

The Smugglers Trail of Thanet, A guided walk along part of the UK's longest chalk coastline

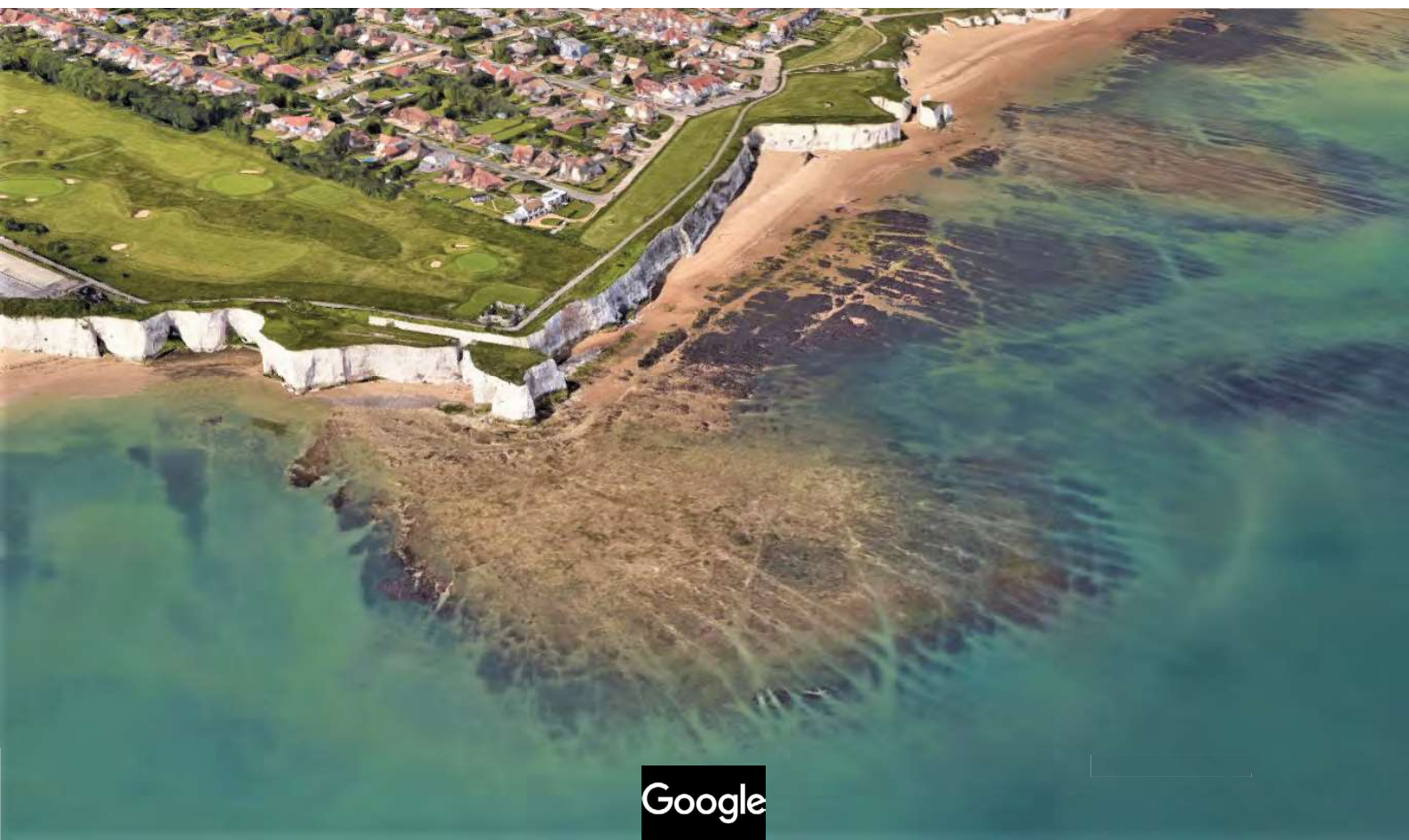
Richard and Tina Hubbard, GeoConservation Kent

The chalk shore platform around the Thanet Coast in Kent is designated as a Special Area of Conservation (SAC), whilst most of the foreshore above Mean Low Water is a Site of Special Scientific Interest (SSSI). All the authorities with a legal responsibility for the coast have worked together since 2001 on a management scheme for the marine site designations, whilst Thanet District Council, the largest foreshore owner, works with Natural England on the management of the wildlife and habitats of the coast covered by the SSSI designation. Located on the longest continuous stretch of coastal chalk habitat in the country, Thanet has some of the best wildlife sites in Europe.

The Thanet Coast, including Pegwell Bay, has long been associated with the chalk cliffs, caves, reefs and sandy bays—not to mention its smugglers—and is nationally important for its geology: the chalk stacks and arches. It also became a Marine Conservation Zone (MCZ) in November 2013, when specific features were protected. This included additional protection for the beautiful stalked jellyfish (*Haliclystus* sp.) found in the abundant rockpools. The importance of the habitats for marine life, coastal plants and bird life, especially the migratory and over-wintering birds, has resulted in a

The broad chalk reef forming the shore platform around Whiteness Point. Note the numerous natural caves, arches and sea stacks within the soft, white chalk cliffs. Please note, Google images are pictorial and should not be used for navigation. © Google.

All photos by Tina Hubbard unless otherwise stated.





The unusual chalk shore platform in Whiteness Bay (the central bay of the previous image) exposes the Barrois Sponge Bed which developed as a mineralised fossil hardground. It records a time of swirling bottom currents when very little if any chalk ooze accumulated on the seabed. It was a time of relatively low sea level within the overall Thanet chalk sequence. The hardground forms the boundary between the Broadstairs Chalk below and Margate Chalk above. Note the 18th century smugglers' caves in the white chalk cliffs forming the distant headland.

number of nature conservation designations which are now collectively known as the North East Kent Marine Protected Area (NEKMPA, which includes the birding SPA/Ramsar site designations), (<http://thanetcoast.org.uk/about-us/nature-designations/>).

Tony Child, Thanet Coast Officer, says, “During the lockdown when coronavirus access restrictions prevented us from running our usual public events, we ran several virtual Seashore Safaris. Short films were produced by Thanet Coast Project volunteers to show some of the marine creatures found in the tidal rock pools. The films allow the viewer to ‘rockpool’ from home and see some of our diverse and fascinating foreshore life. Many thanks to Greg Bessant for taking the lead in filming and production, and for support from the project team”.

The virtual Seashore Safaris can be found at <http://www.thanetcoast.org.uk/learning/informal-zone/>. This site also has a new booklet to help families explore the chalk foreshore and learn about the marine life either during a Seashore Safari (public event) or by themselves inspired by the virtual Seashore Safari films. This work has been supported by the National Lottery Heritage Fund as part of the *Guardians of the Deep* project.

Tony Child added, “Thankfully, we are back to a full programme of public events this summer with 11 days organised for July and August. In addition to our Seashore Safaris, there are two interpretation activities. Firstly, as the chalk reefs provide such a perfect substrate for algal communities, we will be organising a walk through rockpools and along the shore to discover various seaweeds, their uses and properties. Ian Tittley, formerly Natural History Museum, Kent Field Club & Kent Wildlife Trust, will lead a *Seaweeds and their Secrets* walk. Secondly, there will be a chance to join Richard Hubbard on a new walk to explore the geology and fossils as we take a step back in time and discover the way our coastline reveals the evidence of life in the oceans over 80 million years ago”.

On behalf of GeoConservation Kent, (<https://www.geoconservationkent.org.uk/>), and with funding support from the Geologists' Association's Curry Fund, Richard Hubbard and Geoff Downer have recently published *The Smugglers Trail. Geology of the Thanet Coastline from Broadstairs to Cliftonville*. The aim of the guidebook is to enthuse as wide an audience as possible. The geological story is told by the continuous chalk cliffs and shore platform reefs where visitors can see more than they might have imagined. Visitors will walk up and down Thanet's ‘mini alpine’ mountain (Thanet

Anticline) whilst enjoying the natural environment and learning a little about the colourful social history with a brandy smuggler or two! As well as learning about unusual seabed creatures, giant ammonites and the teeth of the huge shell-crushing shark *Ptychodus*, visitors will see how the Victorian geologists first used distinctive marker beds of black flint nodules and orange siliceous sponges to determine the conditions on the seabed some 85 million years ago.

The Smugglers Trail guided walk is suitable for the whole family and a great way to experience and interpret the special chalk shore platform environment in seven of Thanet's beautiful bays. The Smugglers Trail guides the visitor along a leisurely 4-hour walk on the shore platform taking in the social history, with a description of the natural environment and an engaging explanation of the Cretaceous Chalk geology. For those limited by time, there is a 2-hour Highlights Tour to visit and enjoy the key sights. The Smugglers Trail guidebook can be purchased through GeoConservation Kent, online through the GA Shop website (<https://geologistsassociation.org.uk/shop/>) and through the Thanet Coast Project and Visit Thanet. Written for the whole family, it aims to explain and illustrate the marvellous coastal geology whilst spending a great day out on the beach.

In the words of the Seashore Code, *"Respect our coastline and protect yourself and others. Enjoy our shore platform and beaches and leave only your footprints in the sand"*. Please stay away from unstable chalk cliffs and use a camera only when exploring the chalk boulders and reefs. Please feel free to pick up any of the loose-lying common fossils such as the famous heart-shaped sea urchin *Micraster*, distinctive police-helmet-shaped sea urchin *Echinocorys*, the spherical pea-sized calcareous sponges and the bullet-shaped belemnites. Rarer finds such as giant ammonites and fossil fish should be reported along with their location to thanet.coast@thanet.gov.uk. The protected chalk reef habitats of Thanet's splendid shore platform are a natural treasure and provide a memorable experience for one and all.



<http://thanetcoast.org.uk/factfile/thanet-coastal-codes/fossil-code/>

Midsummer sunset over Botany Bay. A family enjoying their chalk walk.





Earth Heritage in print

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For many of us, the opportunity to reconnect with our local natural environment has been an important part of lockdown over the last year. Getting out to look for rocks, fossils and minerals, and learning about the landscape around us are powerful ways to encourage and inspire the next generation of Earth scientists. Gravel Hunters gets families out and looking for gravel on their drive, in car parks, or, in this case, in a sack of gravel bought from the builders' merchant. Sponge fossils, and echinoid fragments (see inset image taken by Liz Hide) are relatively common in some flint gravels. Find out more on p.12. Photo by Nicola Skipper.

