

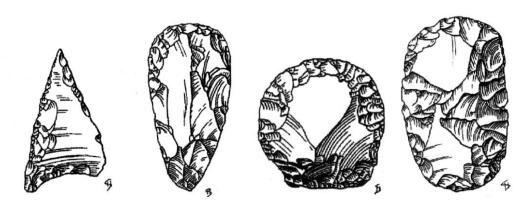
The Icknield Way and Flint-knapping

What is Flint?

Flint is a hard shiny stone found in lumps of chalk rock. It is much harder than chalk and does not dissolve in water. Wherever the chalk lies close to the surface along the Icknield Way, flints can be found. With the development of heavier ploughs, flints were often struck beneath the soil and even today it is not unusual to find a large stone, or heap of stones left at the side of an arable field, laboriously removed from the field by the ploughman, so that the ground could be better cultivated. Flint was made in the sea about 70 million years ago from silica contained in the spines and shells of marine organisms remaining after their death. It often forms layers in various shapes and sizes.

Historic uses of Flint

People have been working flint for thousands of years. Although capable of producing a very sharp cutting edge when worked correctly, this edge quickly blunted so flints worked for a variety of purposes were always in demand. The earliest farmers made most of their tools from flint: axe heads, scrapers, knives and arrowheads were all in everyday use 4000 years ago.



The importance of flint for tool-making declined after the development of metal-working. However, its hardness and durability make it ideal for building, although it is difficult to construct corners from flint, so these are usually made of brick or other worked stone. From the 14th century flints were used decoratively as displayed in many fine mediaeval ecclesiastical and municipal buildings in East Anglia. From the 15th century, flints were cut into squares which could be fitted together – a style known as 'flushwork' – and very often stone, brick and flint were combined to make patterns.

If flint is struck against steel, a spark is produced. This capacity were turned to excellent military use in the 18th century when guns were developed called flint-locks and so Breckland became of vital importance to the British Army

Flint in Breckland

Concentrations of flints were a valuable natural resource and the concentration in the Brecks north of Brandon was known from early times. It was Neolithic miners who first dug flint from the chalk at Grimes Graves and material from here continued to be worked for nearly 1,000 years up until about 1,000 years BC. Over 360 shafts were dug to depths of 30 feet and

from these shafts tunnels ran out in different directions to form the galleries where the best flints could be mined. When a particular shaft became exhausted or the distance that flints had to be dragged became too great, the shaft was filled in and another pit excavated. In this way were created hundreds of peculiar hollows at ground level which were unexplained until the site was first excavated by Canon Greenwell in 1870. Grimes Graves is a bit of a misnomer – there are no burials here! The ancient meaning of the word means 'pit' or 'mine' and the association with the Devil's holes of the pagan god Grim came much later.

The Icknield Way Connection

Until the latter part of the last century, archaeological tradition suggested that the Icknield Way came into being as a prehistoric trading route linking sources of flint with skilled knappers and, of course, the centres of Neolithic culture along the chalk spine of southcentral England.

Since then, much evidence of a wide range of ethno-socio-economic activity has been brought to light resulting in new thinking . Archaeologists are now much more cautious about treating the Icknield Way as a long-distance trading route, considering instead that trade happened in a series of small, local and seasonal exchanges of goods rather than in strategically organised transport of goods in bulk. Axes and other tools, for example, were traded from Cornwall, Sussex, Yorkshire and Cumbria as well as Dorset – the area traditionally linked with Norfolk – and only the Cornish and Dorset axes would have been exchanged directly along the Wessex Ridgeway northeast into the Chilterns and East Anglia. Any continuity of use of the Icknield Way into Romano-British times is seriously put into doubt by the development of urban centres and by the likely transport of key commodities as much by water as over land. The historic fens would have provided easy access to the sea from the northerly part of 'our' Icknield Way and east coast trading ports would also have transported many goods from inland parts of the region. Later still, by late mediaeval times, major road networks were well and truly based on major towns which the Icknield Way generally avoids.

However, there is every reason to believe that for at least 1,000 years, within the area we now know as East Anglia, trading in flint mined in Breckland was a vitally important activity.

'Modern' Use of Flint

It is thought that the first flint-fired gun was invented in the early part of the 17th century but a new flintlock firing mechanism invented later in the century enabled Brandon flint-makers to become the main suppliers of the Army. A musket known as Brown Bess remained in service until after the Napoleonic Wars, during which 3 million muskets were manufactured, not forgetting all the pistols, carbines and other flint-fired weapons in use at the time. An order for 100,000 flints made of the best 'floorstone' flint in 1790 put Brandon on the map, helped along by Charles Sloane, cousin of the Master General of the Board of Ordnance who happened to be the owner of the Santon Downham estate! In 1804, a further contract was placed for a monthly supply of over 370,000 flints and by 1813, Brandon flint masters were supplying over 1,000,000 gun flints each month, providing work for about 160 knappers and miners. A skilled knapper could make 300 flints per hour.

Ling Heath, about a mile and a half from Brandon, became the main mining area. Most miners worked alone by candlelight, digging shafts down to the 'floorstone' (the bottom layer of flints) and then extending galleries at right angles, allowing maximum penetration of daylight. Flints were brought to the surface and piled into heaps known as 'jags', each weighing 650kg, before being carted to small brick sheds where the knappers would work in poorly ventilated conditions. Silica dust in the atmosphere soon accummulated in the lungs of workers: few reached the age of fifty before succumbing to 'knapper's rot'.

After the victory at Waterloo, orders ceased plunging the industry into depression and the final blow was the adoption of the percussion cap cartridge in 1838. However, flintlocks continued in use until the mid 20th century, especially in South Africa and the Congo and further orders came from Turkey and China.



'Masters of Flint' - an 1876 engraving

Flint-knapping Today

There are still flint-knappers at work. Flints are still needed for groups re-enacting historical events and a surprising number of American websites offer 'fine English gunflints' for sale. Building flints are still required especially in conservation areas where planning permission is granted only if flint is used for exterior walls.

Anyone keen to learn a new skill can join workshops run by Val and John Lord. The Lords were appointed as custodians of Grimes Graves in the 1970s and taught themselves all there is to know about flint-knapping. They are now freelance professional knappers, travelling all over the country demonstrating this fascinating craft. For further information go to www.flintknapping.co.uk

References: Mason H J & McLelland A (1994) 'Background to Breckland'

www.flintknapping.co.uk www.will-lord.co.uk/will-lord-flint-knapping.html www.brecks.org/about/history-and-heritage/ www.english-heritage.org.uk/visit/places/grimes-graves-prehistoric-flint-mine/

Chris James, Icknield Way News Autumn 2007