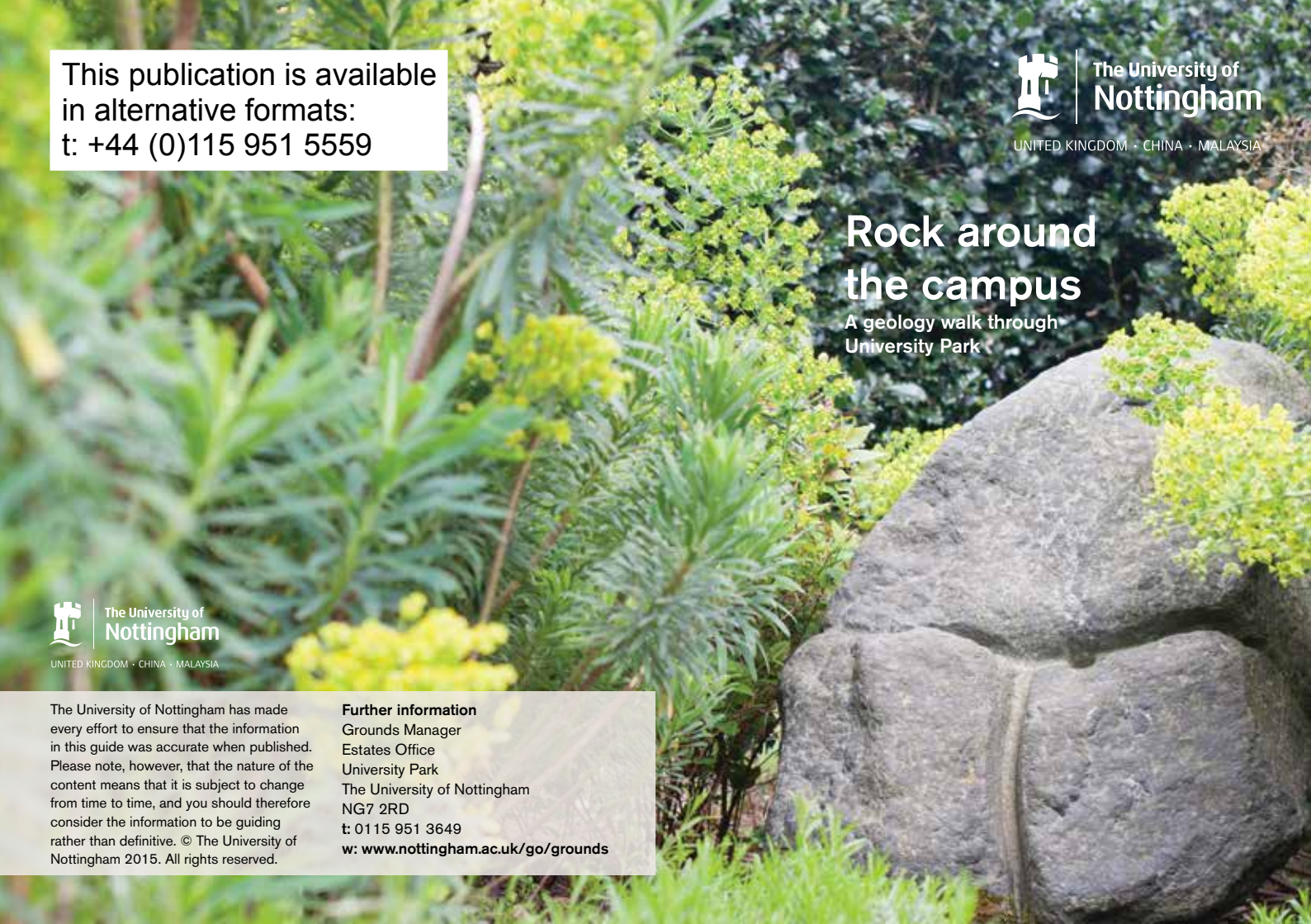

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# Rock around the campus

## A geology walk through University Park

The University of Nottingham
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**Further information**
Grounds Manager
Estates Office
University Park
The University of Nottingham
NG7 2RD
**t:** 0115 951 3649
**w: www.nottingham.ac.uk/go/grounds**

**The Friends of University Park** encourage everyone to enjoy the campus grounds and all are welcome at their events.
**w:** www.nottingham.ac.uk/go/friends

# Geology walk

This walking guide aims to encourage enjoyment of University Park by giving an introduction to the geology of our beautifully landscaped campus.

Millions of years ago the area we now call the Midlands was desert. Floods later deposited sands, gravels and pebbles. Shallow lakes were formed and dried, leaving deposits of salt and gypsum.

Exposed rock in today's campus also gives visitors following this guided walk clues to the area's foundations, while some of the materials featured in the buildings and grounds add to its geological interest.

Geology walk map: pages 10&11

Lenton Firs Rock Garden.
Cover image: The Bassingfield Stone.

The cliff at Lenton Firs Rock Garden is Nottingham Castle Sandstone.

# The walk

1 Start at the **Main Visitor Car Park** which is signposted from all the main entrances. (Pay and display, but free evenings, weekends and bank holidays).

Leave the car park by the footpath in the north-eastern corner, pass the Cripps Medical Centre and cross the road on to Cripps Hill to reach **Lenton Firs Rock Garden**.

2 The garden's west-facing cliff is Nottingham Castle Sandstone. The lines indicate undulating erosion surfaces and inclined current bedding. The scattered pebbles are evidence that this was formed from river deposits. Mud flakes in the sandstone show that shallow lakes or even puddles collected fine sediment before being ripped up by floodwaters. The large blocks of rockery stone are Bulwell Stone. A close look with a lens reveals rhombs characteristic of this Magnesian Limestone.

3 Walk down Cripps Hill and cross the road at the roundabout. A path leads down to the car park at the rear of the **Physics Building**. At the north side of the car park is an old quarry face with a fine exposure of Lenton Sandstone. The sandstone is very fine grained, which together with clay content made it useful as a moulding sand. The inclined bedding may be from sand dunes but the clay constituents indicate periodic flash floods. The yellow patches gave it its old name of Mottled Sandstone.

4 The entrance to the Physics Building is clad with crinoidal limestone, possibly Hopton "marble". Crinoids were marine animals (misnamed sea lilies) that lived on tropical reefs.

5 Pass through or round the Physics Building and head south, down the steps between the Pope Building and George Green Library. After 100 metres or so go up steps to the right and through a tunnelled walkway. Turn left on to East Drive, where a wall to your left, beneath the **School of Psychology**, is set with interesting concretions — rounded rocks embedded in sedimentary rocks. These form naturally but are not fossils.

Concretions set in the wall at the School of Psychology.

The former river cliff.

**6** **DH Lawrence Pavilion**, Lakeside Arts Centre (café and toilets).

**7** Taking the lakeside footpath brings us to **Portland Copse**. This is possibly the site of a former quarry used for brick and tile making at the medieval village of Keighton, which once stood to the north of the East Drive. The rock here is within the Mercia Mudstone group, much of which may have been formed by windblown dust deposited in a deepening basin. At the lakeside is a small exposure of Radcliffe formation, a layer of mudstone.

**8** Further along the path is a terrace buttressing the foundations of the Trent Building, which is built on Mercia Mudstone. The terrace is built from Carboniferous sandstone.

Walk past some disused steps, where the Mercia Mudstone has down-faulted against Nottingham Castle Sandstone. This former river cliff was on the northern side of the Trent floodplain. Two shallow caves have been dug into the cliff.



**9** Climb the steps and walk up the hill towards the Trent Building. Nestled among the shrubs flanking the building to the right is the **Bassingfield Stone**, a hornblende schist boulder that was carried by glaciers from the south-west Highlands of Scotland. It was found in a gravel pit to the east of Nottingham in 1949. Patterns on the stone suggest ceremonial use in the Bronze Age.

**10** **The Trent Building** is constructed of Portland Stone. A lens reveals tiny rounded grains called ooids, which formed this limestone. Walk across courtyard. The paving slabs are Carboniferous limestone showing fossil corals and clay stylolites. The latter form jagged lines of weakness which have cracked some slabs. The foyer beyond the entrance to your right has huge black limestone columns.

The Trent Building was built from Portland Stone.

Keighton Auditorium straddles a sandstone outcrop.

11 As you approach the steps to the south-west of the **Portland Building**, note the way the Carboniferous sandstone has weathered.

Passing behind the Portland Building we come to a recently grassed area of Mercia Mudstone.

A stroll through the **Old Botanic Garden** gives a view of Nottingham Castle.

12 An exposed Lenton Sandstone outcrop can be seen beneath the **Keighton Auditorium**. Cross the road to return to the Main Visitor Car park and complete the walk.

Text: Gerry Shaw
Photography: Lewis Stainer
Design: Rob Ounsworth



The Old Botanic Garden.

# Geology walk

University Park
Nottingham
NG7 2RD