The Early Prehistory of Argyll

The archaeological record, research themes and future priorities for the Palaeolithic and Mesolithic periods

Steven Mithen
University of Reading, UK s.j.mithen@reading.ac.uk

DRAFT: NEITHER FOR CIRCULATION NOR CITATION

2 October 2015, for the Argyll Archaeology Symposium

SUMMARY

Having reflected on the nature of the early prehistoric archaeological record, research themes are explored relating to five temporal (and overlapping) phases of activity:

1. **Exploration and pioneering settlement**, up to 9400 cal BP, when issues about responses to climate change at the Pleistocene/Holocene transition and the human drive to explore are prominent.

2. **Residential settlement**, 9400-7800 cal BP, for which the focus is on Mesolithic mobility and foraging patterns.

3. **Population decline**, 7800-7000 cal BP, when exploring the potential impact of the abrupt 8.2 Ka cold event and considering the differential survival and recovery of Mesolithic sites are important.

4. **Re-colonisation**, 7000-5800 cal BP, for which there is a focus on the Oronsay middens and the extent to which there was ‘sedentism’ on this tiny island or a pattern of regional mobility.

5. **Transition to the Neolithic**, c. 6200-5200 cal BP, when the evidence suggests some degree of Mesolithic-Neolithic overlap and site continuity.

Having reviewed these five temporal phases and their research themes, five priorities for future research are identified:

1. **Exploring the Late Glacial**: by excavations at Rubha Port an t-Seilich, Isle of Islay.

2. **Exploring the Mesolithic-Neolithic transition**: by targeted excavations and dating of Chambered cairns and analysis of artefact assemblages.

3. **Refining the early prehistoric chronology**: by a programme of radiocarbon dating and Bayesian analysis.

4. **Heritage management of early prehistoric sites**.

5. **Writing the history of archaeology in Argyll**.
1. INTRODUCTION

The borders of Argyll have been demarcated by political events and boundary commissions of various types extending from medieval times until at least 1891 when the Small Isles were transferred out of Argyll into Inverness-shire. As such and with regard to the nature of prehistoric settlement, Argyll is an arbitrary region of western Scotland: its spatial extent has no necessary correspondence to the cultural boundaries or the settlement range of early prehistoric communities – the mobile hunter-gatherers of the Palaeolithic and Mesolithic periods. These are likely to have extended throughout the west coast of Scotland and beyond. Nevertheless, as illustrated in Figure 1, the majority (75%, 24/32) of radiocarbon dated Mesolithic sites in western Scotland fall into the modern-day boundaries of Argyll, which also contains the only in situ Palaeolithic site in Scotland, that at Rubha Port an t-Seilich, Isle of Islay (Mithen et al. 2015). This concentration of Mesolithic sites in Argyll is likely to be a consequence of both the attractiveness of this region of Scotland for Mesolithic foragers – abundant and diverse terrestrial and coastal resources – and the quantity of fieldwork undertaken in this region.

Figure 1: Radiocarbon dated Mesolithic sites in western Scotland
1.1 Brief historical summary of research

There has been a long history of antiquarian and archaeological research within Argyll, a history that remains to be fully documented and understood. While some of this research was explicitly related to what we now refer to as the Mesolithic, notably the shell middens on Oronsay, other research explored prehistoric archaeology in general, discovering Mesolithic, and potentially Palaeolithic, remains during its course.

The best known of the antiquarian studies are those undertaken by William Galloway and Symington Grieve on Oronsay between 1881-84, and then by A. Henderson Bishop and Mungo Buchanan on the same island between 1910-1913, their work being summarised by Mellars (1987, 117-32). The end of the 19th century also saw the discovery of midden deposits in caves and rockshelters at Oban by Anderson, notably MacArthur Cave in 1894 and Druimvargie rockshelter in 1897 (Saville 2004a). These and other antiquarians also worked elsewhere in Argyll, generating important artefactual collections that are likely to contain Mesolithic material. In 1903, for instance, Erskine Beveridge (1903) undertook the first systematic description of standing monuments and artefact scatters on Tiree. Henderson Bishop made several visits to Tiree between 1905 and 1913, undertaking the excavation of a hut structure at Balevullin in 1912, this being managed by Mungo Buchanan and later published by Mackie (1964). Ludovic Mann made visits to Coll and Tiree every July from 1904-1907, and in 1912 to Tiree alone. He undertook excavations at Cornaig in 1905 (Mann 1906, and see MacKie 1964 for comments) and made subsequent visits to this site in 1907, as well as working at Balevullin alongside Bishop (MacKie 1964). Finds that we would now designate as Mesolithic were also being made on the mainland, such as at Campbeltown where Gray (1894) attributed flints below a Bronze Age urn to be ‘Palaeolithic’.

With regard to antiquarian/archaeological studies between the wars, we should note John de Vere Loder’s 1935 book Colonsay & Oronsay in the Isle of Argyll. This made a concise description and insightful interpretation of the Oronsay shell middens while also collating evidence from Colonsay that could potentially be Azilian – the term being used prior to the adoption of Mesolithic. Further evidence was accumulating from throughout Argyll, including collections of Mesolithic artefacts from Campbeltown (Saville 2004a) and on Tiree. The latter were collected by George Holleyman, an RAF Corporal stationed on the island. He collected metal, pottery and chipped stone artefacts from dune areas at Balevullin and Balephuil, which are now curated in An Iodhlann – the island’s museum – and include material likely to be Mesolithic in date.
These discoveries of the late 19th and early 20th century were drawn upon in the first synthesis of the Stone Age in Scotland, Lacaille’s 1954 book of that name which was, however, primarily focussed on the Mesolithic. While applauding Lacaille’s volume as a useful compendium for all of the Mesolithic evidence up until the 1950s, Saville (2004a) notes several shortcomings of Lacaille’s treatment of the Mesolithic. These include his view that the earliest Mesolithic material in Scotland was a version of the Irish so-called Larnian material and the manner in which it perpetuated the idea that late Mesolithic traditions persisted in the Neolithic and Bronze Age periods – although that idea remains of interest.

Post-Lacaille (1954), Mesolithic evidence continued to accumulate within Argyll via the work of both professional archaeologists and amateur collectors, the latter making an especially important contribution, as they continue to do so today. On Islay, for instance, Frank Newall collected Mesolithic artefacts from several locations in the late 1950s and early ‘60s, reporting these in Discovery & Excavation Scotland (e.g. Newall 1959, 1962). John Crawford began fieldwork on Coll in 1975 and visited the island nearly every year for a quarter of a century, collecting c. 12,000 artefacts, including some 4000 pieces of chipped stone, primarily from ‘sandhill’ sites on the northwest coast of the island. Crawford donated his collection to the National Museum of Scotland. A selection of his work was published in 1997, with Finlayson commenting on the chipped stone and any Mesolithic affinities (Crawford 1997).

In more recent times, Argyll has benefitted from a relatively substantial amount of Mesolithic research compared to other regions of Scotland: the campaign of excavations by Tom Affleck on Arran (e.g. Affleck et al. 1988), John Mercer (e.g. 1968, 1970a,b, 1971, 1972, 1974, 1980) on Jura, the excavations by Paul Mellars (1987) of the Oronsay middens, McCullagh’s (1989) excavation of Newton, Islay, Clive Bonsall’s work in Ulva Cave (Bonsall et al. 1991, 1992), Mull and Tony Pollard’s excavation at Risga (Pollard 2000; Pollard et al. 1996). Although formally outside of Argyll, we should also note Caroline Wickham-Jones’s (1990) excavations at Kinloch Fields, Rum, and her work with colleagues in the Inner Sound forming the First Settlers Project (Hardy & Wickham-Jones 2009). Between 1988-1998 The Southern Hebrides Mesolithic Project (SHMP) examined Mesolithic settlement on Islay and Colonsay (Mithen 2000). Mesolithic sites have also been found in the course of projects exploring later prehistoric and historic settlement, notable at Kilellan Farm, Islay (Ritchie 2005), while a shell midden most likely contemporary with those on Oronsay was discovered at Port Lobh, Colonsay in 2007 (http://canmore.org.uk/site/295397/colonsay-port-lobh). Between 2014 and 2014, Mithen & Wicks undertook survey for and excavations of Mesolithic sites on Coll.
(Mithen et al. 2007a; Mithen & Wicks 2008), Tiree (Mithen et al. 2007b) and NW Mull (Mithen & Wicks 2010c). In 2010 they began further work on Islay (Mithen & Wicks 2010a,b; 2011a,b; Wicks et al. 2014), which remains on-going today. The public engagement associated with this recent fieldwork on Islay, Colonsay, Coll and Mull has resulted in a network of local collectors with a significant increase in the number of potential Mesolithic sites located within this region.

Such archaeological work has often been closely involved with palaeoenvironmental studies, reconstructing changes in sea level and vegetation history (e.g. Dawson & Dawson 2000; Edwards 2000; Sugden & Edwards 2000). Such studies have provided vital evidence for the chronology of human settlement and its impact on the landscape (Tipping 2012), in some instances where archaeological evidence is either scarce, ambiguous or entirely lacking (e.g. Gregory et al. 2005). Laboratory-based studies, such as on the isotopic composition of human and animal bones (Schulting & Richards 2002; Richard & Mellars 1998; Richard et al. 2003), have also made a key contribution to what has become one of the best studied Mesolithic records in Britain.

1.2 The nature of the record

As with ‘Argyll’, the ‘Palaeolithic’ and ‘Mesolithic’ are themselves cultural constructs with no meaning for the early prehistoric hunter-gatherers themselves. Definitions of these periods are relatively straightforward: the Mesolithic starts with an environmental event, the Pleistocene/Holocene transition at 11,650 cal BP, and ends with a cultural event, the appearance of the Neolithic which has been formally dated in Argyll at c. 5800 cal BP (Ashmore 2004). While the Mesolithic is characterised as a period of hunting and gathering, it is likely that various forms of environmental manipulation and potentially management would have been undertaken. The Palaeolithic is simply correlated with the Pleistocene, potentially extending to pre-modern humans, although at present the only existing evidence is restricted to the Late Glacial period.

While definitions are straightforward, identifying sites of the Palaeolithic and Mesolithic is more challenging because the bulk of the surviving evidence – stone artefacts - is not directly informative of either lifestyle or date. Leaving the Palaeolithic aside, Mesolithic sites within Argyll can be defined as those that ‘possess either microlithic technology, one with prepared platform cores, blades and microliths, or an ‘Obanian culture’ with bevelled-ended artefacts associated with bipolar core technology and shell middens’ (Wicks & Mithen 2014, 246). A
range of coarse stone, antler and bone artefacts are also found at Mesolithic sites, as reviewed by Saville (2004b).

The microlithic technology is generally referred to as the narrow blade tradition, a term used to distinguish this from the use of broad blade microliths as found in the Early Mesolithic in England. Broad blade microliths are known within Scotland and are prominent within some assemblages in Argyll, notably at Glenbatrick and Lussa Bay on Jura (Saville 2004b). It has not, however, been possible to establish whether these constitute a chronologically early phase of the Mesolithic as in England. Moreover, narrow blade assemblages in Scotland have now been dated to c. 10,400 from Cramond, in eastern Scotland, with their earliest unambiguous appearance in Argyll at c. 9000 cal BP at sites such as Rubha Port an t-Seilich on Islay and Fiskary on Coll (Mithen et al 2015; Wicks & Mithen, forthcoming). At the other end of the Mesolithic time period, the Obanian was once proposed as a distinct late Mesolithic cultural phase. This is now recognised as a behavioural variant within the Mesolithic, with its supposedly characteristic shell middens, bevel ended artefacts and bipolar technology found throughout this period. Pirie has stressed technological continuity between the Obanian chipped stone tool assemblages as found on Oronsay and the narrow blade assemblages as found on the neighbouring island of Islay (Pirie et al. 2006; in Wicks et al. 2014).

Identifying archaeological sites as Mesolithic on the basis of technology as defined above is unsatisfactory for two principle reasons. First, it does not preclude the possibility that such technology continued into later prehistory, as is known to be the case with bevel-ended artefacts. While the Neolithic and Bronze Age periods are characterised as having farming lifestyles, we should assume that hunting and gathering continued as a supplementary means for securing not only food but a wide range of raw materials, and may have at times have become critical. As such, it is possible that stone technology similar to that used in the Mesolithic might have been adopted, such technology presumably having a high level of functionally efficient design for hunting and gathering activities. If so, narrow blade assemblages cannot necessarily be assumed to Mesolithic when that is defined as the period prior to the appearance of Neolithic culture. At Bolsay on the Isle of Islay, for instance, an extensive scatter of artefacts dominated by narrow blade technology provided a larger number of radiocarbon dates falling after the supposed transition to the Neolithic (c. 5800 cal BP) than those within the Mesolithic period (Mithen, Lake & Finlay 2000).

A second matter for concern is the converse: stone technology without any evident narrow blade, broad blade or Obanian characteristics might have been used in the Mesolithic period.
This is especially the case for localities in which stone without the classic conchoidal fracture of flint and chert might have been selected. Such stone might have required an alternative means of flaking or simply left minimal and ambiguous traces of its fracture patterns, as with quartz. As such artefacts made in the Mesolithic period might be designated to the Palaeolithic, Neolithic and Bronze Age, or simply not recognised as cultural artefacts at all.

In light of these two issues, we can only confidently attribute those sites with radiocarbon dates between 11,650 and 5800 cal BP as being Mesolithic, of which there are 32, distributed as in Figure 1. Three-quarters (24) of those sites are located in Argyll. This is, of course, only a small proportion of the number of probable (i.e. undated) Mesolithic sites that are known to exist, as defined by the artefact criteria specified above. Whether this ‘small proportion’ is closer to 50%, 20%, 5% or even 1% is unknown at present.

Within archaeology the term ‘site’ conventionally refers to a specific locality that had a continuous period of activity within a designated period. This is unsatisfactory when dealing with mobile hunter-gatherers because any one site might represent a palimpsest of debris arising from multiple short-term visits spread over a long period of time. As such the entire chronological range between the first and final visit is of limited value, because the hunter-gatherers might have been absent for the majority of that time. A more effective measure is to use the radiocarbon dates to assess the minimum number of activity (occupation) events required to have created that set of radiocarbon dates by clustering the statistical consistent dates as minimally indicative of a single event.

As an example consider the site of Fiskary Bay on the Isle of Coll (Mithen et al. 2007a; Wicks & Mithen, forthcoming). This has six AMS radiocarbon dates derived from single fragments of hazelnut shell excavated from within a palimpsest of microlithic artefacts, fish bones and charred plant remains. The dates range from 8200 ± 50 BP (c. 9110 cal BP) to 7460 ± 50 BP (c. 8300 cal BP), which from a site perspective provides an occupation period of c. 800 years. The six dates, however, fall into three pairs of statistically consistent dates, indicating three discrete activity events – each of which could have lasted for no more than a few hours. The earliest is centred on 9070 cal BP, a second at 8520 cal BP and a third at 8280 cal BP. In this regard, rather than referring to Fiskary Bay as a single Mesolithic site, it is more accurate to refer to it as having a minimum of three separate Mesolithic activity events.

A further important factor regarding the nature of the early prehistoric record is that the distribution of sites, and hence dated activity events, is inevitably strongly influenced by
patterns of recent human activity that may be quite different to the distribution of Palaeolithic and Mesolithic activity. Much of Argyll is covered by peat and blown sand accumulated after the Mesolithic period. Only where this has either not accumulated or been cleared (by human means or erosion), does the possibility exist of finding early prehistoric sites. As such, their distribution is likely to be biased to areas of farming activity, urban development and so forth. As the recent discovery of Mesolithic artefacts in the Cairngorms have demonstrated (Warren, pers comm), Mesolithic sites might exist in areas that are unlikely to be covered by intensive archaeological survey or where chance finds during development might occur.

In summary, the Mesolithic record is dominated by scatters of chipped stone artefacts derived from a range of manufacturing techniques including platform-core and bipolar technology. Designating these as necessarily Mesolithic in a chronological sense is problematic because such technology might continue in to later prehistory, while other Mesolithic sites (in the chronological sense) might be neglected because of an absence of evidence for such manufacturing techniques. The distribution of sites will be biased my numerous factors, including the extent and nature of farming activity, urban development and archaeological research.

2. MAJOR RESEARCH THEMES

2.1 The chronological pattern of human activity

Establishing the chronology of human activity and an indication of population levels, in either relative or absolute terms, are key research questions for any period of archaeological study. For the Mesolithic of western Scotland, Wicks & Mithen (2014) undertook this task by adopting the activity event approach for all 32 radiocarbon dated Mesolithic sites in western Scotland, as available at the time of study. These had provided 227 radiocarbon dates. When those dates were screened to remove any that appeared unreliable or fell outside the defined chronological range of the Mesolithic the sample was reduced to 137, 69% of which are from Argyll. The activity event analysis identified 74 Mesolithic activity events, occurring at the 32 sites. The majority of sites were characterised by a single activity event, often because there was no more than a single reliable radiocarbon date. Recent fieldwork and dating programmes allows a further 26 radiocarbon dates to be added to the sample used by Wicks & Mithen (2014). Twenty-three of these dates came from Creit Dubh (Isle of Mull, Wicks & Mithen, forthcoming) and three from Rubha Port an t-Seilich (Isle of Islay, Mithen et
al. 2015), providing an additional four activity events (three and one at the sites respectively). One further activity event located at Rubha Port an t-Seilich can be added. This is represented by a small collection of chipped stone artefacts with technological and typological characteristics of the Late Glacial rather than Mesolithic and dated by association with tephras to c. 12,000 BP (Mithen et al. 2015).

The chronological distribution of those 78 activity events by 400-year time steps throughout the Mesolithic period is presented in Figure 2. More than three quarters (77%, n = 16) of these events were located within Argyll. The first activity event is dated to c. 12,000 at Rubha Port an t-Seilich, and hence formally placed within the Late Glacial and Palaeolithic period. There is no more evidence of activity within either Argyll or western Scotland in general until c. 10,230 cal BP at Creit Dubh on the Isle of Mull. There are no further documented activity events for c. 800 years, but as from c. 9400 cal BP there is a gradual and then a steep increase in their number. They reach a peak in the time-period between 8600-8200 BP with 25 activity events, located between Northton on the Isle of Lewis in the north and Rubha Port an t-Seilich on the Isle of Islay in the south. This is followed by a dramatic decline in the number of activity events, until there are only three activity events in the time period 7800-7400 cal BP, located at Bolsay and Rockside, both on the Isle of Islay, and at McArthurs Cave near Oban. The number of activity events begins to increase again after 7000 cal BP, reaching 10 in the time period 6200-5800 cal BP. Their location is heavily concentrated on the tiny island of Oronsay and adjacent islands of Colonsay and Islay, although there is a single event at An Corran on the Isle of Skye. Activity events then decline in number and then cease at the end of the defined Mesolithic time period.
The 18 non-Argyll activity events within this distribution are spread throughout its geographical range, although having a limited chronological presence (a single activity event) after 7000 cal BP. As such, the pattern for Argyll is not significantly different for western Scotland as whole, other than its apparent locus for settlement towards the end of the Mesolithic.

Figure 3 represents the same data using a summed calibrated probability distribution (SCPD). These are increasingly used in archaeology as a proxy for human population levels (Williams 2012). The SCPD for Mesolithic Scotland increases the degree of bimodality of the activity event distribution, making both the rise and fall of human activity/population on either side of 8200 cal BP more intense.
It is not possible to estimate the size of the population directly from the archaeological evidence. Estimates based on ethnographic analogies range from one to nine persons/100Km² (Smith 1992; Gamble 1999). If we take western Scotland to encompass approximately a third of Scotland’s entire landmass of c. 79,000 Km, then the Mesolithic population of western Scotland may have varied between c. 260 and 2370 people.

As indicated in Figure 2, the chronological distribution of Late Glacial and Mesolithic activity can be divided into five temporal phases, each of which pose specific research questions.
2.2 Exploration and pioneer settlement: when, where and how did people arrive in Argyll?

The archaeological record suggests a period of at least 2500 years during which hunter-gatherers were making exploratory visits to what is now Argyll during the Late Glacial and early Holocene. Understanding this critical period of Argyll’s prehistory requires not only analysis of the archaeological data but reconstruction of the palaeoenvironmental context, notably changes in sea level, tidal range and vegetation history.

The earliest dated activity event is that of Rubha Port an t-Seilich, Isle of Islay, represented by a collection of chipped flint artefacts dated by association with tephra indicating c. 12,000 cal BP (Mithen et al. 2015) and hence formally within the Palaeolithic. That date, falling in the Younger Dryas/Greenland Stadial 1 (GS-1), is compatible with the technological and typological characteristics of the stone artefacts, which suggest affinities to the Ahrensburgian culture, which is primarily known from north central Europe. Interestingly, an isolated and un-provenanced artefact find from Tiree has also been categorised as an Ahrensburgian point, as have artefacts from outside of Argyll at Shieldig and Links House on Orkney (Ballin & Saville 2003; Woodward 2008).

Whether or not designation as Ahrensburgian is either correct and/or useful, the Rubha Port an t-Seilich artefacts indicate a Late Glacial activity event, the first in Scotland that is documented and dated in a stratified context with the potential for further excavation. During the GS-1 period, Britain remained attached to continental Europe by the low-lying landscape of Doggerland. One possible scenario is that Late Glacial hunter-gatherers with a maritime adaptation travelled from what is now southern Scandinavia along the northern edge of Doggerland and around the northwest of Scotland to reach Rubha Port an t-Seilich. For that they would have required substantial boats; the umiaks used by recent sea-faring foragers in the polar region providing a feasible analogy (Fair 2005). In this scenario we would envisage the Late Glacial hunter-gatherers exploring the far northwest fringes of their world, presumably during the warmer summer months. Alternative scenarios are of course possible, such as reaching Argyll by travelling overland from either the south or east, or by sea-faring along the west coast of Britain.

While Rubha Port an t-Seilich is the only directly dated late glacial activity event in Argyll, the possibility for earlier events certainly exists. A chipped stone assemblage from Kilmefort Cave has been attributed to the Federmesserguppen culture, which would place it in GI-1c/b of the Late Glacial interstadial, perhaps c. 13,000 BP, but no absolute dates are available.
The Howburn discovery in South Lanarkshire of artefacts with Hamburgian affinities and hence likely dating to c. 14,500 also suggests such exploratory visits to the far northwest had been occurring in the Late Glacial inter-stadial (Ballin et al. 2010). There is no environmental reason why they might not have reached Argyll. Prior to the Late Glacial Inter-stadial, however, the extent of glaciers and ice sheets covering Scotland is likely to preclude the possibility of such exploratory activity.

The possibility of earlier Palaeolithic activity within Argyll cannot be entirely excluded. Fossil and archaeological evidence for pre-modern human activity is known from Pontnewydd Cave in north Wales dating to 230,000 years ago. If Neanderthal-like humans had expanded their range to northern Wales, there seems no reason why they should not have also done to western Scotland. If any such evidence exists it will only survive in cave deposits.

Until excavation has been undertaken at Rubha Port an t-Seilich, it is impossible to know whether the artefacts present represent a single short term visit or are part of a palimpsest showing a longer-term presence in the region – and even with excavation that might remain unclear. My current assumption is that this was a short-term exploratory visit to the region that did not lead to the establishment of a permanent population with the region.

There is an elapse of almost 2000 years prior to the next known activity event in Argyll, or indeed western Scotland in general. This is located at Creit Dubh in NW Mull at c. 10,230 cal BP, represented by two statistically consistent radiocarbon dates both from charred hazelnut shell fragments excavated from adjacent and heavily truncated pits (Wicks & Mithen, forthcoming). It is not possible to associate specific artefacts with this activity event at Creit Dhu, but the assemblage at the site is entirely narrow blade in technology and hence we assume this was in use at Creit Dhub at 10,230 cal BP. This activity event is one of the earliest in Scotland, statistically equivalent to that of Daer 1, but c. 200 years younger than Cramond, near Edinburgh. The route by which the west coast was reached remains entirely unknown: perhaps across the interior of Scotland, by boat around the north or from the south?

The event at Creit Dhub is followed after a further c. 800 years by an event at Kinloch on the Isle of Rum. Both Creit Dhu and Kinloch are notable for having extensive Mesolithic deposits that primarily accumulated several hundred years these first and presumably exploratory visits. Creti Dhub visited again in the time period 9400-9000 cal BP, as were at least four other locations within Argyll: Staosnaig (Isle of Colonsay), Fiskary (Isle of Coll), Rubha Port an t-Seilich (Isle of Islay) and Druimvargie Cave (Oban).
These earliest activity events in Argyll, especially those at Rubha Port an t-Seilich and Creit Dubh raises one of the perennial questions about colonisation: why do people explore? Even more pertinent is why do people make journeys into the unknown to visit small islands that would have involved substantial effort and risk? One answer is that, on the first visit at least, they would not have known that the land sighted on the horizon across the sea was necessarily an island – it may have been the edge of a new landmass. Another answer is that of human curiosity: even since the dispersal of Homo sapiens from Africa around 70,000 years ago, our species appears to have had an unquenchable thirst to explore all corners of the world at the first opportunity, including those presenting hostile conditions.

Whether or not these exploratory visits were undertaken by members of a single population-line and hence resulted in the gradual accumulation of geographical knowledge about the region is, of course, unclear. But as they increased in frequency after 9400 cal BP and led to a resident population within the region, such geographical knowledge – that about the topography, resource availability, climate and weather – would have developed and been passed from generation to generation, no doubt largely by stories and song. The dilemma, of course, was that the environment was in a state of dramatic flux, with rising sea level, changes in tidal range and colonisation followed by succession of flora and fauna. As such the hunter-gatherers were constantly required to revise their knowledge and expectations about the region. Reconstructing the history of such palaeo-environmental change is essential for interpretation of the archaeological remains within this phase of the early prehistoric archaeological record.

2.3 Residential settlement: reconstructing mobility patterns

The period between c. 9400 and 7800 cal BP can be described as that of residential settlement within Argyll and western Scotland in general. Mesolithic communities – or perhaps a single community – were exploiting the whole region, with activity events distributed from Northton on the Isle of Harris in the north to Auchareoch on the Isle of Arran in the south. Although there are only 45 dated activity events within this 600 year period, it seems likely that many of the undated Mesolithic sites would date to this period. It was a period of on-going environmental change, with the likelihood that people were now having an influence on vegetation history through deliberate clearance and intensive harvesting of woodland.
By residential settlement I mean that Mesolithic hunter-gatherers were permanently located within western Scotland; the increase in the number of activity events up to c. 8200 cal BP can be interpreted as an increase in population numbers, although factors relating to preservation and discovery may also be significant. As I have argued elsewhere (Mithen 2015) and illustrate in Figure 4, the archaeological record suggests a mobile settlement pattern based around exploiting specific types of resources at specific location, most likely at specific times of the year – unfortunately seasonality data is especially sparse. Several sites have multiple activity events throughout the period of residential settlement indicating repeated visits to key localities, either as a regular seasonal round or simply responding to particular weather conditions and other contingent factors.

*Figure 4. Schematic diagram for Mesolithic hunting and gathering activities during the residential phase of settlement.*
At Staosnaig, Isle of Colonsay, for instance, there is evidence for intensive processing of hazelnuts and other plant types, suggesting the harvesting of the woodland (Mithen et al. 2001). Colonsay is unlikely to have supported large game and hence visits may have been specifically directed towards the exploitation of the hazel-rich woodland – as the name of the island implies. Likewise, Fiskary on the Isle of Coll can be interpreted as a fishing camp, visited on at least three occasions providing discretely dated activity events, centred on c. 9070, 8520 and 8280 cal BP (Mithen et al. 2007a; Wicks & Mithen, forthcoming). The fish bones from Fiskary indicate inshore fishing, possibly using fishtraps not unlike the cairidh that survives at Fiskary Bay today. The quantities of charred hazelnut shell and wood charcoal at Fiskary suggest that activities other than fishing were also undertaken. Unfortunately, the debris at Fiskay is an unstratified palimpsest and cannot be divided into the three (or more) activity events. As such, although one might assume the same range of activities were undertaken at Fiskary during each visit, we cannot exclude the possibility that one visit involved fishing, another involved hazelnut collecting, and a third might have involved neither or both.

Rubha-Port an t-Seilich on the Isle of Islay provides evidence for another form of activity: big game hunting (Mithen & Wicks 2010a, 2011b; Mithen et al. 2015). Although heavily fragmented, the faunal remains include those from red deer, roe deer and wild boar, as well as from fish and birds. Rubha Port an t-Seilich is one of only two non-shell midden sites where faunal remains have survived, the other being the much later dated Storakaig, also on Islay. It seems likely, however, that other microlithic-chipped stone scatters on the larger islands, such as Bolsay (Isle of Islay, Mithen, Lake & Finlay 2000), Kinloch (Isle of Rum, Wickham Jones 1990) and Creit Dubh (Isle of Mull, Wicks & Mithen 2010c, forthcoming) were also related to large game hunting.

One further specialised activity location appears to be Coulererach on the west coast of Islay (Mithen & Finlay 2000). Excavation revealed evidence for a predominance of the early stages of core preparation, with large numbers of split pebbles and primary flakes. The location is close to beaches that today have relatively large numbers of flint pebbles. Assuming this was also the case in the Mesolithic, Coulererach appears to have been a raw material acquisition site, from which partially prepared cores were taken to other destinations, especially on islands lacking in flint raw material. Comparative analysis of chipped stone assemblages from the region has yet to be undertaken in an attempt to trace such raw material movements,
although evidence for this is already apparent from the presence of bloodstone from Rum and pitchstone from Arran at sites such as Staosnaig on Islay (Mithen 2000).

The rarity of evidence for structural remains implies a high level of Mesolithic mobility with limited investment in ‘place’. This might, of course, reflect no more than the limited area of excavation at any one site, the predominance of small trenches being unable to expose structural evidence other than isolated pits and postholes. When relatively large areas have been exposed, however, such as at Kinloch and at Bolsay, the number of features has also been limited with no evident patterning to suggest structures. Two exceptions are Staosnaig and Creit Dubh. The large shallow pit containing charred hazelnut shells at Staosnaig has been interpreted as a secondary use of a hut floor (Mithen et al. 2001), while a dense concentration of postholes and stakeholes at Creit Dubh, some providing well-formed arcs and associated with large fire pits, suggests they may have been one or more structures erected (Wicks & Mithen, forthcoming).

In summary, the residential period, 9400-7800 cal BP, appears to have been one of mobile foraging, with visits to specific locations to exploit specific resources most likely at specific times of the year. But the Mesolithic hunter-gatherers would have been in a state of constant uncertainty about environmental conditions, these being in flux because of both weather and climatic change. As such, constant information gathering, processing and decision making by the Mesolithic hunter-gatherers would have been required: by necessity they would have been ‘Thoughtful Foragers’ (Mithen 1990).

2.4 Population decline: the impact of climate change?

Following c. 8200 cal BP the archaeological record shows a dramatic decline in the number of activity events, a decline that appears even more dramatic in the summed calibrated probability distribution (Figure 3). Wicks & Mithen (2014) proposed that this was a consequence of the environmental impacts of the abrupt 8.2 ka cold event, Figure 3, which is synchronous with the decline of activity events and even more so with the summed probability calibration distribution. This event is well documented within the ice cores and a range of terrestrial indicators as a c. 200-year climate anomaly creating cooler, drier and perhaps windier conditions in the North Atlantic regions (Thomas et al. 2007). Its impact appears evident in pollen records from the region, such as at Loch an t-Sagairt on the Isle of Coll (Figure 3, Wicks & Mithen 2014).
Wicks and Mithen (2014) argued that the 8.2 ka event reduced the biomass and productivity of the region while increasing the risks associated with sea-travel and coastal foraging. This either resulted in landscape abandonment or a demographic collapse. Wicks & Mithen preferred the latter, arguing that even slight reductions in birth rates and increase in mortality are likely to have significantly reduced the population levels. The continuing presence of activity events and technological continuity throughout the residential, decline and re-colonisation phase suggests the population did not become locally extinct.

One must, of course, be cautious of this interpretation because the decline in the number of activity events might be an artefact of the archaeological record rather than population density. Acknowledging this, Wicks & Mithen (2014) considered a range of alternative explanations including:

- Might there have been a change in technology or settlement size immediately after 8.2 Ka that made Mesolithic sites in the period 8200-6600 more difficult to find?
- Might there have been a differential rate of destruction or burial of Mesolithic sites resulting in their relative rarity in the period 8200-6600?
- Might the 8.2 ka event have caused a change in the spatial distribution of Mesolithic activity within the study region to locations that are no longer archaeologically visible or have received less intensive fieldwork?

None of these possibilities were found to be compelling. As such a demographic collapse arising from the environmental impact of the 8.2 Ka event appears most plausible to explain the decline in activity events. If that is indeed the case, one might reasonably ask why the Mesolithic hunter-gatherers did not adapt their technology, subsistence and social systems to be more appropriate for the new environmental conditions. Many hunter-gatherers have lived, if not flourished, within far harsher environmental conditions than those likely to have been induced in western Scotland by the 8.2 Ka event.

The most likely explanation for a failure to adapt is a combination of the abruptness of the 8.2 Ka event and low population densities that inhibited the capacity for innovation. A demographic impact would only have been avoided if new patterns of mobility, subsistence and social behaviour could have been required within a generation. That rate of cultural change appears unfeasible within groups of low-density hunter-gatherers (Shennan 2001). A limited capacity for innovation is indeed evident in the c. 4500 years of the Mesolithic record.
of western Scotland. There is, for instance, a striking similarity in the stone tool technology from the earliest activity events, such as at Kinloch, Creit Dubh and Fiskary (events before 9000 cal BP), to those at the latest, such as Storakaig (events after 6000 cal BP).

In summary, the period between 8200 and 6600 cal BP is interpreted as one of population decline to low, but still viable, population levels throughout the region – towards the c. 260 rather than the 2370 of the potential population range. Activity events are known in the relative south, such as at Bolsay, Isle of Islay, and in the relative north, such as at An Corran, Isle of Skye. It is also within this period that the first activity event becomes apparent on the Isle of Oronsay.

2.5 Re-colonisation: was there Mesolithic ‘sedentism’ on Oronsay?

As from 7000 cal BP the number of activity events increases in number, reaching a peak at between 6200-5800 cal BP, but at only half the level attained prior to 8200 cal BP. The location of these events is almost entirely in the southern area of Argyll, notably on the Isle of Oronsay. This increase in activity events might be explained either by the growth of what had been the residual population by enhancing fertility and/or reduced mortality, or by re-colonisation with people returning to what had been a largely abandoned landscape. As noted, above, however, one must remain aware of the possibility of differential survival of archaeological sites in different phases of the Mesolithic past arising from environmental events.

It is indeed during this temporal phase that the post-glacial transgression reaches its maximum extent. This rise in sea level is likely to have destroyed a number of sites by coastal inundation. An example comes Fiskay, Isle of Coll (Mithen et al 2007a; Wicks & Mithen, forthcoming). Here a raised beach that contained abraded stone artefacts sealed the in situ Mesolithic deposits: the lower-lying part of a single activity location appears to have been swept over that at a higher level. Mesolithic chipped stone artefacts within storm beach dating to the maximum transgression also been recorded at Croig, Isle of Mull (Mithen et al., forthcoming). While such coastal inundation might have destroyed some Mesolithic sites and made others harder to discover, Wicks & Mithen (2014) discount this as explaining the temporal pattern of activity events illustrated in Figure 3, primarily because of the prominence of inland sites within the Mesolithic period.

The Oronsay middens are some of the most intensively studied and discussed Mesolithic sites in Britain. These have provided data for the application of numerous scientific methods
including the analysis of fish bones for seasonality (Mellars & Wilkinson 1980), human bone for isotopes indicative of diet (Richards & Mellars 1998), and Bayesian statistics for establishing chronology (Wicks et al. 2014). It is nevertheless regrettable that much of the data excavated by Mellars during the 1970s remains unpublished, including the bird bones, fish bones, stone artefacts, bone artefacts, fish bones, features and so forth. Moreover the frequent characterisation of Cnoc Coig, as a ‘shell midden’ does little justice to the complexity of its archaeological remains evident from unpublished plans because a range of features indicative of substantial structures are present.

The studies of the Oronsay material and ensuring debates have contributed to wider discussions about settlement patterns and diet in the Late Mesolithic and potential contrasts with that of the Neolithic (Schulting & Richards 2002; Richards et al. 2003). As such, the key themes of the re-colonisation phase are Mesolithic sedentism and diet.

There are two conflicting interpretations of the Oronsay middens. To quote Mellars (2004, 177);

1. “That the occupation and use of the different shell middens on Oronsay was essentially the product of a single social group, which remained on the island throughout most if not all of each year, but moving seasonally between the different sites (Richard & Mellars 1998)”;

2. “That the occupation documented in the different middens represent much more sporadic and intermittent visits to the sites by a range of different social groups, who spent the remainder of each year on some of the larger adjacent islands, such as Jura, Islay or Colonsay, or possibly the Scottish mainland, most probably practicing economies in these other locations dependent largely on the hunting of red deer and other land mammals (Mithen 2000a: 623; Mithen & Finlayson 1991)”.

Wicks et al. (2014) provided new evidence to support the second of these interpretations. Their excavations at Storakaig, a non-coastal, upland site on Islay, had produced not only a Mesolithic site with a narrow blade assemblage but also, and uniquely for an inland site, preserved animal bones. Although highly fragmented, these represent red deer, roe deer, wild boar, fox and badger. They were preserved by having become heavily calcined from being burned at high temperatures. The location of the Storakaig, its artefacts and fauna suggests a small Mesolithic hunting camp. When its eight AMS 14C dates (all on single fragments of charred hazel nut shell) were analysed these indicated a minimum number of
three activity events, centered on c. 6230, 5842 and 5786 cal BP. As such a strong overlap with the chronology of activity events on Oronsay was demonstrated, which is illustrated most effectively by the overlap in the summed calibrated probability distributions for Cnoc Coig and Storakaig (Wicks et al. 2014, Figure 8).

Although it cannot be formally demonstrated that the same group of Mesolithic foragers were moving between Oronsay, where they were predominately fishing and collecting shell fish, and Islay, to hunt big game, that would appear to be the most reasonable interpretation, lending support to the second of Mellar’s hypotheses listed above. In this regard the differences between the chipped stone assemblages from Cnoc Coig and Storaking, the former predominately bipolar the latter predominately platform core technology, should be interpreted as responses to available raw materials, types of activities undertaken, anticipation of future needs and the social context of tool manufacture, rather than distinct cultural traditions of separate populations.

If one does indeed favour the second of Mellar’s (2004) hypotheses, then the behaviour of the Mesolithic foragers within this period appears similar to that with the residential period: thoughtful foragers moving to different locations to exploit different types of resource at different times of the year, always in a state of uncertainty because on-going change in their environment. While one might perceive an increased focus on coastal foraging, perhaps relating to the marine transgression, shell middens had also been created during the residential period, notably at Sand, Northton and An Corran.

2.6 Transition to the Neolithic: population replacement or continuity?

This is arguably the least understood of the five phases of the Mesolithic as demarcated on Figure 2. The alternatives of ‘population influx’ involving colonisation from the European continent (Sheridan 2007, 2010), ‘population continuity’ involving the adoption of Neolithic lifestyle by the indigenous Mesolithic population (Armit & Finalyson 1992; Thomas 2004), and a period of ‘population co-existence’ from which a particular form of the Neolithic emerged (Mithen et al. 2007b; Cummings & Harris 2011) have long been debated without any apparent means of finding a resolution.

Ashmore’s (2004) review of radiocarbon dates proposed a fairly abrupt start to the Neolithic in Scotland of c. 5800 cal BP, but key sites within Argyll remain undated. The current date range for the Clyde type of chambered cairn which are concentrated in Argyll, Arran and Bute, places their start of construction at sometime before 5650 cal BP, although it remains
unclear when the first chambered cairns were built in western Scotland (Schulting & Richards 2002; Noble 2006; Cummings & Robinson 2015; Harris et al. 2105).

Sheridan (2010) argued that the chambered cairn of Achnacrebeag in Argyll has close affinities with the closed chambers and simple passage tombs of the Morbihan region of southeast Brittany, believed to have been constructed within the 4300/4200 – 4000 cal BC date bracket (c. 6300/6200 – 6000 cal BP). The most recent dates for Neolithic Scotland are associated with carinated bowls. Sheridan (2007, 453) argued that “CB pottery and the lifestyle and monuments with which it is associated, is unlikely to have been in use before 4000 cal BC and is likely to have appeared over large parts of Britain and Ireland between 3950/3900 and 3800 cal BC”

The chronological analysis of the Late Mesolithic undertaken by Wicks et al (2014) support the notion of an overlap with the earliest Neolithic, as previously noted for Oronsay (Sheridan 2010; Milner 2010). Interesting, this also now applies to the site of Storakaig, with posterior density estimates from these sites reaching into the 52nd century Cal BP for Oronsay and 55th century cal BP for Storakaig.

The potential overlap with Storakaig is especially interesting because this is a ‘classic’ Mesolithic site and would have sat comfortably within the residential period of settlement. Its chipped stone assemblage contains some large blades and retouched artefacts that are generally considered diagnostic of Neolithic assemblages but which are scarce in Argyll (Wicks et al. 2014). At Storakaig, these Neolithic-like artefacts are scattered across the site and are indistinguishable from the diagnostically Mesolithic artefacts in their condition and patination.

The radiocarbon dates from both the Oronsay sites and Storakaig have a significant overlap with the dates of the Clyde cairns, including Port Charlotte chambered cairn on Islay (RCAHMS Site No. NR25NW 1, Henshall 1972: ILY 1, Harrington and Pierpoint 1980), which yielded three preconstruction dates from the occupation layer under the cairn (5930-5590 cal BP, 5900-5580 cal BP and 5590-5050 cal BP). Two dates from inside the chamber of the cairn were 5460-4960 cal BP and 5590-5310 cal BP. Very similar dates come from Newton, c.5km northwest from Storakaig (Figure 4), where two pits containing Neolithic pottery produced dates of 5890-5590 cal BP and 5750-5770 cal BP (McCullogh 1989). Although we are dealing with overlaps between substantial date ranges, which by no means prove overlap
in the activities at these Mesolithic and Neolithic sites, these nevertheless provide a significant cluster of dates spanning the transition in a narrow geographic proximity.

Neolithic activity is also evident at Boslay, one of the most extensive Mesolithic sites on Islay. This is situated 2km to the northwest from Port Charlotte chambered cairn and an equidistance from the chambered cairn of Slochd Measach, located to the west of Bolsay (Hensall 1972). The excavation at Bolsay recovered 329,667 pieces of chipped stone, including 7000 microliths, and was interpreted as frequently visited hunting camp, providing a significant ‘place’ for Mesolithic people who returned to it repeatedly for over millennia. Mesolithic occupation is represented by an in situ horizon sealed by colluvium, which was disturbed by ploughing. This colluvium contained a huge number of artefacts of narrow blade technology, which is conventionally entirely associated with the Mesolithic period, along with small numbers of Neolithic and Bronze Age artefacts, including the fragment of a polished stone axe.

From ten Boslay C14 dates only three belong to the Mesolithic providing two activity events centred on 8155 cal BP and 7650 cal BP and thus predating the activities at Storakaig and Oronsay. However, renewed activity at the site in the Early Neolithic is evident by three C14 dates with ranges between 5590-5320 cal BP, 5580-5070 cal BP and 5300-4880 cal BP (Mithen, Lake & Finlay 2000), even though the diagnostic Neolithic artefacts are a tiny proportion of the whole.

In this regard, Bolsay provides further questions about the nature of the Mesolithic-Neolithic transition, not only in terms of dating, but also in terms of more fundamental questions of what exactly constitutes ‘Mesolithic’ and ‘Neolithic’ settlement remains in western Scotland (Armit and Finlayson 1992). The presence of the C14 dated ‘Neolithic’ material in the ‘Mesolithic’ occupation horizon warrants explanation and introduces the question of continuity of not only the location, but also the lithic technology, as also been noted at Kinloch on Rum (Wickham-Jones 1990) and at Newton (McCullogh 1989:36).

In summary, the Mesolithic-Neolithic transition in Argyll remains poorly understood. While there are strong signs for an overlap between what are conventionally understood as the time periods for the Mesolithic and Neolithic, the interpretation of this remains unresolved. Artefacts with Neolithic affinities are found within assemblages that are otherwise dominated by narrow-blade technology while at a larger number of Neolithic than Mesolithic dates were acquired from Boslay, despite the huge dominance of narrow blade technology. This evidence suggests some form of Mesolithic-Neolithic continuity is likely, but whether arising from acculturation alone or from a mixing of indigenous and incoming populations remains unclear.
3. KEY PRIORITIES FOR FUTURE RESEARCH

As this overview of the early prehistory of Argyll has indicated there are a large number of research themes that require on-going exploration, being of relevance not only to Argyll but to national and international debates about early prehistoric settlement and society. While on-going fieldwork to simply discover and excavate further Mesolithic and ideally Palaeolithic sites along with palaeoenvironmental research is desirable, the following can be identified as the five priorities for the region, three concerning fieldwork, one desk-based research and one heritage management. Three of these priorities have already been heightened as core elements of a proposed Islay Prehistory Project (Mithen, unpublished proposal).

3.1 The Late Glacial: excavation at Rubha Port an t-Seilich

Argyll now has the only known in situ Late Glacial site in Scotland, located at Rubha Port an t-Seilich (Mithen et al. 2015). In light of the Ahrensburgian affinities and its most likely date in the latter part of the Younger Dryas, this site has significance for the Late Glacial of NW Europe in general, notably the extent to which maritime adaptations were developed. At present, however, all that we know about Rubha Port an t-Seilich (other than its Mesolithic archaeology) is from a small collection of chipped stone artefacts (n=57) and preliminary studies of tephra, pollen, phytoliths and the geochemistry of a sediment monolith. Whether the site contains a substantial number of artefacts, structural features, evidence for radiocarbon dating or even preserved faunal material remains unknown. As such, this site should be the research priority for early prehistory in Argyll. As a hugely valuable by-product of this research priority, the Mesolithic deposits at Rubha Port a t-Seilich would also be excavated, these containing abundant artefacts, charred plant material, faunal remains and features indicative of significant structures.

3.2 The Mesolithic – Neolithic transition: targeted excavation and dating at a sample of chambered cairns

The second priority would be a programme of fieldwork, dating and analysis to explore the Mesolithic – Neolithic transition. As summarised above there are numerous strands of evidence relating to chronology and artefact assemblages, but these have tended to be by-products of other research projects. A concerted effort to establish the chronology of the foundation of chambered cairns in Argyll by targeted survey and excavation would be of considerable value. Islay would provide an ideal case study, especially in light of the possibility of chronological overlap with Mesolithic activity and Neolithic-like artefacts within
their chipped stone assemblages. Survey and targeted excavation at three chambered cairns would be required: Slochd Measach (the Giant’s Grave, which has been surveyed in August 2015), Cragabus and Braahunisary. This work should be undertaken with a systematic programme of work to confirm (or otherwise) the presence of typologically diagnostic Neolithic artefacts within the Mesolithic assemblage.

3.3 Establishing the Mesolithic chronology: A programme of radiocarbon dating and Bayesian analysis: testing the 8.2ka model

The chronological development of the Mesolithic as described in this contribution is based on a sample of a mere 163 radiocarbon dates (selected as those considered reliable from a total sample available of 253 dates). This is far too small a number with which to confidentially establish the chronology of settlement over a period of at least 6000 years. As such, the pattern identified by Wicks & Mithen (2014), and especially their proposal of the impact of the 8.2 Ka event, should be considered as hypotheses requiring further testing. There is already a large quantity of well source material suitable for radiocarbon dating from Mesolithic sites, while small scale targeted excavation could produce further samples from localities, especially those that appear under-represented. Securing an additional 100 AMS dates, subjecting these to Bayesian analysis and establishing activity event on a site by site base and for the region as a whole will enable the 8.2 Ka hypothesis to be testing and provide a secure chronological foundation for the early prehistory of Argyll.

3.4. Heritage management of early prehistoric sites

Argyll has some of the most important Mesolithic sites in Scotland, and indeed the UK. Yet there is no heritage management of these sites. In one regard the required managed is limited: with the exception of middens, Mesolithic sites are predominately buried below ground in areas unlikely to be disturbed or developed. This is not always the case: numerous Mesolithic have been found by ditch digging and other farming activities and remain subject to further risks of this nature; others are in fields that are regularly ploughed or costal areas subject to erosion, especially with anticipated rise in sea level. My understanding is that none of the Mesolithic sites are scheduled to ensure they are protected. Another dimension of heritage management is public engagement. My experience is that the public have a huge interest in the Mesolithic and would enjoy visiting Mesolithic sites, even if these are only points on the landscape with no visible archaeology. As such a programme of marking sites with suitable display boards, producing walking trails, guide-books and related exhibitions
within the local museums should be a priority. This must also apply to the Neolithic. The chambered cairns on Islay, for instance, are largely buried by vegetation, with no markers for visitors or walking trails.

3.5 Writing the history of archaeology in Argyll

Finally, it would be of considerable value to have a systematic study and interpretation of the history of archaeological research in Argyll. My impression is that this is important to the history of archaeological thought in general in the late 19th and early 20th century. Why were the tiny islands of Oronsay, Coll and Tiree so attractive to the likes of A. Henderson Bishop and William Galloway? What were their intellectual networks? This project would also help recognise the contribution of amateur collectors such as George Holleyman, stationed on Tiree during the war, and indeed those who continue to contribute to archaeological knowledge today.

4. SUMMARY

The prior knowledge and particular interests of the author will inevitably bias any overview of the archaeology within a specific region. I am conscious that I may be guilty within this particular contribution with a focus on those areas of Argyll where I have undertaken fieldwork myself. Similarly I have stressed certain research themes while neglecting others that are nevertheless of considerable importance, such as analysis of lithic assemblages, and exploring technological and typological change through time. I have also avoided the more speculative matters, such as relating to the social organisation and ideology of the Mesolithic and Late Glacial hunter-gatherers. What I have attempted, however, is to provide a chronologically driven overview of the early prehistoric period and highlighted what I believe to be the most important topics for future research. The Mesolithic – and now Palaeolithic – periods in Argyll are of national importance with considerable potential for contributing to international debates about the human-environment relationships within early prehistory.

Acknowledgement

I am grateful to Dr Karen Wicks, University for Reading for collaborating in the research that underpins this article.
Bibliography


Gray, A. Notice of the discovery of a cinerary urn of the Bronze Age, and of worked flints underneath it, at Dalarun; also of an old flint-working place in the 30 foot raised beach at Millknoewe, Campbeltown. Proceedings of the Society of Antiquaries of Scotland 28 (1893-94), 263-74.


Mann, ?, 1096.


Newall, F. 1962. Mesolithic Occupation Of Gleann Mor And Port Charlotte Areas, Islay. Discovery And Excavation In Scotland, 1962, 16-17.


