



FROM LAND TO SEA: A JOURNEY THROUGH TIME AND GEOLOGY

Welcome to Mont de Couple in Audembert!

This is a Cross-Channel Geopark Geosite

Before you, the panorama stretches towards the sea and the Bay of Wissant (4 kilometres away as the crow flies), framed by Cap Blanc-Nez to the north and Cap Gris-Nez to the south.

Beneath our feet, the **chalk*** layer that forms Mont de Couple shapes a gently undulating landscape.

This ridge forms a well-defined landform—a cuesta*—that outlines the entire perimeter of the Boulonnais Basin. This basin corresponds to a geological structure known as a boutonnière*, which extends into the English Weald, making these two areas a

The summit of Mont de Couple, reshaped by bombings during World War II, is not cultivated but grazed by cattle. Classified as a regional nature reserve and a Natura 2000 site, it is home to rich biodiversity.

Cap Blanc-Nez, recognisable by the Dover Patrol monument, is a continuation of the Mont de Couple ridge and is composed of the same chalk layers, dating back to the Late Cretaceous.

Cap Gris-Nez, on the other hand, consists of Middle and Upper Jurassic rocks, including clays, limestones, and sandstones. A more erosion-resistant sandstone layer protects the cliff and gives it its distinctive shape.

Wissant Bay, bordered by sand dunes, stretches from Cap Gris-Nez to the cliffs of Petit-Blanc-Nez. Its subsoil is made up of sands, clays, and gravel deposited at the beginning of the Quaternary period, where fossils, including mammoth remains, have been discovered.

At sea, a vast sandbank known as Banc à la Ligne emerges at low tide. This area is a favourite resting and sunbathing spot for seals.

In the background, the busy maritime corridor of the Strait of Dover can be seen, and on clear days, the White Cliffs of Dover outline the horizon, forming a natural link between the two territories of our cross-border Geopark.

Imagine that just 20,000 years ago, at the end of the last Ice Age, the English Channel did not exist: a river flowed through the Strait of Dover, and one could walk from France to England!

is a white, porous (permeable), relatively soft, and crumbly limestone rock. It is primarily formed by the accumulation, over millions of years, of shell fragments from microscopic plankton called coccoliths on the seabed. Chalk also contains numerous fossils, including ammonites, sea urchins, brachiopods, molluscs, and more.

(Spanish for 'slope') is where layers of rock tilt gently upward, creating a natural ridge. Here, this ridge stands above older rock layers that form the heart of the Boulonnais boutonnière.

A Boutonnière *

(Buttonhole) is like a bowl carved by erosion in the middle of a dome-shaped fold in the Earth's crust. As erosion digs deeper, it reveals ancient rock layers that were hidden below. Around its edges, you'll typically find a cuesta - just like we see here in the Boulonnais.

the Middle Devonian. They are still quarried

are preserved as coal, which was formerly mine in the Marquise basin in France as well as in East Nord-Pas-de-Calais.

shallow sea where the

a region shaped by its geology!

► Chalky subsoil (Upper Cretaceous)

villages (originally built around deep wells).

less impermeable (Lower Cretaceous and Jurassic)

= Quarrying activities in the Marquise stone extraction basin.

The Boulonnais region perfectly illustrates the connection between the

► Subsoil composed of clays, sands, and sandstones, wetter and more or

= A landscape featuring hedgerows, livestock pastures, wooded areas,

► Subsoil composed of very ancient marble-like limestone (Carboniferous)

planning, and human activities. Three types of subsoil can be distinguished:

= A landscape mainly composed of cereal crops, dry valleys with clustered

geology of the subsoil, landforms, landscapes, biodiversity, land use

This was the first step towards the formation of Great Britain our distinctive chalk landscape, which defines much of the Geopark.

the chalk ridge connecting Calais and Dover, creating the iconic white cliffs of the Geopark we see today.

megaflood destroyed

RE OF THE BUTTONHOLE / South

forests from that period

