IPSWICH GEOLOGICAL GROUP

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CONTENTS

Notes on some Gipping Valley Sites.

In the Gipping Valley a thin "stone-bed" containing flints, phosphatic nodules, and phosphatised bone fragments and shark teeth, marks the basal bed of the Red Crag; overlying sand may in part be of Red Crag age, in part later.

Two Geological Group visits were made to the Gipping Valley in Autumn 1973, one joint trip with the Geological Society of Norfolk, the other a joint trip with the Suffolk Naturalists' Society (see "Suffolk Natural History" vol. 16, part 4, Jan.1974, Proceedings, p.247, 'Geological Field Meeting to Gipping Valley Sites').

The stratigraphy at four sites was studied with particular reference to the Red Crag transgression, from London Clay across Lover London Tertiaries (Reading and Thanet Beds) onto Chalk.

The following deposits were seen;-

Till (glacial boulder clay); some sand and gravel.
Quartz-rich sand and gravel.
'Red-Crag' and basal stone bed.
London Clay, with stone bed at junction with underlying
'Reading Beds'
'Thanet Beds'
Chalk.

The pits visited, with notes on some recent observations and finds, were:-

Bramford Old Brickyard.

A rather overgrown section. A special Geological Group excavation showed Red Crag basement bed with flints and phosphatic nodules (a tooth of the giant shark Carcharodon megalodon was found here by Mr. P. Grainger) resting on about >8ft. of brown London Clay, which rests on pale-coloured sandy Reading Beds; there is a bed of rounded black pebbles at the junction of the London Clay and Reading Beds(this pebble bed has yielded shark teeth, and also, sieved by Miss .C. Taylor, portion of a tooth of Hyracotherium (= Eohippus the Eocene ancestral horse).

Chalk, Thanet Beds and Quartz-rich Sand and Gravel may also be seen here. The site shows the northernmost exposure of London Clay in the Gipping Valley.

Brush's Pit, Bramford.

"Coe's Pit" of literature.

The deposits seen here, in descending order, were;-

Till; some sand and gravel.
Quartz-rich sand and gravels - at one place these beds were seen to channel down through the 'Red Crag' into the 'Reading Beds'; sites within this division have recently yielded poor plant remains.
'Red Crag' sands - occasionally, tubes ('trace-fossils') similar to those known from shelly crag further east have been seen, suggesting that part of these sands may be Red Crag.

(cont)

Brush's Pit Bramford (cont.)

Red Crag basement bed. - rests on 'Reading Sands', the London Clay having been cut out and the bed of rounded black flint pebbles at its base having been incorporated into the Crag Basement Bed, The Crag Basement Bed, which has yielded Neptunea contraria and Mytilus edulis, also contains phosphatic nodules, sharks teeth and mineralised bone.

'Reading Beds' - sands containing clay lenses and clay pebbles, also beds of laminated clay and sand; some small scale faulting. Small pieces of lignite may occasionally be found. The Reading Sands and 'Red Crag' here are easily confused by the inexperienced eye, but are soon separated when the thin Crag basal stone bed is found. A spring line is present where the Reading Sand overlies the 'Thanet Clay'.

'Thanet Beds ' - the green clays of the 'Thanet Beds' have a basal stone bed ('Bull Head Bed'); the overlying clays contain pale-coloured hard nodules. There is a distinct uppermost bluish-green division (layer "e" of Boswell's 1927 'Ipswich' Geol. Survey Memoir) which contains small pebbles and has yielded shark teeth, - this uppermost division may be the basal marine bed of the overlying Reading or Woolwich Beds.

Chalk - only a few feet of Chalk can now be seen (compare with the frontispiece photo, in the 1927 Ipswich Memoir); the top of the Chalk has yielded the belemnite Belemnitella praecursor, a fossil of the Gonioteuthis zone; Chalk of the B. mucronata zone is now known not to occur in the Gipping Valley.

Creeting (new by-pass excavation).

Till and Gravel were seen at the top of the section. Blue-grey laminated silts occur, apparently in the lower part of the gravel, and several feet of this laminated deposit were seen resting on the yellow and white sand ('Red Crag' or 'Glacial'?). Under these sands and resting on an irregular surface of chalk was the Red Crag stone-bed containing flint and phosphatic nodules, and in which a shark tooth, a ray tooth, phosphatised bone, and a barnacle mould (in ironstone) have been found. The 'Red Crag' has by now transgressed across the Eocene deposits on to the Chalk. The Chalk here has yielded Pteria tenuicostata, 'Ostrea' (Pycnodonte type), and Actinocamax verus.

Battisford.

Till rests on gravel, on pale-coloured sands, Sin a thick (over 13ft) deposit of large flints and phosphatic nodules containing, in its lower part, Red Crag shells. The Red Crag here has been shown to rest on Chalk in a excavation dug a few yards away from the main site.

Barham. (Sandy Lane.)

Was visited during one of the 1973 trips, led by Mr. P. Allen (see Quaternary Research Association Guide to Clacton based Meeting, 1973.)

R. Markham.

A Preliminary Note of the Section at Blake's Pit, Bramerton.

For at least fifteen years the famous section at Blake's Pit, Bramorton has shown shelly crag only on the upper part of an old excavation; there has been no sign of the once abundant Scrobicularia.

The upper section shows;-

	thickness
Soil and loamy sand	1ft. 3ins.
Brown Sand	1ft. 0ins.
Ferruginous stony crag	10ins.
Sand with some shells	10ins.
White shelly crag	>6ins.

An excavation by members of the Geological Society of Norfolk led by Mr. P. Cambridge, and the Ipswich Geological Group on the 14fth. and 15th. September 1974 proved over fourteen feet of shelly sands to overlie the Chalk in a lower part of the pit; these lower shelly sands were found to contain Scrobicularia.

This excavation showed;-

	thickness
Soil and sand	2ft. 6ins.
Shelly crag	1ft. 2ins
Layers of pale and dark silty sand	1ft 10ins.
Layers of pale sand and darker shelly silty sand	2ft. 5ins.
Pale sand	3ins.
Section obscured (due to step in section)	6ins
Sand with shells	1ft. 8ins.
Section obscured (due to step in section)	1ft. 6ins.
Sand with shells	10ins.
Shelly sand, bedded	1ft. 11ins.
Clay band	to 1ins.
Shelly sand	1ft. 5 ins
Sand with silt bands	7ins.
Shelly sand	2ft. 1ins.
Blue-grey clay with shells	9ins.
Large flints with clayey matrix	circa 6ins.
Chalk	circa 8ins

A more complete description of the section and accompanying fauna is not yet available. We wish to thank Captain Blake for permission to excavate on his property.

R. Markham.

THE IPSWICH SCIENTIFIC SOCIETY, and OTHERS.

On the 9th. April 1869 a meeting was held at the house of Dr. Drummond ‘to form a Society to excite more interest in the study of Natural History, Science, Geology, and Archaeology’. The name adopted for the now society was “The Ipswich Science Gossip Society". An earlier society, the Ipswich Philosophical Society, existed from 1818 to 1854.

Meetings of the new Society were to be held monthly, with Soirees and Field days from time to time. The Museum Committee granted the use of a room for meetings at the Old Museum (in Museum Street). Friday evenings were selected for meetings, the first of these being held in May 1869. Mr (later Sir Daniel) Ford Goddard exhibited a series of Coal Tar preparations, including analine dyes, and Mr. Charlesworth gave a description of the collection of Red Crag fossils that the Mayor (Mr Edward Packard) had given to the Museum.

Two months later, Mr. Edward Bidwell, the original Secretary, moved to London; he was succeeded by Mr. Henry Miller, who held the post for 21 years and was responsible for much of the success of the Society.

One field day was held in the first year, an excursion to the Oyster Grounds of the Orwell Fishery Company at Shotley, and it was reported "that if not what it might have been from a scientific point of view, yet was a very agreeable one in other respects" (? the oysters were good.)

On 9th. September 1870 a visit was paid to the Gun Cotton Works at Stowmarket, "this was not long before the explosion which destroyed the Works, shook Stowmarket and startled the world.”

The first Conversazione was held at the Town Hall on 25th.November 1870; 400 tickets were sold at 1/-. At this Soiree one of the exhibits, by Mr. Ford Goddard, was Professor Peppers decapitated head speaking.

In 1873 Dr. (then Mr.) J. E. Taylor gave his first paper to the Society, on "Flint Implements”; he was an active member of the society until his death. In 1875 voting papers were sent to all members after a proposal to change the name of the society to the 'Ipswich Scientific Society”. 23 voted for, and 19 against the change. With the adoption of the new name, Dr. Drummond resigned on the grounds that the title was too ambitious.

A now departure in November 1875 was a public meeting with a eminent lecturer: Dr. W. B. Carpenter was engaged to lecture on the Challenger Expedition and Deep Sea researches.

At Easter 1877 the London Geologists Association visited Ipswich and district, and the Scientific Society took charge of arrangements; Messrs. Whittaker, Taylor and Charlesworth acted as guides. A visit was paid to Harwich to examine the cores of a deep boring, after which the party visited Felixstowe and then travelled back to Ipswich as far as Spring Read Viaduct, on cars by the railway then in the course of construction. Dinner that evening was at the Golden Lion, after which the Museum was visited to examine the geological specimens. The next day there was an excursion to Butley, Chillesford, Sudbourne and Orford; Sir Richard Wallace entertained the party to Luncheon in the Keep of Orford Castle.

On the 5th.Decomher 1877 the Society introduced to Ipswich 'a new

invention for the transmission of sounds -by electricity'(telephone). At the end of the paper, a bugle was played at the Dock Post Office and transmitted to the meeting by means of the invention.

The Annual Subscription became 5/- in 1878.

At a special meeting on the 19th. June 1878 the Society were introduced to the Phonograph; a microphone was also exhibited.

The new Museum in High Street was opened in 1881, complete with Chemical Laboratory, Committee Room and Lecture Room; the Scientific Society held its first meeting in the new building on the 5th. 0ctober 1881.

Dr. Taylor led a geological field-day on the 1st. September 1883, exploring the whole length of Felixstowe cliff and then across to Bawdsey to see the old Forest Bed exposed at low tide. The party had a lobster tea at the Martello Tower (Golf Course), ' such lobsters as only Bawdsey can produce.'

On the 3rd.May 1884 there was an excursion the Colchester district, a few days after the Earthquake which shook the district; the Society voted £2.2s. to the Relief Fund.

There were excursions in 1885 (22nd.August) to Brandon for" flint investigation" and in 1886 to Blakenham Chalk Pits.

In May 1887 various sections were formed for special work - Botany, Entomology and also a Geology section under Dr. Taylor.

The London Geologists Association paid another visit to the district in 189O and members of the Scientific Society with Mr. E. P. Ridley at the head again acted as guides. At Walton-Naze they were joined by the Essex Field Club.

In 1890 (June) and 1891 the Scientific Society and the Essex Field Club organised joint excursions for Dredging on the Rivers Orwell and Stour.

Mr. Henry Miller was elected President in 1891 having resigned as Secretary aafter 21 years).

In February 1893 Dr. Taylor gave a paper on Coal Boring in East Anglia.

A unique exhibition was also given in the Art Gallery of a collection of fresh flowers from New Zealand frozen in blocks of ice.

About 1894 the (then) Ipswich Photographic Society faded from the scene and the Scientific Society formed a Photographic Section.

The British Association met in Ipswich in September 1895, and the Society played a leading part in arranging the meeting.

In January 1896 Dr. Taylor died.

The 'Chelmsford Odd Volumes' visited Ipswich and the Scientific Society in 1896, for their ' annual dusting' (the leading member was known as Volume 1).

The Scientific Society decided to establish a Meteorological Station in 1896, and the Museum was registered as the headquarters.

The Society organised one of the most successful lectures ever given in Ipswich when in February 1898 they engaged Fridjoff Nansen immediately alter his return from the North Pole. 'So many people had never been got into the Public Hall to a lecture before'.

It was a rule of the Society that members were expected to contribute a paper within two years of joining.

In 1899 Mr. Vick (the photographer), one of the original members moved to

London.

Wireless Telegraphy was demonstrated in May 1899, when a set of instruments were used to transmit messages from the Curators office in the Museum to the Art Gallery.

In 1902 the Society opened a tumulus at Bucklesham.

In 1903 the Ipswich and District Field Club was founded, for lectures, excursions and rambles of Natural History interest, and to be 'in no sense a competitor with the Ipswich Scientific Society.' The Field Club published a Journal from 1908.

In February 1912 Mr. Reid Moir talked on "The Occurrence of a Human Skeleton in a Glacial Deposit at Ipswich " Dales Road) to a joint meeting of the Scientific Society and the Prehistoric Society of East Anglia.

December 1912 saw a Field Club "At Home", with three brief lectures, and refreshments served by the Ladies' Committee.

At a Scientific Society meeting in March 1917 Mr. F. Woolnough exhibited a 'piece of bath stone from one of the windows of the Museum, which had fallen off, and showed some interesting fossils.'

The Field Club had an excursion to Christchurch Park, Ipswich in July 1917, heard a paper on the history of the mansion, and were then conducted round the building.

By now the Scientific and the Field Club had reciprocal attendance arrangements for various occasions.

In April 1918, towards the end of the Great War, one of the lantern lectures for juveniles, arranged by the Scientific Society, was on ,"Early Man" by Mr. H. Moir. 'Attention was drawn to the very primitive and brutal Neanderthal race, which appeared in Western Europe during Pleistocene time and apparently overran the country, driving out the more highly-evolved inhabitants. The sudden irruption of these people reminded one strongly of the present attempt of Germanic peoples to overrun Europe, and it was to be hoped that, as with the Neanderthal, they would finally disappear from the scene@

A Field Club Conversazione in the Ipswich Art Gallery in October 1919 could be enjoyed with 'the soothing delights of the strains of Mr. H. Hinsley Burgham's orchestra in haunting selections.'

In April 1920 the Field Club visited the Stoke Bone Bed where Miss. Layard was 'working in wet clay, fifteen feet down, with an umbrella in one hand and a knife to excavate with in the other.'

January 1921 saw the A.G.M's of both Societies. The Field Club increased subscriptions from 2s.6d to 3s.6d.; the Scientific Society decided to include Lady Members.

In June 1921 Mr. Reid Moir led the Field Club and the Scientific Society to the Henley Road Brickfields. 'A unique surprise awaited the party alongside the footpath from Norwich Road, where the opening of a grave in the old Roman burial ground had revealed a human skeleton, with its skull between its knees.'

In June 1922 the Field Club visited Foxhall Hall crag pit, where Mr.

J. Reid Moir showed the site of some of his discoveries. ‘Rather in the nature of an anti-climax, one of the party picked up, beneath his feet a shilling of James I’

The Ipswich Scientific Society (80 members) and the Ipswich and District Field Club (140 members) amalgamated in January 1924, to form a new Society - the Ipswich and District Natural History Society. Over 100 people attended the amalgamation meeting in Ipswich Museum on the last Saturday evening in the month; the event was celebrated with a wedding cake cut by Mrs. Reid Moir.

Mr. J. Reid Moir was the first president of the new Society, and Mr. F. W. Brinkley the Hon. Secretary; the annual subscription was 3s.6d.

The President gave a brief address, and then followed a Conversazione: ‘A few minutes later the lively strains of the Hinsley-Burgham Salon Orchestra, ensconced beside the hippopotamus (sic) in the central hall of the Museum, indicated that the social side of the event demanded the attention of the members - the programme included the appropriate Suite by Stanley, “Courtship, Wedding Morn, Festivities.” In the lecture room the new “cult' of wireless enabled members to hear the Opera "Handsel and Gretal" at Convent Garden, and the News by wireless. There was a demonstration of the properties of liquid air when a nail was driven into a brick with a hammer, for the nail was made of quicksilver, the brick of alcohol, and the hammer of rubber tubing.

This is an expanded version of the notes appearing in the I. G. G. Bulletin No.8 (1970) pp.7- 8. It is taken from material collected by Messrs. F. Woolnough and J. Reid Moir.

R. Markham.

FINANCIAL STATEMENT; GEOLOGICAL GROUP, 1973

EXPENDITURE	£. p
Postage re Newsletters 37 - 42	9.50
Postage re Bulletins 12 - 13	3.71
Envelopes re Newsletters 37 - 42	77
Envelopes re Bulletins 13 - 13	97
Stencils re Newsletters 37 - 42	49
Stencils re Bulletin 13	56
Duplicating paper	3.12
	£19.12

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Carried forward from 1971-72	4.89
Subscriptions	27.75
Interest on bank account	1.94
	£34.58
Carried forward to 1974	£15.46

R. A. D. M.