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

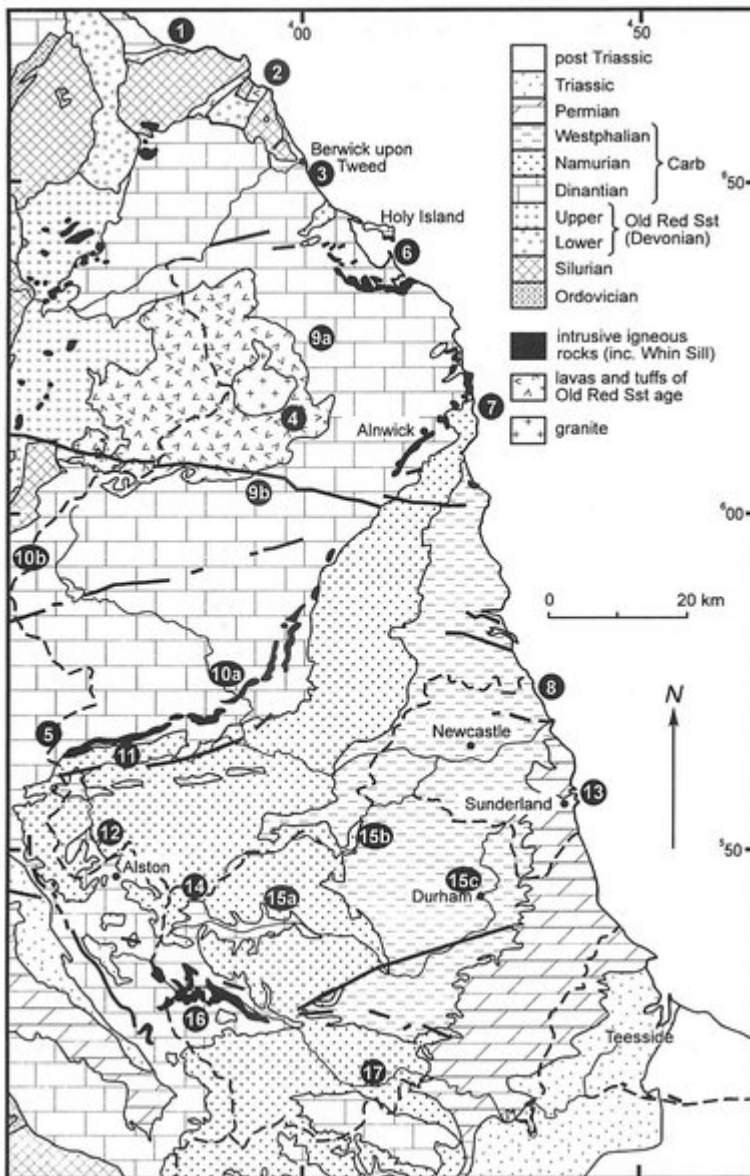
(Figure 17.2) Geological cross-section of the northern limb of the Middleton Tyas anticline. Line of section on (Figure 17.1).

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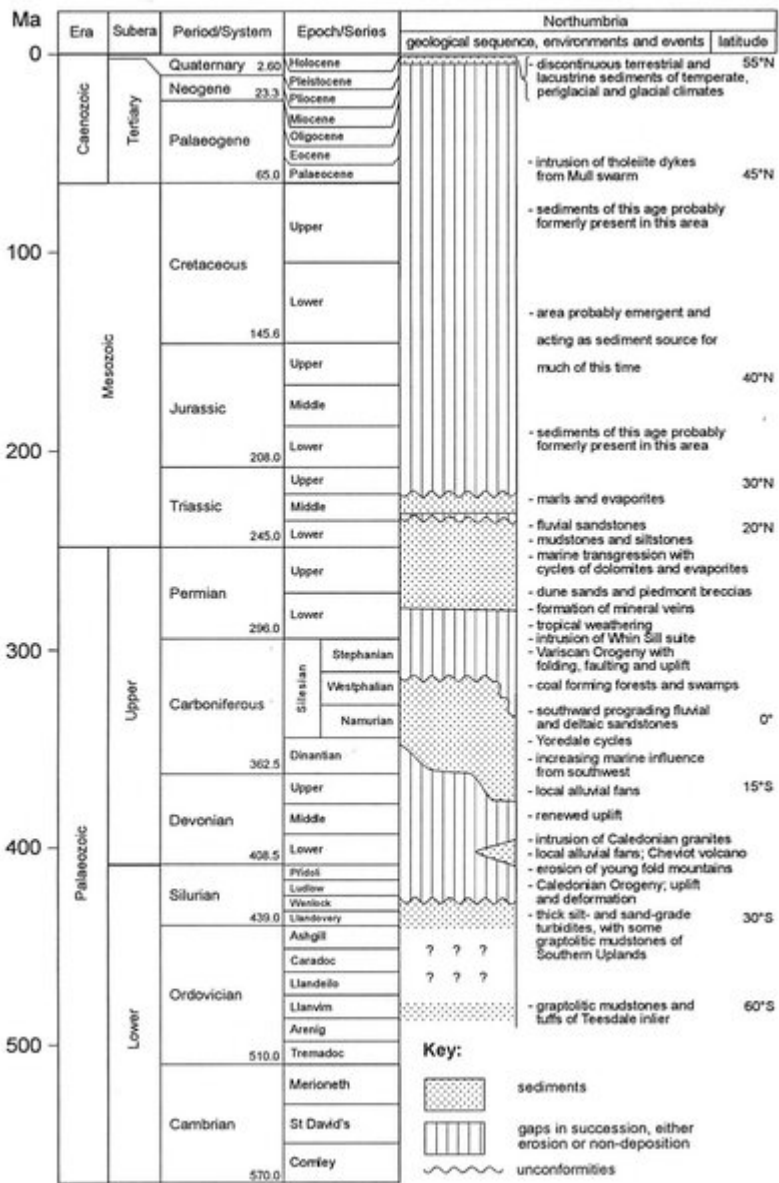
(Figure 18) Location of museums of geological interest in Northumbria.

(Front cover)

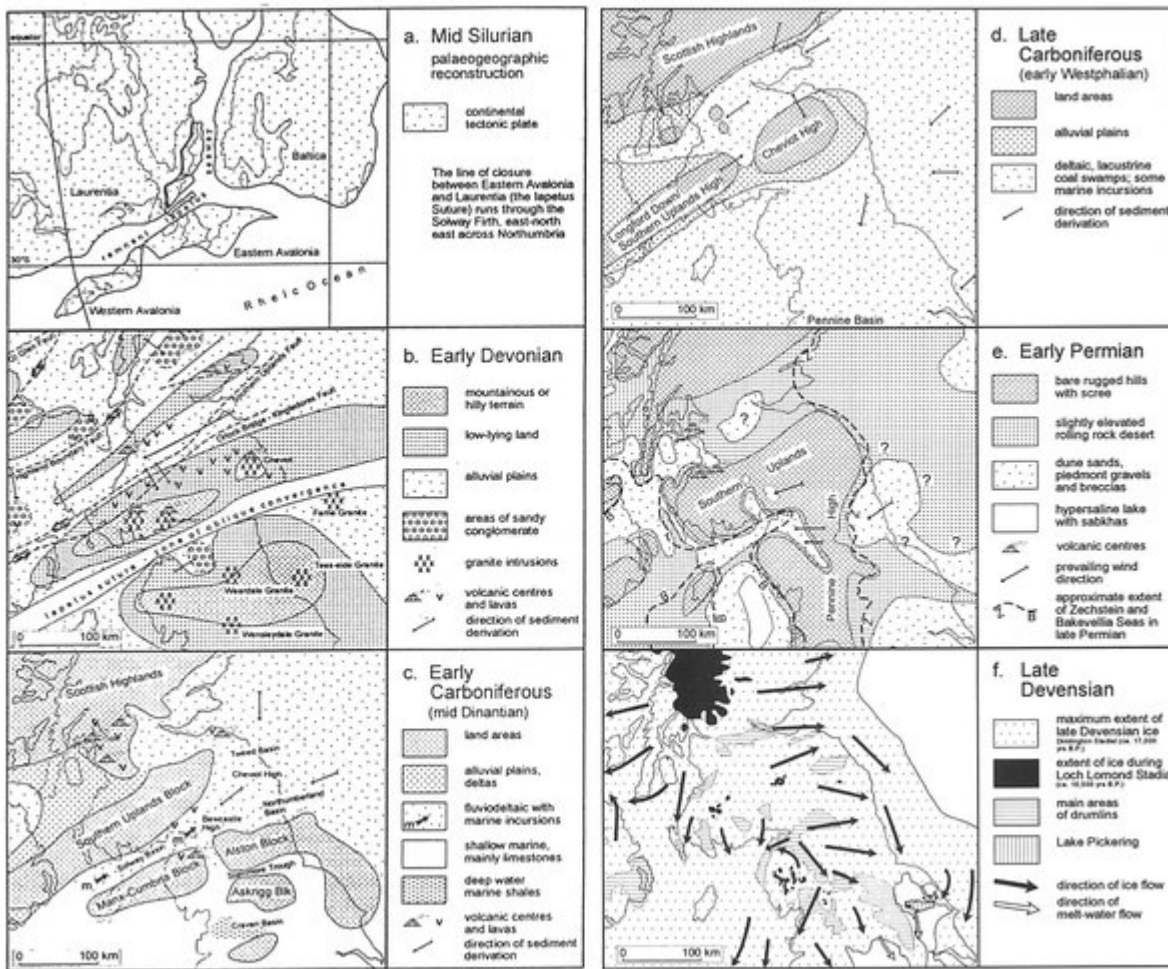
(Rear cover)



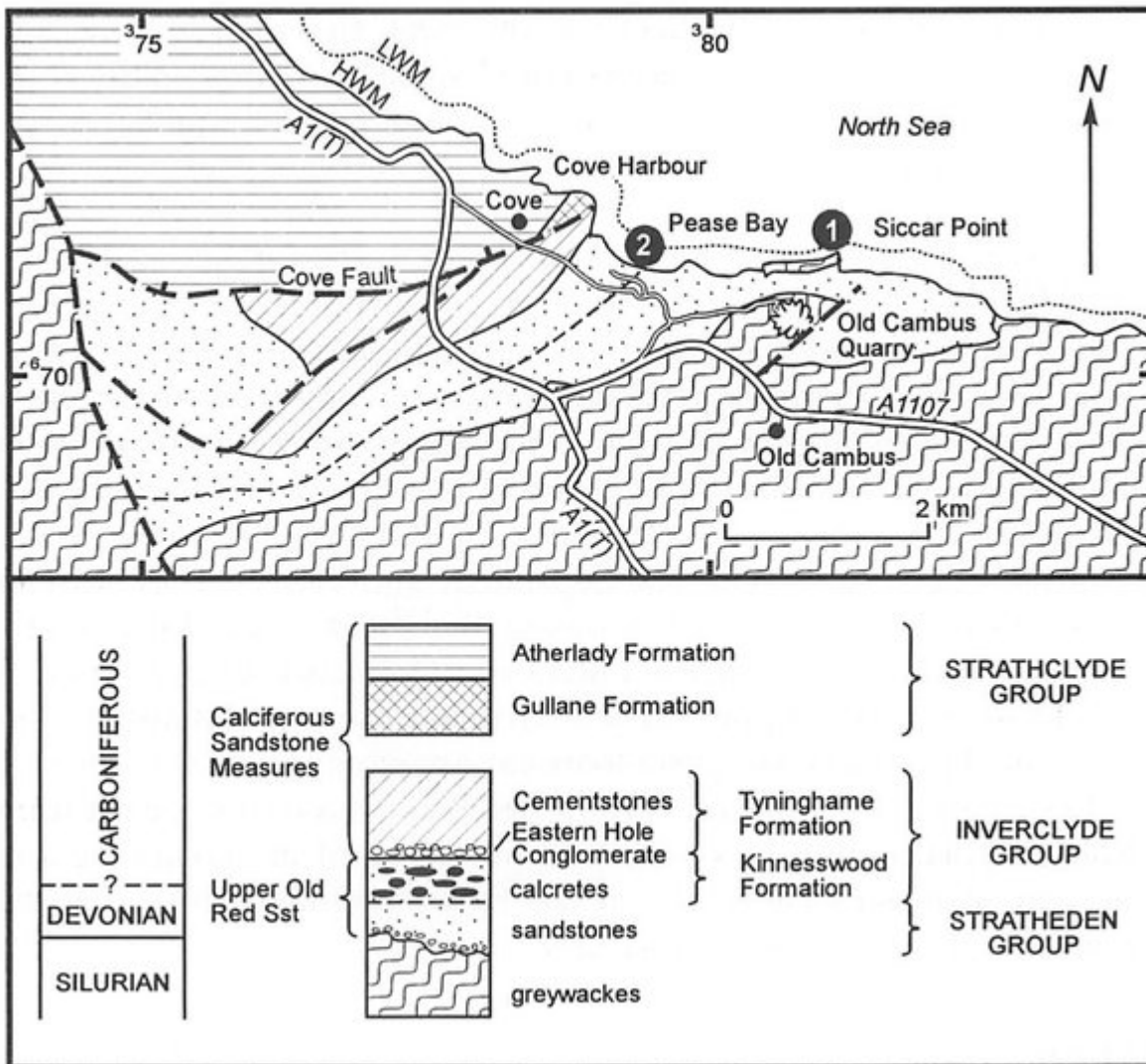
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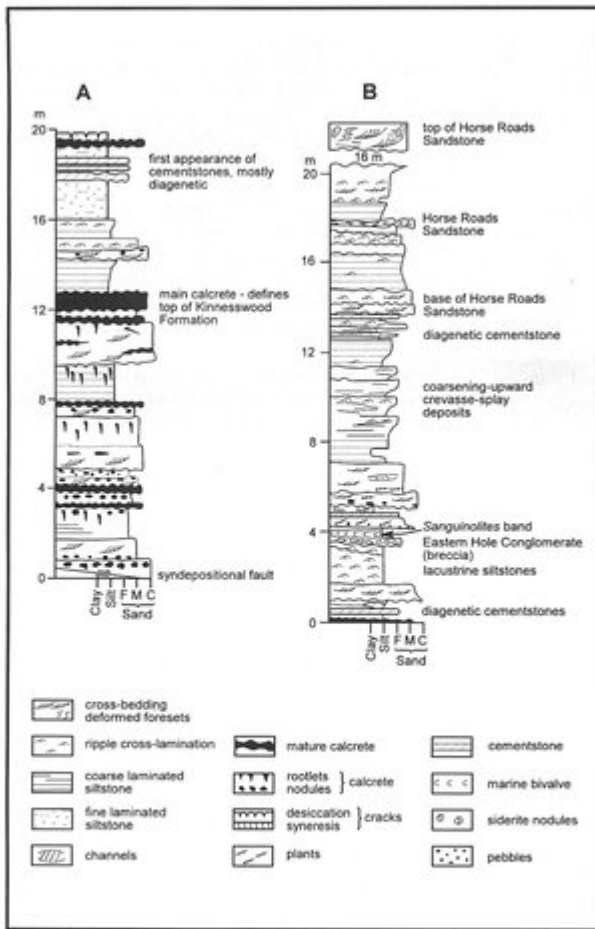
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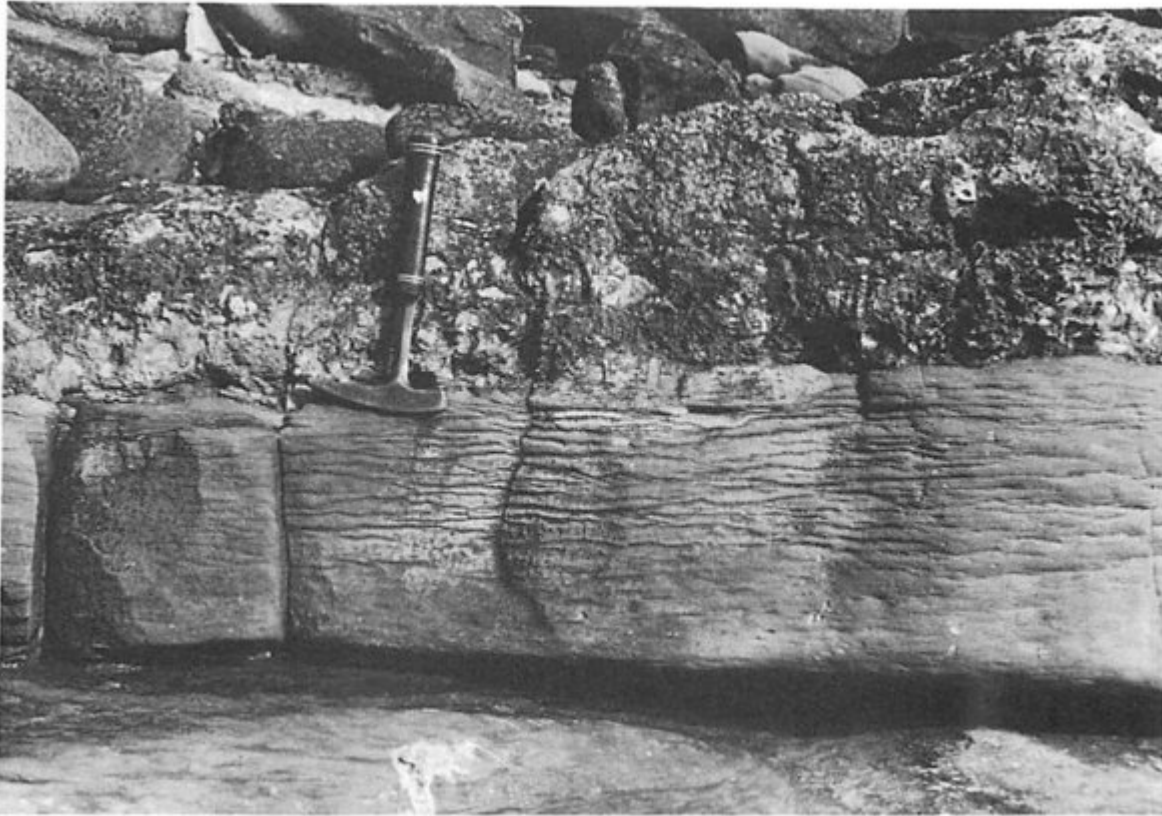


**Figure 1.3** Measured sections of the (A) Upper Old Red Sandstone and (B) Lower Carboniferous Cementstones at the northern end of Pease Bay.

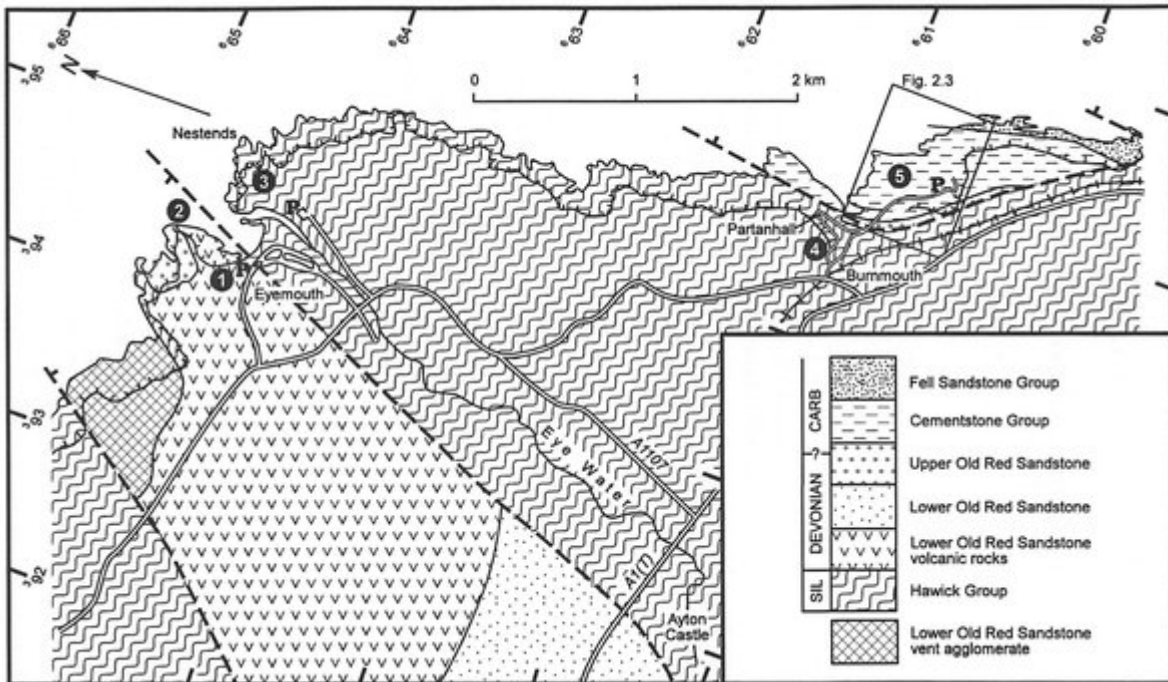
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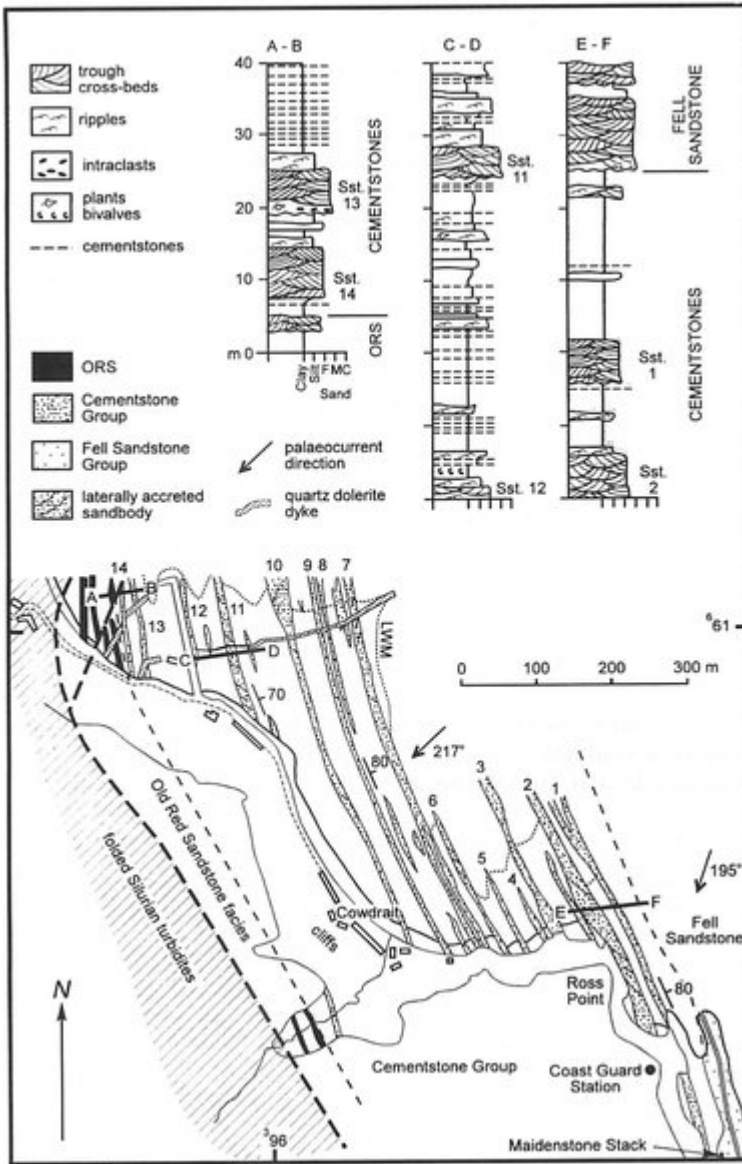
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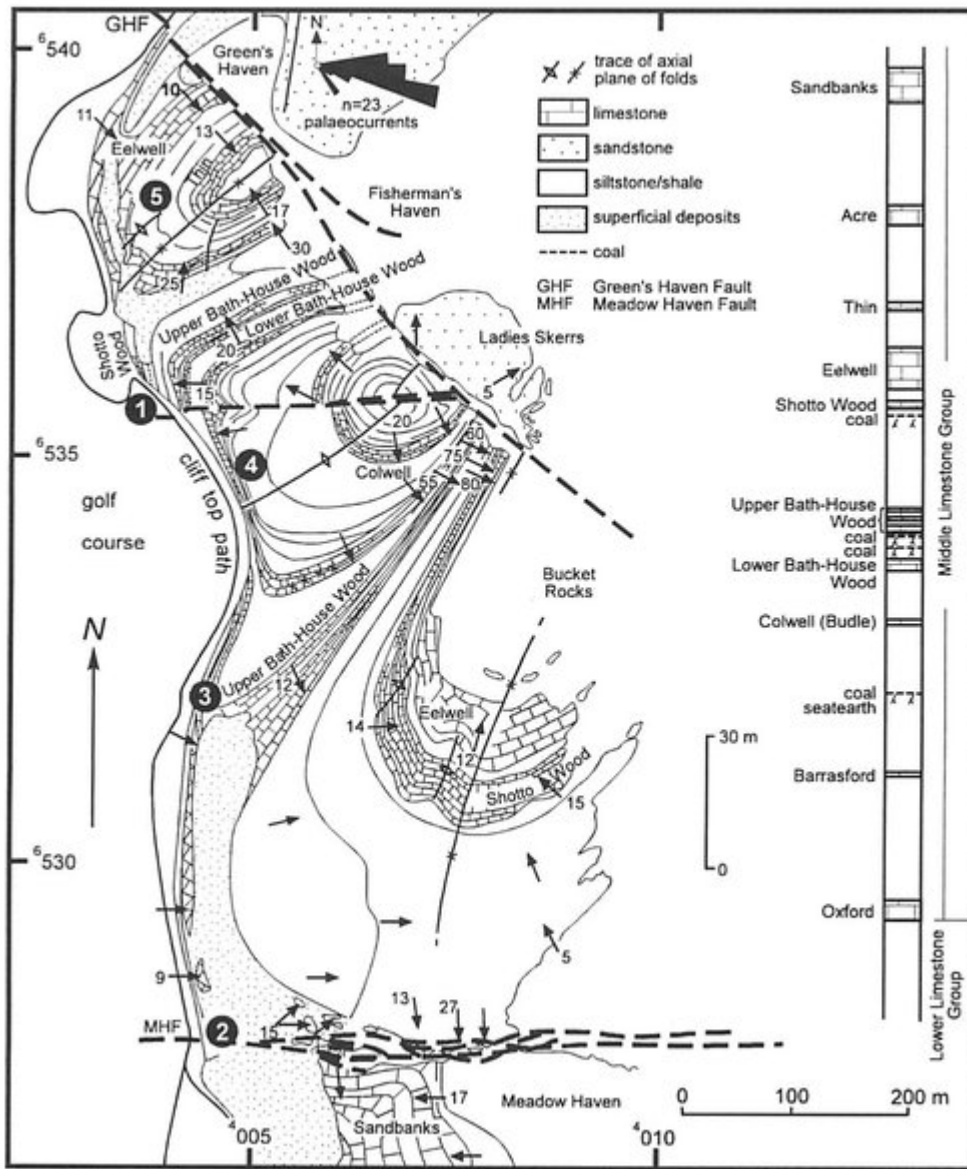
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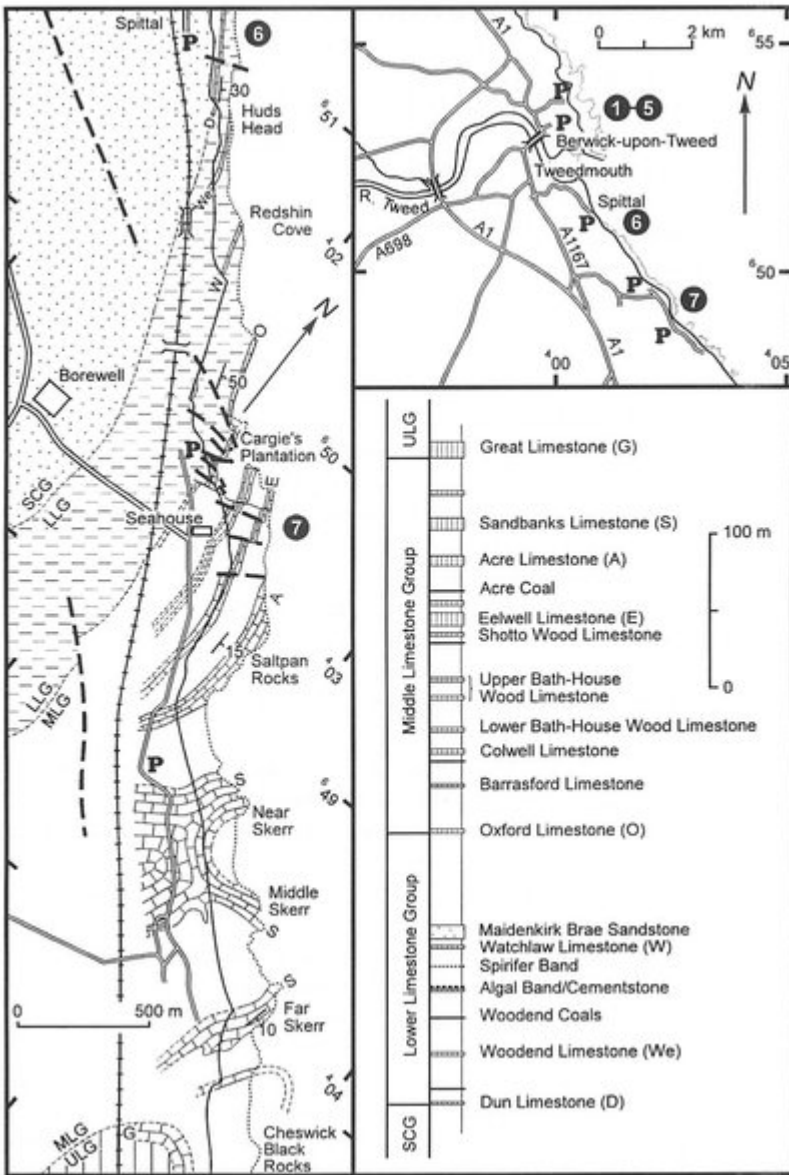
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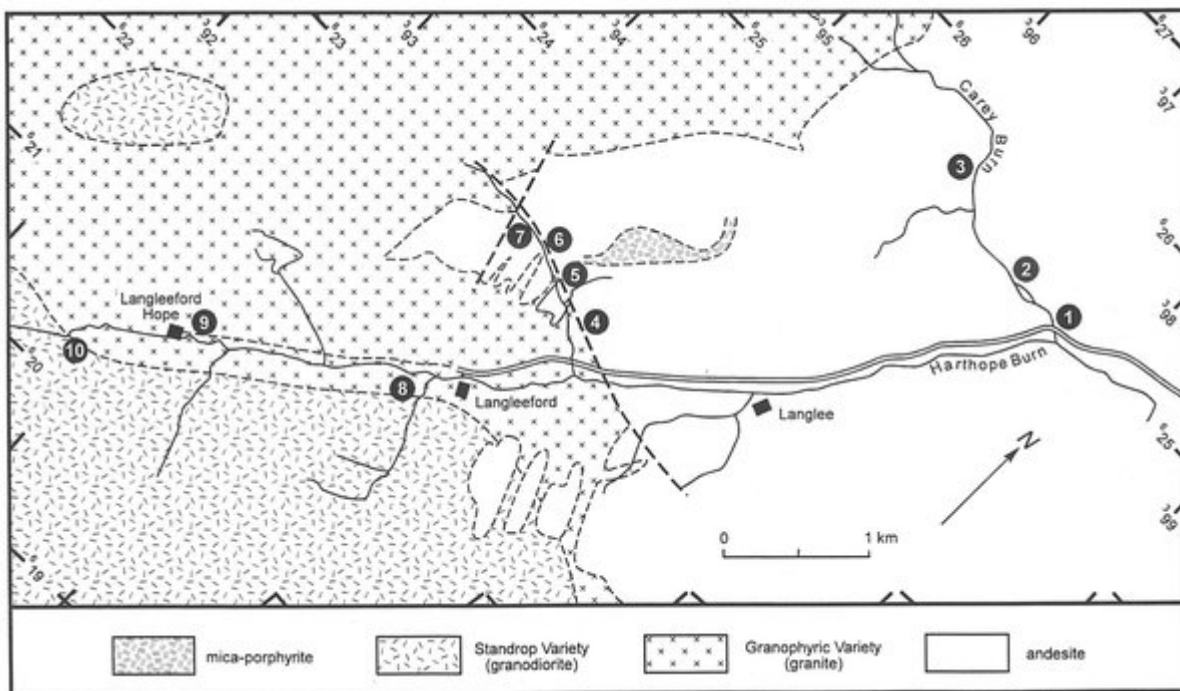


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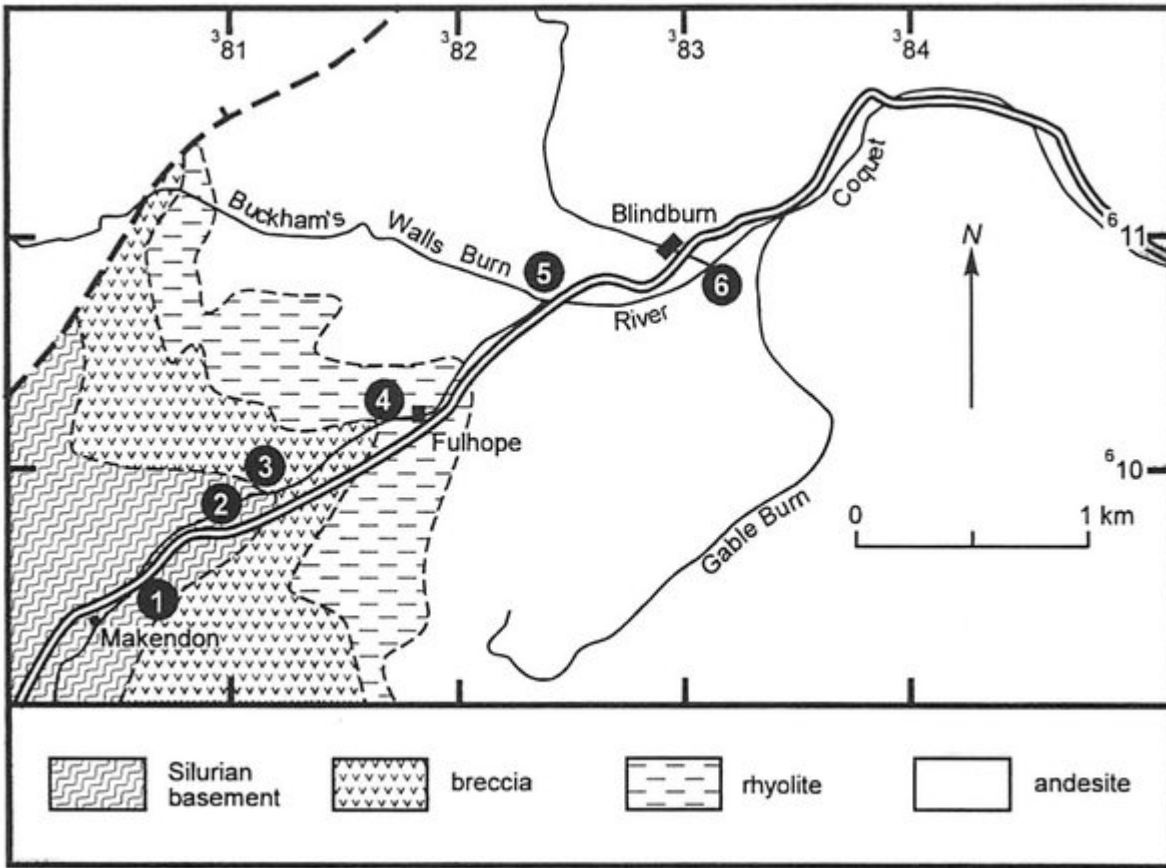


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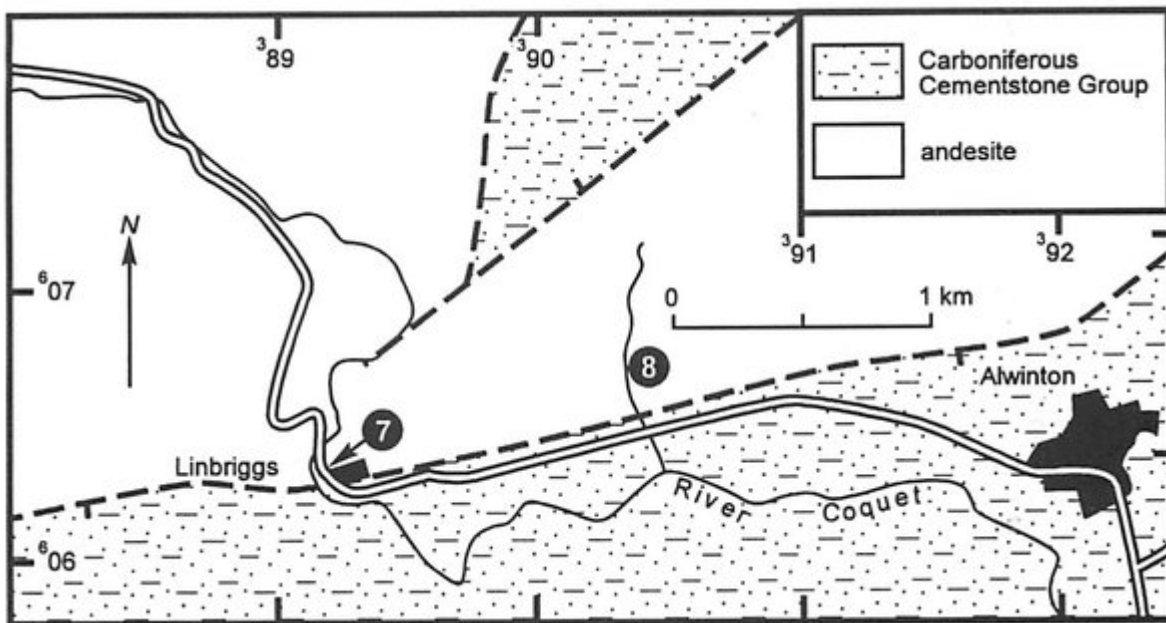


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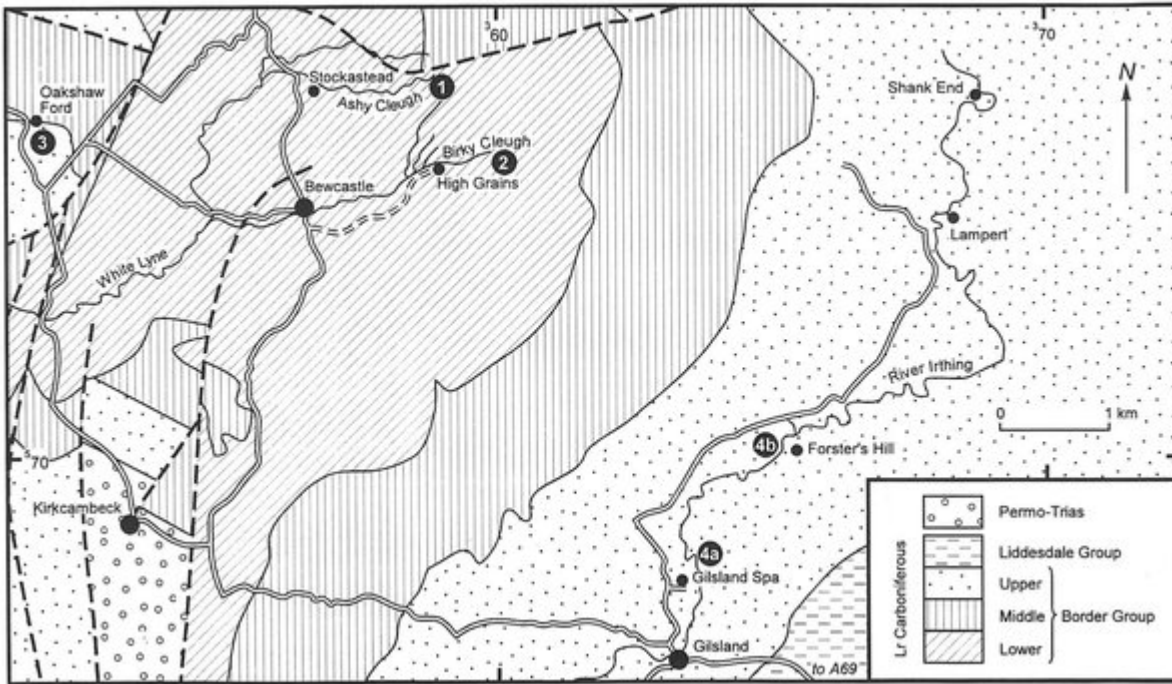




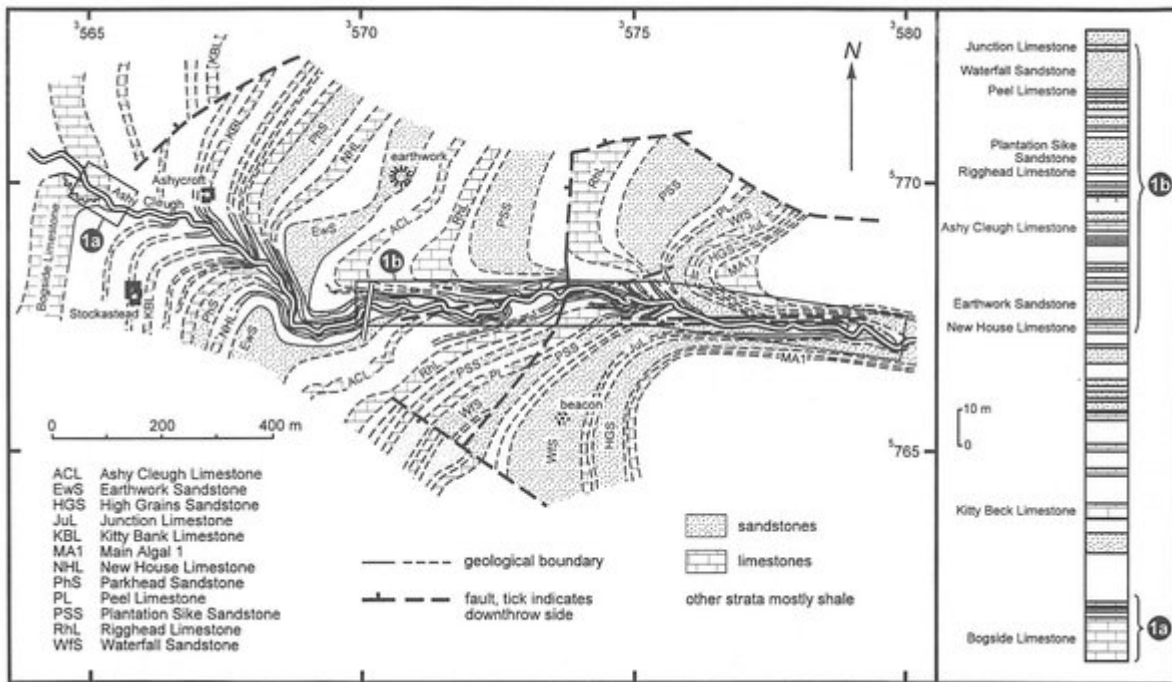
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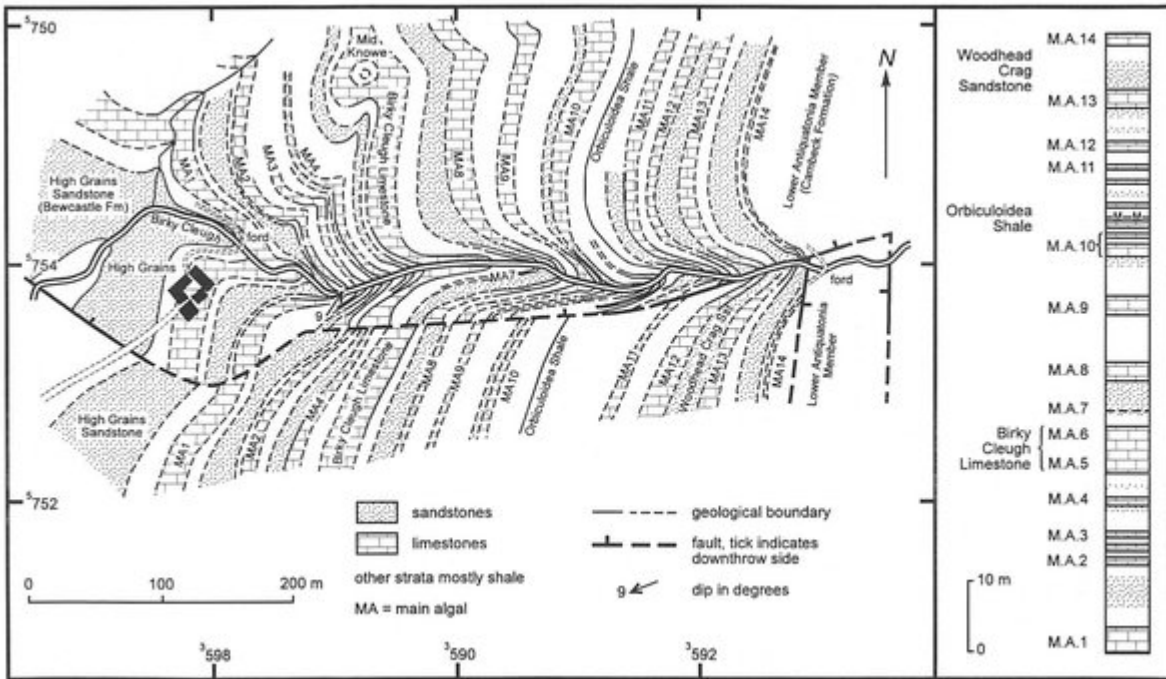
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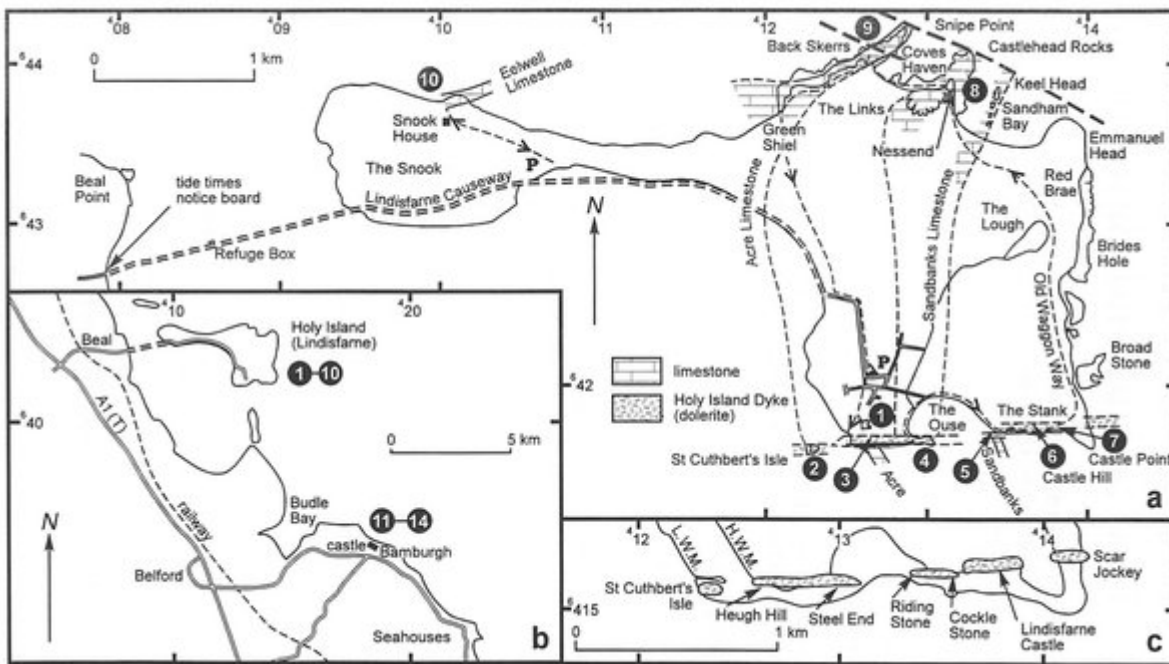
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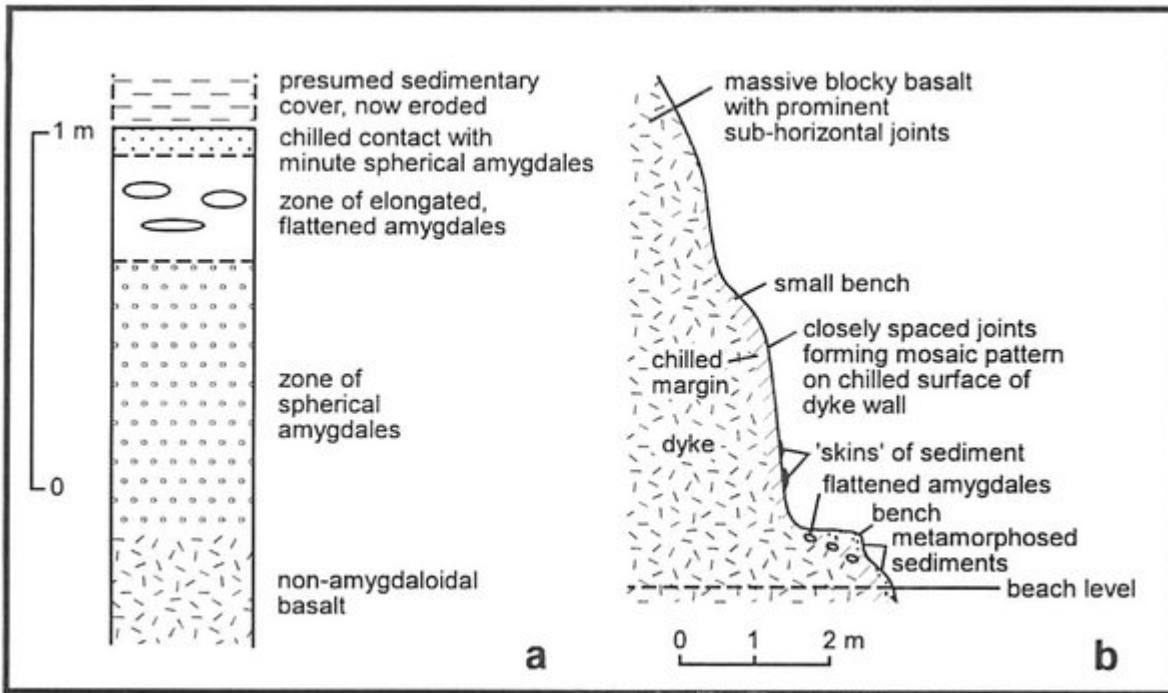
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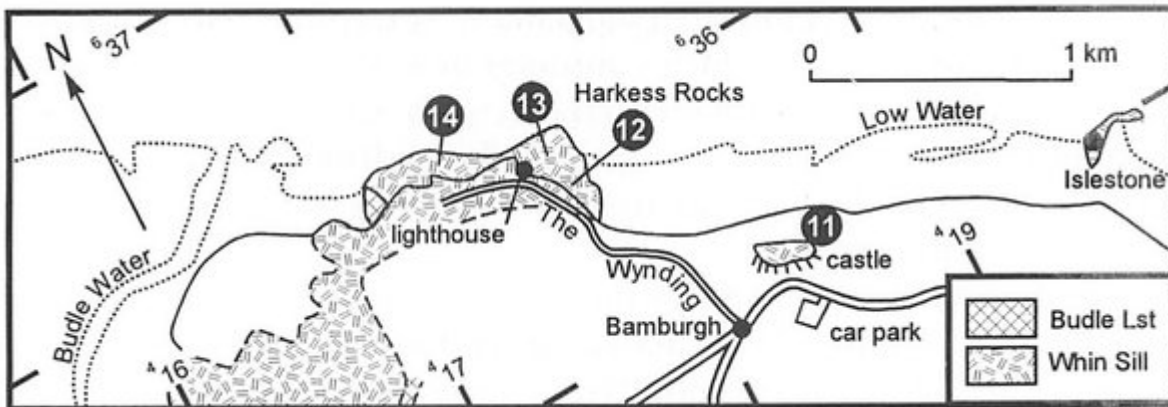
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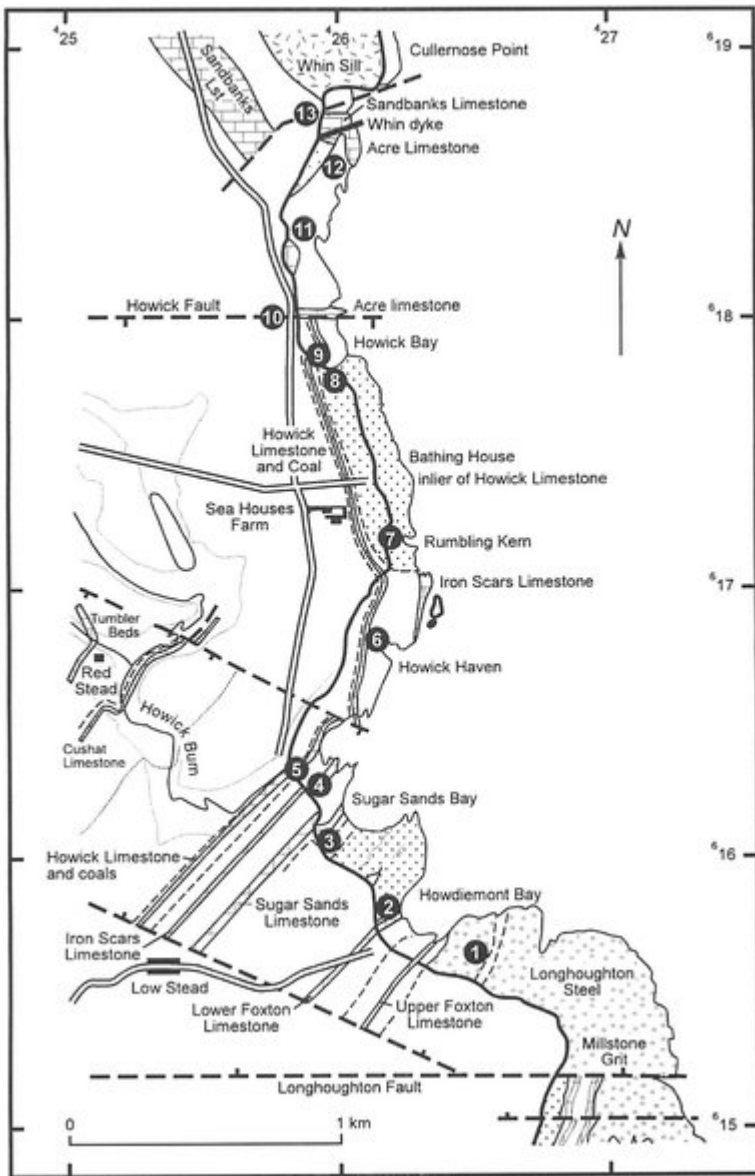
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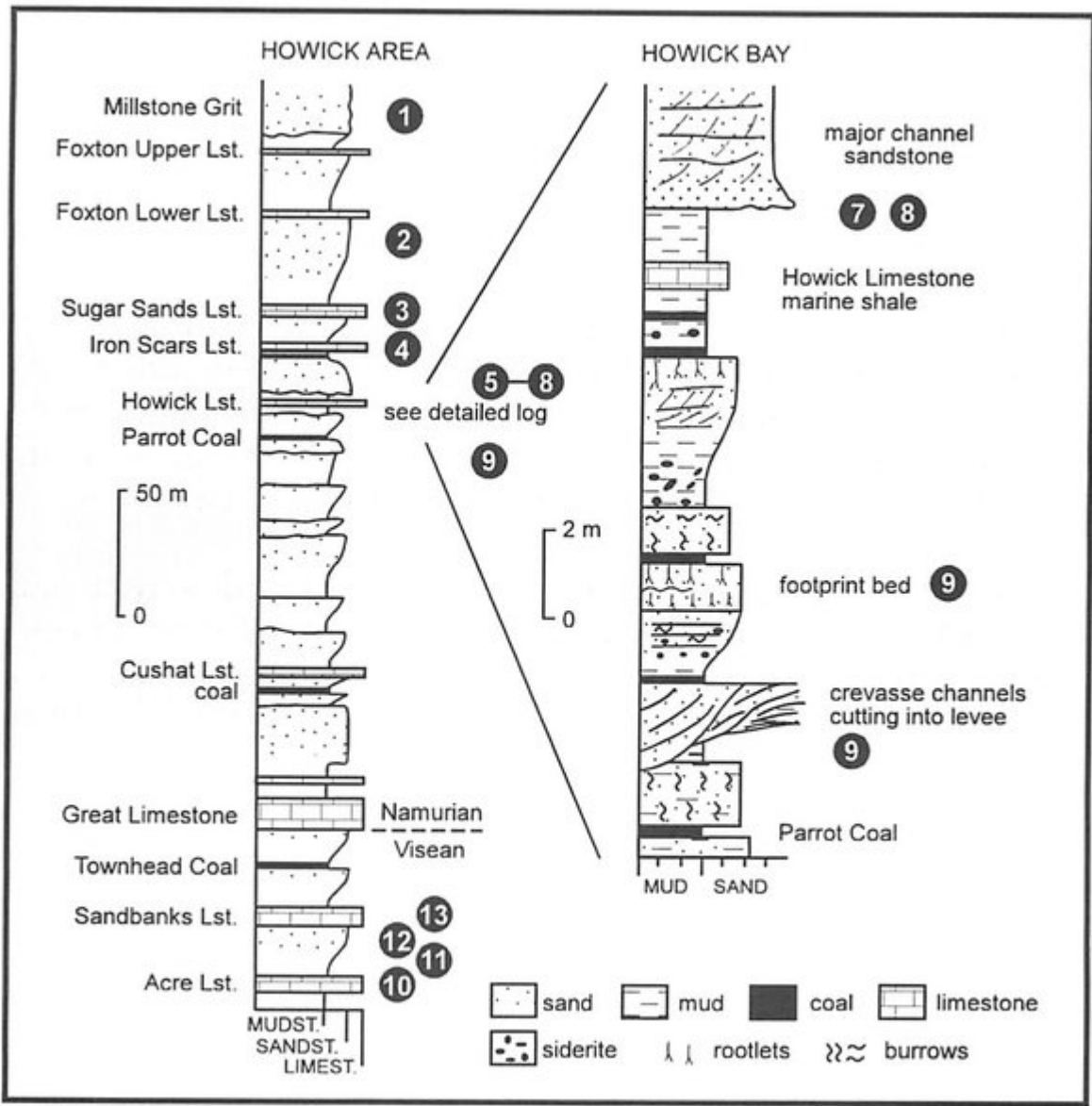
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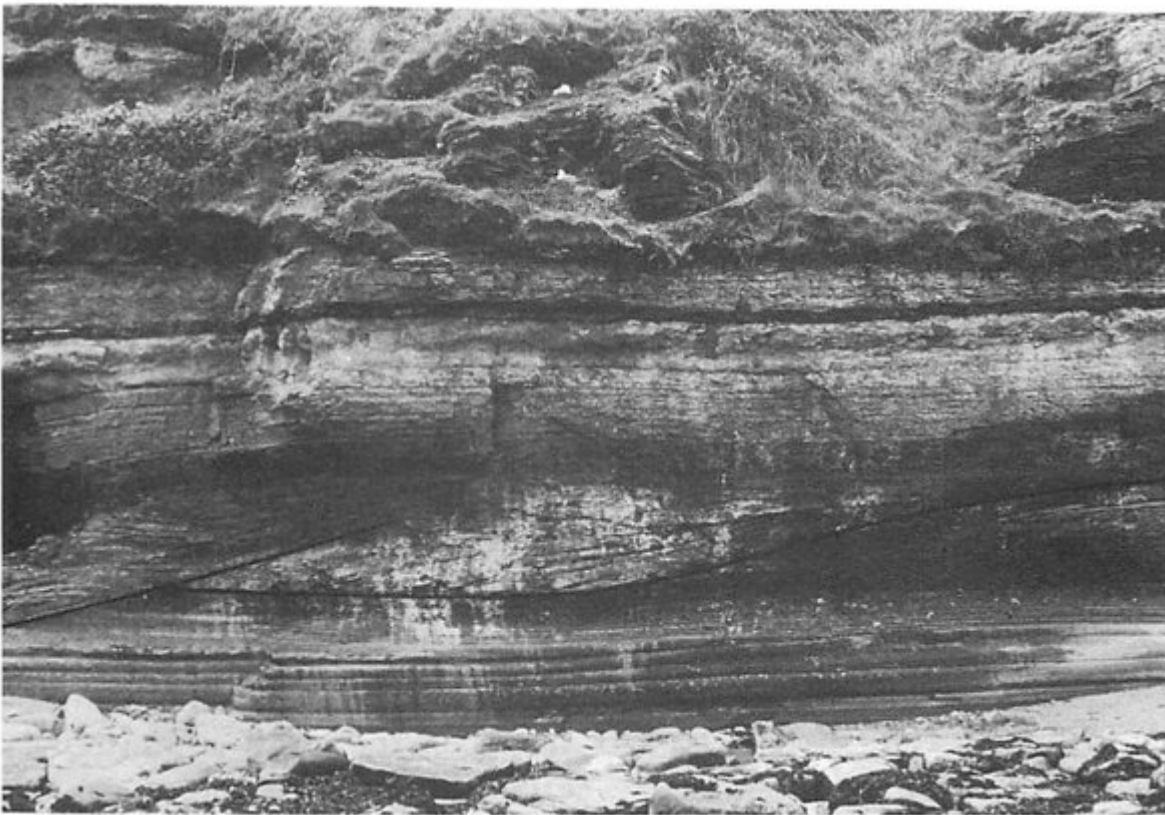


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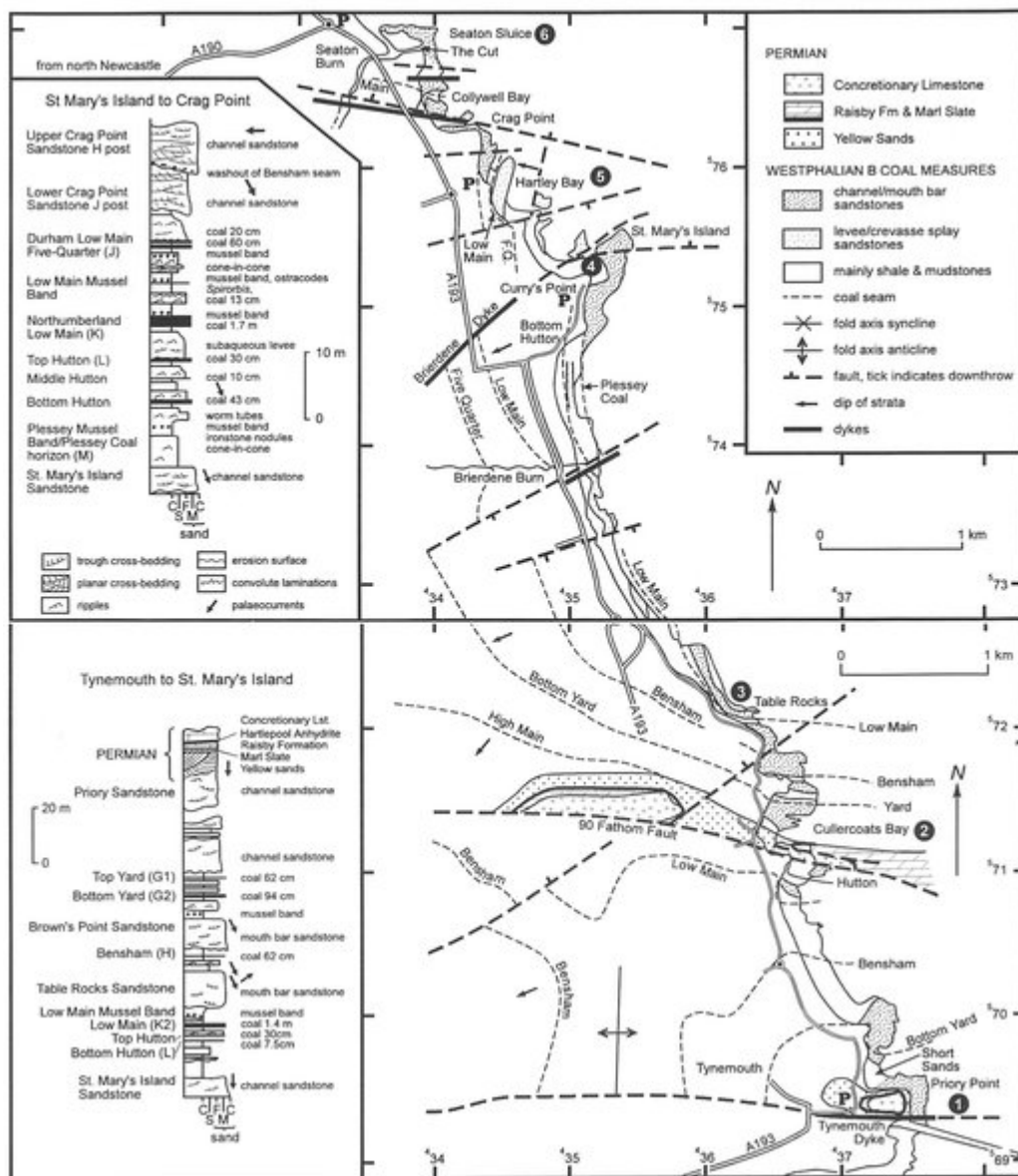


*(Figure 7.3) The northern end of the major channel within the Howick Limestone cycle. Locality 8, southern part of Howick Bay. Photo: M. E. Tucker.*

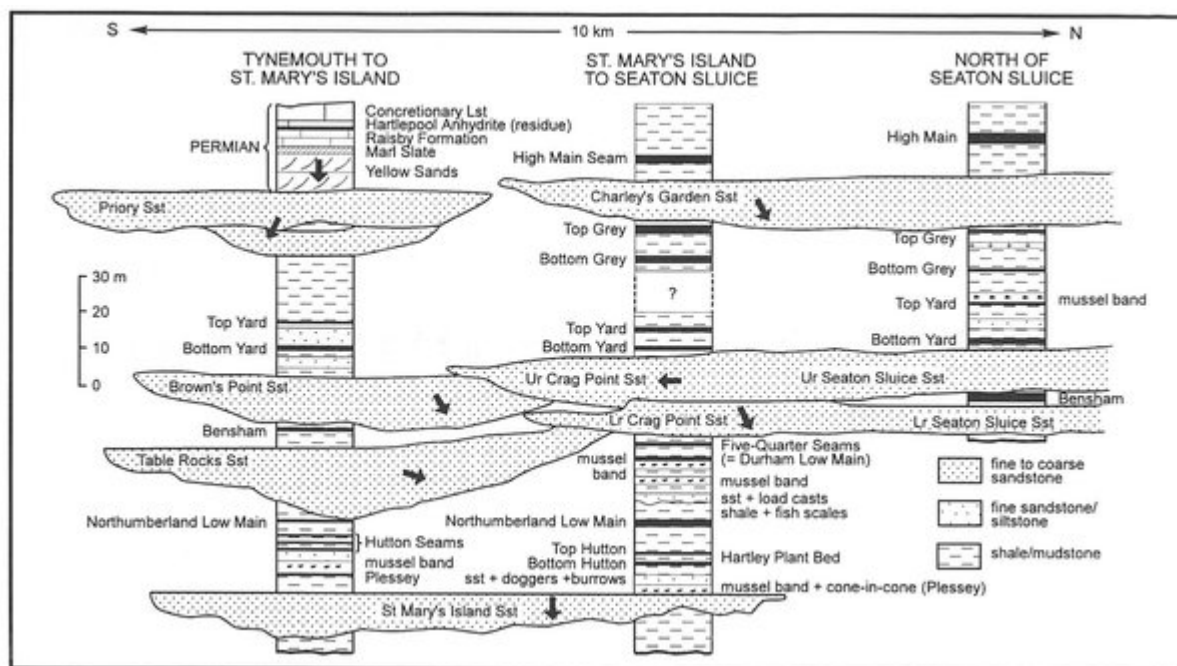


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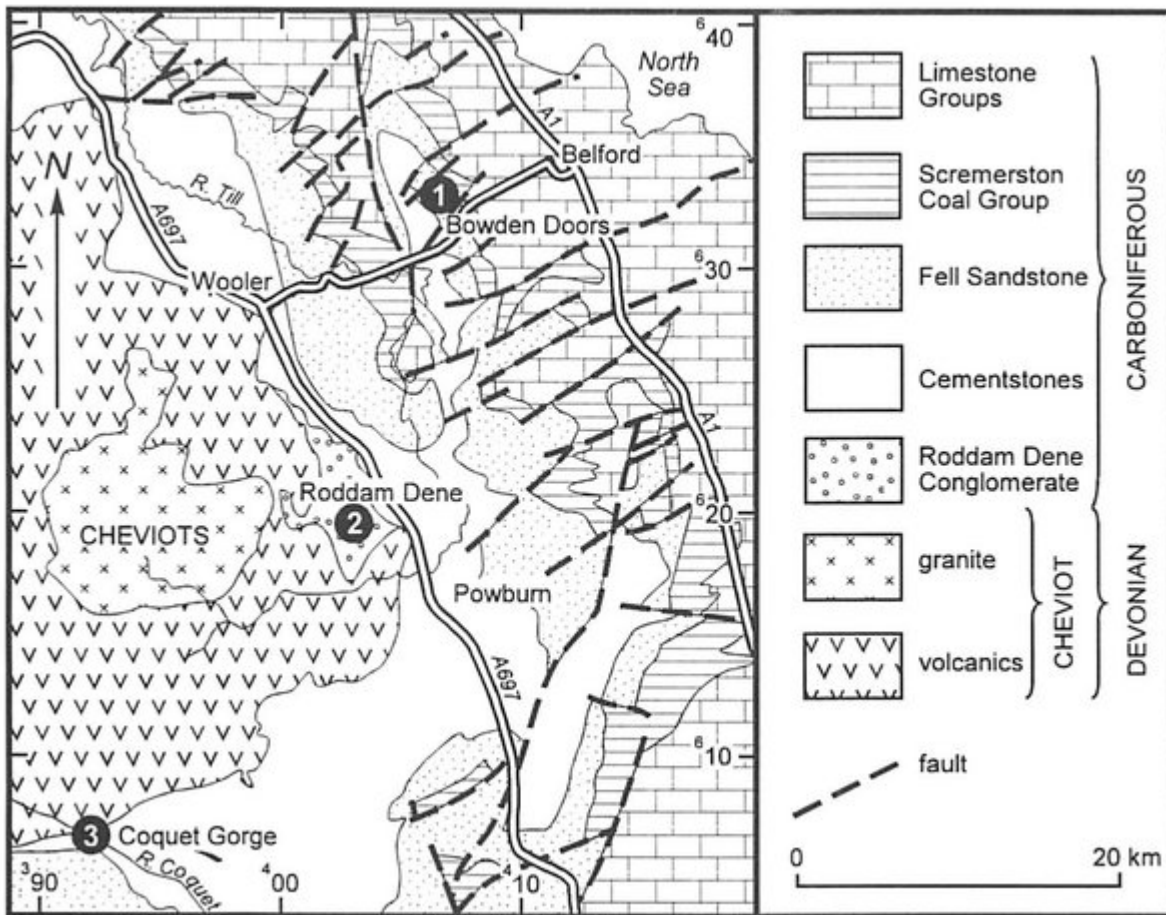
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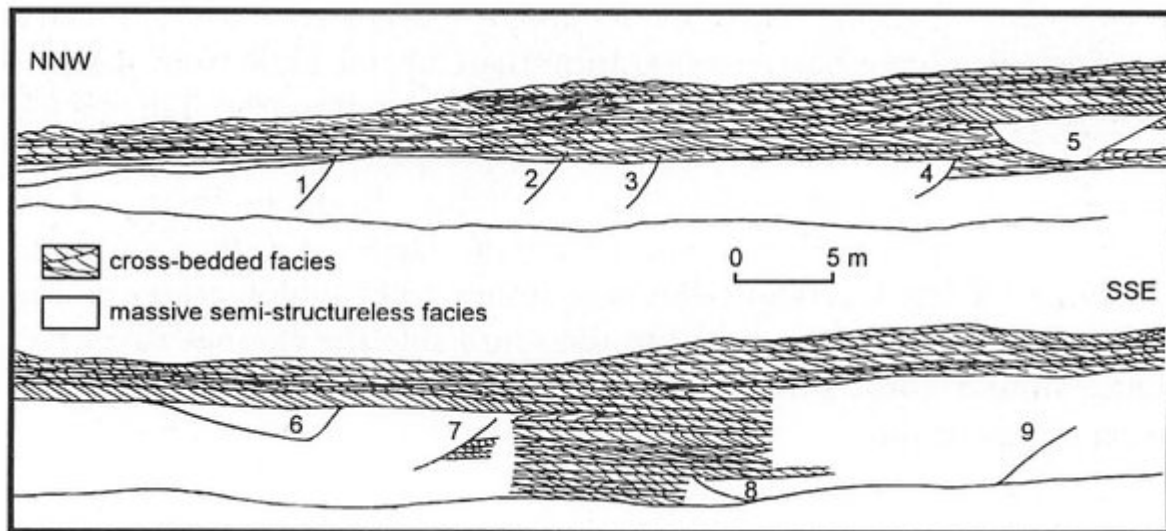
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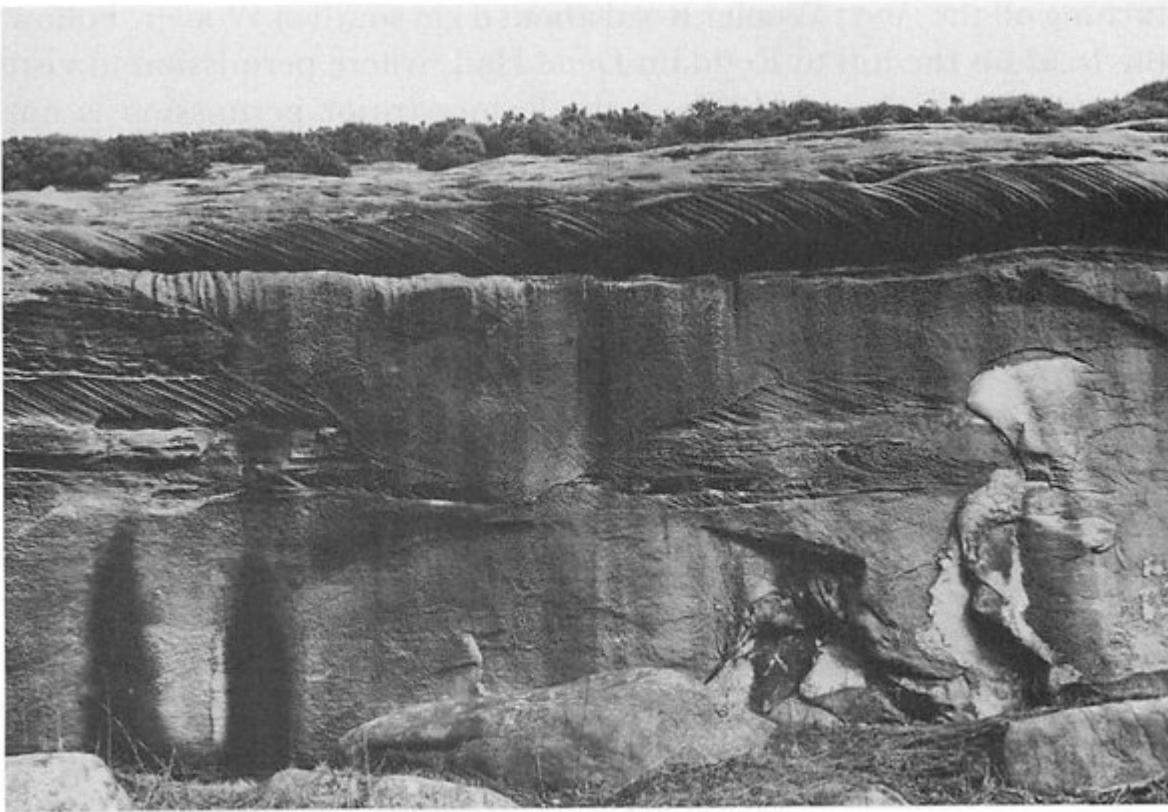
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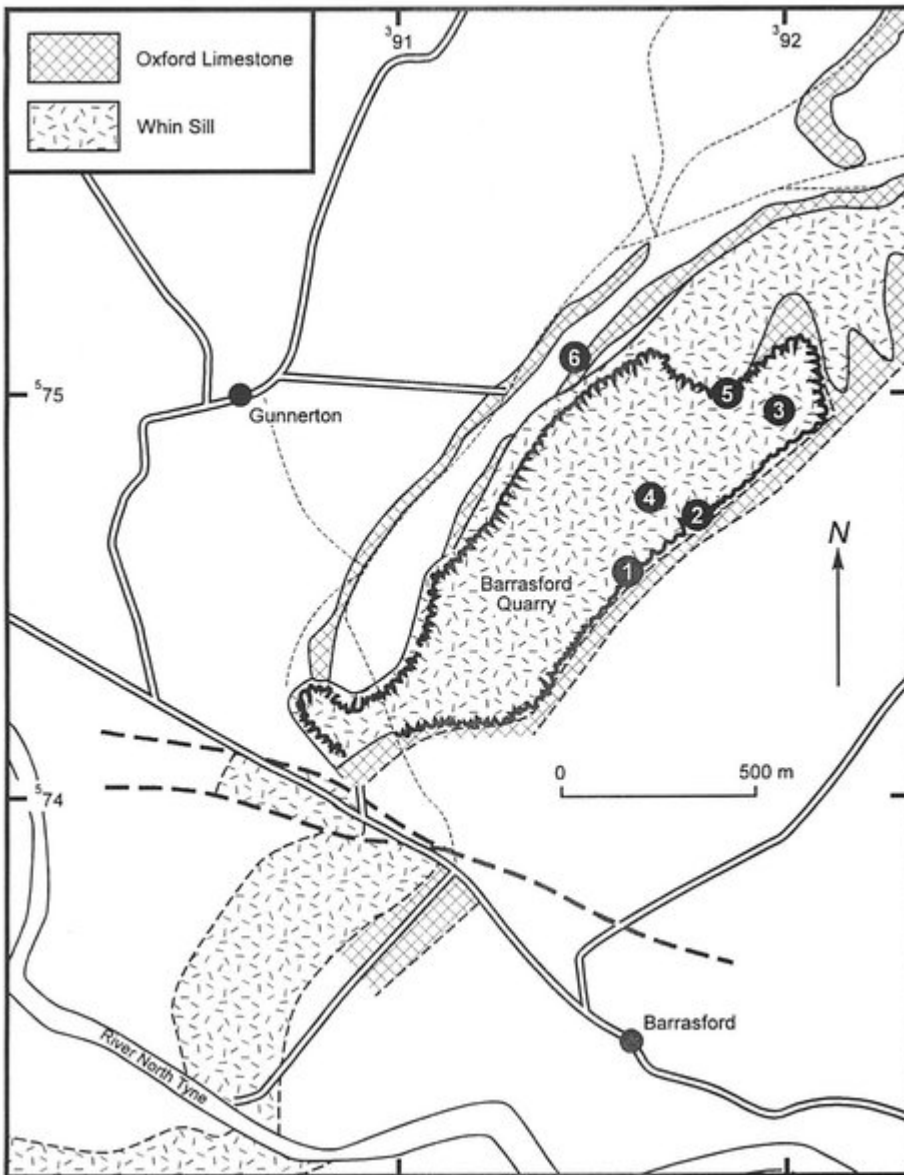


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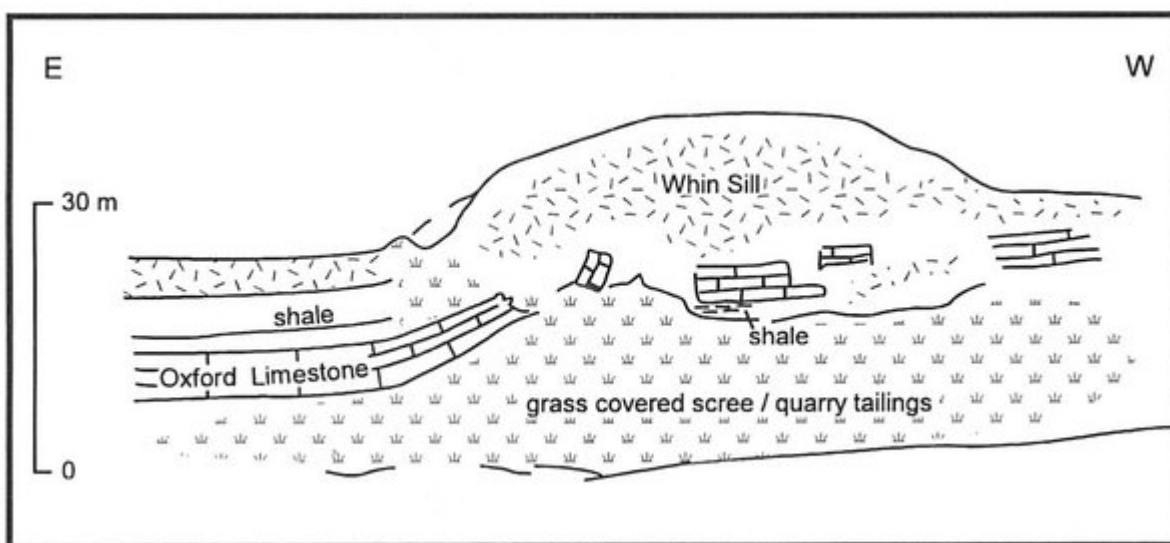


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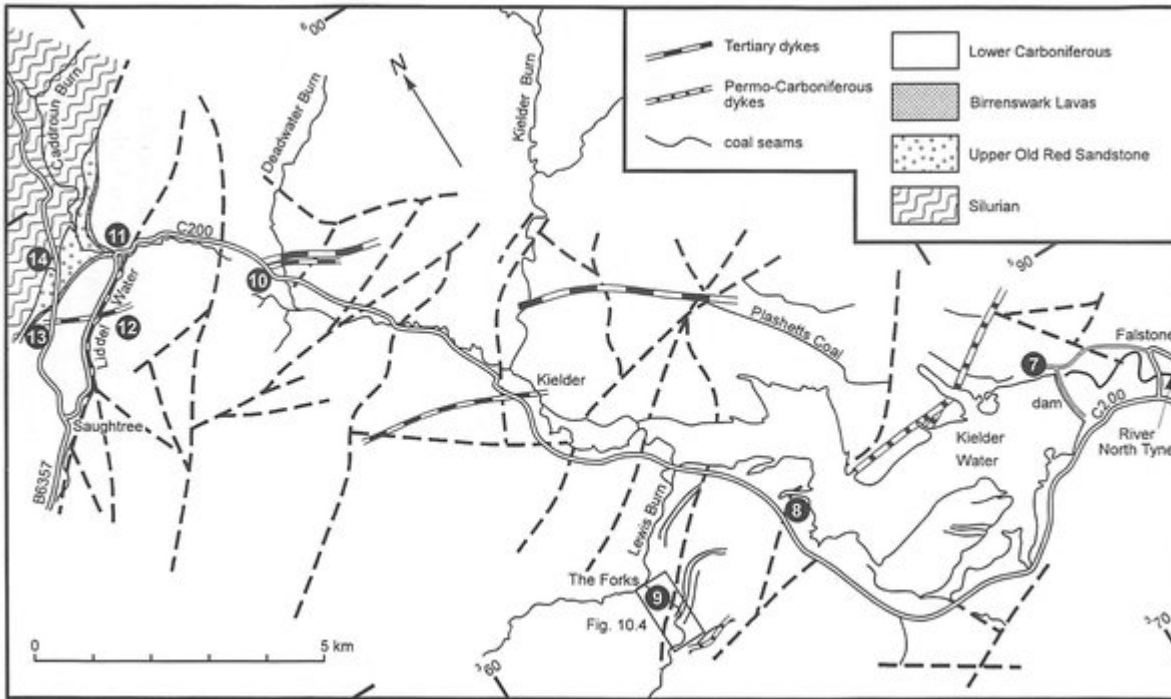




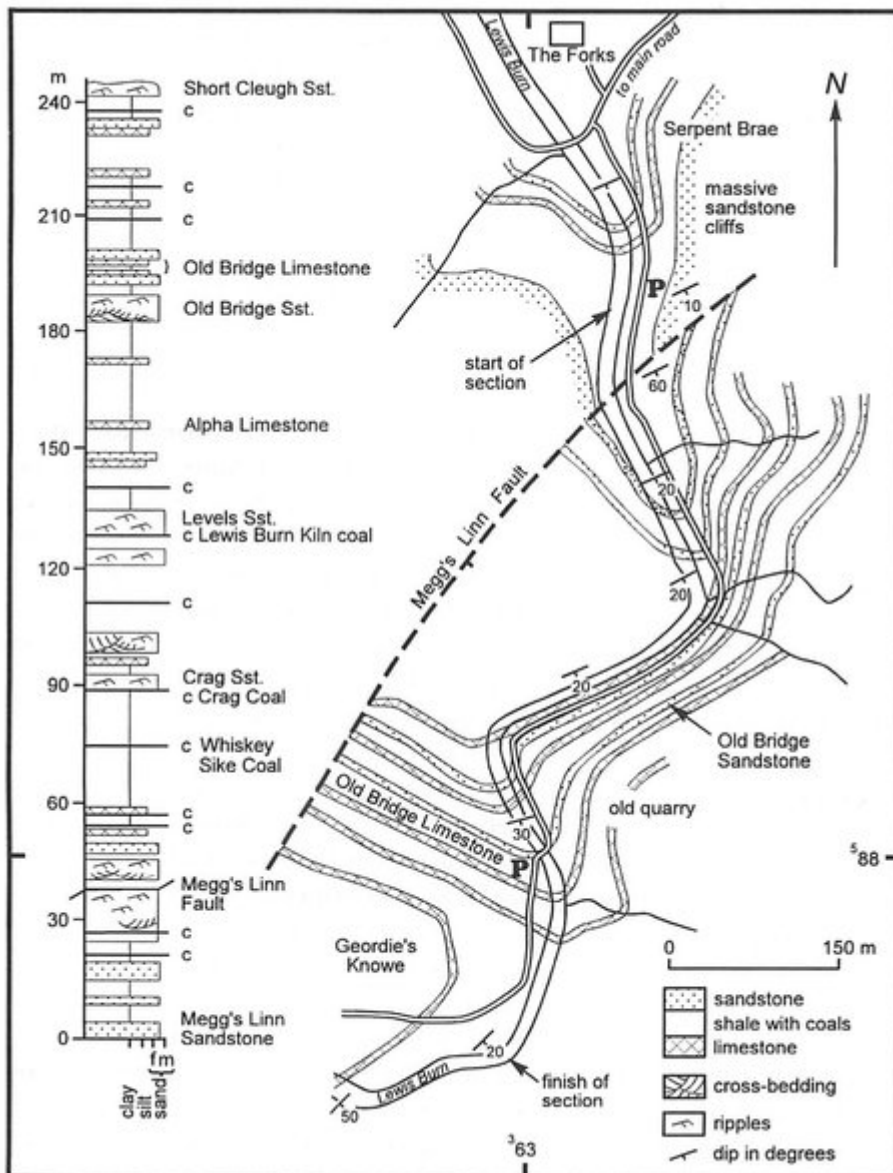
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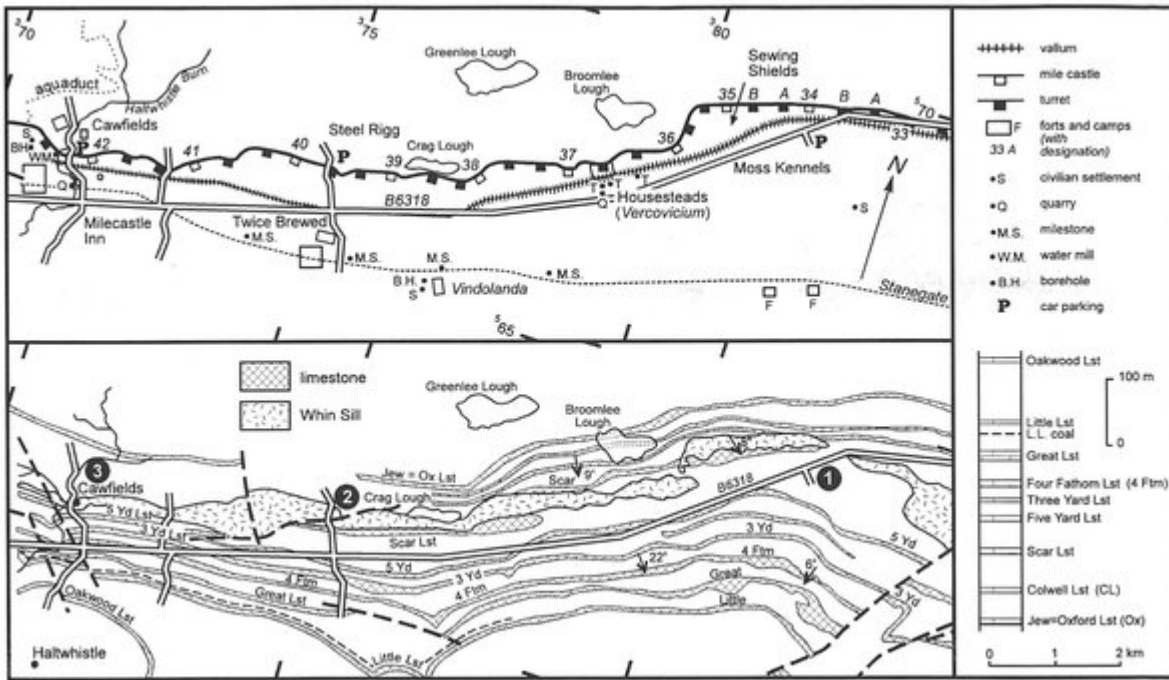
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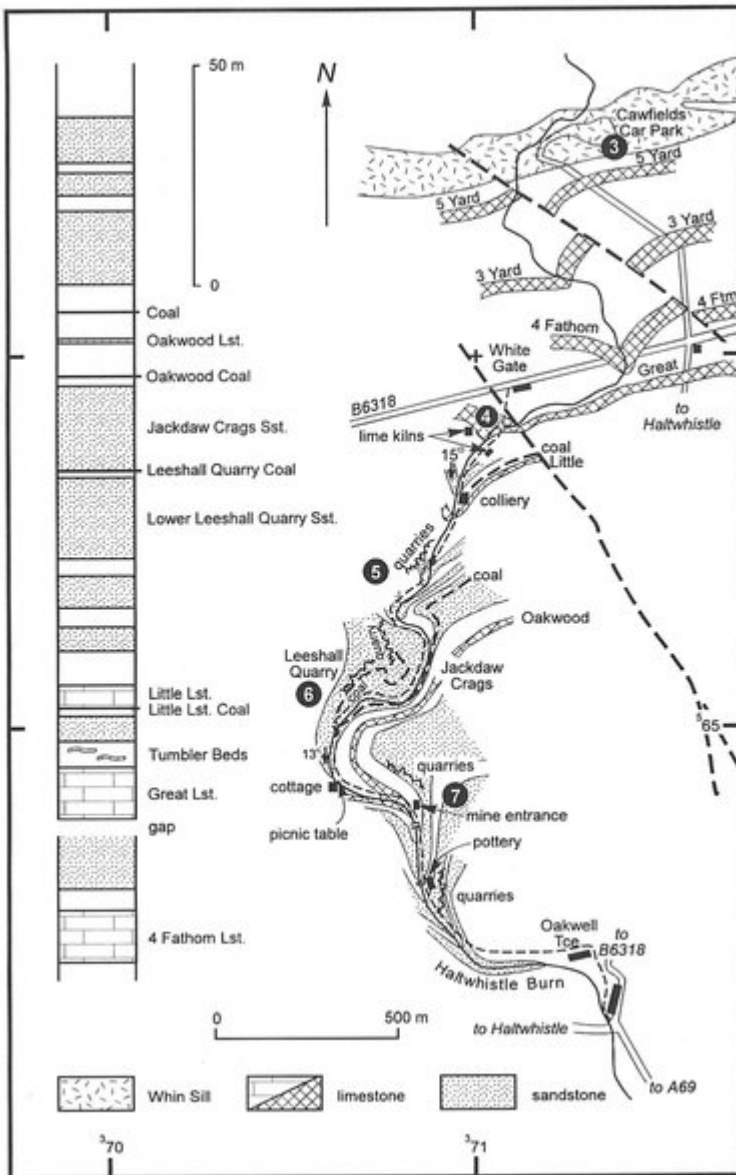


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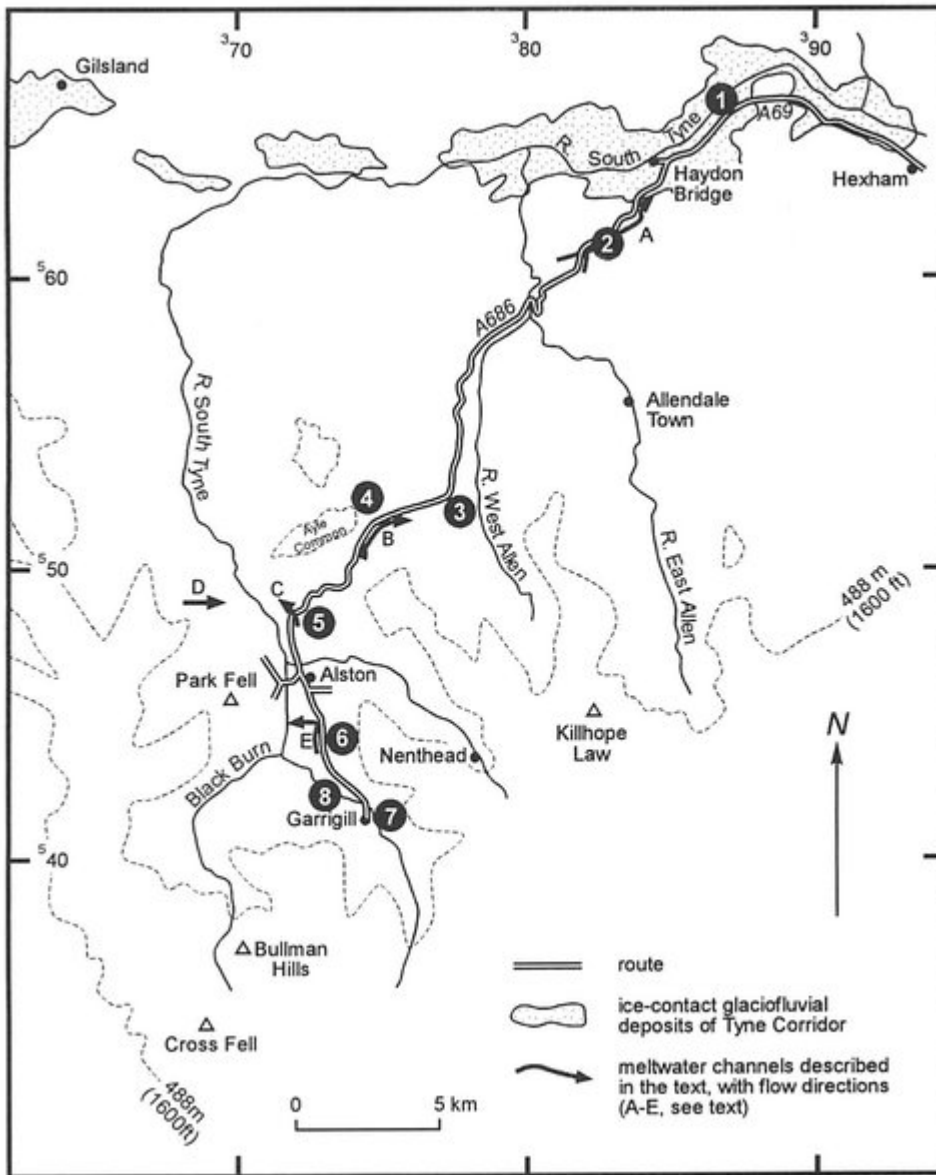


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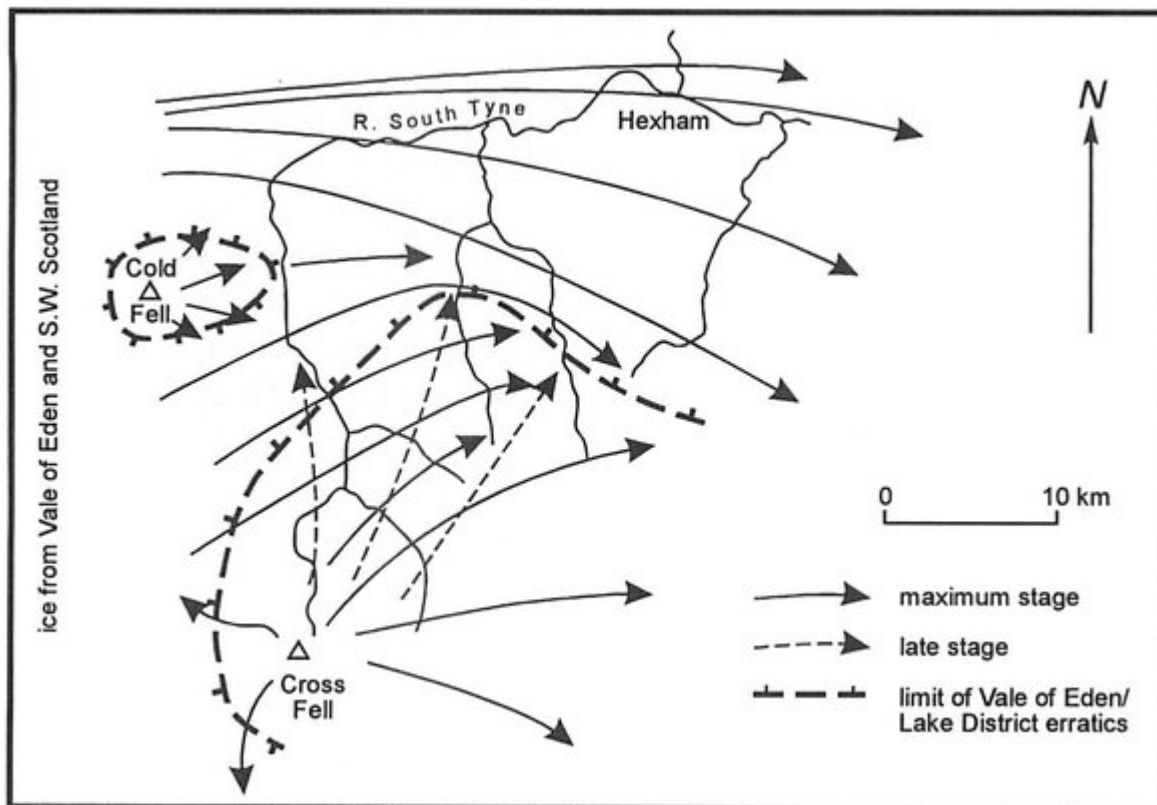




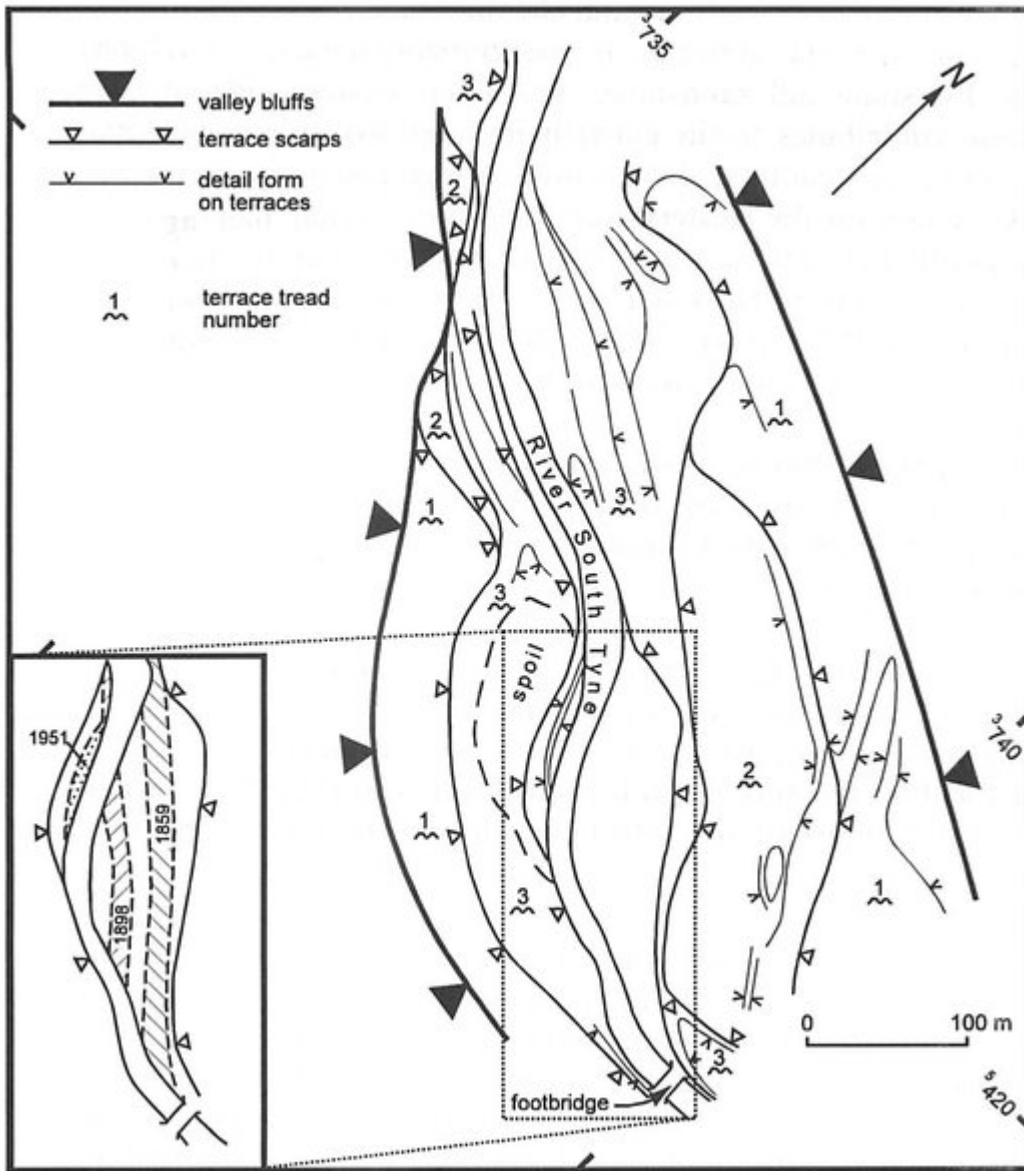
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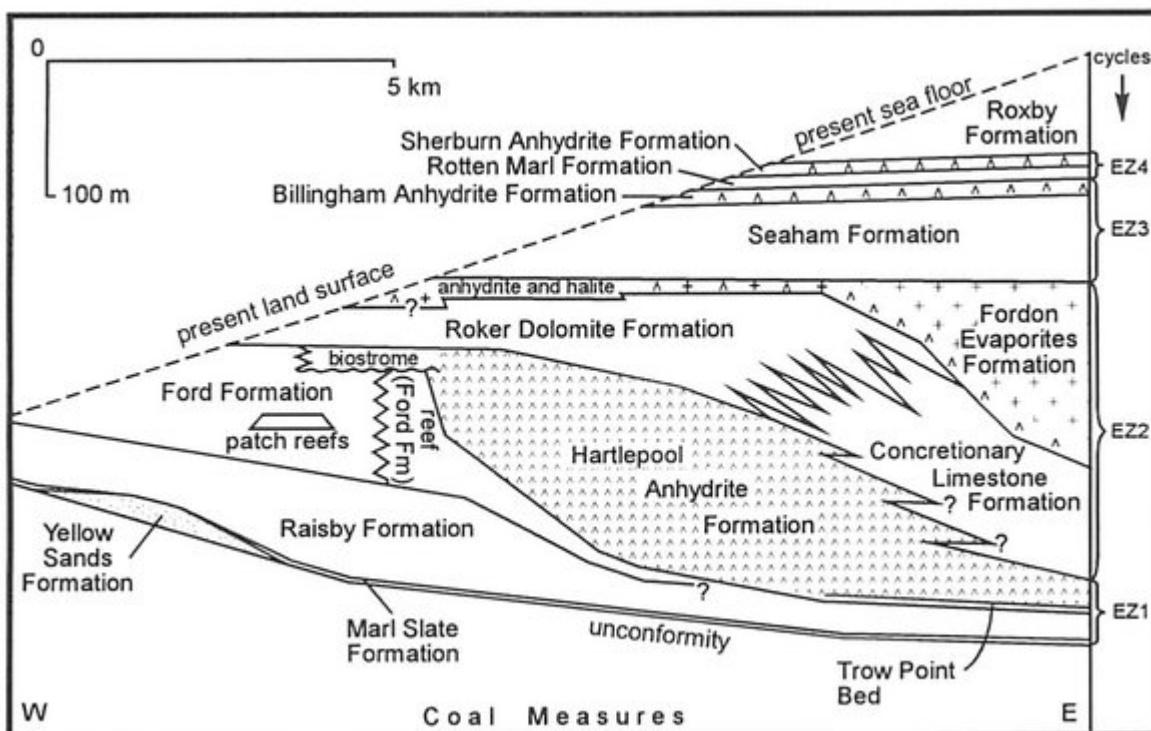
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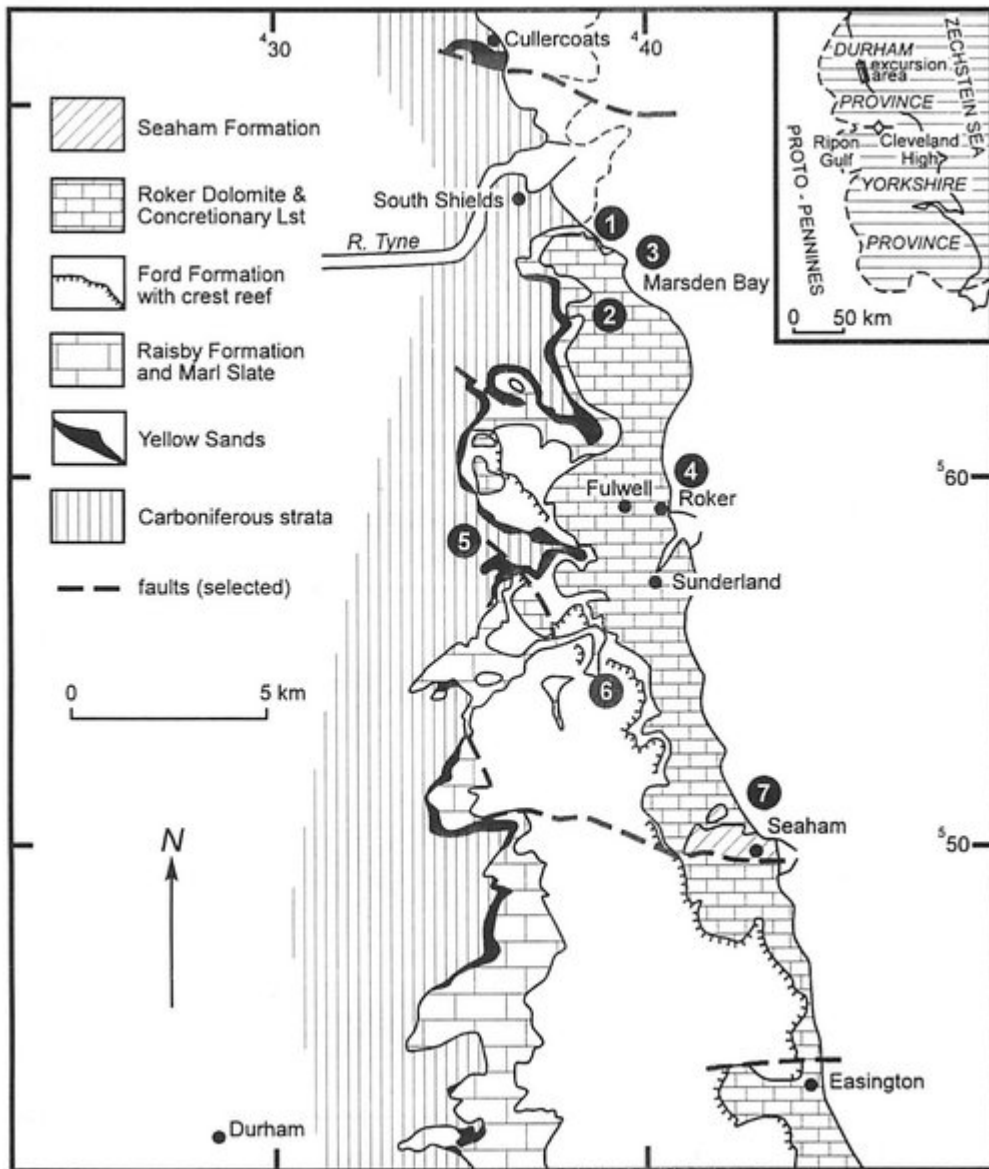
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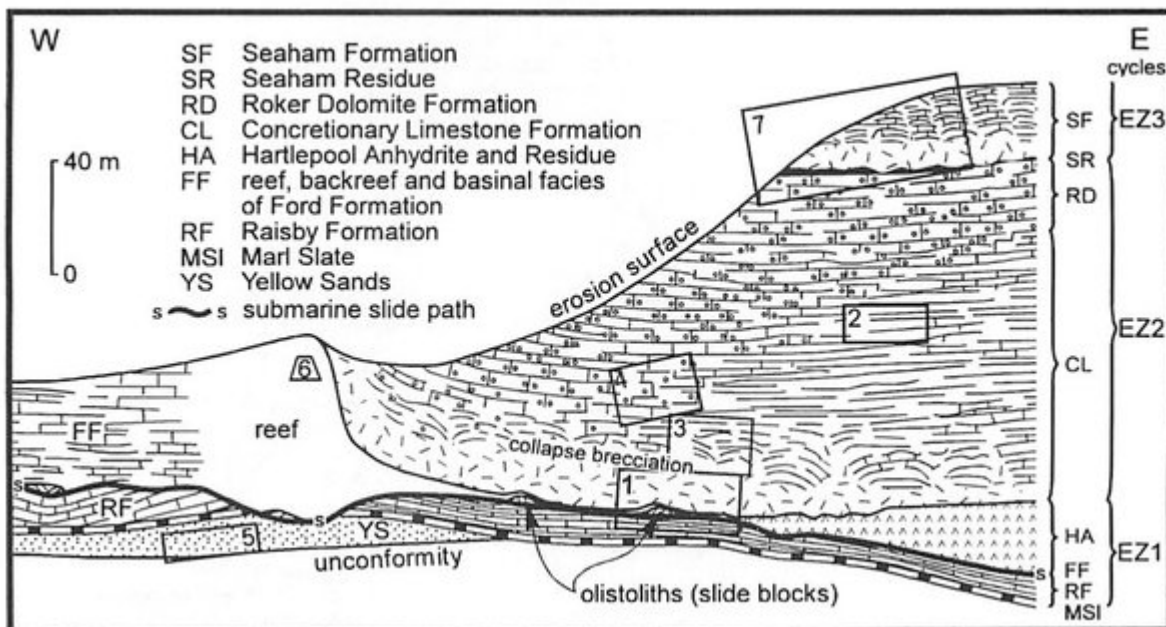
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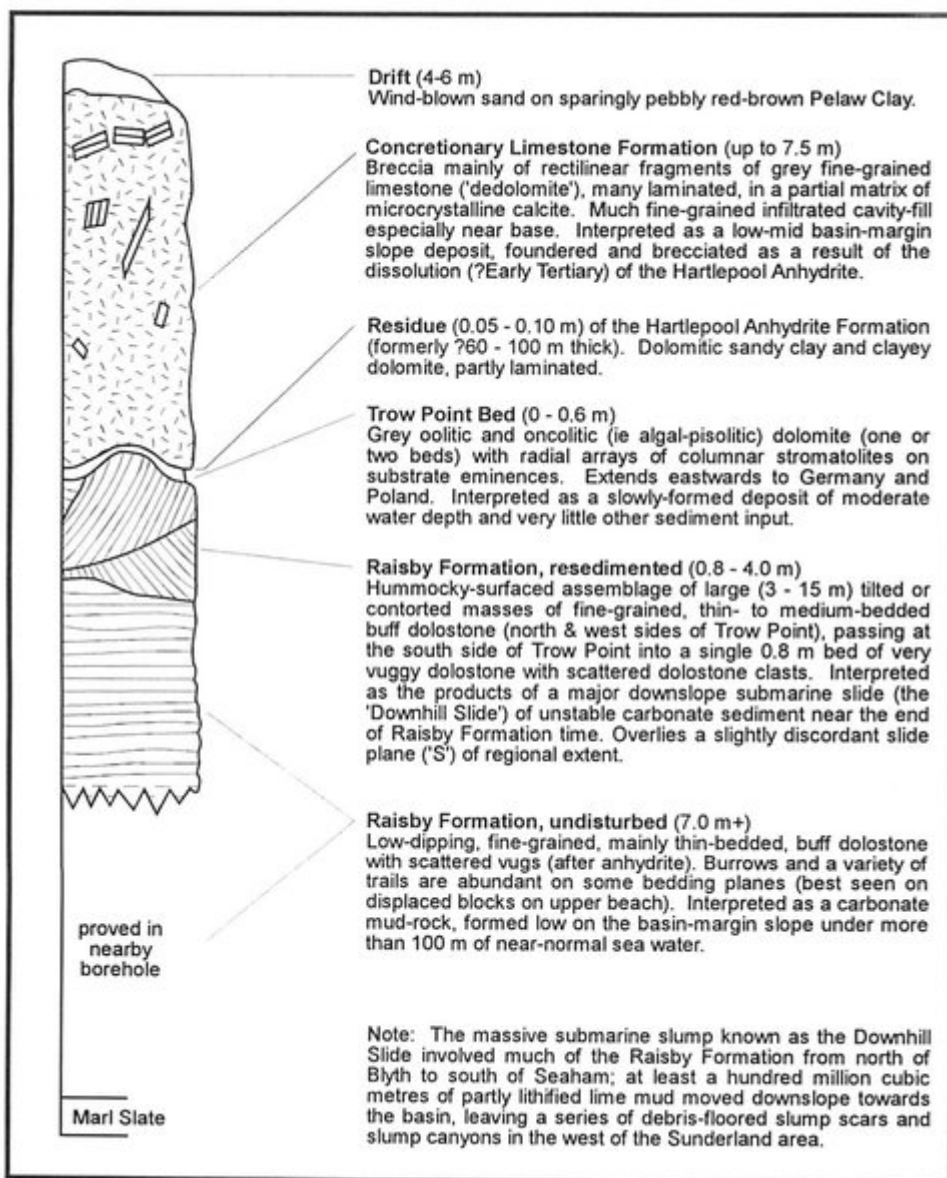
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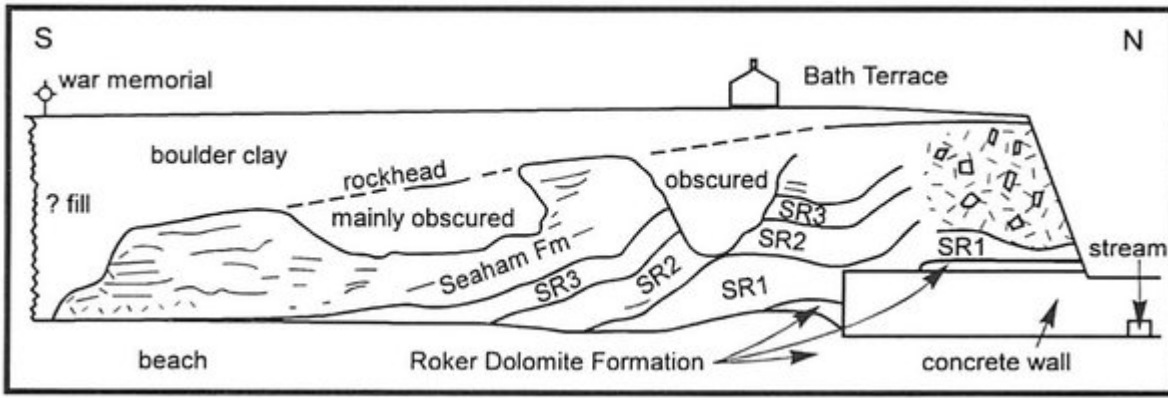
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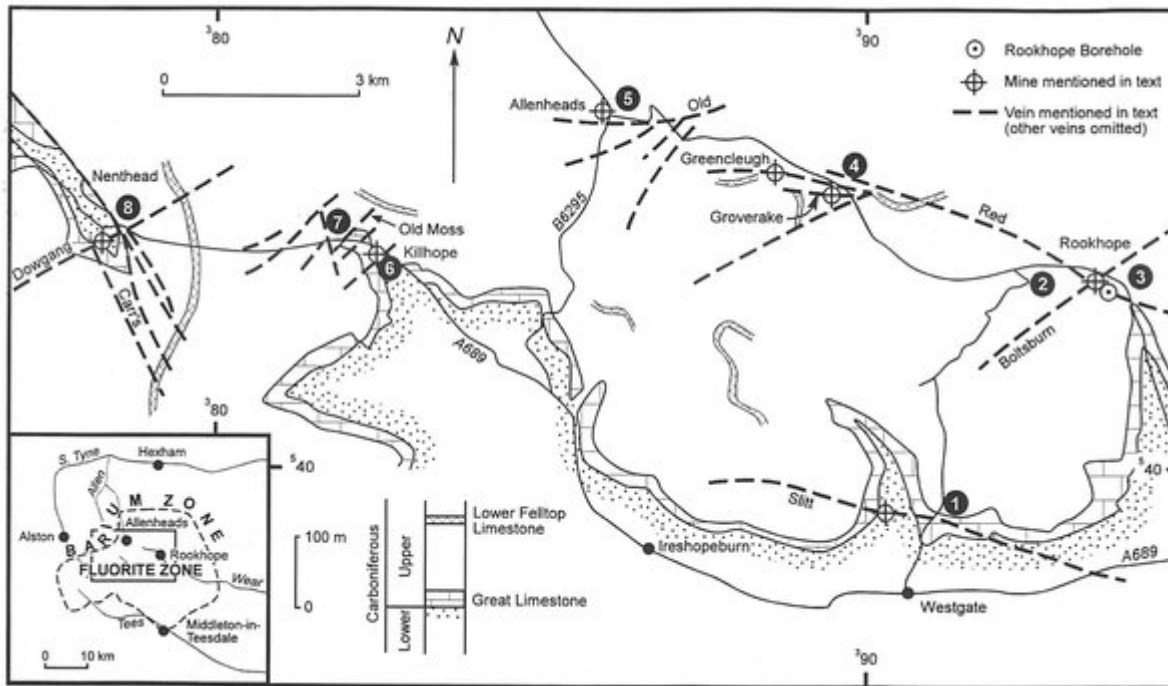
(Figure 13.3) Permian strata in the excursion area, showing the approximate stratigraphical positions of localities 1–7. The Hartlepool Anhydrite would not normally be present close to the coast but is included for completeness.



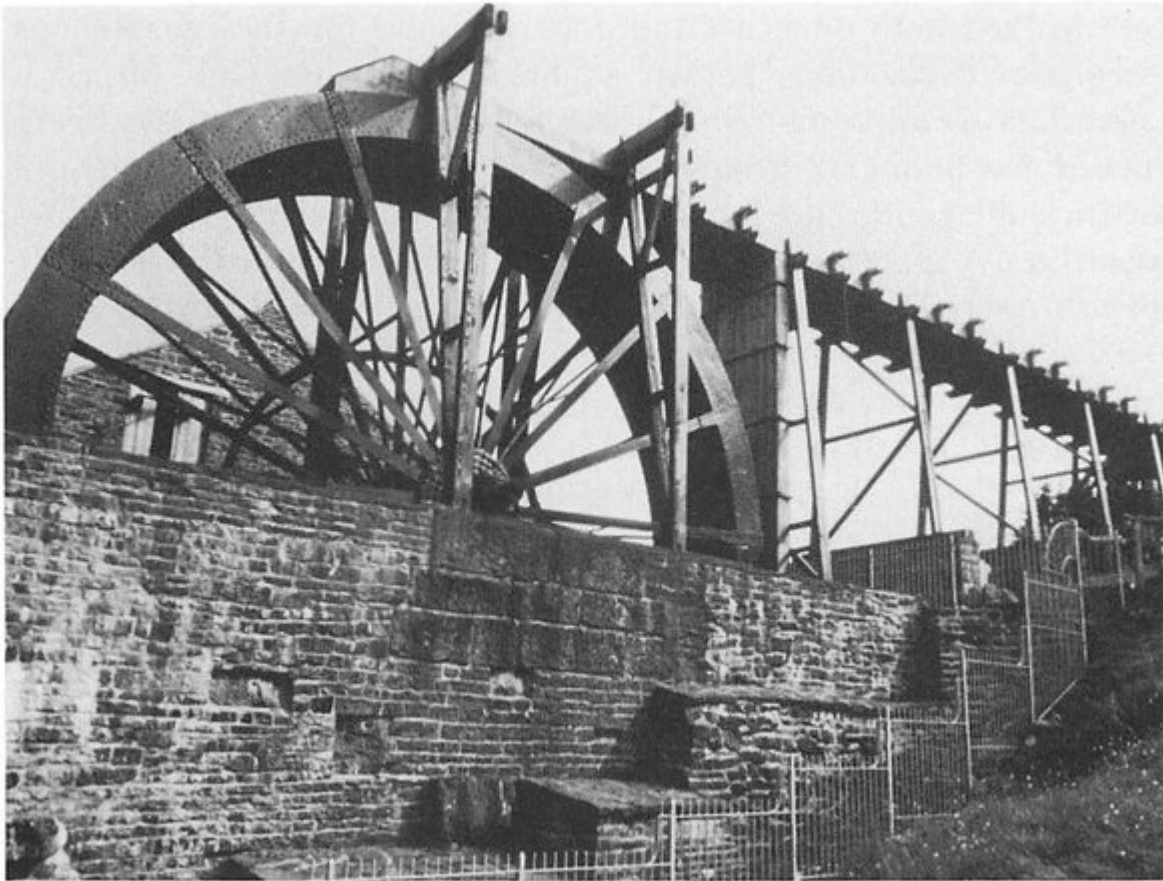
(Figure 13.4) Strata exposed at Trow Point.



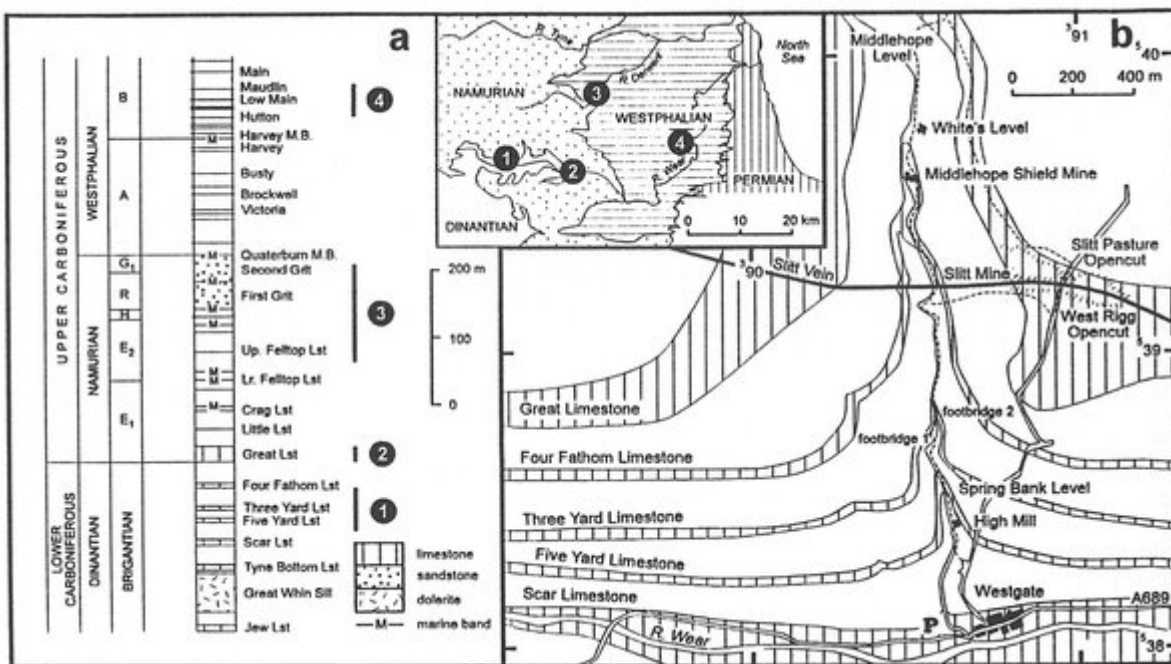
(Figure 13.5) Strata exposed in the cliffs north of Seaham Harbour.



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

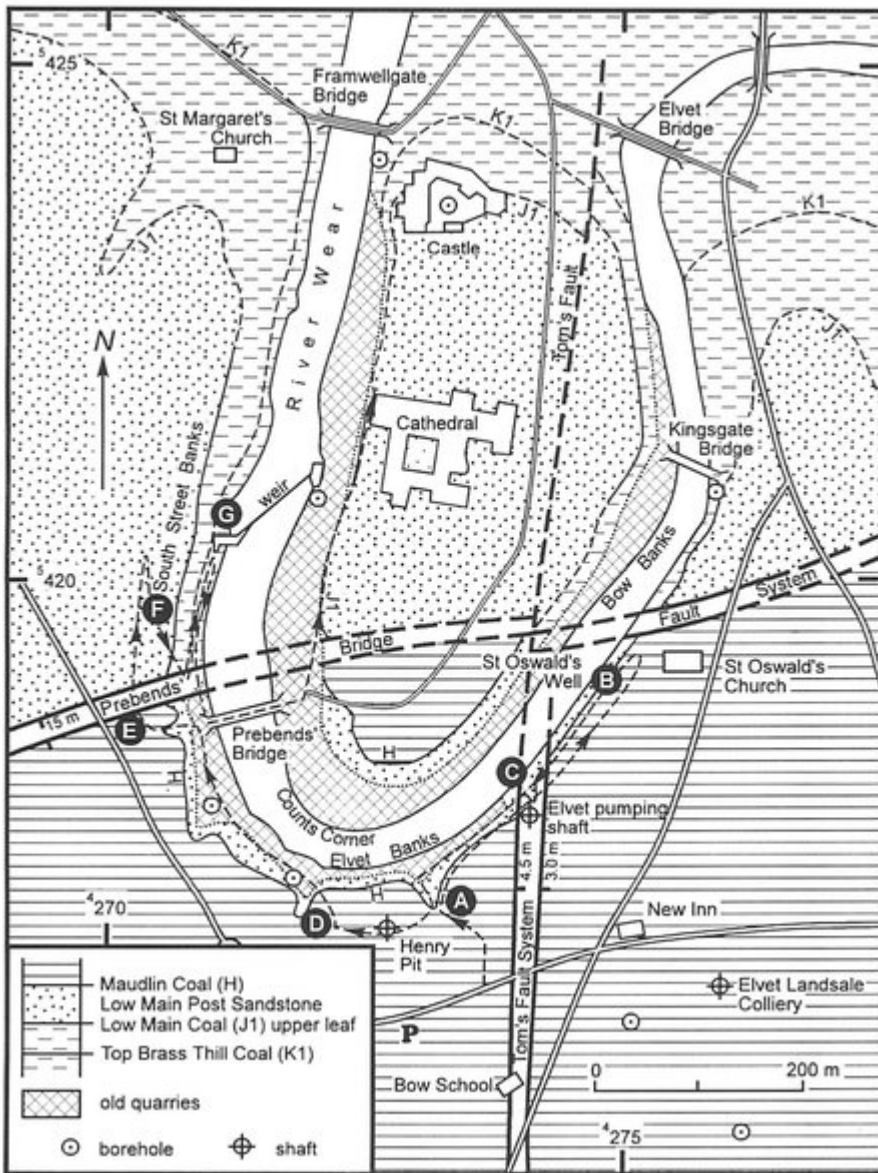


(Figure 14.2) Restored overshot wheel, Killhope Lead Mining Centre, Weardale. Photo: P. Nixon.

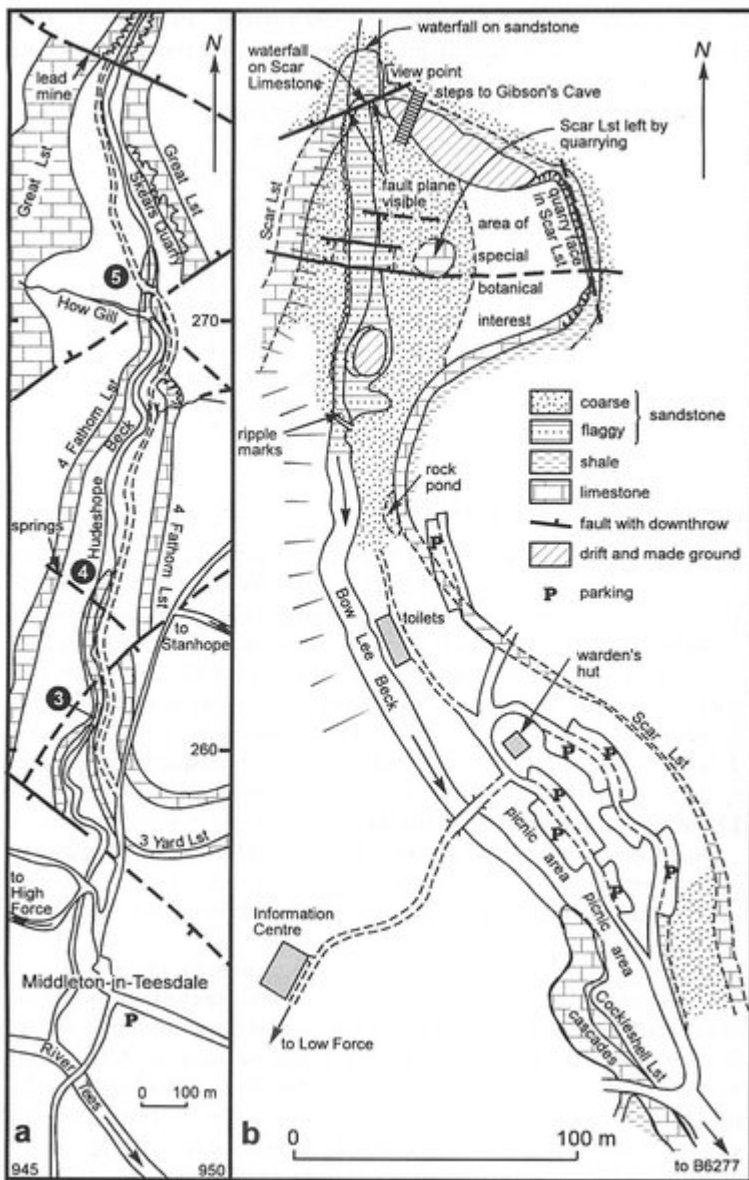


(Figure 15.1) (a) Carboniferous succession, and inset geological map for mid Durham, showing sections described at localities 1-4. (b) Geology of Middlehope Burn, Westgate (Locality 1).

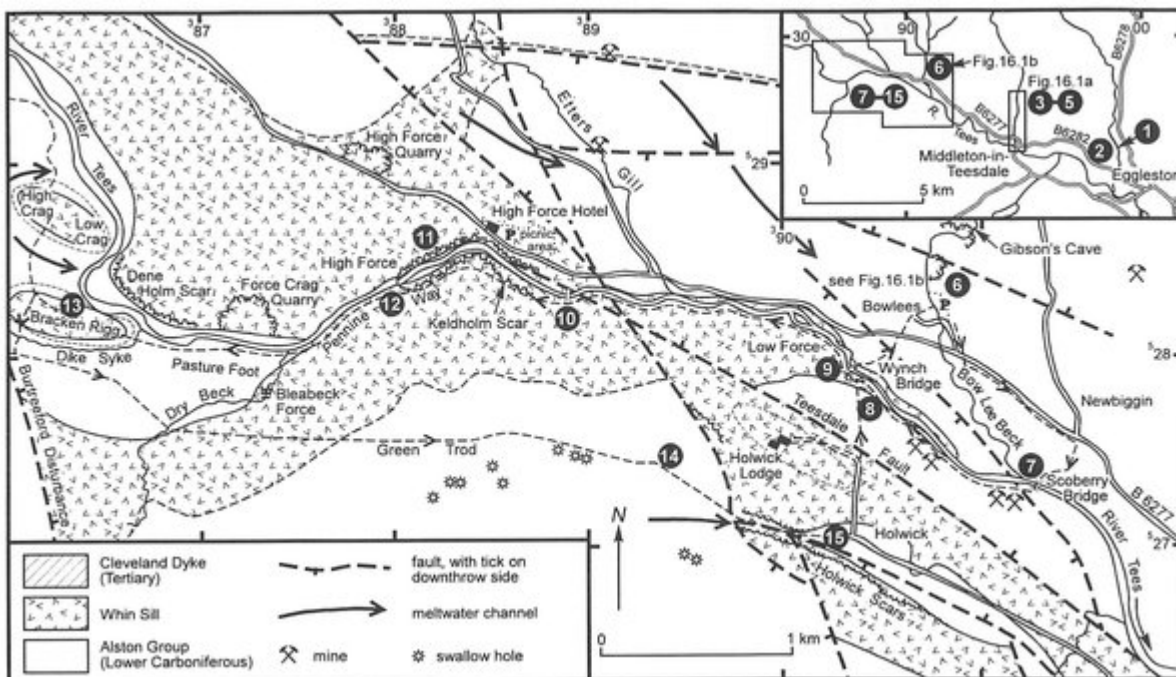




(Figure 15.2) Geological map of the River Wear Gorge, Durham City. Details of boreholes are given in Johnson and Richardson (1990).



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



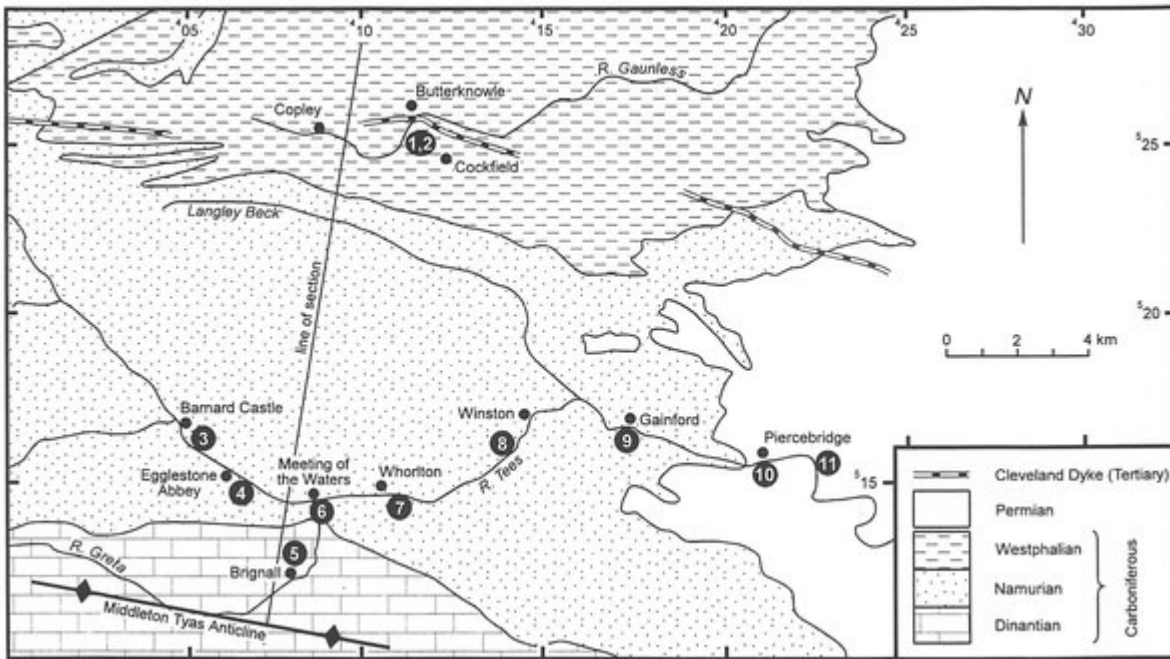
(Figure 16.2) Geological map of upper Teesdale around High Force. Inset showing localities described in text.



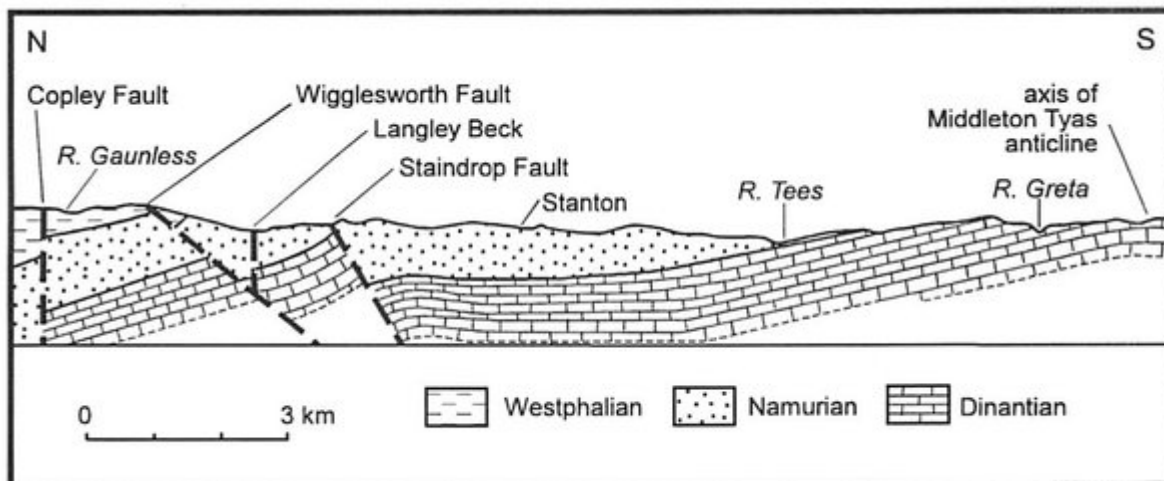
(Figure 16.3) High Force (Locality 11). WS = Whin Sill; S = metamorphosed sandstone; TBL = Tyne Bottom Limestone. Photo: J. Senior.



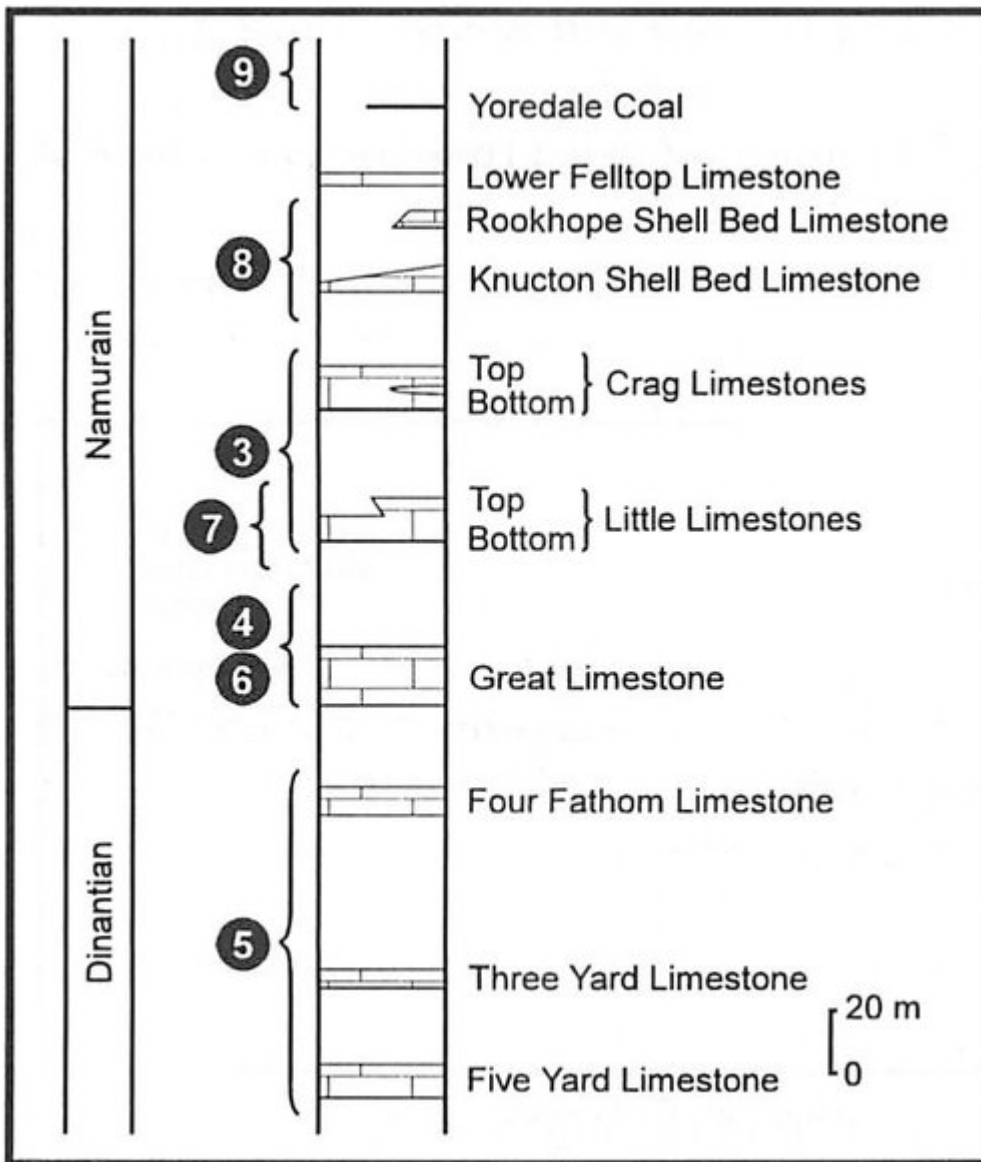
(Figure 16.4) The Whin Sill forming Howick Scars, looking east (Locality 15). Photo: J. Senior.



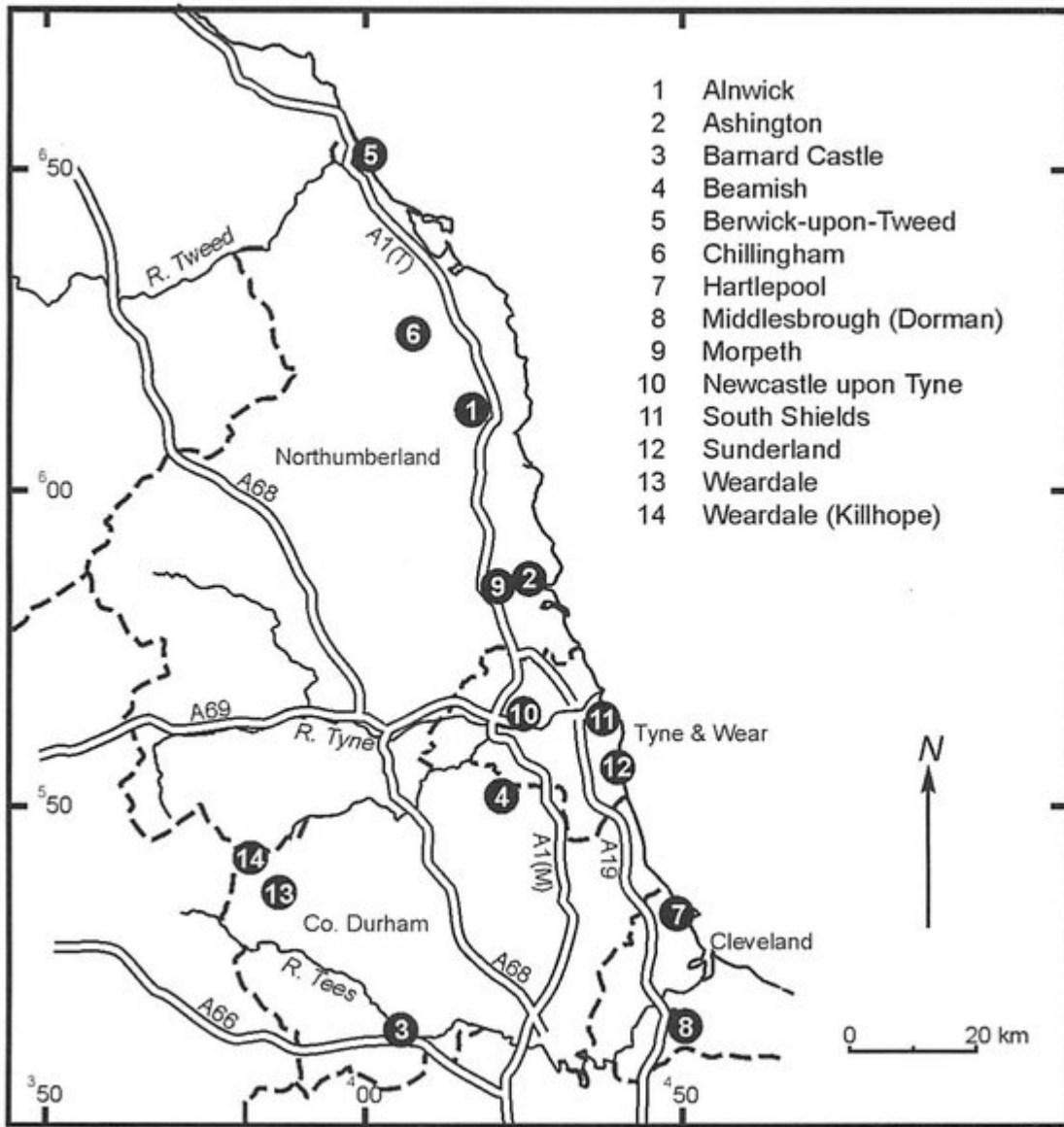
(Figure 17.1) Geological map of southern County Durham showing the localities described in the text (after Mills & Hull 1976).



(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 cyclothem units between Barnard Castle and Piercebridge, indicating sections exposed at each locality.



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



# NORTHUMBRIAN ROCKS AND LANDSCAPE

A FIELD GUIDE

EDITED BY COLIN SCRUTTON  
YORKSHIRE GEOLOGICAL SOCIETY

*(Front cover)*



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