

Fleet Lagoon Walk





MOONFLEET

J. MEADE
FALKNER

The village of Moonfleet lies half a mile from the sea on the right or west bank of the Fleet stream. This rivulet, which is so narrow as it passes the houses that I have known a good jumper clear it without a pole, broadens out into salt marshes below the village, and loses itself at last in a lake of brackish water. The lake is good for nothing except sea-fowl, herons, and oysters, and forms such a place as they call in the Indies a lagoon; being shut off from the open Channel by a monstrous great beach or dike of pebbles, of which I shall speak more hereafter. When I was a child I thought that this place was called Moonfleet, because on a still night, whether in summer, or in winter frosts, the moon shone very brightly on the lagoon; but learned afterwards that 'twas but short for 'Mohune-fleet', from the Mohunes, a great family who were once lords of all these parts.

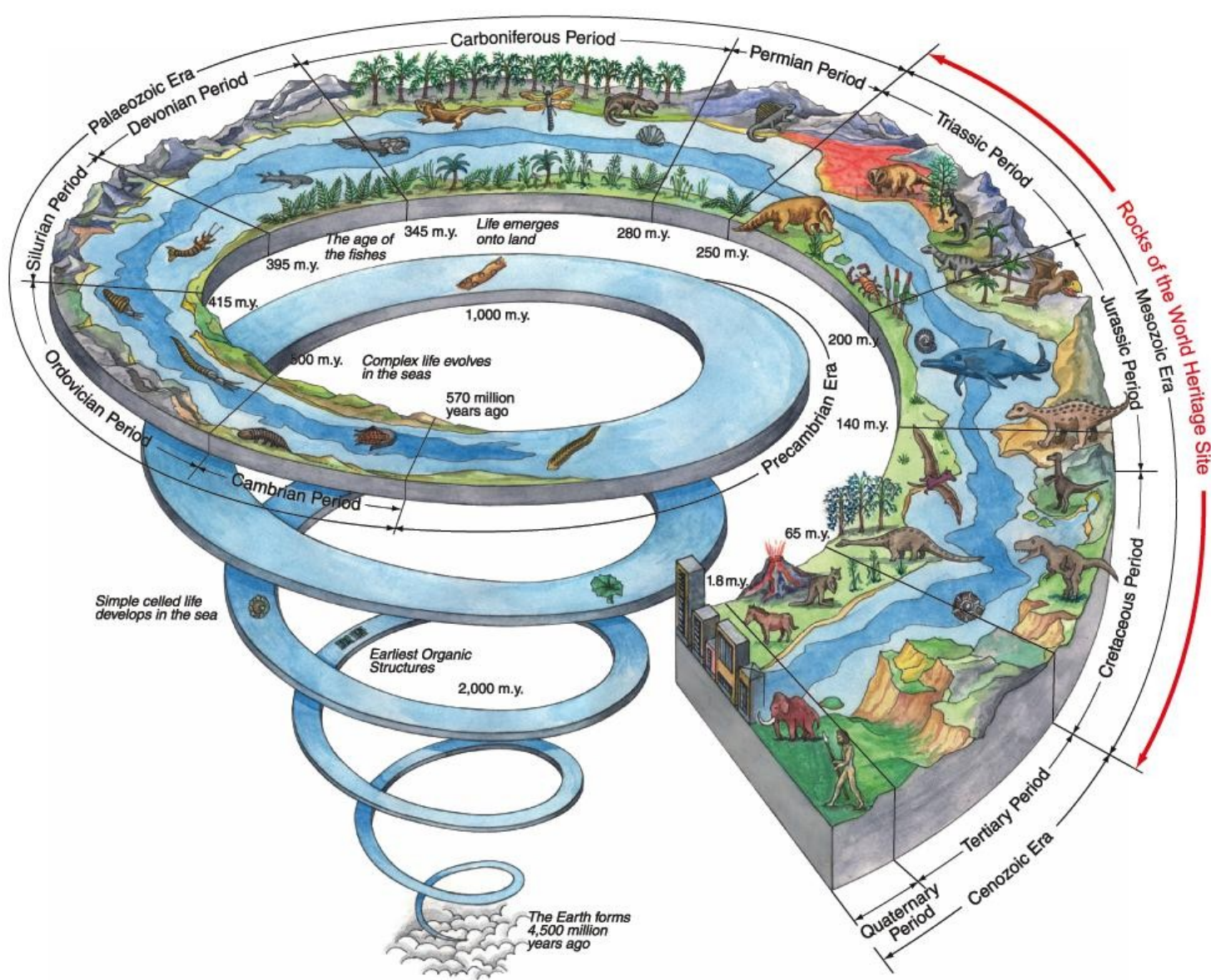




Chesil Bank and the Fleet

- UNESCO East Devon and Dorset World Heritage Site
- RAMSAR Wetland of international importance
- EU Birds Directive Special Protected Area (SPA)
- EU Habitats Directive Special Area of Conservation (SAC)
- Dorset Area of Outstanding Natural Beauty (AONB)
- Natural England Site of Special Scientific Interest (SSSI)
- Geological Conservation Review (GCR) Site

Deep Time



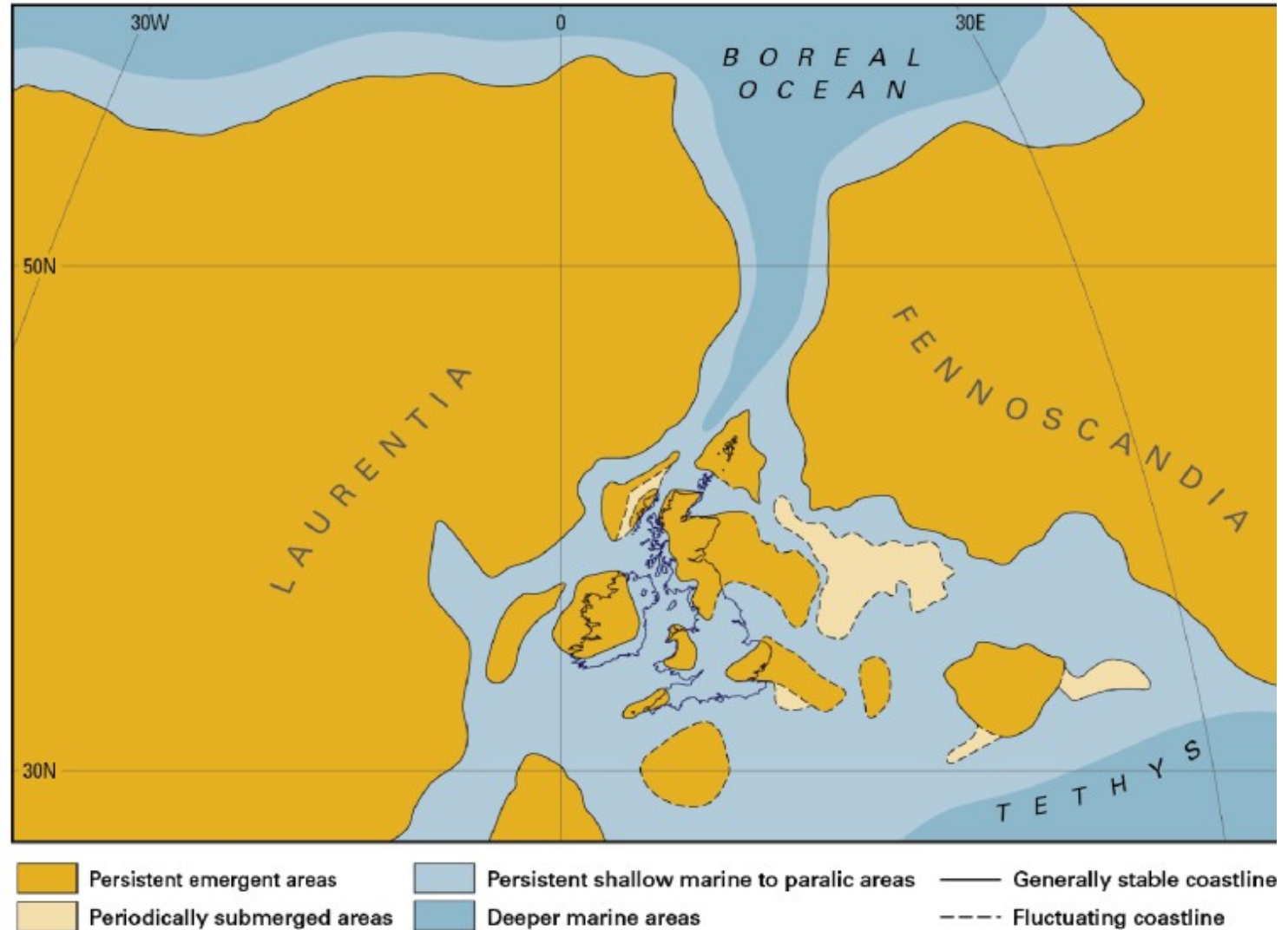
Middle Jurassic

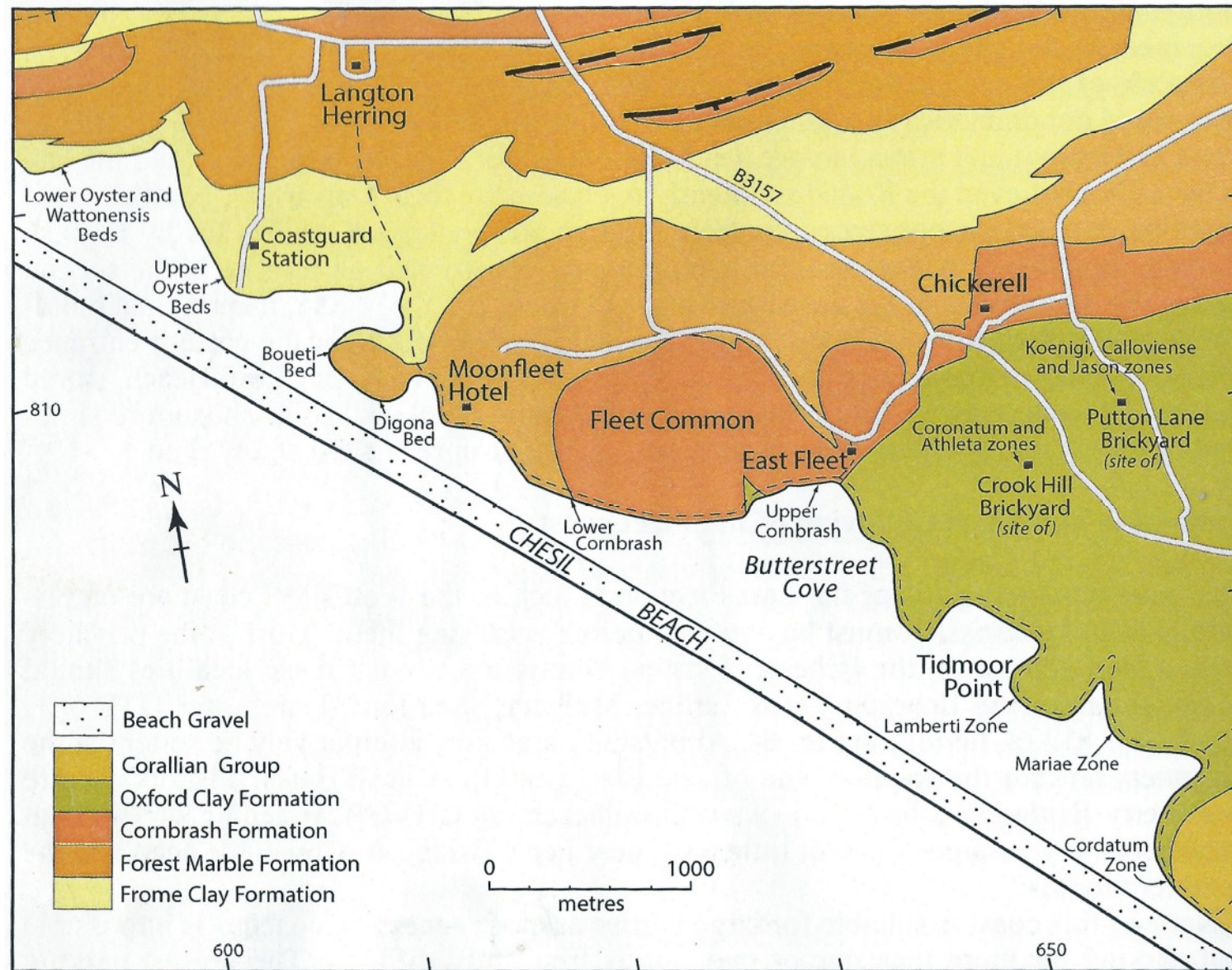
175-164 mya

Britain lay about 20° latitude further south than now

Warm and humid, with high rainfall and high carbon dioxide levels leading to intense weathering and erosion

Conditions promoted marine carbonate deposition





Map of the Fleet shore
showing locations of
interest

Cope, J.C.W (2016)
Geology of the Dorset
Coast

Geologists' Association
Guide No. 22

CityPrint Ltd

Fleet Geology



Kimmeridge Clay Formation

Corallian Group

Kellaways Formation and Oxford Clay Formation

Cornbrash Formation

Forest Marble Formation

Frome Clay Formation

(Upper Fuller's Earth)



Great
Oolite
Group

Kimmeridgian Age

157-152 mya

Upper Jurassic

Oxfordian Age

163-157 mya

Callovian Age

166-163 mya

Bathonian Age

168-166 mya

Middle
Jurassic

W

E

Abbotsbury

Langton
Herring

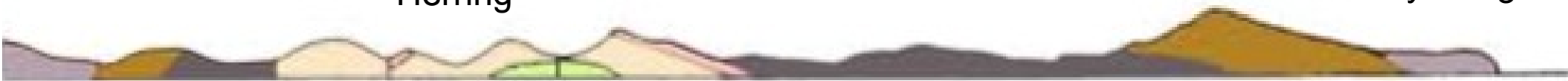
Moonfleet
Manor
Hotel

Chickerell

Weymouth

Wyke Regis

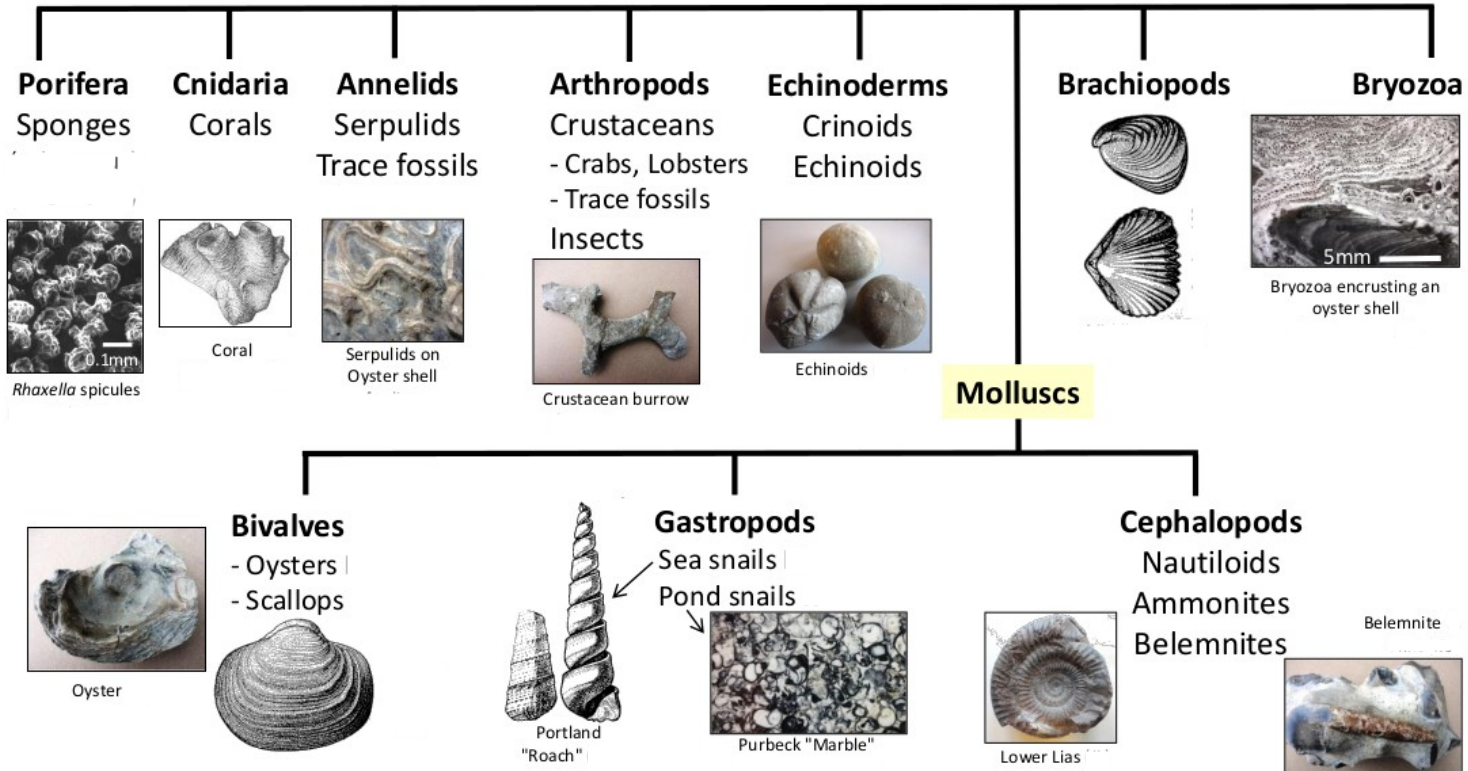
Ferry Bridge



Forest Marble



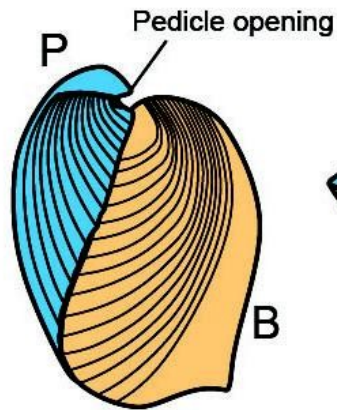
Fossil Invertebrate Animals from the World Heritage Cost



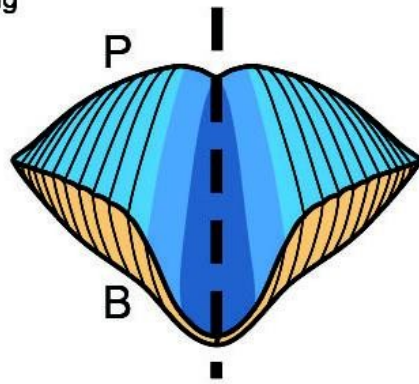
Forest Marble Fossils



Brachiopod

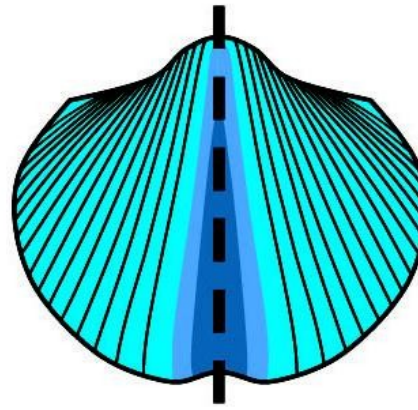


Side view



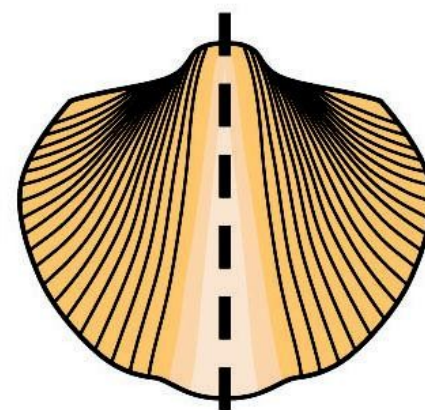
Front view

Pedicle or
ventral valve (P)

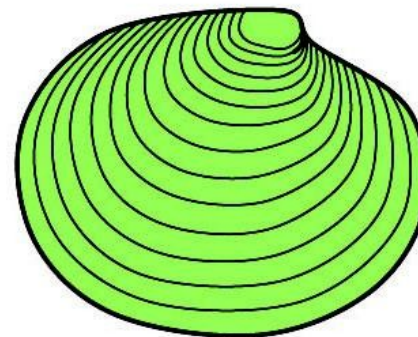
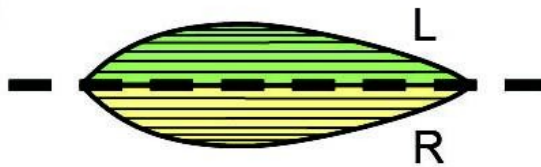
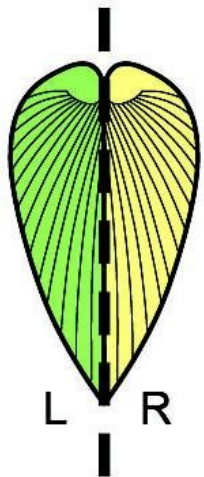


Top view

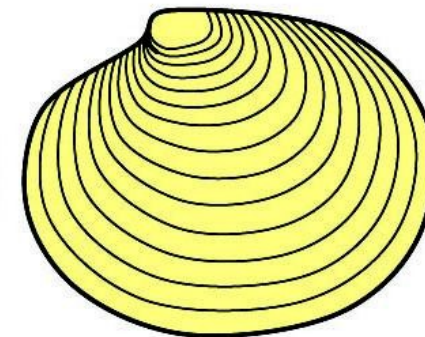
Brachial or
dorsal valve (B)



Bottom view



Left or top valve (L)



Right or bottom
valve (R)

Bivalve (Pelecypod)



'Classic' Brachiopods from Herbury



Goniorhynchia boueti



Ornithella (Digonella) digona

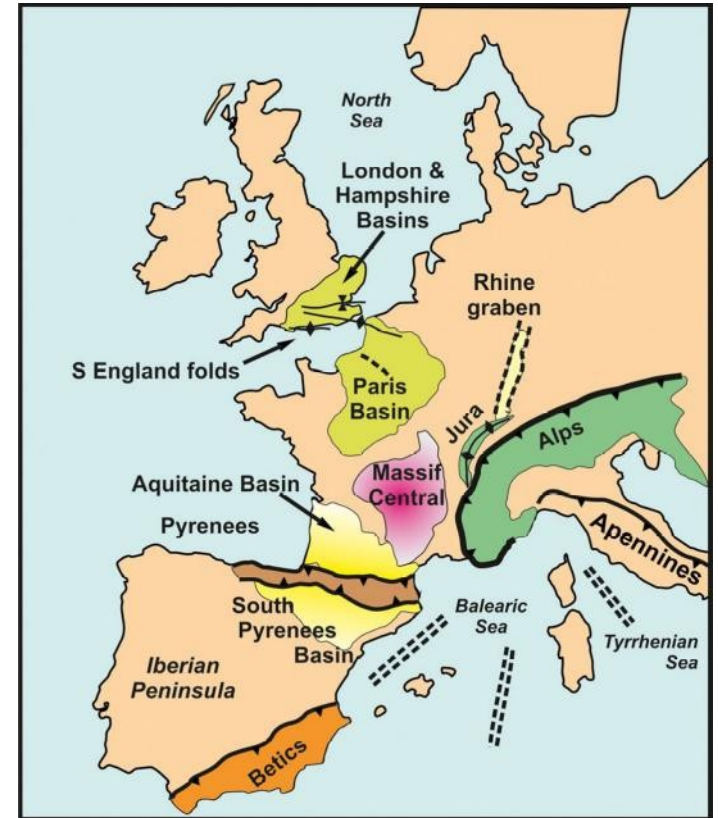


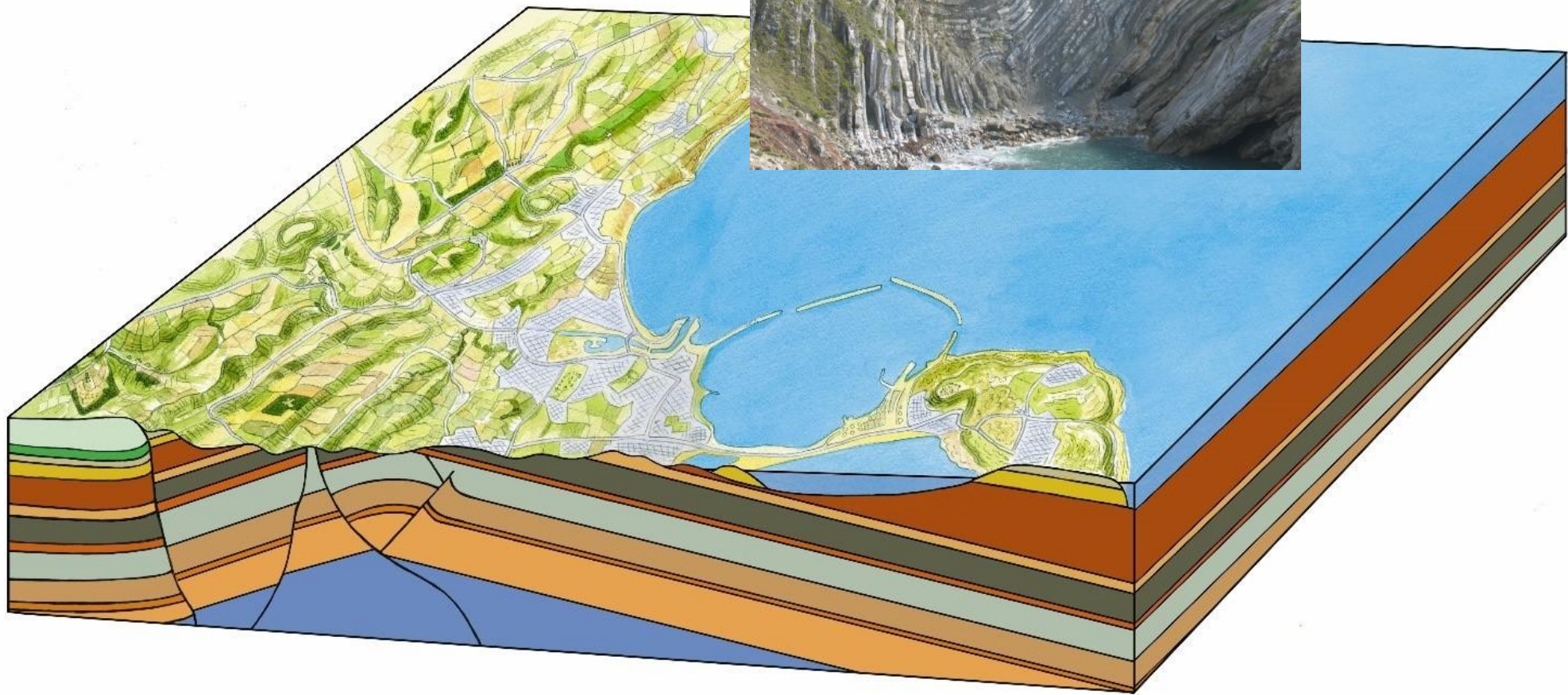
*Praeexogyra hebridica
elongata*

from the Frome Clay
(Bathonian, Middle
Jurassic) of Langton
Herring, Dorset,
England

Wilson44691, CC0, via
Wikimedia Commons

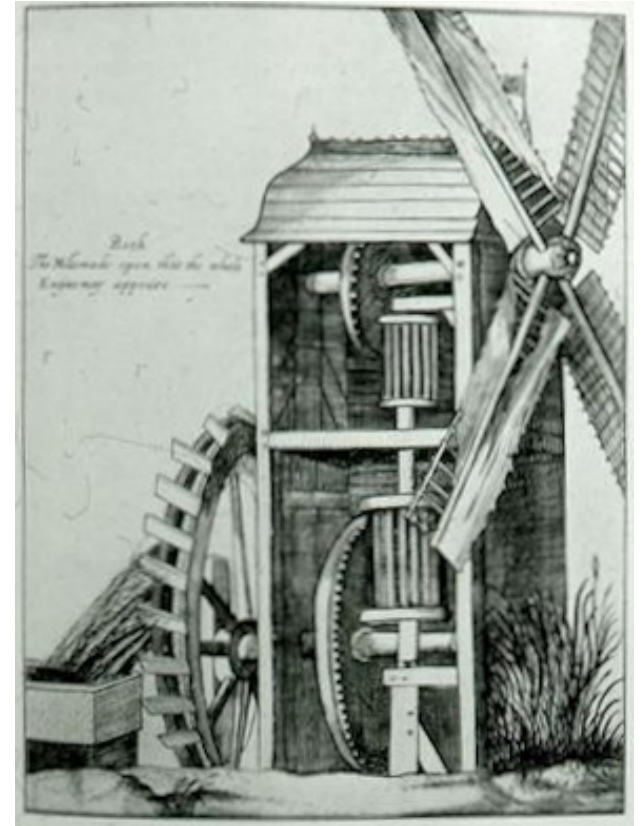
50 mya to present





Attempts to drain the Fleet

- 1630-1646 Well-documented but unsuccessful attempt to drain the entire Fleet
- 1665 Fry's Works
 - *William Fry his executors administrators and assigns shall... endeavour to drain and make dry the said plott or peece of ground called Yerberry Hope*
- William Fry was steward of the Abbotsbury Estate



ington Hive Point



W o r k s

M u d

Works Wall

Herbury Plantation

H e r b u r y



© Scarborough Borough Council, East Riding of Yorkshire Council,
Environment Agency, New Forest District Council,
Derbyshire District Council, Sefton Council



‘Lost Gardens’ of Moonfleet Manor

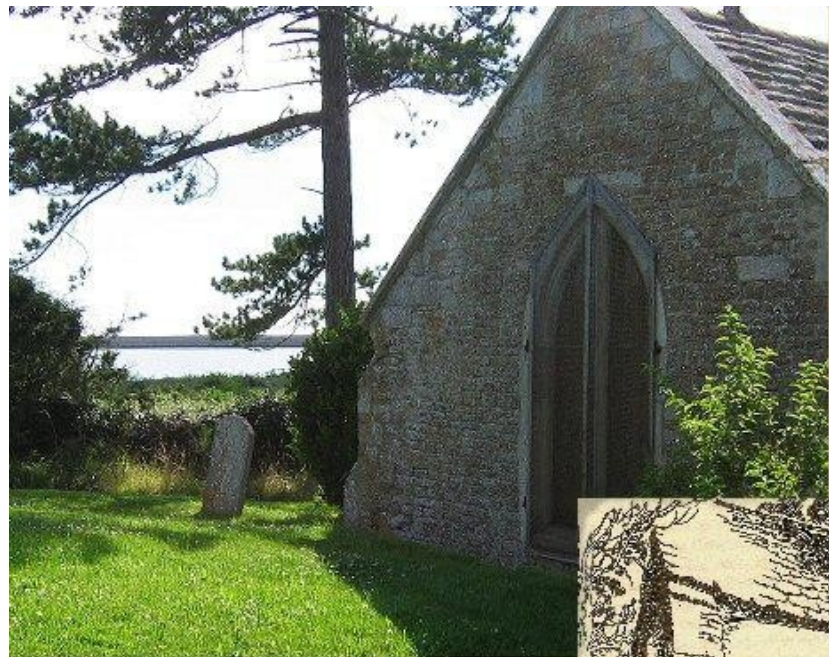




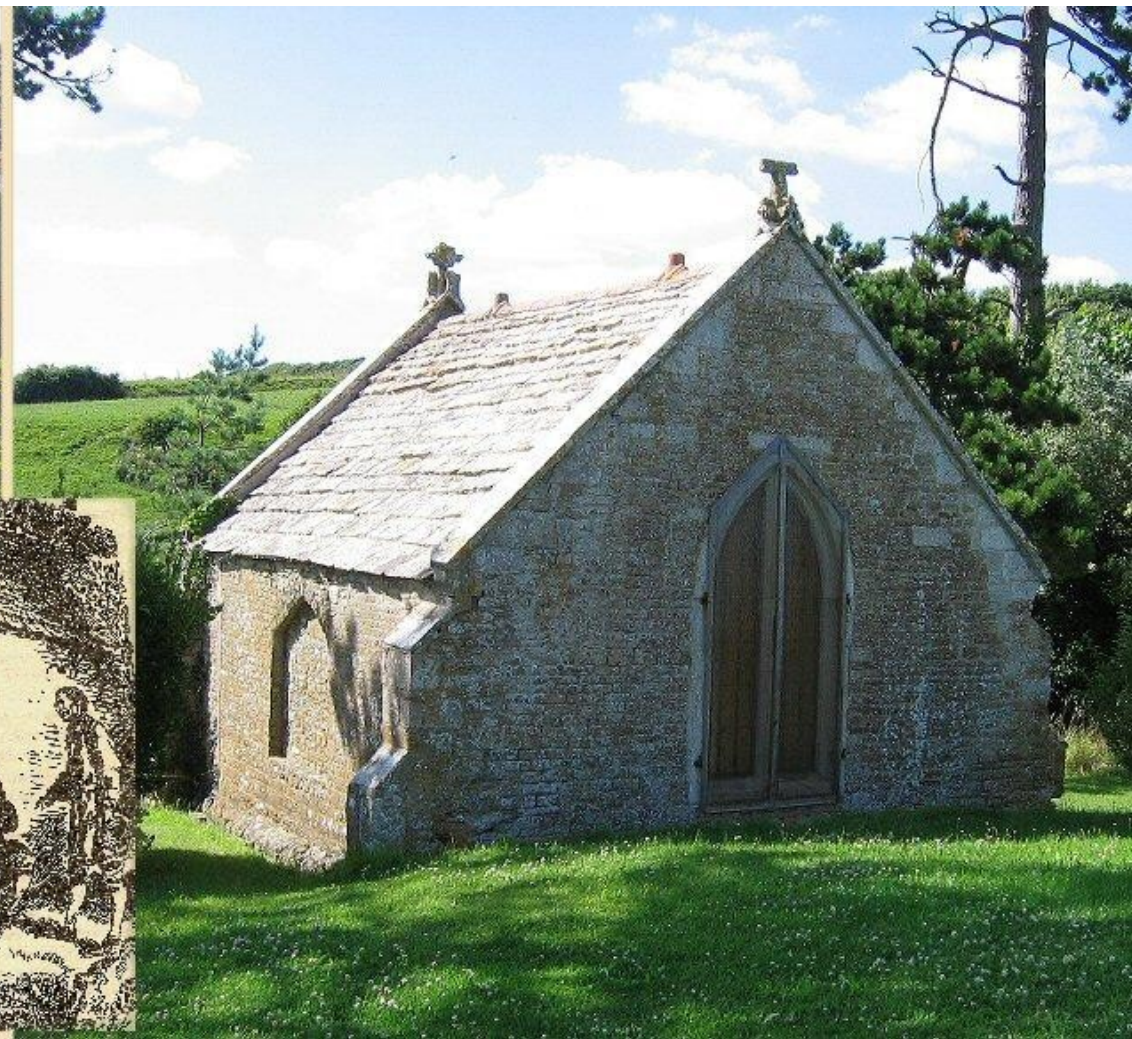
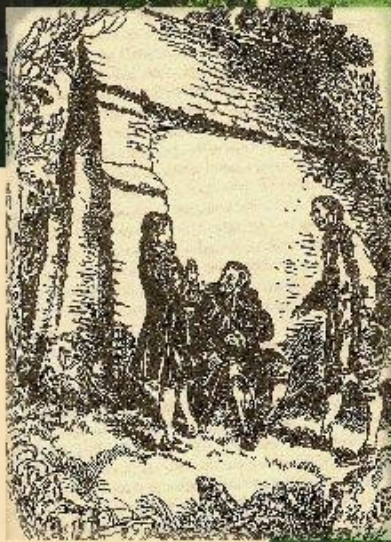
Doncaster Council, East Riding of Yorkshire Council,
New Forest District Council,
Rushcliffe Council, Sefton Council

1824 Storm-Surge

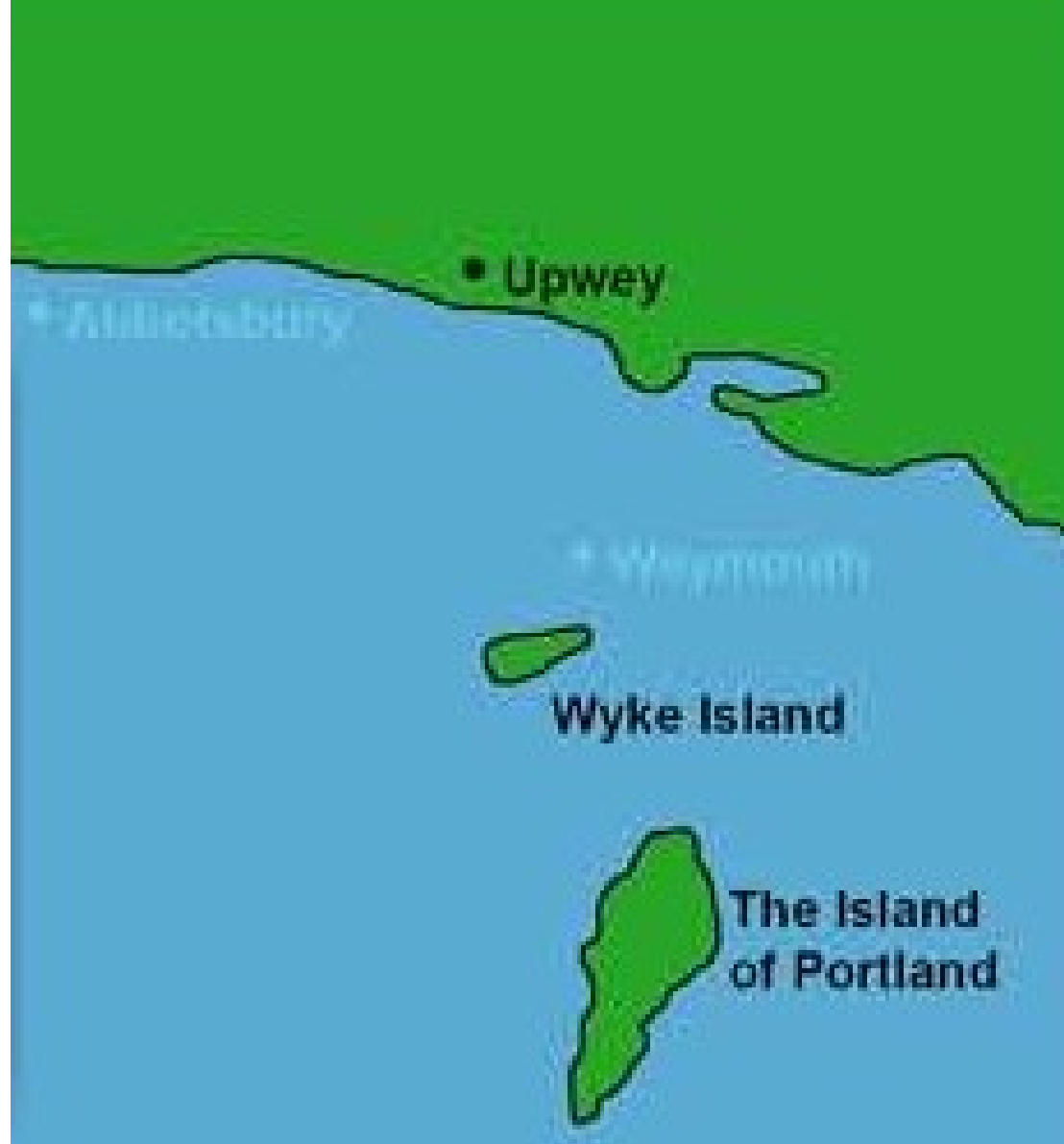
- *the water came up as fast as a horse could gallop*
- In November 1824 a hurricane/storm-surge wave overtopped *Chesil Bank*, thundered into *Butterstreet Cove* and up the valley as a 'Tidal Wave'



*Remains of the "Moonfleet" church at Fleet, Dorset, much of which was destroyed by the great "tidal wave" of the 1824 hurricane.
Ian and Tonya West (c) 2005.*



The Future?



DORSET



**Moonfleet
Manor**

JURASSIC COAST

Sources and further information

<https://www.moonfleetmanorhotel.co.uk>

<http://www.fleetandchesilreserve.org>

<http://www.fleetandchesilreserve.org/the-fleet-study-group>

<https://www.southampton.ac.uk/~imw/Fleet-Lagoon.htm>

<http://www.channelcoast.org>

<https://jurassiccoast.org/what-is-the-jurassic-coast/all-about-fossils/fossil-finder/fossil-finder-database/>

