

ART. II.—*Early Neolithic sites at Eskmeals.* By J.
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Read at St Catherine's Hall, Port Erin, July 3rd, 1969.

AT the southern end of the Eskmeals Gun-Range, stretching to the east of the road between Marshside Cottages and Eskmeals Station, was an area of rough land covered mainly with heather and poor grasses. According to sheet 37, Gosforth (Drift) of the Geological Survey, the major portion of this land formed part of the so-called 25-ft. raised beach [Map ref. 3084/4918].

In the early summer of 1965 and in 1966 this land was ploughed to form two fields (Fig. 1, 1 and 2). There was no trace of the usual farm debris on the surface of the soil, and the farmer, Mr R. Pritt of Middlebank, is of the opinion that the land had not previously been ploughed.

The line of the old beach was easily recognisable after ploughing, as a broad ridge of pebbles stretching from the north-east corner of the ploughed ground to the south-west. Beyond the beach is an old sea-cliff of boulder-clay known as Skelda Hill. The remainder of the two fields is composed of blown sand and peaty deposits overlying marine warp, and is separated from the raised beach by a deep drainage ditch.

To the east the ground falls away into a wet boggy hollow in which there has been a growth of several feet of peat. This is shown on the O.S. 6-in. sheet, Cumberland, No. LXXXV, N.E., as Williamson's Moss (Fig. 1). Its eastern bank is a narrow strip of raised beach which gives way to a raised terrace of warp.

Although there was a scatter of flint debris over

much of the raised beach, the greatest concentration was over a distance of 400 yards in a narrow band bordering the bog. The northern end of the flint debris began just beyond the edge of the bog, and this area produced the greatest proportion of microliths and fine-bladed cores, together with a fragment of coarse gritted pot. A similar fragment of pot was found about 300 yards to the south-west about 30 feet from the edge of the bog, together with a quantity of charcoal and some pieces of hard clay. A hollow-based arrowhead in grey flint was found close by.

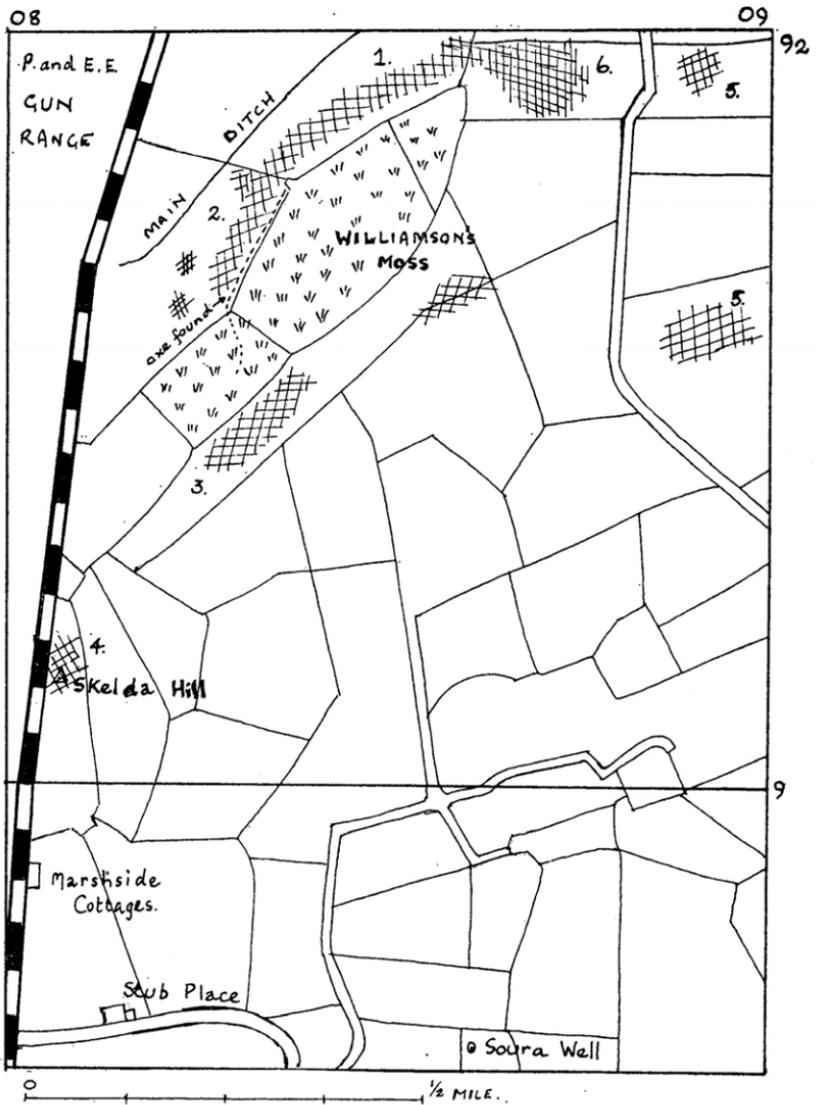
Microliths and bladelet cores were picked up for a further 70 or 80 yards until the main site ended where the beach gravel became overlaid with sand. On the western edge of the beach at this point was a small area of flint debris separate from the rest. Here several small flint scrapers and a fragment of burnt tanged and barbed arrowhead were found.

To the south-west the raised beach is almost completely overlaid with sand, but in a few places gravel was visible. On one of these areas, isolated from the main flint scatter, was a small concentration of flint debris, none of which was particularly microlithic in character.

After the fields had been sown with grass, Mr Pritt decided to drain a portion of the south end of the bog, and to do this he re-cut and deepened an old ditch which ran along the edge of the bog. In doing so, he turned up a fine specimen of a rough-out stone axe.

In the summer of 1967 a narrow field was ploughed at the north-east end of the Moss (Fig. 1, 6). This field stretches from the raised beach to a low clay ridge about 100 yards to the east.

There was an even greater abundance of flint debris on this sloping ground than on the beach itself, and the finds included many fine-bladed cores and several microliths.



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FIG. 1.—Map of prehistoric sites around Williamson's Moss. Shaded areas show the extent of the spread of flint debris.

None of the fields along the eastern side of the bog has been ploughed, but flint debris, including microliths and fine-bladed cores, has been found here and there in molehills.

At the south-east end of the Moss a narrow strip of land was ploughed, lying between the bog and the raised terrace of warp, and is without doubt a continuation of the raised beach (Fig. 1, 3). There was a scatter of flint over most of the field, but this seemed to be most concentrated in the half of the field which bordered the bog.

On the low ridge of boulder-clay about quarter of a mile to the east, on the 50-ft. contour, are two sites which yielded material similar to that from the raised beach (Fig. 1, 5). The flint debris from the more southerly of these was generally of bigger size than that from the raised beach sites and had a much higher proportion of utilized material.

The last site of the group lies on the highest point of Skelda Hill, where we found two microliths together with a number of patinated flint blades and small flakes (Fig. 1, 4). The finds here have been made in molehills and erosion scars, so that there may be much more flint debris to be found.

Cores.

All of the 590 cores found have well defined striking platforms, in direct contrast to the completely worked-out cores from the Bronze-Age sites in the sand-dunes.¹

Most of the smaller cores with the narrowest blade scars are of the single platform type, although cores with double opposed platforms and with platforms at right angles are not uncommon. All these cores have a fairly high degree of patination and were to be found mainly at the northern end of the raised beach and on the higher ground immediately to the north-east.

The delicate fluted cores were less numerous towards

the southern end of the raised beach where the cores generally had a large amount of cortex adhering. This slightly larger, rougher type of core is mainly of the single platform type with only a few examples showing evidence of having been struck in more than one direction.

Although the problem of patination is complex, it may be significant that the patination on these larger cores is, in general, not so heavy as on the small cores from the northern end of the raised beach, although there appeared to be no difference in the soil conditions in which they were found.

Many of the cores of all types exhibit the burin facets described by Dr J. M. Coles in his paper on Wigtownshire sites.² My view, which I have confirmed by practical tests, is that the so-called core burin is an accidental product formed by the core being struck with insufficient force to remove a complete blade from the full length of the core face. The same effect is obtained if the flint is flawed.

Core rejuvenation flakes formed by renewing the striking platform or the face of the core, were also found. Some of the latter have been utilized or worked to form tools.

Among the artefacts which are common to the Drigg, Eskmeals and Wigtownshire sites is the core scraper formed by retouching the face of the core along the edge of the striking platform. It is often difficult to differentiate between deliberate retouch and accidental blunting on the edge of a striking platform, but there are four specimens from Eskmeals about which there can be no doubt. The flakes removed from the edge of the platform are slightly longer than those removed by accidental blunting, and the cores have pronounced concave striking platforms. No. 38 (Fig. 2) is an example.

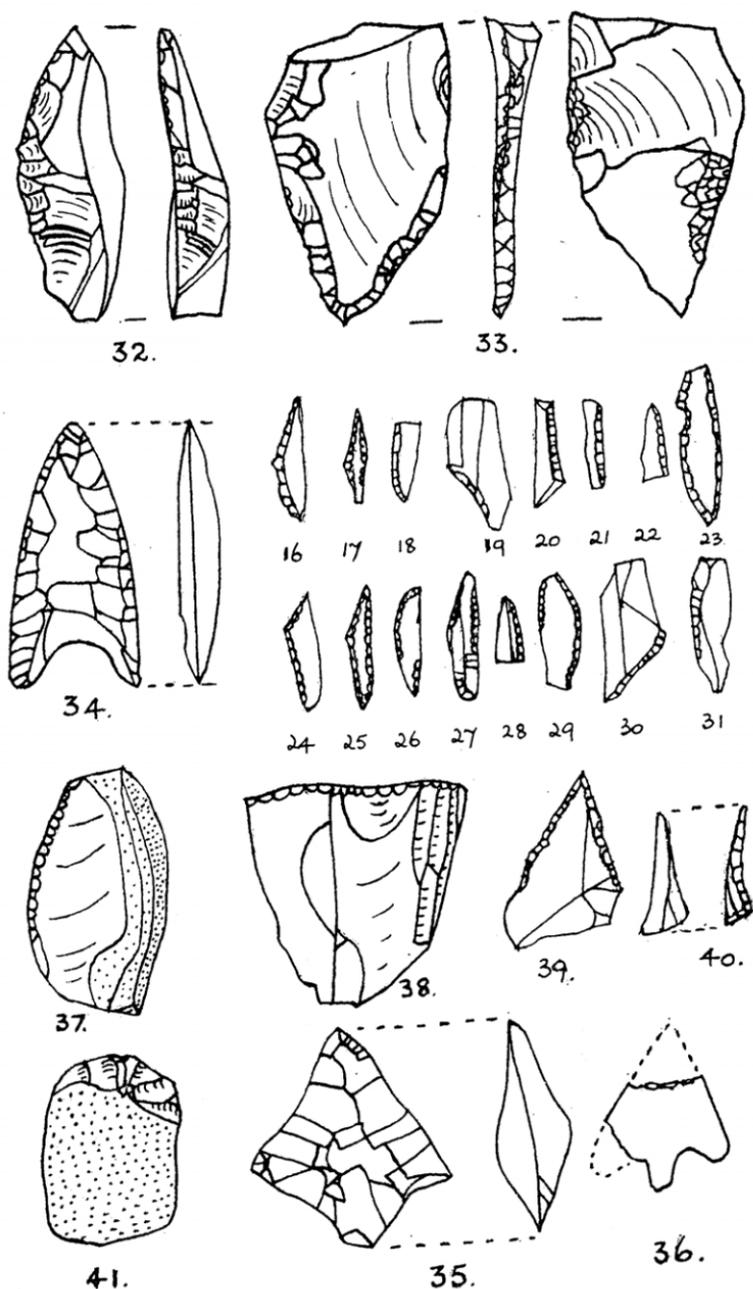


FIG. 2.—Scale 1:1.

Microliths.

A selection of the different microlithic forms is illustrated in Fig. 2. The shouldered point or double point (17) is unusual and is the only one of its kind to be found here in the north-west, although several have been found on two sites in the Tees valley.³ The remainder, which include obliquely blunted points (19, 20), isocoseles and scalene triangles (16, 24, 25) and quadrilangular forms can be paralleled with the microliths from Drigg^{4 5} and can generally be accepted as belonging to a Sauveterrian tradition. The largest microlith, a worked point (23), has been notched; this was found about 50 yards from the bog on the higher ground to the north-east. All the microliths are heavily patinated with the exception of one found on the raised beach to the south-east of the bog.

Flakes.

The narrow-pointed forms which were characteristic of the Shippea Hill⁶ sites are not the predominant types here.

Scrapers.

The side scraper (32) is only lightly patinated and is similar in form to one found on the Eskmeals sand-dune sites in association with tanged and barbed arrowheads, although the sand-dune artefact is more finely flaked.

The side scraper (37), made from a thick flake of honey flint with cortex along one edge, is identical with one found on the Neolithic/Bronze-Age site at Seascale.⁷ The remainder of the scrapers were of the usual forms, the end scraper (41) with most of its cortex still adhering, is typical of all the South-West Cumberland pebble industries.

Arrowheads.

No 36 is a fragment of a burnt tanged and barbed arrowhead found with several thumbnail scrapers on the extreme western edge of the raised beach. The debris here actually spread below the edge of the beach and there is no doubt that this represents a later occupation of the site which must have taken place when the beach was completely isolated from the sea. Another burnt tanged and barbed arrowhead was found on the raised beach south-east of the bog.

The incipient arrowhead (35) in yellow flint is worked with pronounced scars and the general shape and flaking technique is similar to an arrowhead picked up on the microlithic site at Drigg,⁵ although the Drigg specimen had a pronounced tang. A worked point of similar size and shape has been found more recently at Drigg in association with tanged and barbed, and leaf arrowheads. They are all rather broad, thick and clumsy.

The hollow-based point (34) in opaque grey flint is a good example of fine Neolithic workmanship. This type is not common in the north-west although hollow-based arrowheads of cruder form have been found on Walney Island.⁸

Worked points.

These are represented by a large awl in grey flint (33); this tool has some edge wear and seems to have been used as a knife. The small borer (39) is more in keeping with the Mesolithic affinities of the site; it has been trimmed down two edges with fine Mesolithic blunting to form a sharp-pointed tool. Only one other good example of a borer of this type was found. No. 40 seems to be a fragment of a borer blunted along the whole of one side.

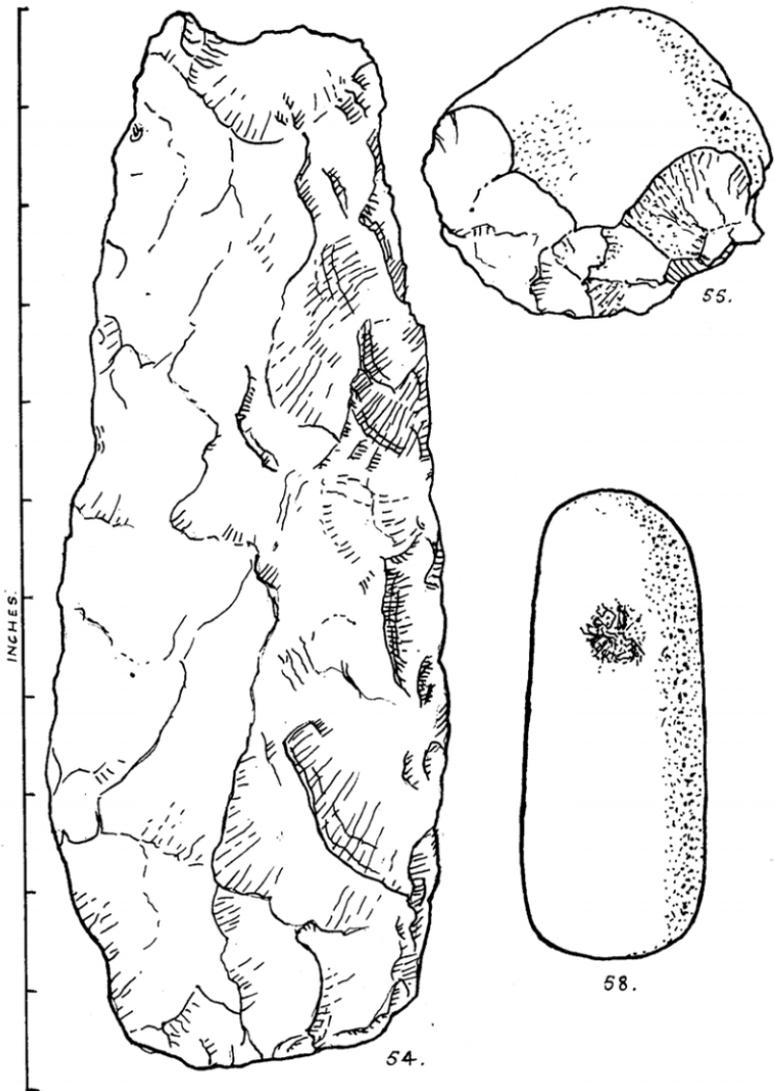


FIG. 3.—Stone tools from the Raised Beach.

Knives.

Two knives made by trimming the edge of large truncated blades were found associated with the hollow-based arrowhead; these are similar to those found on the Seascale sites,⁷ being closely paralleled by those found on Bailey Ground. This type of knife is not found on any of the Bronze-Age sand-hill sites.

Stone tools (Fig. 3).

The rough-out axe (54) is the only artefact recovered from the peat and is of the Cumbrian type made from the Borrowdale Series of volcanic tuff; $10\frac{1}{2}$ in. long, 4 in. wide, 2 in. thick at its maximum, and weighs 3 lbs. $5\frac{1}{2}$ ozs. It has been shaped by striking from the cutting-edge towards the middle and this has formed a pronounced ridge down one face of the axe.

The hammer stone (55) was found towards the northern end of the raised beach. It was formed by striking a pebble in two directions around half of its circumference to form a chopping tool or scraper which is reminiscent of the pebble chopper tools of the early Palaeolithic industries. It is made from a coarse-grained tuff in which can be seen a number of garnets.

The butted stone or limpet hammer (58) is made from a long pebble of igneous rock, pecked in the middle of one end. This stone would have made quite a useful hammer for use in the indirect percussion or "punch" technique. There is slight butting on the ends, and the sides are markedly smoother than the upper and lower surfaces.

Discussion.

There is little doubt from the evidence that there are at least two occupation periods for these sites. The material that can be said with certainty to be Bronze

FIG. 4.—TABLE OF ARTEFACTS.

Artefact	North Beach	South Beach	South-East Beach	Skelda	East Ridge	North-East Slope
	1	2	3	4	5	6
Waste weight	12 lb. 9½ oz.	14 lbs.	3½ lbs.	2½ oz.	2 lb. 9 oz.	8 lb. 14 oz.
Cores	135	141	37	1	56	220
Blades less than ¾"	37	61	10	3	—	11
Blades longer than ¾"	53	54	16	—	17	21
Microliths	16	14	3	2	—	7
Side scrapers	10	33	6	—	7	12
Thumbnail scrapers	25	9	10	—	5	—
End scrapers	—	17	2	—	4	2
Scraper on blade end	—	1	1	—	—	1
Hollow scraper	—	4	—	—	—	1
Straight sided scraper	—	—	—	1	—	7
Awls (worked points)	1	5	—	—	1	2
Utilised blades	—	1	—	—	—	16
Utilised flakes	23	2	8	—	18	17
Tuff blades	—	—	—	—	1	2
Tuff cores	—	—	—	—	—	2
Core trimming flakes	11	8	5	—	3	11
Hammer stones	2	1	—	—	—	1
Axe roughout	—	1	—	—	—	—
Core scrapers	4	2	—	—	—	—
Hollow base arrowhead	—	1	—	—	—	—
Triangular arrowhead	—	1	—	—	—	—
Tanged and barbed arrow-head	—	1	1	—	—	—
Fabricator	1	—	—	—	—	—
Pot fragments	1	1	—	—	—	—

Age in character is, in the main, separate from the rest. Most of it was found away from the bog in a small area on the seaward edge of the raised beach and it represents a very small proportion of the total debris.

Along the western side of the bog and again at the south-east there is a general intermixing of material with Neolithic and Mesolithic affinities, although at the northern end of the raised beach and on the higher ground, the amount of material which could be ascribed to a Neolithic culture is much smaller. It is perhaps noteworthy that this material has, in general, a higher degree of patination than that from the south-east and west of the bog. A table of artefacts is given in Fig. 4.

There is no evidence of a midden although a number of shells were picked up at the northern end of the beach. These included the common winkle, the common whelk, the red whelk, the common mussel and the common oyster. One of the methods of wall building in this area is by use of a mortar made from sea-shells, so that the presence of a concentration of these was not unexpected.

Sixteen sites with Mesolithic affinities have been reported since 1962 in Wigtownshire, along the coast of Luce Bay and Wigtown Bay, and another has been found at the head of Loch Ryan.² These sites produced large quantities of fine-bladed cores but no microliths. In 1965 my son and I discovered another site on Luce Bay, at Auchenmalg and in addition to the usual material we were fortunate enough to find two microliths; more have since been found at Low Clone, a few miles to the south-west, by Mr W. F. Cormack.²

The ground at Auchenmalg contained a high proportion of clay and did not easily break down to a fine tilth. Small pieces of flint are difficult to find in this type of soil and this might account for the poor yield of microliths on the Wigtownshire sites. In his paper on these sites, Dr Coles suggests that the Scottish coastal sites date from 5,000-3,000 B.C., basing his theory mainly on the fact that these sites occur, not on the raised beach, but on the higher ground adjoining the beach. The only exception is a site at Terally where mesolithic flints were found in the humus and the topmost zone of the raised beach material. Evidence to support his view that the sites predate the raised beach has recently been obtained from Barsalloch,⁹ on Luce Bay, where a carbon date of 4,000 B.C. has been obtained from stratified carbonaceous material associated with microliths.

On typological evidence it is possible that there

were three occupations of the Eskmeals sites, but since none of the raised beach flints show any signs of having been rolled by the sea, the beach could not have been inhabited until well after the maximum of the marine transgression which took place about 4,000 B.C. From the continuity of the flint spread towards the higher ground and the similarity of material from all the sites, it seems unlikely that any of the sites was occupied before the beach was laid down. The possible exception to this is the site on Skelda Hill which is geographically similar to the Scottish sites and from which all the material so far found, has been Mesolithic in character.

A pollen survey of the section of peaty deposits in the ditch from which the rough-out axe was recovered, has been carried out by Dr W. Pennington [Mrs T. G. Tutin] of the Freshwater Biological Association and the University of Leicester. A fuller description of this is to be published elsewhere, but it is sufficient to note that a tentative date of 3000 B.C. was obtained for the forest clearance. The pollen horizons were in good agreement with those obtained at Drigg⁵ where a similar date was suggested.

The potsherds were undecorated and did not include any rims; they were too small for positive identification but were certainly of a coarse gritted type that was in use from the Neolithic into the pre-Roman Iron-Age. They were gritted with stone and not with shells as one might have expected on a site so close to the sea.

It seems probable that the first occupation of the sites around Williamson's Moss took place between 3,500 B.C. and 2,700 B.C. and that this was the major occupation. There was a later, though much smaller, occupation by people following a Bronze-Age tradition, possibly contemporary with the people who used the sand-hill sites.

Acknowledgements.

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