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OBJECTS OF ATTACHMENT FOR BARNACLES IN THE RED CRAG OF BUCKLESHAM

Barnacles (Cirripedes) are Crustaceans which in adult life do not resemble other crustaceans.

After hatching from eggs they begin existence as free-swimming larvae. Following moulting stages they find places of attachment and secrete calcareous plates to protect themselves throughout their sessile adult lives.

They grow attached to rocks, shells of other invertebrates, or other footholds on the shallow sea bottom.

An excavation in Red Crag at Bucklesham (Watson & Whelham's), Suffolk, has yielded a rich fauna, including numerous barnacles.

Many of the barnacles are attached to phosphatic nodules, some to flints, and others to molluscs. The shells used include both calcitic and aragonitic forms.

Normally, only two or three species are used by barnacles in the Crag, but at this site over a dozen species have been used.

Barnacles are normally uncommon on the left-handed Neptunea contraria (although common on the right-handed or dextral Neptunea); however a number of barnacleencrusted N. contraria have been found at Bucklesham.

Aragonitic lime	Calcitic lime
Glycymeris (common)	Ostrea
Cardium parkinsoni	Chlamys opercularis
? C. "interruptum"	Pecten
Nucella tetragona (rare)	Nucella lapillus (common)
Nassarius reticosus (rare)	N. incrassata
Colus (rare)	Phosphatic
Dosinia (rare)	Nodules
Gastrana laminosa (rare)	Bone (mineralised)
Calcite and Aragonite	Siliceous etc.
Neptunea, dextral group (common)	Flint
N. contraria	Sandstone
- also found on other barnacles	Mudstone

Lists of objects of attachment

(the above was the basis of an exhibit at the 1976 Geologists' Association Annual Reunion)

R A D MARKHAM

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R.M.

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THE SUFFOLK SCENE - PAST AND PRESENT

From Ipswich to the Stour

The freshness, beauty and life of the Suffolk countryside especially the Stour Valley, in the late 18th and early 19th centuries is immortalised in the landscape paintings of John Constable (1776-1837) of East Bergholt and Flatford. Thomas Gainsborough (1727-1788) of Sudbury painted some Suffolk scenes. His earlier landscapes depicted local scenes, such as that of Cornard Wood. His later ones are mainly compositions.

When I saw the Stour Valley at Flatford for the first time in the early nineteen twenties it was, in many ways, very much like Constable had known it. There was the river, the trees, the pastures with the grazing animals and the distant view of Dedham Church. A few barges were still using the river. I would watch them going through on to Dedham and Stratford St. Mary. Everything seemed so peaceful in those days as the barges " moved almost silently and just the voices of the men as they talked and called out instructions to the horses. About half a mile from Flatford there was an old humpbacked wooden bridge (the Cart Horse Bridge) crossing the river and connecting with the end of Fen Lane. At this point the barges would stop and the horses would be disconnected and led over the bridge to the Towing Path on the Suffolk side.

I used to do some fishing between Flatford and Dedham, and knew the best places; the deep pools where the large fish would lurk. I never caught any of these large fish, only a few very small specimens. Once, however, when fishing from the flat wooden bridge over the Dead Page 6 River in Fen Lane I nearly landed a really large Perch but at the critical moment the line broke! The Lead River is really an old winding section of the Stour and became silted-up after a new cut or canal was made from Flatford Lock in the 18th century.

To reach the Stour Valley from Ipswich I would use various routes walking or cycling. The London Road was the quickest way of getting to East Bergholt, Flatford and Dedham, but not the most attractive. Although the main road, it was still very much of a country road by present day standards; quite narrow and winding in parts. There were tall hedges and some fine avenues of trees, one still thought of the days of the Stage Coach. There had been no major alterations.

Crane Hill from the Railway Bridge to the Chantry was the first section to be widened. The Town had hardly expanded beyond the Railway which for years had acted as a boundary between the Town and the Country. There were the few large houses on Crane Hill and also just beyond the Chantry Park, which was still private.

In late April and early May on the railway bank by Gippeswyk Park the beautiful Meadow Saxifrage flowered abundantly. Everytime I passed that way I would look across the park to Waller's Grove and make sure that it was still there and none of the trees had been cut down. Waller's Grove was then rather private and situated beyond the park boundary fence. It is now incorporated in the park area and new housing and has completely lost all that special charm and fascination it used to give men when on its own. Access was difficult, but at times I would overcome various obstacles and managed quick visits. Waller's Grove was once a famous and rich habitat of several uncommon wild flowers. It was known to Ipswich botanists in late Georgian and Victorian times. There they collected Yellow Star of Bethlehem, Wood Anemone (described as then being abundant), Goldilocks or Wood Crowfoot and many other kinds. Dried specimens have been preserved and are in the Ipswich Herbarium. I have never been able to re-find any of these earlier botanical treasures during my visits and it is possible that in later years Waller's Grove was open for grazing which would account for the disappearance of the majority of its woodland flora. The earlier flora suggests Waller's Grove to be a fragment of ancient woodland.

Out of Ipswich one would frequently be passing tramps oh their way to London. Many were not real tramps but only the unemployed in search of work. Some would prefer to sleep rough rather than spend a night at the workhouse. In the early morning you would see them over the little fires they had lit to warm themselves and make hot drinks and have a simple breakfast. Bentley Long Wood was for many years a favourite stop. The verge was wide and there was cover with a good supply of fuel.

One of my favourite ways to the Stour was very winding, yet so pleasant as to be well worth the extra time and distance. This way was via Belstead and then taking the lane to the Wops and through Bauldrough (sometimes called Blady's) and Old Hall Woods. Belstead Wops is the old name for the valley before you enter Bauldrough Wood. Shepherd's Cress, Dog Violet and other interesting flowers can still be found on the dry slopes. Heath Lousewort used to occur. There were Fritillary Butterflies; the caterpillars feeding on the Dog Violet plants. I have also seen Purple Emperors on the edge of the wood. These large beautiful butterflies were once fairly common in the woods of the district and many were collected by local dealers in Victorian times. The woods have been well worked by entomologists for more than a century.

Spring and summer mornings were delightful, the woods so fresh and peaceful. They were more open than today with standard oaks and other well spaced trees. The old trees were nearly all foiled just after the Second World War and the woods replanted with several different species of trees. In early April the open glades had their drifts of white and pink Wood Anemones and these were followed by Bluebells, Rose Campions, Yellow Dead Nettle and Bugle. Sometimes Fallow Deer would be disturbed and once I came upon a spotted and striped fawn asleep among the old bracken and brambles. On other occasion Fox Cubs were seen playing on a bank near their holes. Beyond Old Hall Wood the bridle path continues as a narrow lane. At the bottom of the small valley there is a turning to the left leading to Newcome Wood, the path going through the wood and then over the railway bridge. In summer the section of the lane between the turning and Newcome Wood becomes grown-up with various grasses and the flowering stems of Hogweed, Black Knapweed and other flowers There used to be Wood Betony, but this flower has now become extinct in nearly all its recorded local sites. The lane was the haunt of various butterflies and the last place I saw Large Tortoiseshells. On the umbels of the Hogweed were Soldier Beetles and various brightly coloured Flies. On the Knapweed flowers were several kinds of wild Bees.

In the former pasture beside Newcome Wood was the toad pond. Ever spring hundreds of Toads would leave their holes and hiding places in the woods and ditches and converge on the pond or water in the area for performing their annual frolics and spawning.

Newcome Wood was also very open with its standard oaks, many festooned with honeysuckle. During May the wood was almost a perfect carpet of Bluebells, a sight I shall never forget. Sadly this wood was cut down and planted with conifers.

The main lane from the exit at Old Hall Wood was once an important route for travellers from Belstead to Bentley and Tattingstone. There were other lanes and tracks connecting with Copdock. I used to know them all very well and it was then possible to cycle or walk these by-ways to Last Bergholt. Some of the lanes can still be used; others have almost disappeared or been ploughed up, hedgeless and untrodden. A few are now completely overgrown thickets. Here and there in some of the remaining hedges can be found Butcher's Broom and Wild Service Tree, both species are relics of the ancient forest and scrub which once covered much of the stony and gravelly land between the Orwell and the Stour estuaries. One route I used to take went past Pond Hall and Engry Wood, Bentley and continued through Holly Wood to Dodnash and East End, Bergholt, where there was a giant, partly hollow elm, of great antiquity, and used as a cart shed. Once there was extensive heathland between Dodnash and East Bergholt and you can still see Wood Sage, Hawkweed, Gorse and other heathland plants and shrubs on the wayside banks, which managed to survive after the enclosure.

Some of the old lanes and tracks I followed through Bentley led to Brantham or Stutton and finally to the Stour Estuary. At the ends of the lanes there were at one time recognised crossings of the River by rowing boats or in some cases at low water, even by horse, where there was a 'hard'. One can still see a few stakes marking the crossings. There are also the remains of the old Quays where up to fifty years ago the sailing barges used to tie up, bringing coal and various supplies for the local villages.

The banks of the Estuary were far more picturesque and wooded than today. Hundreds of trees have been lost especially during the past thirty years due to the more rapid erosion of the banks, felling and decay. Vulnerable points were formerly protected from erosion by simple defences of stakes and brushwood. It was also considered important to preserve the fringe of trees and bushes as they assisted in retarding erosion and acted as wind-breaks. Stretches of the cliffs are becoming treeless and this change is likely to continue. The fringe of trees and small areas of cliff woodland are perhaps relics of an ancient forest.

Another important change affecting the shore, mud-flats and saltings has been the rapid spread of the Cord of Spartina grass. This grass was introduced to the Estuary at Seafield Bay, Brantham in 1923. Plants were brought from Poole Harbour, Dorset with the object of reclaiming the mud-flats. Unfortunately, it has spread so rapidly destroying some of the native vegetation. Its growth has spoilt several of the beaches, especially those of sand and shingle, now overgrown and muddy.

Pollution of the River and the foreshore is now becoming a serious problem and an increasing amount of rubbish is constantly being washed up. Most of this rubbish comes from the boats using the Ports of Felixstowe and Harwich. The pressures destroying the beauty and peace will continue. I have watched them multiplying. The noisy gravel from the bed of the river, destroying areas of the Eel Grass (Zostera) on which the ducks and geese feed. Conservation is so important but so often it is too late to save a site we have loved and enjoyed from the many spoilers.

The Geological history of the Stour Valley is very interesting. Many thousands of years ago, in Inter-glacial times, the Valley was very much wider then today. The river was more like a huge lake extending across the Valley. Its old bed is partly covered by glacial deposits of sand and gravel. The climate was then warmer and animals flourished which later became extinct. Their remains have been found in deposits at various sites between Sudbury and Harkstead. The Stour, like the other Suffolk rivers was at that time a tributary of the Thames. Bones, teeth and tusks of large mammals have for many years been found at Brundon, near Sudbury, Stutton, Holbrook and Harkstead. The shells of some extinct species of fresh water molluscs occur in clays and have been very well preserved. Some specimens, although thousands of years old, have retained traces of their original colour. A bivalve species, shaped like a small smooth cockle and known as Corbicula fluminalis, is quite abundant at one site. This species is now extinct in Britain but still occurs in the warmer water of the River Nile. Prom time to time I have found a small number of bones and teeth at Stutton and Harkstead but only on one occasion due to abnormal tides was I able to collect the best part of a hundred-weight of mixed specimens. On Saturday 30th January 1953 hurricane force north-westerley winds in the North Sea caused the build-up of the disastrous high tide. During the Saturday night and early Sunday morning the sea swept up the estuaries flooding the low lying areas and the waves beat against the cliffs causing many to crumble and fall. At Stutton were found the bones, teeth and fragments of tusks of elephant, wild ox, horse and deer. The number and their weight meant that I had to make several journeys to bring them back to Ipswich, hiding up those which could not be carried until later.

One of the most interesting bones was recognised by Mr H.E.P. Spencer, the Geologist, as part of the skull of an unborn elephant. I was also able to find a complete tooth of a baby elephant. On another., occasion I found part of a humanly polished radius of a Red Deer about 100,000 years old, of the last Interglacial. The polished bone was used in the preparation of skins for garments, by ancient men of the Levallois Culture. The three pieces were found between 1949 and 1962, as two further sections of this same bone were found later by other collectors and these were fitted together by Mr Spencer. The bones are exhibited in the Geological Gallery of the Museum. Since the high tide of 1953 there have been fewer discoveries and no major cliff falls. Twenty-three years later during the Saturday, Sunday night of 1st and 2nd January 1976, a very similar tide developed but was not so disastrous. At Stutton there were only small cliff falls and a few bones and teeth plates of elephant were recovered on the Sunday morning.

The shores of the Stour must have been excellent hunting territory for ancient man as the herds of big .animals came to drink and bathe. The animals were also attacked by lions, wolves and hyaenas and their teeth marks have been found on a few bones. The tools Palaeolithic man made at the time are not often found. In the spring of 1975 I found at Harkstead a triangular shaped hand-axe of the type first described by John Frere in 1797 from the Brickearth at Hoxne, Suffolk. These handaxes have been discovered in a number of sites in the County, usually in the Inter-glacial deposits of clays, sands and gravels. I have also found small hand-axe of Neolithic culture and a few other worked flints. Man has therefore been associated with the Stour for a very long period of our unwritten and written history. The story continues and no doubt other discoveries will be made in the future.

F.W. Simpson

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