The landscape has evolved over many hundreds of years. It has been created by the interaction of the natural environment and human activities, in particular the combination of physical, biological and cultural influences. Physical influences such as geology and landform, together with the overlying pattern of settlement and land use are key determinants of landscape character. The following section provides an overview of those factors that have shaped Swale Borough.

Geology and Soils

The diverse landscapes and biodiversity of Swale Borough can be largely attributed to its very rich and varied geology (Figure 3) and soils (Figure 4).

The upper chalk of the North Downs dip slope dominates the southern area of the Borough. Over the majority of its area it is overlain by clay-with-flints on the higher ground and head deposits in the valley bottoms. The fine loamy and silty soils of the clay-with-flints support cereals, permanent grassland and deciduous woodland (much of which is ancient). In the valleys the thinner well-drained calcareous soils generally support grassland.

To the north of the chalk is a band of Thanet, Oldhaven and Blackheath beds overlain with a complex mix of brickearths and gravels. The main areas of settlement, including Sittingbourne and Faversham are located within this band, along with the Roman Road of Watling Street. The deep well drained, often stoneless, fine silty soils throughout this area have traditionally supported a variety of crops, most notably apples and other top fruit with some hops.

London clay forms the geology of the northern and far eastern parts of the Borough, including the Isle of Sheppey. The London clay gives rise to two contrasting landscapes. Where it is low lying it is overlain with alluvial deposits, which form an almost continuous belt of marshland along the north edge of the mainland and across southern Sheppey. London clay also forms the higher ground of northern Sheppey, capped with a small area of Bagshot beds around Minster and the distinctive clay ridge of the Blean in the east.

On the marshland ditches and pumps drain deep stoneless clayey soils. Traditionally these soils support grazing, although some areas have been sufficiently drained to support cereals. The mudflats and saltmarshes are categorised as unripened gley soils. Some of these soils are flooded at high tide and generally they are conserved as saltmarsh habitats with some summer grazing.

Landform and Drainage

The varied geology of the Borough gives rise to an equally diverse landform (Figure 5). The southern part of the Borough falls just north of the North Downs scarp resulting in much of the southern area being formed by the dip slope. A series of dry valleys starting at the crest of the Downs cut through the landscape. These valleys start as narrow, steep sided, intimate spaces separated by ridges and plateaux. They gradually converge to form progressively wider and shallower valleys as they reach the marshland. At the same time the height of the separating ridges and plateaux drops from a little under 200m above ordnance datum (AOD) at the crest of the Downs to below 5m AOD on the marshland. Springs emerge from the dry valleys where the chalk ends, draining onto the marshes and eventually into the Swale and Thames Estuary via a series of creeks and fleets.

The mixed geology as the upper chalk gradually becomes overlain with the Thanet beds, combined with the incline of the landform and the effects of drainage, create an undulating landscape through the central part of the Borough. To the east the edge of London clay ridge of the Blean is apparent.

The marshland itself is typically flat and low lying and drained by a series of ditches and counterwalls. The Swale separates the Isle of Sheppey from the mainland. On Sheppey the incline is reversed with the land climbing from the low-lying marshland that covers most of the south of the island to approx 76m AOD east of Minster. Outcrops of higher ground on the marshland at Elmley Island and the Isle of Harty, 10m AOD and 26m AOD respectively, form distinctive features in this otherwise flat landscape.

Swale Borough, and particularly Sheppey, is affected by sea level change. This is clearly illustrated by maps dating circa 1860. These show areas of land in the west of the Borough north of the Barksore Marshes, e.g. Millford Hope Marsh and Greenborough Marsh, as part of the mainland. Whilst these were unsettled they were crossed by trackways and were probably used for summer grazing. Now they are either remnants of saltmarsh or lost to the mudflats and only visible at low tide. On the northern and eastern coasts of Sheppey the effects of coastal erosion are particularly apparent at Warden Point where the clay coastline is slipping into the sea. The Consultation Draft Medway Estuary and Swale Shoreline Management Plan (May 2007) provides a large-scale assessment of the risks associated with coastal evolution. The plan presents a policy framework to address these risks to people and the developed, historic and natural environment in a sustainable manner. Part of this includes options for managed realignment of seas defences which would allow tidal inundation of current grazing marsh land.

Historic Background

Two thousand years ago small Iron Age villages were built in this area. Extensive tracts of the large north Kent woodlands were cleared for cultivation. Subsequently these fertile soils were recognised by the Roman invaders as valuable and suitable for their expansion.

The Romans were responsible for the construction of major cities such as Rochester and Canterbury and the transportation routes that connected them, such as the Watling Street. Between these large cities and towns smaller settlements were built such as Syndale. The soils on the coastal plain were rich and yielded plentiful crops. Villas were built close by to take advantage of the fertile countryside. Roman shrines were built and materials from the shrine built at Stone were taken to build Stone church, the derelict remains of which still houses a 4th century Romano-British pre-Christian mausoleum.

The Isle of Sheppey has produced evidence of complex land uses dating back to the Neolithic period and onwards into the Bronze Age. Evidence of Romano-British settlement exists on the Isle of Harty. Despite its remoteness, archaeological evidence indicates that human settlement on Harty was probably from the 4th Century AD. The ferry at Harty was in use from the time of these early settlers and remained so until very recently.

Sixteen hundred years ago the Jutes developed Faversham after the Romans left, because of the rich agricultural land which surrounds its location, and it became a command centre for their kings. The Swale and associated creeks provided easy access to the London and continental markets and the area prospered. The Roman roads continued to be used during this period. In addition drove roads were created to drive cattle and swine between the Weald and the wooded downs for autumn foraging.

In 1147 King Stephen chose Faversham as the site for an abbey but as a result of the Reformation, the abbey was dissolved in 1538 and trade in the area flourished. In the 1500s gunpowder manufacture was a new industry, which supplemented the traditional industries of brewing, tanning and oyster dredging. In addition good creek access made Milton a significant fishing port. Wealthy merchants built luxurious new hall houses during the 15th and 16th century in the splendid rural settings of the surrounding countryside.

The area became a haven for refugees during the 16th and 17th centuries due to its location on the main shipping lane between southern England and the continent. Flemish immigrants that settled here during this period re-introduced hops, which had ceased to be cultivated in late medieval times. They also did much to improve fruit growing. Cherries were introduced from the continent, some of the first cultivated cherry trees in England being planted by Henry VIII's fruiterer at Teynham in 1533. In addition the Huguenot refugees who were forced to flee persecution in France brought with them knowledge of gunpowder production and rejuvenated this local industry.

At the end of the 1600s the landscape was still of a medieval character, but by the early 1700s agricultural prosperity meant the development of a number of farm estates and parklands across the southern dip slopes of the North Downs. During this period the road network was improved by the introduction of the turnpike trusts. Other roads also developed as many road users sought alternative routes to avoid tolls.

In the 18th century the industrial revolution meant the enlargement of local industrial activities including gunpowder production and brewing. Until the early 18th century, although there was some expansion of hop growing in England, it was only on a limited scale as importation of cheaper foreign hops was common. However, in 1710 an act of parliament placing duty on imported hops encouraged the expansion of hop growing in England. Thereafter there was a huge increase in the number of hop gardens. This had a significant effect on the character of the Kentish landscape and on local employment. Contrary to modern methods, farming practises of the late 19th century were as diverse as possible and designed to keep a large work force productively employed throughout the year. Many hop fields and orchards were again lost as a result of competition from foreign imports.

In the early 1900s the hop industry came under considerable pressure from foreign imports and whilst tariffs were set to protect home grown hops, by the 1950s further mechanisation and herbicide development meant a much reduced workforce and the consumption of traditional beers has meant that hop acreage has been slashed and reduced in the past. The long fruiting period provided by the many different varieties of fruit formerly grown was sadly further reduced during the post – war period.

Many traditional buildings associated with the hop industry fell into disrepair or were lost during the early 1900s. However, during the late 20th century many oasts and barns were saved and converted to housing. There remains a widespread distribution of farmhouses and traditional agricultural buildings and despite some loss in extent, these buildings, the isolated hop fields and areas of orchard remain a feature of Swale Borough and a legacy of the traditional rural Kent.

The 19th century brought further changes to the landscape with the opening of the railway. Between 1850 and 1900 industry was booming and the population of local towns grew rapidly. Vast brickfields were opened up and billions of stock bricks created for use in London. A series of paper mills and cement works were also developed adjacent to Milton Creek. To facilitate the transportation of materials between London and these local industries, fleets of barges were constructed in the boatyards of Milton, Conyer and Faversham Creeks. The heyday of the creeks began in the mid 19th century and continued well into the 20th century. Barges brought in materials including sand for the production of bricks, mud and lime for cement and took away the finished products.

By the Second World War other forms of transport were taking precedence and the use of barges was in decline. Boat building is however emerging at Sheerness and restoration continues to be practiced on a smaller scale at both Faversham and Conyer.

The landscape of Swale Borough is today recognised as of particular significance in terms of the traditional character of large areas and for its wealth of well-preserved historic settlements and buildings. Its diversity is reflected in the landscape types that are found here. Much of the area is designated and recognised for its national importance in terms of its biodiversity and many of the settlements have conservation areas designated within them.