

THE VALUE, MEANING AND PROTECTION OF LITHIC SCATTERS

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ABSTRACT

Much research has been completed on British lithic scatters over the past 30 years, principally on field techniques and site formation processes including three 'Lithic Scatters Projects' in England, Scotland and Wales. Despite this and the publication of a guidance note for planners and conservation officers, it still appears that archaeologists in the curatorial and academic sectors undervalue the contribution of lithic scatters. This paper will review the progress over the past 30 years and consider lithic scatters in terms of their: Value, Meaning and Protection.

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Keywords: Lithic scatters, landscape, palimpsest, interpretative frameworks, heritage protection.

INTRODUCTION

After thirty years of research on lithic scatters this type of site is still undervalued. This is surprising, as much has been published in respect of field methods, sampling, surveys, guidance and the subject has even been included in regional and national research frameworks (Haselgrove *et al.* 1985; Barrett *et al.* 1991; Schofield 1991 & 1995; Boismier 1997; Bradley 1998; Gamble *et al.* 1999; English Heritage 2000; Pollard & Healy 2008; Hosfield *et al.* 2008). However, this type of site is rarely cited in text book prehistory (Bradley 2007). This paper will explore why this is the case. Three themes and questions are discussed:

- Value (where have we come from and where are we now?)
- Meaning (why are lithic scatters important and to whom?)
- Protection (why and how should we protect this unique class of site and Heritage Asset?).

VALUE

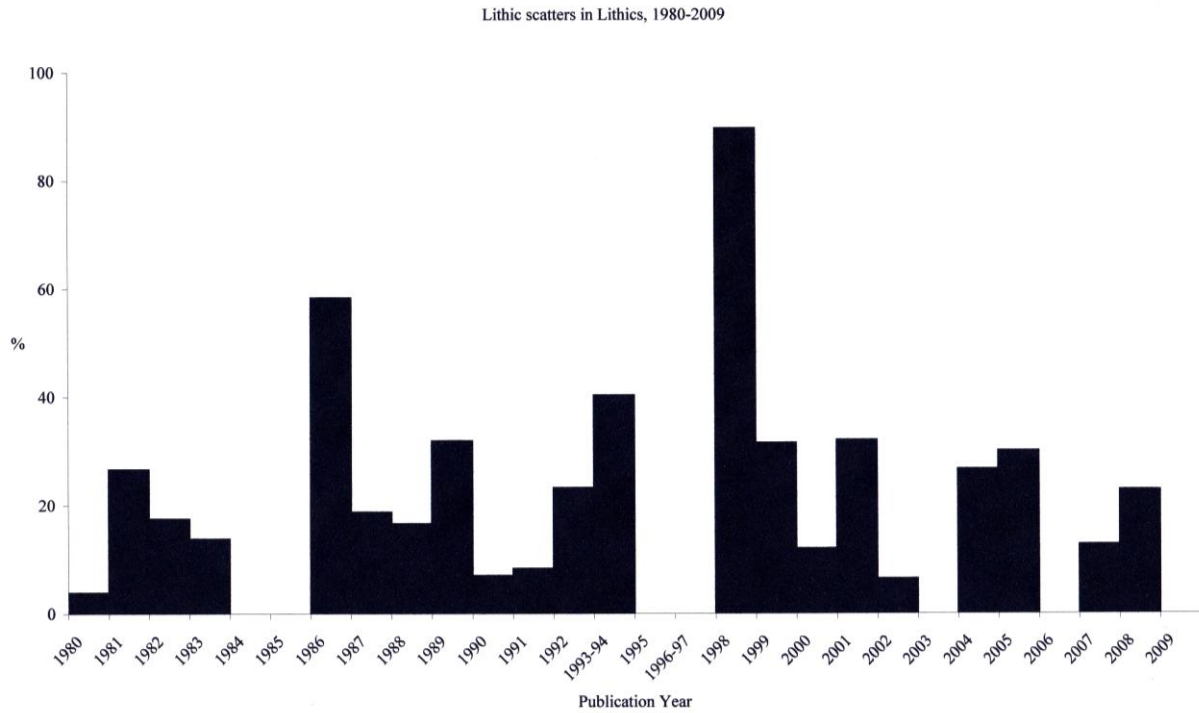
Lithic scatters in publication

A starting point for exploring the interest and value of lithic scatters to the profession/discipline can be journal publication output over twenty nine years.

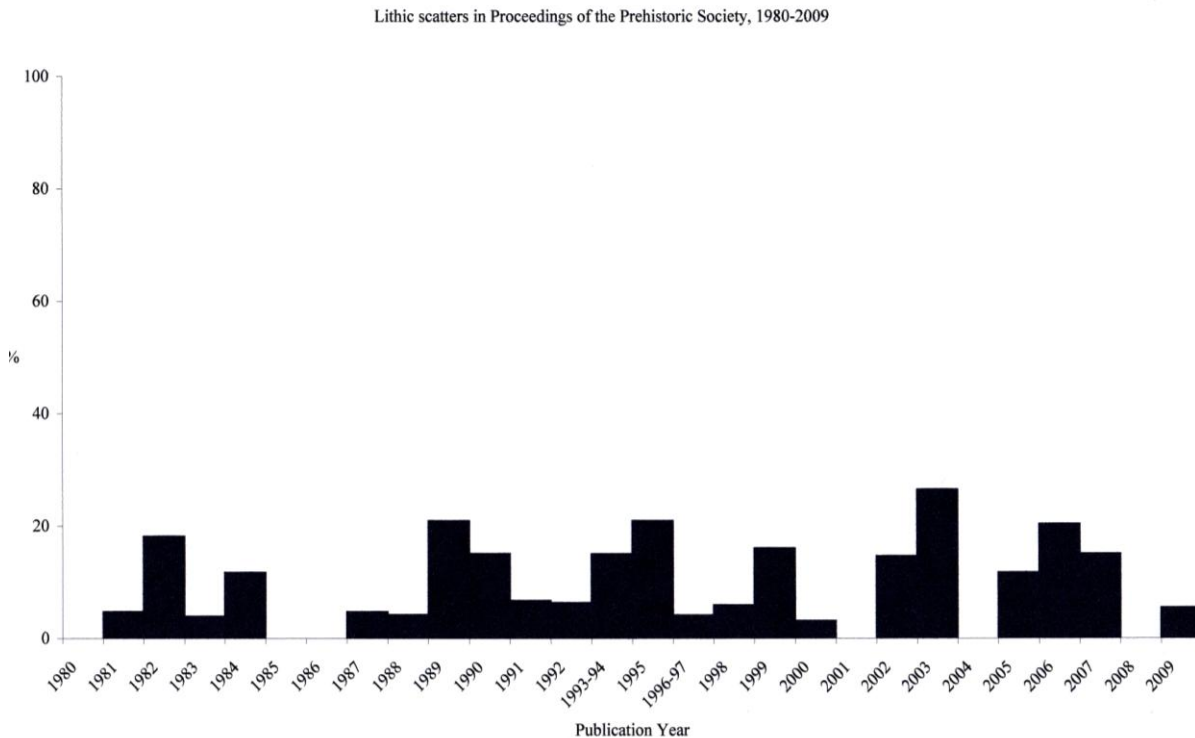
A content analysis; proportion of pages published covering lithic scatters may be instructive to isolate trends. The Society's newsletter, now journal, *Lithics* and the national or wider context, the *Proceedings of the Prehistoric Society* is analysed (Figure 1). The former may provide an indicator of trends within the sub-discipline (national setting); the latter, the discipline and international trends.

Lithics: The newsletter/journal published from 1980 to 2009 consisted of a total of 2240 pages. Some 401 or 17.9% discuss lithic scatters. Nine volumes have over 20% of the pages dedicated to lithic scatters (Figure 1, top). In 1986 (58.3%) and 1998 (89.6%), lithic scatters were well represented. In these years Society meetings covered the subject. Papers tend to relate to United Kingdom case-studies; a rare exception covered a Spanish survey (Schofield *et al.* 1999). Most papers relate to site-based case studies not landscapes, surveys or methodologies. The Palaeolithic is commonly represented, whilst the Mesolithic is rare; Neolithic and Bronze Age assemblages are common. Iron Age assemblages, similar to those identified by Humphrey and Young's (2009) are not reported, save in their own paper and Saville's (1981) paper. Multi-period assemblages and/or sites are rare, as are excavation of lithic scatters. Excavated assemblages are the main unit of analysis. Papers are often centred on fieldwork from southern England. Lithic scatters are a minor element to the publication output.

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Total pages, 2240, in 30 volumes; 401 pages dedicated to lithic scatters, or 17.9% pages within the journal



Total pages, 12124 in 30 volumes (Nos. 46 – 75); 1143 pages dedicated to lithic scatters, or 9.4% pages within the journal.

Figure 1. A content analysis of 'lithic scatters' in publication, 1980–2009. Top: Lithic scatter-related papers within the journal of Lithics as a percentage of pages per volume. Bottom: Lithic scatter-related papers within the journal Proceedings of the Prehistoric Society as a percentage of pages per volume.

Proceedings of the Prehistoric Society: The journal published from 1980 to 2009 a total of

12,124 pages, 1,153 or 9.5% discuss lithic scatters (Figure 1, bottom). Three volumes

have >20% of the total pages dedicated to lithic scatters (1989, 1995 & 2003). In the 2003 volume four papers reported on a wide range of surveys, excavations and landscapes. Papers ranged from the Mesolithic of the Vale of Pickering (Conneller & Schadla-Hall 2003), the Kennet Valley (Ellis *et al.* 2003), the Exe Valley (Fyfe *et al.* 2003) and a survey in Thrace, Turkey (Erdoğu 2003). Papers tend to be dominated by excavation and finds-based technical reports; surveys are rare. Pottery is more commonly reported than lithics and few papers focus exclusively on lithics. Lithics are central to analyses of Palaeolithic sites, but marginal in later period contributions. Lithic scatters are a minor element to the journal output.

Between the two journals five themes emerge:

- An emphasis on single site and period analyses rather than landscape studies,
- An emphasis on excavated lithic assemblages,
- Regional and sub-regional studies are few; rare is comparisons between surveys,
- Explanation of lithics in terms of social theory or landscape patterning is rare,
- Excavation, fieldwork methods and results dominate papers.

The study of lithic scatters has changed against these trends. From extensive surveys the focus has been drawn towards site formation processes and social understanding of prehistoric settlement. A further context for these developments is the intensification of arable farming and its impact on buried archaeology (e.g. Lambrick 1977). Growth in professional developer-led archaeology and PPG16 is important (DoE 1990).

Lithic scatters 1979/1980 to 2010

Published content overlapped between the two journals. In the mid-1980s to the early 1990s increasing numbers of systematic extensive field surveys were completed in southern England (e.g. Shennan 1985; Ford 1987a & 1987b; Richards 1990; Barrett *et al.* 1991). Surveys in other areas yielded extensive new data sets (e.g. Healy 1991). There were also other themed meetings (Brown & Edmonds 1987; Schofield 1991). In the early to mid-1990s more strategic national projects came

forward (Schofield 1993 & 1994; Barrowman 2000 & 2003; Locock 2000; Silvester & Owen 2002; Stuart 2003; Smith 2005). As developer-led archaeology was established lithic scatters were recorded as part of evaluations and excavations; very rarely was systematic field survey deployed (Darvill & Russell 2002, 26, table 4; Last 2009, 4). Concerns of curators and unit archaeologists on methodology led to two meetings (Bradley 1998; Schofield 1995).

Review of PPG16 has indicated fieldwalking has rarely been deployed (Darvill & Russell 2002, 31–35) and understanding lithic scatters at a landscape-level may have been inhibited. Indeed, it is telling that Bradley's (2007) synthesis based on the 'grey literature' does not discuss lithic scatter evidence. Rather, 'settlements' or 'settlement patterns' are discussed and the type of evidence excavated is essentially houses, middens and pits (Bradley 2007, 38–47, 94–98). For example, the Mesolithic was hardly considered by Bradley (2007, 32). Blinkhorn (2010) states apparently such reports provide variable quality and quantitative data on Mesolithic archaeology, including lithic scatters. Analysis of artefacts, eco-facts and interpretation is often limited (Blinkhorn pers. comm., 2010). Lithic scatters may not have fared well.

Research on lithic scatters has evolved and terminology has reflected broad-scale changes in Anglo-American Archaeology over the past thirty years. This matches moves from traditional, to processual/New Archaeology and post-processual/interpretative archaeology (Thomas 1995 & 2001). In the 1950s/1960s the site was viewed as an objective unit of analysis; lithic scatters were interpreted as 'stations' directly representing human occupation (e.g. Clark & Higgs 1960). In the late 1960s into the mid-1970s the New Archaeology took root with an emphasis on understanding behaviour and methodology (e.g. Plog *et al.* 1978). Research design, sampling and implementing systematic surveys led to a new focus on interrogating plough soil data (e.g. Haselgrove *et al.* 1985). This together with ethnography led to Foley's model for 'off-site archaeology' (1981). Extensive surveys demonstrated the validity of this approach (e.g. Shennan 1985, Gaffney & Tingle 1989).

Town and Countryside planning provides another context. With increased urban expansion into the 'Green Belt' some local planning authorities turned to extensive survey, recording lithic scatters, part of the new cultural resource management (e.g. Richards 1978; Ford 1987a & 1987b). Extensive surveys led to an interest in field methods; sampling and consideration of the impact of 'tillage' or environmental processes emerged (e.g. Gardiner 1986; Allen 1991; Clark & Schofield 1991; Boismier 1997). From the mid-1990s into c.2000, more social-theory led interpretations emerged in which lithic scatters have been viewed as part of the socially constructed landscape (e.g. Barrett *et al.* 1991). Models of seasonal human movement and settlement were proposed (Whittle 1990 & 1997).

Interpretations emphasising the experience of place and phenomenology have now become dominant (see McFadyen 2008; Bayer & Cummings 2009; Bayer 2010). This social emphasis is a result of Tilley's (1994) synthesis blended with Ingold's (1993) anthropology. Whilst Tilley's (1994) text was not explicitly concerning lithic scatters it touched on perceptions of the landscape, locales and movement between such places (e.g. Tilley 1994). A critical weakness of Tilley's argument is the lack of quantitative analysis of the assemblages derived from the lithic scatters and their 'locales'. This approach impacted on others, particularly authors who attempted to articulate ideas of place with lithic scatters (e.g. Hind 2004a & 2004b; McFadyen 2009). But, it is worth noting detailed technological lithic data is rarely articulated with such interpretations (see Chadwick 2004). Lithic scatters are often interpreted as representing a place of communal life, habitual technological practices and daily routines (Edmonds 1997; Pollard 1998 & 1999; Edmonds *et al.* 1999; Hind 2004a & 2004b; Conneller 2005). Landscapes have been argued to compose of interlinked places, with paths; the analysis of lithic technologies can infer 'taskscape' and 'locales'. Each would be a focus of human activity where lithics were discarded. Each is a signature of a technological practice, indicative of a more or less mobile lifeway (Edmonds 1995 & 1997; McFadyen 2008 & 2009). The social meaning of place including the lithic

scatter has been interpreted as a place for 'inhabitation' or 'dwelling' (Snashall 2002; Chadwick 2004; Chan 2004; Hind 2004a & 2004b). From this scholarship tradition it is possible to suggest a three stage development in British lithic scatter studies:

- c.1975–c.1987: Sampling and Field Methods
- c.1987–c.1995: Extensive Sub-Regional and Regional survey
- c.1995–c.2011: Analysis, Interpretation and Community Engagement.

Where have we come from and where are we now?

Lithic scatters and extensive field survey: Eight selected systematic surveys are listed and compared (Tables 1, 2 and 3). Although each covers many hectares, each sampled distinctive regional lithic typologies and technology and isolated dominant and chronologically discrete trends from surface-derived assemblages. Authors have grouped lithic artefacts, both retouched forms of distinctive chronological typologies and waste (cores, flakes and blades), into lithic groupings (Tables 1 and 3). This approach may be termed the 'Whole Assemblage' approach, uniting product and by-product of flaking (Gardiner & Shennan 1985, 66). Individual lithic artefacts are grouped into sub-assemblages of the ploughsoil collection enabling the relative dating of proportions of the collection.

A relative technological and chronological banding of lithic material was achieved by comparing lithic technology and typology, from known excavated and radiocarbon dated assemblages to those field walked (Table 2). Measurement of waste material was sampled (commonly whole flakes and blades), so to indicate the dominant shape of the lithic industries and determine the technology and broad periods present (cf. Pitts & Jacobi 1979). These approaches have been successful in broadly determining the character of lithic scatters. However, their presentation and interpretation is limited to dots on maps, with little further compositional analysis. Thus, lithic scatters have remained marginal to mainstream prehistoric syntheses, poorly integrated with other types of evidence (Bradley 1984; Darvill 1987; Thomas 1999).

<i>Study area</i>	<i>Date</i>	<i>Groups</i>	<i>Description</i>	<i>Reference</i>
Berkshire Downs	1978	4	1. Mesolithic, 2. early Neolithic, 3. later Neolithic/early Bronze Age, 4. Middle to early Bronze Age	Bradley in Richards 1978, 17, table 3
East Berkshire	1987	7	1. Mesolithic, 2. Mesolithic/earlier Neolithic, 3. earlier Neolithic, 4. later Neolithic/earlier Bronze Age, 5. later Neolithic/Bronze Age, 6. later Bronze Age/Iron Age, 7. Undated	Ford 1987b, 13
North Stoke, Oxfordshire	1987	7	A. Mesolithic, B. Mesolithic or early Neolithic, C. later Neolithic, probably with some Mesolithic, earlier Neolithic or middle Neolithic present, D. late Neolithic, E. late Neolithic or earlier Bronze Age, F. later Bronze Age, G. undated	Ford 1987a, 106-107, 112, 115, Table 5
East Hampshire	1985	4	1. Mesolithic, 2. Earlier Neolithic, 3. Later Neolithic/earlier Bronze Age, 4. Middle to late Bronze Age	Gardiner and Shennan 1985, 66, 68, fig. 5.11
Stonehenge Environs	1990	4	1. Mesolithic, 2. Early Neolithic, 3. Later Neolithic, Beaker, 4. Later Bronze Age	Richards 1990, 16, 18-19, 24-25, table 6, fig. 11
Maiden Castle field survey	1991	2	1. Earlier Neolithic, 2. Middle to Late Bronze Age	Bellamy and Edmonds 1991, 32-34, tables 5 and 6; Woodward and Bellamy 1991, 24, 25, tables 3 and 4
Wissey embayment, Norfolk	1991	9	Predominately: Mesolithic, 2. earlier Neolithic, 3. Mesolithic and/or earlier Neolithic, 4. later Neolithic, 5. Beaker, 6. Bronze Age, 7. indeterminate later Neolithic or early Bronze Age, 8. Mixed or undated, 9. Non-site	Healy 1991, 116-118, figs. 65-68, microfiche 2: 5-12
Milfield Basin, Northumberland	1999	4	1. Mesolithic, 2. late Mesolithic-early Neolithic transition, 3. late Neolithic-early Bronze Age, 4. unclassified	Waddington 1999, 57-58, table 4.8

Table 1. Selected extensive field surveys, indicating the varied approach towards assigning surface derived lithics into broad technological, typological and period groupings.

No.	cal. BC	Data quality & period filters ¹	Radiocarbon dated and excavated assemblages	Technology and typology ²	Retouched forms	Patina ³
1	—	?PREH	—	Irregular and angular flakes or chunks. This group includes material that is struck, but may not be humanly worked: flakes without diagnostic features; natural pebbles and 'liming flints' (irregular chunks, lumps and flakes, imported into the area from Wiltshire)	None	1-3
2	10,000-700	PREH	—	Chronologically unclassified material, but definitely flaked. Waste dominated, with chunks, cores and core-nodules. More rarely retouched forms, such as scrapers	Scrapers, miscellaneous retouched flakes/blades	1-3
3	10,000-4000	ME	—	Dominated by waste; flakes, some cores and core fragments with some retouched forms, such as particular scrapers. Note, no diagnostic types, but given the degree of patination this group may be a residual element of the early Mesolithic. Other data filters: 4. EM; 5. LM	Scrapers, miscellaneous retouched flakes/blades	1-3
4	10,000-6500	EM	Aveline's Hole, Burrington Combe, Burrington: human ulna: GrA-22421, 8890±45 BP; 2 Sigma - 8225 to 7840 cal. BC (Jacobi 2005; Schulting 2005)	Diagnostic waste, with broad flake/blade scars on cores, microliths, typically 'Broad blade'. Common, end and end and side scrapers on flakes. Burins, microburins and miscellaneous retouched flakes. Other data filters: 3. ME	Obliquely blunted points (large), non-geometric forms, burins, microburins, end and end and side scrapers	3-2
5	6500-4000	LM	Hawkcombe Head, Porlock Common, Porlock, Trench 14, hearth: oak, hazel and hawthorn charcoal: GU-11979, 7420±35 BP; 2 Sigma - 6390 to 6230 cal. BC (Gardiner in Hosfield 2005)	Diagnostic waste, with narrow flakes/blades or bladelet scars on cores, microliths typically 'Narrow blade', small and thin non-geometric and geometric types. Small microburins (few). Other data filters: 6. LM/EN	Obliquely blunted points (small), crescents, scalenes, most geometric, small microburins, small round scrapers	0-2

Table 2. Lithics groupings from a study of lithic scatters across central Somerset (after Bond 2006, table 3.25). A total of fifteen overlapping data quality and period filters are presented.¹ PREH = Prehistoric. ME = Mesolithic. EM = Early Mesolithic. LM = Late Mesolithic. EN = Early Neolithic. MN = Middle Neolithic. LN = Late Neolithic.

BK = Beaker. EB = Early Bronze Age. MB = Middle Bronze Age. LB = Late Bronze Age. MOD = Post Medieval/Modern. ² Typo-technologically similar dated lithic assemblages from region, ordered thus: site/location: context; radiocarbon sample material/associated pottery: laboratory number; date BP; calibrated date using OxCal. 3.10 (Bronk Ramsey 2005) and the calibration curve INTERCAL 04.14 (Reimier et al. 2004). See Bond (2006, chapters 5 and 6, DVD, ii. 3, table 3.26) for references. In this column, in the data quality and period filters, at the end of each statement a grouping abbreviations with number are included, for example, under ME, the grouping 4. EM and 5. LM is provided. This indicates that this ME grouping may or may not be partially contemporary with the preceding and succeeding lithic groupings or data filter. ³ 0 = none, 1 = Light. 2 = Medium. 3 = Heavy.

No.	cal. BC	Data quality & period filters ¹	Radiocarbon dated and excavated assemblages	Technology and typology ²	Retouched forms	Patina ³
6	6500-2900	LM/EN	Birdcombe Court, Wraxal, Trench D: oak charcoal: Beta-147105, 4700±50 BP; 2 Sigma - 3630 to 3370 cal. BC (Gardiner in Hosfield 2005)	Mostly not diagnostic; cores, flakes, narrow flakes, blades. Also some scrapers on flakes, other miscellaneous retouched flakes. Other data filters: 5. LM; 7. EN	Scrapers, miscellaneous retouched flakes/blades	0-1
7	4000-2900	EN	Dendrochronology dates = 3838 BC, Post Track; 3806-07 BC, Sweet Track (see Hillam <i>et al.</i> 1990). Many radiocarbon dates: e.g. oak charcoal, upright and carinated plain bowl assemblage: Beta-147106, 5420±60 BP; 2 Sigma - 4370 to 4065 cal. BC (Coles & Dobson 1989)	Group typically earlier Neolithic with typologically diagnostic retouched forms: leaf-shaped arrowheads, chipped and polished axes, as small and simples scrapers, such as the short scraper. Classic waste, includes narrow flake, blade-like flakes and some blades; evidence for core preparation and rejuvenation (for example, core tablets and core rejuvenation flakes). Other data filters: 6. LM/EN; 7. EN	Leaf-shaped arrowheads, chipped and polished axes, short scrapers	0-1
8	2900-2500	EN/MN	South Cadbury Castle, South Cadbury, Pit P154, Site D: burnt hazelnut shells, with 'Windmill Hill type' plain bowl; I-5972, 4705±115 BP; 2 Sigma - 3700 to 3105 cal. BC (Alcock 1969, 1972)	This grouping is less distinctive, with few retouched forms and waste dominating: cores, irregular waste, technologically narrow flake based. Other data filters: 7. EN; 9. MN/LN	Scrapers, miscellaneous retouched flakes/blades	0-1
9	2900, 2500-2000	MN/LM	Bell B Track, Westhay, Trench BIII: ash transverse: BM-384, 3975±92 BP; 2 Sigma - 2865 to 2200 cal. BC (Coles & Dobson 1989)	Lithics within this group are less diagnostic, but flakes do tend to be broad. Flakes are more squat and broad in shape, with little sign of core preparation. Blades are few. Waste dominates, with few retouched forms. Other data filters: 8. EN/MN; 10. LN	Scrapers, miscellaneous retouched flakes/blades	0
10	2500-2000	LN	Abbey Quarry, Doultong, Pit 702: cattle rib, with Grooved Ware: Wk-1159, 3980±59 BP; 2 Sigma - 2835 to 2290 cal. BC (Hollinrake and Hollinrake 2002)	Group typically includes later Neolithic retouched forms; e.g. <i>Petit tranchet</i> arrowhead, chisel arrowhead and large scrapers (e.g. horse shoe scraper). Flakes are few, but tend to be large, hard hammer in type Technological shift from narrow to broad flake production, with a corresponding reduced emphasis on core preparation and maintenance. Other data filters: 9. MN/LN; 11. BK; 12. LN/EB; 13. EB/MB	<i>Petit tranchet</i> arrowheads, chisel arrowheads and large scrapers (for example, the horse shoe scraper)	0

Table 2 continued.

11	2500-1800	BK	Charterhouse Warren Farm Swallet, Charterhouse, Horizon 4: aurochs skull, with Beaker pottery: OxA-1561, 3870±60 BP; 2 Sigma - 2490 to 2140 cal. BC (Levitan <i>et al.</i> 1988; Smart and Levitan 1989)	This group is dominated by diagnostic retouched forms, including thumbnail scrapers and barbed and tanged arrowheads. Scale flaking is more evident on other forms of scraper, for example semi-circular scrapers and plano-convex knives. Flakes, overlap in type with adjacent groups: broad and squat in shape, with limited platform preparation. Other data filters: 9. MN/LN; 10. LN; 12. LN/EB; 13. EB/MB	Thumbnail scrapers, other scale-flaked scrapers, plano-convex knives, sickle knives, daggers and all types of barbed and tanged arrowheads	0
12	2400-1500	LN/EB	Gorse Bigbury, Cheddar, henge Ditch fill (lower and hearth): charcoal, with Beaker pottery: BM-1087, 3602±71 BP; 2 Sigma - 2145 to 1750 cal. BC (ApSimon <i>et al.</i> 1976)	Waste would overlap with adjacent groups: broad and squat in shape, with limited platform preparation; some large flakes. Retouched forms on large flake blanks are present, for example, circular and sub-circular scraper forms. Other data filters: 9. MN/LN; 10. LN; 11. BK; 13. EB/MB	Large miscellaneous scrapers, miscellaneous large retouched flakes	0
13	2000-900	EB/MB	Williton and Watchet Pipeline, Watchet, Area 1, Pit 1: charcoal, with Trevisker Ware: Wk-11901, 3124±46 BP; 1500 to 1290 cal. BC (Hollinrake and Hollinrake 2002)	Waste tends to be large or on irregular flakes, with hard hammer and low bulbar angle. Few pieces provide retouched edges, informal, coarse and short in execution. Miscellaneous retouched forms, scrapers, flakes are common. Within the study area examples are few from both excavated and ploughsoil assemblages. Other data filters: 12. LN/EB; 14. MB/LB	Few retouched forms; miscellaneous retouched flakes, coarse scrapers	0
14	1000, 900-700	MB/LB	Combe Hay, Bath, Occupation 4a, Pit IVA: charcoal, with post-Deverel-Rimbury pottery: Birm-445, 2650±120 BP; 2 Sigma - 1115 to 440 cal. BC (Rahtz 1980)	Waste tends to be large or on irregular flakes, with hard hammer and low bulbar angle. Raw material can be re-used, including thermal fractured flint. Expedient working demonstrated - poor technical skills, on ad-hoc flake blanks. Few pieces provide retouched edges, informal, coarse and short in execution. Miscellaneous retouched forms, scrapers, flakes are common. Within the study area examples are few from both excavated and ploughsoil assemblages. Other data filters: 13. EB/MB	Few retouched forms; miscellaneous retouched flakes	0
15	1600-1800 (AD)	MOD		This group consists of one class of artefact, without waste: the gun flints.	Gun flints	0

Table 2 continued.

<i>Study area</i>	<i>Technology</i>	<i>Typology</i>	<i>Metric analysis</i>	<i>Comparison to excavated assemblages</i>	<i>Number of lithics</i>
Berkshire Downs	X	X	X	X	2266
East Berkshire	X	X	X	X	6533
North Stoke, Oxfordshire	X	X	X	X	10158
East Hampshire	X	X	X	X	2682
Stonehenge Environs	X	X	-	X	102175
Maiden Castle field survey (sample areas 1-16)	X	X	X	X	8384
Wissey embayment, Norfolk	X	X	-	X	15512
Milfield Basin, Northumberland	X	X	-	X	693

Table 3. Selected extensive field surveys, indicating the varied approach towards lithic scatter analysis and the attributes analysed (the same surveys are listed as in Table 1). X = attribute studied; - = attribute not studied.

Lithic scatter data have been analysed, but failed to interrogate the complexity and significance of the evidence. It is common to plot the tools across the landscape, but the waste is assumed to be un-datable, even though technological traits observed within this component may relate to specific types of industry and period. Waste is mostly the largest part of the assemblage, but is mostly ignored in tracing changing behaviour across the landscape. Technological compositional and the relative dating of proportions of a lithic scatter are rarely disseminated as mapped distribution. Why not? Lithic analysis needs to be more interpretative. The uncertainty of the surface material needs to be embraced and interpretations need to be bolder. Lithic scatters can be analysed in terms of broad periods and landscape-wide changes.

The Shapwick Project: a case study in landscape interpretation:

In the case of the Shapwick Project, Somerset (Figure 2) a more interpretative approach has been adopted. This is one way of analysing and mapping the composition of lithic scatters recovered by systematic surface collection (Bond 2007, 2011a & 2011b). Following Healy (1991) and others (see Table 1), the 2359 lithics recovered by line walking across the parish of Shapwick over ten years was assigned into broad period and data quality groupings. These groupings may relate to

discrete period material or lithics that may straddle other more or less chronologically diagnostic materials (Table 2). The relative and broad dating of lithics was confirmed by comparison with excavated and radiocarbon dated regional assemblages (Table 2). Lithics were attributed to a broad group, part of an interpretative act once artefacts were considered in terms of their condition, technology, typology and shape/size (metric attributes). This provided an interpretative table where lithic groupings are assigned (Table 4). Instead of mapping lithic technology and typologies across the landscape (top, Figure 2), different period groupings were mapped (bottom, Figure 2).

This is an interpretative act, but enables the changing pattern of activities across the parish to be depicted. Trackways, such as the wooden Sweet and Post Tracks, and other earlier Neolithic tracks can be mapped against this total inhabited landscape. This does not mean that all lithics mapped in that grouping would have been deposited at the same time as the construction of any one track. It does, however, indicate a possible reading of emerging earlier Neolithic landscape, lasting c.3838 BC (the dendrochronology date for the Post Track; Hillam *et al.* 1990) to c.3000/2900, with the later Neolithic ending, at c.2500/2200 cal. BC (Whittle 1999, 60). It is acknowledged

	<i>Cores</i>	<i>Irregular Waste</i>	<i>Core Trimming Flakes</i>	<i>Flakes</i>	<i>Blades</i>	<i>Retouched forms</i>	<i>Other</i>	<i>Totals</i>
?Prehistoric	– 0.0%	104 28.5%	2 0.54%	166 45.6%	– 0.0%	– 0.0%	92 25.2%	364
Prehistoric	1 0.5%	56 28.4%	2 1.0%	116 58.8%	– 0.0%	7 3.5%	15 7.6%	197
Mesolithic	– 0.0%	2 16.6%	– 0.0%	3 25%	– 0.0%	7 58.3%	– 0.0%	12
Early Mesolithic	5 1.0%	27 5.8%	106 22.9%	299 64.8	4 0.8%	20 4.3%	– 0.0%	461
Later Mesolithic	4 8.5%	– 0.0%	10 21.2%	8 17.0%	3 6.3%	22 46.8%	– 0.0%	47
Later Meso. &/or Earlier Neo.	4 5.4%	4 5.4%	18 24.6%	34 46.5%	– 0.0%	13 14.8%	– 0.0%	73
Earlier Neolithic	47 4.4%	80 7.5%	321 30.3%	465 43.8%	10 0.9%	135 12.7%	2 0.1%	1060
Earlier Neo. &/or Middle Neo.	2 1.9%	4 3.9%	28 27.7%	53 52.4%	– 0.0%	13 12.8%	1 0.9%	101
Middle Neo. &/or Later Neo.	– 0.0%	2 13.3%	4 26.6%	6 40.0%	– 0.0%	3 20.0%	– 0.0%	15
Later Neolithic	– 0.0%	– 0.0%	– 0.0%	– 0.0%	– 0.0%	8 100.0%	– 0.0%	8
Later Neo. or Early Bronze Age	– 0.0%	– 0.0%	– 0.0%	1 20.0%	– 0.0%	4 80.0%	– 0.0%	5
Beaker	– 0.0%	– 0.0%	– 0.0%	– 0.0%	– 0.0%	13 100.0%	– 0.0%	13
Modern	– 0.0%	– 0.0%	– 0.0%	– 0.0%	– 0.0%	3 100/0%	– 0.0%	3
Totals	63 2.6%	279 11.8%	491 20.8%	1151 48.7%	17 0.7%	248 10.5%	110 4.6%	2359

Table 4. Quantification of the systematic field survey derived lithics: The Shapwick Project, Somerset (Adapted after Bond 2007, fig. 15.3).

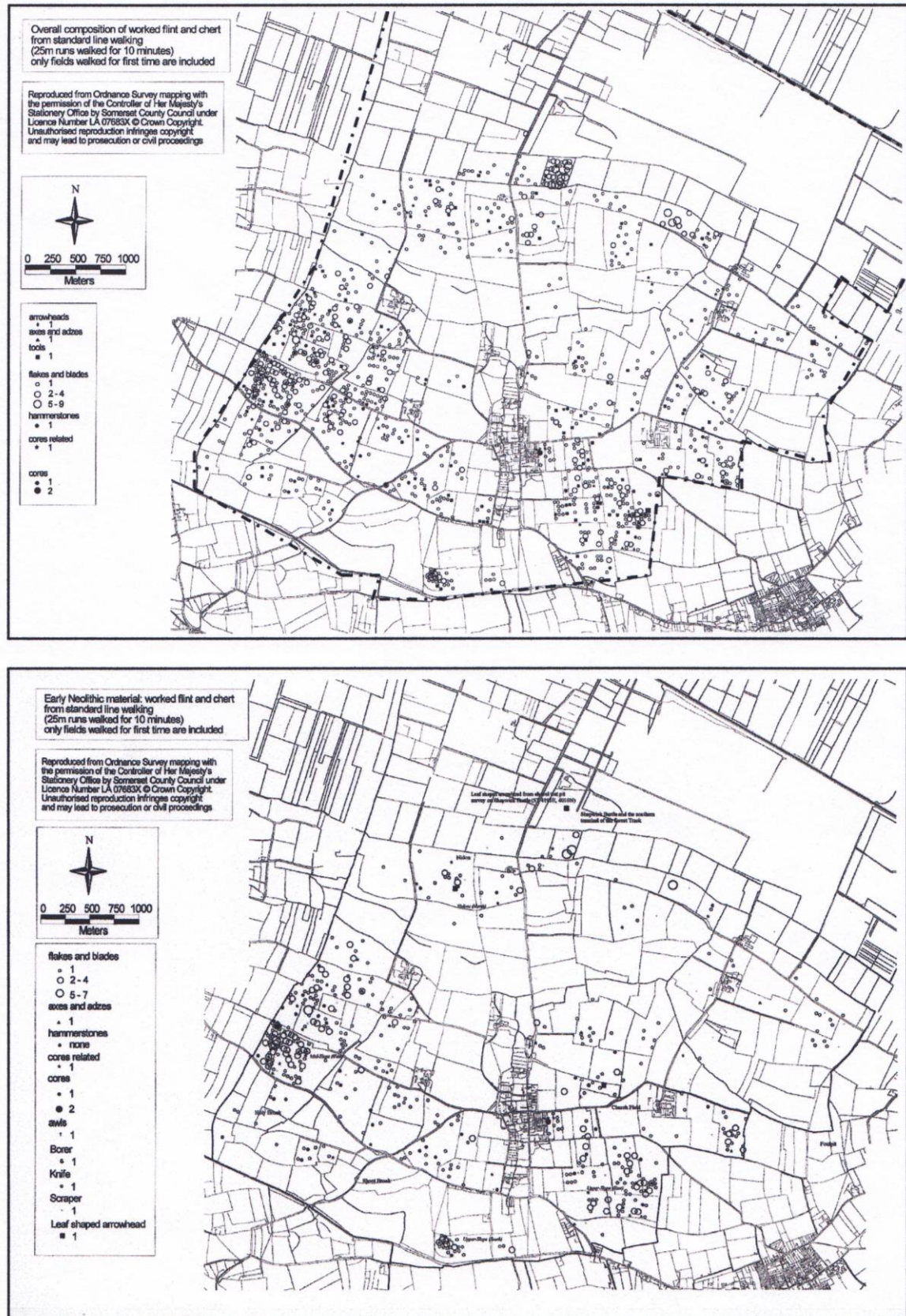


Figure 2. Location, Top: Lithic scatters mapped across the Parish of Shapwick showing technological composition. Note dot-dashed line is the parish boundary; Bottom: Lithic scatters mapped across the Parish of Shapwick showing earlier Neolithic material grouped, only. (Ordnance Survey data Licence Number LA07683X).

this is a coarse chronological resolution, but it serves to map the long-term ebb and flow of human action across the landscape. The narrative combines the lithic scatters, excavated and radiocarbon dated lithic and pottery assemblages, into one narrative (e.g. Coles *et al.* 1973; see Table 3). It respects the currency of long-lived earlier Neolithic material culture, whilst giving a possible interpretation. This analysis arguably maps for the first time the communities who built the Sweet Track (Bond 2006, 2011a & 2011b). Unifying lithic analysis with landscape in this way is central to communicating the significance of lithic scatters to a wider archaeological audience. Without this interpretative leap lithic scatters will continue to be undervalued, disconnected to larger questions. This is not because it is difficult material, but different (Whittle 1993, 42; Schofield 1995, 106).

Recent lithic scatter-related discussions have centred on theory (Pollard 1999; Conneller 2005; McFadyen 2008), but methods and lithic analysis are ignored. Lithic scatters have long been viewed as significant for understanding prehistoric landscapes (see Brown & Edmonds 1987). But, the deeper interrogation of lithic data to map period-based landscapes has not been forthcoming. Syntheses have not articulated the quantitative data with social theory (Hind 2004b; McFadyen 2008). A disjuncture is apparent; tabulated data versus text (social theory). Few publications have married this numerical data (lithic quantification) with synthesis at the landscape scale (as mapped). Lithic scatters have rarely been mapped at a landscape scale integrating the time-depth and technological composition of each scatter. This analysis is one contribution to this goal.

MEANING

Why are lithic scatters important and to whom?

It can be argued that there are two key themes for understanding British lithic scatters:

Academic

In textbook prehistory whilst there are references to dots on maps that represent sites,

the interpretation of these along with any interrogation to other site-based or landscape-based evidence is minimal. Lithic industries recovered by field survey are rarely discussed in terms of their total technological composition or the range in date – a contribution to understanding palimpsests. They may be viewed as locales, or socially constructed places (Tilley 1994), but with little or no linkage to the artefacts that are residues of repeated, habitual routines. The diversity and variation in the technological, typological and time-depth of this class of site (and assemblage) has not been articulated with social theory on prehistoric lifeways. This material culture represents a palimpsest of human interaction over generations at one location. It can be regarded as a proxy data for the ebb and flow of a prehistoric population across the landscape; the frequency of visits to a location; change in use and perception of place.

Community

The Portable Antiquity Scheme (PAS), whilst recording metal objects provided by the public has recorded quantities of lithics. In April 2007, a total of 9,550 lithic-related records were known, 5.37% of the Scheme's total (Bond 2010a). These records often relate to individual artefacts or even small assemblages of artefacts recovered by amateurs from ploughed fields. The Scheme at any one time recovers c.5-10% lithics for any one area. This data, taken with records on County-based Historic Environment Records (HER; see Gilman & Newman 2007; English Heritage 2010a) offer a unique insight into the number, density and scale of prehistoric activity in any one region. Both the PAS and HER data sets are variable in data quality, but complementary for mapping lithic scatters; both commonly have a high degree of spatial provenance. This is critical, offering a record that can be revisited by later fieldwork. These records vary in the level of recording typologies and technologies but should be viewed as a 'base-line' record. Both records often are the result of amateurs collecting, often repeatedly over many years. Whilst this type of evidence cannot indicate the precise character of lithic scatters (e.g. numbers of artefacts recovered; date range of a total assemblage), it may be viewed at least as proxy data for the potential

presence of lithic scatters and prehistoric peoples across the English and Welsh landscape. Both PAS and the regional HER data sets offer a medium to map regional and national occurrences of lithic scatters and chance finds helping us to populate the landscape beyond the excavation trench and monuments (see Mossop 2010).

PROTECTION

Why and how should we protect this unique class of site and Heritage Asset?

Within the draft Heritage Protection Reform Bill lithic scatters are deemed as a heritage asset, as ‘sites of human activity without structures’ (DCMS 2008a, 13). They are even considered as potential assets worthy of designation as sites, ‘comprising anything or group of things that evidences previous human activity’ (DCMS 2008b, 2). The new Planning Policy Statement 5 (PPS5; DCLG 2010) and practice guidance (English Heritage 2010b) indicate the total historic environment is to be protected. This is critical. It is now recognised lithic scatters are a heritage asset in their own right! Future policy and protection is highlighted (English Heritage 2010c, 14).

Formal legal protection of lithic scatters in Britain has not been possible under existing legislation; the Ancient Monuments and Archaeological Areas Act 1979 (HMSO 1979) was focused on scheduling structures. Some provision for protection of heritage assets, including lithic scatters associated with scheduled monuments was facilitated by agreement. In this case, the land owner being a party to a civil contract — Section 17 Agreements (HMSO 1979, 1165–1167), agreed to restrict the use of the land in order to protect the buried archaeology. This approach has been extended with land management agreements, the agro-pasture schemes of DEFRA and the Higher Level Stewardship Scheme. A pilot study using Heritage Partnership Agreements to address undesignated heritage assets or multi-period and different type of assets in close proximity to each other was completed (English Heritage 2006, chapter 4). However, despite this research lithic scatters remain unprotected in Britain by planning or conservation legislation.

With the emphasis on understanding the broader context of designated and undesignated heritage assets in PPS5, lithic scatters may become a high priority for conservation/planning practice. Lithic scatters are common, extensive and a key element to understanding the character of any one regional English landscape. With a need for a national audit, to review the nature and knowledge on lithic scatters, primary legislation may not deliver expedient protection. Rather, the civil contract approach between owner, local authority/local planning authority and state may be more flexible, to enable conservation within existing land use regimes.

In Europe the heritage value of surface artefact scatters has continued to grow from research, heritage-curatorial and commercial archaeology (Bintliff *et al.* 2000). Methodologies for recording, sampling and monitoring arable cultivation impact, as well as the heritage value are increasingly recognised (e.g. Bond 2010b; Bond *et al.* 2011; Smit 2011; Rensink *et al.* 2012). In Britain, although local planning archaeologists may refer to the planning policy guidance on lithic scatters (English Heritage 2000), the majority of planning decisions are taken by local planning authorities. Most of these authorities ignore, or are ignorant of this class of site. This practice may well relate to the planning practice division highlighted between local planning authorities (buildings: PPG15) and local authorities (archaeology: PPG16), as noted elsewhere (DCMS 2007). Meanwhile, despite this cultural resource management context, lithic scatters appear largely in British academia to be linked to debates on understanding the social prehistory of place, with little practical implications (see Bayer & Cummings 2009; Bayer 2010).

Heritage Protection at a landscape-scale and lithic scatters raises two opportunities:

Increased Community and Partnership Management

Protection, through monitoring, allowing partial destruction, as a research tool to enhance understanding of specific lithic

scatters may be one way forward. This fits a change to 'constructive conservation' principles, rather than statistic preservation (English Heritage 2007). Spatial boundaries and the composition of scatters in the ploughsoil could be guided by land stewardship, but actively monitored by community groups in partnership with a land owner. In this setting the value of local and regional systematic surveys is highly important. This archive and data may be deemed a benchmark, a point of reference for existing and understood lithic scatters/quality field walked collections held in regional or local museums. The long tradition of amateur quality fieldwalked collection, together with professional field survey and excavation (either by research or commercial projects), can be deployed as a knowledge base in order to understand existing heritage asset.

A Broader Spectrum of Protection Measures

Conservation under existing regimes, such as defining and scheduling monuments under the 1979 Act (HMSO 1979) is one way of protection (statistic). It does not necessarily enable understanding of the heritage asset. Likewise, management agreements and agro-pastoral schemes that set aside land may only be one approach as part of a broader spectrum of recording and monitoring agricultural impacts. Such an approach may be managed by heritage partnership agreement or new land use classes, subject to designation, working alongside interested, responsible and skilled community groups.

Lithic scatters are a class of heritage asset that require monitoring, proactive engagement, rather than inflexible management regimes. Lithic scatters should be viewed in this new integrated conservation-planning model as integral to understanding the time-depth of the Historic Environment. These types of asset are central to understanding the spatial integrity of any one prehistoric landscape.

CONCLUSIONS

Looking forward four themes need to be pursued:

- *Valuing and Evangelising:* Lithic scatters, their potential and contribution needs to be fully recognised,
- *Realising their Potential in the Field and Assemblage:* Change in methods of analysis and dissemination may help with engaging an agenda on landscape and settlement pattern change, now well established in British prehistory (Bradley 2007; Pollard 2008). A move towards a more interpretative framework in reporting and mapping lithic scatters embracing the ambiguity of the material is important,
- *Opportunities and National Picture:* Increased public engagement and the Heritage Protection agenda raise the importance of lithic scatters as a highly significant Heritage Asset. Whether lithic scatters are viewed as a potentially designated asset or without designation, they are now acknowledged as central to unlocking the long-term patterning in settlement across the regional prehistoric landscapes of the British Isles,
- *Lithics and Lithic Scatters:* Beyond just stone technology, more a landscape and person-centred approach that embraces interpretative frameworks for lithic scatter analysis should be pursued (e.g. Bond 2006 & 2009). Lithic scatters are often interpreted as residues of generations of peoples' action in one place; palimpsests, intentionally selected and re-visited by human agents. Analysis and interpretation needs to reflect this social construction at the landscape-scale. Archaeological theory and method need to come together, to disseminate the meaning of these unique places to a wider audience.

If lithic specialists do not take this agenda forward over the next thirty years Professor Richard Bradley's comment may be realised, '...lithic analysis must think BIG: landscapes rather than individual living-places, societies rather than single knappers...; in short, the *mainstream* of prehistory rather than a by-passable backwater...' (Bradley in Healy 1986, 14; my emphasis).

Now is the time to take Bradley's foresight seriously and secure a *mainstream* agenda for lithic scatters and, indeed, lithic analysis! Without this, lithic scatters may continue to be ignored, at the expense of a better understanding of our prehistoric landscapes.

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