'Ancient Vermont'

ANNE ROSS and PETER REYNOLDS

Dr Anne Ross, Department of Archaeology, University of Southampton, and Mr Peter Reynolds, Director of the Butser Ancient Farm Project, are among the members of a Committee formed in February 1978 at Goddard College, Plainfield, Vermont. The object of this Committee is to bring together American and other archaeologists and specialists in related fields to enable a scientifically conducted programme of research to be carried out upon the various at present enigmatic structures and alleged epigraphic phenomena which have been recorded in north-east America. The authors are at present the only British-based members of the Committee.

The authors of this paper were invited to attend a conference on 'Ancient Vermont' held at Castleton in Vermont in October 1977, and to examine and comment upon the 'evidence' for the extensive occupation of New England by Celts and others in the first or second millennium BC as propounded by Professor L. B. Fell of Harvard University. The 'evidence' consists broadly of supposed 'Ogam' and 'proto-Ogam' inscriptions on rocks and stones and megalithic stone structures, some of the structures appearing to have specific orientation in association with standing stones which, it has been suggested, indicates possible solar observatories. The nature of some of the evidence was examined by the authors both in the field and in an exhibition as well as by way of papers delivered at the conference. The conclusions reached were negative concerning any material evidence of a Celtic presence but do not, of course, preclude the possibility that Celts reached the New World in remote antiquity, nor deny that there are numerous anomalous features in the New England landscape which need to be carefully documented, explored and analysed.

PART I

Evidence of an early Celtic presence is claimed to be widespread and unimpeachable in New Hampshire and Vermont, New England and in New York State, principally by Professor Fell and his associates. The evidence is documented in *America BC* (Fell, 1976) and in numerous publications of The Epigraphic Society and The Early Sites Research Society. The impact of these publications, especially the book, has been considerable. Inevitably there is a pressing desire in the United States to identify with a European prehistory, and this offer of a ready-made fulfilment is almost too attractive a proposition. The book was expertly reviewed in the *New York Times* of 13 March 1977 by Professor Glyn Daniel (Cambridge University, England), and it is unfortunate that this did not put an end to its influence. The present paper seeks to outline and discuss briefly some of the field evidence, publish some preliminary conclusions and offer cautionary proposals.

Vermont, one of the most beautiful regions of New England, has a complex topography with Lake Champlain and its associated claylands on the northwest, dairy farmland on the southwest, and the great ridge of the Green Mountains with land areas above 1,220 m dividing the State from north to south. To the east of the mountains are the lower Vermont Hills, and in the north-east an area which has reverted, subsequent to agricultural abandonment, to a quasi-wilderness. The Connecticut Valley occupies the south-east of the State: in the Pleistocene period this area, like the Champlain Lowland, was the site of a glacial lake, and now it is an area of rich farmland (Meeks, 1972). The greatest concentration of population, in the north-west, corresponds to the agricultural activities of dairy farming, apple- and maple-syrup production (Barnum, 1975). In the last century, however, the picture of land use was different: in 1850 44 per cent of the State was classed as

'improved land', and in 1880 84 per cent as 'farmland' (Ring, 1975). The forest cover was adjudged to have extended over about 30 per cent of the land in the early period; today it is in excess of 70 per cent.

While no detailed geological survey of the State could be discovered, observation indicated that it is a complex area with both igneous and sedimentary rock present, the latter predominant.

The climate is predictable. The winter is distinguished by heavy falls of snow and intense cold. The snow falls in October and lies until April, after which a short period usually follows, known by Vermonters as the mud season, during which the valleys are subject to considerable flooding. The summer is often extremely hot but none the less agreeable and suited to good farming. The autumn, the fall, is renowned for the colour of the leaves, the State being invaded by tourists described locally as 'leaf-peepers'. The weather is usually warm at this time until the advent of the first frost in October. Briefly, then, extremes of climate are experienced in Vermont—a long hard winter and a short but good summer during which successful farming is difficult but not impossible.

The above brief description is important in that it is necessary to view the evidence in the light of demography, geography and climate since all these factors have a direct bearing upon the conclusions.

The primary evidence which, it is suggested, demonstrates the early presence of Celts in New England is the large number of rocks which have what are alleged to be organized markings on them. A discussion of their interpretation as Ogam, 'proto-Ogam', Celtic, Iberian or Punic is in Part II below. At this point, however, consideration is given to possible alternative interpretations of the origin of the marks. The most significant observation that must be made is that virtually all examples seen by the authors both in the field and at the exhibition set up at the conference at Castleton State College were on sedimentary rocks. One factor that the authors found most disturbing, both at the exhibition and in illustrations in Professor Fell's book, is the fact that markings which would appear to allow an interpretation in terms of Ogam or other cryptic scripts were respectively exhibited or published, whereas equally obvious markings which did not fit into the 'linguistic interpretations' were not so treated and indeed were totally ignored. Almost without exception it is possible to provide perfectly good and acceptable alternatives for the origins of the markings, ranging from normal erosion patterns and organism trails well evidenced in geological literature (e.g. Conybeare and Crook, 1968) to plough marks subjected to further erosion once exposed to the elements or even at the base of the ploughsoil. This last circumstance could, of course, be argued to have been organized, but only in the sense of reflecting the normal range of ploughing directions undertaken by the farmer. In fact, this particular interpretation of the marks on stones or boulders on land that was cultivated by early colonial settlers, but subsequently abandoned, provides extremely valuable information about the ploughing practices of the colonial farmers, and could lead to a further isolation of field boundaries. One particular example from the Crow site cited below is of such a boulder. It is situated on the crest of an inconspicuous rise in a field adjacent to an abandoned colonial farmstead. The field was undoubtedly cultivated and probably with a colonial type horse- or ox-drawn plough. The colonial plough is directly comparable with the Common Gloucester Plough which has a single metal share (Young, 1813, Pl. xivA). Although the scoriations on this stone have been 'translated' as alleged Ogam inscription, the marks could well have been made by the plough since they follow a specific pattern of shallow entry groove following the land contour which deepens and ends abruptly with a further similar continuation after a gap of approximately 0·20 m. The physical explanation here offered is the striking of the rock by the ploughshare, the momentary lodging of the tip, followed by the lift under traction and the secondary strike. The majority of the interrupted grooves are at right angles to each other, with a few diagonals. The axes of the majority of the grooves correspond to the directions in which the stone-wall field boundaries run. The marks mirror the experimental ard marks achieved by Hansen in Leire (1967). Subsequent erosion and deepening of these marks has clearly occurred as the topsoil has eroded down the slope exposing the boulder to the extremes of the local climate. One or two of these particular marks have an abrupt termination at either end which, bearing in mind the position of the rock and the frequency of ploughing is not sufficient argument for deliberate manufacture. Further support of this interpretation occurs on an adjacent rock set lower down the slope which has traces of comparable scratches on its surface.

Similarly, a large number of other marks on stones of which the great majority have been removed from their context without adequate detailed description or with no description at all, can be explained as the results of eroded plough marks on sedimentary rock. On other rocks and stones too large to remove to 'safety' the preparation of Latex moulds has removed all possibility of scientific microscopic and chemical analysis. Thomas Lee (1977) reports on the several conflicting 'translations' of the Beauvoir Stone or Stones at Sherbrooke, Quebec. The scientific explanation of the marks is that they are a series of natural cracks on, in this case, an igneous boulder. This explanation is entirely credible, and far outweighs the 'linguistic interpretation' which depends upon a high degree of selectivity and interpretation of hitherto unobserved detail (Whittall and Fell, 1976).

Other marked stones—whether the markings have been caused by ploughing, natural cracking, glacial scouring, organism trails or erosion processes—have been similarly treated. Yet there is every opportunity to apply any number of scientific tests which would clarify many of the problems involved. Apart from the microscopical and chemical analyses which should be fundamental to the enquiry, the presence of lichen on a great majority of the stones is also worthy of study. This particular aspect has been totally ignored, although there is every reason to believe that lichen growth can be used as an indicator for dating rock surfaces (Beschel, 1961).

That there are some organized markings on rocks and stones cannot be dismissed. The most significant of those observed by the authors was the 'sun-net', a check design carved on a rock face from which it is possible to calculate solar positions at different seasons of the year. This is well known as a device and has no direct relevance to the argument that ancient Celts were in New England.

The second major element in the 'evidence' for this presence, in New England as elsewhere, consists of a large number of stone structures many of which have been recorded in New England and in particular in Vermont, and some in New York State.These structures share the common characteristic of dry stone walling. There is, however, a wide disparity in their size, shape and basic design and, presumably, therefore their function. Some are rectangular and roofed with massive stone slabs, others circular or semi-circular, and occasionally corbelled. A number are covered with an earthen mound, or built into slopes. Some are adjacent to colonial farm buildings, others are not. The orientation of the rectilinear examples, while not apparently exactly random, is hardly standardized. Similarly, the siting of doorways is diverse. Some of the structures are fitted with a vent or hole in the roof, others are not.

The only satisfactory observation that can be made at this time from the above data is that the structures are extremely divergent in type. The reason that they have attracted so little attention until now is that they were generally regarded as colonial root cellars, built to store apples and root crops during the winter.

Indeed, the present discussion concerning these structures represents a considerable polarization of opinion. At the one extreme they are ancient Celtic, at the other colonial. One further postulated interpretation involves Irish Culdee monks supposed to have fled before the onset of the Norsemen in the ninth century (Goodwin, 1930). Sadly, this is still a matter of conjecture and opinion, exacerbated by the 'inscriptions' claimed to have been carved on some of these structures.

The argument for the 'Celtic' determination is entirely based upon the principle of diffusion. Because there are stone structures of a comparable type to be found in the United Kingdom and in parts of Europe, the New England structures, therefore, were constructed by peoples from these regions who had migrated to the New World. The diversity of the New England structures, moreover, is seen to represent the diversity of the emigrants.

There is a serious difficulty in the term 'Celt', however. The word is used primarily and specifically by philologists and linguists, while prehistorians and archaeologists use it more loosely in an attempt to achieve a general compatability with linguistic research. It has been found necessary to qualify the term with 'pagan' or 'Christian' in order to correlate with the archaeological data. Since the New England structures are alleged to be of the pagan period it is necessary to consider the archaeological evidence for this period, in the United Kingdom and the rest of Europe termed the Iron Age.

Basic information for the Iron Age in these regions is drawn from archaeological excavation and fieldwork and from references found in the vernacular literatures of Ireland and Wales and in the classical texts. The data thus collected suggest

a complex and organized society based upon an agricultural economy (Cunliffe, 1971; Harding, 1974). There is, inevitably, a regional diversity in the nature of the evidence, but in general terms the insular style of iron age houses and that of the western seaboard of continental Europe from Normandy to Portugal, is circular in plan with diameters ranging between 4·0 m and 16·0 m. Building materials are equally diverse, depending upon what was available in the immediate locality. Circular houses, with walls of dry stone or of timber and daub, are widely spread throughout these regions. Elsewhere in continental Europe the long rectangular house was established in the Neolithic and continues without a break. The various types of 'souterrain', the function of which is still matter for hypothesis, are restricted in distribution and of differing dates, and do not form a characteristic element in the evidence for European iron age society.

There is as yet no body of evidence for a pagan Celtic presence in New England that can be directly compared with the European material.

Because the basic economy of the Iron Age was an agricultural one the effects of that economy can still be observed, even in England, where post-iron-age agricultural activity has been intense. They are present either as physical, extant field monuments or as soil marks recorded on aerial photographs. It is reasonable to assume that any Celtic immigrants to the New World in early times would have maintained their agricultural way of life just as the colonial settlers did. Given the less intensive subsequent activity, especially in Vermont, traces of earlier fields should survive. Neither surface exploration nor aerial photography, however, have revealed any patterns of land use comparable to Celtic fields.

Certain structures, however, that are broadly comparable to those recorded in New Engand are found in the United Kingdom and on the continent of Europe (PL.XVIII*a*). As the buildings in question are constructed of dry stone walling the options are fairly limited, and the very diversity of structural method virtually assures some degree of similarity. For example, circular and semi-circular structures built entirely of dry stonework usually have a corbelled roof. Rectilinear structures of similar construction may also have a corbelled roof but may alternatively be covered with large slabs. Buildings of these types incorporating variations on this theme are known from many periods of prehistory and from documented historical times. Because of the limited number of building styles offered by the raw material, unless there are other concomitant dating materials or documentation available, it is almost impossible to date such structures on stylistic grounds.

In Dordogne, in south-west France, dry stone 'beehive' structures with corbelled roofs called 'cabanes' were built during the post-medieval period, their diameters ranging from 4·0 m to 6·0 m and their heights from 3·0 m to 4·0 m. Today they are used as sheep shelters and hay barns. Near the Abbaye de Sénanque large numbers of similar but much smaller structures can be found in the corners of small stone-walled fields. These were built in living memory for use as tool sheds or refuges from the heat of the mid-day sun and from storms. Similar small 'beehive' structures have been recorded in Caithness and the Orkney Islands in northern Scotland (Mitchell, 1880), built for housing pigs and poultry. Other 'beehive' houses, the Gaelic name for which is *both*, plural *bothan* (*anglice* bothy) are found throughout the Hebrides off the west coast of Scotland. In this century they were used as shielings, temporary residences of herders of sheep and cattle at their summer pasturage; before this they were in use as dwelling houses. They were built of rough undressed stones and with corbelled roofs with a hole in the centre to let out smoke and admit some light, and covered with turf sods. In 1880 about 25 such houses were occupied; at least one was actually constructed in the nineteenth century.

Beehive houses of much earlier date and more complex in plan have been recorded, such as one at Meall na Uamh in South Uist, Outer Hebrides (Thomas, 1869). This has a souterrain terminating in an underground beehive chamber which hints at an interpretation of some souterrains as having been food storage chambers. In the case of 'beehive' houses, then, it would seem from the evidence that the passage of time led to a degradation of building skill and constructional or architectural expertise.

On the island of St Kilda, situated west of the Outer Hebrides, there is a type of stone structure comprising two parallel side walls just over 1·0 m apart and about 1·50 m in height spanned by round lintel stones and capped over all by a jumble of stones and a cap of turf sods. The entrance is usually blocked with piled stones,

though occasionally a wooden door is used. There are estimated to be some 5,000 of these buildings on St Kilda, and it is recorded that they were used for storing hay and peat fuel (Kealton, 1897) (FIG. 1).

The above examples relating to 'beehive' structures alone represent but a minute fraction of the available material. The constructional style of all is generally similar, but the examples quoted are widely divergent in function as in date. Space precludes the listing of a similar series of examples of rectangular structures.

The purpose of the above exposition is to underline the dangers of single observation. Because a structure appears to be simple, even primitive, it is quite wrong to regard it as ancient. Similarly, because structures share similarity of design and size, but are different in location, it is quite wrong to ascribe similarity of function. Equally, there is no logical reason to argue for direct contact between peoples geographically widely separated because they construct similar buildings. Especially is this so if the structures in question are architecturally restricted by the raw materials employed.

The structures in New England are at present anomalous. It is unlikely that they are Celtic, but equally there is no adequate proof that they are colonial. A preliminary survey of the structures situated in Vermont (Neudorfer, 1977) has adequately served to indicate the scale of the problem. At the outset of the survey 31 structures were known, at the end 51 had been identified in 27 towns situated within five counties. The interpretation now offered for the structures is that they were 'root cellars'; and since such structures would have been of prime importance to colonial settlers it is likely that there are many more still to be discovered. Clearly there is a case to be made for an in-depth survey in Vermont of these structures and of the early colonial farm process and its impact on the landscape. Further, such a survey should be repeated in as many states as possible to determine the presence and distribution of such structures. It is not yet known if their presence is isolated in New England and New York State.

It would be of great value to test the storage properties of a number of these structures. One *ad hoc* experiment is reputed to have been carried out, with negative results. A full scale scientific research programme is required to explore the hypothesis that these structures are 'root cellars'. Such a programme will not necessarily prove function if the results are positive. If the results are negative, however, it will certainly disprove function.

Fig. 1. A typical cleit for storing fuel or hay. Many date to the nineteenth century AD

While there has been no adequate way of proving the function or date of these structures up to the present time, some exemplary research has been carried out in exploring the hypothesis that the structures and allied wall and stone alignments possess the properties of solar observatories (Dix, 1977). The adoption of the hypothesis was clearly inspired by work that has been done on European stone monuments and the conclusions drawn therefrom. A great deal of the New England evidence is put into a previously accepted model. The relationships of stone structures with standing and apparently fallen stones is not yet supported by any archaeological evidence. Indeed, many of the stones significant to the mathematical hypothesis are flat on the ground, and no attempt has been made as yet to excavate the immediate area to determine whether or not there exist beneath the surface sockets in which the stones may originally have stood. The postulated relationships are thus perhaps too subjective. The conclusions would be more acceptable had there been some testing of random options. Instead of imposing a model upon the physical evidence it would be more persuasive to allow the physical evidence to propose the model. It is regrettable that this research hypothesis has led to the naming of two specific sites as 'Calendar I' and 'Calendar II'. Such nomenclature based upon hypothesis has unfortunately a habit of becoming established fact.

The European sites claimed to be observatories are, of course, pre-Celtic in the presently accepted sense of that word. The iron age Celtic peoples were more conscious, it would seem, of the calendrical qualities of the night sky. Caesar clearly indicates that they counted by nights rather than by days; and their calendrical calculations were more than probably star dominated (Caesar, *De Bello Gallico*, Bk IV).

The resolution of the problem of the stone structures clearly lies in meticulous archaeological excavation. It is only when a representative number of sites has been excavated in this way that a sufficient corpus of corroborative data will be available. These data, in association with in-depth surveys and accurate scientific experimentation, should provide credible answers. There is little value in hypotheses, however attractive they may be, which are fundamentally unsupported by acceptable and unimpeachable data. The argument put forward, that determines isolated similarities as proof of direct contact, is academically unacceptable. Postulated similarities belong to the world of phantasy.

PART II

The earliest documentary material in the Irish language is couched in a strange cryptic writing known as Ogam, a word which would appear to be connected, appropriately enough, with the name of the Celtic god of eloquence, *Ogmios* in Gaul, *Ogma* in Ireland. The earliest form of this alphabet, which is based on a late form of Latin, consists of fifteen consonants and five vowels (FIG. 2). The key to the Ogam script is to be found in the tract devoted to it in *The book of Ballymote* (Atkinson, 1887). This book was compiled in 1391; it is housed in the premises of the Royal Irish Academy. The Ogam script would appear to have been used primarily for funerary inscriptions. It is found cut on stones which mark the graves of dead heroes. When it is referred to in the Early Irish tales it has likewise associations with the deceased, or it may convey a brief cryptic message. A language which is reserved for the initiated elite is mentioned in Early Irish literatures—*Bérla na bfiled* (The speech of the Poets), and it seems likely that Ogam script had a similar exclusiveness. Each letter is named from some tree or plant, objects much venerated in the early Celtic world. For example, D is *daur* (oak), the most sacred tree of them all.

One method of employing Ogams on funerary

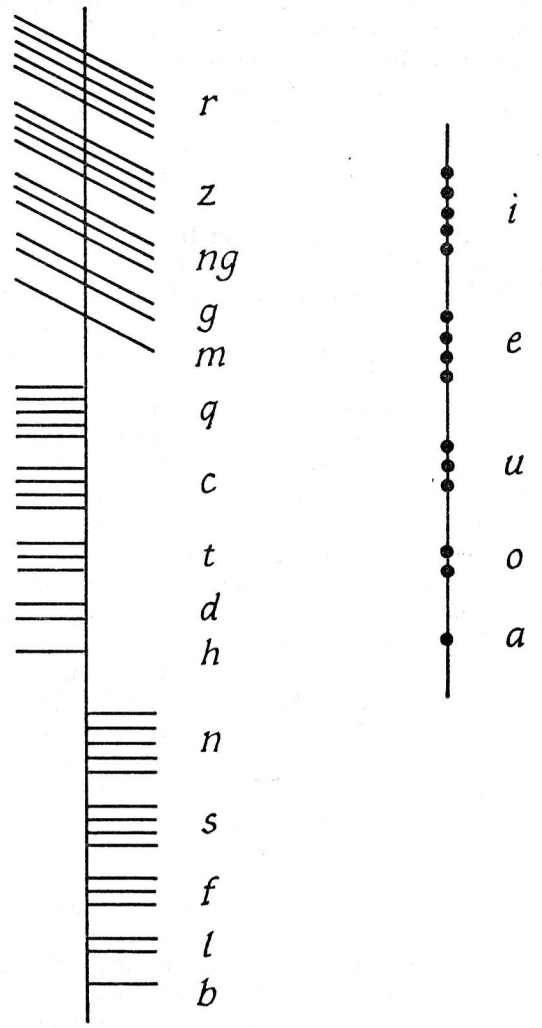

Fig. 2. The Ogam script

stones was to utilize the angle of the stone as a dividing line; another, wrought upon the face rather than the angle of the stone, was to utilize an incised line for this purpose. In either case, the notches of which the alphabet was composed were cut into the stone on either side of the line. The so-called Edge-Ogams are the more numerous.

This cryptic alphabet probably dates from about the fourth century AD when the knowledge of writing would seem to have reached Ireland by way of Britain. There is no evidence that it predates this period, and indeed it could be somewhat later in origin. It is essentially a Goidelic (i.e.

Gaelic) phenomenon; most of the some 300 Ogam inscriptions known to date are found in Munster (south-west Ireland). There are also about 40 in Wales, in districts where there were considerable Irish settlements; and others in the Isle of Man and Scotland, regions which were settled from Ireland at the end of the fifth century AD. There are also a very few outliers.

To summarize: Ogam is an Irish word for an alphabet based ultimately on late Latin, peculiar to Ireland and to lands settled by the Irish, and dating to the fourth century AD at the earliest. It is thus improper to apply the term Ogam to any other alphabet found in association with non-Irish countries or cultures. To date, scholars recognize no other scripts analogous to and predating Ogam. It is totally inapposite to speak of Iberian, Punic, Libyan or Egyptian Ogams. To do so is to indulge in a semantic phantasy of the wildest nature. Use of the word Ogam to describe any scoriations or manuscript markings no matter how contrived is an insupportable contradiction in terms. In *America BC* (Fell, 1976) Professor Fell 'translates' his so-called Iberian, etc., 'Ogams' (which he would date to the first millennium BC at least) into modern Scottish Gaelic. Even if they were genuine, Ogams would have, of necessity, to be translated into the Goidelic, Celto-Iberian or the Libyan, Punic or Egyptian dialects of the period in which they were written. Fell also finds Celtic meanings to numerous Amerindian and southern Canadian place names for which specialists in onomastics, such as Professor William Nicolaisen, New York University, as well as others including the authors, can find no justification whatsoever. We have not, to date, seen any examples of pre-colonial place names which can be said to be Celtic and translated in terms of any Celtic language.

As Fell is, in his presentation of his published material, so completely unconvincing in respect of his 'evidence' for a Celtic presence in America before Columbus, let alone before Christ, it is difficult for us to have any real confidence in his 'evidence' for all the other 'early settlers'. This is not to say that extraneous artifacts have not been found here, as anywhere else. While it is of course possible that portable objects of any origin or period should be discovered in New England, these by themselves do not provide evidence for the former presence of the people to whose culture they may be referred. When peoples settle new territory they inevitably take with them relics pertaining to their religion and treasured personal and family possessions—*lares et penates*. Are we to say that, because one happens to own an Eskimo soapstone lamp, a Luristan bronze, a Hallstatt helmet or a cuneiform tablet, that this is proof that the people who manufactured these objects occupied the territory contemporaneously with the artifacts in question?

CONCLUSION

Our own conclusion, shared by our colleagues in these disciplines, is that the 'evidence' for Celtic settlements and writings in America BC as it has been presented *to date* is totally negative. It may well be that once the necessary preliminary scientific fieldwork in this absorbing and vitally important subject has been carried out, it will be really possible to turn the 'fanciful' America BC into a perfectly valid reality; but this must await the conclusions of an objective, competent scientific programme of valid research.

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BIBLIOGRAPHY

ATKINSON, R. 1887. *The book of Ballymote* (Dublin).

BARNUM, H. G. 1975. Some three-dimensional maps of Vermont, *The Vermont Geographer*, No. 2, 65 ff.

BESCHEL, R. 1961. Dating rock surfaces by lichen growth and its application to glaciology, in *Geology of the Arctic*, 1044–62 (Toronto).

CONYBEARE, C. E. B. and K. A. W. CROOK. 1968. *Manual of Sedimentary Structures*, Bull. 102, Department of National Development (Canberra).

CUNLIFFE, B. 1971. *Communities in iron age Britain* (Oxford).

DIX, B. 1977. Possible calendar sites in Vermont (Ancient Vermont Conference paper, forthcoming.)

FELL, B. 1976. *America BC: ancient settlers in the New World* (New York).

GOODWIN, W. B. 1930. *Greater Ireland in New England.*

HANSEN, H.-O. 1967. *Report of experiments in Leire* (Lejre).

HARDING, D. 1974. *The Iron Age in Lowland Britain* (London).

KEALTON, R. 1897. *St Kilda* (Glasgow).

LEE, T. 1977. If at first you can't succeed. . . , *The Anthropological Journal of Canada*, February, 11–15.

MEEKS, H. A. 1972. A preliminary analysis of Vermont geographic regions—a summary, *The Vermont Geographer*, 22–35.

MITCHELL, A. 1880. *The past in the present* (Glasgow).

NEUDORFER, G. 1977. Vermont stone chambers (Ancient Vermont Conference paper, forthcoming.)

RING, N. 1975. *Landscapes of Vermont* (U.S. Office of Education Environmental Project 74–7338).

THOMAS, F. L. W. 1869. On the primitive dwellings and hypogea of the Outer Hebrides, *Proc. Soc. Antiq. Soc.*, VII, 153–95.

WHITTALL, J. P. and L. B. FELL, 1976. *Early Sites Research Society*, Vol. 4, No. 1.

YOUNG, A. 1813. *General view of the agriculture of Oxfordshire* (London).

PLATE XVIII(a): 'ANCIENT VERMONT'
A structure at the Crow Site, Woodstock, Windsor, Vermont

See pp. 100–6

Photo: Courtney Fisher