

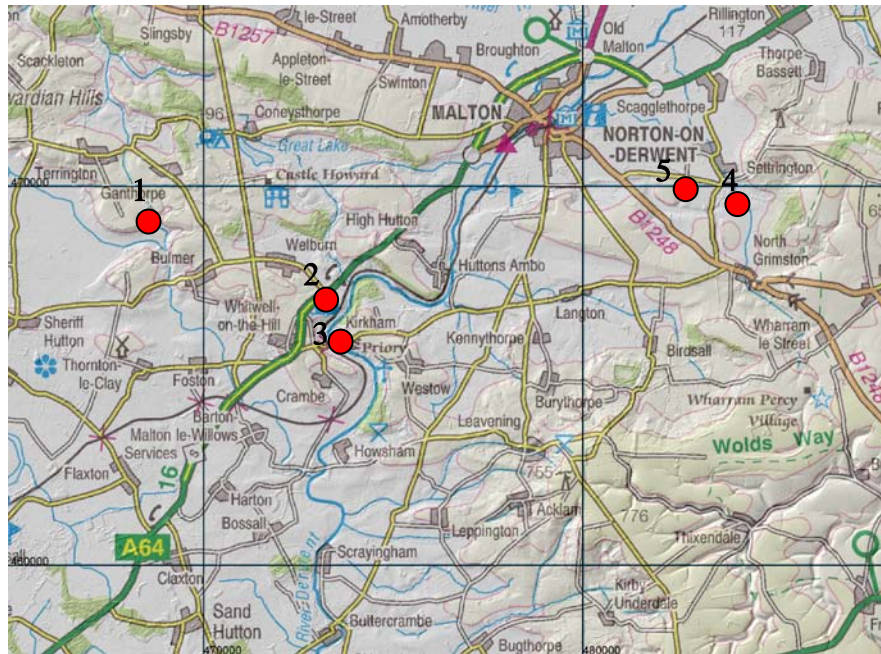


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The Jurassic of the Howardian Hills, North Yorkshire

Geology and Landscapes England Programme Open Report
OR/08/061



BRITISH GEOLOGICAL SURVEY

GEOLOGY AND LANDSCAPES ENGLAND PROGRAMME

OPEN REPORT OR/08/061

The Jurassic of the Howardian Hills, North Yorkshire

S Price & J Ford

Leeds Geological Association Field Meeting

4th October 2008

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Location map of fieldtrip localities

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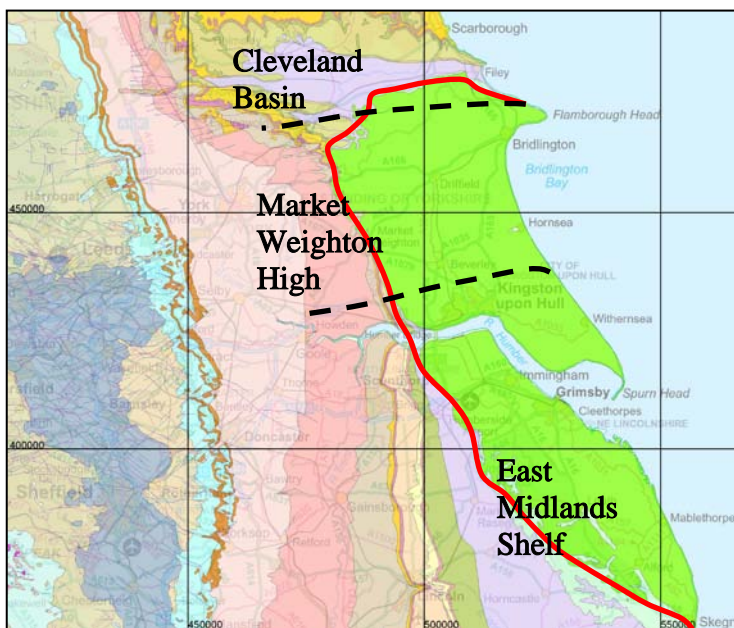
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1 Introduction

This fieldtrip aims to provide an overview of current geological map of the Jurassic succession in the part of the Howardian Hills within 1:50 000 scale geological map sheet 63 (York). The field trip localities will provide an opportunity to examine the Jurassic succession and to discuss the emerging possible structural controls on their deposition.

The area lies between the Cleveland Basin to the north (thick Jurassic sediments) and the East Midlands Shelf to the south (generally thinner Jurassic sediments). The boundary between the two is marked by a structurally complex east-west trending fault system termed the Flamborough Head Fault Zone. A major deep seated basement structure referred to as the Market Weighton High is also present to the south of the area. The degree to which each of these sedimentary and structural regimes controlled sedimentation and variations are gradually being unravelled as part of recent resurveying work on the York sheet.

The field trip provides an opportunity to explore and discuss some of the on-going research in a previously poorly understood and little studied area of North Yorkshire Jurassic deposition.



Fieldtrip leaders

EurGeol Mr Jon Ford BSc MSc FGS CGeol British Geological Survey. jford@bgs.ac.uk

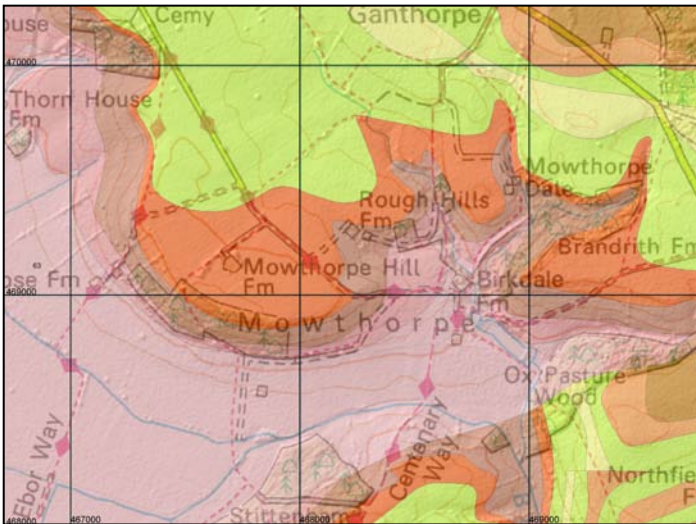
EurGeol Mr Simon Price BSc MSc FGS CGeol. British Geological Survey. sprice@bgs.ac.uk

2 Field trip localities

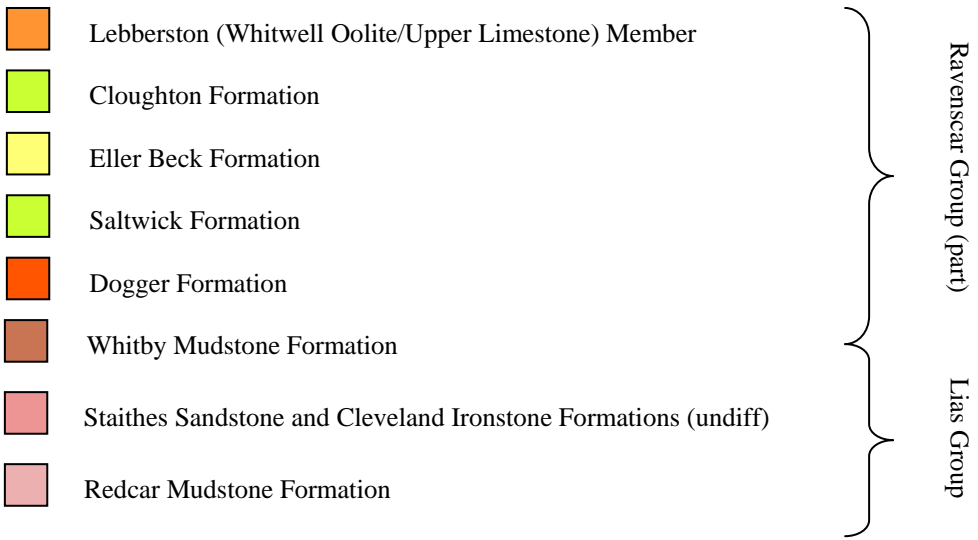
2.1 LOCALITY 1. MOWTHORPE, NEAR TERRINGTON VILLAGE

Location: Birkdale Farm, Mowthorpe [SE 6870 6901].

Feature: Geological overview and examination of sediments and landforms of the Lias and Ravenscar Groups.



NOTES

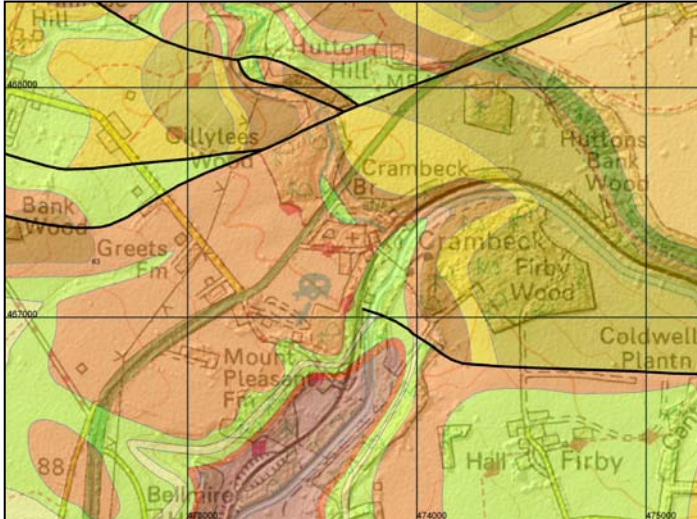


Existing DiGMap50GB Geological Map

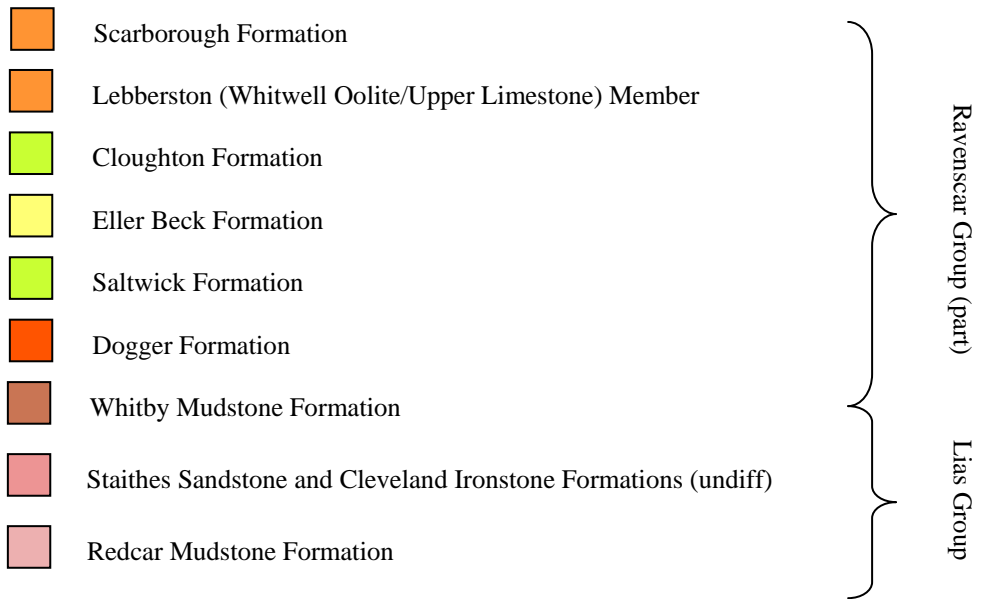
2.2 LOCALITY 2. JAMIES CRAGG CARAVAN PARK

Location: Caravan Park south of Crambeck village [SE7340 6702].

Feature: To examine the marine Leberston Member of the Ravenscar Group.



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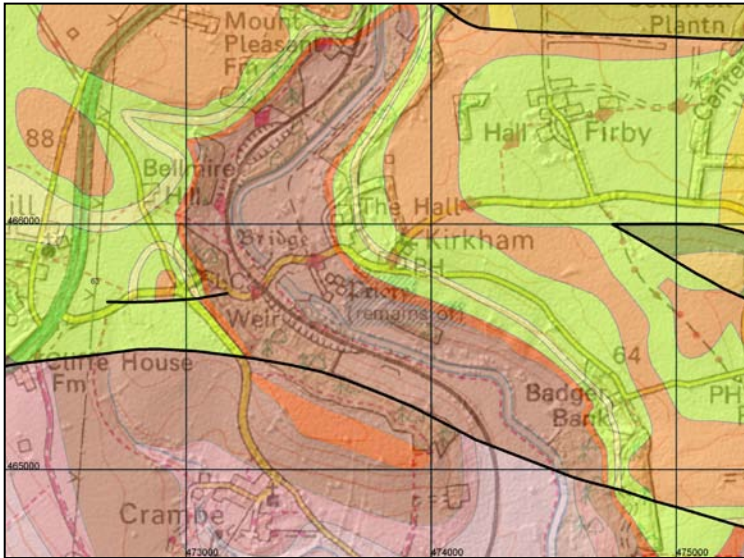


Existing DiGMap50GB Geological Map. Rocks younger than Scarborough Formation not shown in legend.

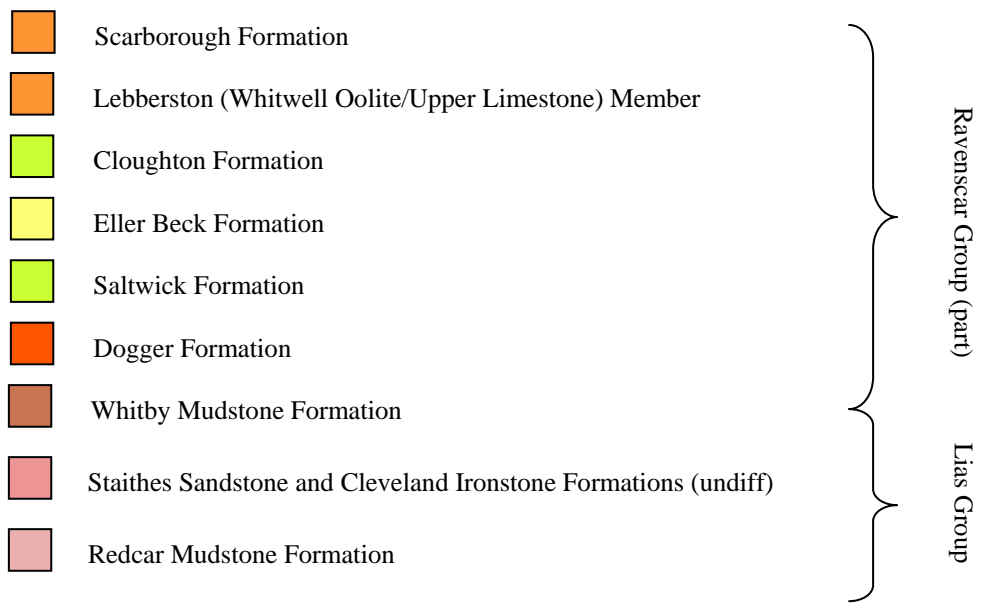
2.3 LOCALITY 3. LUNCH AT KIRKHAM PRIORY

Location: Kirkham Priory Car Park [SE8687 6332].

Feature: To examine Geomorphological features of the River Derwent and its glacial significance in relation to the formation of pro-glacial lakes Pickering and Humber during the late Devensian.



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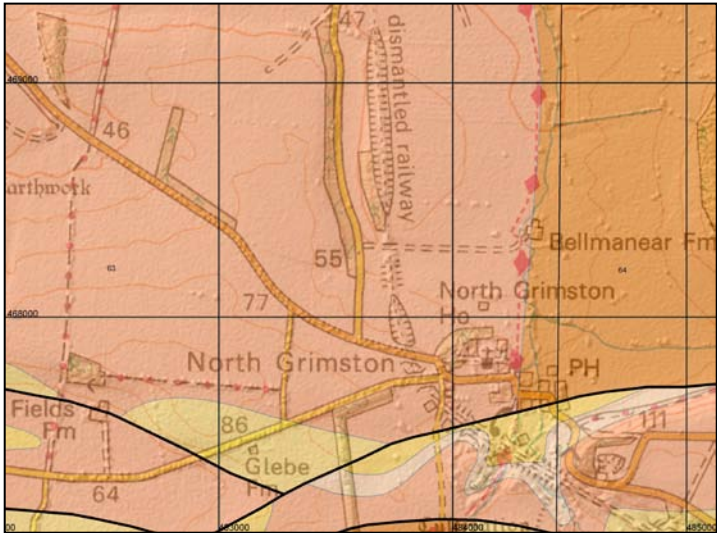


Existing DiGMap50GB Geological Map. Rocks younger than Scarborough Formation not shown in legend.





2.4 LOCALITY 4. DISUSED RAILWAY CUTTING, SOUTH OF SETTRINGTON

Location: Bellmanear Farm. Cutting in disused railway south of Settrington Grange [SE8378 6793].

Feature: Examination of an exposure within the probable upper part of Coralline Oolite Formation.



NOTES

-  Amphill and Kimmeridge Clay Formations (undiff)
 -  Upper Calcareous Grit Formation (North Grimston Cementstone Member)
 -  Coalline Oolite Formation (Including Coral Rag and Malton Oolite Members)
 -  Lower Calcareous Grit Formation (probably Birdsall Calcareous Grit Member)
- } Corallian Group

2.5 LOCALITY 5. SETTRINGTON QUARRY

Location: Settrington Quarry [SE8288 7001].

Feature: Examination of the Malton Oolite Member of the Coralline Oolite Formation.

