

PROLOGUE

‘Three fields to cross till a farm appears’

R. Browning, *Meeting at Night*

The first people to farm in Britain did so over 6,000, perhaps even 7,000, years ago. Precision in such matters depends not only on scientific accuracy in discovering and dating the early evidence but also on the care with which we frame our thoughts and use our words. In other words, how do we define ‘to farm’? On our answer will, to a large extent, depend our success or otherwise in recognizing early ‘farming’ in the unwritten records of the natural and human world of Britain in the fifth millennium BC.

Farming today is readily recognizable; it has in effect created its own contemporary archaeology. Its characteristic types of settlement, buildings and machinery, above all its overwhelming impact on the countryside, betoken a minority but extensive activity which is unmistakable, particularly to the urban majority of present-day society. Farmers, whether they be ‘small’ farmers of the hills or a multi-million-pound insurance company, produce food which they sell; and they continue to farm or otherwise as a result of the monetary returns from farming and not because of how well they feed themselves directly from their own crops. Farming, in other words, for virtually all those now engaged in it in Britain, is a means of livelihood rather than a way of life.

Farming in 4000 BC was fundamentally different. It was an end in itself, a means of acquiring food for direct and personal consumption with perhaps a little more security than was enjoyed by the non-farmers still feeding wholly off Mother Nature’s unaided efforts. To say as much, however, begs questions. Was farming so obviously superior as a way of living? Did it even provide that greater degree of security in the supply of food? Were the Mesolithic communities among the many thousands of people in Britain then really environmentally passive? And if they were not, at what point does a non-farming, hunting and fishing man become in any sense a farmer in his manipulation of his surroundings to his own benefit? It is most unlikely that such a person would not notice, for example, the advantages to him of a natural woodland fire: plants would multiply and fruit in and around the edges of the resultant clearing and the attraction for animals as well as himself would accidentally create a convenient hunting and trapping ground. The observation made, it is at least conceivable that first the idea and then the practice of using fire as an aid to living would occur to our hunter/fisher. From that, it is but a short step to

herding animals and selectively encouraging floral regeneration, even planting 'strangers', in such clearings: at what stage in the management and cropping of the clearing does our non-farmer become a farmer?

He does not become a farmer at all, says the modern dictionary. The *OED*, defining a farmer as one who cultivates a farm, and 'to farm' as 'to till the soil', takes a very narrow view with its surprising emphasis on arable activity to the exclusion of other aspects. And surely such a definition is inadequate, for the essence of farming is the regulated production of a crop larger than the breeding stock, whether it be of plants or animals. The turning over of the ground is but a means to that end, not the criterion of farming. So, by beginning to influence what happened at his clearing, our Mesolithic hunter was beginning to move towards a crop-taking, or farming, approach to his surroundings even though he never turned the soil.

This mildly theoretical introduction points a convenient and realistic way into a consideration of later prehistoric farming in Britain. By *c.* 2500 bc, when our main story begins, farming had already been practised in Britain for some 2,000 years; its origins in the Old World developed some 5,000 years earlier still. So the farming life was in no way a novel experience for the British in the later third millennium bc; they were themselves heirs to an established agrarian tradition which already contained, as well as a considerable practical knowledge about soils and weather, much of the range of crops and the types of tools which we find later among the successful Celtic farmers of the last centuries before the Roman Conquest.

The problem for the student of early British farming is to identify the origins and development of that tradition between the fifth and the third millennia BC. The archaeological evidence is inconclusive and the other main source of information, palaeo-studies in the natural sciences, tends to be even less convincing than archaeology in distributional terms and even more tentative in interpretation. That the two have, nevertheless, made significant separate and joint advances in recent years is demonstrable both in continuing research¹ and in modern scholarly syntheses.² One of their common concerns is to recognize the signals from some 6,000 years ago that farming has begun. While belief persisted in a 'Neolithic Revolution' in the sense not only of a fundamental change but also of a fairly rapid and extensive change from hunting and fishing to farming, then there was not much of a problem: Man progressed from Middle to New Stone Age, crossing from one state of culture to another and better one. To a degree, the purely artefactual evidence of archaeology buttressed that belief for much of it is different from what went before and characteristic of a life-style based on agriculture. Polished axe-heads for felling trees, bars of

¹ As in the Somerset Levels, the Thames Valley and the Fens.

² I. Simmons and M. Tooley (eds.), *The Environment in British Prehistory*, 1981.

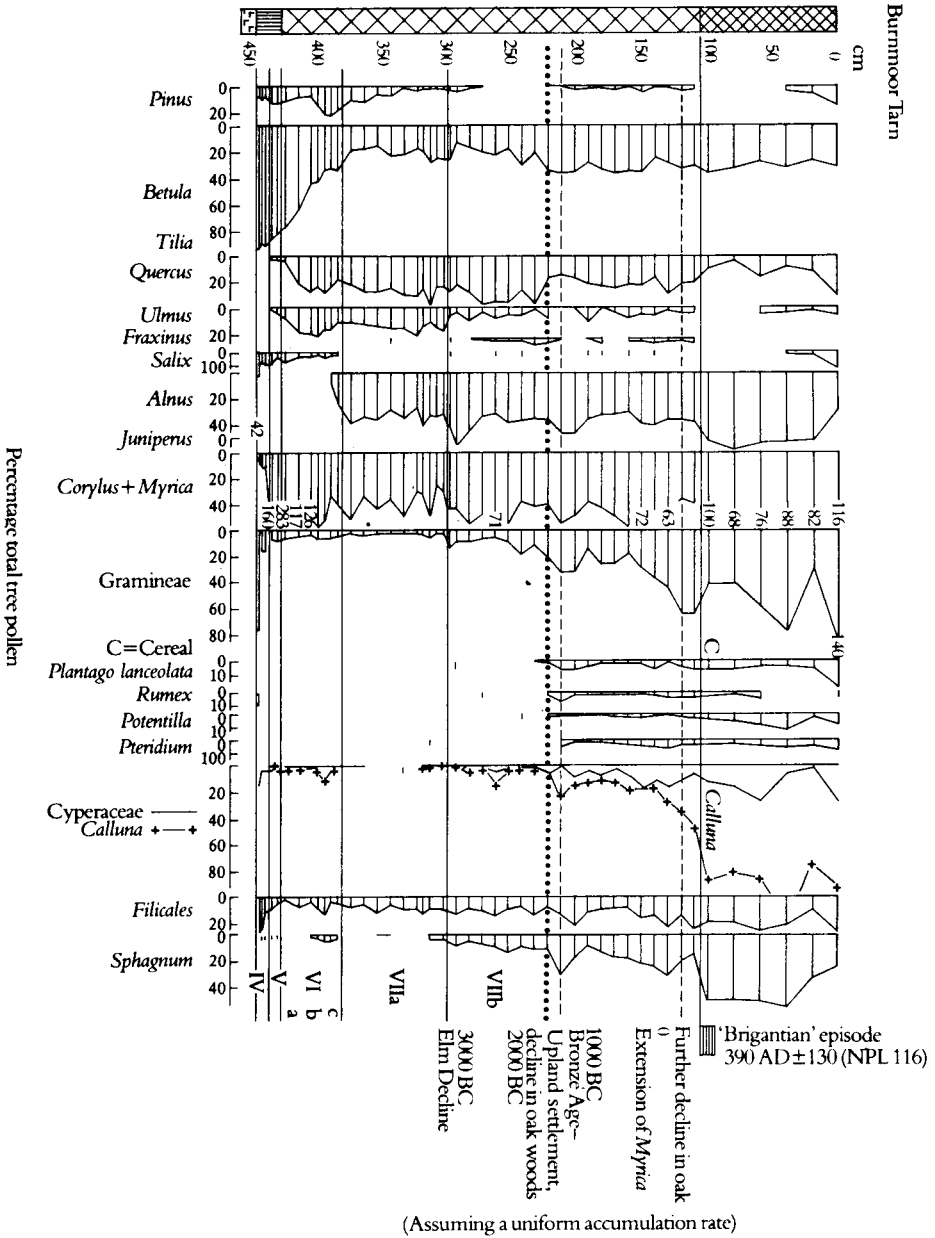
stone battered from use as plough-shares, flints glossy from use in sickle-blades, rubbing stones for grinding grain – as a package of durable material goods, such artefacts clearly reflect the realities of farming before the invention of metal tools and together make up a kit different from that of the communities living off the land.

Yet those communities were not environmentally inert; their presence is constantly being detected by the non-archaeological investigators of the past who look at ancient soils and their faunal and floral contents. The effects betrayed in such evidence – the chemical residues of a buried soil, the pollen from a lake sediment, a collection of animal bones – tell of Man affecting his environment and raise questions about the nature of his activities in the light of what happened afterwards. We are back to our hypothetical clearing; many such clearings are evidenced before *c.* 4000 BC. How many were accidental and how many deliberate? Is there indeed quite such a sharp divide between Neolithic farming and Mesolithic collecting? Dimbleby expresses a current thesis in writing “Mesolithic men in Britain were not just hunting the herbivore populations, but were sometimes exploiting them more intensively in what was perhaps some sort of husbandry, though this probably fell short of domestication”.³ Extensive controlled grazing of deer over fire-cleared uplands is the sort of activity in mind, an activity which could have led to increased treelessness and possibly the beginnings of blanket bog growth and would almost certainly be reflected today in the pollen record if sampled in the vicinity. Though such hints of man-induced changes at so early a stage in the development of what we now see as Britain’s cultural landscape – our surroundings – are intriguing, Simmons probably sums up the situation correctly in observing that “We must not overstress the magnitude of these changes: they were small in aggregate area, even if widespread in occurrence.”⁴

Nevertheless, whatever was happening in Britain up to the fifth millennium BC in the relationship between Man and his environment, at some moment before 4500 BC a first boat arrived from the European mainland containing people who expected to live by farming. It was doubtless followed by many others. Among their cargo, to establish and develop what was for Britain a consciously new way of life, must have been domesticated livestock and seed-corn. They came to a group of islands rich in wild flora and fauna including many edible plants and their fruits, such as nuts and berries, and many useful as well as edible animals, probably including pig and horse but notably the red and roe deer and the already domesticated wolf or dog; but Britain did not contain, wild or domesticated, the essentials for the sort of farming that actually developed

³ Simmons and Tooley, *op. cit.*, pp. 104–5.

⁴ Simmons and Tooley, *op. cit.*, p. 286.



during the fifth and fourth millennia. There were no cereals and no sheep, goat or domesticated cattle (*Bos primigenius*, the wild aurochs, was a native which did not become extinct until the second millennium by which time it had become the ancestor of *Bos longifrons*, the ubiquitous ‘Celtic shorthorn’ of later prehistoric Britain).

We do not know how many boatloads of farmers arrived, how long the immigration lasted or where the landfalls occurred. Now that much hard research, however, has provided us with a radiocarbon chronology and a palaeobotanical framework within which to fit our long-known Neolithic archaeology,⁵ it is beginning to look as if quite a lot – thousands? – of people arrived over a fairly short period (from 4000 to 3500 bc?) – at many points on the southern and western shores of the British Isles. Though the palynological evidence is not yet as well distributed or as dense as is desirable, from many places come indications of forest and woodland clearance, perhaps local facets of what may well have been a quite vigorous, extensive and sustained attack by a rapidly increasing and increasingly well-fed population. Certainly it was one which soon, in the second half of the fourth millennium bc (roughly 4000–3500 BC in terms of calibrated C-14 dates) was imposing the first cultural layer on the landscape in the form of surviving sites that we call causewayed enclosures and collective tombs of stone and timber⁶ (respectively ‘megalithic’ or ‘chambered’ tombs and ‘earthen’ or ‘long’ barrows). Whatever their function, these monuments established by agrarian communities betoken the success of a way of life based on a mixed farming of cultivated cereals and domesticated livestock. To sustain it, they possessed both the necessary tools and equipment and, no matter how empirically gained, sufficient knowledge of soils, weather, drainage and crops.

The operation of this farming economy has been linked, in several different interpretations, with a recurring feature in many pollen diagrams constructed from field samples taken from many spots in north-western Europe. It is commonly called ‘the Elm Decline’. A diminution of elm

⁵ S. Piggott, *Neolithic Cultures of the British Isles*, 1954.

⁶ I. F. Smith, ‘Causewayed enclosures’, in D. D. A. Simpson (ed.), *Economy and Settlement in Neolithic and Bronze Age Britain and Europe*, 1971, pp. 89–112; P. Ashbee, *The Earthen Long Barrow in Britain*, 1970; G. Daniel, *The Prehistoric Chamber Tombs of England and Wales*, 1950.

Fig. 1. Example of a pollen diagram, here illustrating Post-glacial vegetation history in the south-west of the Lake District as represented at Burnmoor Tarn. The wavy line indicates the reversion of *Betula*, previously thought to indicate the opening of the Sub-Atlantic period. This horizon is now seen to be non-synchronous, by comparison of pollen diagrams, and is interpreted as an anthropogenic effect, resulting from destruction of upland oak woods by the clearance episode which precedes the horizon of sustained expansion of *Betula* (from W. Pennington in D. Walker & R. G. West (eds.), *Studies in the Vegetational History of the British Isles*, Cambridge 1970, Fig. 154).

pollen occurs in relation to the pollen of other species in the same soil layer. The phenomenon frequently occurs in Britain at dates around or just earlier than *c.* 3000 bc and used to be associated with the earliest or pioneering tree-felling phase of the Neolithic; but clearly it is now too late for such a simple cause and effect explanation. This realization has led to thoughts such as whether disease could account for the apparent fall in the proportion of elms or whether Man's need to supply his animals with fodder led him to lop off the polleniferous elm branches and thus accidentally create the illusion of an elm decline in the microscopes of twentieth-century scientists. It has also been suggested that the bark of elm trees could have been systematically stripped by Man as an animal food and that it could have been extensively removed by grazing animals; or that some climatic factor caused the numbers of elms to be reduced. All such suggestions tend to smack of special pleading; at the zenith of Early/Middle Neolithic farming, around 3000 bc, a great deal of woodland had been and was being cleared 'permanently' (see below), i.e. with the intention that the land should continue to be used for farming for a long time and not be abandoned to vegetational regeneration as part of the pattern of that farming.

If the idea of 'slash and burn' has a place in early farming, it surely lies at most in a brief pioneering phase and not as a standard practice of crop production among second and later generations;⁷ clear evidence to substantiate it must be demonstrated in pollen diagrams rather than the latter being interpreted as if we knew that such a method of crop production was practised. But whatever method or methods Neolithic farmers were using to clear the land of wood or stone obstructions to their growing of food, it is quite clear that they were the main cause of the 'Elm Decline', itself indicative of an extensive removal of woodland to which some of the treeless landscapes of today still bear witness even more obviously than the roughly contemporary monuments. The Langdale Pike area in Cumbria, around one of the most prolific of stone axe-head factories, is a case in point.⁸ Yet, elsewhere and perhaps surprisingly, woodland regenerated. That this should have happened is not in itself surprising, for the idea of a natural cycle of vegetational succession has for long underpinned palaeobotanical research: climax → clearance → farming → abandonment → grasses/weeds → scrub → woodland → climax.⁹ Evidence of this in the

⁷ P. Rowley-Conwy, 'Slash and burn in the temperate European Neolithic', in R. Mercer (ed.), *Farming Practice in British Prehistory*, 1981, pp. 85–96; P. J. Reynolds, 'Slash and burn experiment', *Archaeological J.*, 134, 1977, pp. 307–18.

⁸ W. Pennington, 'The effect of Neolithic man on the environment . . .' in J. G. Evans *et al.* (eds.), *The Effect of Man on the Landscape: the Highland Zone*, CBA Research report, 11, 1975, pp. 74–86.

⁹ G. W. Dimbleby, *Plants and Archaeology*, 1978, pp. 20–4.

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Neolithic environment has tended to be seen on a short-term basis, in part influenced by assumptions about a slash-and-burn methodology. We are now, however, faced not only by evidence for long-term clearance, i.e. the cycle was broken by the vigour of the clearance and then the intensity of the land-use, but also – and this is surprising – for long-term woodland regeneration *within* the Neolithic. Summarizing Whittle, who brought much of the palaeobotanical evidence together to point out an apparent pattern, the hypothesis is that, having established a successful and progressive way of life, the Neolithic farmers, possibly through overpopulation and resource mismanagement, ran into problems towards the middle of the third millennium bc (c. 3400 BC).¹⁰ Such an inference derives from the observation that a phase of woodland regeneration, after long-term clearance, appears in numerous, independent pollen diagrams in different parts of the British Isles. At the same time permanent grassland became established where previously there had been cultivation. A change from arable to pastoral farming or land-use is not in itself a step backwards, though of course shepherding or cattle-ranching cannot by themselves support the same head of population by area as can cereal production. Since the main argument is that these palaeobotanical observations are hinting at a lessening of activity because of a drop in population, grazed grassland and regenerated woodland are in this case both interpretable as making the same point.

The thesis is, as it happens, well illustrated by the sole English archaeological site where incontrovertible physical evidence of Neolithic ploughing has been excavated.¹¹ This was in the form of ard-marks in the bedrock below a probably cultivated soil sealed by an old ground surface representing a grazed grassland, buried by the mound of a long barrow at South Street, Avebury, Wilts. (Fig. 2). The marks themselves have been variously interpreted and are now seen, in view of their depth, as the product of the Neolithic equivalent of a ‘prairie-busting’ operation carried out with a tough traction implement fitted with a large stone or flint share.¹² The effect must have been to loosen up the soil considerably, as much from applied pressure as direct contact, while lacing it with chalk gauged out of the bedrock. This activity took place well before the ‘date’ of c. 2800 bc obtained from charcoal on the grass surface which developed

¹⁰ A. Whittle, ‘Resources and population in the British Neolithic’, *Ant.*, LII, 1978, pp. 34–42; P. J. Fowler, ‘Lowland landscapes: culture, time and personality’, in S. Limbrey and J. G. Evans (eds.), *The Effect of Man on the Landscape: the Lowland Zone*, CBA Research Report, 21, 1978, pp. 1–12.

¹¹ P. J. Fowler and J. G. Evans, ‘Ploughmarks, lynchets and early fields’, *Ant.*, XLI, 1967, pp. 289–301; J. G. Evans in P. Ashbee *et al.*, ‘Excavation of three long barrows near Avebury, Wiltshire’, *Proc. Prehist. Soc.*, 45, 1979, pp. 250–75.

¹² P. Fowler and P. Reynolds in Mercer, *op. cit.*, pp. 37, 103–4, Pl. 9.

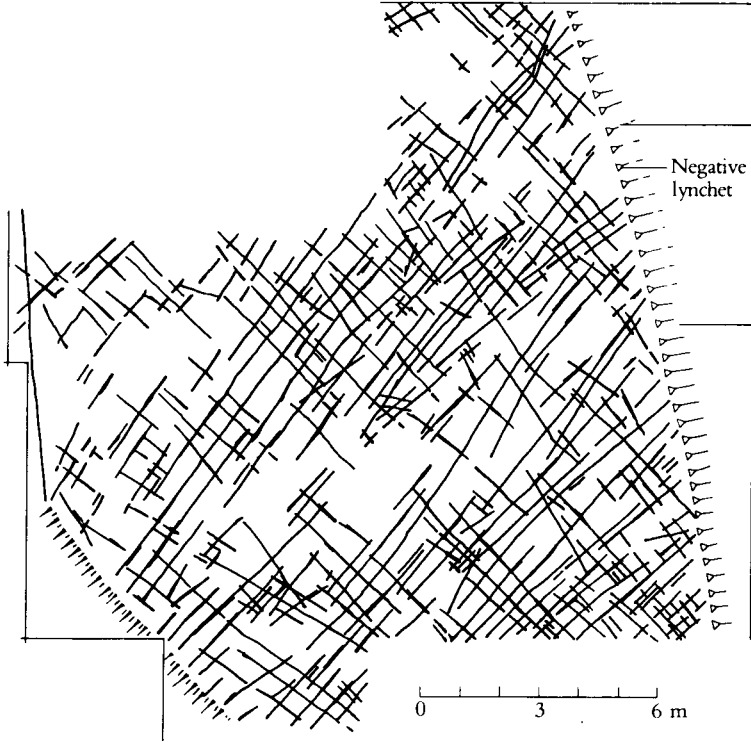


Fig. 2. Plan of early third millennium bc ard-marks in the surface of the subsoil at the base of the soil profile sealed beneath the South Street long barrow, Avebury, Wilts. (after J. G. Evans).

over the former arable before being buried by the barrow mound.

Hints of cultivation from soil evidence in Neolithic archaeological contexts are also known elsewhere but, despite the implications of South Street, actual enclosed fields are not certain until the second half of the third millennium bc (*c.* 3100 BC) i.e., *after* the vegetational change and possible cultural hiatus tentatively identified around 2600 bc. Perhaps from as early as 2400 bc, however, not just enclosed fields but whole stretches of organized landscape are attested in western Ireland, surviving intact in a cocoon of sub-Atlantic peat.¹³ Elements of these landscapes range from the gross, such as a court cairn, settlements, clearance cairns and field walls, to

¹³ S. Caulfield, 'Neolithic fields: the Irish evidence', in H. C. Bowen and P. J. Fowler (eds.), *Early Land Allotment in the British Isles*, BAR, 48, Oxford, 1978, pp. 137–43.

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the detailed, such as ard-marks and the ridged surfaces of cultivated soils inside enclosed fields. Similar detail has also been recorded in recent years in Scotland, together with a few instances of lengths of pre-bog walling.¹⁴ Doubtless many more examples will come to light in Britain's Highland zone.

¹⁴ S. P. Halliday *et al.*, 'Early agriculture in Scotland', in Mercer, *op. cit.*, pp. 55–65.

CHAPTER I

LATER PREHISTORIC BRITAIN

THE SOURCES OF EVIDENCE

THE writing of history from non-documentary sources is a difficult, little understood task. It is perhaps as well, therefore, to mention briefly the main sources of evidence on which the following review is based. 'Review' is a word used advisedly here because the nature of the evidence for agrarian history in, roughly, the last two millennia BC, and the present lively state of study of that evidence, do not convincingly lend themselves to the writing of historical narrative. This account must perforce confine itself to a survey and discussion of the evidence.

That evidence comes from several sources. Traditionally the most important for the period under review has been archaeology, and quantitatively most of our information comes indeed from archaeological investigations. Excavation has produced much of the evidence, not only in general terms of stratigraphical succession and artifactual association, but also as the various structures on which our picture of later prehistoric agricultural life is based. The farms and their buildings, the details of plan and settlement features like pits, these are the data excavation is good at recovering. Excavation also provides, more valuably than as casual finds, the artifacts of agriculture, the parts of ploughs and harness, the tools of the fields, the equipment for the processing of crops into palatable food. And sometimes it produces evidence of agrarian practice such as buried tracks or plough-marks. Furthermore, it is from excavation that the raw material comes for many of the palaeo-techniques of studying the past – the palaeobotanical evidence such as pollen, seeds and charcoal for microscopic examination; the animal bones which can allow inferences about species, diet, and economy; the fossil snail, insect, and parasite samples, eloquent of their man-influenced habitat; the buried soils containing their record of land-use; and, arguably most important, the contextual materials for date-estimation using the C-14 or other laboratory techniques. It is from excavation too that, in some ways, we come closest to prehistoric man by being able to examine the skeletons of individuals, sometimes with evidence of what they did and suffered in life and wore when buried. By implication at least, from such evidence we can also learn something of the communities they lived in, of societies' attitudes not only to death but to life.