



# MONMOUTH BEACH to PINHAY BAY, LYME REGIS, DORSET



## INTRODUCTION TO MONMOUTH BEACH

Thank you for enrolling on our fossil hunting event.

To the west of the Cobb at Lyme Regis is Monmouth Beach and here the famous rocks of the Blue Lias Formation extend west to Pinhay Bay. This is the birthplace of palaeontology and where the young Mary Anning began her famous life, collecting fossils to sell to the visiting gentry.

The distinctive cliffs of layered limestone and shale is present, particularly at Ware Cliffs. Fossil collecting should be only attempted on the foreshore, as the cliffs are highly unstable and prone to collapse.

However, the foreshore should provide you with opportunities to find fossils which have fallen and now lie in the rock pools and amongst the boulders and rocks. Ammonites, belemnites, crinoids, brachiopods, marine reptile bones and teeth, fish and molluscs regularly wash out of the clays and with a keen eye can be picked up.

The site is given SSSI status, as part of the Jurassic Coast World Heritage Site, so the cliffs themselves are not to be hammered into.

Walking as far west as you can on Monmouth Beach at low tide and after some traversing of boulders, you reach a limestone ledge known as the Ammonite Pavement, where hundreds of ammonites of considerable size are to be seen.

## THE GEOLOGY

The distinctive cliffs of layered limestone and shale is present, particularly at Ware Cliffs.

The Blue Lias Formation consists of hard layers of limestones and shales and occupies much of the base level of cliffs around Lyme Regis and on the ledges, seen on the foreshore at low tide.

Above the Blue Lias, the Shales-with-Beef Member (part of the Charmouth Mudstone Formation) can be seen and consists largely of dark mudstones, with mostly crushed fossils. The overlying Shales-with-Beef and Black Ven Marl Members, only appear on the foreshore as accumulations of displaced rock, shales and clay. These overlying strata are better seen east of Lyme Regis and towards Charmouth.

The coastline here has been dramatically reshaped due to a series of large landslides in the past. As a result, blocks of Cretaceous rocks (Upper Greensand and Chalk) are found on the beach too, with echinoids and brachiopods.





## WHAT FOSSILS MIGHT YOU FIND?

At any fossil hunting event, you cannot be guaranteed to find fossils. The frequency of fossils depends on the rates of erosion of the cliffs, by the sea and weather and of course, if others have already scoured the site beforehand!



West at Monmouth Beach, beneath Ware Cliffs, towards Pinhay Bay, the rocky foreshore is an ideal place to look for fossils. Loose fossils including ammonites, belemnites and reptile bones can all be found with a little patience.

*Below: A giant bivalve, *Plagistoma*, from Monmouth Beach*



*Below: Ammonites in nodules. These can be prepared to reveal the beautiful shells enclosed.*



*Below: Two fused vertebrae of an ichthyosaurus from Monmouth Beach.*



West on Monmouth beach at low tide s, you reach a limestone ledge known as the Ammonite Pavement, where hundreds of ammonites of considerable size are to be seen.



*Below: A small, calcified ammonite (*Promicroceras*)*



We hope you enjoy your day at Monmouth Beach. Please visit our website for further events which might be of interest to you at <https://ukafh.com/> Our book, with over 50 other sites across England & Wales, can be purchased at £16.95 here: [http://www.ukge.com/en-GB/A-guide-to-fossil-collecting-in-England-and-Wales\\_p-3439.aspx](http://www.ukge.com/en-GB/A-guide-to-fossil-collecting-in-England-and-Wales_p-3439.aspx)

