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(Figure 17.1) Geological map of southern County Durham showing the localities described in the text (after Mills & Hull 1976).

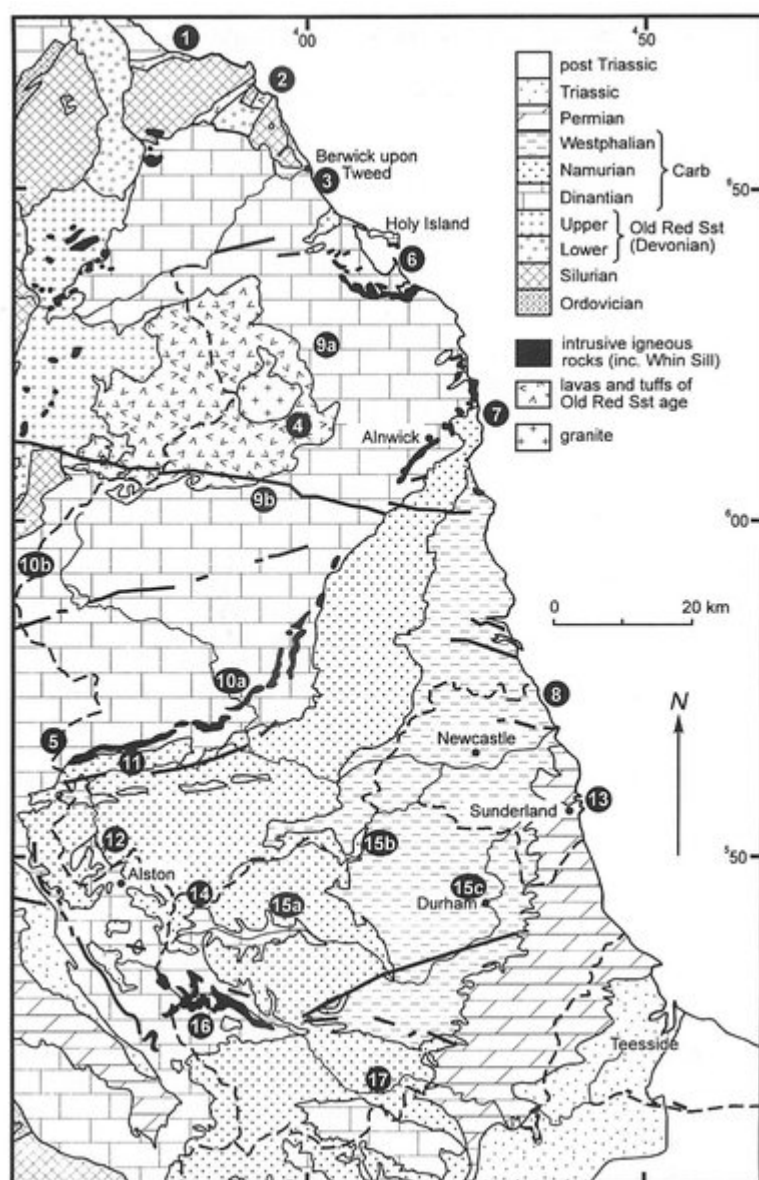
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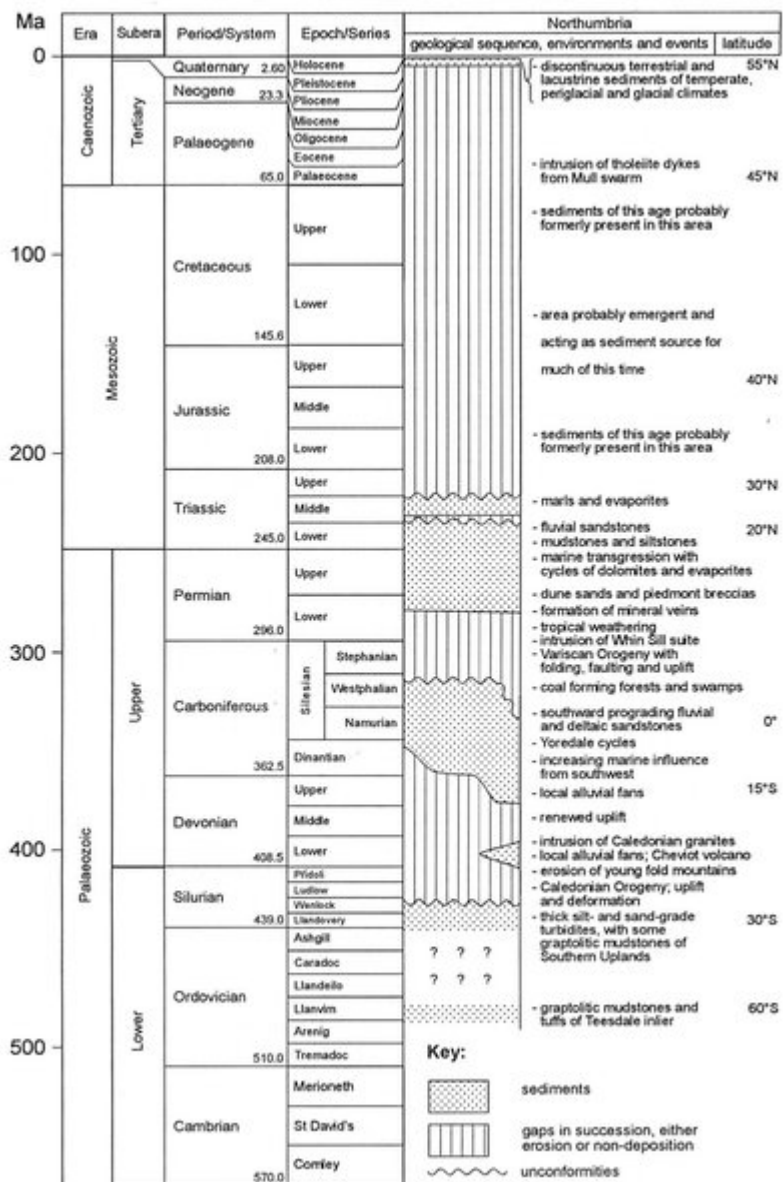
(Figure 18) Location of museums of geological interest in Northumbria.

(Front cover)

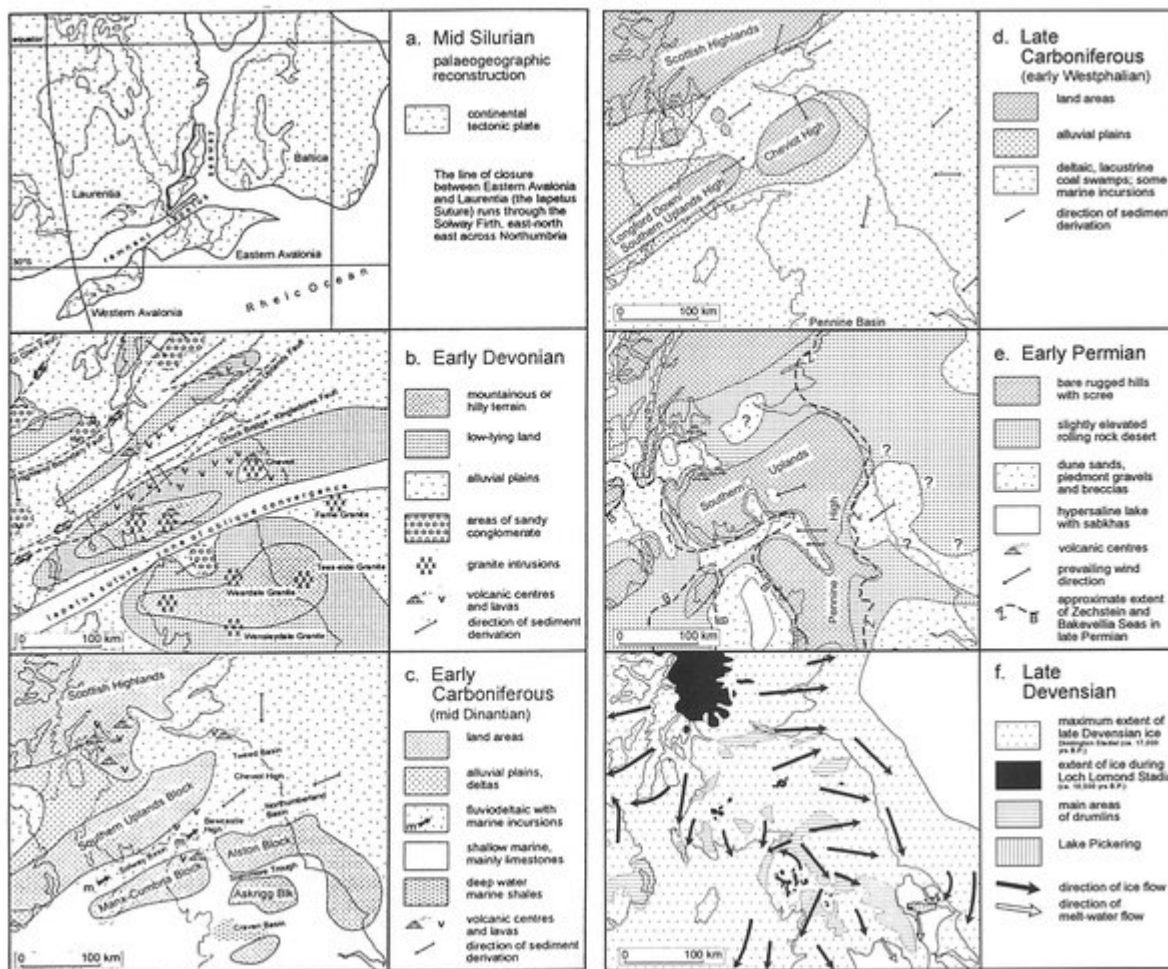
(Rear cover)



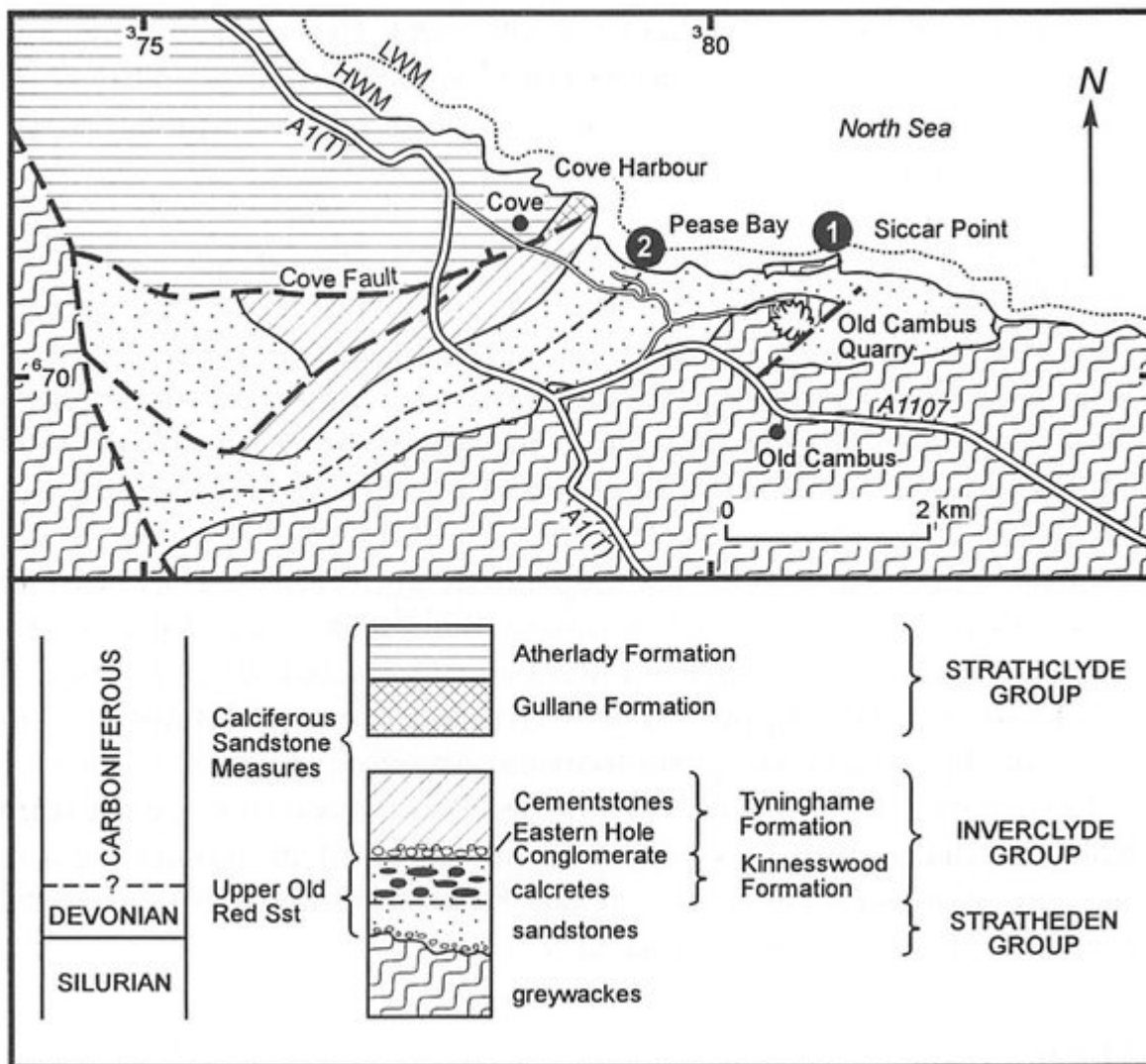
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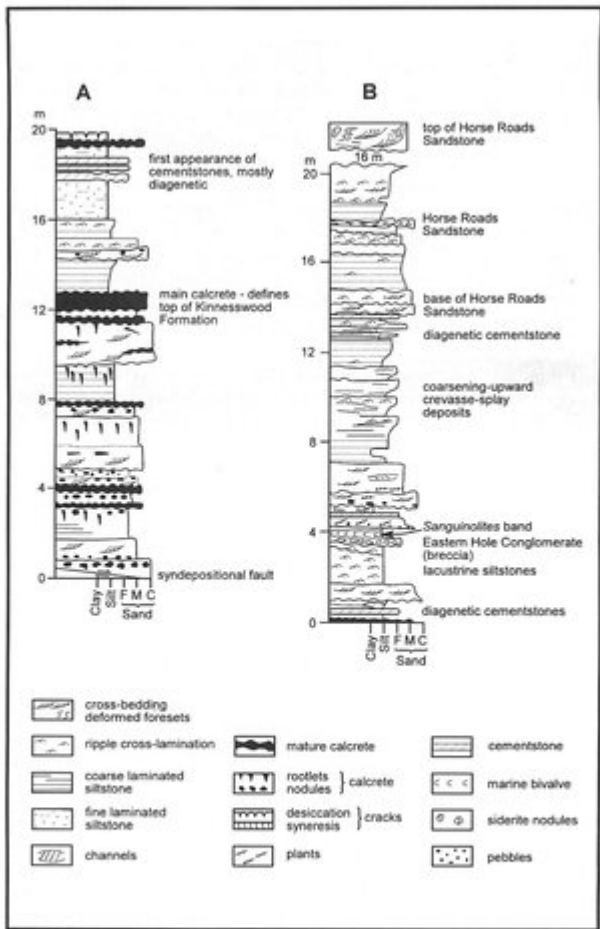
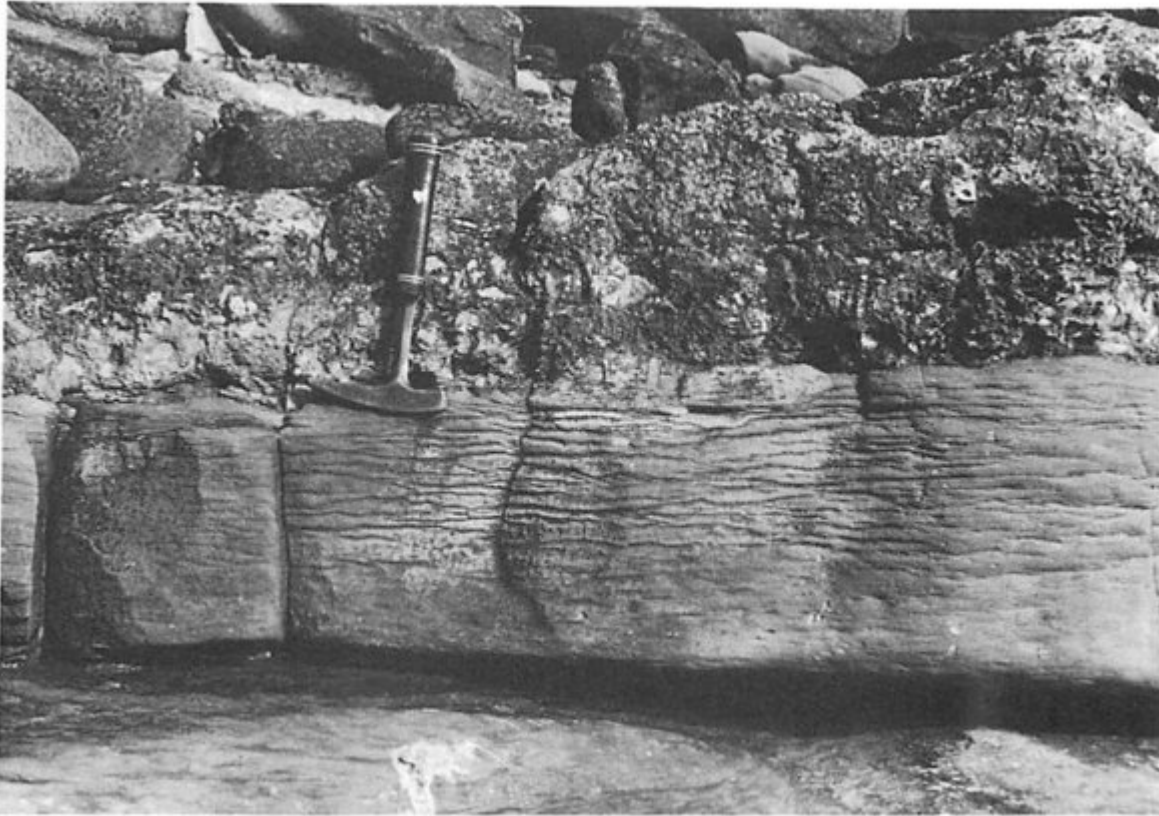
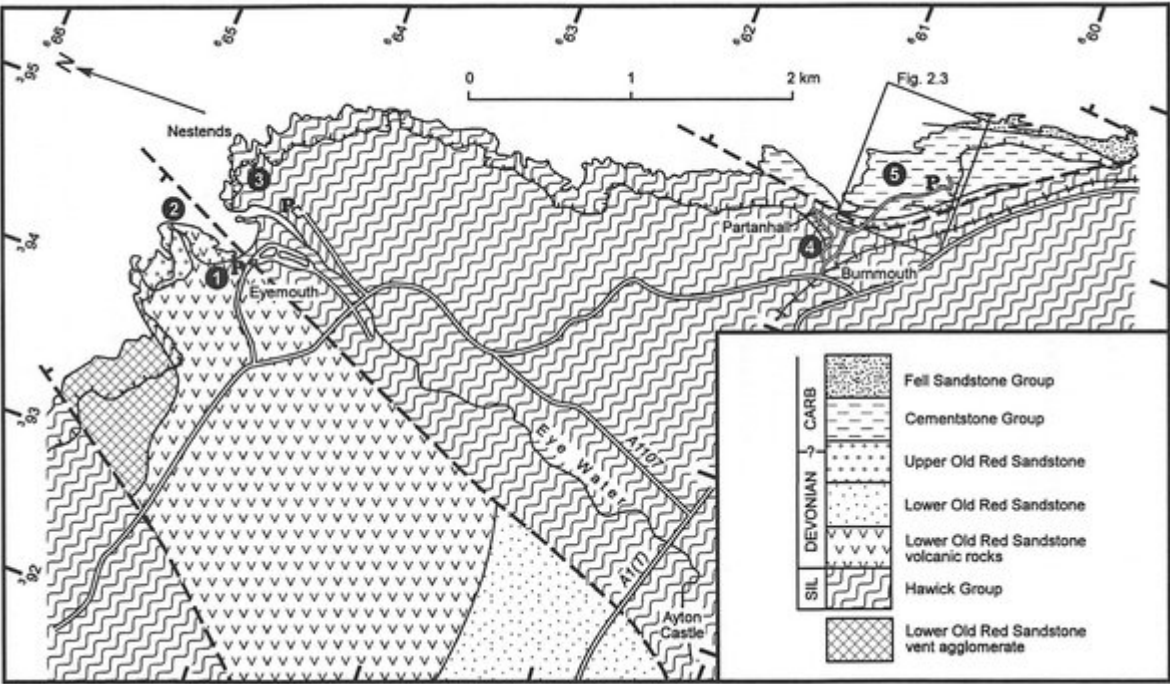


Figure 1.3 Measured sections of the (A) Upper Old Red Sandstone and (B) Lower Carboniferous Cementstones at the northern end of Pease Bay.

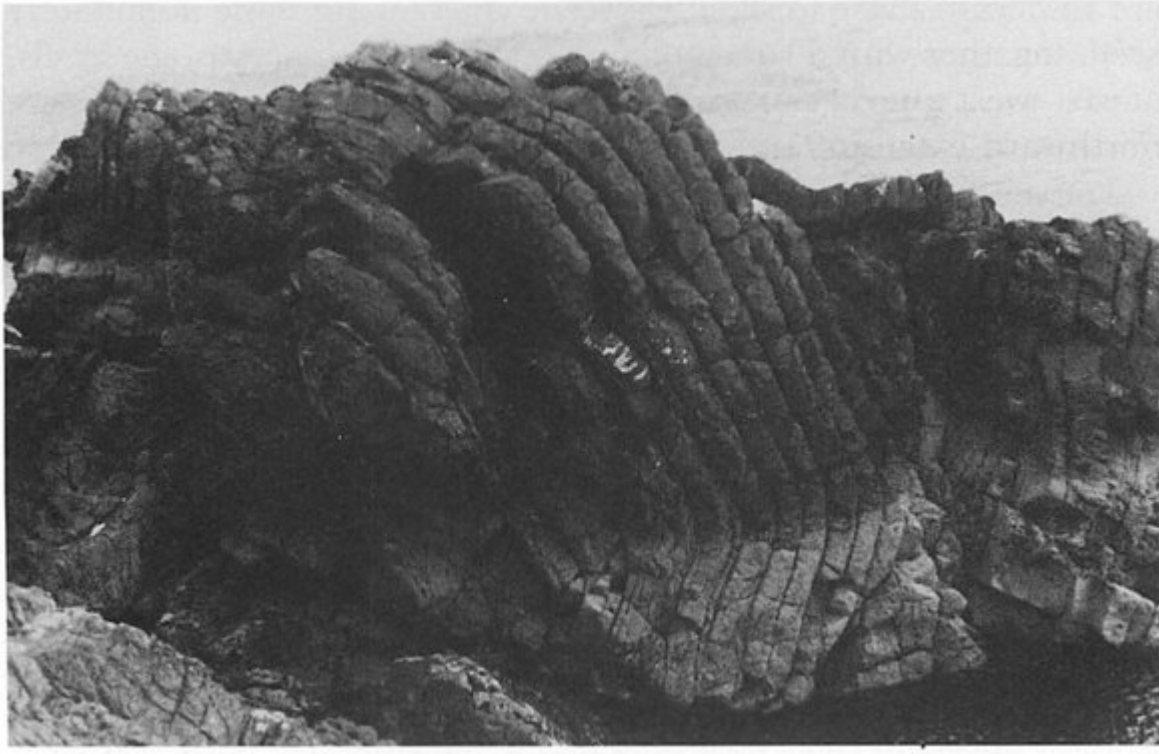
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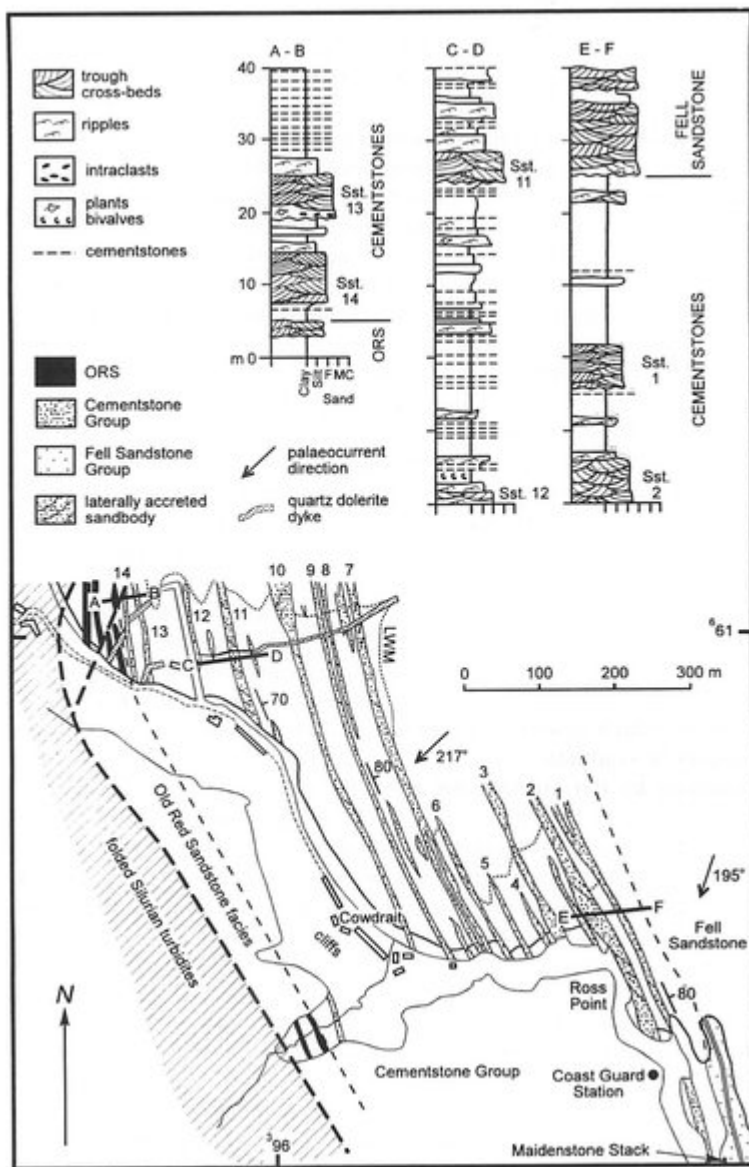
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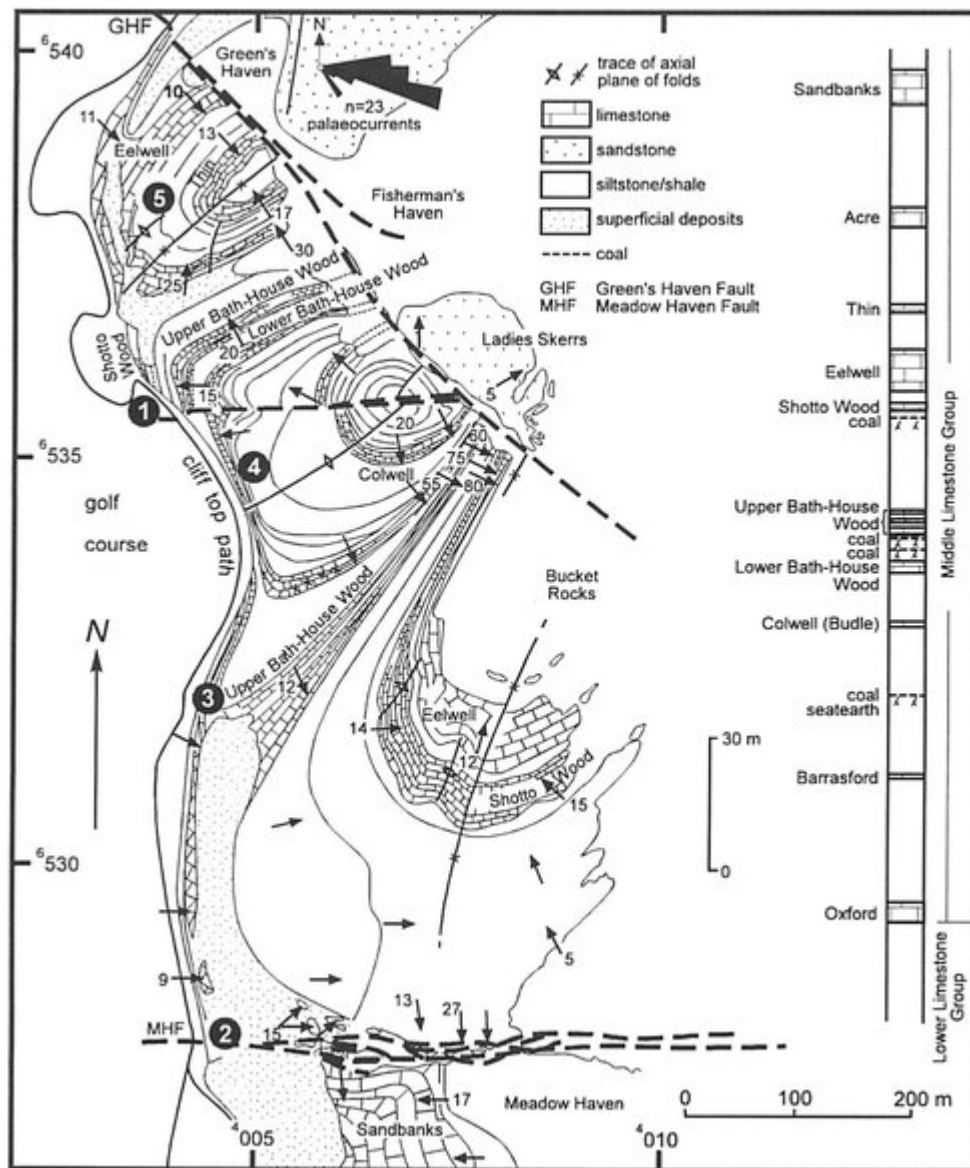
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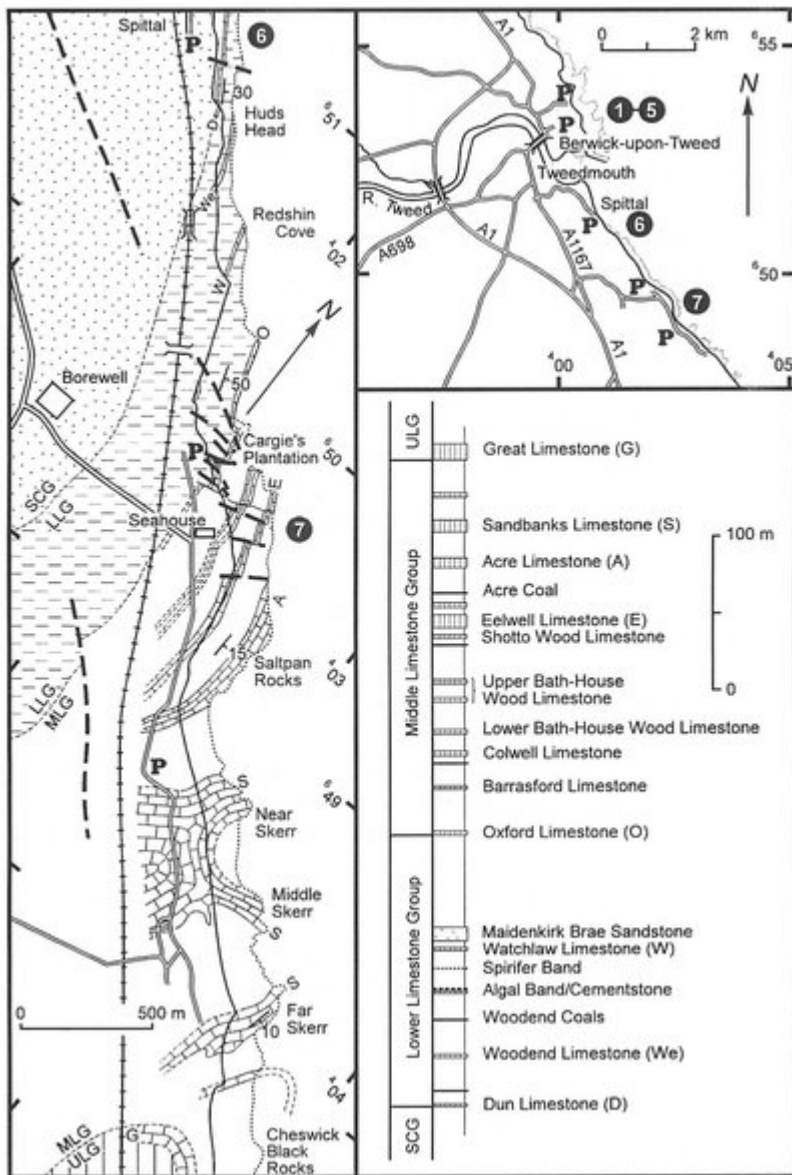
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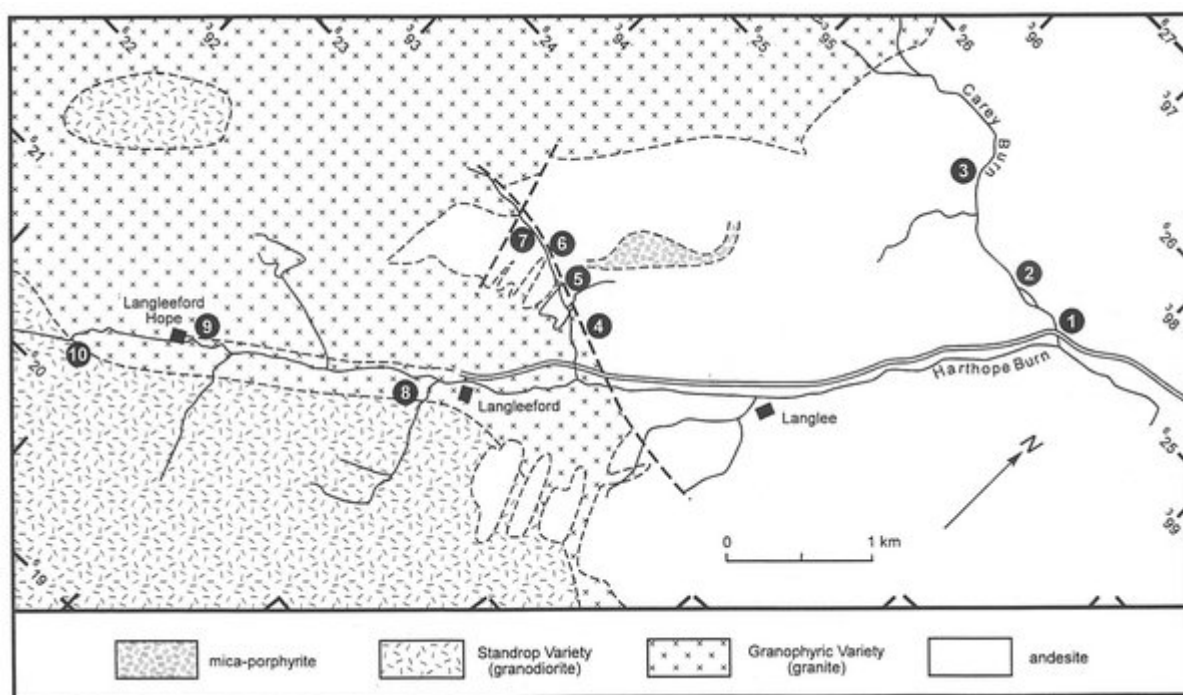
(Figure 3.2) Ladies Skerries dome (Locality 4) from the clifftop at Berwick (Locality 1). Photo: C. T. Scrutton.



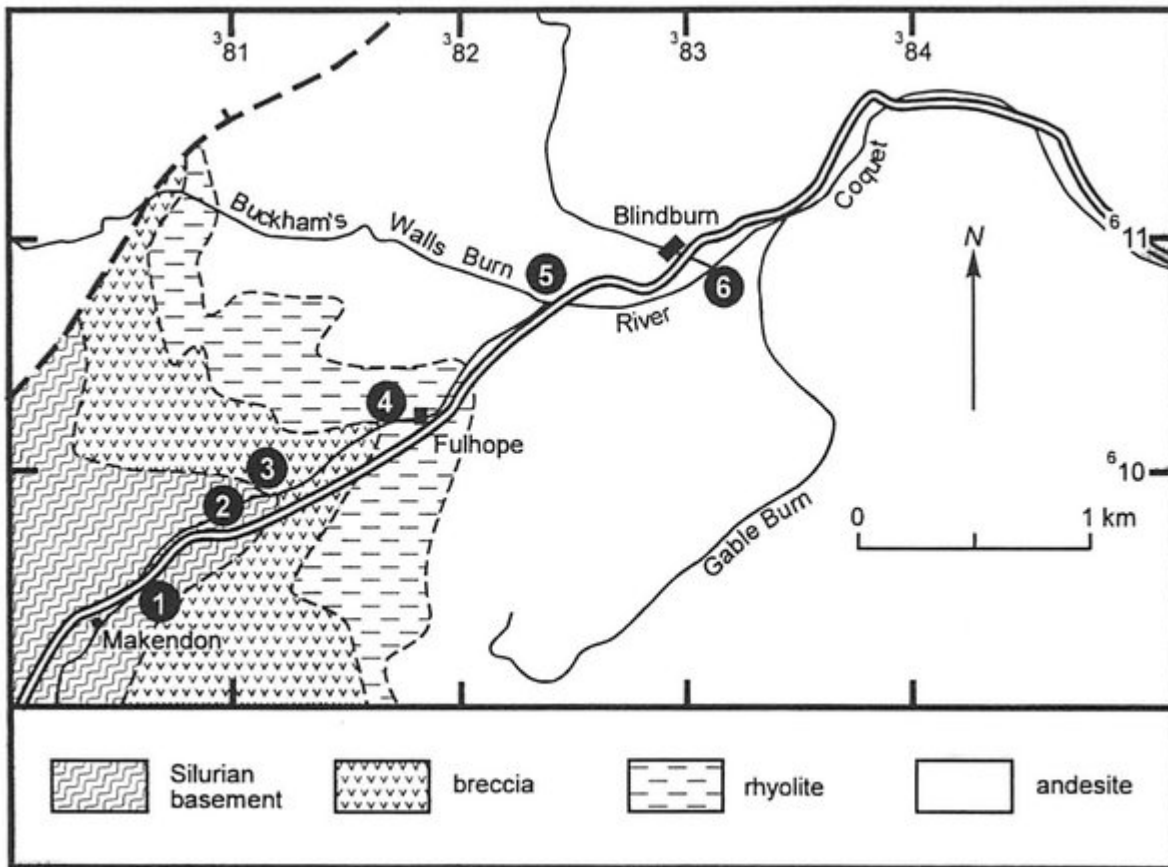
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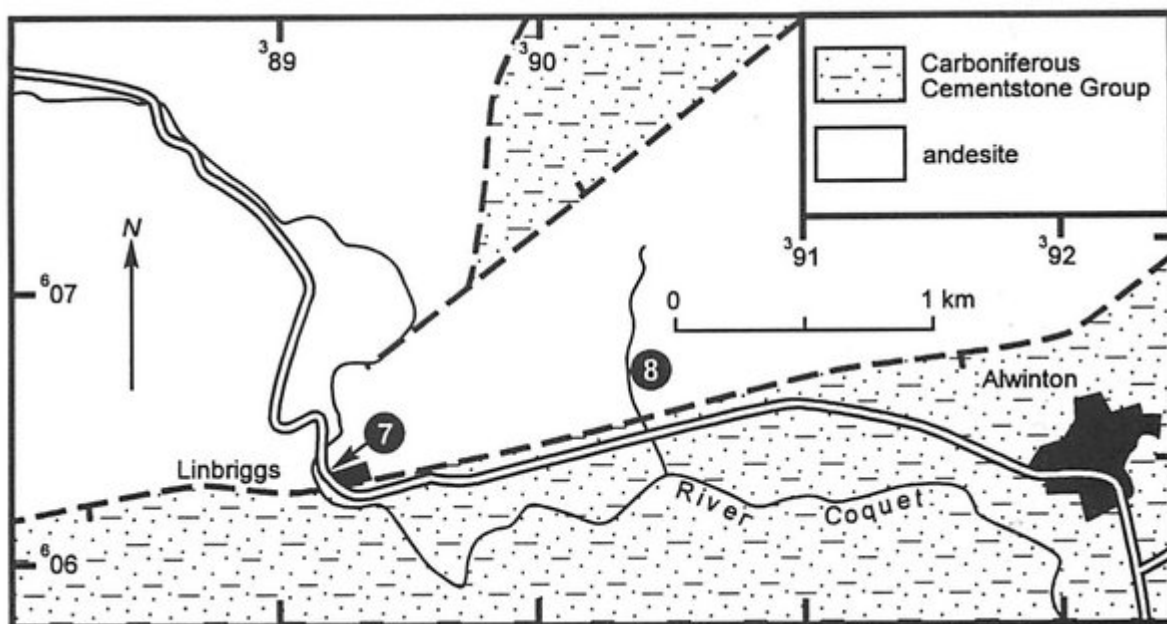
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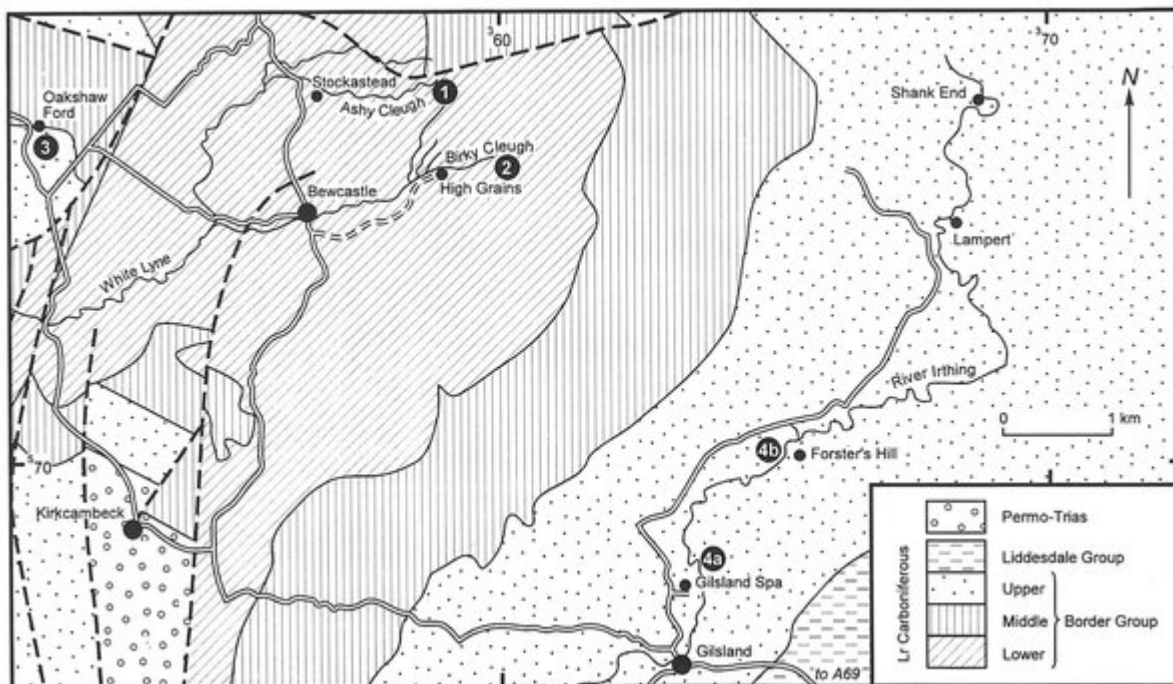
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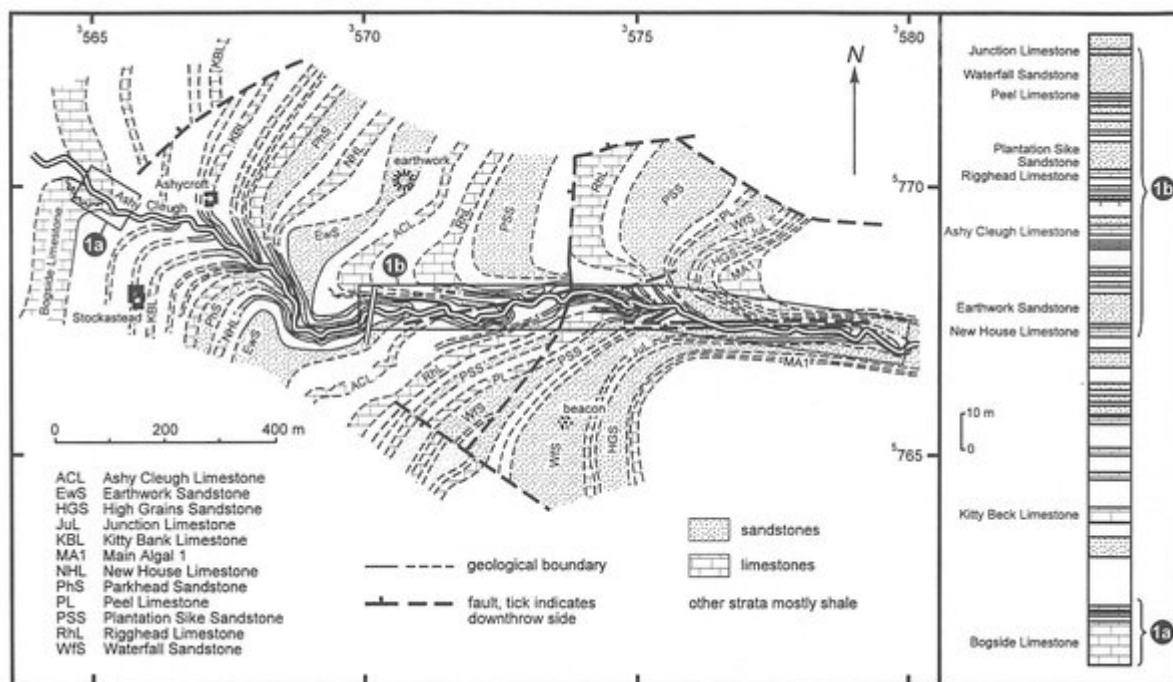
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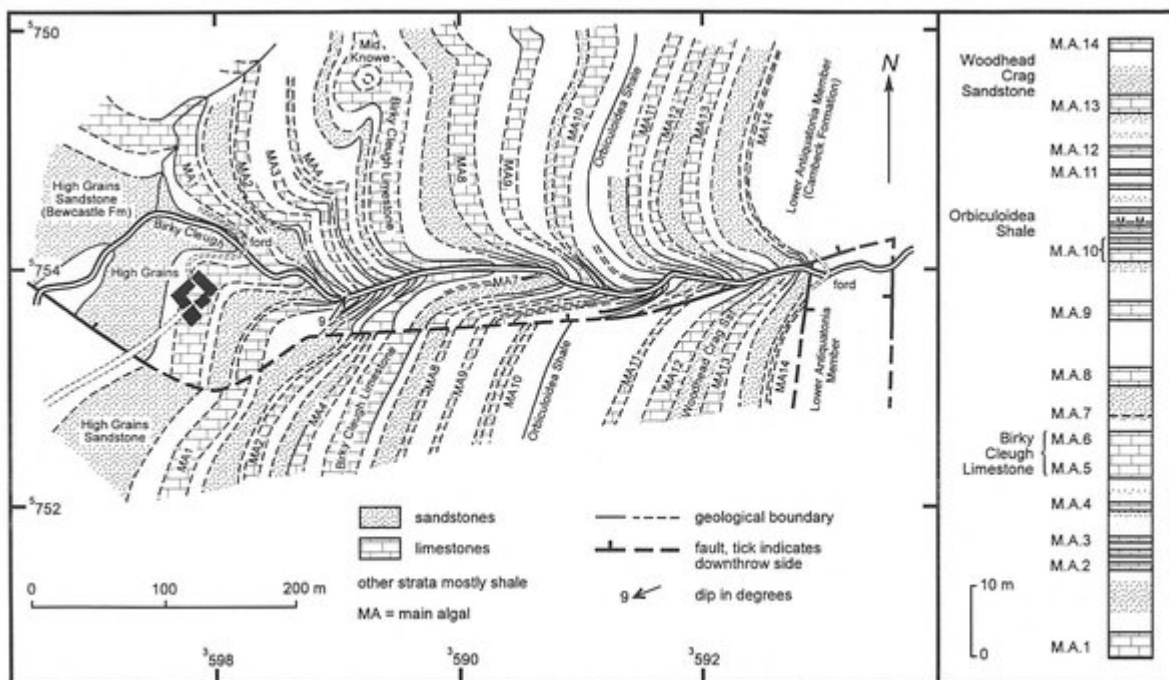
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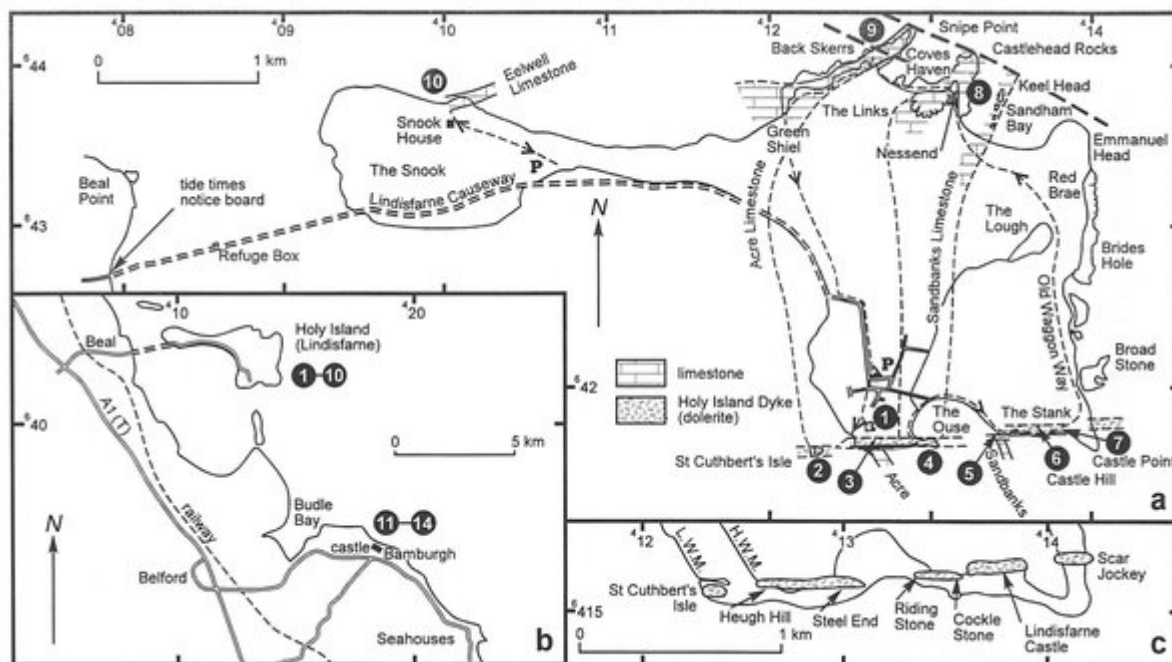
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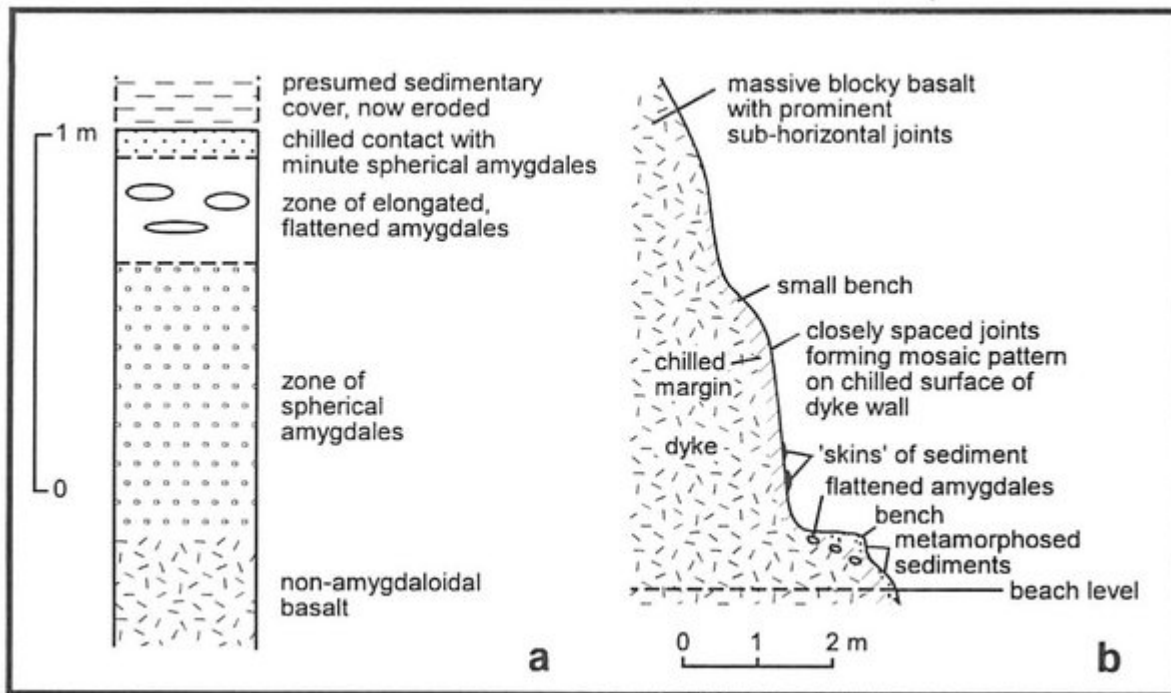
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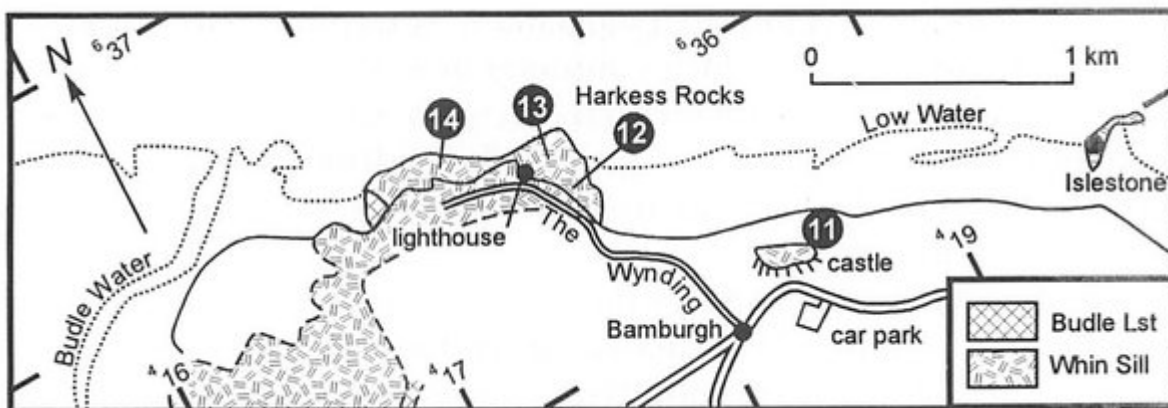
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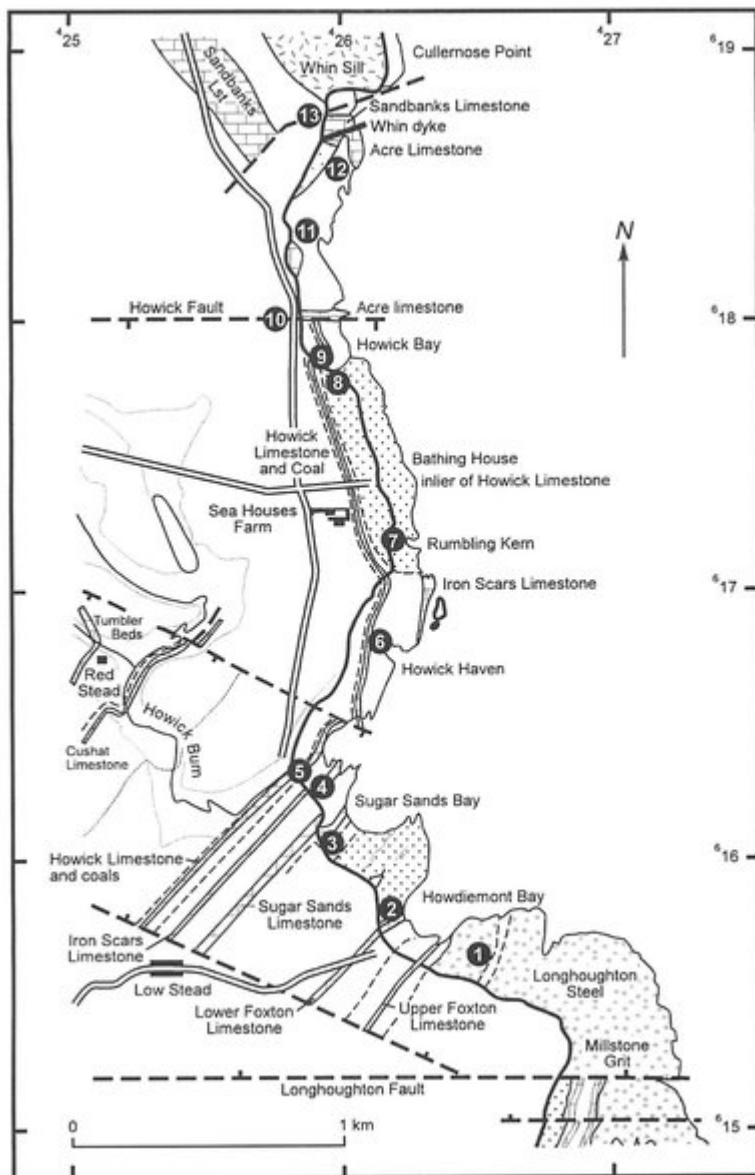
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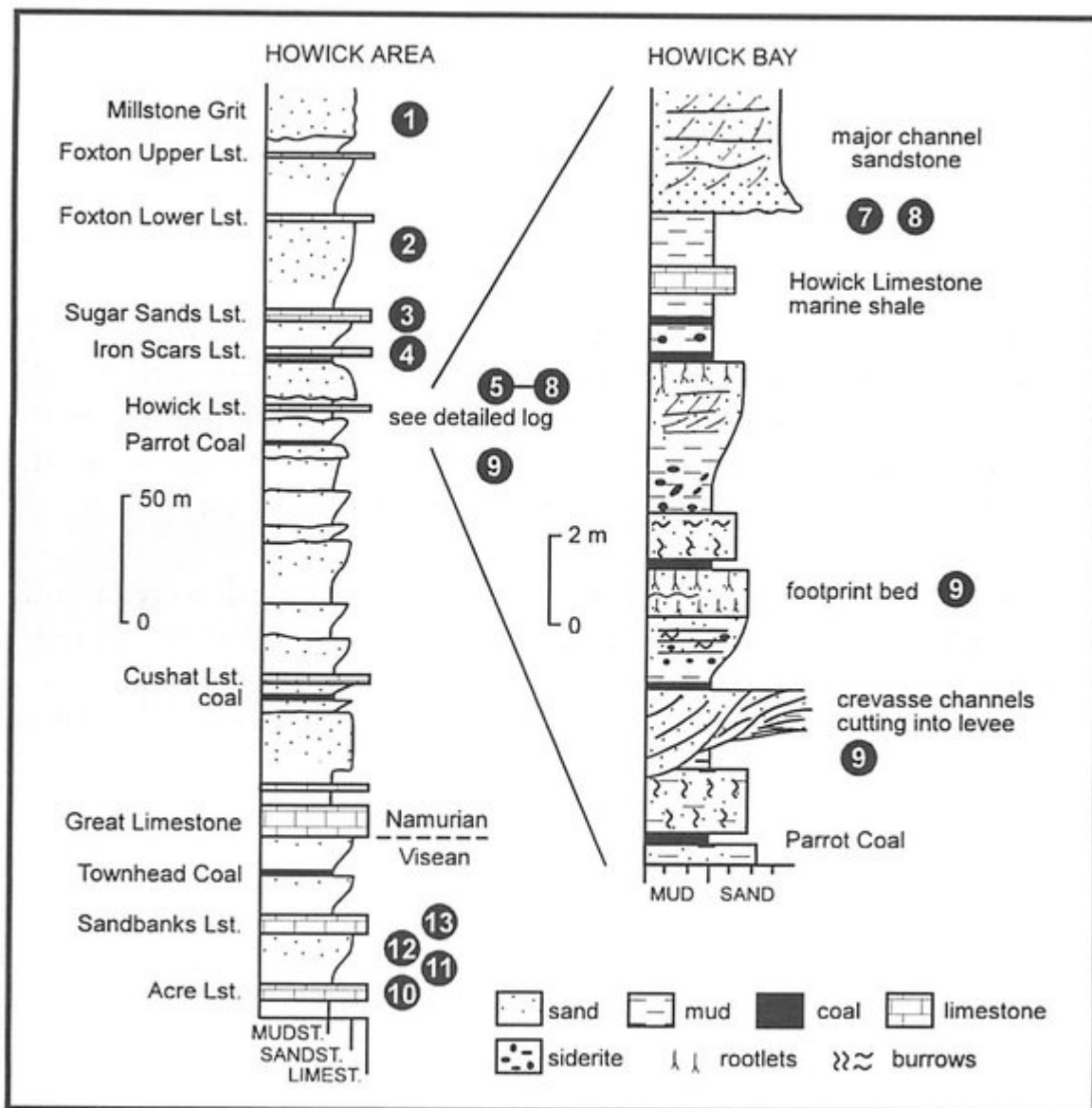
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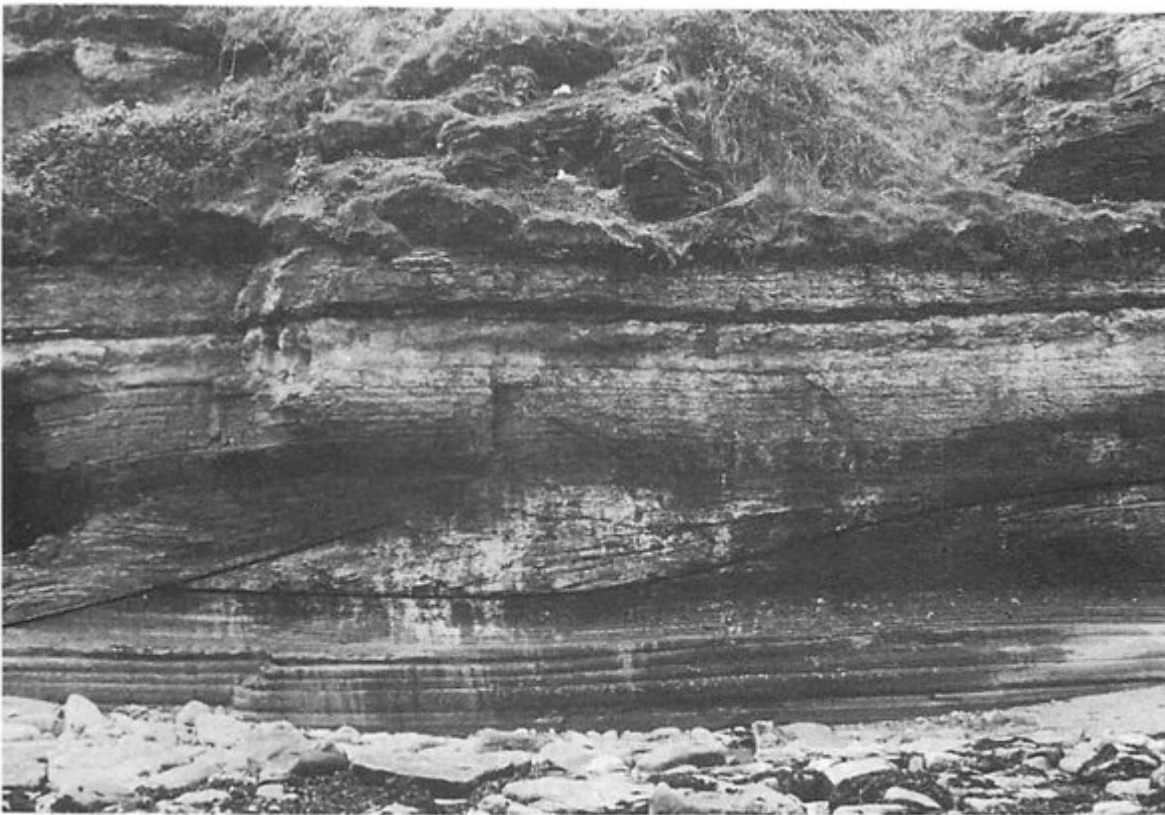
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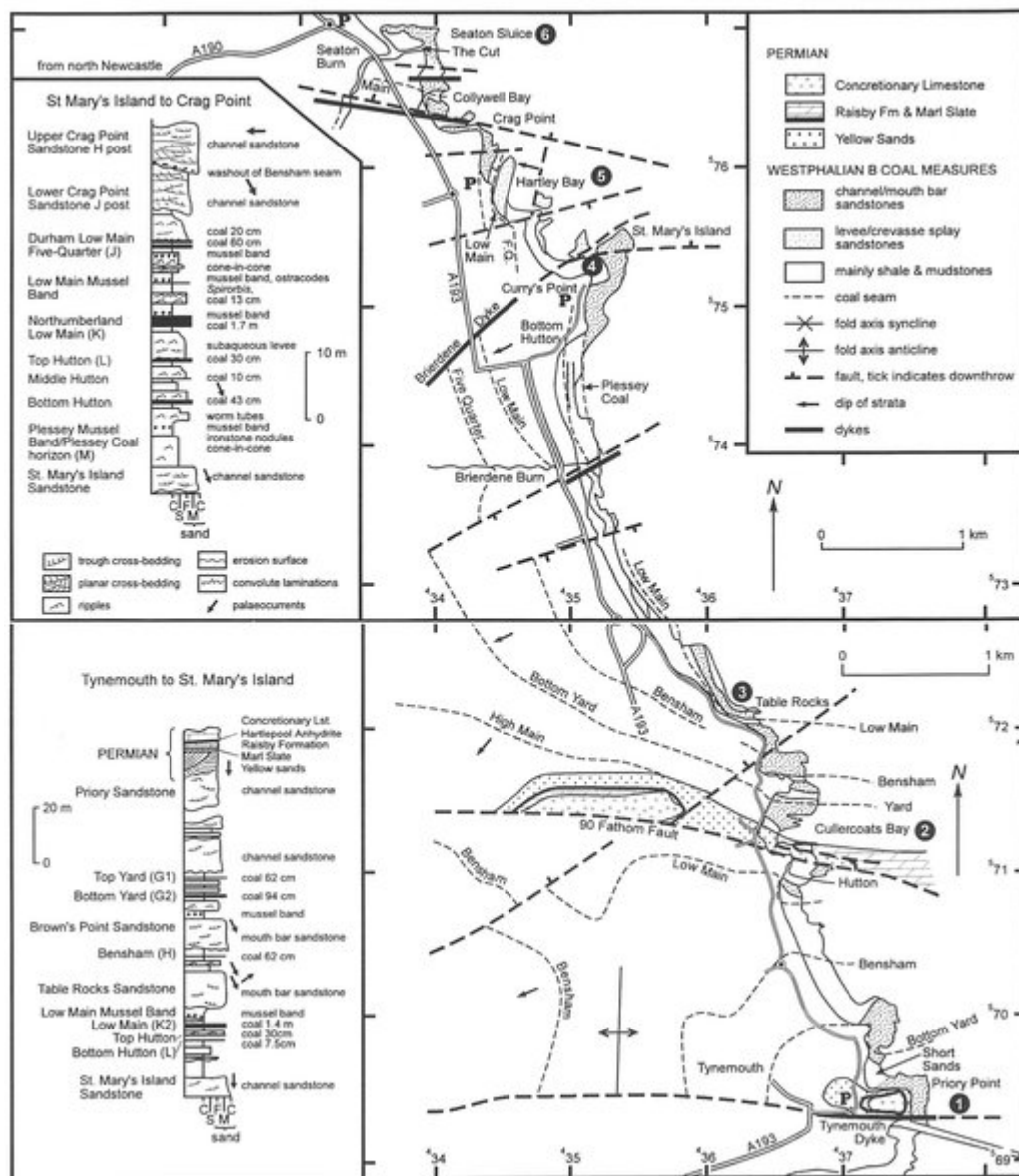
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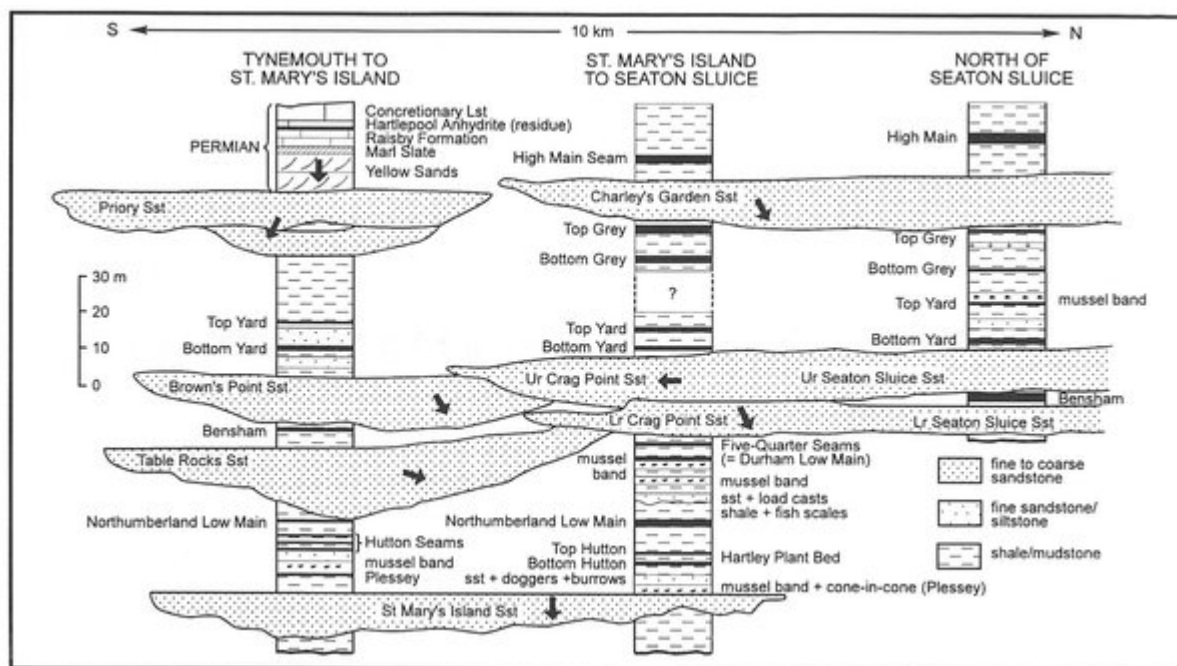
(Figure 7.3) The northern end of the major channel within the Howick Limestone cycle. Locality 8, southern part of Howick Bay. Photo: M. E. Tucker.



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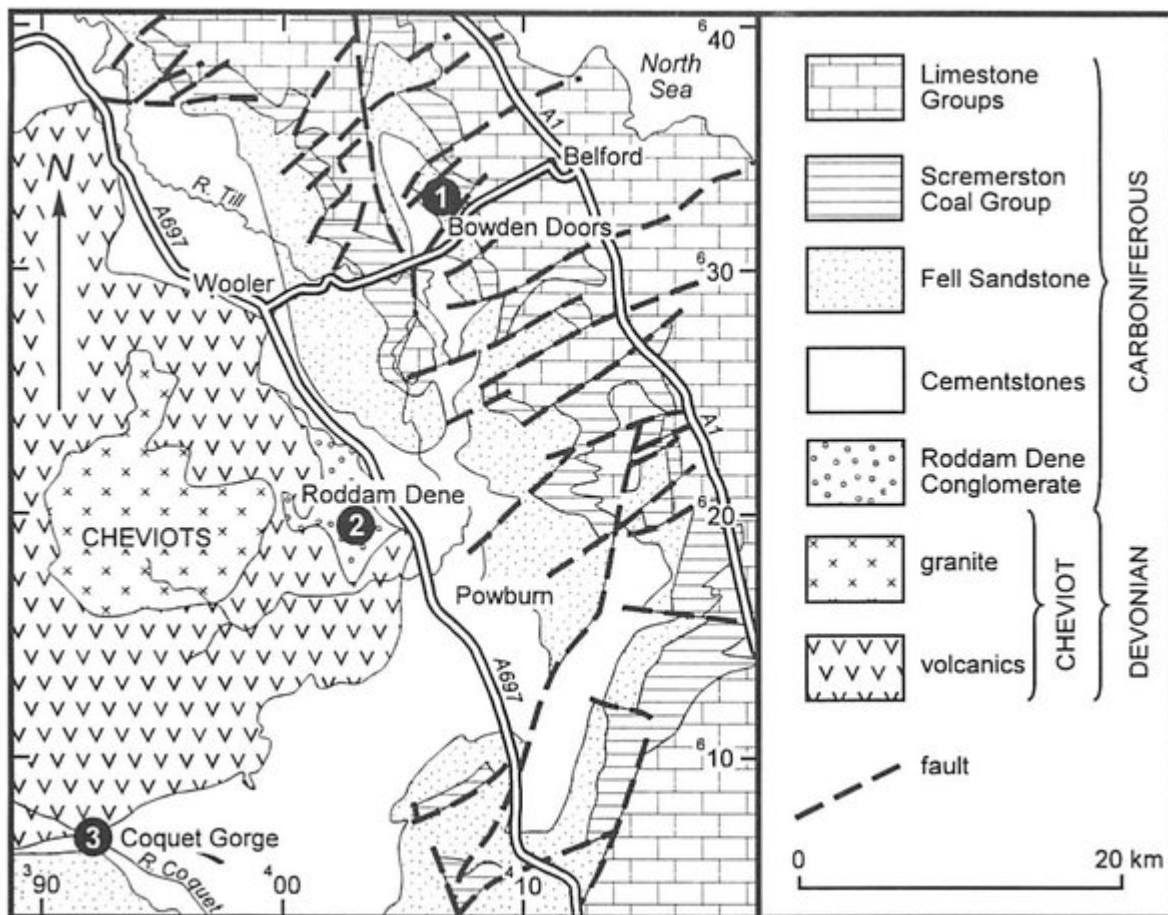
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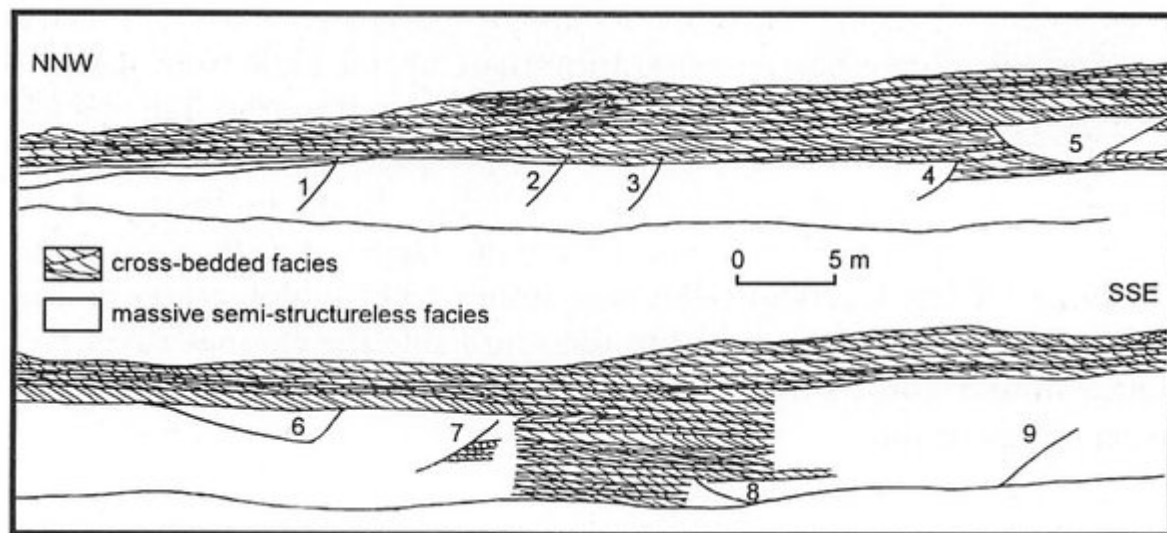
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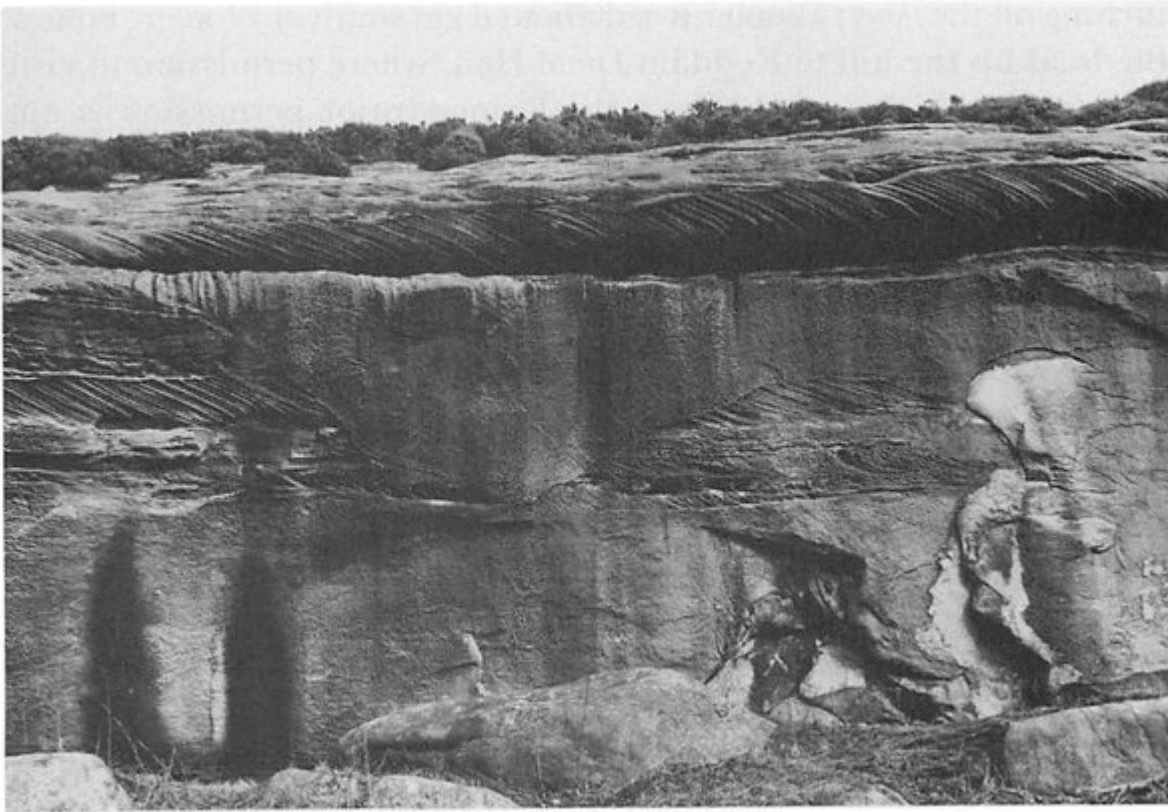
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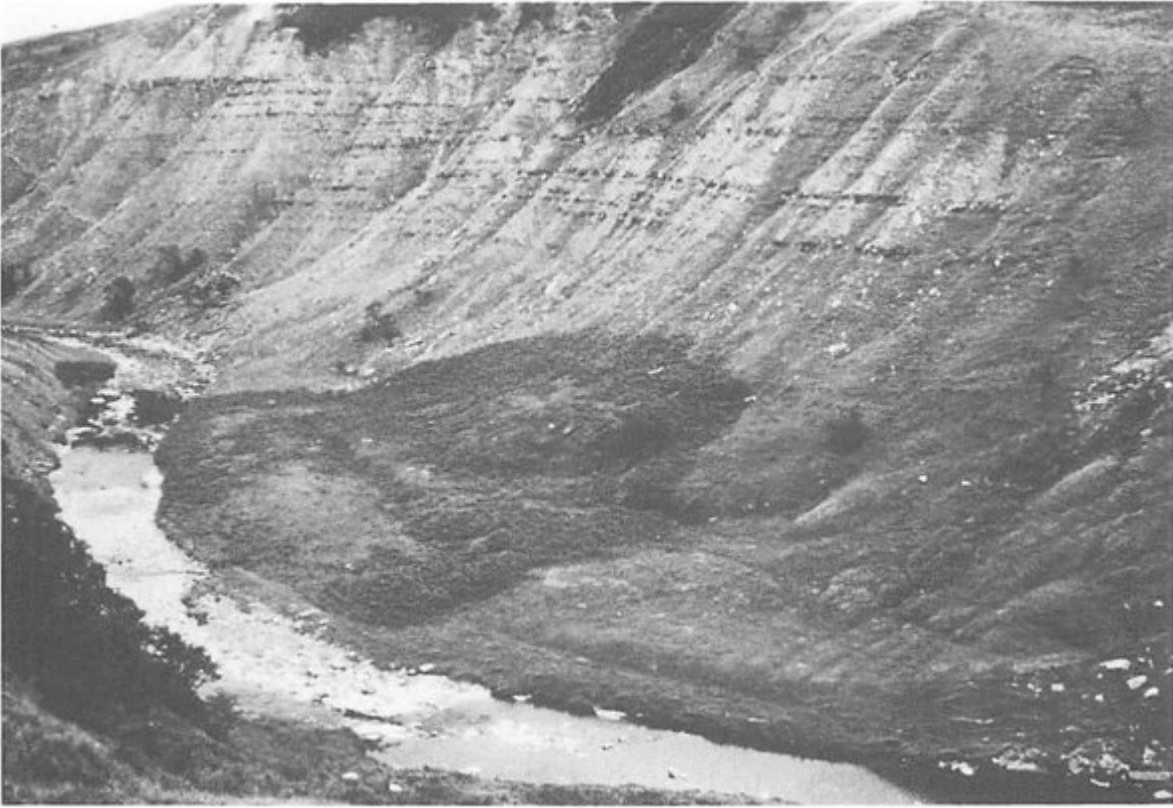
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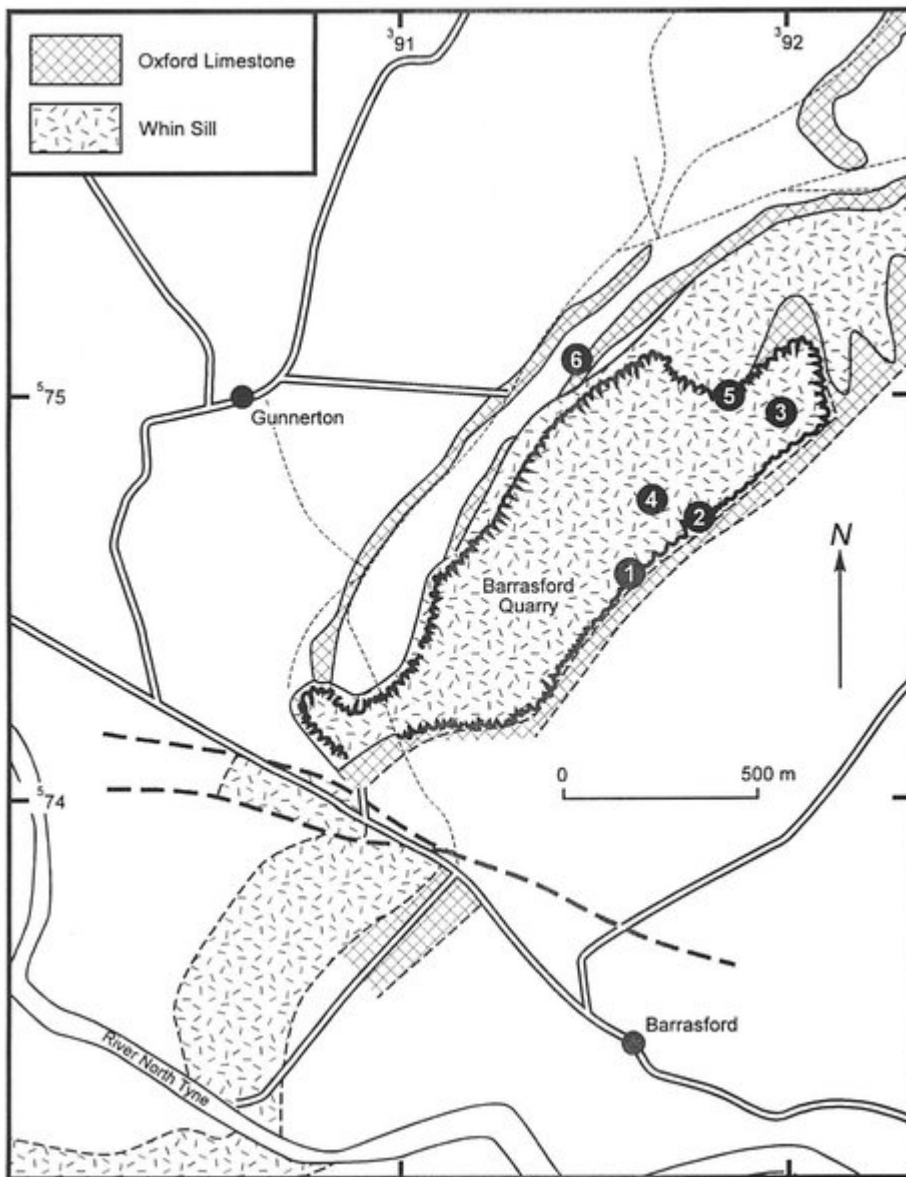
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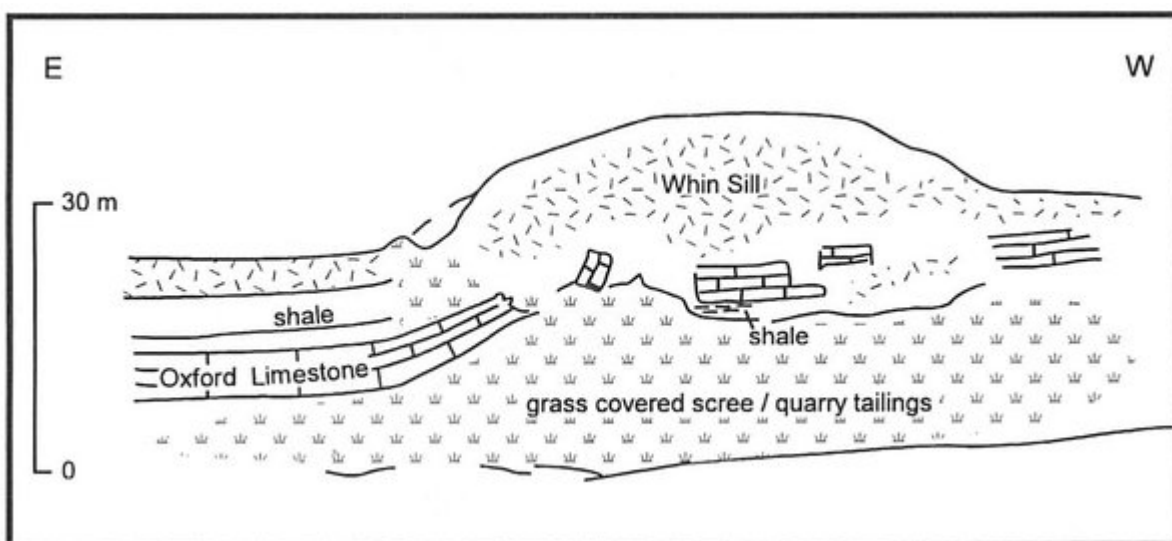
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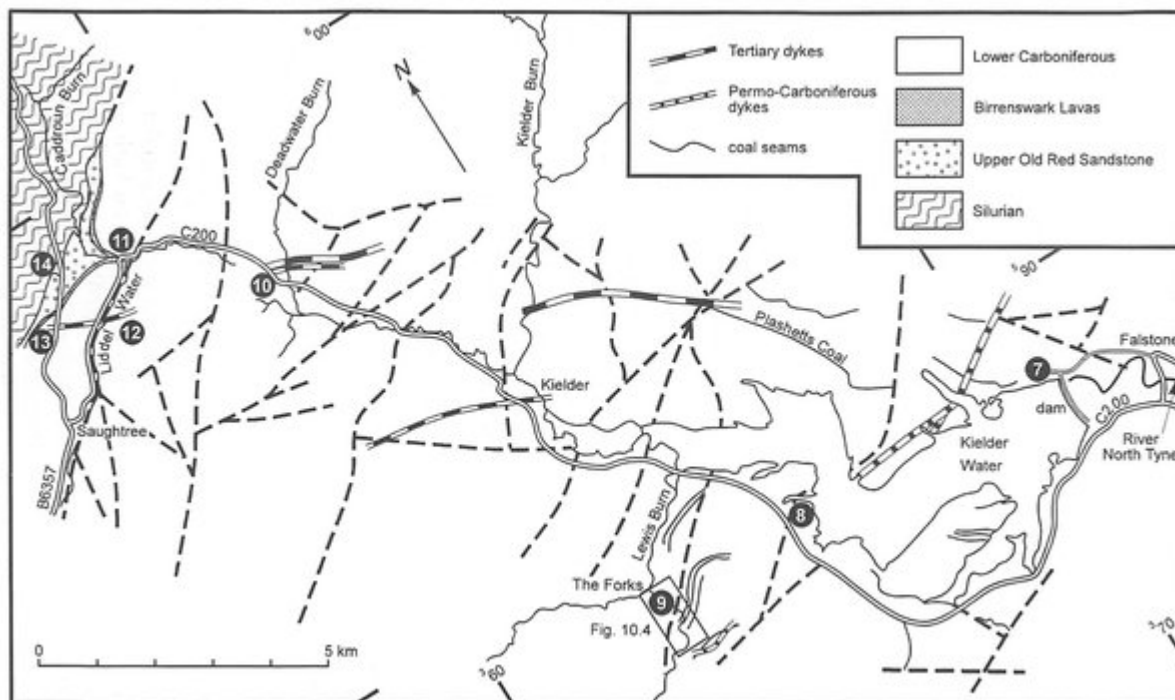
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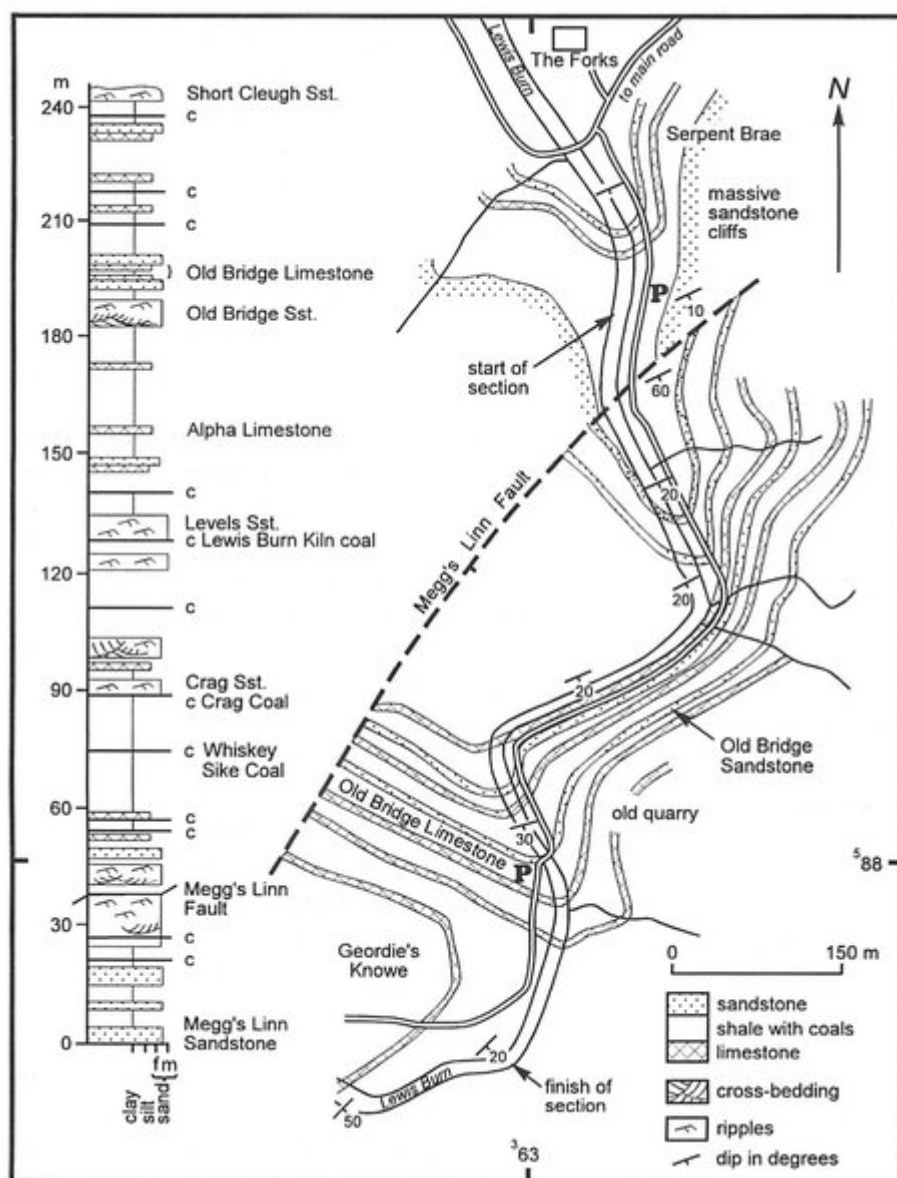
(Figure 10.1) Map of the region around Barrasford Quarry.



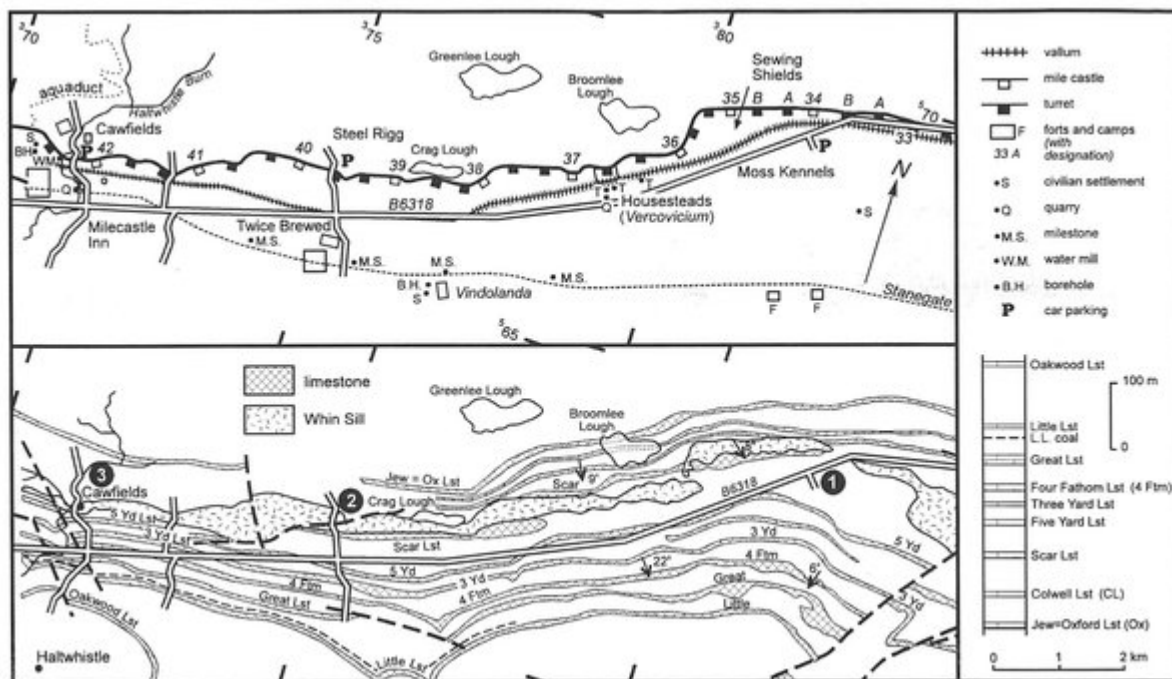
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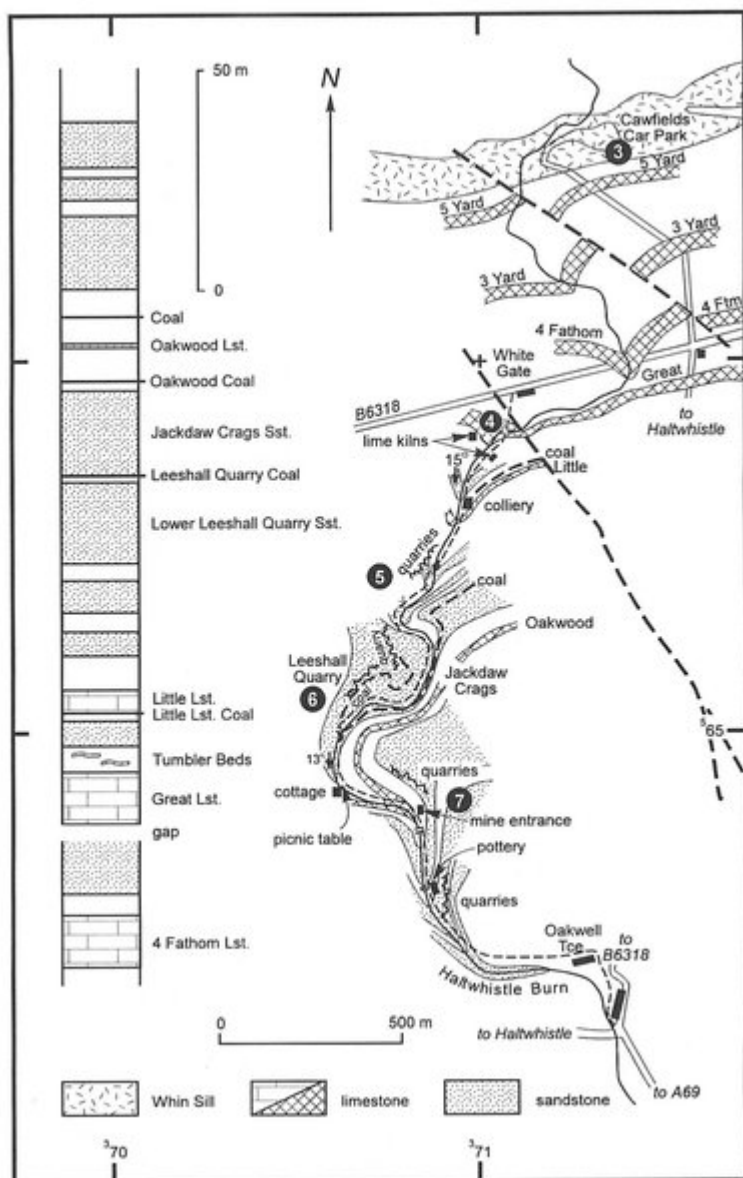
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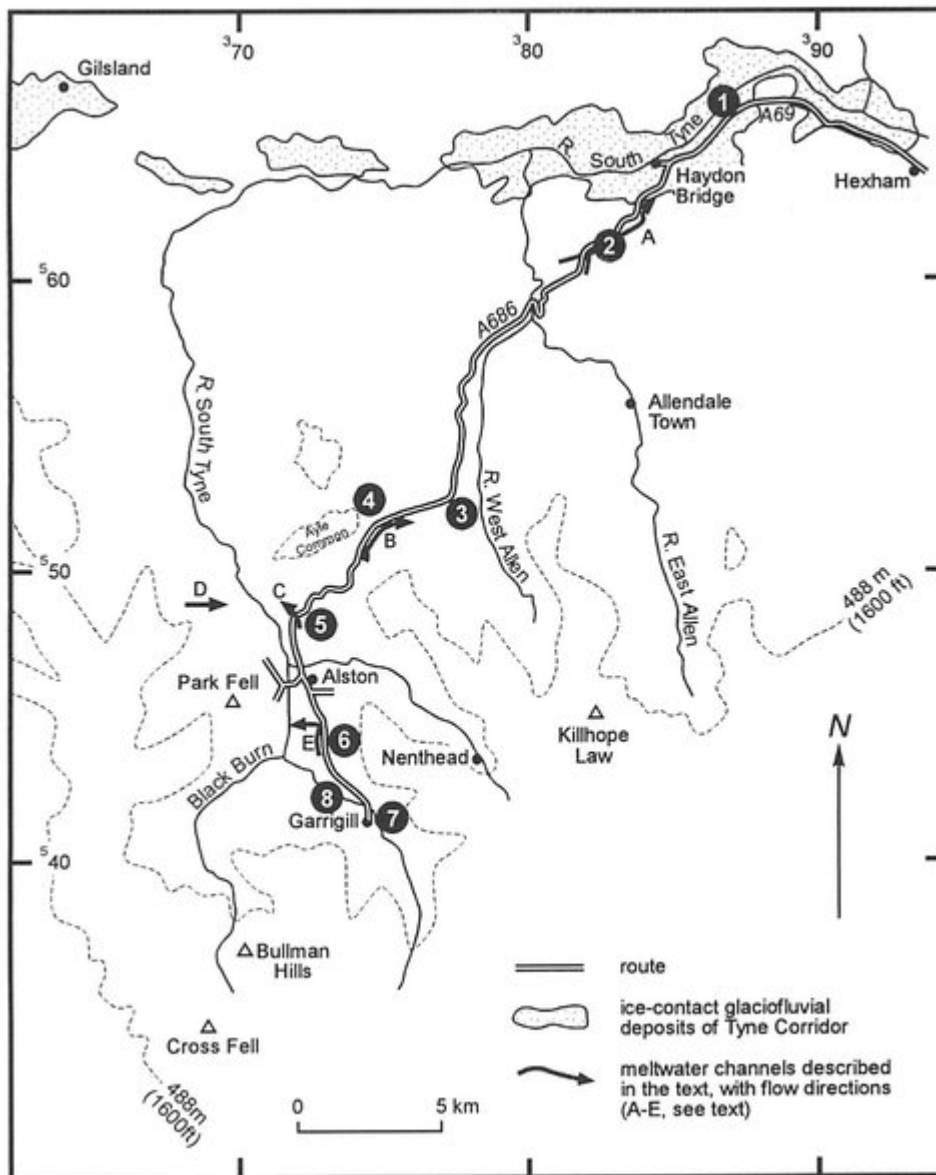
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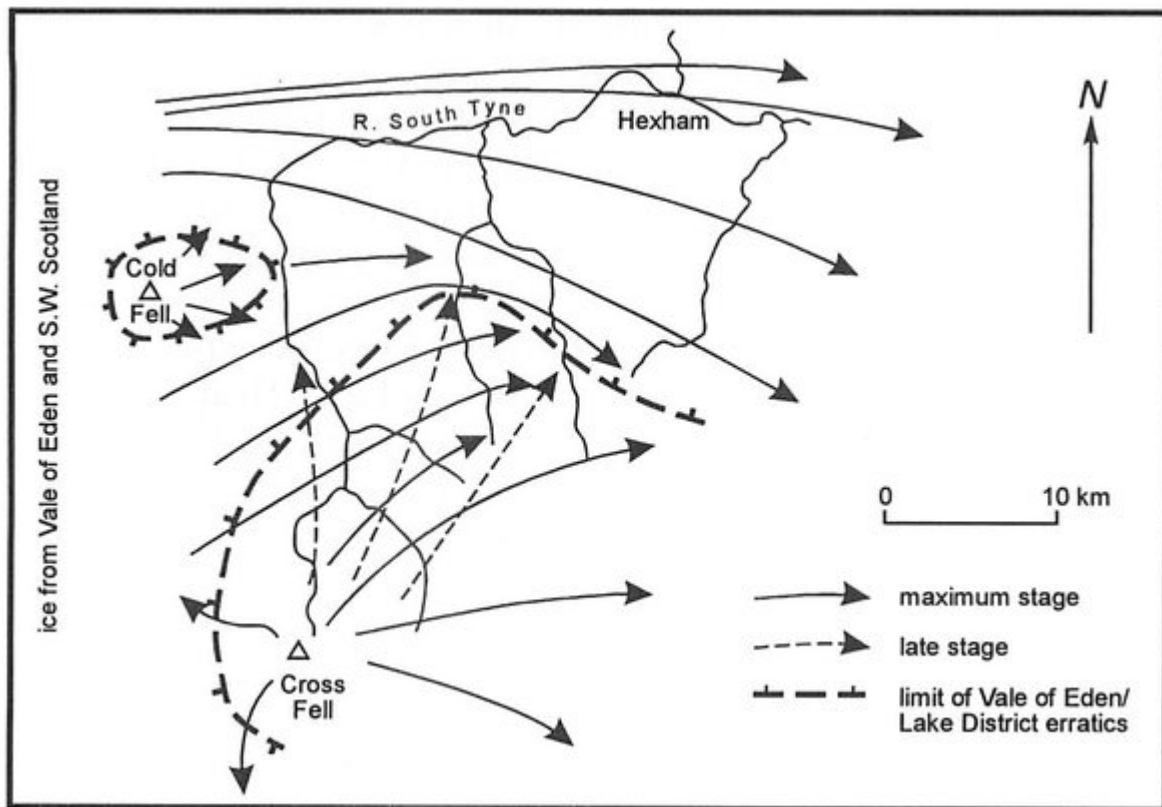
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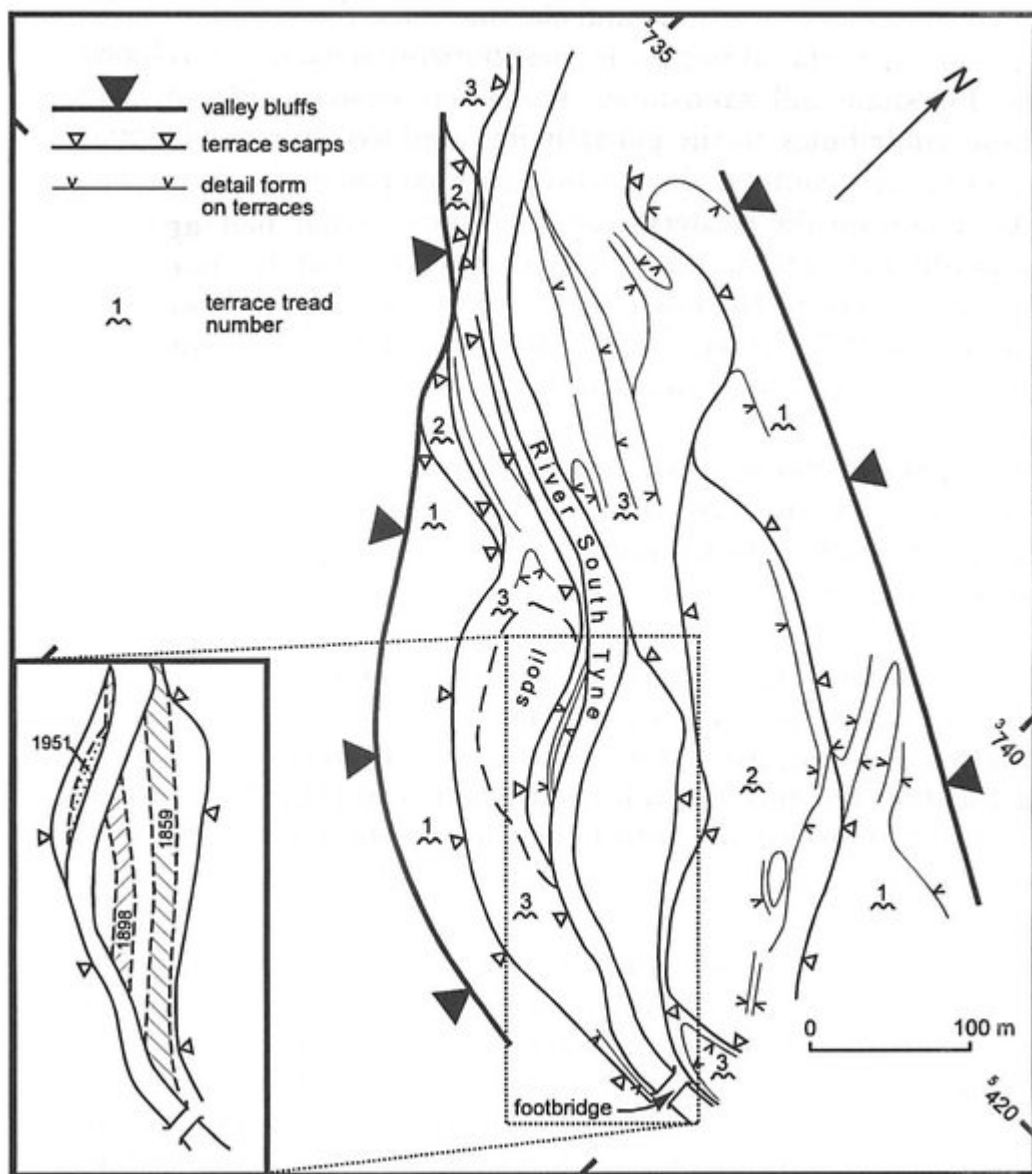
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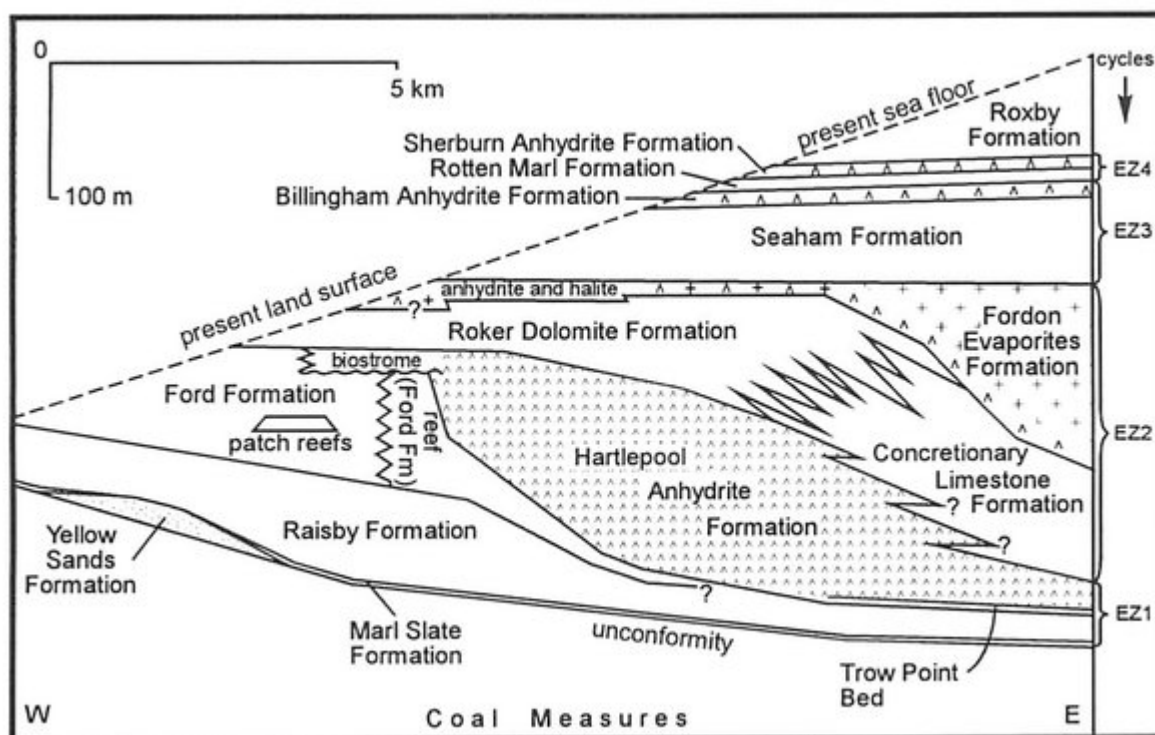
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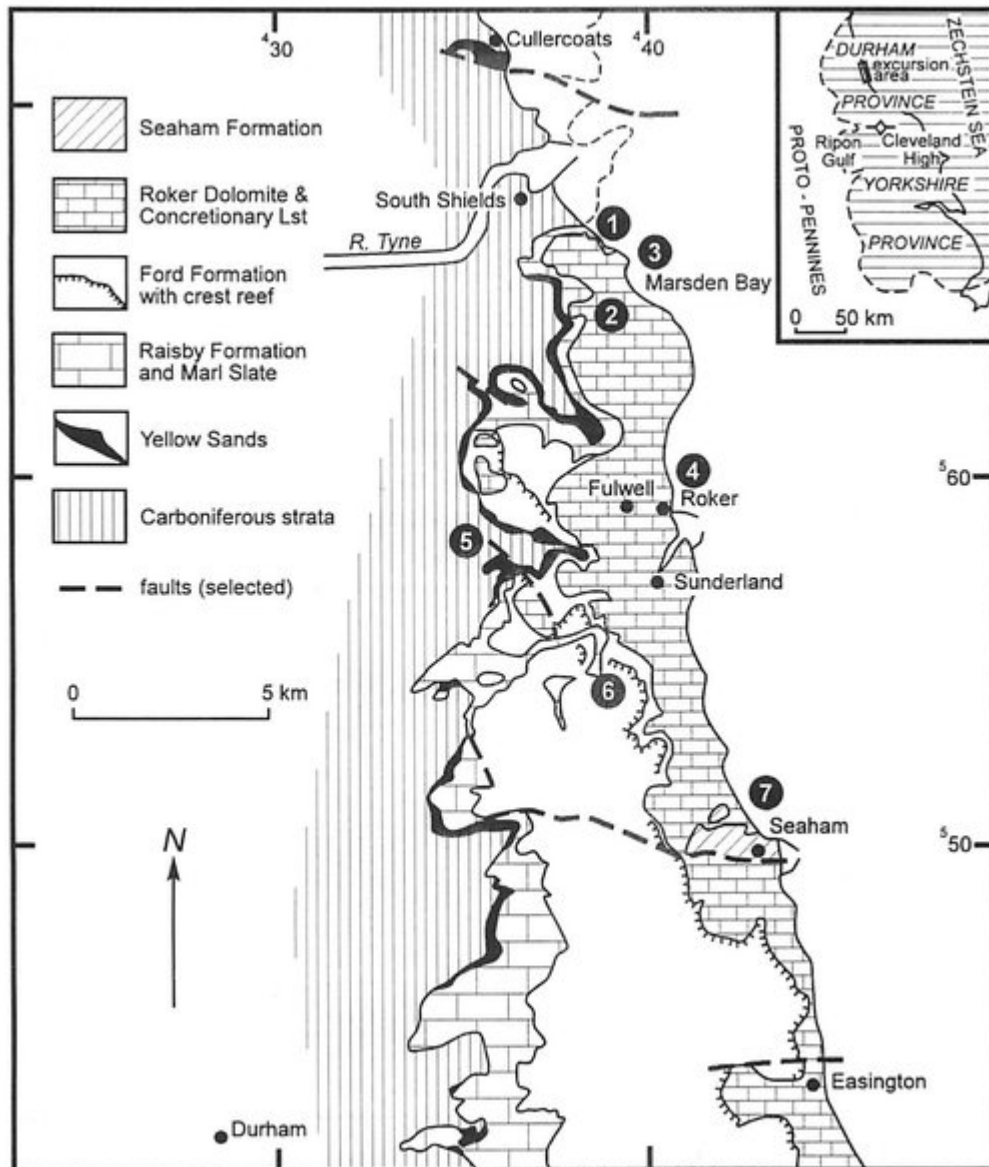
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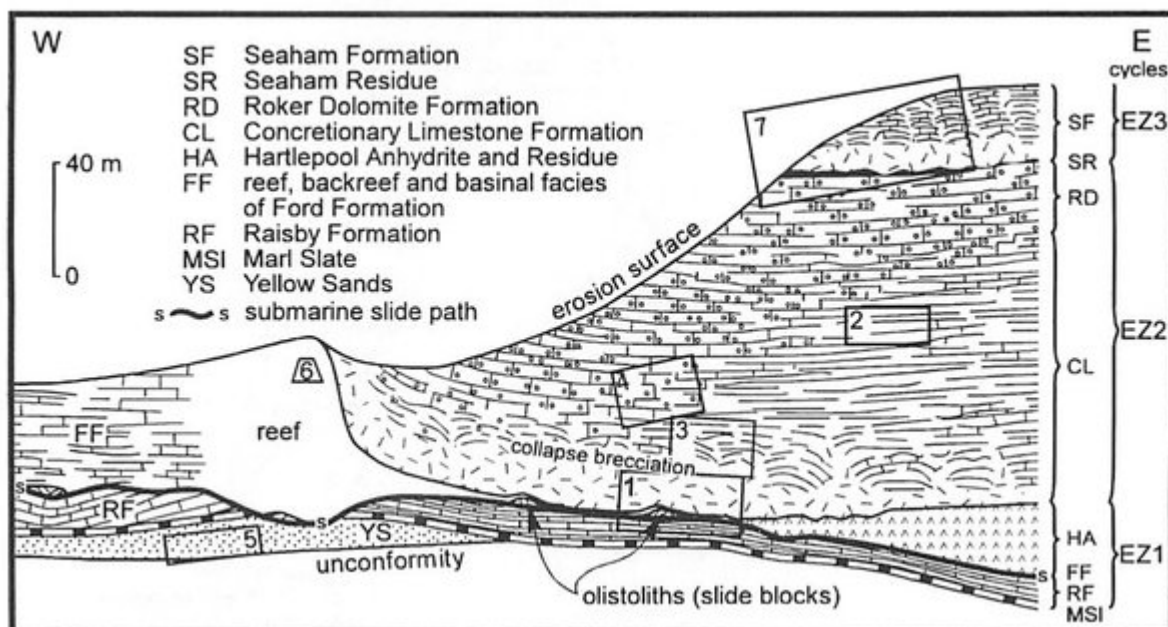
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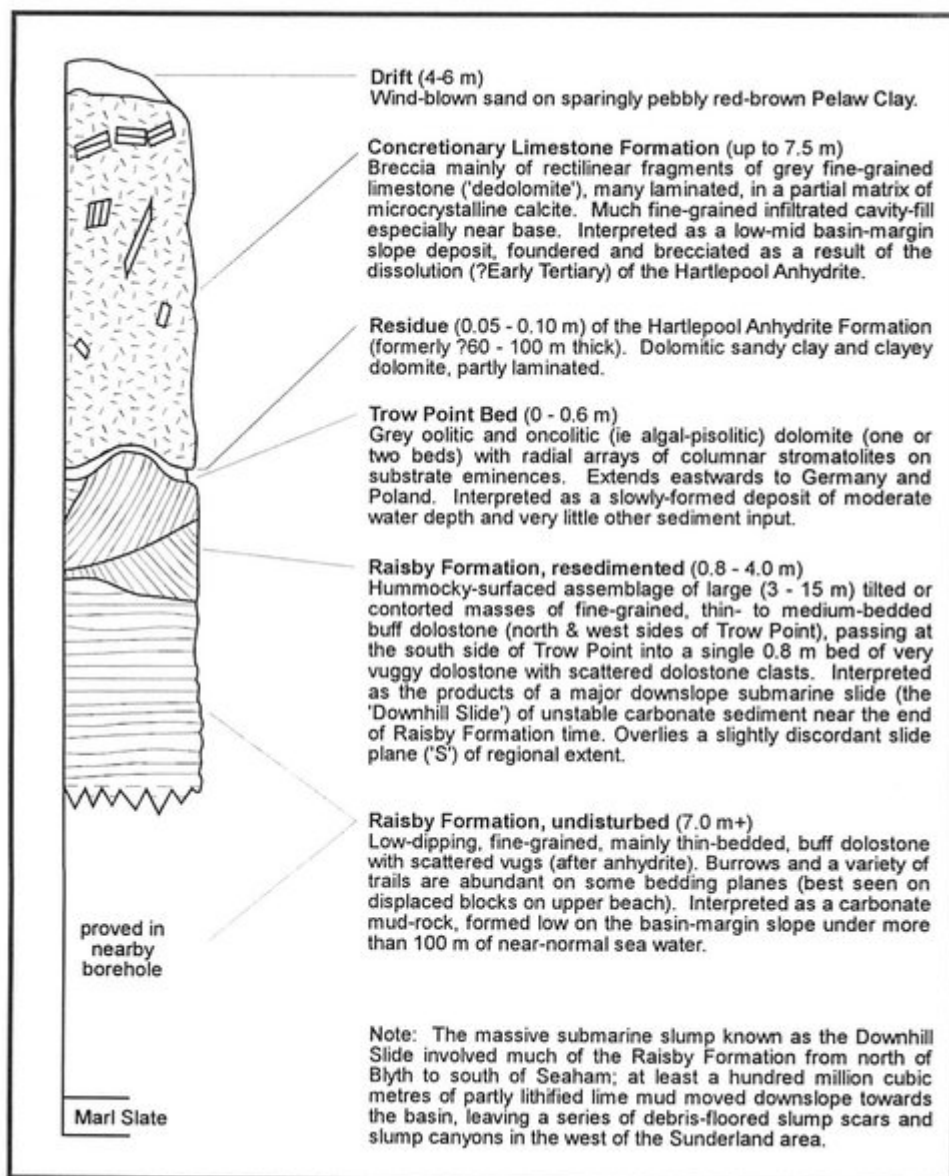
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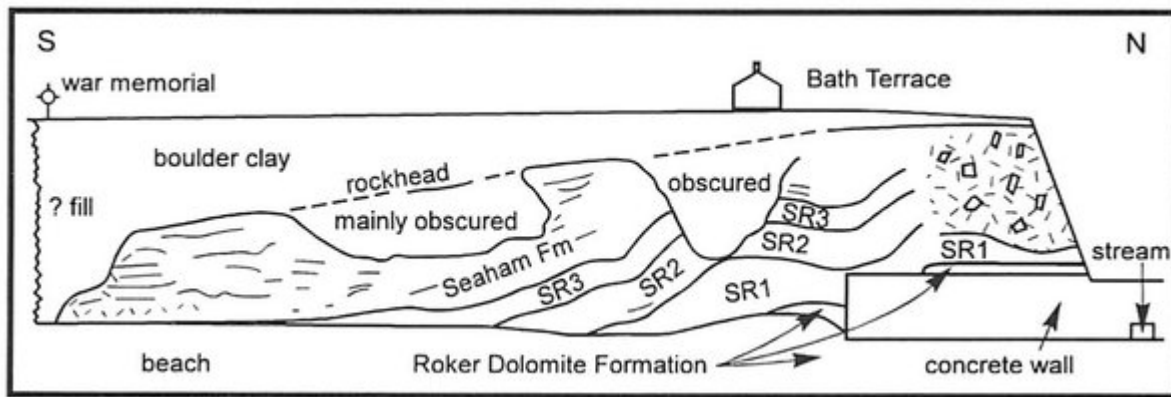
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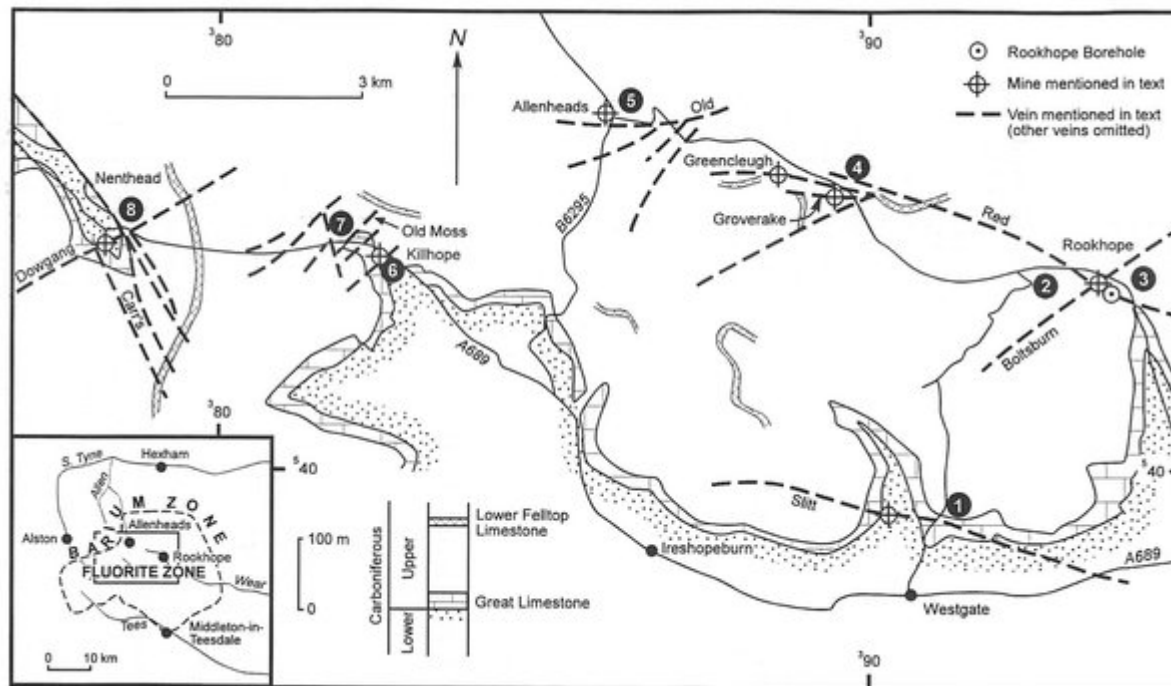
(Figure 13.3) Permian strata in the excursion area, showing the approximate stratigraphical positions of localities 1–7. The Hartlepool Anhydrite would not normally be present close to the coast but is included for completeness.



(Figure 13.4) Strata exposed at Trow Point.



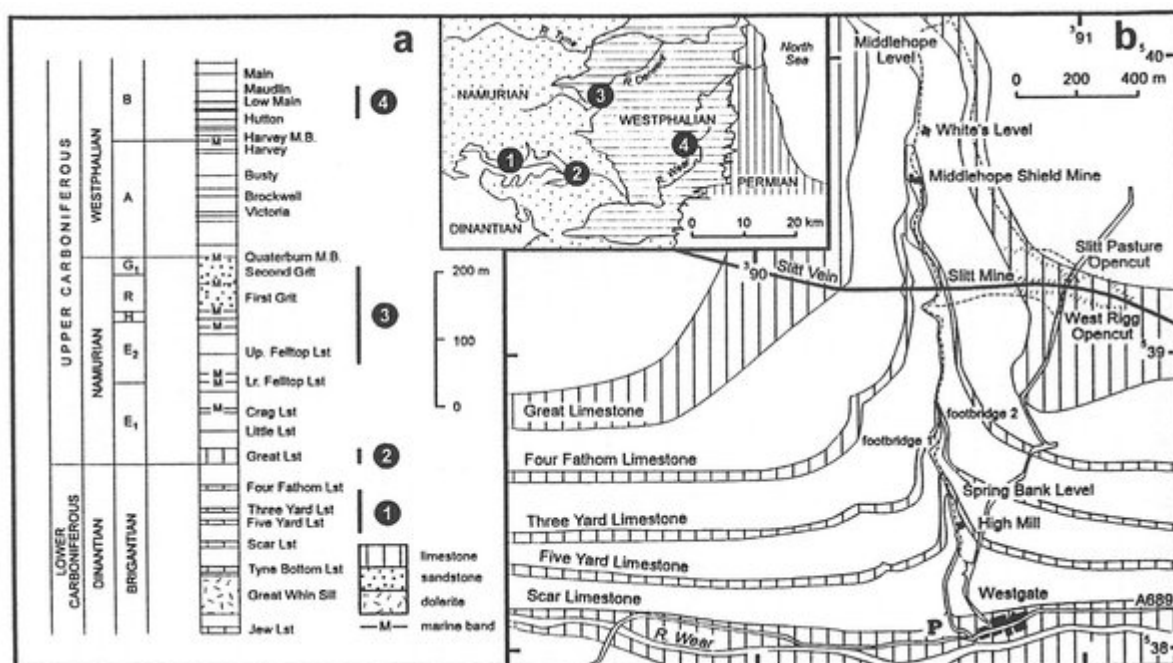
(Figure 13.5) Strata exposed in the cliffs north of Seaham Harbour.



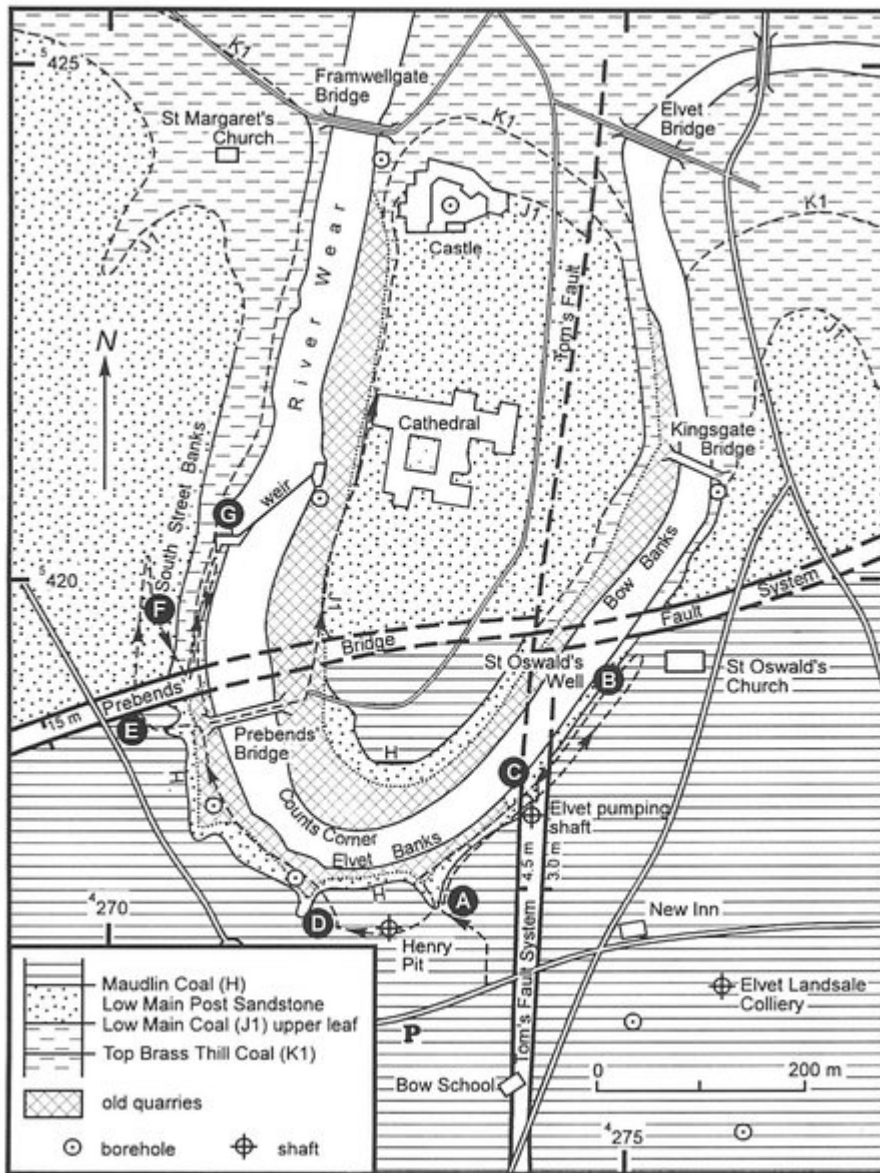
(Figure 14.1) Map of the Weardale–Nenthead area showing localities mentioned in the text.



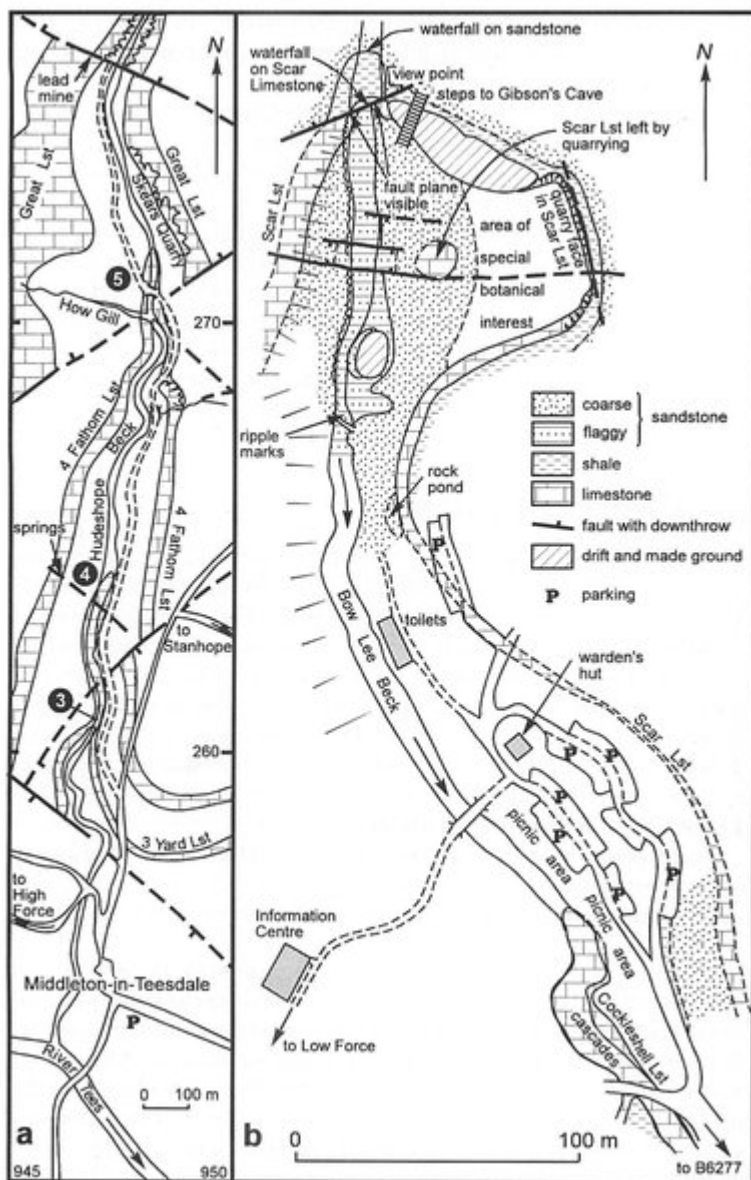
(Figure 14.2) Restored overshot wheel, Killhope Lead Mining Centre, Weardale. Photo: P. Nixon.



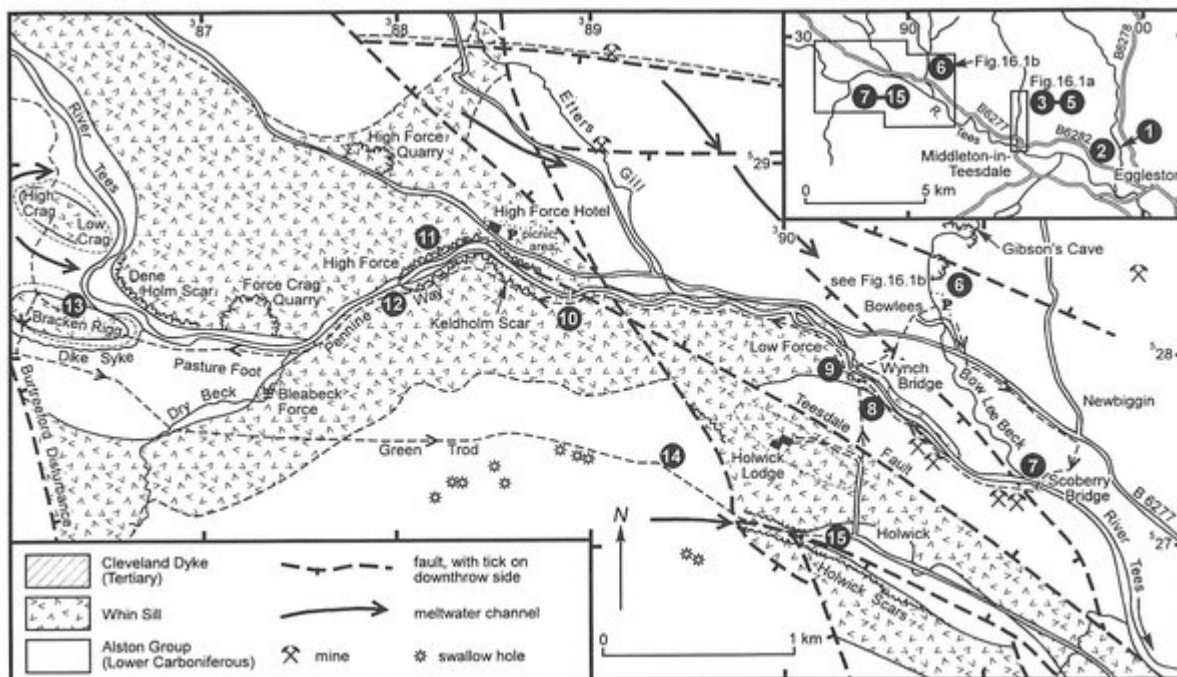
(Figure 15.1) (a) Carboniferous succession, and inset geological map for mid Durham, showing sections described at localities 1-4. (b) Geology of Middlehope Burn, Westgate (Locality 1).



(Figure 15.2) Geological map of the River Wear Gorge, Durham City. Details of boreholes are given in Johnson and Richardson (1990).



(Figure 16.1) (a) Geological map and localities in Hudeshope Beck, Middleton-in-Teesdale. (b) Geology of Bowlees Quarry and picnic area.



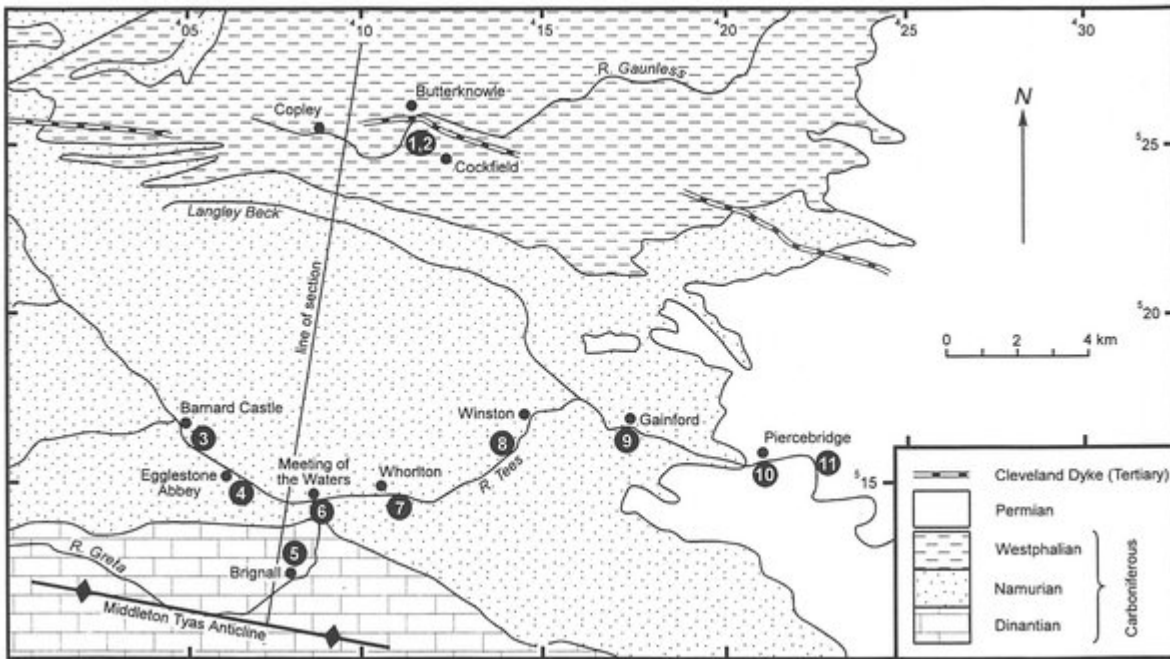
(Figure 16.2) Geological map of upper Teesdale around High Force. Inset showing localities described in text.



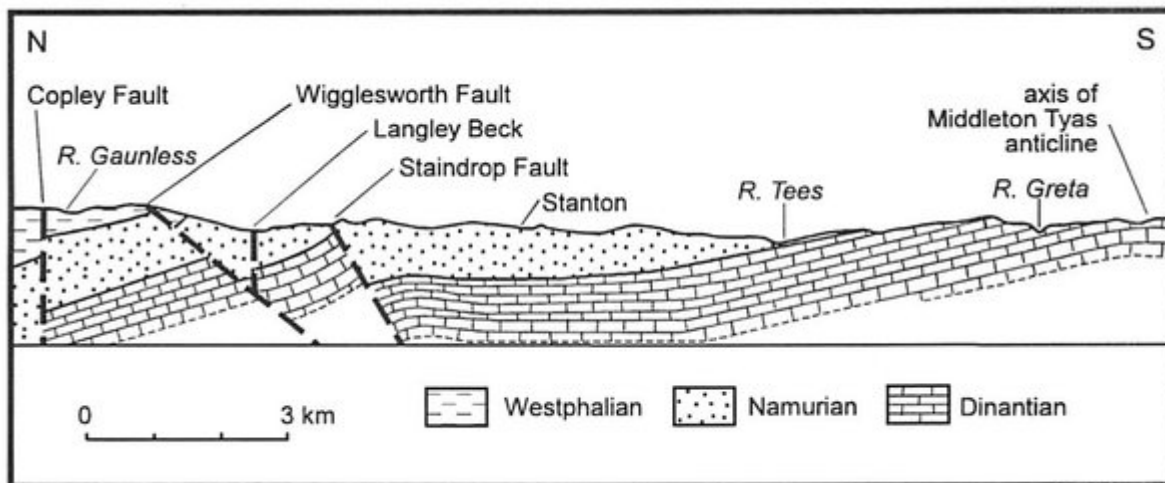
(Figure 16.3) High Force (Locality 11). WS = Whin Sill; S = metamorphosed sandstone; TBL = Tyne Bottom Limestone. Photo: J. Senior.



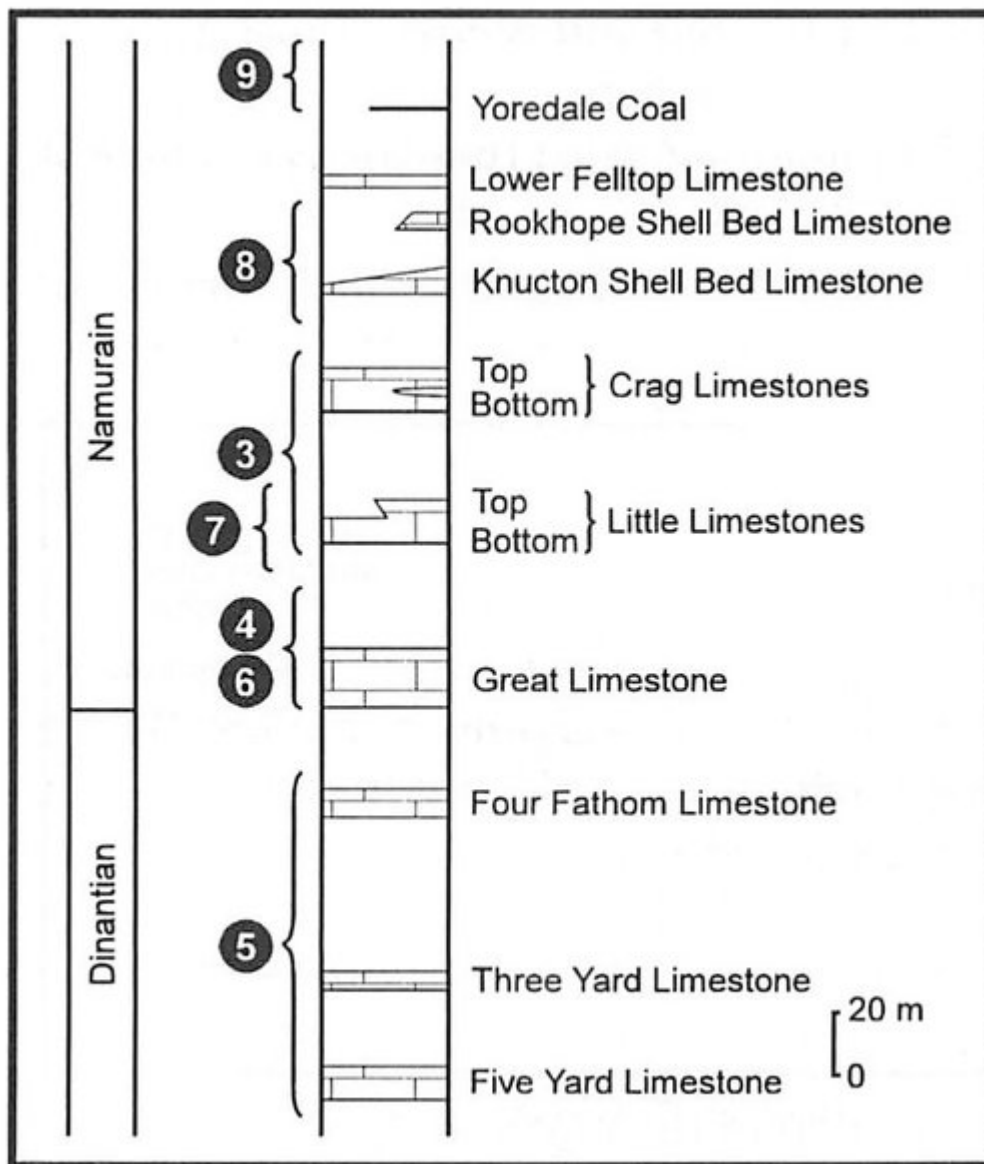
(Figure 16.4) The Whin Sill forming Howick Scars, looking east (Locality 15). Photo: J. Senior.



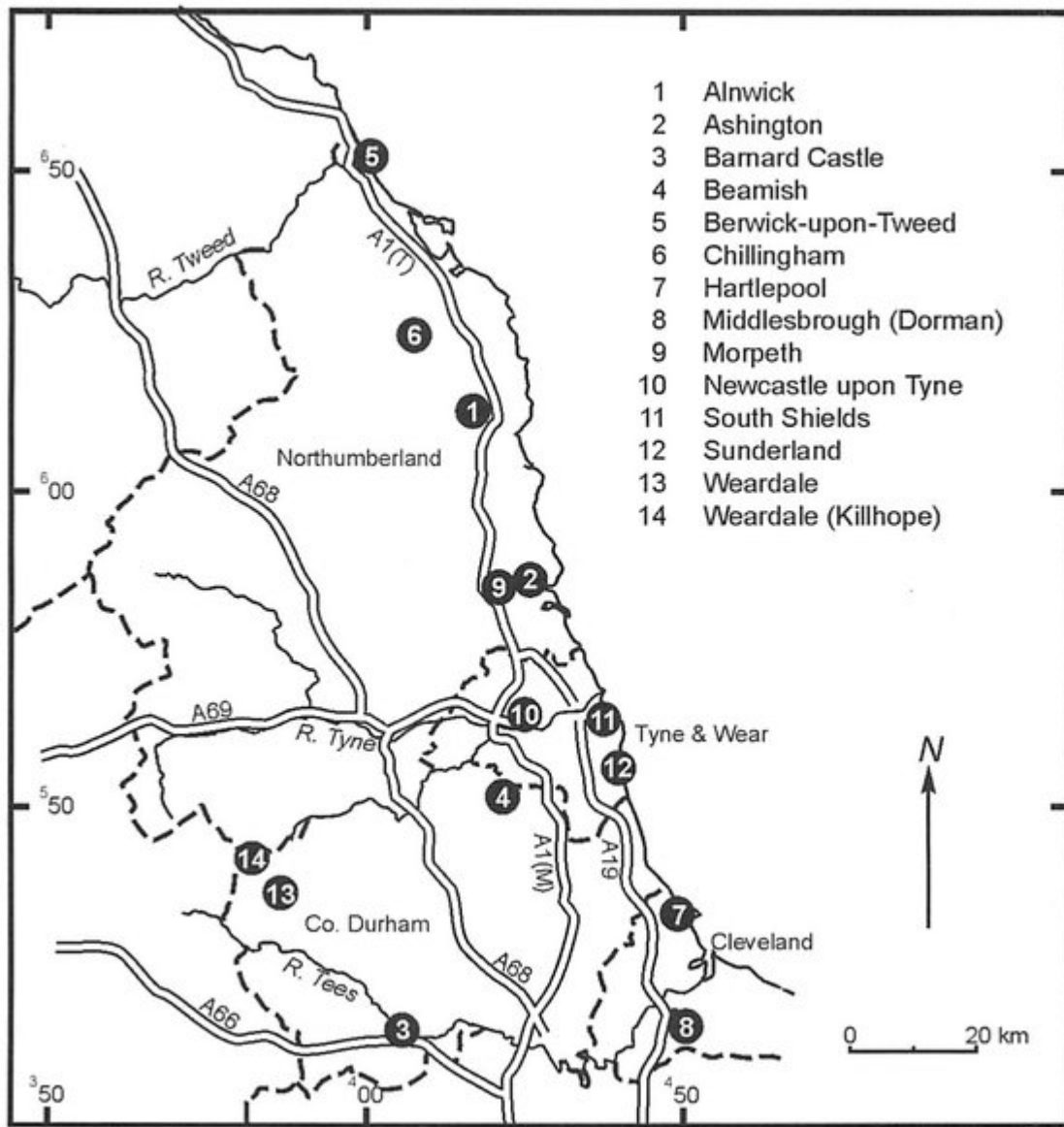
(Figure 17.1) Geological map of southern County Durham showing the localities described in the text (after Mills & Hull 1976).



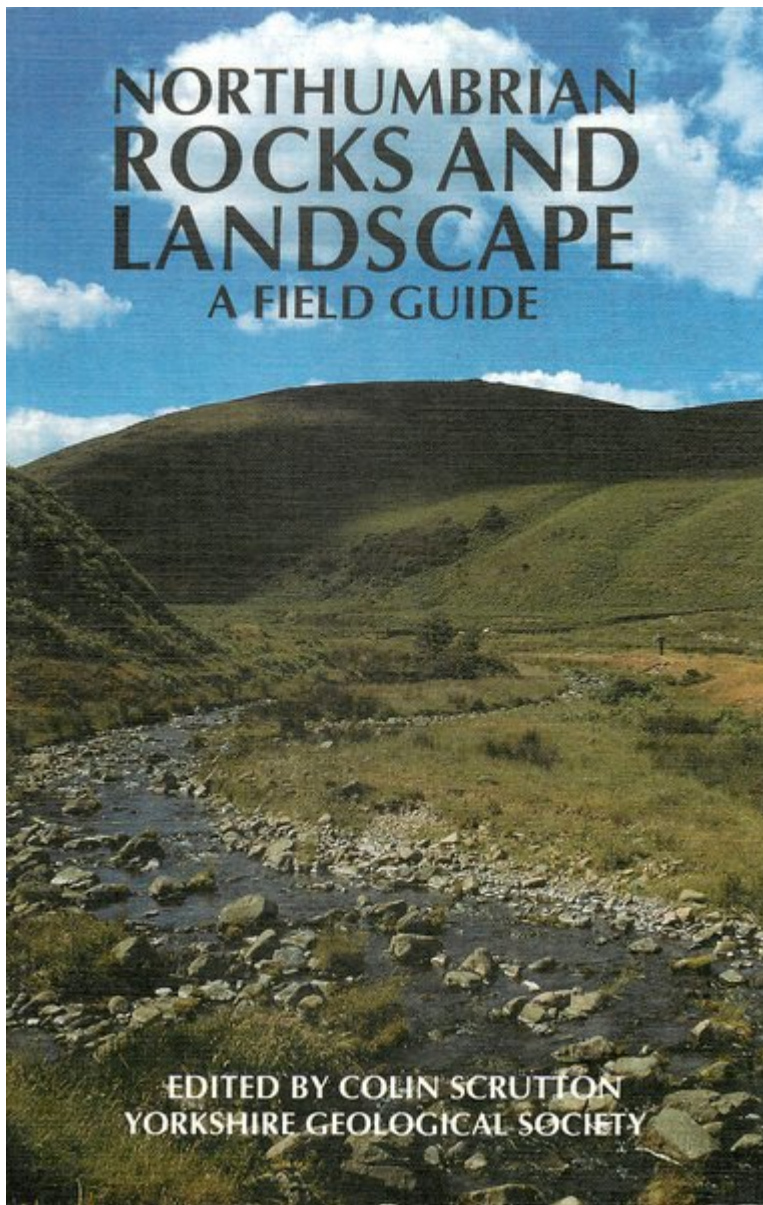
(Figure 17.2) Geological cross-section of the northern limb of the Middleton Tyas anticline. Line of section on (Figure 17.1).



(Figure 17.3) Succession of Carboniferous Limestone cyclothems between Barnard Castle and Piercebridge, indicating sections exposed at each locality.



(Figure 18) Location of museums of geological interest in Northumbria.



(Front cover)

ABOUT THIS GUIDE: Northumberland and County Durham contain within their boundaries some of the most interesting geology and scenery in England.

This book is a stimulating field guide to seventeen locations selected to give comprehensive coverage of the minerals, rocks, fossils and landforms of the area. Excursions vary from easy half-day walks to longer outings. Some are in moorland areas such as the Roman Wall country; others on the coastline, famous for its beauty and rich history.

Aimed both at beginners and more experienced geologists, the book includes a general introduction to the area's geological history, a full glossary of terms, and details of local museums.

Northumbrian Rocks and Landscape will be used and enjoyed by all those interested in the natural heritage of this large and diverse region.

ABOUT THE AUTHORS: The contributors to this book are academics, professional geologists and dedicated amateurs, many of them members of the Yorkshire Geological Society. Together in this book they provide the most up-to-date and authoritative guide to the geology of Northumberland and County Durham currently available.

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Cover photograph:
Harthope Burn in the Cheviots
by James Walker FRPS



(Rear cover)