

Resource Assessment

The Mesolithic in Hampshire

Julie Gardiner, Wessex Archaeology, September 2006

Chronology

Roger Jacobi's seminal paper *The Last Hunters in Hampshire* (1981, see also Jacobi 1978) outlined a relative and, in part, absolute chronology for the British Mesolithic that has been refined but otherwise little altered since (see, for instance Reynier 2000; in press). This was based on Jacobi's deep knowledge of a vast, personally compiled lithics database that had grown from the CBA's initial data collection for the Mesolithic *Gazetteer* of 1977 (Wymer 1977) until it has encompassed virtually the entire country (Wessex Archaeology 2002). This typological sequence was combined with radiocarbon determinations obtained from major excavated sites, many of them in Hampshire. As such the County has played a key role in the development of Mesolithic chronology. There are comparatively few radiocarbon dates from Hampshire Mesolithic sites and most are obtained more than 20 years ago. Those cited in text have been recalibrated using Oxcal v3.9 with the datasets of Stuiver *et al.* 1998, rounded out to 10 years (Table 1).

Early Mesolithic sites in Hampshire include substantial flint assemblages associated with hearths forming great conglomerations of material within which are dense concentrations. The vast assemblages in the east of the County around Oakhanger are archetypal and extend a well-known distribution of Early Mesolithic sites on the Greensand extending across Surrey and Sussex. They remain some of the most substantial assemblages of the period known from the entire country. Oakhanger Sites V and VII (Rankine 1952; 1953; Rankine and Dimpleby 1960) produced approximately 85,000 and over 100,000 struck flints respectively with radiocarbon dates spanning the period 9200–7550 cal BC (Table 1) that is, within the pine, elm and hazel phase of Southern British Pollen Zone VI. The assemblages are characterised by the presence of many microliths, with large obliquely blunted points dominating, combined with scrapers, finely serrated and truncated blades, and smaller numbers of burins, core-adzes, drills, punches, abraded-end blades and occasional ground-edge pieces (Jacobi 1981).

Jacobi identified a 'Middle' Mesolithic which, at that time, seemed to be confined to the western Weald (1978; 1981). These assemblages were again generally of substantial size but incorporated distinctive forms of concave basally retouched points, including a distinctively asymmetrical form that has become known as the 'Horsham' point, having affinities across northern Europe. In Hampshire, he identified major 'Horsham' sites at Longmoor and Sleaford Heath are both on the Greensand and the only other major assemblage is that which is clearly predominantly Late Mesolithic at Broom Hill Braishfield. Whether these industries represent an essentially regional cultural development, or are functionally related is as yet unknown but radiocarbon dates show overlaps with both diagnostically Early and Late assemblages, between 8300–7700 cal BC (Longmoor, OxA-376; Table 1) and 7600–6450 cal BC (Kettlebury, Surrey, OxA-378-9; 8270±120 BP, 7940±120BP).

Late Mesolithic sites, characterised by the occurrence of smaller, more varied microlith forms amongst which narrow, straight-backed 'rod' and scalene triangles

predominate, could also be recognised among the sites of the Hampshire Greensand, for instance at Kingsley and Oakhanger III and IX (Rankine 1952; 1953), but also much further afield. Such assemblages tend to be much smaller and less extensive than the earlier ones and are often associated with hearths, concentrations of burnt flint and possibly pits, and there may be numerous discrete flint scatters within comparatively small areas. Many thousands of pieces were recovered from a sandpit at Broom Hill, Braishfield where 80% of the microlithic component comprises rods and scalene triangles and over 100 adzes. Radiocarbon dates are again few but span the period 6400–5260 cal BC (Table 1).

In short, the suggested chronology for Mesolithic Hampshire, though based on only a small series of dates is:

Early Mesolithic	late 10th–early 8th millennium cal BC
‘Middle’ Mesolithic (Horsham industries)	8th millennium cal BC (with overlaps)
Late Mesolithic	early 7th–late 5th millennium cal BC.

Landscape, Landuse and Site Distribution

Site distribution

Virtually all known Early Mesolithic sites in Hampshire are concentrated on the Greensand in the East of the county around Oakhanger, Petersfield Heath, Sleaford Heath, Selborne, Trottsford and Kingsley (Clarke 1932; Rankine 1949; 1953; Jacobi 1981). Sites away from the Greensand are relatively few and those that have been recognised, for instance at Sandy Lane Shedfield (Draper 1953; 1968; Gardiner 1988, cat. no. 322), Abbey Wells, Woolton Hill (Wymer 1977, 112; Gardiner 1988, cat. no. 241) and possibly Dorridge Hill, Ibsley (Avon Valley Archaeological Society; Gardiner 2002), are again generally associated with sands and gravels rather than with the chalk which dominates the county’s geology (as indeed are sites such as Hengistbury Head and those around Bournemouth and Christchurch Harbour, formerly in Hampshire but now in Dorset). It seems unlikely that extensive early scatters have simply been missed on the chalk, where many Mesolithic surface assemblages are, in any case, mixed with flintwork of later periods, but some hint of the occurrence of smaller Early scatters may be apparent amongst material collected in a few locations around Basingstoke. Small groups of large, obliquely blunted points of typical early form can be recognised, for instance at Dummer (Gardiner 1988, cat. no. 274) and Bradley (*ibid.*, cat. no. 253).

Major flint assemblages containing Horsham points are concentrated in East Sussex and Surrey with ‘outliers’ on the Hampshire Greensand in amongst the distribution of Early sites. However, some assemblages from chalkland areas, such as Salt Hill East Meon, Windmill Hill and Butser Hill (Draper 1968) have also produced small numbers of Horsham points and these industries can now be seen to have a sporadic but widespread distribution across the southern chalk, even as far as Cranborne Chase, though their main distribution continues to be peripheral to it. The only other substantial assemblage in Hampshire to incorporate Horsham points is Broom Hill, Braishfield, which is again located on sandy substrate (O’Malley and Jacobi 1978; see below).

Both Jacobi (1981) and Wymer (1977; 1996) commented on the comparative lack of Late Mesolithic flint sites in the county, with the exception of those again located in the western Weald. Recent work, however, has indicated the widespread occurrence of flint scatters both off and on the chalk. The East Hampshire Field Survey (Shennan 1985) showed that, outside of the main concentrations, there is a generalised scatter of generally later Mesolithic material spreading across the Lower Greensand west of Oakhanger and up onto the western edge of the chalk, especially in areas capped by clay with flints, while excavations at Southam Common, just 5km south of Oakhanger, identified several small, dense flint scatters associated with hearths (Thames Valley Archaeological Services; Gardiner 2002).

Southam reflects a pattern that is most noticeable away from the Greensand, where sites tend to be discrete, quite small in terms of both size of assemblage and extent, often associated with hearths or possibly pits and to cluster over relatively small areas. They are usually located on sandy substrates or on sandy or gravelly superficial deposits overlying the Chalk. Chris Draper's work in southern Hampshire in the 1960s and '70s revealed this clearly, demonstrating the presence of numerous small scatters associated with patches of Eocene sands, plateau gravels and clay with flints on Windmill Hill Chalton, Salt Hill and Butser Hill, with other scatters on, for instance Teglease Down, Old Winchester Hill and at Blendworth and Droxford (Draper 1952; 1968; Gardiner 1988, cat. nos 342, 321, 264, 332, 301, 267, 323). Further north, mixed assemblages in the Basingstoke and Andover area include Late Mesolithic elements, again mostly on superficial deposits, as a Ruckstalls Hill (Hants SMR), Wellocks Hill Basingstoke and Popham (Gardiner 1988 cat. nos 223, 309).

Larger scale, more systematic, surveys and area evaluations/excavations have confirmed this pattern, for instance along the Meon valley (Schofield 1995), the Avon valley around Fordingbridge and Rockbourne (Avon Valley Research Group), Foxcotte Andover (Dacre Archive, examined by Wessex Archaeology, 1992), Whitenights Farm, Hartley Wintney (NE Hants Archaeological Society), Chilbolton near Andover (Hants SMR) and Riverdene, Basingstoke (Thames Valley Archaeological Services) (Gardiner 2002).

Jacobi (1981) drew particular attention to the presence of many Mesolithic flint scatters at or below present tide level all along the Hampshire coastline. Such sites were well known to local collectors such as W F Rankine and Chris Draper, and many thousands of implements had been recovered from foreshore sites at, for instance, Portchester Seabanks, Cams Fareham, Rainbow Bar, in Southampton and Portsmouth, on Hayling Island and around Langstone Harbour (Rankine 1951; 1956; Draper 1951; 1958; Bradley and Hooper 1975; Jacobi 1981; Gardiner 1984; 1988, cat. nos 310, 339, 311, 277). The pattern extends both westwards to Christchurch Harbour (eg Gardiner 1987) and eastwards to Chichester Harbour and Selsey (Cartwright 1982). Most scatters can be seen to be eroding out of the soft clay margins of the harbours onto the foreshore and, though their spatial and stratigraphic contexts are somewhat compromised by their exposure to the tides, it is clear that the material represents extensive exploitation of former dry land rather than the coastal zone that now pertains. Detailed survey and artefact collection on the foreshore and around the islands of Langstone Harbour indicated the original presence of numerous small Late Mesolithic (and later) scatters revealing some inter-site patterning and the presence of hearths associated with animal bone and burnt flint (Allen and Gardiner 2000).

Inland on the coastal plain and tertiary deposits of southern Hampshire further Late Mesolithic sites have been recorded, for instance at Rowlands Castle, Walton Heath, Hipley Copse (Draper 1968; Gardiner 1988 cat. nos 319, 335, 290 and around Testwood (Hants SMR and Wessex Archaeology CHECK). Most notable among these are the series of pits and possible stakeholes associated with flintwork at Wakeford's Copse, Havant (Bradley and Lewis 1974) and the vast assemblage, again apparently associated with pits and post-holes, at Broom Hill Brashfield (O'Malley and Jacobi 1978; Jacobi 1981). Some kind of tented structure has been suggested for both sites though in neither case has this met with universal agreement. Another substantial assemblage, radiocarbon dated to around 4800 cal BC, was excavated at Bowman's Farm near Romsey where it was thought to have been associated with structures represented by ring-slots, but these have since been re-evaluated as belonging with Iron Age activity on the site (Green 1991).

One area that seems so far to be largely devoid of Mesolithic flintwork is the eastern part of the New Forest, though this may be more a question of lack of ploughed land and interest than a real picture. Certainly the sands and gravels of the south-western part of the Forest, in Dorset, shows a continuation of patterns seen elsewhere in Hampshire. A few scatters have been recorded, for instance at Boarman's Lodge Beaulieu and Burley (Hants SMR).

Subsistence patterns and landuse

Despite the comparative lack of closely dated and stratified, excavated assemblages there are some clear patterns that emerge from the Mesolithic data in Hampshire.

The Early sites show an almost exclusive bias towards the Greensands in the east of the County, where they continue a familiar pattern from Sussex, Surrey and Kent. As Jacobi pointed out (1981, 13), Early Mesolithic findspots rarely occur in isolation and where they do, this was, in 1981, mostly in areas lacking in detailed work. That situation has barely changed. All findspots within these clusters tend to be of closely similar age, and this situation pertains in Hampshire, Surrey, Sussex and probably Kent.

It seems inherently unlikely that the Mesolithic occupants of Hampshire were keen geologists and it seems reasonable to assume that the main focus of activity was in areas where distinctive combinations of vegetation and resources encouraged repeated occupation of traditional hunting and foraging grounds. The naturally acidic, fine, base poor soils of the Greensands will have given rise to a distinct range of vegetation that is likely to have been in marked contrast to that developed on the calcareous parent material of the Chalk. The location of sites shows a further, marked bias towards low bluffs and slopes overlooking watercourses or arranged along springlines. We might conclude, therefore, that the Wealden Greensands provided optimal environments for the exploitation of a range of resources and for the congregation of communities, probably at specific times of the year, in areas with a good and constant water supply. It is unnecessary to view the vast assemblages like those around Oakhanger as representing single episode occupations by very large numbers of people but more the repeated use of a larger, favoured area over many generations. This has resulted in the overlapping of chronologically distinct but

typologically undifferentiated assemblages whose whole has become, archaeologically speaking, much greater than its component parts.

Unfortunately, the acidic nature of the soils means that little organic evidence survives apart from burnt hazelnut shells and charcoal, the former suggesting autumnal occupation, and so it is not yet possible to determine the range and variety of resources available or for how long any single occupation may have lasted. We should probably expect to find smaller, more specialised and seasonal assemblages away from these core Greensand areas but, for the Early Mesolithic at least, these have proved elusive and provide one topic for future study.

Patterns of resource exploitation and landuse seem to have changed markedly by the Late Mesolithic. Now we see many smaller flint scatters occurring over a much wider topographical and geological area, though the traditional use of the Greensands continues. Whether this spreading out was the result of population increase, changes in resource availability brought about by natural climatic and vegetational successions or as a result of anthropogenic factors, or through pure curiosity, is impossible to determine, but it seems that most landscapes within the county were brought into use by or during the 6th millennium cal BC. Traditional criteria seem to have applied, however, as sites still tend to be located overlooking running water and either on sands and gravels or, on the Downs, where superficial deposits overly the chalk. Again, such a preference is most likely to reflect patterns of vegetation and, concomitantly, the availability of associated resources. We can see that, in general, the largest and most complex assemblages are still those that are located on the sands and we can envisage the regular movement of smaller groups of people along the river valleys penetrating the chalklands in search of seasonal resources and/or on hunting trips.

The 'coastal' plain, with its generally gentle topography and sand and gravel deposits was, in the Mesolithic, incised by a series of relatively deep river valleys running south from the chalk. Pollen evidence from Langstone Harbour indicates that these contained open grass and sedge environments bordered by flat plateau areas supporting light deciduous woodland and open grassland (Scaife 2000). A pollen sequence from Testwood, Southampton, also indicated a gradual change from pine and juniper in the 9th millennium cal BC to a more open, semi-deciduous woodland including oak, elm and hazel by the middle of the 8th millennium (Scaife in prep.). As such, this region would have seen high biodiversity and the extensive flint scatters reported from the shores of all the major harbours suggest extensive exploitation of the lowland plain. The intertidal and underwater archaeology of the Solent harbours certainly deserves further study, particularly given the potential for the preservation of organic materials and pollen sequences.

Material culture and trade

The material culture of the Hampshire Mesolithic is confined to flint artefacts and occasional objects made from Greensand/Portland chert and other stones, such as sandstone pebble maceheads. Since the classic typological sequence for the southern English Mesolithic is largely based on Hampshire assemblages there seems little point in reiterating it here (see Jacobi 1981 and 1978).

The exploitation of flint as a resource is interesting in itself, however. Increasingly through the Mesolithic there was a change from the use of generally poor quality, small size nodules available in the river gravels and Greensands to the much larger and generally better quality material derived from the tertiary beds in the south of the county and, especially, from the chalk. The majority of Mesolithic flint tools are small and easily portable but they increasingly required the use of high quality raw materials in order to produce the small, precise, fine blades from carefully prepared cores that characterise the later assemblages.

There was also the increasing production of 'tranchet' adzes and large core tools that required the availability of very large, quality nodules. We cannot closely trace the development of either adze use or procurement because, like polished axes, these tools were in use for many hundreds of years and they have the added advantage of being easily resharpenable, thus extending their use-life considerably. Their distribution is interesting (Gardiner 1988, fig. 6.8). Gardiner personally examined over 550 tranchet adzes from Hampshire and, although these are probably not all Mesolithic in date anyway, showed that the vast majority (over 80%) occur on the upland chalk in the northern half of the county, particularly in areas covered by clay with flints, where they were probably made. Significantly, however, the remainder are very widely spread across the lower part of the Downs and the coastal plain with comparatively few in the Mesolithic 'heartlands' of the Greensand belt (a similar pattern is seen in Sussex). In other words, they mirror the pattern of Late Mesolithic flint distributions much more closely than they do that of the earlier sites. It is reasonable to assume that communities moving into the flint-rich areas and encountering this resource would have collected sufficient for their own needs, if not for the wider community, presumably carrying away roughout or finished items rather than predominantly raw materials.

It has long been assumed that a principal use of axes and adzes was for the felling of trees and this may point us towards the initiation of clearances of upland forests during the Mesolithic, as has been suggested by many authors previously. Direct evidence for such clearances are lacking for Hampshire though the Sussex Wealden sites have produced pollen evidence for a dramatic change from hazel dominated open woodland to heathland species, especially heathers, during the Early Mesolithic (Simmons *et al.* 1981; Garton 1980). Whether any anthropogenic factors were involved here is not clear.

Not all the adzes are made of chalk flint. The Late Mesolithic sites of the present coastal plain would have been far inland during the Mesolithic (see Allen and Gardiner 2000 for a recent discussion) and were not, therefore, primarily exploiting marine resources. Mesolithic visitors to what is now Langstone Harbour inhabited a river valley and its open, grassy hinterland, probably for only a few days at a time, and seem to have been largely concerned with the procurement of large flint nodules from the Bracklesham Beds. These would have been exposed in river cliffs and gravels and were used to make adzes and other core tools as well as flake and blade tools. Significantly, nearly all the tranchet adzes and sharpening flakes recovered during the recent Langstone Harbour survey are made of chalk flint indicating that, whatever the local flint was to be used for, the visitors brought their own adzes with them and took some of them away again. The flint assemblages in the area contain a very restricted range of forms and are particularly lacking in processing tools. Though

this may, in part, be the result of the winnowing effect of tides on the smaller pieces, a sufficiently large assemblage of small debitage survives to suggest that items were being manufactured here and removed for use elsewhere.

There are no 'exotic' Mesolithic items – the few recorded pebble maceheads and occasional pieces of 'Portland' chert could all have been procured locally.

Social organisation

Hampshire, like much of the rest of the country, has produced insufficient evidence for much to be said about social organisation during the Mesolithic. The notion of seasonal movements with the coming together of small groups in so-called base camps at particular times of the year is a now well rehearsed explanation of Mesolithic lifeways and there is nothing to contradict this scenario in the Hampshire database. What we may see, however, is an increasingly wider range of movements through the period, with new areas of the county gradually being drawn into the seasonal cycle. Whether this reflects a perceived need for new 'territory', an increase in the range of available natural resources resulting from climatic and vegetational changes, or change in social organisation is impossible to tell.

Transport and communication

The distribution of Late Mesolithic sites in particular indicates the importance of Hampshire's river valleys as communication routes as well as favoured areas for settlement. Penetration of the chalk uplands seems to have been accomplished via the major rivers and their tributaries. The more open conditions of the southern plain presumably facilitated easy movement and it is not surprising that extensive flint scatters occur around the current tidal margins.

Key sites and resources

Key sites for the Early Mesolithic in Hampshire include the series of major flint scatters on the Greensands at Oakhanger, Petersfield Heath, Sleaford Heath, Selborne, Trottsford and Kingsley (Clarke 1932; Rankine 1949; 1953; Jacobi 1981). Sandy Lane Shedfield is the only other major site for which details of the assemblage are available (Draper 1953; 1968; Gardiner 1988, cat. no. 322). Sites with Horsham points include Longmoor, Sleaford Heath (Jacobi 1981) and Broom Hill Brashfield (O'Malley and Jacobi 1978) with chalkland assemblages identified at Salt Hill East Meon, Windmill Hill and Butser Hill (Draper 1968).

Key concentrations of Late Mesolithic sites on the Greensand occur at Kingsley and Oakhanger (Rankine 1952; 1953); on the downland on Windmill Hill Chalton, Salt Hill and Butser Hill (Draper 1968); and on the lower dipslope and southern plain at Broom Hill, Wakeford's Copse (Bradley and Lewis 1974) and around the Solent Harbours, of which the most comprehensively recorded are those in Langstone Harbour (Allen and Gardiner 2000).

Apart from the Hampshire SMR, key resources are the collections of the Hampshire County Museums Service (HCMS) – which also incorporate the former private collections of Chris Draper, Michael O' Malley and G.W. Willis, Portsmouth Museum and the British Museum. Archaeological Units, and field study groups, working in the County retain relevant 'grey literature' and most temporarily hold objects recovered in fieldwork until publication of the results is achieved and the

material deposited with HCMS. In addition to published sources cited in the Project bibliography, a major catalogue of material is contained in Julie Gardiner's PhD thesis (Gardiner 1988) which, though presented to HCMS in 1989, has not yet been assimilated into the County SMR.

References

- Allen, M J, and Gardiner, J, 2000 *Our changing coast. A survey of the intertidal archaeology of Langstone Harbour, Hampshire*, CBA Research Report 124, York
- Bradley, R J, and Lewis, E, 1974 A Mesolithic site at Wakeford's Copse, Havant, *Rescue Archaeology in Hampshire* **2**, 5–18
- Bradley, R J, and Hooper, B, 1975 Recent discoveries from Portsmouth and Langstone Harbours: Mesolithic to Iron Age, *Proceedings of the Hampshire Field Club* **30**, 17–27
- Cartwright, C R, 1982 Field survey of Chichester Harbour 1982, *Sussex Archaeological Collections* **122**, 23–7
- Clark, J G D, 1932 *The Mesolithic Age in Britain*, Cambridge
- Draper, C, 1951 Stone industries from Rainbow Bar, Hants, *Archaeological Newsletter* **3.9**, 147–9
- Draper, C, 1952 A Mesolithic site on Old Winchester Hill, *Proceedings of the Hampshire Field Club* **17**, 283–7
- Draper, C. 1953 Further Mesolithic sites in south Hampshire, *Archaeological Newsletter* **4.12**, 193
- Draper, C, 1968 Mesolithic distribution in south-east Hampshire, *Proceedings of the Hampshire Field Club* **23**, 110–19
- Gardiner, J, 1984 Lithic distributions and settlement patterns in central-southern England, in *Neolithic studies* (eds R Bradley and J Gardiner), BAR **133**, 15–40, Oxford
- Gardiner, J, 1987 The Neolithic and Bronze Age, in B W Cunliffe, *Hengistbury Head Dorset, Vol 1: the prehistoric and Roman settlement 3500 BC–AD 500*, Oxford University Committee for Archaeology Monograph **13**, 329–36, Oxford
- Gardiner, J, 1988 *The composition and distribution of Neolithic surface flint scatters in central southern England*, unpublished PhD thesis, University of Reading
- Gardiner, J, 2002 The Palaeolithic and Mesolithic, in *The Millennium Publication: a review of archaeology in Hampshire 1980–2000* (ed N Stoodley), 1–3, Winchester
- Garton, D, 1980 An early Mesolithic site at Rackham, east Sussex, *Sussex Archaeological Collections* **118**, 145–52

- Green, F, 1991 Mesolithic structures in the Test valley: Bowman's Farm, *PAST* **11**, 1–2
- Jacobi, R 1978 The Mesolithic of Sussex, in *The archaeology of Sussex to AD 1500* (ed P Drewett), CBA Research Report **29**, 15–22, London
- Jacobi, R, 1981 The last hunters in Hampshire, in *The archaeology of Hampshire* (eds S J Shennan and R T Schadla Hall), Hampshire Field Club and Archaeological Society Monograph **1**, 10–25, Winchester
- O'Malley, M, and Jacobi, R, 1978 The excavation of a Mesolithic occupation site at Broom Hill, Braishfield, Hampshire 1971–1973, *Rescue Archaeology in Hampshire* **4**, 16–38
- Rankine, W F, 1949 *A Mesolithic survey of the west Surrey Greensand*, Papers of the Surrey Archaeological Society **2**, Guildford
- Rankine, W F, 1951 A Mesolithic site on the foreshore at Cams, Fareham, Hants, *Proceedings of the Hampshire Field Club* **17**, 141–2
- Rankine, W F, 1952 A Mesolithic chipping floor at the Warren Oakhanger, Selborne, Hants' *Proceedings of the Prehistoric Society* **18**, 21–35
- Rankine, W F, 1953 Mesolithic research in east Hampshire: the Hampshire Greensand, *Proceedings of the Hampshire Field Club* **18**, 157–72
- Rankine, W F, 1956 *The Mesolithic of Southern England*, Research Papers of the Surrey Archaeological Society **4**, Guildford
- Rankine, W F, and Dimbleby, G W, 1960 Further investigations at a Mesolithic site at Oakhanger, Selborne, Hants, *Proceedings of the Prehistoric Society* **27**, 246–62
- Reynier, M, 2000 Thatcham revisited: spatial and stratigraphic analysis of two sub-assemblages from Site III and its implications for Early Mesolithic typo-chronology in Britain, in *Mesolithic lifeways: current research from Britain and Ireland* (ed. R. Young), Leicester University Archaeological Monograph **7**, 33–46, Leicester
- Reynier, M, in press An Early Mesolithic stone assemblage from Marsh Benham, Berkshire UK, *Berkshire Archaeological Journal*
- Scaife, R, 2000, Pollen analysis from Farlington Marshes: a vegetational history of Langstone Harbour, in Allen and Gardiner 2000, 171–5
- Schofield, A J, 1995 The changing face of 'landscape' in field archaeology: an example from the upper Meon valley, in *The evolution of the Hampshire landscape: the Meon valley landscape project* (ed M Hughes), Hampshire Co. Council Archaeological Report **1**, 1–14, Winchester

Shennan, S, 1985 *Experiments in the collection and analysis of archaeological field data: the East Hampshire Field Survey*, Sheffield

Simmons, I, Dimbleby, G W, and Grigson, C, 1981, The Mesolithic, in *The Environment in British Prehistory* (eds I Simmons and M Tooley), 82–124, London

Stuiver M., Reimer P.J., Bard, E., Beck, J.W., Burr, G.S., Hughen, K.A., Kromer, B., McCormac, G., van der Plicht, J. and Spurk, M., 1998. INTCAL98 Radiocarbon Age Calibration, 24000-0 cal BP *Radiocarbon* 40(3) 1041-1083

Wessex Archaeology 2002, *The Colonisation of Britain by Modern Humans: A Review of Upper Palaeolithic and Mesolithic Resources in England*, unpublished Project Design, Salisbury

Wymer, J J, 1977 *A Gazetteer of Mesolithic Sites in England and Wales*, CBA Research Report **20**, London

Wymer, J J, 1996 The Palaeolithic and Mesolithic periods in Hampshire, in *Archaeology in Hampshire: A framework for the future* (ed D A Hinton and M Hughes), 1–6, Winchester

Table 1: radiocarbon dates for Mesolithic sites in Hampshire

<i>Site</i>	<i>Context</i>	<i>Material</i>	<i>Lab Ref</i>	<i>BP determination</i>	<i>Date cal. BC at 2 sigma</i>
Oakhanger VII	level II	hazelnuts	Q1489	9225±200	9200-7900
	level II	pinus chacoal	Q1491	9100±160	8750-7750
	level II	pinus chacoal	Q1493	9040±160	8700-7600
	level II	pinus chacoal	Q1490	8995±160	8600-7600
	level II	pinus chacoal	Q1492	8975±1600	8550-7600
	level II	pinus chacoal	Q1494	8885±160	8450-7550
			scots pine charcoal and hazelnut	F 68	6380±115
		scots pine charcoal and hazelnut	F 69	6380±110	5650-5050
Longmoor	L1, podsol	hazelnut	OxA-376	8930±100	8300-7700
	L3 podsol	hazelnut	OxA 377	8760±110	8250-7550
	L3	oak/birch charcoal	HAR 4475	6060±110	5300-4700
Broom Hill, Braishfield	base of Pit III	wood charcoal	Q1192	8540±150	8200-7100
		wood charcoal	Q1528	8515±150	8000-7000
		wood charcoal	Q1383	8315±150	7650-6800
	top infil of Pit III	wood charcoal	Q1460	7750±120	7050-6350
	above Pit III	wood charcoal	Q1191	7220±120	6400-5800
	Pit II hearth	wood charcoal	Q1128	6535±125	5720-5260
Oakhanger V		pinus sylvestris charcoal	BM 221	7869±104	7100-6500
Micheldever R4	pre barrow	oak charcoal	HAR 1043	6904±170	6200-5450
Wakefords Copse	hearth in pit 8	charcoal	HAR 233	5680±120	4800-4250