



## Exploring the Cross-Channel Geopark

### TOURIST MAP

### Embark on a journey through time by discovering our Geosites !

The Cross-Channel Geopark is a collaboration between the Parc naturel régional des Caps et Marais d'Opale (France) and the Kent Downs National Landscape (United Kingdom). The Geopark is working to secure UNESCO Global Geopark status and join the Global Geoparks Network.

For more details about the Geopark



[www.geoparktransmanche.org](http://www.geoparktransmanche.org)



Parc naturel régional des Caps et Marais d'Opale – Tourist map  
Cross-Channel Geopark Transmanche - Edition: PNRCMO, 2024.  
Editorial team: PNR des Caps et Marais d'Opale.  
Conception graphique: [ceoupo.org](http://ceoupo.org) [www.ogence-ceoufr](http://www.ogence-ceoufr)  
Illustration crédits : Julianne Huon

Parc naturel régional des Caps et Marais d'Opale  
24 rue principale BP 22 F-62142 Le Wast  
Tél.: 03 21 87 90 90

[www.parc-opale.fr](http://www.parc-opale.fr) | [www.kentdowns.org.uk](http://www.kentdowns.org.uk)



### Explore the geosites of the Cross-Channel Geopark: extraordinary locations selected for their stunning beauty, unique character, and rich heritage.

These remarkable sites are celebrated not only for their geological significance but also for their ecological, historical, cultural, landscape, and industrial importance.

#### Natural Geosites

##### 1 Fossil Cliff of Sangatte | Sangatte

The fossil cliff of Sangatte dates back to the Quaternary period. Strangely, it is not parallel to the coastline but forms a 30° angle. On this ancient cliff, you can also find the remains of an old beach, itself fossilised, appearing as if suspended in the cliff.

##### 2 Cap Blanc-Nez | Escalles

A must-see site, Cap Blanc-Nez offers a unique view of the Strait of Pas-de-Calais and, on clear days, the English coast. Its 134-metre-high cliffs are made of chalk. They were formed during the Cretaceous period by the build-up of microscopic marine organisms.

##### 3 Bay of Wissant | Wissant and Tardingenhen

The Bay of Wissant is a wetland, formed by marine deposits over thousands of years and the erosion forces acting on this area. Archaeological evidence suggests that Wissant and Dover were closely linked through trade during the Iron Age.

##### 4 Cap Gris-Nez | Audinghen

Standing 45 metres high, the cliffs of Cap Gris-Nez were shaped 150 million years ago (Jurassic period), at a time when dinosaurs still roamed the Earth. Back then, the site was covered by the sea, where sediments gradually accumulated, eventually forming the cliff. These same Jurassic formations can be observed along the coast down to Cap d'Alprech, south of Boulogne-sur-Mer.

##### 5 Dunes and Estuary of the Slack & Fort d'Ambleuse | Wimereux and Ambleuse

This geosite illustrates the changes to the coastline over time, influenced by variations in sea levels. The dunes serve as records of these climatic changes. Nearby, Fort d'Ambleuse stands as proof of this region's historical importance.

##### 6 Hills of Dannes/Camiers and Mont Saint-Friex | Dannes, Camiers and Neufchâtel-Hardelot

Overlooking the Picardy maritime plain, these hills offer stunning views of the area, including the Canche estuary and the ancient and recent dunes of Mont Saint-Friex. Together, they host ecosystems that are unique in Europe and illustrate the coastline's evolution since the opening of the strait.

##### 7 Mont de Couple | Audembert

Once covered by the sea, Mont de Couple serves as evidence of this ancient past. Its chalky subsoil was formed by the build-up of marine microorganisms' remains, creating underwater hills that later emerged as the sea receded.

##### 8 Chalk Hills of Northern Boulonnais | Colenbert (Mont Dauphin)

Like other hills in the region, these formations date back to a time when the land was submerged under the sea. Today, the northern 'cuesta' not only offers breathtaking views (including Mont Dauphin) but is also home to rare wild orchid populations thriving on the chalky soils.

##### 9 Mont Pelé and Mont Hulin | Desvres and Menneville

These chalk hills, reaching heights of 200 metres, were long exploited for their chalk, which was used in construction. Remnants of mining slopes are still visible. Since quarrying stopped in the 1970s, the site has been preserved, providing a haven for flora and fauna, including ten species of orchids that bloom in spring.

##### 10 Saint-Louis Chapel | Tournehem-sur-la-Hem

Besides offering a breathtaking view of the surrounding hills and an air of mystery, this chapel serves as an example of how our geological heritage impacts our built heritage. Built in the 16th century, it was constructed using chalk, the same rock forming Mont Saint-Louis, on which it stands.

##### 11 Audomarois Marshes | Near Saint-Omer

The largest wetland north of Paris is also a significant geological site. It was formed by the meeting of the sea and the Aa River, with its soil composed of sediments deposited by the river that would otherwise have ended up at the bottom of the North Sea. This sedimentation process led to the formation of peat, long exploited by humans. Today, it is a UNESCO Biosphere Reserve and a Ramsar site.

##### 12 Hills of Wavrans-sur-FAa | Near Wavrans-sur-FAa

These hills originated in the Cretaceous period from chalk deposits. Over time, they underwent intense natural changes: the sea's retreat, tectonic movements, and even wind activity, which deposited a layer of loess (a fine, wind-borne silt) two million years ago. Finally, the Aa River carved its bed at the foot of this hill.

#### Historical Geosites

##### 13 Column of the Grande Armée | Wimille

Erected between 1804 and 1824 in honour of Napoleon Bonaparte, this 54-metre-high column was built using Marquise marble limestone. This fine-grained and durable stone is known for its solidity and moderate weight, and was named 'Napoleon Marble' for the occasion.

##### 14 Mimoyecques Fortress | Landrethun-le-Nord

Sometimes called the 'London Gun' this fortress was carved into a Cretaceous-era chalk hill for military purposes. It was originally a German missile launch base. Today, beyond its historical significance, the fortress serves as a refuge for numerous bats that inhabit its chalk caves.

##### 15 Park & Geopark Main Office | Le Wast

Dating back to the 18th century and restored in 2021, the Huisbois Manor beautifully uses local stones in construction. Its oldest walls feature Marquise marble limestone (a solid type of limestone), Marquise stone (a softer limestone), and Baincthun stone (a Jurassic sandstone). A self-guided tour allows visitors to observe these stones' use during opening hours.

##### 16 Saint-Omer City Centre | Saint-Omer

The heart of the Audomarois region is filled with geological treasures. From the majestic cathedral to medieval streets and churches, the city's old buildings have been well preserved, showcasing extensive use of yellow brick and local stones.

##### 17 Helfaut Plateau and La Coupole | Near Helfaut

This museum, nestled between chalk hills, was once a German V2 missile launch base during World War II. Before that, the Helfaut site was a chalk quarry exploited for many years.

##### 18 Historic Centre of Calais | Calais

Like Saint-Omer, Calais was built using local stone, giving its historic centre a distinctive charm. Many of its monuments showcase the geological makeup of the region, including the UNESCO-listed belfry, Notre-Dame Church, and Fort Lapin.

##### 19 Historic Center of Boulogne-sur-Mer | Boulogne-sur-Mer

Baincthun stone is also known as 'Boulogne Stone' for a reason: many buildings in this port city were constructed using this ultra-local Jurassic sandstone. Examples include the city walls, the Upper Town houses, and the château-museum.

#### Industrial Geosites

##### 20 Marquise Quarry Basin | Near Marquise

This chalk-extraction basin is the oldest geological zone in the Cross-Channel Geopark. It tells a 400-million-year story, spanning from the Devonian to the Carboniferous periods, demonstrating how geological history has influenced the region's economic activity.

##### 21 Ceramics Museum | Desvres

Desvres faience (tin-glazed pottery) is a prime example of the influence of our geological heritage on local craftsmanship. During the Jurassic period, the Boulonnais region saw the formation of large quantities of grey clay, along with sandstone, sand, and limestone deposits. These clays were extracted and used for pottery, bricks, tiles, and ceramics.

#### MARINE GEOSITES

Marine geosites further highlight the deep connections between England and France.

- The Megaflood carved open the Strait, leaving behind geological traces still visible on the seabed today.
- Historical shipwrecks, dating from the Bronze Age to World War II, cover different periods of cross-Channel maritime history.
- The Channel Tunnel symbolises the sustainable reconnection between France and England after 450,000 years of separation.

To learn more about the geosites, scan the QR code !





Did you know 450,000 years ago, you could cross the English Channel on foot ? While the opening of the Strait separated our two countries, our landscapes, our biodiversity, and our cultural heritage connect us now more than ever.

For more details about the Geopark



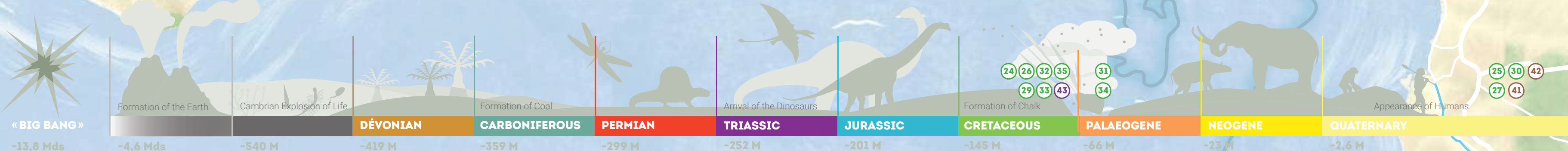
The Cross-Channel Geopark champions sustainable tourism, honouring our landscapes while providing engaging activities for all ages. It's dedicated to preserving our geological and natural heritage, while also celebrating the cultural and intangible treasures of our region.

## EXPLORE THIS SITE AND MORE

[www.geoparktransmanche.org](http://www.geoparktransmanche.org)



## A journey through time...



### Natural Sites

#### 22 The Pines Calyx and Pines Garden | Saint Margarets Bay

Nestled in a valley just behind the famous White Cliffs of Dover, the Pines Calyx is a carbon-negative conference venue, and a rare example of a building made from chalk (there's even a layer of flints built into the wall!).

#### 23 White Cliffs of Dover | Dover

One of the most recognisable geological features in the world. On a clear day, you can stand on top of these 110-metre-tall chalk cliffs and see France. The cliffs were formed by around 20 million years' worth of build-up of microscopic shells at the bottom of a warm sea. As you look across the Channel you can imagine the ridge of hills which once connected the UK and France, and the Megaflood that broke through nearly half a million years ago.

#### 24 Dryhill Quarry | Sevenoaks

This former quarry was Kent's first Geological Local Nature Reserve. The main geological feature here is an exposure of the Hythe Beds, part of the Lower Greensand group of rocks from the Early Cretaceous period. The rocks here are faulted and folded due to the process which created the Alps around 65 million years ago, which gives the main exposure its slanted appearance.

#### 25 The River Darent | Near Darenth

One of only around 200 chalk streams in the entire world, the special biodiversity of this river is completely dependent on the rocks the water flows from. The water of the Darent is crystal clear due to the purity of chalk itself, and classic chalk stream species can be found here including water crowfoot and brown trout, so keep your eyes peeled!

#### 26 Folkestone Harbour, the Warren & Samphire Hoe | Near Folkestone

Starting with the abundant fossils of the Gault Clay at Copt Point as the Harbour meets the Warren, this stretch of coastline sees the beginning of the enormous chalk faces of the White Cliffs of Dover. Further along the coast is Samphire Hoe, a beautiful country park formed from the 'chalk marl' that was dug out to create the Channel Tunnel.

#### 27 Folkestone Downs | Folkestone

The chalk hills that provide the backdrop to Folkestone are a haven for all sorts of rare chalk grassland wildlife including orchids and butterflies such as the Adonis Blue. At the foot of the hills is the UK entrance to the Channel Tunnel. The excavations for the tunnel revealed a 13,000-year history of nearby Holywell Coombe, telling the story of a transforming landscape and human settlements after the last ice age.

#### 28 Farthing Common and Postling Down | Postling

A stunning viewpoint at the top of the downs, this site also tells a story of how our landscape was formed at the end of the last ice age. Postling Down is an unusual shape for a valley, posing questions about exactly how it was formed.

#### 29 Brockhill Country Park | Saltwood

Brockhill is a beautiful country park centred around a valley of early-Cretaceous geology (older than the Chalk). Starting on top of the locally named Sandgate and Hythe Beds, as you head down the valley to the lake you move onto the older clays of the Weald. All the rocks here are over 100 million years old!

#### 30 The Devil's Kneading Trough and Wye Downs | Wye Downs

The 'Trough' here is a steep-sided valley created at the end of the last ice age by defrosting ground as this area warmed up and emerged from periglacial conditions. Stood on top of the chalk downs here you can look out across the Weald, which is the centre of the 'Weald-Artois Anticline', a huge geological structure that the Geopark sits within.

#### 31 Perry Wood | Selling

Perry Wood is something of a geological anomaly in the Geopark due to the presence of the collectively 'young' Thanet and Lambeth Beds. The Thanet and Lambeth layers are the youngest bedrock found in the Geopark, dating back to between 50 and 60 million years ago.

#### 32 Hucking Estate | Hucking

An estate of ancient woodland and open chalk grassland, the trees, plants and animals here depend on the geology underneath them. The woodland here is perched on top of the chalk hills of the Kent Downs, and when you reach the edge you are rewarded with incredible views out across the Weald.

#### 33 Trosley Country Park | Vigo

This country park features extensive woodland and chalk grassland perched on the ridge of the downs. Trosley's location on the chalk means it is home to many rare 'chalk specialist' species such as Musk Orchids and Chalkhill Blue butterflies. As with other sites on the edge of the chalk downs, you can enjoy spectacular views from here.

#### 34 Shorne Woods Country Park | Gravesend and Shorne

The most northerly Geosite in the Geopark, Shorne Woods is part of a network of protected sites that work together for the benefit of nature. The park itself was once a huge clay pit, with the clay being extracted mostly to be made into bricks. This past use defines the shape of the site today, with large flat areas that were once the floor of the pit.

#### 35 Sevenoaks Wildlife Reserve | Sevenoaks

This nature reserve is a haven for wetland birds, with a series of large ponds and lakes sat alongside the River Darent. These lakes weren't always here, however, in fact this site was a series of gravel and sand quarries. This site was the first former quarry to be transformed into a wildlife reserve in England, pioneering an approach to returning such sites to the benefit of nature.

#### 36 Bore Place | Edenbridge

Bore Place is an active farm that is at the forefront of regenerative farming, producing food in a way that is sustainable and beneficial to humans and nature. Bore Place is free to visit and open all year round for walks around the fields and woodlands of the farm. There is also a milking parlour where visitors can see the dairy cows being milked, and the 'Farm Gate' shop where you can buy the organic produce of the farm.

### Historic Sites

#### 37 Dover Castle | Dover

The famous 'key to England', a defence has existed on the site of the castle for over 2000 years. The history of Dover Castle is intertwined with the geology of Dover, perched as it is on the top of the White Cliffs and with miles of tunnels dug directly into the chalk.

#### 38 Dover Museum and Maison Dieu | Dover

Discover the history of Dover and it's cross-Channel connections, including one of the oldest intact boats ever discovered. Dover's Bronze Age Boat is evidence of cross-Channel trade 3,500 years ago. The Maison Dieu at the other end of the high street is an incredible building made of flint. Thousands of flints taken from the chalk were 'knapped' to create flat edges and build the Maison Dieu, which has served as a hospital, court and town hall during its 800-year history.

#### 39 Down House | Orpington

The home of Charles Darwin, set amongst the chalk hills just south of London. It was from here that Darwin conducted many experiments, including a 29 year long study on the chalk itself and an attempt to calculate the rate of erosion of the chalk of the Weald-Artois Anticline. Darwin once proposed that chalk had been formed by the burrowing of worms (like every good scientist, he wasn't right about everything!).

#### 40 Folkestone Museum | Folkestone

Folkestone Museum houses an incredible collection of fossils from nearby Copt Point and the Warren. Discover an array of ammonites, bivalves and even dinosaur footprints(!) alongside the rest of the history of the town.

#### 41 The Chalk Monuments | Folkestone, Wye, Lenham and Shoreham

Along the chalk hills of Kent you can occasionally spot carvings in the chalk. These monuments build on the ancient tradition of hill figures in England, with the Folkestone White Horse in particular an example of a more recent carving. Two of the other monuments at Shoreham and Lenham are crosses honouring the fallen soldiers of the First World War, while the Wye Crown was created to honour the coronation of King Edward VII.

#### 42 The Medway Megaliths | Aylesford and Trottisciffe

These ancient structures were built by Neolithic people about 6000 years ago. The Medway Megaliths are part of the same tradition of structures as Stonehenge, although they are more than 2000 years older. The massive rocks used to create the Medway Megaliths are known as Sarsen stones, famously tough rocks formed by the weathering of sand over millions of years.

### Industrial Sites

#### 43 Blue Bell Hill and Culand Pits | Blue Bell Hill

The former chalk pits directly below the Blue Bell Hill picnic site provide the best inland exposures of chalk in the Geopark. The old quarry faces expose rocks from the top of the Gault Clay layer through the Cenomanian and most of the Turonian chalk. The pits are a remnant of the cement industry which has shaped the entire Medway valley, which you can look out over from the viewpoint at Blue Bell Hill.



### MARINE GEOSITES

Marine geosites further highlight the deep connections between England and France.

- The Megaflood carved open the Strait, leaving behind geological traces still visible on the seabed today.
- Historical shipwrecks, dating from the Bronze Age to World War II, cover different periods of cross-Channel maritime history.
- The Channel Tunnel symbolises the sustainable reconnection between France and England after 450,000 years of separation.

To learn more about the geosites, scan the QR code!

