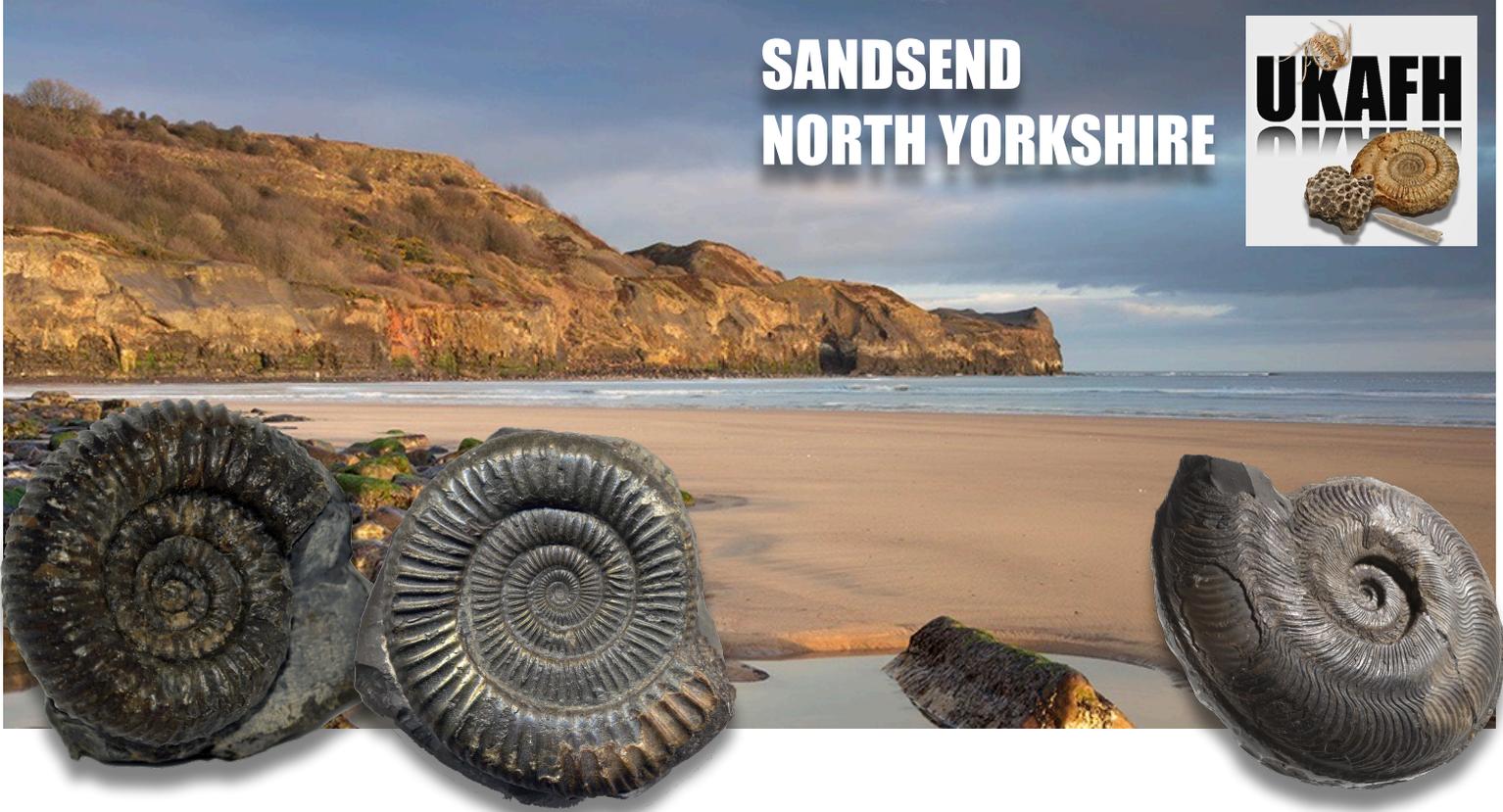


# SANDSEND NORTH YORKSHIRE



## INTRODUCTION TO SANDSEND

Thank you for enrolling on our fossil hunting event.

Sandsend is a small fishing village, near to Whitby in the Scarborough district of North Yorkshire. The area around Sandsend is part of the Jurassic Coast of Yorkshire, which is famed for the profusion of fossils to be found along the foreshore in nodules or even loose within the shingle.

The best area to collect from is the foreshore. Look for nodules with ammonites in, which often protrude from around the edges of the nodule. Nodules can also be found trapped under rocks. Also, examine the cliff face about one metre above beach level, as reptile remains can occur here.

Nodules can be easily opened by a sharp blow from a geological hammer (always use goggles for this procedure). The two nodule halves will mostly contain an ammonite and its impression.

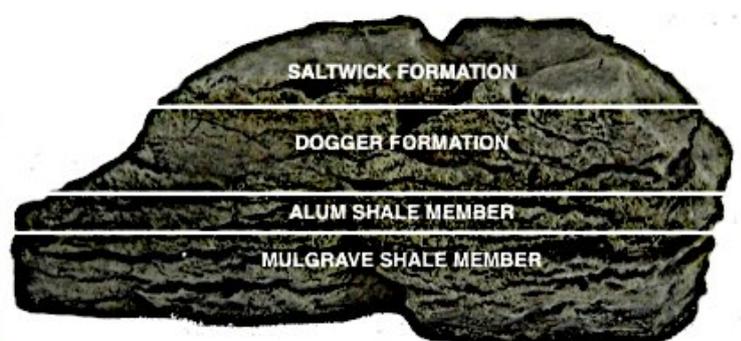
The beach here can be very slippery with seaweed and algae under foot, so care is advised. A hardhat is essential.

## THE GEOLOGY

The Jurassic-aged rocks at Sandsend are from the Toarcian Stage and were formed approximately 174 to 183 million years ago. These sedimentary rocks are of shallow marine origin and form the Whitby Mudstone Formation, part of the Lias Group.

At beach level, the dominant rock in the cliffs is the Mulgrave Shale Member of the Whitby Mudstone, which was deposited in oxygen depleted bottom waters. It consists of the Jet Rock, the overlying Top Jet Dogger, a tough calcareous mudstone, and the Bituminous Shales. Jet was mined from the Jet Rock. The Mulgrave Shale Member tends to be finely laminated not having been disturbed by bottom living fauna.

Fossils are present in large numbers in the deposits, including ammonites such as *Hildoceras bifrons* and *Dactyloceras commune* and also ichthyosaur and plesiosaur remains, though the latter are nowadays much less commonly found. Oysters (*Gryphaea*) and belemnites also occur with some frequency



## 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, the weather and of course, if others have already scoured the site beforehand!



Above: An example of *Hildoceras bifrons* within a nodule that has been split to reveal the positive and negative impression.



Above: Belemnite- a relative of the modern squid

Below: *Dactyloceras* ammonite fossil



Above: A rare find! A fish, probably *Lepidotes*. Fish scales can be found as shiny, black individual pieces in the rocks.

We hope you enjoy your day at Sandsend. 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)

