

## Middle Age

### The Mesozoic

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## MESOZOIC

Cretaceous    A Triple Whammy:  
Jurassic  
Triassic      End-Cretaceous  
Late Triassic  
End-Permian



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Triassic:  
A Game of Three Halves

(3 major units in Germany;  
Only 2 in UK)

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## Sherwood Sandstone Fm



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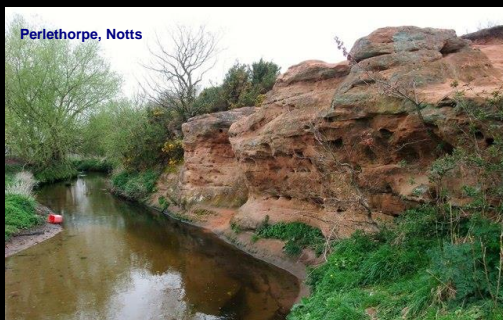
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## Sherwood Sandstone Fm



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## Mercia Mudstone Fm



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## Salty mudflats




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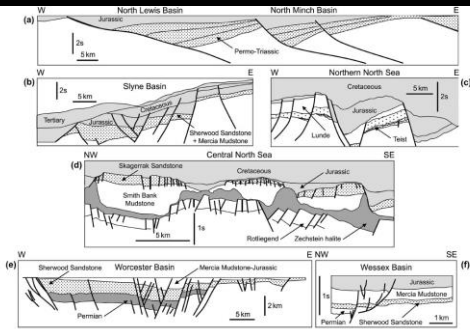
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## Rifted Britain




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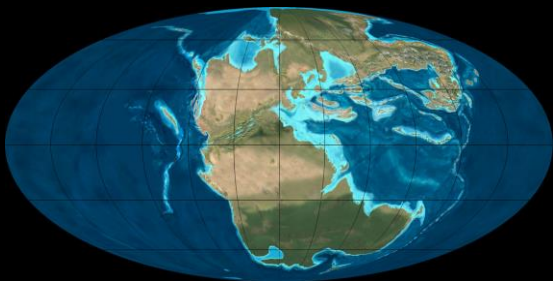
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## The great break-up




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## Triassic Europe



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## The Seas Return

Late Triassic marine sediments



Penarth Group (Lavernock Point)

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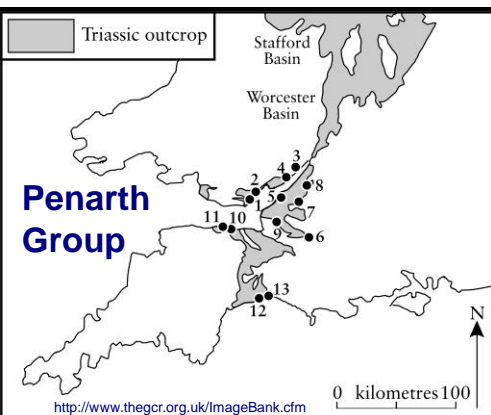
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## Jurassic

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## Early Jurassic – Lias Group



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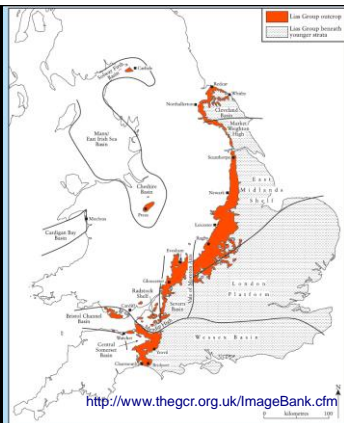
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## Lias

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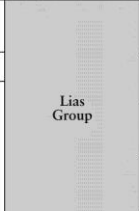
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## Early Jurassic stages

Middle Jurassic	Aalenian		
Lower Jurassic	Toarcian	Upper Lias	 <b>Lias Group</b>
	Pliensbachian	Middle Lias	
	Sinemurian	Lower Lias	
	Hettangian		
Upper Triassic	Rhaetian	<a href="http://www.thegcr.org.uk/ImageBank.cfm">http://www.thegcr.org.uk/ImageBank.cfm</a>	

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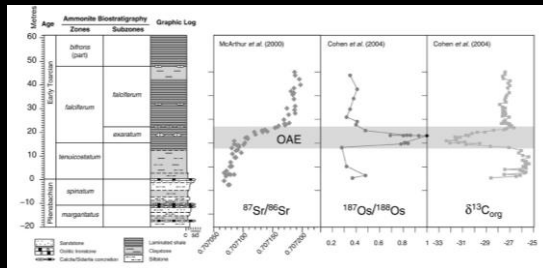
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## Toarcian

Woodcock &  
Strachan (2012)



Enhanced weathering – increased Sr, Os, and light C  
Productivity = marine anoxia

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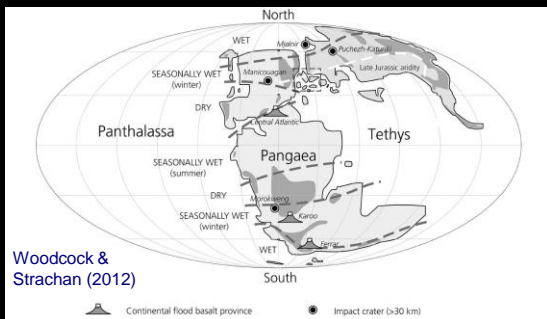
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## Middle Jurassic




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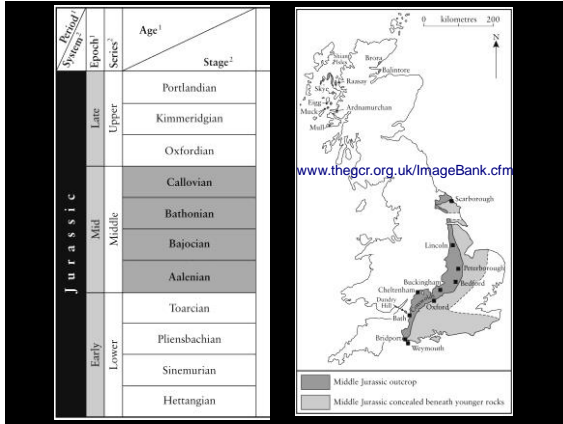
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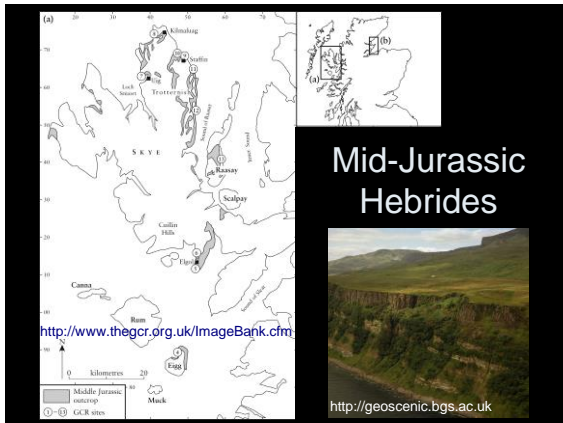
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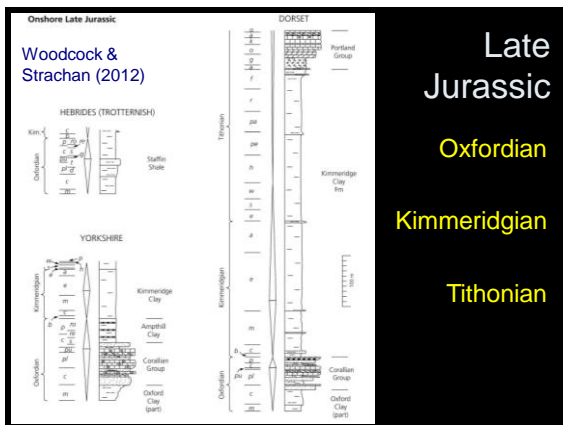
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## Yorkshire - Oxfordian



Corallian Group –  
Filey Brigg

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## Dorset: Tithonian

Known locally as  
Portlandian  
Portland limestone



<http://commons.wikimedia.org/>



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## Cretaceous: The Age of Chalk

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# The Weald

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Dover  
Canterbury  
Rochester  
Maidstone  
Ashford  
Tunbridge Wells  
Beachy Head

Thames Sheppey

Chalk: North Downs  
South Downs  
Lower Greensand, Chalk Hills  
Wealden Series  
Tunbridge Wells Sand  
Ashdown Sand  
Lower Greensand  
South Downs  
Sussex

Alluvium

Underlying Palaeozoic Platform

Cross Section of the Wealden Dome, in relation to Kent

[illegible]

# Wonders of the Wealden

Baryonyx claw – 35 cm

*Iguanodon* teeth

Sketch of the 14th Iguanodon's newly discovered tooth, JOURNAL from the  
 Institution of SILESURY, DORSET, no. 1845.

14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1

a

b

Portion of the jaw of the Iguanodon from the Wealden of Silesbury, Dorset, no. 1845.

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**Simplified Geological Map of the Isle of Wight**  
*modified and partially redrawn after Brinkley  
 in Parker (1916) and partially updated  
 (geographical terms, Ink West & Tenny West (c) 2000)*

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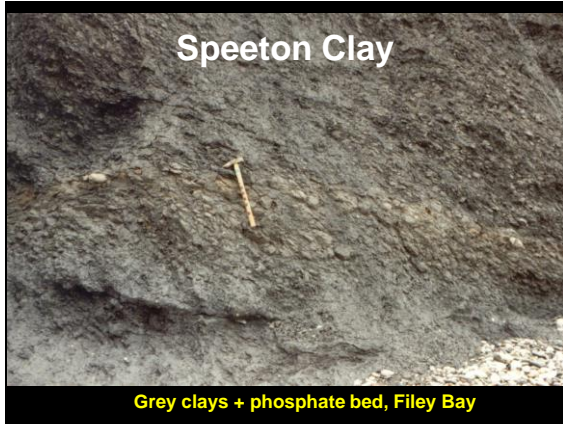
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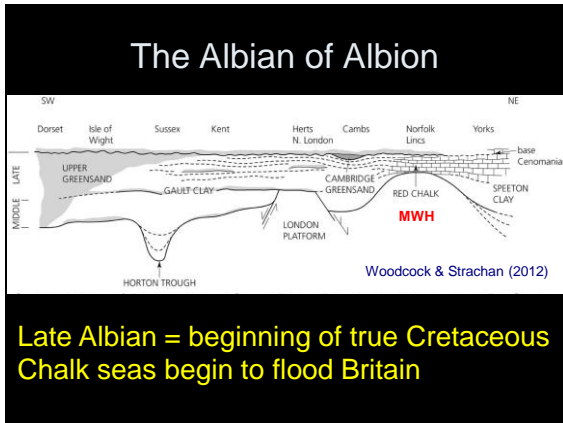
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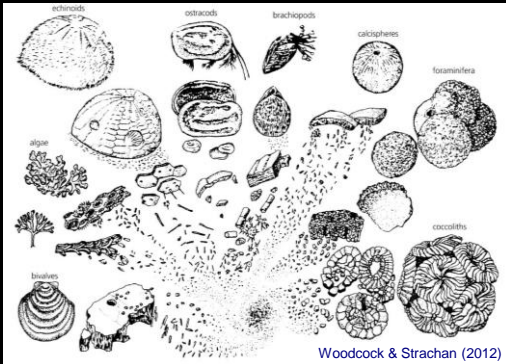
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## Chalky creatures



Woodcock & Strachan (2012)

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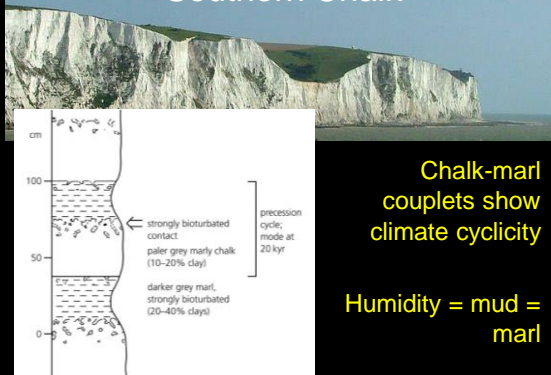
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## Southern Chalk




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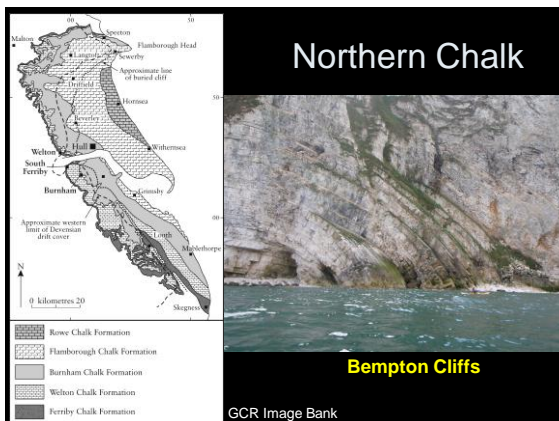
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## Northern Chalk




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## Northern Irish Chalk



White Cliffs, Portrush, Co. Antrim

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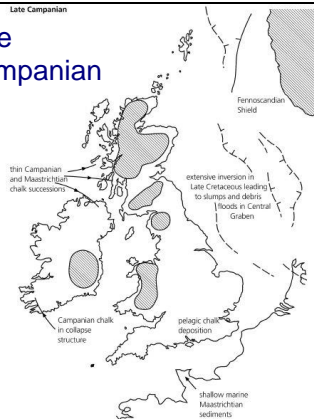
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## Chalk across the board

Woodcock &  
Strachan (2012)

### Late Campanian



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## The End (of the Mesozoic)



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## Links

### ***Cetiosaurus* – the Rutland dinosaur:**

<http://www.leicester.gov.uk/your-council-services/leicester-city-museums/museums/mwm-art-gallery/dinosaurs/the-rutland-dinosaur/>

### **GCR Image Bank – Lower Jurassic:**

<http://www.thegcr.org.uk/ImageBank.cfm?v=30&Style=All>

### **GCR Image Bank – Middle Jurassic:**

<http://www.thegcr.org.uk/ImageBank.cfm?v=26&Style=All>

### **GCR Image Bank – Upper Jurassic:**

<http://www.thegcr.org.uk/ImageBank.cfm?v=21&Style=All>

### **Geology of the Wessex Coast – Ian M. West:**

<http://www.southampton.ac.uk/~imw/>

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