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Fulachta Fiadh in the South Midlands

by John Feehan

Recent years have seen a great surge of interest in burnt mounds or *fulachta fiadh*, which are now proving to be one of the most widespread and enduring records of prehistory in the Irish landscape. This interest is not confined to archaeologist, as burnt mounds also have an extraordinary ability to excite and exercise the popular imagination.

This is partly, no doubt, because they are such intriguing structures and because they are the product of such an ingenious use of common sense; in part also because they are more often than not found in the field by amateurs rather than professionals. Finally, *fulachta fiadh* are of particular interest because these simple, unpretentious features are of such antiquity, generally the oldest cultural features in the landscapes in which they occur, surviving to tell of the everyday activities of people who lived here in this same place so long ago, and concerning whom every other trace and record has vanished.

The very large number of *fulachta fiadh* known from certain parts of the country — as many as 2,500 are known from Cork alone [Power 1990], and over 4,000 from the country as a whole — make this the most common prehistoric site type in Ireland [Buckley 1990a], and this is certainly still only a fraction of the total. This is not surprising, since it represents an everyday method of boiling water in a domestic economy where fire-proof pots were not in everyday use by ordinary people — they are the kettles of the Bronze Age — and each individual mound represents domestic activity over a relatively short time-period, perhaps as little as a generation [O’Kelly 1954, Barber 1990, Williams 1990].

In spite of their apparent simplicity, many questions about *fulachta fiadh* remain unanswered. Even basic questions as to function remain in doubt: are *fulachta fiadh* simply ancient cooking places, as we have tended to believe since Geoffrey Keating directed us so firmly along this line of interpretation (Dineen 1908)? If not the hunting camps of the mythical Fianna after whom they are sometimes named, then at least of other, more real (if less storied) people of the past?

This is the view which was so classically argued by Professor O’Kelly in his famous paper on *fulachta fiadh* [O’Kelly 1954], and it has always been the way the burnt mounds have been understood elsewhere, both in popular tradition and by archaeologists [Cantrill and Jones 1911, Layard 1922]. More recently, the possibility that they may also, and perhaps primarily, have been washing places — prehistoric saunas — has come to the fore [Barfield and Hodder 1987, O’Drisceoil 1988], although this function is also part of traditional belief [O’Drisceoil 1990].

The antiquity of the monuments is no longer in doubt. In spite of the paucity of finds from the mounds, radiocarbon and other dating evidence shows that most dated examples were in use in the period between the Early Bronze Age and the early part of the Iron Age, with a maximum in the latter part of the second millenium B.C. This, and many of the other questions relating to *fulachta fiadh*, are admirably summarised and further exercised in the recent volume of essays compiled by Victor Buckley [Condit 1990], consisting of contributions made to the first of (no doubt) many international conferences on burnt mounds, which was held in Trinity College Dublin in 1988.

The present paper is an attempt to raise the flag for the South Midlands, which do not feature in the 1988 conference proceedings as an area in which *fulachta fiadh* are important and widespread monuments. A Table is presented which shows the location of all *fulachta fiadh* at present known from the three counties of Laois, Offaly and North Tipperary, in the full realisation that this will



undoubtedly be out of date by the time it is in print. However, the primary purpose of the Table is to stimulate further field work, especially by local people, and to elicit information about other sites known locally, so that a more adequate gazeteer can be prepared for this part of the country — hopefully before the next conference on burnt mounds! The paper also attempts to make some more general observations which may shed a further glimmer of light on the economy of the makers of the mounds, and on the environment in which they lived and worked.

The first observation concerns the conservatism of the natural landscape which most *fulachta fiadh* demonstrate. In spite of their antiquity, most of the sites still occur in an environmental context which can be little different from that in which they were constructed, in marshy ground or along small streams which would reliably fill the heating trough with percolating water. Mountain streams and the floodplains of larger rivers seem not to have been used, presumably for the very good reason that *fulachta fiadh* in such situations would be inundated in Winter, which — as will be argued later — may well have been the time of year when the sites were in use.

In Slieve Bloom, for instance, there are no *fulachta fiadh* along any of the numerous large streams which radiate out from the inlier. The only sites known to date which carry great volumes of water when in flood. These occur close to a cluster of Iron Age monuments; but there is no dating evidence other than the hint of this proximity.

Most of the three counties covered by this paper are underlain by carboniferous limestone apart from the Lower Palaeozoic inliers of Slieve Bloom, Devilsbit-Silvermines and the Arra Mountains and a few other very small areas. Most of the *fulachta fiadh* are located in limestone country, though rock seldom outcrops at the surface to any extent, and will have outcropped even less in the pre-quarrying days of Bronze Age Ireland. However, examination of the material visible at the surface of burnt mounds in the area shows a marked preferential use of sandstone, although fractured limestone is usually present in the mounds as well.

It is well known that the mound builders were selective in their choice of stones as boilers. In Scotland, heat-resistant stones were also preferred, the most common being hard sandstones. In the Outer Hebrides almost all the burnt stone in mounds comes from the 5% of the bedrock which is not Lewisian Gneiss [Russell-White 1990]. The preference for Old Red Sandstone has also been noted in Wales, where mounds are also common but much under-recorded [Cantrill and Jones 1911].

This selection was done for very practical reasons. Many rocks will simply shatter when heated to a high temperature or when they are suddenly quenched. Hard sandstones are among the most resilient in this respect, whereas most limestones shatter easily; personal experience demonstrates that some limestones shatter explosively and dangerously when heated by fire. Another important factor is convenience of size and shape; water-worn cobbles and small boulders from streams are the ideal boilers.

The fluvioglacial gravels of moraines and eskers are an equally good source, and for the makers of Midlands *fulachta fiadh* this was the main source of sandstone boilers. Sandstone bedrock is restricted to the mountain inliers, but even where it outcrops naturally it never yields lumps of stone convenient for use in *fulachta fiadh*. Selection of material from glacial drift has also been noted in other areas [Buckley 1990b].

A good example of the selective use of stone is provided by the group of Slieve Bloom mounds mentioned earlier. These appear (on surface indications at least) to be entirely composed of sandstone debris; but they are located in a part of the mountains where bedrock is Silurian rock of a kind totally unsuited to the needs of the mound makers.

Not far from the mounds a belt of steep-sided moraine girdles the lower end of a mountain glen. This contains an abundance of splendid sandstone cobbles and boulders, mainly of sandstone,



limestone and Silurian rock types; the townland — Gortnagloch — is named for this material, though the stone which was probably of more interest to the Irish-speaking people who applied the name was the limestone, which was exploited as a convenient source of lime for use as fertiliser on the upland fields.

Burnt mounds containing mainly limestone debris do occur, especially in parts of North Tipperary, always in areas where drift derived sandstone is difficult to locate in the vicinity. A more systematic study would combine a proper analysis of the mound contents with an analysis not only of the hard rock outcrop, but more especially with an analysis of the distribution and composition of the glacial till.

Fulachta fiadh are invariably located on wet ground. Spreads of burnt material not associated with water must be interpreted with caution: apparent *fulachta fiadh*, especially when they have been ploughed out, may turn out to be of quite different origin — burnt mounds of other kinds, or woodland or hedgerow-clearance fire-sites, which may, of course, themselves be of archaeological significance. However, this essential association with water refers to the past, and although most sites are still in the same environmental context as they were in prehistory, subsequent landscape change has altered it for many.

This is well illustrated by a series of recently-discovered sites in county Offaly. The Sites and Monuments Record lists eight *fulachta fiadh* for this county. A further ten sites have been brought to notice by Gerard Lalor, on whose land near Fahy most of them are situated. All of these sites are ploughed out to a greater or lesser extent, and are at present situated in dry contexts; but an examination of archaeo-environmental conditions is instructive.

The mounds are situated at or close to the outer edge of the lagg or fringing fen which formerly surrounded most Midland raised bogs, where the land rises to drier, generally drift-covered ground. This situation provided ideal conditions for *fulachta fiadh*: the lagg providing percolating water for the heating trough, the drift supplying boiling stones and drier ground. A cursory examination showed that there was preferential use of sandstone, though a mixture of drift-derived lithologies occurs.

The fringing lagg area around the raised bogs was almost completely destroyed by reclamation between the 17th and 20th centuries, because the reclaimed fen provided excellent land for cultivation once it was drained. Under these circumstances it is likely that *fulachta fiadh*, which possibly occurred as an aureole around many midland bogs, were levelled, and subsequent recognition of the spreads was rendered more difficult by the masking effect of the black fen peat on the charcoal, and of disturbed stony drift on spreads of burnt stone. Systematic field-walking around the periphery of suitable bogs would quickly test this hypothesis.

It is of interest that turf ash is not evident at the Ballybryan sites, whereas it does seem to be present at other sites in the county; these may very possibly be a much later group of, perhaps, medieval sites. It certainly cannot be assumed that they are an indication that turf was used as a fuel in the Bronze Age; it appears probably that turf only began to be used as fuel in the Iron Age [Sheehan 1990].

Another interesting instance of a changed hydrological regime is provided by a mound at Tinnakill on the southern slopes of Slieve Bloom. This is located towards the centre of a sloping, quite dry field. It is kidney-shaped and measures some 25m along the axis by about 15m across the middle, and it rises perhaps 1m or a little more at the centre above the general level of the ground.

Although there *appears* to be no stream here, in actual fact there is one. In prehistoric times a stream flowed down the slope, and much of the area around the mound would have been waterlogged. However, as part of land improvements in the 18th or 19th century, this stream was culverted and still flows under the field, probably in stone-lined drains. A few meters below the



mound the stream bubbles out to fill an old drinking trough which is sunk at ground level, before disappearing again. It appears a second time some distance away to fill a second trough, before disappearing once more underground.

None of these mounds has been excavated, so the observations made here must rely on surface indications. These can seldom shed light on anything other than the environmental context of the features. There are, nonetheless, some clues. The close spatial association of the Carrowreagh *fulachta fiadh* in Slieve Bloom with presumed Iron Age monuments may, of course, be coincidence, and is hardly more than the suggestion of a possibility that the mounds are contemporaneous with the burial and settlement features.

Stray finds at two of the Ballybryan mound sites are more helpful. A flake of flint was recovered from the debris in Ballybryan¹. It should be noted that flint is extremely rare in the South Midlands; it does not occur naturally, and any flint which occurs must have been imported, probably from the north-east. The presence of porcellanite axes even here in the heart of Ireland shows that trade links with the north-east were well established by the Bronze Age [Cooney *et al.* 1990 and in prep.].

A saddle quern was recovered by Gerard Lalor at the site of the Ballybryan *fulacht* during the course of land reclamation. This is made of slightly pebbly, hard sandstone (Old Red Sandstone), probably made from a boulder from the glacial drift. Apart from the hint of a Bronze Age date for the mound, it provides evidence of a domestic function associated with permanent settlement, and suggests that all *fulachta fiadh* cannot be regarded as simple hunting camps — focal points for the exploitation of the resources of wilderness — as is widely believed.

Whatever about the long-term affects of Hekla 3 for the mound makers [Baillie 1990], the significance of the great climatic cooling of 500 B.C. must have been a significant factor in bringing about the eventual abandonment of the agricultural system in which the *fulacht fiadh* functioned. The most interesting and important question is still this: what was the role of *fulachta fiadh* in the overall farming economy of the Bronze Age? What difference in the Bronze Age economy gave this feature a function it did not have either in the earlier way of life of the Neolithic farmer, or in that of the Iron Age?

A possible answer is that *fulachta fiadh* fulfilled their role in a mainly pastoral economy which took full advantage of the postglacial climatic optimum which reached its peak around 5000 B.C. A limited number of cattle could have grazed all year round, and in Winter and early Spring this would have concentrated to a large extent on naturally flooded grasslands in the floodplains of rivers and along the fens fringing the bogs.

The pastoral landscape did not stop at the fringe of the bog, but extended on to what was for much of the time a much drier bog surface than that which developed after the downturn of 500 B.C., which also made the laggs much wetter. *Fulachta fiadh* (*sensu stricto*) very possibly mark the seasonal camps not of roving bands of hunters, but of Bronze Age herders accompanying their cattle in areas of early grazing, and they are not summer camps but winter camps.

This is perhaps part of the explanation for the absence of bone from typical *fulachta fiadh*; however important meat may have been at other times of the year, it would not have featured in the winter diet, which was probably porridge or pottage, and the heated water may have been intended mainly for the making of food of this kind. The heated stones may also have been used for baking, or even for heating in the cold nights of winter; apart from cooking, the hot water may have been used for washing, and perhaps for all we know to the contrary for purposes of veterinary hygiene.

Fulachta fiadh went out of use because of the collapse of the economy of which they were an integral part. Climatic change necessitated a new farm economy for the winter [Larsson 1990], and at the same time the coming of iron and the different farming of the new society which came with it cast the rural economy in a new mould. If the *fulacht fiadh* is the most symbolic monument of the



Bronze Age farm economy and climate, the ringfort and its variants are the essential monument of the age to which it gave place.

Although older ways of doing things will, as always, have survived in out-of-the-way places, later *fulachta fiadh* may not always represent such a survival. The possibility should be considered that medieval *fulachta fiadh* are an accompaniment of the new transhumance of the Iron Age — associated with summer booley camps, and using peat as well as, or instead of, wood.

There is endless scope for further observation and recording of *fulachta fiadh* in the Midlands. They never appear on the Ordnance Survey six-inch maps for this part of the country, though they can sometimes be recognised on aerial photographs. However, the only reliable way to locate them is by systematic field-walking in suitable terrain.

There is something peculiarly rewarding about the discovery of a new prehistoric site, and *fulachta fiadh* provide the ideal opportunity for amateur prehistorians, whose intimate knowledge of local landscape and topography more than compensates for any lack or specialised archaeological training.

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TABLE

Fulachta Fiadh Recorded in Cos. Offaly, Laois & North Tipperary

The list published here is very much a first approximation. The intention is to generate interest and discussion prior to the preparation of a series of distribution maps for *fulachta fiadh* in the three counties. Most of the sites listed for North Tipperary were discovered during the course of the FÁS-sponsored environmental heritage surveys of the northern part of the county; detailed descriptions of many of the sites can be found in the unpublished records of the Survey at GPA-Damer House in Roscrea.

Several sites in Laois were recorded during the course of the Environmental Survey of Slieve Bloom and the Heritage in Rural Tourism mapping project sponsored by FÁS. Sites recorded in the Sites and Monuments Record of the Office of Public Works are indicated by the abbreviation SMR.

The north Offaly sites in Ballybryan and Ballybrittan were brought to my attention by Gerard Lalor. The two Tullowmacjames sites are taken from Geraldine Stout's *Archaeological Survey of the Barony of Ikerrin* (Roscrea Heritage Society in association with ANCO, 1984).

OFFALY

Ballybrittan
Ballybryan 1
Ballybryan 2
Ballybryan 3
Ballybryan 4
Ballybryan 5
Ballybryan 6
Ballybryan 7
Ballybryan 8
Ballybryan 9
Ballyduff (SMR)
Clonfinlough (SMR)
Clonkelly (P) (SMR)
Clonmacnois (SMR)
Killyon
Mullaghakaraun Boy (? SMR)
Oakleypark (P) (SMR)
Rathlihen (SMR)
Smithstown (? SMR)

LAOIS

Archerstown (SMR)
Ballygeehin Lower (SMR)
Carrowreagh 1 (SB; SMR)
Carrowreagh 2 (SB)
Carrowreagh 3 (RT)
Carrowreagh 4 (RT)
Gorteen 1 (RT)
Gorteen 2 (RT)
Gorteen 3 (RT)
Fearagh (SMR)
Friarsland (SMR)
Kilminfoyle (SMR)
Monamanry 1 (SMR)
Monamanry 2 (SMR)
Newtown or Skirk 1 (SMR)
Newtown or Skirk 2 (SMR)
Newtown or Skirk 3 (SMR)
Shanahoe (RT)
Slatt Lower 1 (SMR)
Slatt Lower 2 (SMR)
Tinnakill

NORTH TIPPERARY

Abbeville (ES)
Ballyhasty (ES)
Ballynamona (ES)
Ballynamurragh North (ES)
Ballythomas 1 (ES)
Ballythomas 2 (ES)
Ballythomas 3 (ES)
Ballylusky (ES)
Bantis (ES)
Bellevue 1 (P) (ES)
Bellevue 2 (P) (ES)
Bellevue 3 (P) (ES)
Carneybeg 1 (ES)
Carneybeg 2 (ES)
Carrowle 1 (ES)
Carrowle 2 (ES)
Castletown 1 (P) (ES)
Castletown 2 (P) (ES)
Castletown 3 (P) (ES)
Coolderry (ES)
Graigue Lower (ES)
Fortmoy 1 (ES)
Fortmoy 2 (ES)
Johnstown 1 (ES)
Johnstown 2 (ES)
Killenaule
Kyleonermody (ES)
Lissagadda 1 (ES)
Lissagadda 2 (ES)
Lorrha 1 (ES)
Lorrha 2 (ES)
Lorrha 3 (ES)
Lorrha 4 (ES)
Lisquillibeen (P) (ES)
Oxpark (ES)
Redwood (ES)
Shesheraghmore 1 (ES)
Shesheraghmore 2 (P) (ES)
Tullowmacjames 1 (P) (ASI)
Tullowmacjames 2 (P) (ASI)

GLOSSARY

- ASI = Stout, Geraldine: *Archaeological Survey of the Barony of Ikerrin* (Roscrea, 1984).
- ES = Environmental Survey of North Tipperary (FÁS-sponsored; unpublished records at GPA-Damer House, Roscrea).
- P = Ploughed-out site.
- RT = Heritage in Rural Tourism (FÁS-sponsored mapping project).
- SB = Environmental Survey of Slieve Bloom.
- SMR = Sites & Monuments Record (Laois & Offaly) (Office of Public Works).

