Carry on and look for the copse to the left of the path

14 In the copse is a pit, probably the remains of where the ice-age gravel cap was dug for local estate roads

Carry on along the path and divert to the left into the area of grassland running up towards Stockgrove House

15 See how again there is a feel of the cap of material with its steeper edge towards the path. The grass here is longer on the more clayey soil rather than the typically shorter acid grass on the slopes down to the Visitor Centre.

Carry on down the path

16 See how water has created little gullies in the path.

Return to the car park and cross the road with care into the meadow, divert up the hilltop to left just beyond tree

17 Get the feel of the steep-sided dry valley here – a cap of the hard sandstone makes for the flat hill top and keeps the sides relatively steep. The lack of a stream in this valley shows the rock lets water through (it is permeable) and it was eroded mainly when the soil was frozen in the Ice Age.

Continue up the valley to where there are long coarse clumps of grass in the bottom

18 See here how there is a wet hollow – in wet weather it holds water and is a spring with no exit. In really wet weather water flows down the whole valley as the water within the sandstone rises above ground level.

Retrace your steps back to the car park – we trust you have enjoyed your geological ramble through this important site.

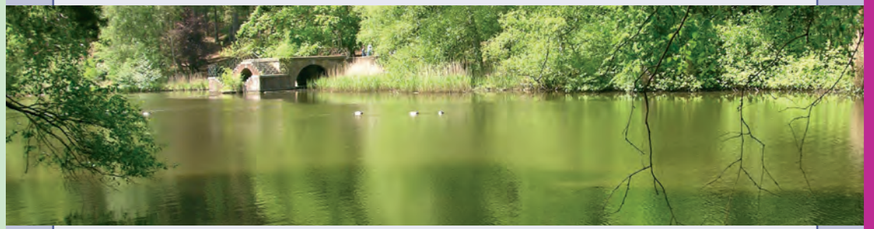
BEDFORDSHIRE GEOLOGY GROUP

The Bedfordshire Geology Group was formed in 2004 by a group of enthusiastic amateur and professional geologists. We aim to encourage an understanding of the rocks and landforms of the county for the benefit of all. One of the main ways of doing this is by identifying and popularising Local Geological Sites which are of scientific and educational importance.

Members enjoy field trips, clearing overgrown sites, lectures, workshops and social events – all aimed at getting familiar with local rocks and fossils. We also arrange guided walks in order to share our interest in the varied scenery of Bedfordshire

We work closely with local companies, museums and county parks. Recently we have collaborated with The Wildlife Trust, The Greensand Trust, Natural England and English Heritage on different projects around the county.

Educational support for schools is arranged by request. This often involves classroom-based sessions that introduce pupils to exciting geological topics such as dinosaurs and volcanoes. Alternatively we can organise outdoor visits to help students learn more about their natural environment.



The Rushmere Country Park is operated by The Greensand Trust. Café, toilet and car parking facilities are available with a 'pay on exit' parking charge of £2 (in 2013) – season available.

For more information, contact us through our website
or by email to
secretary@bedfordshiregeologygroup.org.uk

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This leaflet has been funded with help from The Wixamtree Trust

www.bedfordshiregeologygroup.org.uk

STOCKGROVE

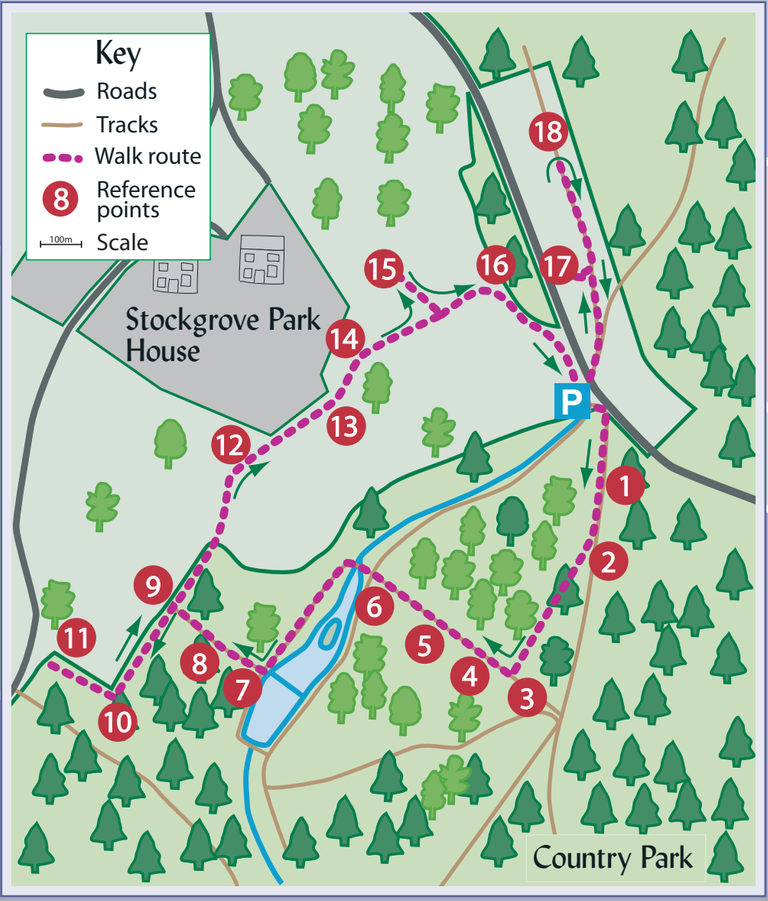
GEOTRAILS IN BEDFORDSHIRE

Encouraging an understanding of
the rocks and landforms of the county

BEDFORDSHIRE GEOLOGY GROUP
bringing landscape to life

Introduction

The walk explores the impact of the underlying sandstone rock and the influence of the ice age on the landscape and plants of this important **Local Geological Site**. The walk starts at the car park at the Stockgrove Entrance to Rushmere Country Park in Brickhill Road, Heath and Reach LU7 0BA, map reference SP921294.



Directions

With your back to the car park entrance on Brickhill Road, turn left through the fence and follow the path left back towards the road and then along the inside of the fence boundary:

1 See the sandy soil and lack of ground vegetation under the trees reflecting the poor, infertile soils of the underlying sandstone rock.

Instead of going through the kissing gate, turn right along the inside of the fence using the track up the hill:

2 Suddenly bramble and other plants can be seen on the ground and the soil is more clayey with stones in it including flint from the chalk rock. This is evidence we have a cap of glacial material coming from the Scandinavian ice sheets that came south and west across Lincolnshire.

Continue on to the field gate in the fence on your left; turn right here 3

4 As you go along the path see the continued covering of clay-loving plants.

Keep going downhill

5 The plants on the ground suddenly stop at a very clear line—this marks the return to the underlying sandstone rocks.

Continue down towards the gate

6 Here ground vegetation occurs again as clay from beds underlying the sandstone are present and material has also been washed down-hill, or brought down during the Ice Age under periglacial conditions when the ground was frozen.

Carry straight on over bridge and follow the path around to the ruined boathouse, turn right up the dry valley

7 Valleys normally need rivers to form them but here they are dry as the sandstone lets water sink into it. They were created initially when the ground was frozen during the Ice Age and water had to run on the surface.

Walk half-way up the valley

8 See the marshy grass and wet patches of ground (front cover) – it shows that water is close to the surface and will create a small stream to further cut the valley when we have had lots of rain. The removal of some of the thirsty tree cover has helped raise the level of the water in the sandstone rock beneath your feet.

Using the left-hand path at the fork, continue to the top of the hill

9 Here we are back to the cap of glacial material with stone in the path and bramble and other ground plants that again like the clay in the soil.

You can turn left here to points 10 and 11 and then retrace your steps or instead turn right straight to point 12.

10 Just beyond the corner in the path the stone is very clear in the path—not only flint but also other stones such as 'Bunter sandstone' from northern England, brought here by the ice sheet.

Carry on here until you can see across the fence into the field.

11 Look ahead and you can see in the grassy slope the steep end of the cap of glacial deposit.

Retrace your steps to

12 The stones here in the path show the glacial cap of material and you get a sense of this 'cap' in the shape of the ground in the field to your left.

Continue on path across meadow with the large Stockgrove House (once owned and rebuilt by a sugar magnate, Sir Michael Kroyer-Kielberg) visible through the fence on your left

13 See the 'sundial'. This is made of rocks from the hard beds in the sandstone where iron-rich solutions have created a cement to weld the sandgrains together and have also given it the dark brown colour. The locally rare hard bands in the Greensand beneath your feet give rise to the flat hilltops and the steep valley sides. Without this the normally soft sands, extracted elsewhere in the quarries of Leighton Buzzard, would only give gentle slopes.