the permeability of the Chalk layers e.g at **Burwell Castle** and **Pauline's Swamp**. These waterways end up reaching the **River Cam**. Relatively small patches of **Peat**

still cover the bedrock in some areas in the west and north of the area. These are remnants of a time before drainage when larger water channels existed and much of the lowland here would have been flooded, at least seasonally, forming extensive marshes.

As with most of the county, the natural history of the landscape in this area has been greatly affected by man and there are now only a few remnants of semi-natural habitats. This is a predominantly agricultural area which has the National Trust owned **Wicken Fen Vision 2000** project land bordering it just to the north west (see Fen Edge Trail walk Burwell to Wicken Fen). Muntjac and Roe Deer are often to be seen and Short-eared Owls and various raptors benefit from the proximity of the reserve. **Reach Lode** attracts Grey

Herons and Kingfishers as well as a myriad of dragonflies (*ph11.2g*) and damselflies in the summer. The **Devil's Dyke** is not only a scheduled monument but also a valuable wildlife area due to the **chalk grassland** habitat that it supports. It is famous for the **Lizard Orchids** and other rare plants (*ph16.1g*) that grow on its banks and is a Site of Special Scientific Interest (**SSSI**) and part of a Special Area of Conservation (**SAC**). The next walk, **Reach to Burwell, follows the Dyke.**





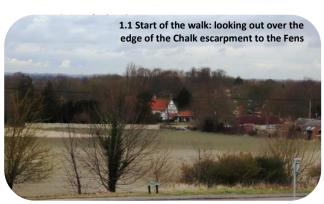
Old quarry workings

13.3g Path for option of walk to quarry in Rea

hill top

The Walk

The walk begins up on the chalk escarpment in **Swaffham Bulbeck** (ph1.1). This area has been extensively quarried for **clunch** - there are remains of local quarries in some nearby fields. The walk then descends to lower ground and follows the road to **Swaffham Prior**. The Swaffham name probably comes from the Anglo Saxon invasions, with the area being occupied by the 'Swabians'. It used to be called **Great Swaffham** (the nearest priory is in Swaffham Bulbeck). There is a rich historical record in this village from Bronze age burials to Roman Villas. Before you reach the churches, on your left at Vicarage Lane is an old King George VI post box. Original green boxes were replaced by the familiar red ones by 1874 – so this is likely to be a red one painted green recently!



Swaffham Prior is probably most famous for its **twin churches** in the same church yard (ph2.1f).

The older church, of **St Mary**, might date from the 970's, established under Byrthnoth, Abbot of Ely. This church is still used for services and it is unusual for its stained glass windows (*ph3.1*) depicting scenes from World War 1. The 'younger' church was built shortly after the Conquest by the new Norman landowner. It was named after St Cyriac and his mother, St Julitta. Its tower was built in 15th century, but gradually fell into disrepair: by 1878, a demolition order was placed on it, but never executed. It was rebuilt in 1974 using church funds and now acts as an exhibition space and is used for other local

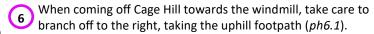


functions. It has even been used for 'Champing' (camping in the church!). As you walk around the churches, note the array of building stones used: from **Caen Stone** (a Jurassic limestone from France), local **clunch** (Cretaceous chalk), **Barnack Stone** (a Jurassic limestone from the area west of Peterborough), flint, cobbles and old brick. There is some attractive pattern work on the outside made from brick and clunch (*ph3.2*) (but not the pale yellow local Burwell brick).

In the village, you pass the **17th Century Red Lion pub** - it is as quaint and cosy inside as it appears.

Near the village sign there is a brick plinth with a plaque commemorating the Land Army (ph5.1). Look across a gate on your right to the village lock-up and pound (ph5.2). The building is well preserved and boasts two impressive oak doors and two cells. Built in 1830, it used to stand on an

enlarged village green with the stocks near the current village sign (ph5.3f) – hence Cage Hill.



The next point of interest is one of the village's two windmills: Foster's windmill (ph7.1). This is occasionally open on Sundays (www.priorsflour.co.uk) and grinds its own flour. Foster's Mill was built in 1857 by local millwrights Fysons of Soham. It stands on the site of an earlier post mill and it is believed mills have stood on this site since the 12th century.

Earthworks Way is a walking route between Swaffham Prior, Reach and Burwell, named after the Devil's Dyke earthwork.

Look out for the track, on the left of the Swaffham Road, named **Barston Drove** and take this to Reach (*ph9.1*). This track curls around the hill at the edge of Reach, running along the **5m contour**. This **drove** has been recorded **since 1319** as the **main route to Reach**. **Short-eared Owls** can often been seen (before dusk) hunting for voles on the fen edge here (*ph9.2f*) and it is a good area for Kestrels and **Roe Deer** (*ph9.3f*). The hill to your right contains the main **clunch quarry** where stone from the West Melbury Marly Chalk and Totternhoe Stone horizons was cut and then exported by barge on the lodes.

The Trail now **follows the river** where, with luck, kingfishers and herons can be spotted. In the fenland to the left, a thin layer of **peaty soil** covers the chalk, but most of the peat has disappeared.

The river turns into **Reach Lode** where the **Roman Port** can be found. Once across the lode on the footbridge, find the information sign referring to the port on the left. Like most lodes, Reach Lode was probably dug by the Romans. There is the site of a Roman villa not too far from here. Reach was an important port from before Roman times, exporting locally quarried clunch (from the pits in **Church Hill** where some chalk faces can still be seen around its perimeter) and agricultural produce. The last clunch was exported in the 1930's. At one stage 40' long barges could moor here. Note the present day scrub obscuring some of the lode sides (*ph11.1*) compared to the historic image (*ph11.2*) and weed choking the waterway. Look out for dragonflies here (*ph11.2g*).

(12) The walk now takes you up the Hythe into Reach village.

The route cuts back down to Reach's Fair Green. An optional detour brings you out into a Millenium Wood (ph13.1), which in the spring is loaded with blossom. The path leads to an area of low ground which is the site of the old clunch quarries (ph13.2 and 13.3g). Paths criss-cross this area where spoil heaps and some low cliffs exposing the chalk can be viewed from a distance. Take care not to stray off onto private property. DO NOT APPROACH ANY CLIFFS. The hill that gave rise to the quarry is topped by Totternhoe Stone. This rock has been exported through the waterways from Reach Port, an example being for use in the construction of parts of Ely Cathedral (mostly built of Barnack limestone).



3.1 St Mary's stained glass



.2 Village lock up







14.2 Old wall

15.2 Church of St Ethelreda on Fair Green, Reach

The next section takes you back to **Fair Green**: this is the site of the historic **Reach Fair** each May (ph14.1). King John granted the village a charter to hold the fair each Rogationtide (1st Bank holiday in May). When the port was working, many exotic goods were traded at this fair. Today, it is a mixture of craft and fairground attractions. It is opened by the Lord Mayor of Cambridge. In the 13th century, the flat green was made by demolishing the end of the Devil's Dyke which once ran closer to the port.

A short walk down **Chapel Lane** brings you to a tall, old wall (*ph14.2*) composed of many types of local rock and brick. Judging by the size and colour of the old bricks, they could well be several hundred years old. There are also thin red tiles, perhaps taken from the nearby Roman villa as well as the ubiquitous local clunch. Many of the bricks may hail from the local brick manufacturing, although these tended to be yellow in colour. Other stone could have been 'recycled' from the ruin of the old church to be found a few tens of metres away.

Next stop up Fair Green is the **Church of St Ethelreda** (*ph15.1f and 15.2*). This was originally built as a school and church in 1861 at a cost of £300. Its front facia has an unusual design. This church is built on the foundations of **St John's Chapel**, dating from at least 1220's. Walk around the footpath to the left hand side of the church to see the only remains of St John's - the east chancel wall (*ph15.3f*). Due to its position between two dioceses, St John's provided shelter for 'heretics'. In 1557 it was confiscated and sold by the Crown, falling into disrepair by the 1550's. By 1769 only the one wall was left standing.

The village sign (ph15.4f) is on the western side of the Green and shows the traditional spelling of the village name (Reche).

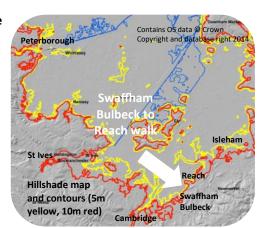
On the edge of the Green is the **Dyke's End pub.** Apart from being a very pleasant place for refreshment and food, it has a bit of a 'claim to fame' as this village pub was kept open in 1999 by the villagers forming a co-operative to purchase and run the pub and was famously visited by Prince Charles whilst still operated by the village. It has since passed into private ownership.

The walk ends at the beginning of the **Devil's Dyke** itself. The Dyke is a linear earthwork thought to have been built in the 7th (or 6th) century by the East Angles as a defence against the Mercians. It runs 7.5 miles (12 km) to Wood Ditton, in the Chalk hills and consists of a high (to 6m) chalk bank alongside a deep (to 4m) ditch (*ph16.1g*). A pleasant walk takes you along the top of the bank.

About The Fen Edge Trail

Linking the landscape of the Fen Edge to the local geology, history, culture and wildlife

The Fen Edge Trail is a walking route around the Cambridgeshire Fens, roughly following the 5 metre contour (the land that is 5 m above sea level), where the low-lying fenland meets the surrounding higher land. From the Lincolnshire border near Peterborough in the north west, via St Ives and Cambridge, to the Suffolk border at Isleham in the south east, it will also extend to include the 'fen islands' including Ely, Whittlesey, March, Chatteris, Thorney and Wisbech. The Fen Edge Trail is an initiative set up by the Cambridgeshire Geological Society as part of their Geosites work which aims to identify and protect local sites of landscape and geological value, and share their importance and interest with local people and visitors to the county. We are working with several community organisations who are helping to develop the Trail. Our main partner is The Fenland Trust in Yaxley. Information on the Trail, and points of interest along it, are gradually being added to the website together with the walk guides.





www.fenedgetrail.org



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www.cambsgeology.org

www.fen.land

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The Fen Edge Trail
Walk: Swaffham Bulbeck to Reach

Swaffham



www.fenedgetrail.org

Directions map (4.3 miles / 6.9 km)

10

www.cambsgeology.org

Footpath ends, but stay on side of road until a signpost (ph9.1) on your left pointing to Reach via Barston Drove Follow this track for a distance ahead until a road next to a river bridge is reached.

At the next T junction, turn right along **Earthworks Way** again and follow path until it meanders out onto the main road again. Turn right and follow main road.

At the windmill, the path meets a tarmac drive. Turn left downhill to a left bend but go straight ahead by garage down a narrow grass path following yellow waymarkers.

Turn back down hill and look for footpath sign (ph6.1) to the right (Earthworks Way). Go on a few paces and take the fork to right towards windmill.

Continue until the T junction with Cage Hill (village sign): turn right up hill. After about 50m note the pound hidden away on the right.

Keep on gravel path up to right of churches. Take grass path to left (before reaching gate) and go through graveyard behind the church. Just before stile, turn left back down hill to exit onto the main road. Turn right along High St.

At **St Mary's** take the right hand side path to circumnavigate the churches. If they are open, you may wish to go inside.

The **twin churches** can be seen on the right, up the scarp slope. Take footpath up towards the churches.

Start at Heath Rd/Quarry Lane junction and walk north east to go around left bend to reach the B1102. Cross road carefully and go right. Keep on footpath alongside road, along High Street, until in Swaffham Prior.

At the road, turn left across bridge and then take right track keeping river to your right. Follow this as it meanders alongside river. Ignore first road bridge, but continue a short distance to the narrow wooden pedestrian bridge into Roman port.

After crossing bridge over

After crossing bridge over Reach Lode, see information board about the port. Turn right up Hythe until a junction, then turn immediate right along pavement.

After a few metres, take a track signposted on left, taking care crossing road. Take note of the local stone in the walls on left hand side.

Occasional fossils can be seen.

Follow track to crossroads with red waymarkers. If a detour up to old clunch quarry is wanted (ph13.3g), go straight ahead to follow track to Reach Millennium Wood. Weave through wood to open clearing marking quarry floor. Retrace steps to rejoin walk.
Otherwise, turn left at crossroads towards Fair Green.

Turn left and go down to next junction and cross to turn right keeping an old chapel to left. Walk down **Chapel Lane** for a few metres and have a look at the old wall with its range of stones. Return to Green and head up right past the **Village Centre** hall.

Stop at **St Ethelreda** church: go around the left side to find the ancient ruins of **St John's** chapel. Then return to road. Once on road turn left and continue up past the **Dyke's End pub.** There are some information boards on the **Green about** the **Devil's Dyke.** Continue to end of the **Devil's Dyke** itself (car park on corner).

Swaffham

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FET walk 5m contour

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Walk: Swaffham Bulbeck to Reach - geology and contours map

Landscape and Geology

(see website for more details)

The main features of the topography in this area are the southwest — northeast trending **Chalk escarpment** running to the southeast of the Swaffhams, the **peninsula of land** on which Reach stands and the flat **fenland** lying at or near sea level. The walk travels along the base of the escarpment, down onto the fens and then back up on to slightly higher land at Reach, which juts out into the surrounding fenland and is connected by a ridge to Burwell.

The bedrock at the surface in this area is of Cretaceous age, the oldest being Gault Clay in the north west, which underlies the low fen. The land gradually rises to the south east through a succession of Chalk rocks, starting with the West Melbury Marly Chalk, a clayey chalk that mostly forms lower land. Between this and the next youngest, the Zig Zag Chalk, is a hard layer, the **Totternhoe Stone**, which also caps the small hill near Reach. Part way up the scarp slope (the steep slope of the escarpment) is another harder layer, the Melbourn Rock, followed by the Holywell Chalk that forms the plateau top.

The younger deposits in this area are mostly peats in small pockets around Reach and a ribbon running northsouth, to the west of the villages. This joins a more extensive peat area in the northwest which can be easily seen in the ploughed fields.

Gault Clay

(Cretaceous

(Holocene)

West Melbury

Marly Chalk

(Holocene)

Nest Melbury

Melbourn Rock

(Cretaceous)

Holywell Chalk

(Cretaceous)

Marly Chalk

Totternhoe Stone

(Cretaceous)

(Cretaceous)

Contains British Geological Survey materials © NERC 2018

Contours **Gault Clay** inlier Thin Peat layer is 10m 5m 0m forming port basin (height eroding under and above intensive 11 above sea agriculture Reach 13 old quarry 10 Wasteway-Drove Hilltop capped with the **Gault Clay** harder Totternhoe Stone, underlying quarried in the past level and low-lying Walk passes Peat ribbon Swaffham over the ZIg Zag trending north Chalk again along possible line before returning of past drainage onto the West **Melbury Marly Melbourn Rock** Chalk forms harder band on hillside Soft West Melbury Marl y Chalk forms the low-lying Harder Totternhoe Stone forms agricultural plain the base of the scarp slope Station Ad Start of walk on the Zig Zag **Holywell Chalk** 20 Chalk at the edge of the forms the Chalk escarpment plateau top Swaffham Contains OS data © Crown copyright and database right 2017. G Earth, ©2018 Google Image, ©2019 The Geoinformation Group, © 2019 Peat

The hill forming the centre of Reach has been extensively quarried for **clunch** (used as a building stone). At the top of the quarry, the harder and higher quality, Totternhoe Stone was found. Much of this was shipped out by barge from the port on the Lode at the lowest end of the village. The springs that issue at the base of the Totternhoe Stone would have been a significant boon to the establishment of Swaffham Prior. There is a small fault in the village, which presumably made the shallow valley in which today there is a road up the scarp slope. It is rare to be able to see evidence of faults in the Chalk.

Ages of local 'rocks' Cretaceous bedrock: c. 105 to 95 million years **Holocene** 'superficial' deposits: under 11.7 thousand years

Elevation profile (metres above sea level)

