

with abundant and diverse shell fragments (brachiopods, bivalves, crinoids and echinoids). Trace fossils, where organisms crawled over the sea floor, also occur.

(4) At Tidmoor Point pyritised ammonites such as *Quenstedtoceras* can be found as well as the crinoid *Pentacrinus*, with its distinctive star shaped ossicles, and small belemnites. Careful searching is necessary to find these. Fragments of ammonites are common and small immature examples.

(5) About 200 metres south of Camp Road the Osmington Oolite of the Corallian is exposed on the beach and sometimes the small echinoid *Nucleolites* can be found.

(6) In the Kimmeridge Clay near Ferrybridge a diverse fauna including oysters and fish teeth can be found.

#### USEFUL RESOURCES:

**Maps:** Ordnance Survey 1:25,000 Outdoor Leisure 15, Purbeck and South Dorset.

British Geological Survey Map Sheet 342 Weymouth.

**Books:** *Geology of the Dorset*. John C. W. Cope. Geologists' Association Guide No 22.

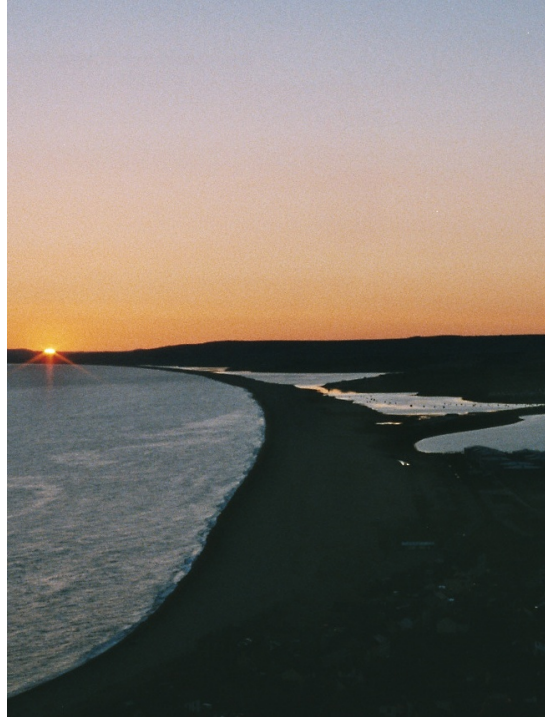
*Mesozoic Fossils*. British Museum (Natural History). This book is very useful for identifying many of the fossils found along the Dorset Coast.

#### Websites:

[dorsetgeologistsassociation.org](http://dorsetgeologistsassociation.org)

[jurassiccoast.org](http://jurassiccoast.org)

[southampton.ac.uk/~imw](http://southampton.ac.uk/~imw)



View looking N.W. along the Fleet and Chesil Beach from Portland New Ground car near Heights Hotel on Portland, a good spot after an enjoyable day fossil collecting!

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## WORLD HERITAGE COAST LOCATIONS:

### FLEET SHORE

### A VARIETY OF INTERESTING FOSSILS.



An exposure of the oyster bed at Langton Herring with enormous numbers of the oyster, *Ostrea hebridica*.

# WHAT'S SPECIAL ABOUT THE FLEET SHORE?

Along the Fleet Shore between Langton Herring and Ferrybridge there are some good fossil collecting sites with the Middle and Upper Jurassic rocks from the Frome Clay (Fuller's Earth Clay) to the Kimmeridge Clay. A range of fossils can be found especially bivalves, brachiopods and ammonites as well as a number of less common types. You should not collect without purpose making sure that any finds are carefully looked after.

## HOW TO GET THERE:

1. Location: The section concerned extends from Langton Hive Point at SY 605813 to Ferrybridge at SY 664763. Just north of Langton Hive Point there is no access through the Ilchester Estate land to the Abbotsbury Swannery.

2. Access is gained via the coastguard track at Langton Hive Point and from the coast path at Ferrybridge. Further access points are near the Moonfleet Manor Hotel SY 619806 (don't park in the hotel unless you are a customer!), East Fleet SY 635802, track to the S.E. of Tidmoor Point Firing Range SY 650794 and Camp Road at SY 652772. The points mentioned have access to the coast path and some parking. Probably the best way to access places is by using the B3157 Weymouth to Bridport road, B3156 (Lanehouse Rocks Road) and the A354 Weymouth to Portland road. Some walking over flat ground or the Fleet shore is necessary to reach the places mentioned.

3. Facilities. These are limited except the Elm Tree pub at Langton Herring and in Wyke Regis. Services are also available in Chickerell and Weymouth. Public toilets are limited but are available at the Chesil Beach Centre at SY 668756.

## HEALTH & SAFETY:

Care should be taken to access these coastal sections with a falling tide. Some of the sections can be very muddy and rubber boots are recommended foot ware. **The bird life is very rich and avoid disturbing the birds unnecessarily.**

**You should not try to walk across inlets as these are often filled with eelgrass and you can sink to depths over your boots!** Thick accumulations of eelgrass often build up on the beaches. Because of the sheltered waters of the Fleet waves are not a problem nor are rock falls as cliff heights are insignificant. **You should look out for the red flags flying at the firing range at Tidmoor Point which prohibit access.**

## THE GEOLOGY

Moving south along the Fleet Shore from Langton Hive Point to Ferrybridge the rocks get progressively younger on the south side of the Weymouth Anticline (a dome shaped fold). Langton Herring is in the core of the fold and therefore has the oldest rocks, the Frome Clay. Moving south you cross the Forest Marble, Cornbrash, Oxford Clay, Corallian and part of the Kimmeridge Clay. Careful study of the beach near high water mark is needed to find the fossils; children might find this easier as they are nearer the ground!

(1) Langton Hive Point. Here you can see the impressive oyster bed or lumachelle exposed in the cliffs to the north of the slipway at the

end of the coastguard track. There are 3-4 metres of oyster bed, mostly *Ostrea hebridica*. The beach is also covered with shells where they have been eroded from the clay cliff. To have such large numbers of one species suggests conditions were not very favourable except for this oyster. The picture below shows a close-up of the oysters.



(2) At the north west tip of the Herbury peninsula (SY 610810), a bed, rich in the ribbed brachiopod *Rhynchonella boueti*, is exposed. Other brachiopods can also be found especially the smooth shelled *Terebratula* (this is private land and access is restricted).

(3) Near the Moonfleet Hotel at SY 616805 slabs of very shelly Forest Marble limestone can be seen

