CHAPTER 2
Natural History

Upton-by-Chester is found to the north of Chester city centre, just over one mile from The Cross. The two-mile post is on the Liverpool Road opposite the site of the old smithy, almost marking the northern most limit of Upton itself. The Township of Upton covers an area of 1154 acres, its near neighbour, Bache, whose own history is often hard to separate from Upton's, covers an area of 95 acres. Upton is sheltered by the Clwydian Mountains and they can be glimpsed from many sites in the locality. As Upton is higher than the city, this too can be viewed, with its illuminated Cathedral by night.

Upton has become part of the suburbs of Chester, as there is now no differentiation between the villages that once surrounded the city. Although Upton has had a very close association with Chester, right from the earliest of times, it has retained it's own identity. This has been revealed through its history, people and natural history.

Geology of Upton

The underlying bedrock at Upton is Triassic sandstone, also known as the Chester Pebble Beds because the sandstone contains pebbles. This is the oldest rock in the local sequence and is overlaid with drift deposits of boulder clay. The soil that has developed is typical of the type widespread throughout Cheshire. It is finely textured and ideal for grassland that has been a major contributor to the development of the dairying industry in Cheshire since 15th century. It is prone to surface wetness, but in the more favourable places it is good enough for market or nursery gardening. Glacial sands and marl have been deposited by the retreating ice sheet where the boulder clay was missing, or in the many pits. When a sand deposit was found it was worked and used for road and property building from the 18th to 20th centuries.



Bache brook and cliffs

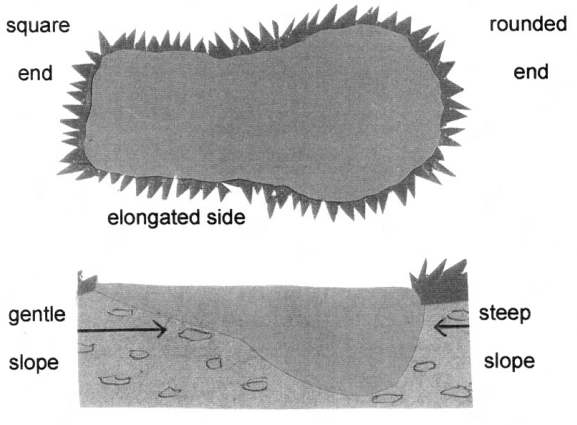
Topography

The western part of Upton formerly consisted of heathland at an approximate level 40m above Ordnance Datum; this is about as high as Upton gets. To the north, a deep valley running between the former estuary of the River Gowy and the River Dee interrupts this plateau. This is called the Deva Spillway and the hill that was formed is known locally as Butter Hill. It originated as a drainage channel for the River Mersey which was blocked by ice approximately 11,000 BC, water cut across to the River Dee estuary at a point between Chester and Blacon. At the lower end, the Upton/Bache border lies at 15m OD; the brook that runs through has worn the stone into cliffs 4 – 5m high.

Marl Pits

Marl pits have been a feature of Upton for hundreds of years. Marl is a naturally occurring resource that was easily utilised by farmers as a fertilizer.

At the end of the last ice age the retreating ice sheet left behind various deposits. One of these was marl, a soft concentration of secondary calcium carbonate. It was found at a depth of 1-2m in the underlying till (clay) layer and as it was dug out a pit was left behind. It had been known, probably since Roman times, that spreading this clay over sandy soils enriches it and improved its water-holding ability. This practice was known as marling. By digging the marl into the field it interacted with the soil, changed it physically and released its nutrients.



Marl was applied in summer and was effective for about 12 years, the value of adding manure to fertilise was well known but as much of the winter stock was slaughtered each autumn, it was therefore not so readily available. Marl was in general use between the 16th and 18th centuries. Marling was carried out by a group of 5 or 6 men under a leader known as the 'Lord of the Pit' and usually took about a fortnight to complete. The practice eventually died out even though it was freely available as it took a great deal of labour for excavation, haulage and spreading. The availability of quarried lime became the replacement for marl. A marl pit is different from a sand or clay pit and is easily distinguished by its shape. It has a square edge, with gentle slope at one end and a steep rounded slope at the other. This shape was the result of the heavily laden carts being hauled up the sloping end; the deep end was where the marl was taken.

Eventually the pit would fill with water, so another would be dug, sometimes very close by. Later, pits were dug in the middle of the field to make the spreading of marl easier. The colour picture of the Roman practice camp enclosure shows a disused marl pit in its centre, see Ch1. As the seepage of water out of a marl pit is very slow, surface water is enough to keep it full and as a result, the marl pits have survived to the present day. This process was repeated over and over again leaving Upton to be dotted with marl pits.

Upton Heath

An Egerton family estate map of 1735 shows, the proposed enclosure of the heath which had been until this time an open, flat area of the township with no natural drainage. There had been several Acts of Parliament to enclose such areas but there is no evidence to support this for Upton, and the enclosure was probably done privately by the Egerton estate. The enclosure award dates from 1767. It can be noted from the map that all the field boundaries inside the enclosure are straight lines whereas the fields outside show a more natural shape. What is now Long Lane is also drawn straight and would have been an access road put in at the same time.

One curious addition to the map is the inclusion of what was then called Upton Green but known today as Upton Heath. There are several references to a property from at least the Elizabethan period, called Hogg House, in the vicinity. The map shows further growth in this area which continued to develop.

Manor of Upton, Chester St Mary, 1735



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Farming in Upton

Agriculture has been the backbone of Upton for hundreds of years. There have been at least eight farms and numerous small holdings and, going back further, everyone who lived in Upton would have grown their own produce on some scale. We have one farm left in operation and it is also one of our oldest.



Upton Grange (Lot 2).

Upton Grange c.1900

The Dutton family has farmed at Upton Grange since John D Dutton took on the tenancy in 1906 from the Shrewsbury estate. The farm then was 166 acres with a rent of about £250 per year. The Shrewsbury estate sold the property and others held in the neighbourhood in 1916. John Dutton took the opportunity to buy and carried on with a mixture of arable and livestock farming. Cattle, sheep and pigs were reared alongside oats, barley and root crops, cheese was made and horses were bred, bought and sold. In those days farming was still very labour intensive and many people made their living on the farm. When John Dutton died in 1950 his youngest son, Tom, took over. By then more machinery was in use i.e. tractors and milking machines, and by 1978 a partnership was formed – father and two sons – who acquired more land and concentrated on dairy and beef farming. The two brothers, Tim and Piers Dutton, now run Upton Grange; their herd of 110 dairy cows is certified organic and all the field work is carried out by contractors. We will have to wait and see if their sons continue working the farm through this century.



The Duttons method of mixed farming is one that goes back a long way due to the types of soil found in Upton. The heavier clay soils hold water and are difficult to cultivate and more adapted to grass that can support animals. The lighter sandy areas are free draining and easier to plough and more suited to growing crops; the extensive nursery lands are testament to this.

An early 19th century map of the Upton Hall estate tells us which crops were being grown; they included potatoes, barley and pasture.

There are two references to ridge and furrow cultivation. These were recorded in the early 1960s and have now been lost to housing developments. The first instance was in the playing field of Upton Heath Primary School where 12 strips were to be seen. Secondly behind the houses of Endsleigh Gardens there were three strips identified. Part of the Wealstone Lane playing field may also show the remains of ridge and furrow field marks.

One lost relic of a farming community is the penfold for impounding stray animals. Upton's stood somewhere near the bottom of Demage Lane by the Upton Lane junction and is marked on the first edition OS map of 1871-72 as 'pinfold'. The WI Book suggests that it could have been demolished at the time the Vicarage was built in 1889. By the time of the 1899 OS Map it is missing. This shows the decline in farming within the village though its name is now remembered in the road Penfold Hey that is close to the site.

Field names on our old maps also show us other types of crops grown, for example, peas, beans, wheat, rye as well as clover. The rural landscape was also recorded in 1721 at the Cheshire Sessions; the document describes the manor of Upton as containing cottages, orchards, gardens, meadows, pasture and heath. This paints a pretty picture of a rural landscape that was once Upton.

Trees

Upton is blessed with many trees and there are several, which are well over 200 years old. Trees, in particular oaks, were used to mark field boundaries when Upton was a farming community, and there are a number of these trees that have survived. The large oak at the top of Demage Lane is an example. (See colour picture chapter 1). The owners of the larger houses built during the 19th century used a variety of tree specimens to enhance their gardens. Although we have lost several of the houses, we are fortunate that many of these trees have been incorporated into the modern re-developments. A considerable number of trees in Upton have Tree Preservation Orders served on them and this will protect them for many years to come. One part of Upton that has many protected trees is the area that covered the former residence Upton Lawn. Not only are there trees remaining from around the old house, but on the opposite side of the golf course running along Heath Road are a great many large trees which once



Heath Road



Tree planting at Upton Heath School, 1991

formed the edge of the property. There is a famous local story concerning Upton Lawn. In 1919 Earl Douglas Haig visited Chester to be made Honorary Freeman of the City. He lunched with the Mayor, Sir John Frost, and Mayoress, at their residence, Upton Lawn. Whilst there he planted an oak tree raised from an acorn which was brought from the WWI battlefields of Verdun, France. It was known locally as 'Earl's Oak'.

More recently there have been several tree-planting occasions. In 1991 school playing fields were being sold off for development, at Upton Heath School. It was decided to plant a mixture of trees on the corner of their playing field to prevent it being sold. On Saturday, 2 November 1991 350 trees were planted by residents, guests and children, Gyles Brandreth MP, and Councillors John Butler and Gerald Grant each planted an oak tree.

At Moston a landfill site was turned into a wildlife retreat by volunteers and the Cheshire Wildlife Trust in 2003. Many trees and plants were included.

In November 2004 the Parish Council, with the help of children from Upton Heath and Dorin Park Schools, planted several trees at the Chemistry Pits field to encourage a wildlife area.

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The Dutton family at Upton Grange, contribution from Piers Dutton

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ULHG History Sheet 6, Des Robertson

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Upton County High School Trial Excavation Report 1994, Matthews, Emery, Edwards, Harrison