INTRODUCTION TO WARDEN POINT
Thank you for enrolling on our fossil hunting event.

Warden Point is situated on the northeast side of the Isle of Sheppey. It’s located on a section of the island where the crumbling cliffs expose over 50 metres vertically of London Clay, of early Eocene age.

The site is famed for its fossils, which occur in pyrite accumulations on the beach or in cement stone nodules along the foreshore, having been washed out of the cliffs.

The site is rich in fossils but the pyritisation of many, including large fruits of the palm Nina, seeds, twigs and wood, gastropods and brachiopods are prone to pyrite ‘disease’ and will decompose over time. Preservation of pyritised fossils is difficult but coating in varnish and storage in an airtight container, with a sachet of silica gel, is about as effective as the amateur collector can get. Fossils showing signs of pyritisation should be discarded, as it can spread the decomposition process to your entire collection!

Crab and lobster carapace and bones, preserved in phosphatic nodules on the foreshore, remain stable, along with shark and ray teeth and fish bones for which the location is famous. The coastline here erodes at an alarming rate and the slumped cliffs are highly unstable. Do not venture near the cliffs. In any case, fossils are rarely found in the cliffs and almost impossible to spot. Instead, examine the accumulations on the beach.

THE GEOLOGY
The London Clay Formation is a marine geological formation from the Lower Eocene epoch (Ypresian Stage of around 56 to 49 million years ago and which is found extensively at sites across the southeast.

The London Clay is well known for its fossils, which indicate a moderately warm climate, with tropical or subtropical flora. The habitat was generally a lush forest – perhaps like in Indonesia or East Africa today – bordering a warm, shallow ocean. Plant fossils, especially seeds and fruits, are found in abundance and have been collected from the London Clay for almost 300 years. Some 350 named species of plant have been found, making the London Clay flora one of the world’s most diverse for fossil seeds and fruits.
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, the weather and of course, if others have already scoured the site beforehand!

Crab carapace (see photos below) are a common find. Preparation is relatively easy and the matrix can be carefully removed by scraping with a blade or use of an air pen. Do not use acid!

Below: A pyritised fruit from the palm, *Nipa*.

Below: Crab carapace are a common find. Preparation is relatively easy and the matrix can be carefully removed by scraping with a blade or use of an air pen. Do not use acid!

Below: Large *Otodus* shark vertebra. *Otodus* is an extinct genus of mackerel shark.

Below: A fish in a phosphatic nodule.