The early prehistory in the west of Ireland:

*Investigations into the social archaeology of the Mesolithic, west of the Shannon, Ireland.*

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Abstract

The Mesolithic period under consideration in this thesis, from c. 8000 cal. BC to c. 4000 cal. BC, covers about 40% of the time that people have inhabited Ireland since the end of the last Ice Age. Some time around 4000 cal. BC the Mesolithic-Neolithic transition occurred, a period that has been seen as the transition from a hunting and gathering lifestyle to that of farming.

Even though the Mesolithic period is nearly half of Ireland’s history of human settlement, it has generally not received much research attention in Ireland. This is especially so in the west of Ireland, where our understandings of the early prehistoric communities have been hampered by a lack of sustained, critical research. This thesis was undertaken to critically review the evidence we have for the social archaeology of this period, covering the six counties west of the Shannon, Co.’s Clare, Galway, Leitrim, Mayo, Roscommon, and Sligo. Along with the review of the literature and the material culture housed in the National Museum and elsewhere, this thesis undertook a series of fieldwalking programmes; these were undertaken to augment the material record, and to assess these various areas for suitability for further, longer-term research programmes.

After discussing the history of research concerning the Stone Age in Ireland, and in particular in the west, this thesis then considers the evidence for the Mesolithic and Mesolithic-Neolithic transition in Ireland. Attention is then turned to discussing the approaches used by researchers concerning landscape and social archaeology, and how such approaches will be used in this thesis. This is followed by a detailed description and discussion of the fieldwalking programmes and museum research, where each locale will be dealt with individually. This thesis will then discuss how we can understand the evidence in terms of a social archaeology of the period.
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1. Introduction

The Mesolithic period under consideration in this thesis covers approximately 4000 years of the story of human habitation in Ireland by communities of hunter-gatherers, starting from c. 8000 cal. BC. The ambit under review takes in the six counties – Clare, Galway, Leitrim, Mayo, Roscommon, and Sligo – that lie to the west of the Shannon River, which runs through the middle of Ireland for approximately 400 km. The Shannon and its adjoining lakes form the eastern borders of the Co.’s Clare, Galway, and Roscommon; they form the southwestern border of Co. Leitrim, and also divide the county in half; a part of Co. Sligo’s southern border is defined by one of the Shannon’s tributaries – the Boyle River and Lough Gara – and this tributary rises in the extreme east of Co. Mayo (Fig. 1.1).

Fig. 1.1. Counties in the west of Ireland under consideration.
This approximate date of 8000 cal. BC marks the end of the last glacial period and the onset of the Littletonian Warm Stage. At this time, Ireland witnessed the recolonisation of the flora and fauna, including humans, after the last glacial period, the Nahanagan Stadial (with the likelihood that some cold-tolerant flora and fauna had remained on the island during this cold spell). The Mesolithic period had for a long time been seen as an interval period: a diminutive hiatus between the epoch of the Late-Glacial Palaeolithic hunter-gatherers and the epoch of the Neolithic farmers (in Ireland commencing c. 4000 cal. BC). Along with their definition as having lived by hunting and gathering, a significant identification of the Mesolithic is therefore concerned with a temporal definition.

In Ireland, the evidence for the Mesolithic was until relatively recently severely biased towards the northeast, chiefly due to the fact that the northeast has a long tradition of amateur lithic collectors. This collecting was partly enabled by the raised beaches and extensive diatomite cutting, both of which provided collectors with suitable places to recover lithics. The northeast is also the source of Irish flint deposits, and this was until relatively recently taken as a reason for the preponderance of evidence from there. Indeed, the flint deposits were considered the raison d’être of people having settled on the island in the first place. Over the last generation of research, it has been realised that the Mesolithic communities in Ireland inhabited the entire island from early in the Mesolithic, and not just the northeast where flint was plentiful.

However, while we now have evidence of Mesolithic occupation throughout the island, our understandings of the Mesolithic communities who inhabited the west of Ireland for these 4000 years have been hampered by a lack of sustained, critical research. In the literature on the Mesolithic in Ireland, the west of Ireland has either had a cursory treatment (Waddell 2000; Woodman 1978), or not been treated at all (Cooney and Grogan 1999). As Gibbons et al. (2005) dealt only very generally with parts of the west, and Fredengren (2002) dealt with only one area, and Woodman et al. (1999) only mentioned some locations in passing, it was difficult to attain a fuller understanding of the Mesolithic in this quarter of Ireland. Therefore, this thesis began with the objective to review the available evidence for the lives of these communities,
and to undertake a series of fieldwalking programmes to critically assess these areas, and to develop possible strategies for further, longer-term research.

On initiating this thesis it became apparent that all was not as bleak as it seemed: two projects on the Mesolithic in the west had been undertaken. Warren (2004), lecturer at UCD, had begun a preliminary excavation of a Mesolithic quartz scatter when this thesis was initially being formulated. This excavation represents the first targeted research excavation of a Mesolithic lithic scatter west of the Shannon, and excavations of this site have continued for three seasons so far (Warren, pers. comm.). In Co. Clare, Lynch (2002) had undertaken some fieldwork in parts of Co. Clare towards an MA thesis. The map below (Fig. 1.2) shows the distribution of possible Mesolithic evidence at the onset of this thesis.

![Possible Mesolithic sites cited in previous literature](image_url)

**Fig. 1.2. Possible Mesolithic finds cited in previous literature.**
Section 1.1 will discuss the aims and methods of this thesis. This will then be followed in Section 1.2 by an outline of the structure of the thesis.

**Aims and methods**

The following section describes the aims that this thesis decided to address at the onset of the research programme. This is followed by the methods which were used to achieve these aims.

**Aims**

1. The initial aim of this thesis was to understand the character of the early prehistoric period, west of the Shannon. What is the character of the material culture of the Early and Later Mesolithic? What is the character of the material culture of the Mesolithic – Neolithic transition?

2. To understand how people have inhabited, and utilised, this landscape from a diachronic perspective; and to assess how this understanding from a diachronic perspective can give insights into a synchronic perspective.

3. To establish any degree of variability between inland and coastland in the region: to assess how this variability pertains to the Mesolithic; and how this pertains to the Early Neolithic.

4. To establish any degree of regionality in the Mesolithic that would seem to be apparent in the Neolithic material culture.

5. To analyse and interpret the evidence in terms of a social archaeology of the period. This will involve producing a coherent record of the Mesolithic and Mesolithic-Neolithic transition evidence for the region.
Methods

1. Defining the region

The first consideration of the methodology of this thesis was to define the region under consideration. Here, the immediate concern was that the River Shannon is an arbitrary division between the east and west of Ireland: it is a convenient division for us between east and west, something to be bridged, hence the county and provincial boundaries for the most part obey its course. In defining the regional divide between east and west in prehistory: how does this translate into something meaningful; is it a hindrance? In looking at the question of regionalism in the material culture of the Mesolithic, how does the River Shannon act: as a conduit or barrier? The second consideration, which relates to both defining the region, and questions on regionalism, is the western seaboard. The region under scrutiny consists of hundreds of km of coastline. In defining the region as a whole, how does the coast interplay with the rest of the interior? And thirdly, how does this region fit in context of its island setting.

2. Establishing the character of the archaeological evidence and cataloguing the material

In order to establish the character of the material culture for the Mesolithic and Mesolithic-Neolithic transition for the six counties under review, an extensive literary review was undertaken, which was followed by five weeks of research in the National Museum; this museum work included both a review of the archives (topographical files) and the artefacts themselves. These five weeks spent in the museum was matched by another five weeks organising and assessing the information gathered in the museum. I have reviewed and catalogued all of the Mesolithic and Neolithic material culture housed in the museum for the six counties, which were provenanced as non-excavated finds. As well as this, I looked at a wide selection of Mesolithic and post-Mesolithic finds from excavated contexts for the six counties, as well as looking for Mesolithic material which was provenanced to townlands and parishes on the east bank of the River Shannon, i.e. for Co.’s Cavan, Limerick, Longford, Offaly, Tipperary, and West Meath.
3. Fieldwalking

The fieldwalking consisted of two main parts: the first was the formulation of three case study areas, and the second involved selective fieldwalking by visiting old findspots to assess these areas as to whether they were suitable for further longer-term research.

Case studies:

The case studies were formulated in order to intensively examine three areas in order to develop our understandings of the prehistoric inhabitation of them. The research for these case study areas involved: a detailed study of conditions, past and present; an evaluation of the character and location of the areas; a focused, intensive fieldwalking programme; and an examination of the wider context of the areas.

1. Lough Corrib and environs, Co.’s Galway and Mayo. This area was chosen as a case study as there were a number of findspots located around the lake and River Corrib, but no sustained fieldwalking programme had been carried out. Between the Lough and River Corrib, a total of 70 km of the shoreline and river bank was fieldwalked. The survey also included the examination of all erosion scars, and cattle poached ground in the vicinity of the shoreline and river bank walked (a more detailed methodology of the fieldwalking programme can be found in the relevant sections in chapter 5).

2. Lough Urlaur and environs, Co. Mayo. This area was chosen as there had been one Mesolithic find in the area, but again, no fieldwalking programme had been carried out. This fieldwalking included the survey of the entire shore of Lough Urlaur and the adjoining erosion scars, as well as in the area close to the original findspot of the Mesolithic find; three other lakes nearby were fieldwalked, but as these were in places bog fringed, the entire shores were not fieldwalked.

3. Tawin/Maree area, Co. Galway. This area was chosen as a case study for the Mesolithic and the Mesolithic-Neolithic transition; this small area had turned up 139 stone axes, which is 33% of Co. Galway’s axes, and Woodman et al. (1999) had suggested that these may be Mesolithic. No other lithics – Mesolithic or post-Mesolithic – had been found. Initially, the methodology was to examine all erosion
scars, but with the availability of ploughed fields, it was decided to fieldwalk a selection of these. In total, 25 ha were fieldwalked, with a survey coverage of 66%, and 100% in three fields.

Fieldwalking – additional fieldwalking locations:

The research of these three case study areas was undertaken along with additional areas where a full case study was not carried out: this included visiting the old findspots of Mesolithic material to investigate for further material, and to assess the conditions of the locations for their suitability for further, longer-term research projects. These areas included Lough Allen, Co.’s Leitrim and Roscommon, Tully, Co. Leitrim, Clonnaragh, Co. Roscommon, Turloughnaroyey, Co. Galway, Streamstown, Co. Galway, Big Island, Co. Galway, Skehanagh, Co. Galway, Lough Inchquin and Lough Atedaun, Co. Clare, and Lough Cullin, Co. Mayo.

4. Landscape analysis- local and regional scale

In developing the analysis of the landscape, I assessed the palaeoenvironmental evidence and approached the landscape from a dwelling perspective (*sensu* Ingold (2000)), as opposed to viewing it as an economic resource and simply a backdrop to activities. This involved assessing the concept of the ritual/sacred landscape, and how this concept relates to the Mesolithic. How can we relate the landscape and seascape in terms of involvement in social reproduction as opposed to subsistence and economy?

5. Geographical Information System and databases

The use of Geographical Information System (GIS) in this thesis involved the use of the ArcMap 9.1 mapping programme, as well as ArcView which has been used to present the maps created in an interactive form on the accompanying CD-ROM. There were two main reasons for using GIS in this thesis. The first was to use the mapping software to analyse the data collected, and the second was to present this data and analyses in a final visual form. There are a number of pros and cons to using this mapping software:

**Pros:** The use of mapping software can dramatically speedup the processes of analysis and presentation of data. The mapping software allows the inputted data to
be analysed and presented in a myriad of ways, which if using paper maps would be a substantially more time consuming process of drawing maps, and necessitate the repeated drawing of multiple maps for each area. With the mapping software, the data can be quickly arranged and rearranged according to the research questions being addressed. The final data can be presented as printed maps, as well as electronic maps: these electronic maps which are on the attached CD-ROM allow the viewer to move around the map, and query the various findspots as to their attributes etc.

**Cons:** While one of the main positive attributes of the mapping software is that it speeds up the mapping processes, there is a steep learning curve needed to use the complex software. A considerable amount of time (intermittent periods totalling about four months) of this thesis was spent becoming familiar with the ArcMap programme, through informal training and trial and error. As well as these four months, another couple of months were spent inputting the data collected from the museum work, literary research, and the fieldwalking programmes.

As the quality of the results of the analyses is directly related to the quality of the data inputted, one of the key considerations with using mapping software is the integrity of the data used. There were a number of key problems with the data presented to me:

1. The topographical data used (digitised 1:50,000 series) was purchased from the OSI, and this dataset proved to have numerous errors in its topographical presentation. For instance, in places the 10m contour line veered into the sea, with the result that these areas had to be “fixed”, by editing the contour lines’ position. In numerous places, the polylines that represented rivers and lakes were incomplete or inaccurate, entailing that these too had to be fixed: this was an extremely time consuming process.

2. Another extremely time consuming process that was necessary was the rendering of the data into a presentable form. This was necessary as the lakes and coastline were in the form of polylines, which meant that when presenting these in map form, one could not distinguish the lakes and coastline from the adjacent dry land. Therefore, this data had to be converted into polygons which gave them their final shape as distinct bodies of water.
Data sources

1. The topographical data used for the mapping was the 1:50,000 series digitized OS maps.

2. The data used for the prehistoric monuments was the Department of the Environment, Heritage and Local Government’s digitized SMR dataset, obtained from their website as a free download. Unfortunately, this also proved to be riddled with errors: so much so in fact that the dataset was withdrawn from their website to be corrected, shortly after I obtained it. Therefore, this dataset also had to be amended.

3. As the area covered by this thesis was in effect a quarter of Ireland, the topographical dataset used was massive, far too large for a standard computer to handle. Therefore, for the creation of a few maps that involved presenting data at the provincial scale and greater, a model of the contours was adopted from satellite imagery: the source for this Digital Elevation Model data was http://srtm.csi.cgiar.org.

4. The Corine dataset, which divided the land use of Ireland into categories, obtained from the Environmental Protection Agency, was used to present information on vegetation.

5. The data obtained from the National Museum archives pertaining to the prehistoric material culture was added to a database: this involved locating each of the townlands or findspots and inputting the coordinates, therefore creating a spatial distribution model of the prehistoric lithics from non-excavated contexts.

6. A sixth source of data was from the Irish Stone Axe Project (2006): where data on some axes was not apparent in the National Museum archives, I used the data gleaned from this source.

7. The seventh source was for the locations of the crannogs on Lough Gara. Barry Raftery kindly gave me a paper copy of the original map of Lough Gara which had the 100-plus crannogs marked on them. I then used this map to ascertain the coordinates of the relevant crannogs (those with lithics provenanced to them), and also the extent of the pre-drainage shoreline.
Presentation of the material

Unfortunately, the majority of the finds in the National Museum are only provenanced at the townland level. The ideal situation in this case would be to have the finds represented as a polygon of the townland’s outline. However, the digitised data for the townland borders was not made available for this thesis, and as the area covered was so great, it was impossible to create my own dataset of the townland borders (the one instance in which I did this was for one of the case study areas). Therefore, the findspots are presented as dots. This entails that any analysis of this data is fraught with difficulties, and can lead to erroneous assumptions. While on a broad scale this does not necessarily matter so much (as the actual dot may be larger than the polygon it represents), on a closer scale this becomes critical. The maps presented in the following chapters therefore come with a serious health warning. This is stated clearly to avoid any misunderstanding. However, in a minority of instances, the findspots may be more accurate than the townland level: whether this is the case or not can be ascertained by looking at the appropriate appendix, or by using the interactive map on the CD-ROM, where each findspots’ details can be queried. Another issue with the provenancing is that a small minority of the material is either provenanced to an area only, or at the county level. Two ways have been used to present this data on the general maps: the first involved creating clearly identifiable boxes on the maps which the material could then be placed “in”; the box is then marked as poorly provenanced material. A second method has been to insert a null coordinate value, which means that this material is left off the map entirely: this has been used by the Irish Stone Axe Project. The data presented of this thesis’ fieldwalking finds represent either exact findspots, or finds grouped to a particular spot in the case of the finds from ploughed fields.
1.2 Thesis structure

In chapter 2 I will outline the predominant strands of thought on the prehistory of Ireland as they have been formulated over the past few centuries. This chapter will spend time delimiting and contextualising how antiquarians and archaeologists have grappled with the prehistoric past, in order to qualify how we have arrived at this juncture in our contemplation of the past, and how this previous work has shaped our present research agendas. Beginning with the antiquarians’ work as it stood before the understanding that there had been a “Stone Age” in the past and that the world was of far greater antiquity than the Bible alluded to, this selective historiography of the past two and half centuries will look at the Irish story in general, while keeping a stronger focus on work carried out in the west of Ireland.

In chapter 3 I will then turn my attention more specifically at the early prehistoric period in Ireland, outlining comprehensively the evidence for the Mesolithic and the Mesolithic-Neolithic transition. The focus of this chapter will be on Ireland in general, with a detailed discussion of the evidence for the area west of the Shannon in chapter 5, as well as in chapter 6. Chapter 3 will begin with a consideration of the post-glacial arrivals of the flora and fauna (including humans) on to the island, and be followed by an outline of the evidence for, and predominant interpretations of, the Mesolithic period. This will look at, in turn, the Early Mesolithic; the transition to the Later Mesolithic; the Later Mesolithic; and the deposition of the dead in both periods. This chapter will conclude with the Mesolithic-Neolithic transition.

In chapter 4 I will turn my attention to the theories and methods of prehistoric landscape studies, discussing how the ambivalent concept of “landscape” has been adopted and utilised by archaeologists, in Ireland and abroad, in a variety of ways over the years; particular consideration will be given to Tilley’s and Ingold’s work on landscapes and social reproduction. In the final section I will discuss, by way of a comparison with other Irish researchers’ work, how this thesis will then use the concepts of landscape in interpreting the Mesolithic evidence in the west of Ireland.
Chapter 5 will detail the museum research and fieldwork that was undertaken. This chapter will begin with a short section on the terminologies and conventions that this thesis will use in relation to the lithics: explanations of other conventions used in the fieldwalking will be explained at the beginning of the appropriate sections. The next section will detail the research pertaining to the three case study areas, followed by a section on the fieldwalking undertaken outside of these three areas. The following section will discuss the Mesolithic findspots noted in the museum research and literature that were not visited during this project. The last section will then discuss aspects of the museum research pertaining to the post-Mesolithic material.

In chapter 6 I will then bring these various strands together, and discuss our understandings of the social archaeology of the Mesolithic in the west of Ireland. I will begin with a discussion on the general distribution of Mesolithic in the landscape, and then discuss the evidence for the Early Mesolithic. This will be followed by the Later Mesolithic, where I will initially focus on Lough Allen as an example; here, I will discuss four aspects of the Mesolithic in the west: taskscapes by the waters; taskscapes in the woods; human-animal relations; and regionality and mobility. I will then discuss the Mesolithic-Neolithic transition.
2. History of research

2.1. Introduction

All research is inevitably the child of the frameworks set by its author’s predecessors. Consequently, the first task of any researcher is to comprehend and qualify how we arrived at this point in our knowledge; to assess how previous research has, for instance, coloured our notions of what is considered pertinent, indeed possible, for further study. Therefore, the purpose of this chapter is to delimit and contextualise the avenues of thought that have had a pronounced influence on the course of archaeological endeavours in Ireland, with a particular focus on research in the six western counties covered by this thesis. As it will be shown, this is clearly not a Whiggish history, of a unilinear progression in thought and successive clarity of vision, of work accumulating to a higher plane of understanding. The history represents a complex pattern of new avenues sought and cul-de-sacs found, of orthodoxies born, surpassed, and reborn again by later generations. Critically, it is recognised that the categories and theories that shall be scrutinised, and the labels, words, and meanings used over the centuries to delimit them, have undergone considerable, yet often subtle and overlooked, alterations: Thomas’ (1993) ‘Discourse, Totalisation and “The Neolithic”’, and Tilley’s (1998) ‘Megaliths in texts’ have both argued this point succinctly in terms of the entities the Neolithic and megaliths.

Following from this, it is a commonplace that the theory and practice of archaeological endeavour cannot be comprehended while divorced from the totality of the intellectual, social, and political milieu in which it operates. The archaeologist is not simply a passive viewer, a spectator, of a neutral past, but rather brings to the subject his or her own intellectual and cultural baggage: their upbringing, education, class situation, religious (or non-religious) and political affiliation. The historian of archaeological thought, Daniel (1971), has noted that a predominant recurring theme of archaeology can be viewed as the pernicious question of diffusion or independent invention. Inevitably, part cause, part effect of this thread of questioning is the fact
that archaeology was born into the era of colonialism, and indeed, which it arguably helped to justify (Trigger 1989).

Consequently, the dominant theme of later Irish history, and indeed global history, has been colonialism – for Ireland, of course, the intertwined relationship with the Crown to the east began before the era of colonialism per se. As we shall see, the colonial discourse was to greatly influence ideas on the archaeological record for many generations, with strands still dominant today. Furthermore, an integral part of the colonial enterprise was the emergent nationalism, with the eventual founding of two states on the island of Ireland. Cooney (1995; 1996) and Woodman (1995) have both succinctly argued that this nationalistic presence has had an enduring affect on Irish and Northern Irish archaeology, nevertheless with their own respective insular peculiarities.

2.2. In the days before the Stone Age

“The true patriot becomes of necessity the antiquarian”

Taking the eighteenth century as my starting point, I will outline the antiquarian interest in the past, as it stood before the realisation that there had been a Stone Age past. It is here in the eighteenth century that the study of the relics of the past became a ‘scientific’ pursuit as the middle and upper classes saw it. The work of Berangar and Bigari and their Tour of Connacht will be assessed, and I will show how this Tour related to the emerging societies, The Hibernian Antiquarian Society and The Royal Irish Academy, and to the political divisions in Ireland at the time. As the nineteenth century wore on, impulses from European archaeology and the natural sciences were absorbed and digested, and often rejected, by scholars in Ireland, all the while that a palpable nationalism and patriotism was building in Ireland, both in the southern provinces and in Ulster. New fora such as the British Association for the Advancement of Science, and journals such as the Transactions of the Kilkenny Archaeological Society (later to become the Journal of the Royal Society of Antiquaries of Ireland (JRSAI)) and the Ulster Journal Of Archaeology developed the field of research, and enabled a platform for debate for the new concepts that were being conceived, such as ‘pre-historic times’ and the ‘Three Ages’ theory.

The eighteenth century antiquarian focus on the relics of the past followed from a long pedigree of such interest. Indeed, it is clear that ‘monuments’ and the various myths and legends related to them have always had a powerful pull on the imaginations of the communities that lived and worked around them. Furthermore it
is a commonplace that what we categorise as artefacts were seen to be, for example, celts or elf bolts, with related stories attached to their significance, and were often used as magical charms for healing purposes. What these monuments and artefacts meant to past communities, and how they made sense of them, was passed down through the mediums of written and oral history. Accordingly, these histories could be edited, revised, and recreated to fit the ideological picture that was to be portrayed. In the case of Ireland, the situation was one where two broad factions, protestant and catholic, were to wrestle with the past.

What distinguishes the new antiquarianism in the 1700’s from previous historical pondering was that now the pursuit was to be followed along scientific lines: the separation of fact from flights of fancy, as the new scientists saw it. In Ireland, this new order came from the Ascendancy, and, as Boyce (1990) has commented, the relative tranquillity of the mid-eighteenth century allowed them to feel more at home, and to relate to the land as such – this burgeoning sense of security tied into a sense of Irishness, correlating with an increasing interest in all things antiquarian.

Arguably, this attitude is typified by the commissioning of Berangar and Bigari on their Tour of Connacht, to illustrate the antiquities in the landscape. Here, the Tour consisted mainly of drawings of ecclesiastical buildings and castles; the megalithic monuments were suggested as being possibly burial places of chieftains or sites of battles – today read cemeteries of ancestors – rather than the contemporary orthodoxy of them being temples or druidic altars – today read shamanistic practices. Harbison has suggested, perhaps somewhat generously, that this project represents a late eighteenth century archaeological enterprise, and that it

focused amateur interest on extolling the physical remains of the country’s past in the years leading up to the foundation of the Royal Irish Academy in 1785. This expedition, therefore, played a seminal role in the early development of archaeological endeavour in Ireland (2002, 1).

However, Love (1962, 419) has noted in an article on The Hibernian Antiquarian Society, subtitled ‘A forgotten predecessor to the Royal Irish Academy’, that the commissioning of the Tour by the Hibernian Antiquarian Society was due to be a far grander scheme encompassing the thirty two counties of Ireland – but the Society

\footnote{I have noted this practice recorded into the 20th century (MNI Files 1935:421 & 1943:190) – for more details see below, p. 216.}
foundered on the rocks of patriotism and the debate on the origins of Irish civilisation between the members. On the one hand, men such as O’Conor (the only catholic involved in the society) and Vallancey saw the history of Ireland through the eyes of a past civilisation hailing from the Mediterranean, i.e. the Phoenicians; on the other hand, Ledwich and Beauford saw the history of Ireland as coming from the barbarous north of Europe, and hence Irish civilisation arriving solely with the English conquest (*ibid.*, 422-3). Love explicates the reasons for the opposing views:

Vallancey himself was an Englishman, but he was entranced with all things Irish and, like so many a convert, outdid many an Irishman in his assumed patriotism. Ledwich’s view of ancient Ireland, then, was slanted towards England and Protestantism; Vallancey’s was calculated to appeal to the native Irish and catholics (*ibid.*, 423).

The acrimonious debate over the course of Irish history railroaded the society, and hence the project of the Tour of Ireland: the project was not continued when Vallancey was involved in founding the Royal Irish Academy over a year later, of which O’Conor became a member. Ledwich earlier had refused membership to what he saw as another superfluous group, but finally [six years later] Ledwich gave in and became the 200th member… Presumably, the Academy by then was too successful, too large, too stable, for Ledwich to decline any longer… Vallancey’s influence had probably waned by then, too (*ibid.*, 431).

Returning to the Tour, a considerable significance of its completed work was that it recorded monuments no longer extant, or at least not as visible, in the landscape today. For example, Berangar recorded a monument, called Cuchullin’s tomb on the shores of Sligo, which by 1858 had disappeared; this is represented in the drawing as a circle of stones, with Harbison (2002, 101) commenting that the raised nature of the centre could imply that it was a passage tomb type monument. And at Ennishowen, Lough Mask, Co. Mayo, a now much dilapidated monument was illustrated, and described by Berangar as a Druidical temple: as an Irish Stonehenge. Harbison (2002, 158) comments

The stones with perforations which stood around the perimeter – nineteen in Beranger’s day, reduced to thirteen when Wilde described it, even fewer when sketched by Mrs. L. Piggins of Westport around 1970, and down to four when examined recently by the Mayo antiquarians Noel O’Neill and Gerry Bracken.
It is interesting to note that, in another case of a Sligo monument in Harbison’s book, the original antiquarian depiction of Carrowmore tomb 7 is drawn in such a way as to divorce the monument from its landscape setting, whereas the modern photo of the same monument is framed in such a way as to show Knocknarea, with Misgaun Mewe on its summit, in the background, yet nevertheless at the same time in the centre of the image, arguably following today’s emphasis on landscape archaeology (ibid., pls. 5 + 6).

Half a century after the Tour of Connacht, the next large scale project was undertaken by the Ordnance Survey, a project which was clearly on a different scale than the previous. While this was ultimately an imperial outing, with Ireland again, as in so many cases, being the testing ground for Britain’s imperial projects, the work undertaken by O’Donovan, O’Curry, and their superior Petrie, amongst others, was certainly seen by some at the time as going against the grain of imperial intentions. Boyne (1987, 20) has commented in her biography on O’Donovan that a member of staff of Petrie’s department wrote an anonymous letter to the government dated to shortly before the topographical department was closed down – its work incomplete – in which he wrote that most of the staff of the department were “nationalists as well as catholics”, and signed it “A Protestant Conservative”. Furthermore, it was argued at the time that the historical and social sections of the memoirs would cause unnecessary disquiet amongst natives and rulers, leading to an outpouring of animosities amongst the political factions, and would provoke intense patriotic feeling and make much more bitter the deep divisions between members of different religions, between the governing classes and those governed, between former and present holders of land (ibid., 22).

The O’Donovan letters certainly show that O’Donovan was well aware of his position as a Milesian working on an imperial project. However, he saw himself as in a position to clear history of obfuscations and fantasy: the scientific approach would reveal the truth behind the lines of fiction. O’Donovan put into print the landscapes of the ‘aboriginies’ as he ironically called them, documenting their oral traditions of place names, and histories of the land and its divisions. Nonetheless, it is of course not wise to see this valuable mapping as a vignette into the further, deep past, as it is inevitably a snapshot frozen in time, and one can be lulled into a false sense of
security by the lines and boundaries, and sites and places recorded in the nineteenth century, and to consequently presume the antiquity of them.

Be that as it may, the work undertaken by the Ordnance Survey has certainly proved to be a wealth of information, and without it perceptions of the past would arguably be different. Furthermore, the survey critically highlights the complex nature of colonialism and nationalism; a simplistic reading of oppressor and oppressed is insufficient. While slightly overdrawn, Tierney (1962, 456) has suggested that “not only the scientific study of Irish history and antiquities but much of the political and social consciousness of modern Ireland may be traced back remotely to the survey and to the work of O’Donovan and O’Curry”.

While Tierney’s comment on their long standing influence may be true of certain sectors of Irish interest, in terms of archaeology in Ulster, Woodman (1978, 6) has commented that the impetus for research in the north came about mainly due to the visit of the British Association for the Advancement of Science in 1852. An exhibition of the antiquities and historical relics of Ulster was staged to coincide with this visit, and Woodman (ibid.) notes that the catalogue for the exhibition made no reference to the ‘Three Age system’. The British Association, satirised at the time by Dickens as “The Mudfog Association for the Advancement of Everything” (cited in Howarth 1931, 35), held its first annual meeting in 1831. It was modelled loosely on a similar German association, and was founded in order to bring together men of science and to exalt the virtues of science to both the government and the general public – and to release scientific enquiry from the shadow of the metropole, more specifically the Royal Society. Orange (1971, 318) notes “if there were varying views on the form which the new body was to take and the objectives it was to embrace, on one point at least its projectors were agreed. Like the German association, it was to be peripatetic”. The association was to be explicitly provincial, holding annual meetings in the major towns, but explicitly bypassing London on its itinerary (ibid., 315). Accordingly, it held its fifth annual meeting in Dublin in 1835: however, the association’s biographer, Howarth (1931, 32), noted that “the second Irish meeting at Cork in 1843, was far less successful than the first: the state of southern Ireland at the time so unsettled that … [it] was in serious doubt as to the safety of holding a meeting
there”. Clearly, the setting of Belfast for their next Irish jaunt was a more salubrious choice.²

In the editorial of the first issue of the Ulster Journal of Archaeology (UJA) (McAdam 1853, 1-2), it states that the British Association’s visit and consequent Ulster exhibition had given the impetus to start a journal, as well as the awareness of the need to match scholarly journals found in the other provinces, to study what is termed the pre-historic times.³ Moreover, the opening article clearly alluded to the political climate, and sectarian divisions in the country and is worthy of a lengthy quote:

The early Irish form of society … still exists here… and itself waiting for the hour of dissolution. The traditionary feeling of clanship, the peculiar notions of land tenure, the antiquated customs, and the strange semi-oriental language and cast of thought, still linger among the inhabitants of our mountains and secluded glens. Here the lineal descendents of the former lords of the soil and their retainers vegetate, as it were, in ignorance of the wondrous changes going on in the world around them. Driven by circumstances into the most sterile parts of the country they have lacked the knowledge and industry necessary to elevate their position… In strong contrast to these, appear the streams of agricultural colonists, chiefly of Scotch and English descent…assisted by thrift and industry (McAdam 1853, 2, emphasis added).⁴

Here, we see clearly some dominant themes of the colonialist discourse that would dominate much archaeological work for generations to come, and indeed, would seem to figure in contemporary discussions on the transition from the Mesolithic to the Neolithic (Trigger 1989). It is interesting to note that the Transactions of the Kilkenny Archaeological Society (1850, 4) (later to become the Journal of the Royal Society of Antiquaries of Ireland (JRSAI)), which was dominated by protestant clergymen and which the UJA mentions as a catalyst for their founding of a journal, is more inclusive in their editorial, stating: “All ranks, classes, and creeds will there [in the society] be found united on common and neutral ground; harmony and good feeling have been the uniform characteristics of its meetings”. Having said this, it should be remembered that this espousal of the common interest of the classes should be seen in the light of

² The association held meetings in Dublin in 1835, 1857, 1878, and 1908, and in Belfast in 1852, 1874, and in 1902: they did not return again to Cork (Howarth 1931, 116-7).
³ For a contentious historiography of the term prehistory, see: Chippindale (1988) and Clermont and Smith (1990).
the formation and writing of this editorial in 1849 at the height of the Great Famine in Ireland: some classes may have had more pressing concerns on their mind, such as feeding their families.

Returning to Ulster, the UJA was founded at a time when European archaeology was groping towards the realisation that humanity was of far greater antiquity than had hitherto been recognised: as of then, the idea of the Three Age system had not received general acceptance. The orthodoxy of scientific thought at the time maintained that the history of humanity could be dated by the facts presented in the bible. Humanity was thought to be about 6000 years old, and the earlier propositions from the Classical world of there having been an age of stone before those of metal did not matter so much, as the bible provided more concrete answers. In an article in the first edition of the UJA on the ‘Origin and characteristics of the population of Down and Antrim’, the Rev. Home (1853) talks of the pagan past, but does not mention the Stone Age. However, in the same volume Grattan (1853, 198), highlighting the measuring of crania as an avenue to the study of past races, comments on the “(so-called) Stone, Bronze, and Iron eras”.

In 1857, an article appeared in which the Rev. O’Laverty (1857, 122-7) comments on the Three Age theory espoused Wilson – which followed from Thomsen – arguing that while the theory may have been plausible, it was inconsistent with the account in Genesis, which states that metal was used from the beginning. O’Laverty argued that his research into the finds from the Bann suggested “no progressive development of the art in the arrow-heads found in the Bann” (ibid., italics in original). From this, he deduced that stone should be seen as a substitute for scarce metal, i.e. they were contemporaneous, and hence no evidence for a Stone Age in Ireland.
In this section I will look at the ramifications of the aforementioned new ideas further, focusing on how the Christian ethics of the time dealt with these new concepts such as evolution, and the subsequent Social Darwinism, and how those realms of possibilities coloured the study of prehistory. Work by Wood-Martin on lake dwellings and stone monuments typifies such quandaries, as does the threading of research into megaliths and contemporary anthropology by Borlase. The work by Westropp, Coffey, and Macalister, while highlighting the adoption of the self-image of the archaeologist as a man of science, equally highlights the difficulty in which the Three Age system was applicable, and how before the era of absolute dating such matters were easily contentious and ultimately, the results a matter of personal choice.

Waddell (2000, 1-3) has commented that the apparent convenience of the Three Age system was eschewed by Irish scholars until quite late in the nineteenth century even though Worsaae (1845-7, 310-5; 327-44) had in the 1840’s made presentations of his work in Ireland, and at this time specifically placed the building of the megaliths in the Stone Age, which a hundred years later would be disregarded (they would be seen as of a metal using age: see below, p.27). In relation to the Mesolithic, Rowley-Conwy (1996, 940-4) has commented that in terms of a European chronology, for a while there was the possibility of there having been no Mesolithic at all, as the earlier theorising by H. M. Westropp was effectively overshadowed by the publication of Lubbock’s *Prehistoric times* where the evolutionary path of humanity was seen to go straight from the Palaeolithic to the Neolithic. The term the Mesolithic was a late starter, only gaining substantial recognition after a few decades into the 20th century, specifically due to Clark’s definition of the period as occurring “between the close of the Pleistocene and the arrival of the Neolithic arts of life” (cited in *ibid.*, 940). Indeed, it is after the Harvard expedition in the thirties and Movius’ (1942) consequent publication of *The Irish Stone Age* – in which he cites Clark’s work as the inspiration for his monograph (*ibid.*, xvii) – that the term comes into more common parlance in Irish archaeology (however, not without its dissenters, see below p.27).

In Wood-Martin’s (1886, 9) *The lake dwellings of Ireland*, he comments on the arrival of people to Ireland without alluding to the possible subdivisions of the Stone Age, stating that the first ‘colonists’ used rude stone tools and settled on the lake shores due to the “original paucity of open country, for on the arrival of the first colonists … the only plain not covered with forest was the level district stretching between Dublin and Howth”; adding that the “most probable cause of their erection
[of the lake dwellings] was to serve as places of refuge… to provide safety and protection”. Again, as we saw in the articles from the *UJA* thirty years previous, the biblical accounts of history weigh heavy on the interpretation of the past: however, here Wood-Martin maintained that

the words of Genesis are in no way antagonistic to the discoveries of modern geologists, nor even to the theory of evolution … In common parlance we speak of events that occurred ‘in days of old’ without intention to limit the idea to periods of 24 hours (*ibid.*, 1).

Furthermore, in concurrence with the evolutionists’ ideas of progression, and Social Darwinism, Wood-Martin, a military man, began his book with the statement:

To look back at antiquity is one thing; to go back to it is another. If we look back to antiquity it should be as those who are winning the race – to press forward the faster, and to leave the beaten still farther behind (*ibid.*).

Nevertheless, as Fredengren has noted (2002, 40-2) the very fact that the lake dwellings under study seemed to have survived as a somewhat stable ‘type’ of settlement for so long in Ireland generated contradictions in this dominant ideological posturing, and led Wood-Martin to analyse the crannogs in terms of use by a physically inferior race, *i.e.* the Celts; but, in the same breath, concluding that progress was to be discerned from the material culture under scrutiny.

In 1888 Wood-Martin (1888, vi) published *The rude stone monuments of Ireland (Co. Sligo and the Island of Achill)*, which he erringly hoped would be the first in a series that would “ultimately embrace the entire ambit of the Kingdom”. Wood-Martin commented on the bipartite division of the Stone Age, and firmly placed the study of archaeology in the fold of science, stating that the discipline was “a connecting-link between geology and history” (*ibid.*, 2), and proudly stated his meticulous approach to fieldwork, leaving no stone unturned as it were (*ibid.*, 237). In terms of his interpretations of the lithics of prehistoric Ireland, he commented that the evidence coming from Australia, where the “commerce” in stone tools were observed as being “bartered” over a distance of a hundred miles, could be analogous with the finding of Antrim flint in Sligo; as for the function of the monuments, he argued against the idea of them as places of sacrifice or ceremony, but rather suggested them as places of sepulture (*ibid.*, 115-9; 250).
As we saw earlier in relation to *The Tour Of Connacht*, it had been surmised that the megaliths may have been used in Druidic cults of some nature; Wood-Martin dismissed this, and T. J. Westropp (1906-7, 454) concurred: “only two or three [megaliths] have ever been called ‘Druids’ Altars’, probably derived from the pseudo-learning of the gentry or surveyors”. Westropp was active in the Clare area, and in similar fashion to Wood-Martin, he was proud of his methodical approach to his fieldwork, and placed the megaliths in the “Neolithic and Early Bronze Age, though probably surviving to unusually late times” (*ibid.*, 457). Over the course of two decades, Westropp published in the *Proceedings of the Royal Irish Academy* and the *JRSAI* a large volume of articles on various Clare monuments such as ‘prehistoric forts’, ‘ancient remains’, and dolmens, as well as on the Aran Islands and other areas, not to mention the folklore of the areas.

The first monograph dedicated to megaliths encompassing all of Ireland was Borlase’s (1897), *The dolmens of Ireland*. This work, unlike that of Wood-Martin and Westropp, did not involve the visitation of all sites, and indeed was reliant on the aforementioned two authors’ respective works for his synthesis.⁵ Significantly, the reach of the imperial age can readily be seen by the list of reputedly comparative dolmens in Africa, Middle East, India, as well as closer to home in England and mainland Europe, a list made possible by the Europeans’ machinations in these lands. Indeed, a major part of this book was what he called “the question of early racial movements from north-west to south-east and vice versa across the face of central Europe” (*ibid.*, viii). Borlase opined that

> the chambers bear witness … to a barbaric attempt to copy in unhewn materials some elaborate models of hewn-stone domes and arched vaults which had become known to the builders through contact with the cultivation of the Mediterranean or the Black Sea coasts (*ibid.*, 425).

And in disagreement with Westropp and Wood-Martin, he argued that the monuments were no mere sepulchres of the dead, but places set apart for the *sacrificia mortuorum*, for pilgrimages, for the periodical assembling of the tribe or tribes for religious or social purpose, for the holding of fairs, for the contracting of marriages, and for unrestricted feasting and revel. At the root of all this lay the cultus of the dead and there is no need to shun the fact that in the British Isles … human sacrifices, almost certainly combined with cannibal practices, prevailed (*ibid.*, 476).

⁵ de Valera and Ó Nualláin (1961, xv) note however, that Borlase did not include all of Westropp’s noted megaliths in his synthesis.
Borlase dedicated his book to Lubbock – the arch-imperialist – and the colonialist thesis is clearly visible throughout. Moreover, the chapter on the “anthropology and ethnology” is an exhaustive account of skull sizes, with comparisons of the Irish with Neanderthal and simian skulls; on the ethnology of Irish groups, he speaks of contamination between groups, and in the case of his self-proclaimed ‘investigations’ in Galway he uses the dominant social theory of the day in his descriptions of the ‘commoners’ he witnessed:

the Cladagh men themselves are lounging and phlegmatic… they are highly suspicious… There are clearly two types … the one the dark and handsome type… the other remarkably plain and ill-looking… sullen and evil (ibid., 1078).

Some fifteen years later, Coffey (1912) followed with a publication on New Grange and other incised tumuli of Ireland, and the subtitle of the book neatly sums up the agenda: “The influence of Crete and the Aegean in the extreme west of Europe in early times”. Here, Coffey maintained that motifs such as spiral patterns lozenges, concentric circles and so forth came from the Mediterranean via Scandinavia, not France as others had thought. This, of course, harkens back to the aforementioned debates of the eighteenth century in the days of the Hibernian Antiquarian Society.

Macalister (1928) sung Coffey’s book’s praises in his synthesis of Irish archaeology, and while Waddell (2000, 3) and Milner and Woodman (2005, 4) have pointed out that Macalister used the term Mesolithic in his 1921 Text-book of European Archaeology, in his 1928 The Archaeology of Ireland he simply states the bipartite division of the Stone Age, and comments

between these two periods there was an era of transition, as yet imperfectly known. It appears to have been a time when new races, swarming, probably out of Asia, were entering Europe, each bringing its own contribution to the culture of the Continent (Macalister 1928, 7).

Furthermore, he frets at the difficulties in analysing the Stone Age and the Bronze Age as separate entities, citing the melting pot character of the material culture from those times; while acknowledging the Stone Age date for the initiation of the construction of dolmens, he describes “the great chambered tumuli” as “the most conspicuous of the Irish Bronze-Age monuments” (ibid., 28; 118). While Macalister uses the term culture in the above quote, this is not in the context of Culture as would become influential, but rather his writing follows the pattern of ascribing affinities to
races as had been the case of the nineteenth century work discussed above, and culture pertaining to the notion of affinity or civilisation.

2.4. The formulation of an Irish Mesolithic

I will now move on to the formulation of the Irish Mesolithic as a distinct entity. Here, I will show how and why Ulster was considered the heartland of the Mesolithic, and the flint resources the *raison d’être* of the north-eastern distributional bias. The history of Ulster Mesolithic research has been comprehensively covered by Woodman (1978, 6-12) so in this section I will briefly outline some of his main points and cover some aspects he did not touch on. I will discuss the work of Whelan, and that of Movius and the Harvard mission, and how this project significantly altered the picture of the Mesolithic inhabitation in Ireland and enabled a framework to be set in place, but one that did not necessarily have to be adhered to as we will see by Mitchell’s reconsideration of the evidence. The lengthy quotes included in this section by Movius, Macalister, and Mitchell arguably show how, on the one hand new parameters of thought alter the theoretical landscape in which archaeology is practiced, however on the other hand how the residues of old concepts are hard to shake off.

Woodman’s chapter on the “history of the study of the Mesolithic period in Ireland” (1978, 6-11) underlines the domination of Ulster in Mesolithic research; this being due to the tradition of amateur collecting, as well as reasons such as the fact of accessible raised beaches and extensive diatomite cutting (of course, the diatomite cutting and raised beaches enabled the amateurs areas to collect artefacts). Critically, Woodman suggests that a pattern may be ascertained between findspots of material and the proximity of collectors’ homes. Commenting generally on the nineteenth century activities, he suggests that the era of the collectors could be described as the era of lost opportunities. Although the natural scientists had created the chronology they were incapable of using it. Knowles did roughly provenance his material but collections were built up in a fashion which had more in common with the 18th century gentleman’s collections of ancient curios (*ibid.*, 10).

Woodman further comments that by the 1920’s the focus had changed from being directed at the artefacts themselves, to what information could be gleaned from them. However, the emphasis on research at the time was placed on ascertaining the foreign contacts that produced the Mesolithic record, thus relegating the importance of developing “a proper definition of local implement types…” Thus Whelan in particular was inclined to attempt to find implements in his Irish material which paralleled
implements in other foreign industries” (ibid., 10). Woodman comments that while Whelan was in many ways blinded by the foreign influence idea, his chronological sequence for the Irish Mesolithic was confirmed by the work undertaken by the Harvard Archaeological Mission of 1934, which investigated sites in both the north and south of Ireland; here, it was established that the Mesolithic consisted of Early and Later periods:

The result of the Harvard Missions work was to make available in a well documented context a large quantity of material which could be placed in a stratigraphic succession. This expedition’s work led to the establishment of a concept of the Mesolithic which has survived until almost today (ibid., 11).

The 1930’s was certainly a tumultuous time to be involved in a project like the Harvard Mission that involved investigations in both Northern and Southern Ireland. The Janus-faced nationalism of Ulster Unionism was in full flight; the South, involved in its Economic War with Britain, was in the process of divorcing itself from the Empire and becoming a republic; and Britain’s relationship with Europe was again in question. Movius (1942) alluded bluntly to the political climate:

the writer, trained as an archaeologist and approaching the problem from the purely objective viewpoint of an outsider, sees no valid reason for doubting as intimate relationship between Britain and Ireland on the one hand and Northern Europe on the other during Late-Glacial and Early Post-Glacial times (ibid., xxi).

In terms of the theoretical aspects of Movius’ work, as mentioned previously, he cites Clark’s work as an inspiration. The following passage, with references to culture groups, diffusion, and environmental parameters, clearly underlines this:

Furthermore, the well-established principles of diffusion are clearly substantiated by the distribution of Mesolithic settlements in England and Ireland. On the periphery influences arrived late, and, due to the proximity of the continent, South-Eastern England was farther advanced than Ireland and Scotland… Other factors, both climatological and geological, were operative, and, in so far as they affected either mode of life or facilities for movement, they must be considered by the archaeologist. These also were important in the diffusion of new ideas. Unless there was a definite need resulting from such a major cause as environmental conditions, traits would probably fail to diffuse… As far as Ireland is concerned the arrival of the Campignian seems to mark an invasion of new peoples… As in earlier times, the North Channel was the line of approach used by the newcomers, who, possessing superior equipment, forced the Larnian food collectors inland and to the infertile
sand dune areas of the coast, and occupied the rich flint region of Counties Antrim and Down… In the sand-dune areas of the coasts of Northern and Western Ireland, the Larnian survivors clung on to a basically food-gathering economy until the Early Christian Period (1942, 260-1; 256).

Interestingly, for a monograph on the Stone Age a peculiar omission was any substantial discussion of the phenomena of the megaliths which he justified so: “whereas some of the megaliths in Ireland are admittedly Neolithic, the practice of constructing these monuments reached its peak with the first appearance of metal and is outside the scope of this book” (ibid., 211). In relation to this, Macalister, in the second edition of his The Archaeology of Ireland footnotes an acknowledgement to the work of the Harvard Mission (1949, vii), and cites the work of Evans and Mahr as causing him to (happily) “discard the Danish scheme of Stone, Bronze, and Iron Ages, with their subdivisions”, and in its place use a chronology based “upon types of megalithic monuments, the most important prehistoric remains in the country”. In so doing, he argued for:

- Beachcombers corresponding generally to Mesolithic
- Protomegalithic corresponding generally to Neolithic and Early Bronze Age
- Deutromegalithic corresponding generally to Middle Bronze Age
- Epimegalithic corresponding generally to Late Bronze Age and Early Iron Age (ibid., viii-ix).

Clearly unimpressed with the sentimental nature of some archaeological and historical work in his land he sniffed at “the history of the egocentric outlook called ‘Nationality’” (ibid., ii), and declared

the myth of Early Irish civilisation is rooted in ignorance of all that Science has to say regarding the origin and nature of civilisation itself. Civilisation was a very rare phenomenon in the Ancient World, and came into existence only in exceptional circumstances. No isolated community could ever develop it: on the contrary, if a community, which had acquired certain of the resources of civilisation, should happen to be isolated… it would sooner or later lose these acquisitions… Imperialism is essential for the planting and fostering of civilisation, for it brings many different peoples within its scope, and almost forces them into contact, so they can ‘pool’ whatever spiritual, intellectual, and material commodities they may individually possess; and supplies, for the developing community, a needful training, such as is supplied by parental and educational discipline for a developing child” (ibid., x).
This forceful paragraph was indeed a far cry from the nationalistic agenda being promulgated in Ireland and many corners of the globe at the time. The end of World War II saw Imperial Britain victorious yet crippled, and there is a clear yearning for the halcyon days of Macalister’s youth in his writing.

As mentioned in Woodman’s previous quote (p. 26), the Harvard expedition set the concept for the Mesolithic in Ireland which survived until well into the seventies. However, there was still room for manoeuvring – Woodman and Anderson (1990) have noted that what we now consider as Mesolithic-type artefacts were seen again as possibly being Neolithic in the 1960’s and 70’s. The main figure in Mesolithic research at this time was the geologist Mitchell, a polymath who excavated numerous Mesolithic sites. In 1971, he highlighted the debated entity, the Mesolithic, and suggested:

At some time more than 7,700 radiocarbon years B.P. a small group of folk of Upper Palaeolithic ancestry must have reached Ireland... The continuing rise in sea level between Britain and Ireland then widened the gap into a stretch of water too hazardous to be crossed in the type of boat available to Mesolithic wanderers. We can perhaps picture very limited numbers of descendents of the original immigrants stagnating in cultural isolation until the first Neolithic farmers arrived about 5,500 radiocarbon years B.P.... In addition to providing cultural innovations, the Neolithic folk may have provided a market for the fish and other game trapped by the Larnian hunter-fishers [‘Neolithic’ polished stone axes a main trading item]. The latter seem to have undergone some sort of population explosion, and established themselves widely on sea and lake shores in the Northern half of Ireland. Here for a short time, before being absorbed into the Neolithic way of life, they flourished as specialised fishermen, catching and smoking fish in large quantities (Mitchell 1971, 282-3).

Arguably, the interpretation here of cultural progress and societal change can be seen to be quite similar to that of the editorial in the first edition of the UJA cited previously (p. 19). There is also the sense that the Neolithic ‘folk’, the farmers, are our ancestors, with the Mesolithic having been a stage of progress inevitably surpassed. The Mesolithic fishers, once given the opportunity of commerce and enterprise, improved their lot, and inevitably became a new people: a Neolithic people.
2.5. The Stone Age in the west

In this section I will move back chronologically, and turn my attention to the west of Ireland more specifically, to look at research into the Stone Age there. I will begin with the founding of the *Journal of the Galway Archaeological and Historical Society* at the turn of the twentieth century, and then look at Raferty’s mid-century article on the Stone Age in the west, and the debate on the ‘Riverford Culture’. Other aspects such as the ‘shore-dwellers’ will be discussed, as well as the initiation of the Megalithic survey by de Valera and Ó Nualláin, which began on the monuments of Clare. This survey, formulated in the concept of the culture history model, saw the monument types as indicators of culture groups, and attempted to ascertain how the diffusionary pattern of the spread of the megalithic phenomenon came about. I will then finish this section with a look at Herity’s model of the passage tomb builders’ arrival to Ireland, and how this related to the megalithic survey’s findings.

The turn of the twentieth century saw the foundation of the *Journal of the Galway Archaeological and Historical Society*, with the inaugural address explicating how archaeology was the “science of things that are old”, and how the scientific mind could understand the remnant monuments as revealing “the domestic, the social, the political, and the religious life of our own ancestors, in the far distant past”; the editorial called these monuments the “unwritten records of the past”, and related the “pre-historic times” to “the ages of stone, of bronze, and of iron” (Healy 1901, 3-5). However, the historical past dominated the articles in the journal for many years, with a focus on the manuscripts, castles, and ecclesiastical monuments, and charting the clans of the area. It was only the occasional paper that dealt with prehistoric matters.

In 1945 the journal published an article on the ‘Contributions to the study of western archaeology’ by Raftery (1945), in which he stated the then conventional dating of the Mesolithic to 6000-2500BC; in commenting that ‘no unequivocal relics of the Mesolithic Period have been identified’ in the west, he presumed, however, that they would have been there; in terms of the Neolithic ‘there is no reason to doubt that man had penetrated to and largely settled in Galway’, citing the polished stone axes as proof of this (*ibid.*, 109). Commenting on Mahr’s theory of a ‘Riverford People’ (see below, p. 30), he was dismissive of the idea of the axes signifying a ‘people’, arguing that the relation between this type of axes and the Bann Flakes might represent instead an industrial aspect of a Neolithic culture rather than a distinctive culture *per se*. Several specimens of these slate axes have been reported from the Corrib … and a very large number has been found on Tawin Island and in the general Oranmore neighbourhood. Conservatism and poverty may, of course, here again have played a role and axes of this type may have been
continued to be made for a long time after their first introduction (*ibid.*, 112).

Furthermore, he argued, in disagreement with Mahr, that the megaliths in the area were related to the arrival of metal using people from the Mediterranean.

Mahr’s presidential address to the Prehistoric Society outlined his theory on the ‘Riverford People’, and he propounded that this should be viewed as an Epi-Mesolithic culture, and further argued that there was the possibility of their being no real Neolithic in Ireland *per se*, but rather, a move into the Bronze Age, and the building of the Megaliths (1937, *passim*). Mahr acknowledged Evans’ research as a major contribution to his analysis of the megalith phenomena, arguing for an evolution from complex to simple form, and that the arrival of megaliths implied “something more than a purely cultural innovation, and that there was also immigration involved”: this diffusion was presumed as invasion and conquest, with the ‘horned cairns’ as exemplifying a move westwards across the island; he argued that the passage tombs began also to the same period of “megalithic colonisation and that they represent two distinct currents within one and the same movement” (*ibid.*, 342, 345, 351).

To jump back slightly to the latter half of the end nineteenth century and the first couple of decades of the twentieth century, some of the dominant names who worked on matters prehistoric in the west of Ireland in this period include Armstrong, Bigger, (Mr. and Mrs.) Coffey, Costello, Kinahan, Knowles, Macalister, and Praeger (e.g. Costello 1905; Kinahan 1868-9; Kinahan 1870-1; Knowles 1896; Knowles, Paterson, Praeger and Bigger 1899; Macalister, Armstrong and Praeger 1911-2). As is obvious from the contributors to archaeological research mentioned so far, this was a male-dominated pursuit: one of the few exceptions to this at this time was Brunicardi (1914, 184-213), who published an article ‘The shore-dwellers of Ancient Ireland’; this was based on her MA thesis, and included a synthesis of fieldwork on middens done by Knowles and Praeger amongst others.

Here, Brunicardi’s map of ‘midden sites’ contains some fifty six shell middens, of which forty four were situated on the western seaboard, and twenty in the area
covered by this present thesis. Interestingly, Brunicardi, in theorising on the ‘shore-dwellers’, comments that the middens were the only monument left by those people, implying no connection with the megaliths even though she describes a skeleton found as “a typical Neolithic man”, and she states that their dwellings were “either huts or caves” (1914, 184, 185). From the twenty sites in the west, numerous ‘hut sites’ were discovered, along with hearths. The lithics consisted of flint (in Sligo, Leitrim, and Clare), chert, quartz, quartzite, and other “metamorphic kinds”; these made up diagnostic tools such as arrowheads and scrapers, as well as axes, choppers, flakes, and hammerstones; she points out the modern use of stone tools on the Aran islands (ibid., 197-200). Pottery was not a frequent find, and in terms of the composition of shells, the case of the middens at Dog’s Bay showed signs of certain types of shell-fish being piled in different heaps; it was considered that the dog-whelk could have been collected for dyeing purposes, either the dyeing of cloth or human skin (ibid.).

Brunicardi relates the middens of Ireland to those from around the globe, and suggests that a peculiarity is the finding of heaps of shells of a single species rather than a mixed heap, and that the finds “point to a race of people in the same plane of civilisation as the Danish and Scotch kitchen-midden makers of prehistoric times, and the Fuegian and Australian of to-day”, and the lithics suggest a “low grade of civilisation” as flint was not exported around the country, but rather, local material was used (ibid., 206). Citing the work of Lubbock – who called the Fuegians “the most miserable specimens of the human race” – and other explorers, she maintains that peoples such as Australians and Pacific islanders were stuck in a stasis of non-development, and in line with this theoretical stance, argued that the Neolithic shore-dwellers in Ireland were a distinct degraded race from the megalithic builders inland (ibid., 207, 209).

Over a century after the initial Ordnance Survey set about recording monuments, the project was taken up again in 1949, this time naturally in the hands of the Republic’s Ordnance Survey section: clearly there were no ‘Protestant Conservatives’ to spoil the party this time around; however the ambitions were considerably more modest, focusing solely on a survey of megaliths. The main considerations of this survey were to record in a systematic fashion the megaliths in the countryside, with a focus on the distribution, locational siting, and morphological and orientational traits.
of the monuments. The initial county surveyed was Clare, which as we saw previously had been well covered by Westropp; indeed, the survey noted that of the 119 extant tombs listed in the volume, Westropp had mentioned all but 24 (de Valera and Ó Nualláin 1961, xv). Commenting on the classification of tomb types, the survey identified four main types, the Court Cairn, the Portal Dolmen, the Wedge-shaped Gallery Grave, and the Passage Grave, and suggested that this typology was vindicated by the respective finds of the types, suggesting that the tomb types were “indicators of cultural groups”; further they argued that no new type was bound to be discovered, and that the excavation of some 50 megaliths from 1930 had led to a greater understanding of the “architecture and furniture” of the tomb types (ibid., xi-xiv).

The construction of the megaliths apparently on the bedrock in the Burren suggested to the authors that the contemporary soil cover was similar in the “megalithic times”, with scattered tree cover, and the “craglands” used as winter grazing (ibid., 108), and in relation to the distribution of wedge tombs they argued that, unlike the location of passage tombs in Ireland, the wedge-tombs suggested a pattern of close proximity to habitation as opposed to specially selected burial grounds (ibid., 111). The vast majority of the tombs listed for Clare were wedge-tombs, and they dated them, on the grounds of inference from evidence elsewhere in Ireland, mostly to the Bronze Age, and suggested parallels with Brittany; the less well represented court tombs were suggested as being peripheral to the main Irish distribution and dated firmly to the Neolithic yet they suggested that the arrival of the court tomb type “need not, however, necessarily pre-date the arrival of the wedge-shaped tombs in the area”; the portal tomb was seen again as peripheral to the main Irish distribution, “typologically derivative of the court cairn”, and possibly contemporary with the wedge-tomb; the absence of passage tombs, while noting that some of the numerous hill-top cairns may hold this type, was suggested as a fact due to the lack of a cemetery arrangement of these cairns as well as the fact that the area fell outside the ambit of this type (ibid., 114-5).6

6 Three years later the survey of Mayo followed (de Valera and Ó Nualláin 1964), and eight years later volume III covering Galway, Roscommon, Leitrim, Longford, Westmeath, Laoighis, Offály, Kildare, and Cavan was published with an altering of the terminology of the tombs to court-tombs, portal-tombs, wedge-tombs, and passage-tombs (de Valera and Ó Nualláin 1972); Sligo’s survey was published some 15 years later (Ó Nualláin 1989). The passage tombs were not included in the aforementioned volumes as they were to have their own volume.
The fieldwork carried out for this survey led de Valera (1960) to disagree with Evans and Mahr’s assessment of the court tomb phenomena, however he remained loyal to the entrenched diffusionary model. Here, he switched the direction of the movement to a west-east direction originating in the Sligo/Mayo region by possibly French colonists landing on the coast, and argued for a specifically Neolithic date; again, he disagreed with Mahr’s assessment of the passage tombs, arguing that they were later than the court tombs (*ibid.*, 41, 52-8, 72). In this, Herity (1974, *passim*) agreed; he opined that the court tomb builders were a ‘peasant’ farming culture and the passage tomb builders were a more sophisticated, urbane culture, which set up on the east coast and diffused westwards, originating via Breton and Iberia.

Herity argued that the poverty of the material culture, and the distribution of court tombs evoked the model of a scattered peasant farming community, while the sophistication and agglomeration of passage tombs evoked a model of an urban minded class of entrepreneurs, who engaged in trade and industry and “everywhere they went, there are signs of brilliant administrative and professional minds adapting easily and confidently to the insular environment” (*ibid.*, 27, 175). However, he sat on the fence in terms of a decision on whether or not the passage tomb phenomena represented a small scale movement or outright colonisation; and the seeming paucity of material culture, which in his view should have been greater, was reconciled in terms of degradation and stifling by less urbane folk:

Conservatism is an ever-present threat to such a vibrant society, and the monotonous character of the ornaments and pottery vessels which we find in rather the same forms widely dispersed in space and time may imply a hardening of the society’s arteries and the onset of such conservatism. Intermarriage with the peasant indigenes could well have hastened this development (*ibid.*, 185).

Interestingly, he argued that the preponderance of seashells found at passage tombs in comparison to court tombs suggested an introduction of this pattern of seashore living by the passage tomb people, and argued that the ‘Larnian’ lithics found at Loughcrew tied this lithic type to them, and therefore that middens such as at Sutton and along the north (from Sligo) and north-east coast could be seen as related to the passage tomb builders (*ibid.*, 172-4).
2.6. Woodman and the Irish Mesolithic

This section highlights the predominant place that Woodman has had on the research of the Mesolithic in Ireland over the past few decades. His seminal monograph on the Irish Mesolithic, published in 1978, is still the only dedicated monograph to the Irish Mesolithic, to which he has added many more publications such as that of his excavations at Mt. Sandel, Bay Farm, and Ferriter’s Cove to name but a few. In this section I will limit my discussion to general aspects of these three sites, and will discuss in more detail other aspects of these sites as well as others in later chapters.

Woodman’s, *The Mesolithic in Ireland* (1978), publication was the first monograph dedicated to the Irish Mesolithic, and was mainly concerned with outlining and defining the chronology and typology of the material culture of the period, and indeed, in providing once and for all a definitive Mesolithic: as we have seen not everyone was convinced of this characterisation of the material. His gazetteer of all known sites to that date shows a significant northern bias to the material – about 150 sites are listed for the north against 40 for the rest of the island. However, he made clear that his analysis suggested that the earlier notion of the Mesolithic dependence on the exploitation of Antrim flint, and the notion of the initial colonisation occurring in the north-east were no longer tenable (*ibid.*, 208). Broadly, Woodman’s analysis followed the culture-historical model, and he suggested that his deterministic environmental model was due to the evidence of the period; his use of the site catchment analysis, developed for a considerably different climate and environment was acknowledged by him as problematical (1978, 175).

As is clear, research in the Irish Mesolithic has been dominated by Woodman, and space will not allow even a brief jotting of his publications over the years⁷, so it will suffice to simply comment on three publications which he headed. The site of Mt. Sandel, Co. Antrim projected the Irish Mesolithic onto the European map, and provided much of the evidence for the subsistence patterns discussed in the 1978 publication; however the full report was not completed, so the interpretations were tentative. In 1985 the excavations were published (Woodman 1985), and this site came to dominate discussion on the Mesolithic in Ireland: indeed the site became the site-type for the Irish Early Mesolithic. And understandably so; here there was

⁷ Waddell’s (2000, 407-08) bibliography references some twenty three of Woodman’s publications; and this not including Woodman et al.’s (1999) monograph on the excavations at Ferriter’s Cove, in which his bibliography (1999, 162) references thirty two of his own previous material.
extensive evidence of habitation, far more than had been thought probable when the work began ahead of the development (ibid., 4).

The interpretation of the site was that it signified a base camp, and possibly structures indicating more temporary occupancy as well, with outliers as satellite camps; the early dates obtained entailed that the chronology of the arrival of humans onto the island would have to be revised (ibid.). As mentioned Mt. Sandel inevitably became the site-type for the Early Mesolithic, and as such was at variance with the projected European model of a Mesolithic society becoming more complex over the millennia, with the hunter-gatherers settling down and using fixed base camps: Ireland had base camps early and fleeting occupation later. Moreover, as any standard first year essay or exam answer on the Early Mesolithic will say, the ‘other’ site, the temporary camp at Lough Boora, Co. Offaly provided the perfect cousin to the Mt. Sandel base camp. At Mt. Sandel they overwintered; at Lough Boora they stayed a while.

Accordingly, Mt. Sandel is a good example of the perilous nature of the archaeological endeavour: archaeology deals in fragmentations of fragments, and a shadow in the record remains a blind spot in the interpretation. If Mt. Sandel had remained unexcavated and was treated as another lithic scatter of fleeting occupation, the Early Mesolithic would have been consigned to the picture of roving hunter-gatherers. And of course the discovery of such a site can highlight and vanquish a blind spot, but this can easily become a blinkered view: as the known Early Mesolithic habitation was a base camp, it is expected that this model, placed on an isolated pedestal, is applicable throughout. Consequently, this individual site, which had its own history and trajectory, is laden with a value in terms of its broader picture for us as opposed to what it was, and whose it was, in its own time and place: indeed, these very points were raised by Woodman before the publication of the Mt. Sandel monograph (1983, 25). While it is easy to be critical of the idea of the ‘archaeology of wait-and-see’, it is difficult to extend beyond that boundary of possibilities.

Woodman and Johnson’s (1996) article on the Bay Farm 1, Co. Antrim excavation was a belated publication of an excavation by Woodman carried out shortly after that of Mt. Sandel. Here, Later Mesolithic artefacts were uncovered during drainage work
in a field on the Antrim coast, and it was hoped that this would enable the examination of material in situ, as for the most part “the study of the Irish Mesolithic on the Antrim coast [had] been based on material found in geologically re-sorted contexts” (ibid., 138). Furthermore, this excavation was to form part of a wider regional study of the prehistoric “land use and settlement patterns” in Antrim; however, due to “financial limitations”, and Woodman’s move to Cork, the full project did not come to fruition (ibid.).

The Bay Farm excavations revealed what was argued as signatures of numerous phases of occupation. The excavation revealed stake-holes, and pits, some of the latter which were filled with flint and taken for caches of lithics but not as deliberate caching of only blades, as some of the same pits were found to contain cores: the end result was that these features were treated as “enigmatic”, and the last major feature, or non-feature, was a lack of substantial hearths (ibid., passim; for a discussion on Mesolithic caching see Finlay 2003B). The dominant aspect of the site was the lithic scatter, and the site has been interpreted as a specialised knapping site; over 1000 cores were uncovered as well as the primary debitage consisting of unused flakes. In terms of the regional picture, it was argued that there was the possibility of the Bay farm production site’s material being moved to the Bann Valley and Lough Neagh (Woodman and Johnson 1996, 228). A refitting and a use wear analysis programme were carried out on the lithics. However the use wear analysis was ultimately “not successful” (Anderson 1996, 234). The results of the refitting programme led the authors to suggest that

the classic uniplane core is not so much an integral feature during the reduction of a core but rather a frequent by-product which is a limitation to the further effective utilisation of the core. It has also been shown that frequently very few useful flakes and blades are produced from each core, with the result that large quantities of by-products are left after the production of a relatively small number of usable flakes (Woodman and Johnson 1996, 221).

Woodman’s move to Cork has highlighted once again how our prehistoric periods are determined by people looking for them. With his presence in the south of the country, the Mesolithic distribution map has changed significantly. Ferriter’s Cove also highlights how luck can play a part in the discovery of sites; here, a diagnostic Neolithic tool was noted there which ultimately led to the excavation of a Later Mesolithic coastal site. In 1983, excavations commenced at Ferriter’s Cove, which
continued intermittently until 1995 (Woodman et al. 1999). This Later Mesolithic site effectively showed the distribution of the Mesolithic to involve the four corners of Ireland, and significantly, produced evidence of domesticates of an early date. Woodman comments in the preface to the monograph that, ironically, as this site was investigated to draw out the picture of the Neolithic in the region “the role and significance of the Neolithic component remains almost as unclear in 1999 as it did in 1983” (ibid., viii).

The site has been interpreted as following the model of ephemeral Later Mesolithic habitation, and the dating suggests that the site was used intermittently over a millennium, with more or less three phases (ibid., 154). The lithics at this site highlighted the variable types of stone utilised during the Mesolithic, firmly displacing the ideas of a flint-dominated/dependant Mesolithic. The site however, stands in isolation: as a temporary camp, almost nothing is known of its connecting places in the landscape, apart from Valencia Island which returned a Mesolithic radiocarbon date. Clearly these were not the only Mesolithic sites in Kerry, but the lack of extensive and intensive fieldwork in the region is highlighted.

2.7. Transitions, Megaliths, and Farmers

In this section I will focus on the research undertaken on the Neolithic, especially the role of the monuments, and the ‘arrival’ of farmers. Burenhult’s Carrowmore project is the starting point, and I will discuss his work on the passage tomb builders and his thesis on the Mesolithic economic basis of the same. I will move on to the work of Caulfield in North Mayo, and discuss how he argued strongly against Burenhult’s theory. Moving back east, I will discuss Bergh’s thesis on the passage tombs of Cúil Irra, and finish with a discussion on the Bally Lough Project which looked at the transition to farming in the south-east, and at Kimball’s research on the Neolithic transition in Eastern Donegal.

In between Woodman’s excavations at Mt. Sandel and Ferriter’s Cove, Burenhult’s (1984) Swedish expedition began a large scale survey of the megalithic tradition in Carrowmore, Sligo. While earlier work in Ireland had viewed the megaliths as a result of invasions of missionary farmers (Daniel 1980), Burenhult’s intention was to ascertain the culture historical evolution of the indigenous inhabitants of the region in the context of the theory popularised in the seventies, that along the
Atlantic fringe the Mesolithic population were responsible for the construction of the megaliths. He argued “it is obvious that a maritime adaption has played an important role in the subsistence systems of these megalithic building populations” (the ‘obviousness’ of this surmising is indeed interesting in the context of the previously mentioned omission of Brunicardi on the relation between the middens and the megaliths in her survey of the shore dwellers: see above, p.31). His stated three objectives for the project were to analyse the “culture history”, the “palaeoethnography”, and the “cultural ecology” (ibid., 20-21).

Burenhult maintained that the economy of the builders was in a “traditional sense ‘Mesolithic’”, but the Neolithic makes its presence felt due to the fact that:

1. “The landscape is affected by man”
2. “The erection of stone-built tombs”: this is related to population growth, “and a need for a more formalised social organisation and perhaps … for territorial markers” (ibid., 139).

These “Neolithic elements” take as given the notion of the Mesolithic population as an ecological entity in a ‘natural’, uncultured state, and suggest a Rubicon of population size and social evolution was crossed for the Mesolithic to become the Neolithic. Furthermore, it is clear that the discussion of both the Mesolithic and Neolithic times, and their peoples, is coined in strictly secular terms.

The survey and excavations were interpreted as providing evidence for a Mesolithic economy due to the presence of shells in the megalithic tombs, and the early dates suggested an indigenous development⁸; the lack of substantial houses (beyond what were termed hut sites) was taken as evidence of a mobile societal structure, forgetting the dictum: absence of evidence is not evidence of absence. Ultimately, the lack of diagnostic Mesolithic lithics entailed that the building of these monuments could not be categorically linked to what would be considered a Mesolithic population.

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⁸ For an analysis of the dating of the monuments, and a critique on the project see Bergh (1995).
Caulfield (1983) argued in the early eighties that his work on the Ceide fields militated against the picture painted by Burenhult on the chronology and economy of the megalithic builders in the Sligo area. The discovery of widespread field systems under the bog, with their related megalithic structures, was taken as evidence for the deliberate planning by a farming community, who deforested a large area in order to manage a pastoral system of cattle rearing. Caulfield argued that a similar situation was more likely for the inhabitants of Sligo, rather than Burenhult’s model (of course, Burenhult’s (1984, 144) riposte was that the tombs and area under his consideration were different from the court tombs and the related field systems in Mayo, so both interpretations were valid for their respective areas). Caulfield was dismissive of an indigenous input into the Neolithic, favouring the arrival of Neolithic farmers into the area, bringing with them a Neolithic package of economy and religion. His comments on the carrying capacity of the deforested fields in comparison to that of hunter-gatherers’ range, and the inevitability of farmers taking the opportunity of this apparently empty land is strongly reminiscent of Macalister’s 1949 elucidation on the ‘food-gatherers [being] ... inevitably squeezed out after the arts of food producing have by any means been established in the regions where they pass their unenterprising existence. Thereafter they cannot compete with their more progressive neighbours in the battle of life; sooner or later, they must either emigrate or perish.’ (Macalister 1949, 41).

Again, it is arguable that Caulfield’s and Macalister’s postulating on the landscape as uncultured, empty, and there for the taking by the enterprising farmer, and the inevitability of Progress, are the shibboleth of the colonialist discourse discussed previously.

Amongst the prehistoric field systems and megaliths on the north coast of Mayo, there have also been house structures revealed, both rectangular and circular (Grogan 1996; Cooney 2000); a stone’s throw away to the east at Ballyglass there is the interesting situation, matched in a number of cases elsewhere in Ireland, where the excavation of a tomb revealed a house structure underneath, as well as “smaller structures” under another tomb close by (Grogan 1996, 41-2). Furthermore, it is noted that both seemingly permanent and temporary houses are found in the same regional landscapes during the Neolithic, and Grogan’s list of 50 Neolithic houses has numerous new additions coming from rescue excavations around the country. Indeed, the Neolithic house has a long pedigree of research in Ireland, going back to the work
at Lough Gur, where both round and rectangular houses, as well as enclosures were excavated.

Following work on the Carrowmore project, Bergh undertook a study of the passage tombs in the Cúil Irra region, towards his PhD. The resulting publication, *Landscape of the monuments* (1995), formulates the classification of the ‘passage tombs’ as a ‘tradition’, purposefully blurring the tight classificatory nature of the monument ‘type’ in order to stress the heterogeneity of the extant monuments he was studying. Moreover, the landscape approach to the research and understanding of these monuments is given centre place, and he sets out clearly various avenues by which the monuments can be theorised, such as astronomical alignments, visibility of and from the monuments, and how these related to power structures at the time, and critically, how these changed through time. He suggests that this was a development over time, and tips his hat to the theory of a progression from simple to complex structures over time (*ibid.*, 109).

Consequently, he concludes that a significant aspect of this tradition of monument building was the controlling, and dominating, of the landscape by a social elite, to the exclusion of the wider population whose ancestors resided in the tombs (*ibid.*, 162). Arguably, Bergh has implicitly relegated the ‘masses’ of the Neolithic society, those outside the know, the inner circle of the elite, as a disempowered group. However, this reading of power is questionable, as it is argued that power can not be understood as being projected from the top down, but rather, in Foucauldian terms, as “an understanding of power as a diffuse entity, present at all levels of society and inherent in all events and relationships” (Brück 1998, 32).

Bergh suggests that, *contra* Burenhult, a Mesolithic ‘hand’ was not at play in the construction of the monuments. Rather, he cites the impetus for the monuments as arriving from social and economic lines of communication from the continent, to, presumably, newly arrived farmers in the region. Bergh’s caveat on the influence of the continent maintains that “the absence of continental features represents rather an earlier phase when the long distance contacts were of a different character, and not of a kind explicitly expressed in the local ritual and its monuments” (*ibid.*, 110). Bergh’s position in terms of the links with the continent and the negative evidence for the
Mesolithic does, however, beg the question: does this imply a lack of a Mesolithic society in the region, a virgin territory, or a vanquishing of the former from the latter at some stage in prehistory? This is left unsaid, and Bergh notes that some fundamental issues about the lifestyles of the inhabitants remain unanswered such as the settlement and subsistence patterns.

One of the few portal tombs to be excavated in Ireland is the Poulnabrone portal tomb, Co. Clare. This excavation revealed a series of depositions of disarticulated human remains, along with animal bone, pottery, lithics, and bone artefacts (Waddell 2000, 90-1). At least twenty two individuals’ remains were identified, with these representing six children and sixteen adults (Cooney 2000, 96). The dates returned on the bone ranged from 4200 to 2900 BC, with Cooney commenting that this could represent an early date for the construction of the tomb, with later depositions of remains, or a Later Neolithic construction date, with the deposition of bones that had been stored elsewhere (ibid.). These wide ranging dates highlight the difficulty ascertaining the construction date of a tomb from the depositions found in them.

After discussions with Woodman in the early eighties, Zvelebil and colleagues initiated a long term project looking at the early prehistory in the south east of Ireland, focusing on one river system, with a special focus on the Mesolithic Neolithic transition. In the same vein as Burenhult’s project (see below), one of the aims was to understand how the transition to farming in Ireland involved an indigenous population. The project initially investigated the lower reaches of the River Barrow and the Barrow’s estuary at Waterford, and then further work continued upriver (Zvelebil et al. 1996). In an earlier article, Zvelebil et al. (1992, 202) outlined their processual landscape approach to their investigations, citing two aims: “first, to understand the processes that form and transform archaeological residues and the surrounding landscape, and the second, to interpret contemporaneous patterns of behaviour and the way they change in time”.

They argued that their findings concluded that a site-orientated approach to the record, whereby lithic scatters are used to determine where to dig to look for settlements, would be problematical, and that lithic scatters must be used in and of
themselves to interpret the landscape utilisation of the inhabitants at the time under scrutiny (ibid., 223). Furthermore, the authors stressed the necessity of a multidisciplinary approach to this research, maintaining that it is futile to attempt behavioural interpretation without understanding the geomorphology and the formation of archaeological landscapes first. This requires often detailed testing of the landscape by geomorphologists, palynologists, and other specialists on which palaeoenvironmental reconstruction, both on local and regional scales can be based (ibid., 214).

In summary, they posited that their findings suggested a pattern of continuity over the period of the transition to farming, with also an increase in the type of ecosystems utilised in the Neolithic.

On the other side of the country, Kimball (2000A) surveyed an area in the Lough Swilly, Co. Donegal region towards his PhD on the Neolithic transition in Ireland. Here, he and his team fieldwalked some 101 ploughed fields amounting to 4.3 km², resulting in some 757 stone artefacts, 21 of which were Mesolithic (ibid., 25). Unfortunately, while Kimball alludes to various artefacts found by amateur collectors in the area over the years, he does not elaborate on this aspect of the record, or indeed include even a cursory list of what had been found by them. He suggested that the findings of his survey were broadly similar to the Bally Lough project in terms of the landscape distribution of finds, i.e. the range of ecozones of the Mesolithic and Neolithic finds; however, he argued, contra the Bally Lough project, that this did not represent continuity from the Mesolithic to the Neolithic.

Kimball’s staunchly processual, neo-evolutionary, stance is revealed as he says: “due to the nature of the Later Mesolithic archaeological record, it is not possible to define the social dimension…of this society” arguing that instead the environmental context is all he is left with to work, and, luckily for him, he suggests “that environmental parameters formed the constraints within which the social dimension evolved” (ibid., 55). Therefore, he maintains that there is excellent evidence available to reconstruct the environmental parameters of the time, and hence to detail the economic resources available. However, he does not seem to acknowledge differing opinions of palaeoenvironmental reconstruction, for example the work by O’Connell and Molloy (2001) versus the work by Göransson (1984) (see below, pp.47-8).
Moreover, this explicit dichotomy of social practices and economy are founded on the Hawke’s ladder of inference principle. However, the ladder of inference principle is ultimately flawed and rather than a ladder leading to less obvious insights, the ladder is more Escher-like with steps leading up and down, a confused interplay of parts, as opposed to neat parts playing a role in a unified system: the economic base is intimately related to social practices. Finally, a perplexing void in his thesis is any discussion of the monumental aspects of the region; he does not include the megaliths in his analysis, beyond mentioning that they exist in Ireland in the Neolithic! Given the predominance of the megaliths in the debates on the Neolithic transition, it is unclear why he failed to deal with this issue. Did his adherence to Hawkes’ principle entail that he felt he could separate one part of the ‘system’, as if the ‘ritual’ space was divorced from the ‘subsistence’ patterns that he was surveying?

2.8. The early prehistory in the West

I will now turn my attention to the early prehistory in the west. I will begin with a discussion of the only completed research programme on the Mesolithic, the M.A. thesis by Lynch, which focused on Mid-west Clare. The relevant early prehistoric work by O’Sullivan’s survey of the inter-tidal section of the Shannon will be discussed, as will the various papers by Gibbons ands Higgins on the Mesolithic they have published over the years. Warren’s excavations of a Mesolithic lithic scatter in North Mayo will be mentioned, concluding with a discussion on Fredengren’s work on the early prehistoric material from around Lough Gara.

The Mesolithic in the west has not received much research focus, with the only completed research programme on the Mesolithic itself in the west having been a one year Masters thesis by Lynch from UCC, which looked at the Mesolithic in Co. Clare. One of his stated objectives for the thesis was “to establish a probable rather than a possible Mesolithic” (Lynch 2002, 1); he focused his work on the mid-west of the county, and comments that the foot and mouth crisis limited the possible fieldwork he could undertake, and he was curtailed from fieldwalking in the more suitable season: the end results showed that “some of the lithics found in the area could belong to the Mesolithic period” (Lynch 2002, 67).

In terms of the artefacts in the collections, Lynch comments “none of the stray finds of flint or chert lithics examined in the collections in the museums could be
described as diagnostic Mesolithic artefacts. Equally, none of these could be
definitely assigned to the Neolithic…. In fact, without the evidence of the Neolithic
monuments and their excavated artefacts, it would be difficult to identify the Neolithic
in County Clare based on the stray flint or chert finds alone” (Lynch 2002, 64).
Another of his stated objectives for his thesis was to enter into the debate on the
chronology of polished stone axes. In terms of the axes from the area, he concludes by
remarking that “whether these trends are enough to suggest that many… are
Mesolithic is debatable, but they give a positive indication” (ibid.).

This thesis has seemingly eschewed an explicit theoretical stance, implicitly
aligning itself in a culture history mode of ‘methodology’; Lynch presumes that the
“dense forests” curtailed the helpless inhabitants of the area, until they were later
succeeded by the new arrival of Neolithic farmers, who triumphantly carved their
space into the landscape: the implication is a striking dichotomy between Mesolithic
forager and Neolithic farmer. His aim of studying the period under the auspices of a
“new perspective” (i.e. a landscape approach) would seem to have faltered from the
outset as he failed to connect the landscape and environment as something lived in.
Rather, he implied that the landscape was a background to activities, something to be
passed through in their search for resources to be exploited.

South of Lynch’s study area, O’Sullivan’s (2001) work on the inter-tidal
archaeology of the Shannon estuary covered both the prehistoric and historic periods.
O’Sullivan’s work in the Shannon estuary has highlighted some possible signs of
Mesolithic activity, and more definitive Neolithic activity (ibid., 72-3). Briefly, the
earlier interpretation of a poplar plank, C14 dated to 4779-4551 cal. BC, as remnants
of a dug out canoe is now cautiously suggested as possibly natural, but human activity
is not ruled out completely; the same goes for a possible brushwood feature, which the
author suggests may date, due to its similar elevation to the poplar plank, to the Later
Mesolithic (ibid.). A mid-fourth millennium date was returned on the human skull
and clavicle which was found along with cattle bones, lithics, hazelnuts, worked and
charred wood, and also a basket made of alder, with O’Sullivan commenting
it is instructive to recall that in a dryland context (e.g. a ploughed field)
only the stone axe and chert chips would have been recovered. Indeed,
this also raises the point that even small scatters of lithics in ploughsoil
have to be regarded as potentially significant indicators of human activity
(ibid., 84).
Clearly, the discovery of human remains in an otherwise ‘functional’ context of human food procurement/consumption/subsistence highlights the complexity of the archaeological record and the poverty of our notions of sacred and profane places and events. Moreover, O’Sullivan, in relation the early prehistoric submerged forests recorded, discusses the necessity of moving beyond the traditional approach of viewing the waxing and waning of forests as indicators of human population, and solely economic resources, and rather to think of them as “significant places” in prehistory instead (ibid., 64).

In terms of the transition to farming, O’Sullivan’s comments highlight the limitations of our language and the strength of the periodicity of archaeology – as soon as farming arrives the Mesolithic people are gone, as O’Sullivan states – after mentioning the early dates of domesticates in Ferriter’s Cove – “in the Late Mesolithic the Shannon estuary may already have been a focus for settlement… By the Early to Middle Neolithic local communities may have modified their settlement strategy and economy somewhat… Local Neolithic forager-farmers could have herded their cattle down…” (ibid., 90). Seemingly, one cannot call them ‘local Mesolithic forager-farmers’. But is this due to chronological implications or classificatory restrictions?

O’Sullivan has commented that the publication of the inter-tidal survey should be seen as a preliminary account of the archaeology in the area, and he highlights the need for more work to be done as the actual time spent in the field for the project was quite limited. As he commented, research in the inter-tidal ecosystems has been lacking in Ireland, and these areas are an important avenue for research; the case of the Neolithic log boat in Galway Bay also highlights this.\(^9\)

In terms of the Mesolithic, the picture north of Clare is certainly different, and Gibbons et al. (2005) have outlined various finds of Mesolithic date from western Connacht. For the most part, they suggest that the finds consist of “Bann flakes”, usually found as a single artefact, with twelve reputed findspots recorded by them; they mention in passing material from Tawin Island in Galway Bay, and mention a

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\(^9\) O’Reilly (2003) has used this log boat as a platform to assess a local Neolithic landscape and to discuss inter-tidal archaeology. However, her thesis is beset with problems, such as her concepts of tool use and primitivism (ibid., 48).
find from Omey Island, near Clifden of a pebble hammer mace head, and comment that this type of artefact has been found in Mesolithic contexts in Britain (Woodman (pers. comm.) is not convinced that this artefact is prehistoric). This article follows a number of articles that two of these authors have produced over the years on the topic of Mesolithic finds in Connacht (Higgins 1977-8; Higgins 1985-6; Higgins 1987; Higgins and Gibbons 1988). Similarly to Lynch’s thesis, the main thrust of the aforementioned articles is a picture of a hungry Mesolithic population, with all the sites noted as good places to forage. The thrall of the Mesolithic catch in the west would seem to have got the better of them and the quality and quantity of the reputed Mesolithic River Corrib finds has been overstated (see below, Section 5.3.1.1).

On the North coast of Mayo at Belderrig, near the Ceide fields, Warren (2004), UCD, began a project in 2004 on the Mesolithic finds that have been noted by Caulfield being eroded out of the cliff face. A preliminary excavation began in 2004, and this was continued in 2005 and 2006. Here, Later Mesolithic artefacts have been discovered, dominated by quartz, along with organic remains (Warren, pers. comm.). This excavation is the first Mesolithic site to be excavated in the area covered by this thesis, and it is hoped by Warren that this will enable a long term project of Mesolithic research in the area.

Fredengren’s (2002) work in the Lough Gara area studied the environs of the lake from a long term perspective, up to historic times. She has outlined Mesolithic and Neolithic activity, and has argued for a Mesolithic input into creation of the megalithic monuments there, arguing that the activities of the Mesolithic inhabitants in the area entailed that they were conducive to the notion of monuments and monumentality. Furthermore, she argues that what she regards as Mesolithic crannogs, and how they relate to the lake can be seen mirrored in a structural fashion in the building of monuments and hut sites in the uplands (ibid., 151-2). Fredengren has argued that the polished stone axe should be seen as a Neolithic type artefact, and suggests that the pattern of retrieval of this type of artefact again mirrors what she sees as a move away from the waters in the Neolithic period (ibid.).

However, her referencing of material, specifically those published by Woodman, relating to the information on polished stone axes would seem to be ultimately flawed,
and based on an erroneous reading of Woodman’s work. Arguably, this highlights the fact that there would still seem to be problems and uncertainties when dealing with Mesolithic material culture. The ubiquitous polished stone axe was traditionally linked to the “New Stone Age” and the resulting Neolithic package, and more specifically to the tree felling activities of the Neolithic population. As the Mesolithic inhabitants did not clear away forests but were reduced to wandering the fringes of the dense forests, they must not have had the technology to clear forests. In a sense this becomes a circular argument; no felling of trees, no need for axes, no axes, no ability for felling of trees. However, for nearly 30 years the polished stone axe has been definitively linked to Mesolithic contexts in Ireland (Woodman et al. 1999, 77-80), but more often than not, researchers have failed to take this on board in their work, and are content to regard it as a signature of the Neolithic (e.g. Dowling 2001; Fredengren 2002; Henry 1989; Murtagh 1998).

2.9. Palaeoenvironmental studies

In this section I will outline briefly some of the palaeoenvironmental work that has been carried out over the years. Arguably, this type of evidence is integral to any consideration of a landscape study of prehistory. Much of the evidence comes from pollen analysis. Unfortunately work on sea level changes on the west coast has been lacking, with the current general models available being based on British models and data. The work done on the sea levels at Ferriter’s Cove will be described.

The work of the palynologists, O’Connell and Molloy amongst others, in the West is of considerable importance. O’Connell and Molloy’s (2001) article on farming and woodland dynamics in Ireland during the Neolithic, in their words, paid particular attention to mid-western Ireland; this was due to the quality of evidence available from this area. They have posited that the earlier Neolithic represents a period of widespread farming activity involving large-scale deforestation, and that the Later Neolithic is characterised by limited farming and woodland regeneration; they argue that the lengthy episodes of the cleared woodland suggests permanent habitation as opposed to a mobile structure of farming. In terms of the regeneration of woodland in the Later Neolithic, they suggest that this amounts to a population decrease rather than a movement of people out of an area. In relation to the early appearance of cereal type
pollen, they suggest that for the most part this can be discounted as evidence for cereal cultivation.

Göransson (1984) developed an alternative reading of the pollen record, and began his chapter with quotes from two influential Danish palaeoecologists. These quotes outlined the thinking of their time as considering the primeval forests of the Atlantic climax as being inhospitable places for the Mesolithic as well as the Neolithic populations. However, he argued that contrary to these enduring images of the ecology of the time, people were involved in the forests, and used the forest as part of their farming strategy, and ultimately “it is assumed that Mesolithic and Early Neolithic man used the inherent power of the forest of broad-leaved trees to function both as ‘plough and manure-spreader’; this was done by coppicing the woodlands which would not show up as a dramatic drop in the pollen count, hence farming could have been initiated millennia before the elm decline, and signs of forest clearance (1984, 154-58). This reading of the pollen record however, would seem to be based on intuition rather than an analysis of the record *per se*. Indeed he states that this type of farming would not be clearly perceptible in the record.

A more recent project by Molloy and O’Connell (2004) investigated a pollen core from a small lake on Inis Oírr, one of the Aran Islands, Co. Galway. Here, they noted that a more open habitat than the closed woodland is suggested for the Mesolithic period than is apparent in other pollen cores; they comment that a similar pattern was noted from a core from Caherkine, Co. Clare, and they suggest that this may be due to little or no soil cover in these karstic environments (*ibid.*, 45). Preece et al. (1986) investigated a deposit of calcareous tufa near Tallaght, Co. Dublin. From the mollusc data retrieved, they argued that there was evidence of woodland clearance in this area at c. 7600 BP; this clearance episode was suggested as possibly been created by Mesolithic communities as a flint flake was uncovered during this investigation. However, the authors comment “the causal link between anthropogenic disturbance and vegetational change is extremely hard to demonstrate and in most case totally untestable”. Moreover, as Rackham (1988, 13) has noted, the notion of a dense, closed woodland is ultimately misguided, as intermittent openings in a woodland are not an aberration, but a part of the natural lifecycle of a woodland. He notes that most
of the trees in Britain and Ireland are shade intolerant, so would require openings for younger generations of trees to mature.

Mooney (1990) investigated the palaeoecology of the lower Lough Corrib basin, Co. Galway and his research showed that the lake levels of the Corrib were substantially higher in the Early Holocene, with them falling a few metres below today’s level at some stage later; at some stage prior to c. 6100 BP the levels rose once again. Another project is underway at the moment on the Lough Corrib catchment area, which is studying the environmental change in the area since the last glacial period (Bingham and Sexton 2004). This project will provide an analysis of the local and regional vegetation, and will hopefully be able to define the lake levels over prehistory more precisely than the previous study.

The understandings of the changing sea levels on the west coast during the Holocene are poorly understood. This is due to the fact that little fine-grained work has been carried out. The models that are available have previously been based on data from Britain, which was then extrapolated onto Ireland, and did not take into account the underlying topography (Brooks et al. 2006). Brooks et al. (ibid.) comment that in order to assess the palaeogeography of the coastline at a useful scale what is needed is “higher resolution geophysical surveys of nearshore bathymetry and sediment thickness… combined with refined models of relative sea-level, sediment movement and tidal change. These research aims form part of the long-term goals of the Submerged Landscapes Archaeological Network (SLAN)”. The excavations at Ferriter’s Cove included an investigation of the relative sea level and shoreline position at the time of occupation of the site (Delaney and Sinnott 1999). The results were inconclusive as it could not be determined whether a coastal barrier existed there at the time; indirect evidence led them to suggest that the sea level was c. 6m lower than at present (ibid., 167-9).
3. The Mesolithic and Mesolithic-Neolithic transition in Ireland

Fig. 3.1. Locations mentioned in chapter 3.
3.1. Introduction

In the last chapter I broadly outlined the history of research of the Mesolithic and Early Neolithic, highlighting the key concerns of archaeologists over the years. This present chapter will set out more comprehensively the evidence and prominent interpretations of the Mesolithic and Neolithic transition in Ireland in general, in order to put the evidence available for the west in perspective. The evidence for the area covered by this thesis, the west of Ireland, will be discussed in chapter 5 when I will deal with the various areas more specifically.

To begin, the evidence for the post-glacial arrival of the flora and fauna (including humans) will be discussed, looking at the evidence for the existence and timing of the land bridge connection to Ireland from Britain. I will then move on to the Early Mesolithic, and discuss the sites of Mt. Sandel and Lough Boora, and how these have been interpreted, and then look at the general distribution of evidence in Ireland. This is followed by a look at the debate on the reasons for the transition from the Early to Later Mesolithic, and then on to the Later Mesolithic itself. I will then outline the evidence for burial practices in the Early and Later Mesolithic. Finally, I will outline the evidence for the Mesolithic-Neolithic transition, looking at the interpretations put forward for the arrival of farming.

3.2. Post-glacial arrivals

The discussion of the post-glacial arrival of flora and fauna has centred on glacial refugia, and the theories of the landbridge which connected Britain and Ireland during periods of lower sea levels. While it is apparent that there was a land bridge at some stage, the evidence suggests that this cannot account for all the arrivals, including humans; Mesolithic communities, possibly both accidentally and deliberately, brought various species with them, possibly from as far away as the Pyrenees; however, this is open to question.

The postglacial colonisation of Ireland by Mesolithic communities is certain, but the means and timing are not. The ponderings concerning the arrival of humans onto the island have been mediated on an understanding of the processes whereby the flora and fauna recolonised the island as well, an issue that since the mid-nineteenth century has been hotly debated (Preece et al. 1986, 488). At that time the discovery in Ireland
of organisms that were only known from Iberia and the Mediterranean – the Lusitanian elements – led to the formulation of three theories concerning their arrival: the first maintained that there was a survival of species in the south of Ireland; the second envisaged an early post-glacial terrestrial route; and the third, an accidental, trans-marine post-glacial introduction (ibid.). Added to these is of course the human aspect of people accidentally or intentionally introducing species (Mitchell and Ryan 2001, 99).

Mitchell and Ryan contended that the landbridge theory was most plausible as the arrival of flora and fauna was not sporadic, but rather showed distinct patterning which implies an orderly advance, cut off with the disappearance of the landbridge; the landbridge was considered to run from the north-east of Ireland or from the mid-east (ibid.). Preece et al’s. (1986) analysis of non-marine mollusca from a deposit of calcareous tufa in Co. Dublin suggested that while some of the species may have used a landbridge, the later arrivals are only present after 8000 BP, some two millennia after the postulated landbridge would have disappeared. This led to the difficulty of “how it is that many vertebrates with active powers of dispersal have been unable to reach Ireland whereas most of the British land snails, with proverbially poor powers of dispersal, have done so in a sequential order post-dating the existence of any postulated landbridge”; they offered two explanations: glacial refugia; or that “the existence of the Irish Sea has not posed such an insurmountable barrier as has been supposed” (ibid., 504). They argued however, that the glacial refugia notion was untenable, and left open the possibility of a landbridge, but suggested the mollusca evidence did not support a northern route, but rather a more southerly one, and one that remained open for later (ibid., 506).

Ten years later, Lynch looked at the colonisation of Ireland by mammals, with his results suggesting for his sampling of otters, stoats, and badgers, that the Irish populations were more like English populations than Scottish, therefore showing weak evidence for a northern landbridge, but also commenting that these findings could not “disprove the theory of a recent origin for the otter and badger populations” (Lynch 1996, 182). Moreover, Lynch argued that the badger’s general ecological niche would not suggest the animal using a soggy landbridge, which led to the postulation that people may have introduced the badger, as well as the pine martin, commenting
our knowledge of the past history of Irish mammals is remarkably scant... Naturally, to state that humans could have introduced a species to Ireland, does not imply that they did in fact introduce species. However, given man’s propensity for the introduction of species, the possibility must be addressed (ibid., 183).

Using genetic evidence from pygmy shrews, Mascheretti et al. (2003) have suggested that their results point to an arrival to Ireland of a pygmy shrew population from around the Pyrenees region; further, as the pygmy shrew population on the Isle of Man had similarities with Britain, and not with Ireland, a landbridge connection at that area, as postulated by Wingfield, could be discounted. Moreover, they comment that the lack of other species such as other shrews and voles in Ireland would also discount a land bridge, and maintain that the arrival of the pygmy shrew, as well as other of the Lusitanian elements, suggests human transportation during the Mesolithic colonisation (ibid., 1598). However, recent work on the pygmy shrew, which used a larger data set, has suggested that the Irish pygmy shrew was of the same ancestry as the Isle of Man and British populations, but that later the Irish type was displaced in Britain and the Isle of Man, but remained in Ireland (Searle 2006). This, therefore, discounted the necessity of the human transportation link to Ireland.

Wickham-Jones and Woodman (1998) have outlined the available evidence for the possible presence of Palaeolithic communities in Ireland, and suggest that the miniscule evidence of possible early lithic types – found in both the north and the south of the island – could mean a pre-12000 BP date for human occupation, but c. 7900 cal. BC\textsuperscript{10} is the earliest definitive evidence (Woodman, pers. comm.).

\textsuperscript{10} These dates are about 1000 years older than traditionally cited (Woodman 1985; Waddell 2000), as recalibration has pushed them back significantly (Woodman 2003); a recent reanalysis of the calibrated dates published in his 2003 paper, has brought the dates published there forward slightly (Woodman, pers. comm.).
3.3. The Early Mesolithic

Understandings of the Irish Early Mesolithic are dominated by the excavations of Mt. Sandel and Lough Boora; these two sites, a site-type base camp, and site-type temporary camp, have conjured up a lucid picture of the Early Mesolithic for us. These sites will be discussed as well as looking at the other evidence for the Early Mesolithic communities.

The Early Mesolithic communities in Ireland are traditionally defined by their use of microliths, a composite tool type indicative of the Mesolithic throughout Europe. Particular to Ireland was the use of surface-retouched needle points, flake axes, and polished stone axes (Costa et al. 2005, 19). As noted in chapter two, the distribution of Early Mesolithic material was traditionally centred in the northeast. The following two maps (Fig. 3.2.) relay this conspicuously, with Woodman’s move to Munster expanding the known Early Mesolithic sites to the far south.

![Fig. 3.2. Maps from Woodman (1978) and Waddell (2000).](image)

Two main sites have dominated discussions of the Early Mesolithic: Mt. Sandel, Co. Antrim, and Lough Boora, Co. Offaly. The Mt. Sandel excavations dominate the picture of the Early Mesolithic as so few other sites have been excavated and fully published, let alone found. Not only that, but here was evidence for dwellings – until recently it was not until the Neolithic that there was again evidence for houses in
Ireland.\textsuperscript{11} The Mt. Sandel structures were interpreted as having been egg-shaped, approx. 6m in diameter, and formed by bending over c. 20cm thick saplings. The use of sod walling was suspected, with an estimate that this could have covered c. 50\% of the house, the remainder covered with hides (Woodman 1985, 133).\textsuperscript{12} While numerous posthole patterns could be ascertained, it was argued that one house was in use at any one time; slighter structures were also identified. In some cases the hearths in the interior of the houses were recut, suggesting reuse of the site. The dating of the site ranged mostly from c. 7900 cal. BC to c. 7500 cal. BC, with a number of later dates (Woodman 2003, 8).\textsuperscript{13} There was also Neolithic activity, as well as evidence for later periods (Woodman 1985, 121).

The settlement at Mt. Sandel produced a limited amount of faunal remains. These consisted of calcinated bone fragments with the acidic nature of the soil precluding the survival of uncalcinated bone. Therefore, the faunal record was argued as being unrepresentative (Woodman 1985, 71). What was recorded showed an overwhelming dominance of fish bones (81\% of total), of which salmonoids accounted for c. 84\%, bass and eel for 15\%, and the remaining 1\% was plaice or flounder. The authors noted that none of the fish species would have been available for catching during the winter, with the modern salmon run beginning in April and continuing for five months (\textit{ibid.}). However, Warren (2001, 183) has noted that to transfer this nineteenth and twentieth century data back to early prehistory is predicated on the water temperature being the same, as this would affect the salmon seasonality – an unknown variable. While the salmon run is intensified during a shorter period, salmon is today available for half the year.

The concentration of fish bones in one hearth was taken as signs that the hut at that spot had been used for smoking fish, and the storage of other foods was also suggested. While it was also argued that the number of occupants may have been smaller in winter than in summer due to the dispersed nature of pigs’ habitats (\textit{ibid.}) – in contradiction to the usual surmising on winter camps – this leaves out the evidence

\textsuperscript{11} This has now changed as there is evidence of Later Mesolithic structures from the Toome bypass excavations (Prudame 2004); (This site is unpublished).
\textsuperscript{12} Attempts to build such sod structures suggest that it could have been made entirely of sods (Woodman 2006C).
\textsuperscript{13} As mentioned, a recent reanalysis of the calibration of these dates has brought them slightly forward in time, starting from c. 7900 cal. BC (Woodman, pers. comm.).
they had surmised for the storage of foods, and hence the ready supply available during winter. The mammal bones (15% of total) were 98% pig bones, with the interpretation for winter hunting of the pigs. The remaining mammal bones were hare and either dog or wolf. While birds accounted for only 4% of the total of the bones, 13 species were present, ranging from woodland, to river, to coastal types (Woodman 1985, 72). The presence of at least two types of bird of prey was noted, including the goshawk, and Woodman noted that goshawks were also found at the Mesolithic site at Dalkey Island, and also the Beaker period assemblage at Newgrange (ibid.). While Woodman interpreted the goshawk bones as present on the site as the bird would have been attracted by bird traps set while hunting for pigs (Woodman 1985, 75), Mitchell and Ryan (2001, 115) have commented on the possibility of the goshawk having been used in falconry.

Due to the poor preservation of organic material at Mt. Sandel, the evidence for flora was negligible. The usual suspect, the ubiquitous hazelnut, played a dominant part in the material, with evidence also for wild pear/crab apple, and water lily (Woodman 1985, 80). Over the years Woodman has oscillated in terms of the importance placed on flora in the diet during the Mesolithic, recently suggesting that the coastal and riverine locations of Mesolithic sites does not support such a theory of a plant dominated diet, as well as the lack of plant processing equipment (cf. Woodman 1985; Woodman et al. 1999, 138). However, contra Woodman, it is precisely these locations that are concentrated with flora (Brown 1997, 283). Tools are multifunctional; axes may have been digging tools as well14, for example for tubers. Moreover, the collecting of seaweeds, seeds, nuts, berries, lichen, fungi, and greens do not need an elaborate, clearly identifiable tool kit for collecting and processing: indeed, many do not need tools at all.

Woodman (1985, 171) has argued that the Mt. Sandel lithic assemblage has insular characteristics, and therefore this site may not be indicative of an early date for the arrival of people on the island. The dominant lithic types found were microliths (needle points, rods, and scalene triangles), along with core and flake axes, blades, awls, and scrapers. There was also evidence of ochre stained blades and flakes, with

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14 Some axes in the National Museum collection have recently been interpreted as showing signs of use as ardshares, due to the scratch marks (MNI 1987:184, Dangan Lower, Co. Galway); this may be representative of a more common use of axes as digging tools.
the possibility that the true number is under recorded as the ochre had since been washed off; the ochre on a borer may represent the colouring or preserving of hides (ibid., 51; 64). The use of red ochre as a dye and paint is well recorded in prehistory. Found in Mesolithic funerary contexts, it is interpreted as a material suitable as symbolic of life-blood (Bradley 1998, 24). But this was but one slice of the spectrum of colours possibly used. Other mineral, floral, and faunal substances were probably used for the painting and dying of materials, as well as peoples’ bodies. While it is suggested that ochre on some of the tools represents the preparation of other materials, it may be that ochre was placed on the lithics as an end in itself.

The Lough Boora excavation produced evidence of a lake shore site which was eventually encroached by bog in the Later Mesolithic. The original post-glacial lake was of a substantial size, and it has been conjectured that it would have encompassed the current lakes of Boora, Derg and Ree (Fig. 3.3).

Fig. 3.3. Conjectured early post-glacial lake levels, adapted from Mitchell and Ryan (2001, 104). Location of mushroom stones adapted from Dunne and Feehan (2003).
The site was on a ridge overlooking a lagoon which lay in between it and the lakeshore storm beach (Mitchell and Ryan 2001, 115). The dates returned for the site were broadly contemporaneous with those of Mt. Sandel, but no dwelling structures were identified. The site was interpreted as a temporary camp site, with the dominance of eel bones suggesting a summer occupation. The range of mammals was similar to Mt. Sandel, again with a preponderance of pig bones, with the additional evidence for wild cat (Waddell 2000, 14). The flint in a chert dominated assemblage at Lough Boora, and vice versa for Mt. Sandel, was interpreted as signs of peoples’ movement in the landscape (Woodman 1985, 166) or signatures of exchange and social contact (Cooney and Grogan 1999, 24).

Substantial amounts of the lithics were burnt, as were the bones that survived. The fact that the bones showed evidence of having been burnt at a high temperature for a long time was interpreted as suggesting that they had been boiled in a broth after the meat had been eaten; after being boiled the bones would then be dumped in the fire (Woodman 1985, 75). In a seminar presentation, Nyree Finlay (2003A) noted that at Lough Boora there was also evidence for burnt lithics. She suggested that the lithics were being treated like bone – the heating of the lithics changed their colour akin to bone, and therefore the lithics were metamorphosed; and a similar pattern may be apparent for Mt. Sandel. What may be occurring here is evidence of a ritual aspect to the hearth – the purposive deposition of bone and lithics in the fire, rather than simply a pragmatic use of the fireplace as a means of disposal of rubbish.

While for many years it was presumed that an indirect percussion technique was used in the production of the lithics, it is now considered that a direct percussion technique, using a soft hammer, was used (Costa et al., 2005, 25). An analysis of an assemblage found on a beach near Greencastle, Co. Donegal has shown that two strategies were used in blade production (Costa et al., 2001, 2). A hard hammer, direct percussion technique was used to make large blades and blade-like flakes, while a soft hammer, direct percussion technique was used to make small regular blades – the former were used to make notched pieces or pieces with lateral retouch, and the latter to make microliths and backed pieces (ibid.).
In terms of the distribution of Early Mesolithic material apart from the sites of Mt. Sandel and Lough Boora, Fig. 3.2 shows that the majority finds are from the Bann Valley (where Mt. Sandel is located) and along the northeast coast, with another cluster on Strangford Lough, Co. Antrim, and more from Co. Louth and Co. Dublin (Woodman 1978). A reappraisal of excavated material of a ring barrow at Rathjordan near Lough Gur, Co. Limerick turned up microliths (Woodman 1986), and further Early Mesolithic presence in Co. Limerick has been noted at Hermitage and Killuragh (see below, Section 3.6). Finlay (pers. comm.) identified some early cores amongst the predominantly Later Mesolithic assemblage from Lough Gara and Fredengren’s (2002, 120) work on L. Gara dated a piece of brushwood to 7330-7050 BC. Fieldwork on the Blackwater, Co. Waterford revealed early lithic scatters there (Woodman 1986, 10), as has the Barrow Valley (Ramsden et al. 1995, 331). Recent finds in the north include those found on a beach at Greencastle, Co. Donegal – here microliths were found along with flint axes and “a number of small pointed bone artefacts” (McNaught 1998, 64; Costa et al. 2001). Another two assemblages have been found 300m apart, overlooking the Liffey, at Leixlip, Co. Dublin (Mullins 1999). In general, the evidence so far for the Early Mesolithic material tends to be found on higher ground overlooking water, or on the coast.

3.4. The Early Mesolithic-Later Mesolithic transition

A key change in the lithic strategies in the Mesolithic is apparent, from the transformation from the microlithic tools to the macrolithic tools. The various suggestions for this change, such as population replacement, differing economic practices, and changing social decisions, are presented and assessed.

A significant transformation in lithic production occurred some time in the Mesolithic, with a change from the production and use of microliths to macroliths. This innovation is usually cited as exceptional in Europe apart from the Isle of Man (e.g. Gibbons et al. 2005; Fredengren 2001; Kimball 2000A, 3; McCarton 2000, 26), however somewhat comparative changes are noted in areas of Portugal (Warren, pers. comm.) and the Tyrrhenian Islands in the Mediterranean (Costa et al. 2005, 31). In the case of Ireland Mitchell and Ryan (2001, 119) maintain that the change can be

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15 Recently, Sternke (pers. comm.) has looked at the Lough Gara assemblage in order to include it in the new Irish Mesolithic database – she did not find any cores that she thought could be Early Mesolithic.

16 The author does not state whether this date is calibrated or not.
rationalised by asserting a population influx – their Sandelians being replaced by their Larnians. However, this notion is based on a strict reading of culture groups as epitomised by lithic types – that lithics equal peoples – and also on the notion of diffusion as the cause of, and reasons for, change in material culture. It is generally agreed, however, that a population change is not needed to explain the transformation in the Irish Mesolithic.

Mallory and Hartwell (1997, 4-5), commenting on the fashionable turn towards social explanations rather than economic ones, have put in their few pence worth, suggesting that the change in lithic strategies can be seen as the switch from a male-dominated microlithic society with men as hunters and fishers, to a female-inclusive society where food procurement methods changed to allow women to participate, while minding the kids – akin, I guess, to today’s job sharing. Finlay (2003B, 92) has succinctly remarked that “this misogynistic view of the Mesolithic needs to be redressed…we can dismiss the exclusive male identification with microliths as a legacy of traditional ‘boys and arrows’ narratives”.

Warren (2003, 23) has suggested that the climatic deterioration that is reported to have occurred c. 6200 cal. BC – which led to a drop in temperatures for 200-400 years – should be looked at in terms of the change in lithic strategies. While allowing that this would not have caused the change, he argues that it may have contributed to its timing. However this begs the question as to whether one can view this teleologically – can a change be implicit amongst people, and be waiting for a trigger of some sort. It is unclear as whether this is what he is implying. His thesis rests on a clarification of the dating of the last microlithic assemblage, and the first macrolithic assemblage, which at the moment is not certain. Costa et al. (2005, 23) have outlined the known dates for the two assemblages, and maintain that the change in lithics occurs much earlier than 6200 cal. BC, possibly by 7000 cal. BC. However, this latter date points to the last known date of microliths, not the start point of macroliths and should be noted in the light of the dearth of reliable datable contexts for the transition, especially the insecure contexts of the dates from Newferry and Cushendun, Co. Antrim (Warren, pers. comm.).
Woodman and Anderson (1990) suggested that a change in procurement methods over the course of the Mesolithic could account for the change, whereby the focus of lithic production and use was more geared towards the building and maintenance of traps, weirs and so forth, rather than a change in what was being caught. Costa et al. (2005, 29) have generally agreed with Woodman and Anderson’s position – that a change in procurement methods may have led to the change in lithic types – but suggest this would not account for a change in the entire repertoire of tools. They argue that the lack of a change in subsistence practices rules out this as an explanation. They have argued that the change led to a more flexible approach to stone tool making, as the larger flakes were then less geared towards specific tasks and they state that they

believe that the greater flexibility in lithic production could be interpreted as a social rather than technological or economic revolution. This liberation in lithic production could be the result of a shift in the perception of the importance of lithic tools in the activities of Later Mesolithic society (Costa et al. 2005, 30)

However, this neglects anthropological work as discussed by Ingold – he has argued that the great tool-use fallacy, which has separated social and technical domains, “has blinded us to the fact that one of the outstanding features of technical practices lies in the embeddedness in the current of sociality” (2000, 195). In their conclusion Costa et al. (2005, 31) seem to fall back on a change of subsistence and differing methods of procurement as the reasons, having previously discounted these.
3.5. The Later Mesolithic

The Later Mesolithic has been contrasted to the Early Mesolithic in terms of its perceived lack of base camps, leading to speculations on whether this is an artefact of a more mobile society, or simply a lack of evidence for similar sites such as Mt. Sandel. This led to debates on mobility and social complexity in the Mesolithic, and how these concepts are evidenced in the archaeological record. The later Mesolithic evidence is often characterised by single finds, or specialist sites, and frequently sites with no lithics but returning Later Mesolithic dates. The Later Mesolithic has produced numerous coastal sites, and there has been a focus of research on coastal areas, such as the excavations at Ferriter’s Cove. I will discuss the more recent research projects that have been carried out – the coastal site of Ferriter’s Cove, the Bally Lough landscape survey project, and the island platform site at Lough Kinale, and other constructed Mesolithic sites.

As we have seen, the timing and reasons for the beginning of what we call the Later Mesolithic are uncertain. With the model of a Mt. Sandel base camp, and a Lough Boora temporary camp, a picture of a sedentary or semi-sedentary Early Mesolithic could be posited, and what was perceived as the general European model of a highly mobile society veering to greater degrees of sedentism throughout the Mesolithic turned on its head. The lack of Later Mesolithic base-camps or similar settlements has been read in various ways. Woodman queried (1986, 13; 1992, 302) whether this lack meant that comparative sites simply have not been found, or whether it meant that the Later Mesolithic communities were highly mobile and sparsely populated. Cooney and Grogan (1999, 21-3), however, questioned this idea of an increase in mobility, arguing that the Atlantic period would have been more productive and hence suitable for permanent settlement – they also suggested that situation in Ireland would more than likely have followed the European model of the sedentary complex hunter-gatherer.

Woodman has been at pains to counteract what he sees as various researchers misinterpreting him, arguing that Cooney, Fredengren, and Kimball had got the wrong end of the stick, or only looked at part of the stick, and that in fact he had only suggested that

we could not presume that the Early Mesolithic was followed by a period of increased population levels and sedentism. Indeed it was a call for a more open attitude to the possibility of different solutions rather than accepting a convenient conventional wisdom prevalent elsewhere (2003, 15).
Furthermore, Woodman (ibid.) has commented on the nature of Mesolithic archaeology: “do we always have to seek the Mesolithic version of the ‘Little House on the Prairie’ i.e. sites where we expect all of life’s dramas were played out”. Little (2005, 82) has appositely discussed the debate:

ultimately, while both sides have succeeded in identifying weaknesses in the other’s proposed settlement models for the Late Mesolithic, neither model challenges the accepted (economically determined) norms of Mesolithic settlement, or attempts to address the variety of social factors active in structuring settlement patterns across the country.

What the general impression of Later Mesolithic sites has presented researchers is locations of short term stays, and specialised sites. Woodman and Anderson (1990) have suggested that the presumed paucity and ephemeral nature of Later Mesolithic evidence, in that often a single flake is found, relates to the dynamics of their society – they suggest that a single flake may represent more extensive use of that area, for instance, the maintenance of traps, weirs and so forth. Moreover, they (1990, 386) argue that if lithics were being curated – following Binford’s model – this will not leave evidence of activity; they note sites that have returned Mesolithic dates, but have not produced any lithics, such as Mitchelstowndown East, Co. Limerick and Valencia Island, Co. Kerry. To these two can be added the Mesolithic trackway at Lullymore Bog, Co. Kildare (see below, p. 113).

Woodman suggests that where a plethora of lithics have been found, such as at Lough Gara and Newferry in the Bann Valley, this could be signs of a multitude of repeated, short visits to the same place over long periods of time, as opposed to evidence for sustained, long term settlement (Woodman 2003, 15). The excavations of a knapping floor at Bay Farm on the Antrim Coast produced no evidence for settlement per se – instead it was argued that the evidence suggested repeated visits to a lithic production site (Woodman and Johnson 1996). The Newferry assemblage contained substantially less cores and substantially more retouched pieces than the Bay Farm assemblage, and the Newferry flint was of a higher quality that is to be found on the coast, and the communities avoided the lower quality material available in the Bann Valley itself (Woodman and Anderson 1990, 382-3).
Newferry lies to the north of Lough Beg, which in turn is a northern extension of Lough Neagh. A series of excavations were carried out there, beginning with the Harvard Archaeological Mission in the 1930’s (Woodman 1977, 155). Woodman began a research excavation in 1971, which became a rescue excavation the following season due to impending farm improvement works – the site had initially been noted by Smith after diatomite cutting had been carried out there (ibid.). While the earliest evidence on the site is Early Mesolithic, the main activity is Later Mesolithic with Woodman commenting that the Later Mesolithic material is evidence of a “fully evolved industry” (ibid., 194). The excavations dated material beginning at 6225 ± 145 bc (organic mud, zone 9) with the main activity from 5680 ± 195 bc (wood, zone 8) to 3465 ± 90 bc (charcoal, zone 3), with most of the material presumed as not being in situ (ibid., 156-77). The upper zone – zone 2 – (not dated) contained Mesolithic and Neolithic material, as well as what was presumed to be eroded Mesolithic material from the two lower zones (ibid., 179-81). The zones were devised by the geology as opposed to the archaeology of the site (ibid., 160).

Woodman noted various changes in the lithic assemblage through the zones, especially with more evidence of lithic production – more cores and waste – in zone 7 than in later zones: these later zones consisted of lithics brought to the site, with some zones with no cores identified (ibid., 185). Woodman argued that over time a broader flake became more dominant; tanged flakes were more common in the earlier zones, with these being superseded by the leaf shaped butt trimmed flakes in the upper zones – Woodman suggested that this change may be related to a difference in hafting as opposed to a differing implement type; points are not apparent after zone 4, with the bar form apparent from the upper part of zone 5; the raw materials for the axes changed from a predominant use of schist to mudstone – these two rock types accounted for 90% of the axes; backed knives were in all zones with little apparent change through time (ibid., 187-9). Other implements apparent were picks, borers, spokeshaves, polishing stones, elongated pebbles and bone points, and Woodman noted that over time the range of tools became more restricted (ibid., 192).

Woodman argued that this was primarily a temporary fishing site; the range of lithics were only those non-organic tools that survived – the lithics probably represented tools for the maintenance of weirs and traps, as well as general purpose
tools. There was little evidence of faunal remains due to the acidic nature of the soil. He argued that as the area changed from a series of river channels to marsh the site was gradually abandoned (ibid., 193).

As noted in the previous chapter, it was argued by Woodman and Johnson (1996, 228) that there was the possibility of the Bay farm production site’s material being moved to the Bann Valley and Lough Neagh. The pits at Bay Farm were stated as enigmatic by the excavators. Similarly to the Early Mesolithic at Mt. Sandel and the upper levels of Newferry, chert appears at Bay Farm – this time in the form of a single large flake in one of the pits. Aside from the chert flake, the rest of the flint found in this pit was treated as ‘industrial waste’ (Woodman and Johnson 1996, 155-6), but the placement of a chert flake amongst the flint suggests something more involved than the disposal of industrial waste. This can arguably be seen as a purposeful deposition of a different kind of stone amongst the more pedestrian flint – if we can call it that – that is abundant in the area.

The coastal focus of many Later Mesolithic sites compared to the Early Mesolithic has been taken as evidence not for a change in patterning but the fact of rising sea levels over the periods disguising earlier evidence. Excavations of middens on the east coast at Rockmarshall, Co. Louth (Mitchell 1949), at Sutton, Co. Dublin (Mitchell 1956; 1972) and on Dalkey Island, Co. Dublin (Liversage 1968) showed evidence of the coastal resources used, and these excavations complemented the idea of the Mesolithic peoples as beachcombers mentioned in chapter two (Movius 1942; Macalister 1949).17

The first Mesolithic site to be excavated on the west coast was Ferriter’s Cove, which produced evidence of significantly smaller middens – small dumps of shells – than the east coast examples. Here was evidence for repeated short visits to a coastal site during the summer and autumn months, with the dating of the site spread over about a thousand years – mainly from 5000 to 4000 cal. BC, with the main activity around 4500 cal. BC (Woodman et al. 1999, 114). While there was some evidence for linear patterning of stake-holes and one arc of stake-holes, these were not considered

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17 Woodman (2006B) has commented that there would seem to be pre-midden activity as well.
evidence for huts – some were possibly evidence for fish-drying/smoking (ibid., 130; 154). Possible roasting pits were discovered, and burnt stone platforms were interpreted as cooking places; the evidence of numerous burnt stones was suggested as implying the use of them for roasting or boiling of food (ibid., 126).

The faunal remains were dominated by marine fish, which were represented by 16 identified species; 10 species of shellfish were identified, of which dog-whelk predominated. The minor role played by birds in the diet was considered a factor of seasonality of the site, and the mammal remains were dominated by pig with some hare; the remaining mammal bones were of indeterminate species (ibid., 87-91). The discovery of sheep and cow remains shall be dealt with in the following section.

The lithic assemblage was predominantly of locally sourced stone: greenstone, tuff, rhyolite, and flint, with minimal amounts of siltstone, quartz and chert. Beach pebbles were also used, and 13 polished stone axes were also recovered, 5 of which had been deposited together (ibid., 153). The authors commented that the usual Later Mesolithic-type lithics – the butt-trimmed flakes and related forms – were proportionally underrepresented at Ferriter’s Cove in comparison to other sites, and that, of those present, “few of them could be considered classic examples”; they argued “it is important to emphasise diversity within the Later Mesolithic assemblages rather than always attempting to fit them within one template” (ibid., 76).

As can be seen from Fig. 3.1, the evidence for Mesolithic communities at Ferriter’s Cove is in almost complete isolation in the landscape, apart from the Mesolithic date returned from the site on Valencia Island. The Ferriter’s Cove site has described as a place that was visited recurrently for short periods of time, highlighting the fact that numerous other sites, both coastal and inland must be in the area. The model of communities moving seasonally between coast and inland was presumed to be the case in Ireland for both periods of the Mesolithic (Woodman 1978). However, in light of stable isotope analysis – which measures the protein component from bone collagen in diets (Schulting 1998, 206) – it is now argued that similarly dated Later Mesolithic human remains had a differing food intake. The analysis of a human femur from the midden at Rockmarshall gave a result of -18.1‰, which does not indicate a predominantly marine diet (Woodman et al. 1997, 143); this would support
the notion of communities moving between coast and inland. While the Ferriter’s Cove human remains indicated a marine based diet (-14‰ & -14.1‰), the Killuragh Cave remains indicated a terrestrial diet (-21.96‰ & -21.3‰) (Woodman et al. 1999, 143). A terrestrial diet is taken to mean “C-3 plants, the flesh of C-3 herbivores and freshwater fish” (Lanting and Van Der Plicht 1998, 162). Schulting has noted that salmon register a marine isotopic signature not a freshwater fish signature (Schulting 1998, 207). These stable isotope results for the Killuragh Cave human remains led Woodman et al. (1999, 143) to ask “was it actually possible for some Mesolithic communities to subsist exclusively in the interior of Ireland?”

Little (2005) has taken the traditional coastal Mesolithic research focus to task, arguing that insufficient time and energy has been given towards the inland areas of Ireland, where there has been for years a multitude of evidence of Mesolithic activity. Commenting on her present PhD research on the Mesolithic in the midlands, she suggests that the comparative ease of working in coastal areas is one reason for the neglect of the midlands, where millennia of peat formation hampers any straightforward research agenda (ibid., 82). Little comments that the spatial and temporal relationship between the use of the coast and inland by the Mesolithic inhabitants is poorly understood, with the failure to follow up on the initial discovery of Mesolithic material in the midlands, the exception being Mitchell’s excavation at Clonava, Lough Derravarragh, Co. Westmeath (ibid.).

Recently, Fredengren undertook the excavation of another old findspot upriver from Clonava, at Lough Kinale, which was noted as a surface lithic scatter after drainage works lowered the lake level (Fredengren 2004, 29). This site, with a strong Neolithic presence as well, has shown to be an artificially heightened natural island, constructed with layers of stone, peat, timber and brushwood. The brushwood seems to have been pegged in to place, and it is argued that the site witnessed repeated visits (ibid.). A rectangular structure was noted, but it is unclear as of yet whether this is Mesolithic or Neolithic in date. Due to waterlogging there has been excellent preservation of organic material, with worked wood and bone surviving. One interesting aspect of the site is the lack of significant amounts of fish bone – the usual interpretation of such a site, a platform on a lake, would be to suggest that this was a fishing spot, however this does not seem to be a main activity (Fredengren, pers.
The osteologist noted that this site produced good evidence for mature wild pigs – usually it has been younger pigs remains found – and in comparison to previous samples from Ireland, the pigs were quite massive, much larger than had been previously thought (McCarthy, pers. comm.).

Along with the site at Lough Kinale, there is a growing body of evidence for the construction of various types of ‘sites’ in the landscape. Fredengren’s (2002) work on the crannogs of Lough Gara has again raised the question as to whether some of these may be of Mesolithic date. She investigated a series of brushwood and timber pilings on the shore of Inch Island – this area had turned up lithic in the 1950’s, and Woodman (1978, 322) had argued, contra Raftery’s and Cross’s arguments for a Stone Age date for many of these crannogs, that the relation between the lithics and crannogs was spurious and that the lithics probably arrived there from erosion from a higher spot on the shoreline (for further discussion of the Lough Gara lithics see below, Section 5.5.10). During Fredengren’s work a Later Mesolithic date (4230-3970 BC) \(^{18}\) was returned from one of the timbers on Inch island, and also an Early Mesolithic date (7330-7050 BC) \(^{19}\) from a piece of the brushwood (Fredengren 2002, 120). While she maintains that these, and the possibly related traces of a stone causeway, cannot be specifically described as crannogs, she argues that the “new results show that there is more to the Lough Gara material than eroded deposits from earlier shorelines” (ibid., 121). Fredengren has noted that the difficulty in assessing these numerous crannogs that were noted by Raftery and Cross is that they are now covered over by grass (ibid., 132). However she argues that the stone platforms may well be of Mesolithic date.

The excavations of Moynagh Lough by Bradley (1991) again showed evidence of the construction of island platforms in the Mesolithic. Here, two knolls in the lake were heightened with a layer of white marl, stones, and brushwood. Bradley noted that the mud was “almost completely sterile and its presence is difficult to explain” (ibid., 7). The majority of the lithics, both chert and flint, were found in and on top of this layer which also contained charcoal which dated to 5270+60 BP (ibid., 9).\(^{20}\)

\(^{18}\) It is not stated whether this is a calibrated date.  
\(^{19}\) It is not stated whether this is a calibrated date.  
\(^{20}\) It is not stated what type of charcoal was dated.
While the above locales produced evidence for lithics, at Mitchelstowndown East, Co. Limerick and Valencia Island, Co. Kerry Mesolithic dates were returned with no evidence of lithics. The former site (6585±30 BP) comprised a platform of oak beside a stream, and the latter (6560±120 BP) was a stone platform which had a baulk of fossil oak dated to 8910±150 BP (Woodman and Anderson 1990, 386). Brindley and Lanting (1998) undertook a dating programme on a selection of Irish trackways and produced evidence for the construction of a pine trackway at Lullymore Bog, Co. Kildare in the Mesolithic, at a site where no lithics turned up. This date was so early (7140±70 BP) that other samples were tested and these proved the dates to be accurate as Mesolithic – 7145±35 BP for the pine track, 6120±45 BP for the overlying peat, and 6120±30 BP for pine from a pine ‘surface’ (ibid., 47). The pine trackway was constructed of transversely laid, radially split pine, with a width of 1.8m; the finder suggested that “the timber was worked and formed a linear structure which had all the appearances of a trackway” (ibid.).

Recent monitoring of development works along the River Liffey in Dublin City discovered a series of fishing traps, stake rows and a brushwood platform which have dated to the Later Mesolithic, again with no lithics apparent, apart from a single burnt blade found away from the structures (McQuade forthcoming). The earliest date reported (6090-5890 cal. BC) was for a wattle fish trap consisting of two parallel wattle fences constructed from hazel sails, rods and rushes – most of the sails were pared towards the base, and some had side branches pared as well; some had been torn rather than cut; the rods and sails were an average of 13mm in diameter. One of the fences survived to a length of 5.12m long, while the other only survived for 1m. A horizontal wattle panel lay between the two fences; this was 1.3m wide and extended for 2.1m and consisted of tightly woven hazel, with an average diameter of 25mm (ibid.).

A contemporary c-shaped fish trap was located 31m to the southeast of the wattle trap – this was also predominantly made from hazel, with one ash, and a stake was dated to 6080-5840 cal. BC (2 sigma calibration). 8m northwest of this were a stake row and brushwood platform – these were also contemporary and constructed predominantly of hazel; the hazel from the platform was up to 7cm in diameter and dated to 6080-5870 cal. BC. A row of stakes dated to 5910-5710 cal. BC ran for
25.1m; a similarly dated basket trap was located 10m away and was considered to be related to this row of stakes. Further stake rows and clusters of stakes were identified, as well as three oak planks which were deposited as drift wood along the shoreline (ibid.).

This site was discovered under metres of silt, and the lowest levels were at minus 5.8m O.D – in total a strip of 16m by 60m was excavated (ibid.). The dates suggest the use of this stretch of the river over a period of a few hundred years, and this excavation represents the first definitive proof of fishing traps, weirs and so forth in the Irish Mesolithic. The site also suggests the use of coppicing of wood (Warren, pers. comm.). One of the difficulties with ascertaining this is that hazel is very proficient as a naturally self-coppicing tree (Mabey 1997, 88), but the large quantities needed for making the lengths of traps possibly suggests human help in the coppicing. This is of considerable importance, as this is an early example of such practices – in his recent article on the Neolithic transition, Rowley-Conwy (2004, 96) has suggested that coppicing “implies sedentism” and commitment to place that can be seen as a hallmark of the Neolithic, and that coppicing “cannot be reconciled with a nomadic settlement pattern”. If the material is indeed evidence for coppicing in the Irish Mesolithic, Rowley-Conwy’s remarks are either questionable, or else this implies that current understandings on sedentism in the Later Mesolithic are questionable.

Another interesting aspect of this site is that it highlights a further role for hazel in the Mesolithic. Hazel generally gets a hard time in the literature – the ubiquity of hazelnuts on sites due to their excellent preservational qualities often means that they are either taken for granted as just a prehistoric foodstuff by archaeologists, or dismissed as ubiquitous because of their survival rate. Here, however, hazel is highlighted as the overwhelmingly dominant raw material used by the communities in their constructions – as the surrounding landscape has been surmised as “zones of salt marsh, reed swamp and fenn carr” (McQuade forthcoming), other wood such as willow, dog wood, birch, and alder would have also been commonplace, but there was a clear bias towards the use of hazel. This is not surprising as hazel is an aptly suitable timber for working in wattling, but may suggest a more involved relationship between Mesolithic communities and the hazel tree. Other trees used at the locality were dogwood, ash, birch, and oak (ibid.).
As mentioned in the previous chapter, the Bally Lough Project looked at the Stone Age settlement around the River Barrow’s estuary and then around the middle reaches of the river from Carlow to Monasterevin (Zvelebil et al. 1996). This region was for the most part devoid of research and early prehistoric evidence, apart from the known monuments. Interestingly, considering they subtitled one of their articles “the ‘Riverford Culture’ revisited”, the authors assign ground and polished axes as post-Mesolithic artefacts (Green and Zvelebil 1990, 65; Zvelebil et al. 1996, 33). The initial work on the coast and estuary produced evidence for a rhyolite quarry. The authors noted that while the excavations of the quarry showed evidence of sustained (Mesolithic to Bronze Age) and substantial use (over 30,000 lithics excavated from the site), lithics made from rhyolite were found almost exclusively in a very local area around the quarry (Zvelebil et al. 1987, 18). This apparently highly localised nature of the rhyolite use led the authors to four questions:

1) How intensive was, in fact, rhyolite production, bearing in mind the high waste to finished product ratio of its reduction process? (2) Who was in control of the rhyolite source – perhaps a group not resident in the region? (3) Was rhyolite obtained for export, and if so, what was its destination? (4) Why did local the local people ignore the advantages of this raw material [over the local small pebble flint] for making large and medium-sized tools? (Green and Zvelebil 1990, 70).

The predominant raw material was flint, which came from small beach pebbles, with a small amount of chert, basalt, and quartz (ibid.). The authors suggested that the coastal and estuarine areas were favoured in the Mesolithic compared to inland, and the lack of riverine evidence in this area may be due to peat formation and alluvial events (ibid.).

The survey then continued in following years, where they moved some 70 km upriver from the estuary. Here the (prehistoric, not specifically Mesolithic) lithic raw material changed, with a preponderance of chert, basalts, andesites and rhyolites – flint accounted for 20% of the lithics, with the authors suggesting that the larger flint tools were imported from outside the region, as the available flint nodule size was too small for such tool-making. 5% of the lithics were quartz or quartzite (Zvelebil et al. 1996, 21-3). The density of lithics was smaller in the basin in comparison to the estuary, leading the authors to suggest this may have been due to alluvial deposition, the use of the coastal area as primary reduction sites, hence creating more artefacts, or due to the ease with which worked flint in the estuary was spotted by the researchers,
compared to the basalt/rhyolite material which is not as straightforward to identify as worked (ibid., 31). The authors argue that a clear pattern of the Mesolithic material is for it to lie in the alluvial/till boundary, with the authors suggesting that much Mesolithic activity which would have occurred along the river is buried below alluvium (ibid., 36).

The Bally Lough Project is of clear importance to Irish archaeology, tackling a for the most part devoid archaeological landscape and producing evidence from the Early Mesolithic onwards. However, the various papers are scattered widely over differing journals and book sections, and the project would seem to have run out of steam in a sense. There was no real integration of the coastal and upriver sections tackled, and no move to interpret the findings in a greater or more lucid fashion – beyond a substantial focus on taphonomic issues – such as has characterised Zvelebil’s writings in other works (e.g. 1997; 2003).

3.6. The dead are (almost) everywhere

Over the last few years there has been a dramatic increase in the discovery of Mesolithic human remains. These have been recovered from a shell midden, and more recently from two caves, Ferriter’s Cove, and from a number of cremation burials located on the banks of the Shannon. This section will discuss the various lines of evidence and discuss the interpretations of the burials.

The key discovery in the 1970’s of an Early Mesolithic presence on the Shannon system in the Midlands altered the picture of the Irish Mesolithic as it was realised that areas where there had been no previous research or collecting, could produce evidence. A quarter of a century later a series of Early Mesolithic cremations were excavated on the banks of the Shannon, at Hermitage, Co. Limerick (Collins and Coyne 2003). This excavation will fundamentally alter perceptions of the Irish Mesolithic.

The original date returned for the first cremation (pit A) was 7550-7290 cal. BC, and 7030-6630 cal. BC and 6610-6370 cal. BC for the other two cremations (a Bronze Age date was returned for another cremation at the site) (ibid., 25-6). These dates were from charcoal samples, and at a conference in May 2006 Collins (2006)
announced dates for the cremated bones which are similar to the original dates: 7530-7320 cal. BC for pit A and 7090-7030 cal. BC for the cremation from area B.

The cremated bones from pit A were taken as representing one adult individual, possibly male – due to the small size of bones, no more detailed osteological determinations could be made, and the determination of male was questionable (Lynch 2001, 112-3). The weight of bone recovered was 1979g – which is above average from archaeological contexts – suggesting that the whole body was cremated, and great care taken in collecting and depositing the remains into the pit – the reddened clay with imbedded bone from the pit may be from the pyre, suggesting the shovelling of material from the pyre (ibid., 115). Lynch commented that the cremation was “expertly carried out”, and “the process of cremation would have been a considerable effort, requiring significant planning and a major input of time and effort” – the author argued that the condition of the bones in the pit suggests that the people who undertook it were familiar with the processes of cremation (ibid., 114).

Pit A had a post in it which was suggested as being a grave marker; against this was placed a polished stone axe: “the cremated remains were then deposited around the axe and post, in a semi circular arrangement” (Collins and Hayes 2001, 80). Along with the axe, 17 lithics came from the same context of the pit, with one of these a diagnostic microlith, and another a possible microlith (Woodman 2001, 121). Three of the lithics (including the microlith and possible microlith) and the axe from the pit showed evidence of burning (Collins and Coyne 2003, 25; Woodman 2001, 121). For the lithics in general from the site (chert, flint, siltstone, mudstone, and possibly shale and limestone), Woodman suggested that it was an Early Mesolithic assemblage, with diagnostic Later Mesolithic material as well (ibid., 126-7).

The cremated bones from area B were taken as representing one adult individual, possibly male – again, due to the small size of bones, no more detailed osteological determinations could be made, and again the determination of male was questionable: along with the 179g of bone, a tiny amount of cremated fish bone was also present (ibid.). The human remains well less well burnt in the cremation compared to pit A, and while pit A was suggestive as having been an entire body, the area B cremation may have been only selective parts, as the skull was considerably overrepresented.
while torso and limbs were underrepresented – Lynch noted that the amount of undiagnostic bone may be creating this bias (*ibid.*, 116). Eleven chert flakes and flake fragments were from the same context, along with nine naturally fractured pieces of chert and one piece of flint debris (Woodman 2001, 123).

Due to a lack of identified warping of the bones from both cremations, it was argued that this may mean that the bodies were placed on top or in the middle of the pyre (*ibid.*, 115). Further, the fragments of bones in both cremations were very small, and this was taken as possible evidence that some process such as pounding or grinding of the bones was undertaken after the cremation was completed, as part of the burial ritual (*ibid.*, 118). While a third cremation returned a Mesolithic date, only one bone is registered in the finds (Collins and Hayes 2001, 97), and this is not included in the osteoarchaeological analysis – six lithics also came from the fill (Woodman 2001, 124).

These are the earliest dates for cremations in Europe, and the earliest dates for any type of burial in Ireland. Given the early dates returned for the bone, the comments by the osteologist relating to the cremation practices – made before the material was dated – are of considerable importance. These comments highlight that this was not a haphazard disposal of a body, but a carefully executed cremation. It is a sobering thought that the analysis suggests that the cremation undertaken was of a developed, sophisticated nature: a cremation practice that presumably was of some antiquity at a time of its undertaking. The cremations at Hermitage highlight a persistent place (*sensu* Pollard 2000) in the landscape– the reuse of a locale for burial rites over a period of many centuries, with evidence also for continuity of place and rite in the Bronze Age. While no Neolithic cremations were uncovered, this development-led excavation only examined a 10m wide strip, therefore further evidence for Mesolithic and later periods’ burials is certainly a possibility.

Human remains were also discovered during excavations at Killuragh Cave, Co. Limerick; the cave overlooks the Mulkear River, a tributary of the Shannon and lies some 15km as the crow flies south east of Hermitage. The excavations produced, along with lithics, Early Mesolithic human remains dated to 7194-6658 cal. BC and 7000-6546 cal. BC; Later Mesolithic human remains gave dates of 4730-4460 cal. BC
and 4460-4160 cal. BC; Neolithic human remains gave a date of 3624-3348 cal. BC, as well as a dog bone dated to 3940-3630 cal. BC (Woodman and O’Shaughnessey 2003). Again, this highlights the use of persistent places in the landscape over considerable periods. Woodman and O’Shaughnessey (2003) argue that while the human remains are related to the cave, they do not represent burials inside the cave as such, but possibly “either introduced or washed into the cave from outside” (ibid.).

Whether the continuity of this cave as a locale for the deposition of human remains is a signature of a continuity of the same communities’ from the Mesolithic to the Neolithic is a moot point. The difficulty is in interpreting whether a persistent place such as this represented: either 1) an ancestral burial place to the Neolithic inhabitants, 2) an explicit appropriation of renowned Mesolithic locales by intrusive Neolithic communities, or 3) an incidental reuse of a landmark in the landscape. Or indeed, whether the supposed Neolithic dates are in fact late Later Mesolithic! The orthodox presumption is that all post-4000 cal. BC dates are Neolithic. However, a lack of Mesolithic sites after 4000 cal. BC simply means a lack of excavated dated sites, rather than a past reality that the Mesolithic communities and their way of life were vanquished on the convenient tidy date of 4000 cal. BC. After all, the Mesolithic and Neolithic are our analytical constructs as opposed to something historically meaningful.

The same argument can be made for the Stoney Island bog body from Co. Galway. While O’Floinn (1995, 139) has suggested this skeleton retrieved from a bog as the earliest Neolithic example, the calibrated dating by Brindley and Lanting in the same book (1995, 134) gives four calibrated dates: 4226-4196 cal. BC; 4152-4056 cal. BC; 4052-3958 cal. BC; and 3840-3826 cal. BC (the authors suggest that the earliest date is a contaminated sample). So we have a body which either: 1) straddles the transitional period, 2) falls up to 150 years before the traditional transition date, or 3) falls over 150 years after the traditional date – consequently there is over a 300 year period in which this person may have lived and died, or in other words some 15
generations. Woodman (2000, 40) has suggested that the 13C results of 21‰ for the Stoney Island bog body “would suggest a land-based diet which is more likely to indicate a farming economy”. But this is forgetting the evidence for the ‘land-based diet’ results (-21.9‰ and -21.3‰) for the Later Mesolithic remains of Killuragh Cave mentioned previously; the Early Mesolithic remains at the cave also returned similar 13C results: -19.95‰ and -20.86‰ (Woodman and O’Shaughnesssey 2003).

Recently, human bones which had been found by cavers in a cave in Srahmore, Co. Leitrim have been dated to the Later Mesolithic or Early Neolithic (4217 (4030) 3967 cal. BC (two sigma)) (Dowd, pers. comm.), with the dates being remarkably similar to the Stoney Island bog body. This cave, which lies on the north face of Srahmore Mountain close to the Sligo-Leitrim border, has not been excavated so the fuller picture of this site remains to be revealed.

At Ferriter’s Cove several pieces of human bone and teeth were found, one dating to 4225-3950 cal. BC, and the other to 4250-3980 cal. BC (Schulting 1999, 219). At Rockmarshall Co. Louth, middens overlooked a former coastal lagoon in Dundalk Bay, and a human femur was dated to 4774-4366 BC (O’Sullivan 2002, 11). O’Sullivan has highlighted some current ideas in Mesolithic research, touching on the notion of the middens as visible features in the landscape, recurring places for visitation; he describes the routines of such visits – sitting, chatting, eating, and looking out over the landscape (ibid.). He suggests that what the bones were doing in the middens can be read in a number of ways – from Scottish evidence, he relays that the middens may have been used as resting places for bodies while they rotted, and once they had rotted the bones were removed, with some accidentally left behind; alternatively, the bones may have been purposively deposited in the middens, as a place of ancestry (ibid.).

O’Sullivan’s paper has placed some of the known Mesolithic burials in Ireland in context of wider European discoveries. However, he has overstated the Irish case for

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21 In terms of the loose use of dating, Fredengren (2002, 127), also citing Brindley and Lanting, states the dating of this person as being “calibrated to 4230-3940 BC”. It is unclear how she arrived at these dates. It would seem she roughly bundled the first three dates together, and ignored the latest date – however this would still not tally. If she has grouped these dates, it is a perilous use of dating to present three separate dates in such a manner. Interestingly this dating of “4230-3940” is also given by Sheridan (2003B, 70) for this burial in her paper on chronologies of megaliths.
midden burials, as the bones and teeth from Ferriter’s Cove were not found in the context of the middens – as previously mentioned, the deposits of shells at Ferriter’s Cove were more discrete dumps than substantial middens: these would not have stood out as visible cultural markers in the landscape. So the only human remains from a midden in Ireland is from Rockmarshall. A perplexing omission in the article is any discussion of the Killuragh cave remains, as this site clearly adds to the variety of locales used for mortuary practices. While at the two coastal sites the interpretation can be made for the bones of ancestors remaining close to daily activity, the cave depositions may represent a liminal area, removed from daily routines. While the other sites were out in the open, in plain sight for all to see, the cave is more secluded, indeed hidden. So, rather than one tradition, there was a variety at play contemporaneously.

3.7. The Mesolithic-Neolithic transition

In this section I will turn my attention to the Mesolithic-Neolithic transition, and outline the evidence that has been put forward by researchers in Ireland for the introduction of agriculture. In comparison to the Irish Mesolithic period, the Neolithic has seen a strong focus of theorising and research over many years, with the highly visible megalithic monuments a magnet for researchers. There has been an abundance of publications on the Neolithic over the years, and also on the question of the arrival of farming practices onto the island. Therefore, to keep it succinct, I will only touch on aspects of the Neolithic pertaining to the question of the transition period itself as much as possible, and will not dwell on the megalithic research to any great degree which has a bountiful reading list on its own. I will start with the Carrowmore Project’s work on the passage tombs in Sligo and Burenhult’s interpretation of the economy and society in the Neolithic period, and then outline Woodman’s concerns with the use of radiocarbon dating in assessing the transition period. I then turn to the Bally Lough Project’s work on the introduction of farming in the South-east, and Kimball’s work in Donegal. This will be followed by Sheridan’s, Tresset’s, and Woodman’s disagreement with the forager-centric model as put forward by Burenhult and Zvelebil et al. The Neolithic house is seen as an arrival of an architectural tradition and seen in strong contrast to the Mesolithic societal structure, so I will dwell awhile on this topic, touching on the megalith phenomena as I do. Finally, I will discuss the stable isotope models that have been put forward and finish with the palynological evidence for farming.

As I have outlined in the previous chapter, the Neolithic as an entity has evolved since its inception in archaeological circles, with it now being firmly linked with the practice of agriculture. The earlier theorising by Knowles and his contemporaries did not make this link. Indeed, they reasoned that the first Neolithic inhabitants did not

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22 As noted, Woodman does not regard the Mesolithic human remains as burials within the cave itself (Woodman and O’Shaunessy 2003).
practice the arts of agriculture at all (Knowles 1896, 663). A few decades later, the Childean revolutionary vision placed farming at the forefront of the Neolithic (1927, 1). It has remained there since. However, what has changed is the emphasis placed on agriculture itself as an entity inside the Neolithic – baldly, from a social evolutionary perspective of people progressing to the stage of an agricultural economy (Childe 1927; Macalister 1949), to an economic perspective (with hang-ups from the previous perspective) (Burenhult 1984; Case 1969; Herity 1974; Woodman 2000), to the more current social transformation model whereby the social realities and ideas of farming are as vital as the economic determinations (Cooney 2000; Thomas 2001; Tilley 1994; Whittle 1996). Along with agriculture, new types of material culture such as lithic types and pottery and especially the megalithic phenomenon is tied in with the Neolithic, and therefore tied in with farming. Case’s (1969) thesis that the megalith building came after a period of initial farming, once a sustainable population and economy was in place, was argued against by those who thought of the megaliths as artefacts of pioneering agriculturalists staking their hold on the land (Herity 1974).

Burenhult’s Carrowmore project was designed specifically to test the theory as to whether the indigenous Mesolithic populations were responsible for the construction of the monuments, and to examine the cultural ecology and economy of these builders, and how this changed diachronically (Burenhult 1984). Here, the builders of the megaliths were seen as being Mesolithic in terms of their “socio-economical” character – a key part of the evidence for this was the “offerings of unopened sea-shells in the excavated monuments” (Burenhult 1980, 5). Burenhult argued that cattle did not play a part in their economy, but rather it was a “complex hunter strategy” that typified the economy, which led to an increase in population density, and social complexity – these factors led to the construction of the megaliths (Burenhult 1984, 138-9). The key evidence to support this were the middens and the hut sites, which were taken as suggesting a seasonal round of settlement. Later, ‘Neolithic’ elements such as cattle and cereals were introduced through contact with farming communities of Eastern Ireland (ibid.).

For Burenhult, the Mesolithic-Neolithic transition in Sligo was mediated on an indigenous population developing to a stage of complexity which eventually led to the introduction of farming practices such as cattle rearing and cereal growing, but that
the megaliths themselves were built by Mesolithic people. The key factor missing from this interpretation was that the usual Later Mesolithic assemblage seen throughout Ireland, the macrolithic butt-trimmed forms and so forth were absent from all sites investigated by Burenhult’s team. Therefore, no site investigated could be considered Later Mesolithic, leading to the conclusion that these sites were from a later period – in other words Neolithic in date.

Woodman (2000) has set out the dilemmas of the discussion of the transition in terms of the radiocarbon dating evidence used. He argues that there is a gap from Later Mesolithic sites dating up to 5500 BP, to Neolithic sites dated to after 5000 BP, with no reliable dates in between (ibid., 242). Moreover, he cites Pilcher who maintained that to attempt to use conventional radiocarbon dating to interpret real ages closer than 500 years were not valid (ibid., 226). This would suggest that conventional dating cannot be used to ascertain historical events such as complex transitions. Added to this are the fluctuations in the 14C levels in the atmosphere, which are interpreted as being “considerable” around 4200-4000 BC (ibid., 240).

Woodman suggests that supposed early dates for Neolithic houses, such as Ballynagilly, Co. Antrim and Ballygalley, Co. Antrim tend to be from wood or charcoal, which may create a false sense of antiquity to the buildings (ibid.). McSparron (2003) produced a list of radiocarbon dates from nine Early Neolithic houses which come from material not susceptible to the old-wood effect (four of these houses are from the group of seven recorded at Corbally, Co. Kildare). This list highlights how the early dates given are put into perspective by using non wood samples, and that – for these houses at least – a start point of c. 3800 cal. BC seems apparent, which falls 200 years after the start of the Early Neolithic (sensu Cooney 2000).

Earlier I discussed the Bally Lough Project in terms of the Mesolithic evidence. A key objective of their project was also the investigation of the agricultural transition in the region “in order to explore the roles of indigenous and external influences” (Green and Zvelebil 1990, 59). They argued that the ensuing Neolithic period saw an increase in the diversity in the lithic assemblages, and an adoption of pressure flaking “and polishing as techniques to extend edge life”. As mentioned they considered
chipped and ground stone axes as Neolithic (ibid., 64). Peterson (1990, 93-4) considered the use of bipolar working as a continuation from the Mesolithic, however Woodman (pers. comm.) has disagreed, arguing that there is no evidence of the use of the bipolar method of working in the Mesolithic. They argued that the evidence from the coast and estuary showed a geographical continuity over the periods, and that this was matched in the middle Barrow Valley, with an extension in the Neolithic into upland areas (Zvelebil et al. 1996, 36). Rather than seeing foragers being displaced totally by arriving farmers, they argued that one must consider an overlap, a zone of interaction in which both the foragers and farmers played respective parts (Green and Zvelebil 1990, 58). They raised the possibility that the initial arrival of farming may have come from the continent and from Ireland spread to Britain, with the suggestion that this may have occurred through contact but not necessarily through a substantial population movement (ibid., 86).

Kimball’s Lough Swilly Survey was designed to investigate the Neolithic transition in Donegal, and to compare his results to that of the Bally Lough Project. He argued that whereas The Bally Lough results showed continuity in geographical locations over the transition, his results showed that Mesolithic evidence was located solely in aquatic locations, and post-Mesolithic was more widespread (Kimball 2000A, 77). Further, he argues that discontinuity is apparent in the lithic material use and procurement strategies, with Later Mesolithic characterised by the use of non-local material, and the post-Mesolithic characterised by local, apart from the axes (ibid.).

In a number of papers Sheridan (2003A; 2003C 2004) has also been highly critical of the idea that indigenous foragers were responsible for the introduction of farming to Britain and Ireland, with little population movement involved; she has been particularly scathing in her attack towards Julian Thomas, calling this forager-centric thesis the “Thomasian orthodoxy”. However, he clearly was not the first or last to suggest these thoughts. She argues to forget the latest theoretically-driven models and to look at the clear empirical evidence. Pottery styles (ibid, 7-9) and the fully formed techniques of ceramic production (Sheridan 2004, 12), point to the arrival of culture groups in toto from the continent. Along with the pottery are the early tomb types which she also argues highlight a French connection (Sheridan 2003C, 12).
Tresset (2003, 25) concurs with Sheridan and argues that: “it would appear wholly far-fetched to posit that local Mesolithic groups sailed to the continent and brought back domesticated animals”. But where is the material culture of the continental farmers that brought the cattle? “One could imagine that the new incomers failed in their attempt to settle in Ireland. [Or] erosion, silting-up and Holocene sea level changes…may have washed away any such traces of littoral settlement” (ibid., 26). She argues that the early dates for cattle, such as Ferriter’s Cove, may represent a continental connection which failed, and the later “Early Neolithic” cattle evidence in the form of the settlements at Tankardstown, Co. Limerick and Cloghers, Co. Kerry dating to after 4000 BC “could be linked to some connection with Britain, as suggested by the association with the Carinated Bowl tradition” (ibid., 27).

Woodman concurs with this view for the early cattle remains and argues that, as well as the pottery, the lithic assemblage of the Irish Early Neolithic (large leaf-shaped arrowheads, convex end scrapers, plano-convex knives (Woodman 1993)) resembles that of Britain and significantly differs from that of the lithic technology of the Irish Later Mesolithic (Woodman et al. 1999, 149). He has strongly disagreed with the thesis put forward by Zvelebil et al., arguing that simply because people from the two periods were using the same area and resources, it does not follow that they were the same people, or that the Mesolithic communities had an input into the arriving Neolithic way of life – it simply shows that they were using the same landscape, and that the coast and so forth were important in the Neolithic as well.

The phenomena of the Neolithic house has become a key feature in the debate in the Neolithic transition, as the sheer numbers found, over 90 according to Grogan’s (2002) latest publication on them, stands in stark contrast to the known Mesolithic dwellings, and Cooney (2000, 14) argues that these buildings are evidence of a defined architectural tradition. Added to this, Cooney (ibid., 54) has remarked for the Neolithic in general that the house evidence can help researchers move beyond megaliths as the research point of contact with the Neolithic, and will balance out the idea that Britain and Ireland were typified by a lack of settlements in this period. Moreover, the positioning of these houses can do away with the concept of tombs as proxies for settlement (sensu Cooney 1983).
The earliest examples of the Neolithic houses are suggested as being for the most part larger than those of the Middle Neolithic (Grogan 2002, 521) and this may well be a significant factor in the meaning and use of these buildings. The earliest types also tend to be rectangular, but Cooney (2000, 66-7) noted that this does not strictly play out for every site, and he suggests that the individual site history’s should be examined, rather than an all-Ireland type framework. Grogan (2002), and especially Cooney (2000), have discussed Neolithic houses at length, so here I will briefly mention four different sites that have been published to some degree, which, while showing the commonality of the template, highlight the peculiarities of them.

The first is Cloghers, Co. Kerry, mentioned by Tresset above. This house is the closest known Neolithic activity to Ferriter’s Cove, which lies some 50km out on the Dingle Peninsula. While the excavation of Ferriter’s Cove was initiated on the discovery of a plano-convex knife, little further Neolithic evidence was forthcoming (Woodman et al. 1999). Within a few years, development around the town of Tralee has transformed the known Neolithic activity in the area. A few kilometres from the Cloghers house, other excavations have uncovered a passage tomb and hilltop enclosure on a limestone reef, 50m south of the River Lee at Ballycarty (Connolly 1999), and a preliminary report for another nearby site stated that this was a complex of pits, stake holes and post holes that produced “Early Neolithic” pottery along with lithics (Dunne 2000).

The rectangular house at Cloghers was situated on the north slope of the same limestone reef overlooking the river which met the sea a short distance away (Kiely 2003, 182). While the external measurements of the house gives it an area of c. 100m2 – making it the largest Neolithic building recorded in Ireland – Grogan (2002, 519) notes that as the building was divided into three compartments, he gives the area at 72.45 m2. This building was both plank built and of posts and the builders cut into the bedrock in places to make the foundation; the lithics of greenstone, quartz, chert, and flint as well as ceramics were found in the foundation trenches, including a quartz core that was placed at the base of one of the posts (Kiely 2003, 184). Kiely (ibid., 187) suggested that a focus of deposition was at the entrance of the building. A large number of stake-holes, pits, and what was taken as a fence line, were also excavated outside of the house, and there was evidence for the making of ceramics on site (ibid.).
The house was argued as having been destroyed by fire (ibid.). The dating of 2 hazelnut shells gave dates of 3695-3630 and 3575-3535 cal. BC for the first and 3765-3640 cal. BC for the second. This dating suggests, contra Tresset and Grogan, that this house was occupied towards the end of the Early Neolithic.

A group of seven houses were excavated in Corbally, Co. Kildare. Purcell (2002) excavated three of these, and noted in her article that four others had since been discovered. For the three that she excavated, she was unsure of the contemporaneity of the houses, suggesting that they were occupied within a “very short time-span” (ibid. 70). All three were post and plank built, and the lithics and ceramics from the three houses were similar, but with more retouched tools recovered from house 1 compared to the other two (ibid.). House 1 had a living area of c. 53 m², while house 3 had a living area of c. 37 m² (ibid., 34; 59).

Only one animal bone was recorded – this was from an internal posthole in house 3 (ibid., 72). One of the houses returned dates for a single grain of *Triticum dioccum* of 3775 -3631 cal. BC, 3581-3567 cal. BC, 3561-3537 cal. BC; a fragment *Corylus avellana* of 3891-3881 cal. BC, 3799-3641 cal. BC; and charcoal of 4240-3925 cal. BC, 3875- 3810 cal. BC (Purcell 2002, 46). The wood and charcoal dates are significantly earlier than the grain of wheat, which brings this house closer to the Middle Neolithic *sensu* Cooney (2000, 14), not Early Neolithic as stated by Ó Drisceoil (2004, 180) and implied by Grogan (2002).

While Purcell (2002) noted that there are no known megaliths in the Co. Kildare, another recent excavation of a Neolithic structure, this time in Drummenny Lower, Co. Donegal, saw the structure on the crest of a ridge, overlooking a court tomb 200 m away which sat beside a river in the valley below (Dunne 2004, 165). In discussing the excavation, Dunne (ibid.; 170) commented that she was avoiding the term house as the function of this rectangular, c. 60m² building was uncertain, for one because “the occurrence of a dramatic incline in the floor surface would have made occupation somewhat uncomfortable”. The floor declined in height by 1m over the width of the
building, which was c. 6.3m wide. It was argued that the building was destroyed by fire, and that a possible cremation pyre was also noted 30m away (ibid., 170).

While the Drummenny Lower building overlooked a court tomb, at Ballyglass, Co. Mayo a court tomb was built on top of the foundations of a dismantled rectangular post-built house (Ó Nualláin 1972). So we can see that these buildings and megalithic structures were both intimately related, and, in the example of Kildare, not related. Cooney has commented on the placement of monuments, suggesting that a common theme is the use of places already renowned. The biography of the place was elaborated through the construction of monuments there, with the monuments, like the houses, having biographies (Cooney 2000, 125).

In terms of the identification of Early Neolithic monuments and their part in the Neolithic transition, the dating is extremely difficult. In her article on the chronology of megalithic tombs, Sheridan (2003B) regards passage tombs as being early, but in terms of the court and portal tombs, she regards it as difficult to state. She suggests that the idea of a transformation from a wooden mortuary feature to a court tomb is plausible for the Ballymacaldrack, Co. Antrim megalith and in terms of the portal tombs, she sees them as being contemporary with the court tomb (ibid., 70). Cooney (ibid., 14) argues court and passage tombs can be considered early, while Whittle (2004, 81) suggests portal tombs may be early types as well.

Caulfield’s work has revealed extensive field boundaries of stone and earthen banks along the coast of North Mayo, especially around the area of the Ceide fields, which also have evidence for round and rectangular houses and megaliths, such as at Ballyglass. O’Connell and Molloy (2001) have reviewed the evidence for farming in the Early Neolithic, and in the case of the Ceide fields, there are two pollen profiles, taken 16 km apart, one by the coast at Glenura, and the other inland at Garrynagran. Both are associated with pre-bog walls.

The Glenura profile showed a localised picture of a c. 500m radius; up to c. 3900 cal. BC this showed a pine dominated woodland, with farming initiated before the elm

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23 A similar slope was evident in the Gortaroe II Neolithic house: “the house was built on a slope with a gradient of 1:8 across its short axis (i.e. the northeast of the house was almost 1m higher than the southwest side)”, which was 6.8m wide (Gillespie forthcoming, 104; 127).
decline of c. 3900 cal. BC \textit{(ibid.}, 103-4). They suggested that the intensive farming period was from c. 3800 cal. BC and argued that the field boundaries may have been built then. They noted an increase in tree growth, especially hazel from c. 3450 cal. BC.

The Garrynagran profile – which showed a regional picture – the pre-elm decline woodland was dominated by hazel, elm, and pine, and lesser amounts of oak, and unlike the Glenura there was no evidence for pre-elm decline forest clearance \textit{(ibid.}, 108;110). As mentioned in the previous chapter another study on the area has shown that an area outside the known distribution of field walls produced evidence for extensive farming outside of the known distribution of the pre-bog walls. Again it is unclear whether this could signify a chronological marker or differing farming practices in the region.

Down the coast at Lough Sheeauns, Co. Galway, another profile was taken in an area surrounded by megaliths, but not associated with Neolithic field boundaries \textit{(ibid.}, 110). Here, the pre-elm decline forest was dominated by oak, with hazel, alder, and birch present, and elm and pine in lesser amounts; an opening up of the forest (possibly regionally) was noted at c. 4430 cal. BC with the authors suggesting natural or possibly human causes \textit{(ibid.}, 113). After the elm decline there is a “dramatic landnam phase”, and by c. 3600 cal. BC woodland regeneration.

As mentioned previously, stable isotope analysis has been used to understand dietary practices, and this has become an integral part in discussions of the Neolithic transition. The use of stable isotope analysis to indicate either a marine or terrestrial source of protein in the diet is hotly debated, with polarised views as to whether the results can be clear cut evidence of differing dietary patterns. On the one hand it is argued that a (more or less) straightforward case can be made (Schulting and Richards 2000) – the following table (Table 3.1.) from Schulting (1998, 206) presents a schematic view of the differing stable isotope results. On the other hand it is suggested that a myriad of factors can weigh against such interpretations (Milner \textit{et al.} 2003).
Table 3.1. Schematic view of the differing stable isotope results; table from Schulting (1998, 206).

<table>
<thead>
<tr>
<th>Diet</th>
<th>Description (% refers to calories)</th>
<th>δ¹³C‰</th>
<th>δ¹⁵N‰</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>inland hunter-gatherers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>emphasis on game (&gt;70%)</td>
<td>-20.9</td>
<td>8.3</td>
</tr>
<tr>
<td>2</td>
<td>game w/ some freshwater fish (20%)</td>
<td>-20.7</td>
<td>9.5</td>
</tr>
<tr>
<td>3</td>
<td>emphasis on freshwater fish (50%)</td>
<td>-20.5</td>
<td>11.4</td>
</tr>
<tr>
<td>4</td>
<td>emphasis on non-cereal plants (&gt;75%)</td>
<td>-20.9</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>coastal fisher-hunter-gatherers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>balanced terrestrial/marine (50:50)</td>
<td>-16.5</td>
<td>12.2</td>
</tr>
<tr>
<td>6</td>
<td>emphasis on marine fish (&gt;50%)</td>
<td>-13.9</td>
<td>14.0</td>
</tr>
<tr>
<td>7</td>
<td>emphasis on marine mammals (&gt;60%)</td>
<td>-15.9</td>
<td>15.8</td>
</tr>
<tr>
<td>8</td>
<td>non-cereal plants with marine fish/mammals</td>
<td>-15.2</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>farmers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>emphasis on domestic animals (&gt;50%)</td>
<td>-20.9</td>
<td>8.9</td>
</tr>
<tr>
<td>10</td>
<td>emphasis on cereals (&gt;70%)</td>
<td>-21.0</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Tab. 1. Predicted carbon and nitrogen bone collagen stable isotope values for modern human diets.

The interpretations of the stable isotope values from Britain, France, and Denmark suggest that there was a sudden shift away from a marine diet beginning in the Neolithic (Schulting 1998, *passim*). Milner et al. (2003, *passim*) argued that the suddenness of this shift was not so sudden if the dates are compared, and suggested that the sampling size is meagre. Further, they argue that the variable of “intra-population dietary variation related to gender, age or status” is not accounted for adequately in the interpretations (*ibid.*, 15). They also suggest that “consumption of marine foods does not always result in a marine stable isotope value”, as these values can vary, for instance with the salinity of the water, and also that the introduction of cereal agriculture may have an effect of masking a marine component to the diet (*ibid.*, 16-7).

In discussing his stable isotope analysis, Schulting (2004, 23-5) argues that “cows and fish don’t get along” commenting that “there is little in common between fisher folk and pastoralists”. Citing ethnographic work from Africa and North America he argues pastoralists culturally disinclined towards fish; physiologically, switching seasonally from fish to meat “can cause severe illness” (*ibid.*, 25). However, it is arguable that you do not have to leave Ireland for ethnographic work of the relationship between pastoralists and fishers and the compatibility of the differing protein intakes (see Pl. 3.1).
Clearly it is not an either/or choice, or a matter of only eating one or the other in a separate season. Indeed, Caulfield (1983, 213) made this point in his retort to Burenhult’s thesis: “it can be argued that the persistent fisher/farmer communities which one finds along the Connaught coast today is a more appropriate model for settlement when the megalithic tombs were being constructed”.

Pl. 3.1. Galway Bay coastal farming.
4. Prehistoric landscapes and social reproduction

4.1. Introduction

In the last chapter I outlined the general picture we have of the Mesolithic and Early Neolithic in Ireland. In this chapter I will examine the ways in which prehistoric landscape studies have been formulated over the past few decades, and why such an approach was deemed necessary. Taking my starting point the view that the New Archaeology’s approach to the landscape is a general move away from the isolated site and artefact-based studies, I will discuss some general principles that occur in the theories and methods used in this perspective. Such principles include the tension between regional and localistic studies, as well as the central position given to perception in landscape studies. I will look at examples of the landscape approach as it has been adopted in Irish studies from the early eighties, and then look at the legacy of the interpretive archaeologies’ movement in their approaches, both in Ireland and further afield. This will be followed by a discussion of landscapes and an outline of how this thesis will develop a landscape approach.

4.2. Landscape theories and methods

In this section I will highlight the differing uses of landscape as an analytical tool, from the regional perspective to the local, using Sherratt’s 1996 eloquent paper as a platform. I will discuss the intellectual baggage that archaeologists bring to their studies, and how the study of the landscape is never a neutral act, but involved and mediated by the socio-political realities of the day. The differing understandings of perception will be highlighted, followed by an examination and evaluation of two concepts of landscape studies: the site catchment model and Binford’s model of hunter-gatherer strategies, the foragers and collectors.

The use of the concept of the ‘landscape’ as an analytical tool by archaeologists began in the mid-twentieth century, following the gradual move away from a focus on artefacts and sites to a more regional focus of networks between sites. Sherratt (1996, 140) has commented that a driving force for this new regional perspective was money:
it was then that archaeologists could afford grander projects. In this vein it is interesting to note, as mentioned in the previous chapter, that the Glencoy regional project folded partly due to financial issues, and that the two large prehistoric projects in Ireland in the eighties mentioned in the previous chapter, the Carrowmore project and the Ballylough project, were both funded by institutions from outside of Ireland. In a lucid paper, Sherratt has argued that the divergent paths of archaeology, between studying the landscape as a signature of settlement patterns on the one hand, and studying the landscape for the sake of the landscape, can be rooted back to the beginnings of the archaeological endeavour and the differing influences of the Enlightenment and Romanticism: “whereas the Romantic archaeologist will be happy to examine his own backyard and trace its genealogy as a place, this will be regarded by the Enlightenment archaeologist as parochialism: a retreat to ‘parish-pump archaeology’” (ibid., 143). In a pertinent analogy that he makes between an early nineteenth-century account of a prehistoric landscape in Brittany and a TAG paper abstract, Sherratt highlights perspicuously the Romantic inheritance of the phenomenological accounts in archaeology; in contrast he argues that the Enlightenment view of the landscape, the settlement pattern, is exemplified by an invasive approach to the landscape (ibid., 143-6).

From this account we can see that approaches to the study of the landscape are ultimately mediated through the researcher’s or research group’s own particular training and understanding. It is repeatedly noted that the landscape is an ambivalent term, readily malleable to divergent methodologies. Further, the roots of the term are equally ambivalent, with a number of variants possible (cf. Bender 1993, 2; Lemaire 1997, 5; Berque 1997, 22). Baldly, in the western European tradition ‘landscape’ has its roots in an Anglo-Saxon word connoting a small-scale patch of land, “that corresponded to a peasant’s perception”; this petered out and was followed by a connotation of a larger-scale area, a political territory in the eleventh century (Bender 1993, 2). From the beginning of the modern period, the term related to a certain perception, a gaze, which Bender argues was related to the emergent capitalist west (ibid.). This relation between seeing and landscape is a powerful one, which continues to dominate the theorising and evaluating of landscapes: the perception of the environment is seen as a key ingredient in the study of landscapes. Indeed, as Bender comments, this perception of the landscape is a key arena of conflict (ibid.).
The dominant powers can use and naturalise the landscape for their own agendas; the allusions and portrayals of the landscape can be manifested to mask and obfuscate human relations of dominance and inequality.

Indeed, the act of seeing the landscape is connected with our studying and interpreting the landscape. That the landscape, and the study of the landscape, is not neutral and can be an ideological tool is again readily apparent in the book *The interpretation of ordinary landscapes* edited by Meinig (1979), a series of articles by academic geographers. In looking at how one approaches the landscape, Lewis suggests that “Americans tinker with landscapes… and have been doing so ever since their ancestors landed at Jamestown and Plymouth and began chopping down trees” (Lewis 1979, 12). What is immediately apparent is that in one fell swoop he has managed to wipe away some 10000 years of Americans’ history. By setting up his parameters for study, the Native Americans are immediately reduced to a non-entity; they are non-Americans, a politically inert detritus on the outskirts of society, not worthy of consideration. Leaving aside the hunter-gatherers for the moment and their landscape use, agriculture was being practiced in north-east America, where Lewis is based, before it had arrived to Britain, from where the pilgrims, and his ancestors, eventually came many millennia later.

Lemaire (1997, 6-8) has argued that the only two civilisations that invented landscape painting are classical China and modern Europe. Whereas classical China conceived this act of portrayal as an act of meditation, “the immersion of man in nature, expressing a kind of cosmic consciousness”, in tune with their view of the oneness of nature and culture, the modern west viewed the painting of landscapes as a distant gaze, a demythologised “detached natural scene to be viewed by an observer from the outside” (*ibid.*). He suggests, that with the distinction made by the Enlightenment’s perception of the world as “‘mechanised and reified’” with Man (*sic*) as the centre of meaning, the Romantics attempted to counteract these principles, through the media of the arts, and the landscape “was celebrated as almost sacred” (*ibid.*, 9). Commenting on Lemaire’s paper, Cosgrove (1997, 24) has discussed how archaeology, anthropology, and human geography are together in crisis because they represent “the enlightened intellectual project…whose findings were unconsciously designed to secure the essentially ideological claims of liberal Europeans…the white,
bourgeois European male has been dethroned as the sovereign subject of a universal and progressive history”.

The dichotomy of the perception of the landscape alluded to between Enlightenment and Romanticism succinctly shows that an understanding and analysis of the landscape is historically contingent: the so-called objective strand of (Enlightenment) processual archaeology and the subjective strand of (Romantic) interpretive and phenomenological archaeology are products of our European tradition. Neither of them should be confused with realising a clear and precise description of prehistoric peoples’ conception and perception of the landscape: a total vision of prehistoric landscapes. Rather, the two broad traditions of thought that are used are heuristic devices. One cannot divorce oneself from modern times, or post-modern times, but must acknowledge that the ultimate reasons for our pondering and investigating the past through the various theories and methodologies of archaeological practice are because of the contingency of our historical situation, and work from the acknowledgement of this position.

In querying the question of perception and its relationship with landscape as an analytical concept, Johnston has suggested that one can discern two distinct approaches to perception: an inherent approach and an explicit approach, commenting that

It is a problem that the word ‘perception’ persists in both the explicit and inherent approaches, despite the contrastive character of the concepts. However, it is a useful example of the academic manipulation of meanings to suit different intellectual purposes (1998, 56, 65).

He elaborates that an inherent approach to the perception of landscape can be considered to be perception as a process, “that is, the process by which humans understand/perceive the world around them”; the explicit approach considers perception as a static filter “through which the ‘real’ world is filtered creating a culturally perceived reality” (ibid., 57). For an example of the explicit approach to perception, he cites Renfrew’s cognitive approach, amongst others, whereby the world is divided between the real physical world and that inside the head of the perceiver. The inherent approach used by archaeologists such as Tilley, Bender, and Bradley differs in that, while it maintains that there is a division between what is real and what is perceived, their approach acknowledges “that the human experience which creates
the landscape is much more complex, and it cannot be tied down to a single process of perception” (*ibid.*, 62).

Rather than the explicit approach in which perception is fixed and stable, and can be objectively measured by knowing the context of the individual and character of the environment, the inherent approach to perception of the landscape involves the interplay between the socially constructed world and the natural world. Johnston (*ibid.*) argues that these differing analytical uses of perception have allowed, on the one hand an explicit approach which is stable and empirical, and on the other, the inherent which is unstable and malleable. Citing Ingold, he argues that a concern with both approaches is that they fail to come to terms with the interrelationship between people and animals, and people and the material world, but instead treat these relationships as dichotomous ones. He suggests that this may mean that as a growing awareness of these interrelationships is developed, the place of perception and landscape as meaningful analytical tools will be lost “although they will always remain as useful descriptors of our own peculiar twentieth century world-view” (*ibid.*, 64).

Turning now to models developed to investigate landscapes, the site catchment model was formulated in the late sixties to tackle the environs of a site at an analytical scale, as opposed to being site specific; the site and environs were to be viewed in functionalist terms as being produced due to economic activities in environmental parameters (Jarman *et al.* 1972). This model was to have a long-lasting impact on research; the authors and their focus on the economics of archaeology became what were called the Palaeoeconomy School (Jarman *et al.* 1982; Trigger 1989, 270). As mentioned in the previous chapter, this concept has been used by Woodman (1978; 1985) in treating of the Mesolithic. The site catchment analysis was based around the home base, and their definition of a territory was economic as opposed to a defensive area (Jarman *et al.* 1972, 62). They argued that studies of modern agricultural and hunting and gathering communities showed that the exploited territories tend “to lie within certain well-defined limits”; “for the purposes of preliminary study we have adopted the distance covered in two hours’ walking as the critical threshold for hunting and gathering economies, and in one hours’ walking for agricultural
exploitation” (*ibid.*, 62-3). Coming at a time when the New Archaeology was attempting to demolish the Culture bias, they argued that whereas previously different sites with differing artefacts were perceived as representing separate culture groups, their method entailed that these could now be understood instead as representing differing economies (*ibid.*, 64).

Binford (1980) put forward a model of mobility for hunter-gatherers that has been influential in archaeological studies. His ethnographic work on the mobility of hunter-gatherers led him to argue that the archaeologist could posit the behavioural signatures of the resultant archaeological traces of past hunter-gatherers by focusing attention on two types of exploitation strategies: foragers and collectors (*ibid.*). Interestingly Binford begins, and titles, his article with the perception of a hunter-gatherer; however, he pays no more attention to this and immediately grounds his work, as usual, in terms of a scientific pursuit – he uses a medical science analogy to argue that archaeological endeavours are akin to seeking cures for a disease, with the disease being cultural systems, the symptoms being its by-products. Binford argues that the environment is the determining factor in spatial patterning, and he uses a systemic approach to culture; in contrasting foragers and collectors, he suggests that foragers, living in “undifferentiated areas” do not store food, they ‘map onto’ resources, and are characterised by high levels of residential mobility, whereas collectors are characterised by storing food and “logistically organised food-procurement parties” (*ibid.*, 5; 10). He suggests that foragers will leave archaeological sites defined as residential bases and locations, while collectors will leave these two plus three additional sites: field camps, stations, and caches. However, he comments that “it should be clear by now that we are not talking about two polar types of subsistence-settlement systems, instead we are discussing a graded series from simple to complex” (*ibid.*, 12).

In keeping with a systemic approach, Binford and Jarman *et al.* have excused themselves for accounting for social aspects and determinations in people’s mobility in their models; by positioning the economy at the forefront of people’s mobility, the models as ideals are easier to map and abstract in diagrams. On this issue, Bettinger (1987, 134) has commented on Binford’s contradictory stance in terms of his dismissal of the optimal foraging theory – Bettinger comments that Binford maintains
that “optimal foraging theory is flawed because it ignores cultural values and arbitrarily separates economy from other parts of culture”. As we have seen, this is precisely what Binford has done in his forager-collector model. Moreover, Binford’s model rests on the assumption of the identification of site typologies, and the typologies rest on the straightforward function of the sites: this is also the presumption of the site catchment analysis of the Palaeoeconomy School. The difficulty with this is that the ‘typology’ of a site is not simply determined by the economy (Ingold 2000).

Indeed, it is difficult to relegate sites into a functional and typological framework, as can be seen in the case of the Mesolithic site at Lough Kinale, initially investigated by Mitchell in the 1960’s, and recently excavated by the Fredengren. This island site was presumed to imply a fishing spot, on a seasonal round. However, excavations failed to produce much fishbone for a fishing site, despite excellent preservation conditions and careful excavation (Fredengren, pers. comm.). Therefore, to typologise this site according to economic determinations is a fruitless exercise. In terms of the seasonal round, Warren (2001, 95) has noted that a further difficulty with the forager-collector model is that it does not relate to sedentism in hunter-gatherers, commenting “it seems unlikely that we are dealing with either fully nomadic or sedentary gatherer-hunters”. However, Woodman (1985, 167) came from a differing direction when contemplating Mt. Sandel:

the major problem with the model offered by Binford is that the contrast between the near-sedentary mapping-on strategy and his alternative seasonal foraging strategy epitomizes the alternatives of the European Mesolithic-seasonal mobility or near-sedentary occupation.

4.3. Landscape studies in Ireland

The early eighties saw the development of an explicit landscape approach in Irish archaeology, which was heavily influenced by the New Archaeology’s positioning. Some general points raised by a landscape conference at the time will be discussed, as well as how Cooney’s interpretations have proceeded from this earlier work. The Bally Lough project’s landscape approach, and the comparative work by Kimball in Donegal will also be discussed, followed by Burenhult’s Carrowmore project.

The first volume dedicated to landscape studies in Ireland was published in 1983, following a conference in 1981 on “Approaches to landscape archaeology in Ireland”.

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This volume was split between articles concerning the methodology of landscape studies (such as archaeological surveys, cartography, magnetic prospecting, phosphate analysis, and palynology), and a series of case studies covering prehistory to medieval times (Reeves-Smyth and Hamond 1983). The preface to the publication laid out the general approach to archaeological landscape studies: the study of human behaviour in interaction with the physical environment, their adaptation of it, utilization of its resources and their impact on it (ibid., 1).

To illustrate their general mode of thought, the authors use a diagram (Fig. 4.1) which shows the aforementioned interaction, with ‘population’ in a circle on top; environment on bottom; resources to the left; technology to the right; settlement off centred in the middle. While clearly one can view this diagram as simply a convenient, pragmatic analytical tool to illustrate a complex issue, I would nevertheless argue that it obfuscates what it is attempting to reveal – people’s life in the world, and how people, animals, plants, animate and inanimate objects are caught up in the processes of life and the continual creation and recreation of landscapes. This diagram typifies a framework in which people are reified as populational entities as opposed to agents, or actants, in the environment – they are separated out of the environment, and represented as only tangentially situated in, and involved with, it. The separation of the resources, technology, and settlement from both people and the environment removes the social factors out of the intertwined relationships between all of the above; the intimate social ties between people, their technology, and the landscape are complex issues not readily separated into analytical boxes. I would hazard to suggest that the alternative diagram in Fig. 4.2, while representing the same characterisations (except for replacing population with humans), obviates the removal of people from being centred in the environment; it also relates how the attributes of technology, settlement, and resources, while distinct in themselves, are still porous and are interconnected with humans’ sociality. Indeed, the intersecting of the ‘human’ circle with the ‘resource’ circle can highlight the idea that resources are not simply matter ‘out there’, but rather, humans themselves are each others’ resource: in socialisation, in working together, in supporting each other.
Interestingly, the approach of the landscape themes in this publication follows the earlier distinction noted of the landscape as conceived as a regional study base. Woodman’s article, for example, outlines the Glencoy project as having been necessitated due to the fact that earlier studies of isolated sites were useful when the research questions were concerned with typology and chronology, but the quest to investigate the economic base of prehistory meant that a regional approach was necessary (Woodman 1983). Again, this approach to the landscape involved the reconstruction of the landscape as involving distinct levels of interpretation, from the artefacts, to the sites, to the general landscapes. Similarly, Cooney’s article, on the distribution of megaliths and their use as a surrogate for settlement patterns, is on a par with the processual, regional approach, as it focuses on a regional distribution of upstanding sites to imagine the distribution of hidden settlements lurking beneath the surface (Cooney 1983).

Cooney (2000) has since jettisoned this approach in his publication on Neolithic landscapes, and has replaced populations with people, and settlement patterns with arenas of social action. Here he has developed an anthropological approach to the landscape and its inhabitants, calling for a more intimate story to be told of the
Neolithic, highlighting the effects of nearly two decades of the post-processual influence on story-telling. He maintains that a close eye must be kept on viewing prehistoric communities in terms of their local nature, while at the same time understanding and investigating the regional and intra-regional scales (ibid., 219). Cooney has argued that the theoretical stances adopted in Britain in viewing the Neolithic, especially in terms of a highly mobile society, do not mean that this is importable to an Irish context; he suggests that a more nuanced approach to the regional differences in the British Isles should be recognised, as indeed should regional differences within the island of Ireland as well (ibid., 46). In interpreting the Neolithic landscapes he has contrasted the Ceide fields and the Boyne Valley, arguing that issues of preservation may be at play in disguising the land use in prehistory, and that the boundaries used in the Ceide fields should not be seen as an unusual once-off phenomenon. Moreover, he critically highlights that grassland was not the only motivation for farmers; the wetland and woodlands would also have played an integral role in the landscapes. In summing up he succinctly argues that

rather than seeing people moving across the landscape on pathways, we have to think of people having complex, multi-faceted perceptions of landscapes. Because the monuments they constructed are now more visible and dominate our perceptions, we should not forget the importance of the domestic contexts in which people lived. It was the everyday that underlay and permeated ritual and ceremonial activity (ibid., 48-9).

However, in arguing for a broadening of our horizons away from a focus on pathways, there is the danger of tilting an Aunt Sally and forgetting how the lie of the land in a sense creates these well worn paths: the humps and bumps and tilts and turns, push and pull one’s body in certain directions. A tradition of a path becomes ingrained in the landscape, it becomes part of the mythology. The building of trackways (Brindley and Lanting 1998) can be seen as suggesting this.24 In terms of the connection between monuments and pathways, Kieran O’Connor (pers. comm.) has suggested that one can see an inheritance of ancient pathways in the distribution of some modern roads in Roscommon. Furthermore, it is common for pathways to run parallel to field boundaries. With this in mind, one could also conjecture that

24 This notion of the ingrained pathway, and the constructed tracks, is cognisant of Whittle’s (1996, 236) comment on the possible short life of the Sweet track: “the fen may have overwhelmed it within a generation or so. It is hard to envisage that this outcome was not foreseen by people familiar with their surroundings”.  

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Cooney’s use of the example of Millin Bay, where a monument was constructed enveloping a dry stone wall, could be an example of a monument built not only incorporating a boundary, but also a pathway. In a sense, these two aspects of the landscape, field boundaries and paths are not separate, but of course are part of a continuum of the landscape.

The Bally Lough Project was developed to research the Stone Age on a landscape scale, in a part of Ireland that had been under-researched. Using the Barrow River system as a regional focus, they sought to ascertain evidence for the arrival of inhabitants, the land-use patterns in the Mesolithic, and also the question of the land-use patterns in terms of the Neolithic transition. They argue that their findings conclude that a site-orientated approach to the record, whereby lithic scatters are used to determine where to dig to look for settlements, would be problematical, and that lithic scatters must be used in and of themselves to interpret the landscape utilisation of the inhabitants at the time under scrutiny (Zvelebil et al. 1992, 223). Furthermore, in stressing the necessity of a multidisciplinary approach to this research, they maintained that to understand the behavioural signatures of lithic scatters, the geomorphology of the archaeological landscapes must be understood (ibid., 214). For instance, their work has highlighted that the river dynamics of alleviation are probably masking evidence of land-use, especially for the Early Mesolithic (Zvelebil et al. 1996, 35-6). In summary, they posited that their findings suggested a pattern of continuity over the period of the transition to farming, with an additional increase in the type of ecosystems utilised in the Neolithic. However, this implied continuity of land-use in a does not tell us much about the continuity of the inhabitants in the area, beyond that people at different times used the same areas. Furthermore, the Barrow valley is treated in what can be described as the ‘mezzanine effect’: the valley is a corridor for movement, for people and their lithics, a non-place, not a lived place as such.

While the Bally Lough Project was silent in terms of their theories on social landscapes, Kimball’s project (which was developed to test the aforementioned project’s results in another part of the country) explicitly addressed these issues. In commenting on the social side of life, an oxymoron really, he says:

conducting analyses in which settlement patterns are compared against an ecological backdrop does not sufficiently account for social space…
However, the purpose of this project is not to find the *attractors* for settlement...Instead, it seeks evidence to test specific hypotheses related to *cultural* continuity across the transition to the Neolithic. Because Later Mesolithic settlement corresponds well to a set of ecological relations, I have selected ecological space as the primary context within which to compare prehistoric settlement patterns (Kimball 2000A, 24 emphasis added).

What is he saying here? Social space and social action are reduced to the epiphenomenon of attractiveness, rather than anything more substantial. He argues that he is studying specific testable hypotheses related to *cultural* continuity; however he does this while commenting on the tangential place of sociality. But what else is culture except social? His argument that Late Mesolithic settlement is correspondent with ecological relations, and therefore a primary context to compare settlement patterns, is I would argue therefore ultimately flawed, as it is merely a matter of academic convenience rather than a testable procedure for the investigation of prehistoric people.

Burenhult’s Carrowmore project investigated a specific region of Sligo, where no early prehistoric settlements were previously known (Burenhult 1984, 19). It is estimated that this project, over a 5-year period, clocked up over 55,000 man hours, not including pre-fieldwork preparation or post-excavation work (*ibid*.). Clearly this was a monumental project – especially considering the state of the Irish economy at the time. One of the key objectives of the project was to understand the economy of the megalith builders’ society, and hence to understand of the ecology of the region. As no settlements were known, field surveys, aerial surveys, and phosphate surveys were carried out to ascertain settlement sites, which were followed up by test excavations (*ibid.*, 17). From the results – which produced little evidence for settlement sites, apart from the kitchen middens and the hut sites on Knocknarea – Burenhult argued that the megalithic builders’ settlement strategy involved the use of base camps and satellite camps, used on a seasonal basis (*ibid.*, 133-8).

In commenting on the project’s surveys, Bergh (1995, 57) has noted that the phosphate survey conducted covered less than 1% of the peninsula, and that the majority of the areas chosen were located around known monuments, such as earthworks or platforms. Further, he argues that the use of field surveys in grassland
cannot be expected to turn up settlement sites, therefore the negative evidence cannot be considered “a prehistoric reality”, but rather “says more about the problems of field surveying in a grazed landscape” (ibid.). Therefore, he suggests that the survey cannot be considered adequate to hypothesise a lack of settlement in the region. From this, we can see that Burenhult’s approach was – while landscape orientated – site specific in its outlook. Again, this is the point raised by Sherrat earlier on the New Archaeology’s approach to the regional study.

4.4. Tilley’s Phenomenology and Ingold’s Taskscape

Both Tilley and Ingold have used a phenomenological approach in their writings – Tilley as an archaeologist contemplating landscapes and Ingold in his interpreting of anthropological understandings. Tilley’s 1994 book is well-cited and critiqued, and I will outline his approach and mention some of the criticisms directed at his results. Ingold’s paper, originally presented at an archaeological conference, set out another phenomenological approach, and I will again outline his approach and discuss the theoretical and methodological implications of it.

In 1994 Tilley published his now well-cited book on his phenomenological approach to the study of prehistoric landscapes. Tracing the historiography of landscape studies in archaeology, he was strongly critical of the processual accounts in which place, and places, had been abstracted and were measured as space, a neutral backdrop to human affairs. In commenting on the explicit links between the mid-twentieth century New Geography and New Archaeology, which each espoused this method of analysing the landscape, he argued that by adopting such a perspective they were able to simplify their datasets and hence undertake comparative studies of the organisation of populations and material culture “and flows of information and exchange across regions and landscapes” (Tilley 1994, 7-9). He proceeded to discuss an alternative way of viewing landscape, through the viewpoint of space as place, as an arena in which life and human praxis unfolds; place as socially produced and, therefore,

rather than being uniform and forever the same, is constituted by differential densities of human experience, attachment and involvement...Space has no substantial essence in itself, but only has a relational significance, created through relations between peoples and places (ibid., 10-11).
Citing Heidegger’s and Merleau-Ponty’s work, he outlined a phenomenological approach whereby how people experience and understand the world is integral; being and dwelling are essential characteristics for humankind (ibid., 11-12). Drawing on Giddens’ structuration theory, Tilley outlined the concept of locale and its place in social reproduction arguing that “actors draw on their settings”, and that this relates to their very relationship to place: “in this manner locales, in the most general sense, can be defined as a presencing of potentialities on which actors draw in the daily conduct of their activities” (ibid., 19). And while he commented that Giddens used the term locales to represent nations or empires, he argued somewhat anachronistically that “it is far better to confine the usage of the term to the small-scale and the specific” (ibid., 19). Defining his usage of the term landscape, he argued that he wanted to refer to the physical and visual form of the earth as an environment and as a setting in which locales occur and in dialectical relation to which meanings are created, reproduced and transformed…Humanly created locales…draw on qualities of landscape to create part of their significance for those who use them, and the perception of the landscape itself may be fundamentally affected by the very situatedness of these locales (ibid., 25-26).

Tilley argued that key features that constitute places are paths that link locales. These paths are created by movement and he argues that the act of moving may be as important as arriving; locales, and their linking paths are caught up in social relations and memory; the locales and paths can act as mnemonic devices, and the narratives used to relate to place and landscape are formed by them, at the same time that they are formed by the narratives (ibid., 27-30).

He then drew on the anthropological literature to define how landscapes are related to in small-scale societies, both hunter-gatherer and farming communities. He cited numerous examples, showing how his aforementioned definitions are seen in ethnographic instances: the importance of paths; the socially situated contexts of landscapes; the place of ancestors in the landscape, and in forming and mediating the landscape; how landscapes are named and appropriated by people in their daily activities; how this naming uses geographically descriptive words. In his conclusion he argued that as the landscape is symbolic, ancestral and temporal [in] significance…Writing about an economic ‘base’ in relation to resource utilization or landscape use seems quite irrelevant… The significance of landscape for different populations cannot be simply read off from the local ‘ecological’ characteristics of a
‘natural’ environment…Nor can it be related in any simple manner to the mode of subsistence…or pattern of dwelling. It, rather, cross-cuts these determinisms and distinctions…Landscape is, in substantial part, a mythopoesis and using terms such as hunter-gatherers or subsistence cultivators detracts from rather than clarifies the relationship between peoples and landscapes (ibid., 67).

Tilley presents a powerful set of concepts with which to understand prehistoric landscapes. His elaboration of how landscapes are named and appropriated by people in their daily activities, and how this naming uses geographically descriptive words is of importance when looking at the, for us, nameless prehistoric landscapes. In other works a number of researchers have commented on this naming of landscapes, and how there is a distinction between a western notion of a landscape of memory and landscape as memory. To us in modern Ireland, this landscape as memory concept would seem exotic. We live in suburban allotments with names such as Oak Park and Pine View, and not a tree in sight; the landscape of trees a distant memory. However, if we look at the townland names, while many relate to landholdings (for instance ‘quarter’), many more are geographically and biographically infused. Indeed, Cooney (1999) has suggested that the Gaelic Irish conceived of the landscape in terms of landscape as memory, as opposed to the cartographic landscape of memory.

In Tilley’s case-study of south-west Wales, he argued that in the same localities seem to have strong indications of successive occupation in both the Early and Later Mesolithic, even though the environmental and therefore resource conditions would “have changed drastically throughout the Mesolithic” (ibid., 84). He therefore suggested that the decisions to stop in a particular part of the landscape were for more than for food acquisition reasons. However, while he notes Bradley’s comment on Mesolithic people being defined by their eating habits, he seems to fall into the same trap by not recognising the excavated evidence. This evidence showed, as Warren (2001, 22-3) has comprehensively outlined, that the Early Mesolithic activities at Nab Head involved, besides food getting, the production of stone beads; this changed, therefore following the logic of Tilley’s own work the place and its meaning would have changed.

Arguably, Tilley overlooked a key premise of his own approach by not recognising the significance of praxis at the various locales in the experience,
definition, and creation of them by the inhabitants at the time. In the thrill of
delimiting a new approach, he overlooked the excavated evidence on which he based
his premises. Clearly, a nuanced and empathic approach to Mesolithic landscapes
calls for greater care and fastidiousness than Tilley has allowed. A landscape
approach must utilise all the available evidence to conjure a viable story. Ignoring
excavated evidence is a fraught enterprise. Moreover, I concur with Warren (ibid.)
that Tilley’s shirking of palaeoenvironmental evidence is also erroneous. While in
agreement with Tilley that palaeoenvironmental research is coarse-grained, I suggest
along with Warren that to base a phenomenological approach only on the “bare
bones” of the landscape as Tilley has suggested, and to treat the vegetation as an
epiphenomena, works against the very thesis of a phenomenological approach.

As countless anthropological writings maintain, including those cited by Tilley,
the vegetation is integral to the landscape, and to its inhabitants. How a place is
experienced, perceived, understood, and navigated, will be rooted from the outset by
the trees, plants, grasses, fungi, and animals that envelop the person. Furthermore,
ethnographic work such as Bird-David’s (1994, 591) has highlighted how the
vegetation, not the bare bones, is what people converse about; she comments
occasionally, people gather, passing time together. Normally, they sit all
facing the same direction…talking about the common view (e.g.,
commenting on a flower which blossomed over night) or about common
impersonal matters (e.g., the fruit season which has just ended).

Again, in his Neolithic case studies, Tilley’s account has been criticised for
misconstruing the data. Fleming (1999, 119) has argued that “while the approach may
be promising, the treatment of field data is unconvincing, and has not improved our
understanding of the sacred geography of the Welsh Neolithic”. Fleming suggests
that the heterogeneity of the monuments under scrutiny belies Tilley’s attempt to
portray a single mindset at work, and that the distributional pattern of megaliths in
today’s landscape is inherently related to monument destruction patterns as opposed to
a prehistoric reality, an issue that Tilley sidesteps in his account (ibid., 120).
Therefore, the picture drawn by Tilley of the importance of rock outcrops, and the
labelling of them as “non-domesticated ‘megaliths’” (Tilley 1994, 99), would seem to
be unsure. Indeed, the uses in which Tilley categorises megaliths contradicts his
polemical article ‘Megaliths in texts’ in which he broad-sided research on the
monuments (Tilley 1998).
In terms of his use of phenomenology, Brück has likewise been critical of Tilley’s work, arguing that a phenomenological approach is “so generalised a description as to frustrate any possibility of using it to understand the specifics of past societies” (1998, 26). Furthermore, she highlights the essentialist argument at the root of phenomenology, and argues that treating the body as a “transhistorical entity” is insufficient, acknowledging this would mean that “ways of Being must also be historically specific and perhaps gender specific or class specific too” (ibid., 27). Critically, she maintains that his sojourn through the landscape does not recreate how this would have been like for people in the Neolithic: “we cannot use the body of the ‘average’ adult male from a specific historical context as a yardstick without considering how the world may be experienced and interpreted differently through the medium of other socially-constructed bodies” (ibid., 28).

The anthropologist Ingold (2000) set out, in a 1993 conference paper to archaeologists, an approach he thought useful for studying past landscapes and its inhabitants. This approach has been picked up on by various researchers of both the Mesolithic and Neolithic periods (e.g. Conneller 2000; Pollard 2000; Whittle 2003). Ingold’s 2000 publication is a collection of essays that he had written over the years, and here he has elaborated, while acknowledging himself a child of a western intellectual tradition, on ways of dismantling the opposition between culture and nature, mind and body, space and place. He has argued that one can adopt an approach to landscape studies that rests on the idea of the taskscape, and the temporality of the landscape. Influenced by phenomenology, he suggests that tasks are the constitutive acts of dwelling and “it is to the entire ensemble of tasks, in their mutual interlocking, that I refer by the concept of taskscape. Just as the landscape is an array of related features, so - by analogy - the taskscape is an array of related activities” (2000, 195). Importantly, an understanding of the taskscape is founded on the acknowledgment, and rejection, of the “great tool-use fallacy”, which has separated social and technical domains, with Ingold arguing that this separation “has blinded us to the fact that one of the outstanding features of technical practices lies in the embeddedness in the current of sociality” (ibid.).
Ingold maintains that a key aspect of the relationship between people and landscape is the temporality of the taskscape. Here, *contra* Durkheim’s segmentation of time, of time being “at once chronological and social”, Ingold argues that instead the features that Durkheim identified as serving this segmenting function – rites, feasts, and ceremonies – are themselves as integral to the taskscape as are boundary markers such as walls or fences to the landscape. The temporality of the taskscape is social, then, not because society provides an external frame against which particular tasks find independent measure, but because people, in the performance of their tasks, *also attend to one another* (ibid., 196).

He suggests that the landscape is the congealed form of the taskscape (ibid., 199) and uses the analogies of music and painting to draw out the relationships: like music, the taskscape resonates; the taskscape is manifested through engagement, and consists of concurrent rhythms “just as social life consists in the unfolding of a field of relationships among persons who attend to one another in what they do, its temporality consists in the unfolding of the resultant pattern of resonances”. Ingold suggests that painting viewed as a process, as a performance, can be analogous to the landscape, as the landscape is never complete (ibid., 197-9).

Ingold has provided a powerful concept by which to understand people and the landscape. By focusing on people in terms of their dwelling in the world, notions of a dichotomy between people’s actions, their technology, and their sociality are made redundant, as the former two can be seen as being mediated on the latter. With the taskscape being the activities of peoples’ dwelling, the landscape can therefore be understood as the “embodied form” of this taskscape (ibid., 198). With cognisance to the fact that the taskscape is never ending, so the same applies to the landscape; because the landscape is continuously being created, Ingold suggests that this is why the dichotomy between natural and ‘man-made’ features is problematic: an issue highly pertinent to archaeologists, especially in terms of the creation, and positioning of monuments in the landscape, as well as in terms of the analysis of lithics (e.g. Bradley 2000; Tilley 1994). Moreover, the taskscape approach highlights the fundamental issue of the temporality of the landscape.

Whittle (2003, 23) has highlighted some difficulties with Ingold’s approach, one being that Ingold’s focus on a dwelling perspective, whereby people are attentive to the world around them, possibly overlooks how the daily routine, and indeed much of
life, can be conducted on an unconscious level without the awareness and intellectualisation apparent in a dwelling perspective. Whittle comments that cumulative effects of these unthinking and unconscious actions “may often be what has been called the ‘unintentional reproduction of structures’” (ibid., 22). A second point that Whittle makes is that the taskscape concept understates the acts of socialisation and learning, and the “weight of collective tradition and culture” (ibid., 15). However, these are issues that Ingold has tackled head-on in other articles, and are therefore implicit in the taskscape (Ingold 2000, chapter 1; chapter 18; chapter 19).

In these various articles Ingold has highlighted that learning is mediated on practice and involvement in the world, rather than cultural directions learned from the outside, and by practices and knowledge being revealed to people: an education by attention, rather than by transmission via mental representations. For the latter point, Ingold uses the example of his father (a botanist) showing him plants and fungi, getting him to see and feel them. Warren (2001, 32) has picked up on this latter example, arguing that this does not pay sufficient attention to the “importance of the pre-existing schemes” of learning. Indeed, while education by attention, whether conscious or unconscious attention (arguably both are used), is a critical aspect, the teaching and socialisation of children also involves the telling of stories, the myths, the songs, relating to certain flora and fauna: their origins, their locations in the landscape, and their uses.
4.5. Discussion

Having discussed the various landscapes approaches that have been adopted over the years in Ireland and elsewhere, I bring these aspects together in terms of how the Mesolithic and Early Neolithic in the west of Ireland will be assessed in this thesis. Here, I will outline my adoption of Ingold’s taskscape, and comment on the central issues of the regional and local scales that can be formulated, as well as discussing the concepts of people’s mobility in the landscape, and how this relates to our sense of the regionality of prehistory.

Landscape has to be contextualised. The way in which people – anywhere, everywhere – understand and engage with their worlds will depend upon the specific time and place and historical conditions. It will depend upon their gender, age, class, caste, and on their social and economic situation. People’s landscapes will operate on very different spatial scales, whether horizontally across the surface of the world, or vertically - up to the heavens, down to the depths. They will operate on very different temporal scales, engaging with the past and with the future in many different ways… The landscape is never inert, people engage with it, re-work it, appropriate and contest it (Bender 1993, 2-3).

Neither is the landscape identical to nature, nor is it on the side of humanity against nature. As the familiar domain of our dwelling, it is with us, not against us, but it is no less real for that. And through living in it, the landscape becomes part of us, just as we are part of it (Ingold 2000, 191).

These extended quotes neatly encapsulate a number of key points that are central to the use of a landscape approach in this thesis. I maintain that a focus on the landscape must contend with the realisation that what we as present day researchers regard as landscape is not what was known or thought of by the people whom we are attempting to study. We live in vastly different times, and to state a commonplace, the past is a foreign country.

So how can we approach prehistoric landscapes? To me, a phenomenological approach is an intuitively attractive proposition: probably because I am a subjective Romantic. However, there are considerable complexities in following such an approach, a key issue being the peril of essentialism. How can we translate a long past experience of the world into our terms? It is clearly of importance to use an approach that is founded on an understanding that one’s physical place in the world is integral to one’s experience. The idea that we are somehow divorced from the landscape, self-contained brains floating around in a fleshy shell, is quite bizarre but a commonplace in the western tradition of thought. For example, Meinig (1979, 33)
states that “landscape is defined by our vision and interpreted by our minds…Strictly speaking we are never in it, it lies before our eyes”. However, if I raise my hands, I am immediately in my vision in the landscape: I am, therefore I am in the landscape. This notion of the detached human entity, the brain in a body, is of course deeply ingrained in the “I think therefore I am” paradigm.

The difficulties in using a phenomenological approach are highlighted by the fact that the results of Tilley’s fieldwork are incongruous with his theoretical positioning at the beginning of his book. Moreover, the methodology of attempting to recreate an experience of movement across a landscape has been heavily criticised as essentialising the human body as an ahistorical entity. Can one acknowledge a phenomenological approach and understanding of the world without resort to recreating an experience? Using Ingold’s concept, one can view the landscape as an array of features formed and also unformed by peoples’ sociality. However, this is not a methodology, but rather a tool for thinking about one’s methodology. By adopting the taskscape approach, and recognizing the temporality of the landscape, I maintain that this allows one to investigate the landscape from the position of the interconnection of the evidence we see of the periods. Moreover the Neolithic transition can be seen as process, whereby the changes in the material culture, be they new lithic strategies or ceramics or the introduction of new flora and fauna, can be seen as changes in the taskscape, not technological advances or economic achievements but rather an array of differences that altered how the landscape was used and perceived. The temporality of the landscape maintains that the landscape and its perception are grounded in the historical particularities of activities taking place.

As mentioned in the previous chapter, Pollard (2000) has used the taskscape concept to ascertain the reasons for the apparent use of persistent places in Mesolithic landscapes. By removing the ‘economy’ and the ‘ecological niche’ from the centre of attention in assessing the reasons for the persistent place, the immediate sociality of these contexts and locales is broached. Indeed, the weight given to evidence for seasonality in the archaeological record, because it is something that archaeologists can get evidence for, can also be mediated through a fuller understanding that seasonality is again not economically and ecologically determined, but tied up in
people’s sociality; as Warren (2001, 30) has put it, “the temporality of activity is not just a matter of scheduling seasonal resources, but that these time frames are important in understanding identity and the ways in which people came to terms with their landscape”. Clearly, the climate and ecology shape a community’s positioning in the landscape, but this is not translated to reified models of subsistence. Commenting on ethnographic work undertaken on the Amazonian floodplain, Whittle (2003, 25) highlights that the rise and fall of the river levels between the wet and dry season leads to, in turn, congregation and dispersal of the communities: “seasonality is not just a matter of adapting to a framework of external environmental constraints, but is experienced by changes in sociality and mood”.

As outlined in chapter 2, Gibbons et al. have looked at the Mesolithic evidence in the west, and their more general interpretations raise questions of how we research prehistoric landscapes, and how we can allow for ‘sociality and mood’ in our interpretations. For instance, the authors (2004, 5) compare the River Island, L. Corrib, Co. Galway findspot to that of Cormongan, L. Allen, Co. Leitrim (Fig. 4.3). This comparison is reliant on the economic practices of the Mesolithic people being in the forefront of the authors’ minds. However, I would argue that these sites are not really that comparable, beyond both being situated on lakes. River Island is at the mouth of the Owenriff River extending inland, possibly indicating a social aspect of people’s movement: locales of contact, of people’s confluence and dispersal in the landscape; whereas Cormongan is simply a lakeshore findspot (if one can call a findspot ‘simply’).

More relevant and analogous, I would suggest, are the L. Allen finds of Drummans Lower (MNI files 1984:110 & E114:3-34) and Annagh Lower (MNI files 1984:194-197), which were all found at the mouths of rivers, one leading west, and the other north to the source of the Shannon (for further discussion of these areas see chapter 5). Arguably, Gibbons and Higgins have simply plucked the example of Cormongan from the literature, and compared it with River Island rather than looking at the topographic contexts of the finds. Therefore, they have not given all the available evidence the thorough examination it deserves.
The general gist of the authors’ articles follows the Hungry Mesolithic paradigm. They title their articles ‘Mapping the Mesolithic in western Connacht’ and ‘Hunter-gatherer strategies in western Connacht’. They would seem to take the stance that the Mesolithic is basically an eating machine, and all locales in the landscape used by hunter-gatherers are simply ecologically advantageous economic places. This treatment of the Mesolithic has of course been heavily criticised over many years, with Bradley’s well known comments on the Mesolithic being treated in the literature as if the people in the Mesolithic only had ecological relations with hazelnuts, with human relations beginning with the farmers of the Neolithic (Bradley 1984).

Our prehistoric findspots are not simply signatures of economic practices, but were created by people as they stopped at a locale, on their way to meeting point, or were a meeting point, in a social landscape. A landscape alive: physically, emotionally, and spiritually. This sense of movement is not just related to hunter-gatherers, but also to farming communities: being a sedentary farmer does not imply a lack of movement (Ingold 1986, 169). Of course, these locales *can* be read by us as suitable contexts for sustenance activities, yet this is to overshadow the rest of the activities that took place: the findspots we see and seek are poor remains of a totality
of life and living, and an economic determinism does not do justice to the rest of the
day in the locale as it were. Tellingly, the authors suggest that a base camp at the
River Corrib would have been advantageous as there would have been no “actual need
to move” (2005, 48). However, this may well miss the point that movement and so
forth may have been a important part of their lives, rather than just a necessary
obstacle to overcome on their way to a more ‘appropriate’, ‘progressive’, sedentary
life. Arguably, Lynch’s thesis, on the Mesolithic in Co. Clare follows this Hungry
Mesolithic paradigm and fails to treat the landscape as anything beyond a context for a
‘new’ kind of analysis, and a platform for people to play out their lives against as
opposed to something to be lived in. Indeed, the mezzanine effect is in full force in
his thesis in which he has bizarrely suggested that the Shannon was used as a gateway
to Ferriter’s Cove (Lynch 2002, 64)!

As is clear, one of the overarching questions of both the Mesolithic and Neolithic
periods has been the querying of the degree to which these communities were mobile
in their settlement patterns. The scale of movement will have a direct effect on what
type of landscape we try to study. The evidence available for the Mesolithic has
suggested a semi-sedentary Early Mesolithic, and a more mobile Later Mesolithic,
with debates as to whether this is an accurate portrayal of the periods. Intimately
related to this debate on the variability of settlement patterns is the understanding of
social complexity. Burenhult argued that the economy of the Mesolithic in Sligo led
to a greater degree of sedentism, with the consequent development of social
complexity, the end result being the construction of megaliths (1984, 138-9). Kimball
has arrived at a polar opposite conclusion, arguing that “Ireland’s relatively
impoverished biodiversity may not have permitted a subsistence base that was broad
enough to support sedentism and the development of social complexity” (2000B, 42).
And as noted, Cooney and Grogan (1999) argued that the Mesolithic would have seen
a move towards sedentism in the Later Mesolithic. The key variables for sedentism
and complexity for all these authors are ecological and economic. This is also true for
the debates on sedentism in the Neolithic. The European Neolithic had traditionally
been taken as nomadic in nature, as Rowley-Conwy (2003) has elaborated. The Irish
evidence, of substantial houses and pre-bog field walls, has called this into question;
Cooney (2000, 47) notes that similar evidence has been produced in Britain. From an
ecological and economic perspective, Rosenberg (1998, 654) has commented that
sedentism may require more daily mobility than more generally mobile communities “partly because of the need to range farther as local resources are depleted”.

In discussing the concept of sedentism in archaeology Engelstad (1990, 27) has similarly noted that for researchers to posit social complexity, they must first of all “establish the existence of sedentism”. She comments that if one moves beyond the economic and ecological parameters of investigation, and studies what she describes as a “culturally defined landscape” perspective, a different picture can be drawn of sedentism (ibid., 27-8). She highlights this by contrasting the landscape use of Scandinavian Sami hunter-gatherers and ‘sedentary’ fishing communities, both of whom share the same landscape, and postulates how archaeologists would interpret the different sites. She argues that the fishing communities would typically be considered sedentary, with substantial permanent settlements and the faunal remains indicating year-round use. In contrast, the Sami population would be interpreted as having moved with the seasons, or semi-sedentary (ibid., 29-30). She suggests that in fact the transitory nature of the fishing communities – due to immigration and emigration as well as the need to move with the fish stock – created a migrant workforce and hence community. And while the Sami did indeed move through the landscape, their communities could be viewed as sedentary in their habitual landscape (ibid., 32). Engelstad concludes by suggesting

in discussing sedentism an archaeologists (sic) attention is most often focused on the amount of time spent at a single location by a group of people…[however] that way of looking at a group’s relationship to space is perhaps not totally relevant for an appreciation of their connection to the landscape or the permanence of their settlement within this landscape (ibid., 32-3).

In their classic exposition of the Mesolithic, Mitchell and Ryan (2001, 115) account for Mesolithic communities as being “restricted by their inability to clear large areas to roaming along the shores of lakes and rivers and along coasts, catching fish and collecting nuts and seeds as seasonal opportunity offered”. The sense here of people ‘roaming’ conjures up images of people aimlessly moving across the landscape, a landscape as backdrop, devoid of soul and meaning – not of a knowledgeable people in a lived-in landscape, a landscape which was intimately known, with locales named, and stories told of. The sense of restriction relates that the Mesolithic communities were unsophisticated pawns in their environment, rather
than at home in their landscape – they lacked the common sense and know-how to clear land, to settle down, and to progress. Ultimately, the sense of opportunism alluded to is suggestive of a lesser people than the impending Neolithic farmers – the Mesolithic peoples were on a lower rung of humanity; unable to provide for themselves, they were at the mercy of the seasons to provide them sustenance.

However, a different picture can be constructed of Mesolithic landscapes. Rather than at the whim of nature, we can see the Mesolithic communities actively involved in their landscape, indeed in transforming this landscape in the process. As we saw in the previous chapter, there is substantial evidence for the construction of various types of ‘sites’ in the landscape. The Lullymore Bog trackway was unfortunately destroyed after its discovery so it is unclear what kind of activity was taking place in the locale. Brindley and Lanting (1998, 58) have taken a pragmatic, functional approach to the interpretation of this trackway, seeing it as a “response to the demands of a particular environment and representative of similar activities in other bogs of that date”. However, one can also see this as being a quite elaborate attempt to create a dry path across soggy ground. At about 1.8m wide you could drive a herd of cattle down it, let alone have a pathway for a family of hunter-gatherers. It is unclear how long this trackway ran, from where to where. Indeed, it is unclear whether this was in fact a trackway per se at all, or rather another example of some type of platform (not to say that these platforms were not connected by trackways). What we do have are signs of Mesolithic communities actively engaging with and transforming their landscape – working large trees and creating social arenas in the landscape.

As mentioned, at Mitchelstowndown East, Co. Limerick and Valencia Island, Co. Kerry Mesolithic dates were returned with no evidence of lithics. At Valencia (6560±120 BP) the stone platform had a baulk of fossil oak dated to 8910±150 BP. The wide range in the last two dates may also be saying something interesting. We have a piece of timber almost 2500 years older than the peat. As the Mesolithic communities were certainly adept at woodworking, and would have intimately understood the properties of the various woods in their landscape, the use of such an old timber may have been significant. Of course, I am not implying that they would have regarded the age of the timber in the linear sense of time that we understand it –
in being such-and-such calendar years old – but arguably they would have recognised it as different in some way.

As we have seen in the previous chapter, at Lough Kinale there was the construction of a platform on a natural island, with a lack of a functional reason such as the creation of a fishing spot, and some of the crannogs on Lough Gara may represent Mesolithic platforms. The excavations of Moynagh Lough by Bradley (1991) again showed evidence of the construction of islands in the Mesolithic, and the excavator found it difficult to explain the white marl layer. Little (2005, 91) has suggested that the use of the marl would have created “white islands” and these “would have made a profound visible impact on those approaching the structures”. Fredengren (2002, 135; 139) has argued that these constructions can be seen in the light of monumentality, whereby these creations, which are suggested as having been covered seasonally by the rising water levels, were “important in the creation and maintenance of the identities of these small groups in their yearly cycle”.

Little has commented on Fredengren’s interpretations of these Mesolithic constructions, and while substantially applauding Fredengren’s thesis on them, she is hesitant on the use of the term monumentality:

just how useful a term *monumental* is in describing the role of these artificial islands within the wider landscape is a whole new debate…rather than seeking to identify acts of monumentality – where interpretations often work at such a grand scale that they exclude the possibility of distinguishing other smaller or ‘intimate’ social exchanges, such as would be necessary in the construction of a platform – it is more productive to engage with the *specifics* of the material (2005, 91).

I think Little’s unease with the term monumentality may also stem from the clear appropriation of the term by archaeologists of the Neolithic and later periods. To bring the term into Mesolithic studies brings with it a lot of baggage. While *The concise Oxford dictionary of archaeology* (Darvill 2002, 270) describes the term monument as “in common usage the term is taken to mean any large artificial structure of archaeological interest”, it is clear that in the case of early prehistory a monument or monumentality conjures up certain images. Of course, a standard dictionary reference shows that a monument can be something artificial or a natural landscape feature (*Webster's third new international dictionary* 1961, 1466), and Bradley (1998; 2000) has discussed the archaeology of ‘natural places’ as a useful line
of inquiry, and also raised the issue of whether or not Mesolithic people thought ‘monumentally’.

I also share Little’s unease with the term monumental. What else can we call these places in the landscape? Tilley has suggested for natural outcrops that they can be called ‘non-domesticated “megaliths”’ (Tilley 1994, 99). However, as we saw earlier, Descola noted that while the wild animals of the Amazon were not domesticated, in a sense they already were as they were a part of human lives, and intertwined intimately with the spirit worlds which dominated all aspects of the world, from the waters, to the land, to plants and animals through to people. Does the term personalities in the landscape help? Can we have a landscape of personalities? As artefacts can be investigated biographically (Kopytoff 1986, passim), can we see sites in a similar manner?

Initially, this idea of personalities in the landscape is based on the clarification of the notions personhood and individuality as conceived in the modern west. Taylor has commented that the modern idea that a self is something that comes from within a single individual is a peculiar, historically contingent understanding, and a difficult one to see beyond:

> who among us can understand our thought being anywhere else but inside, ‘in the mind’? Something in the nature of our experience of ourselves seems to make the current localization almost irresistible, beyond challenge (1992, 112).

Finlay (2003C) has approached the ‘entity’ of the microlith from this perspective of the partibility of people and things; using Strathern’s work on the concept of multiple authorship, she highlights how the composite nature of the making and use of the microlith epitomises this idea. She has suggested that with the transformation from microlith to macrolith, “collectivity was [then] expressed in the ownership of places and resources” (Finlay 2003B, 92). Fowler (2004) has outlined various differing anthropological studies of individuality and dividuality, such as the concept of partible people and multiple authorship, and also of permeable people. He elaborates how these differing ways that people conceive of themselves in the world do not stand in clear distinction from the current modern western idea of the individual, but rather each person negotiates a tension between dividual and individual characteristics, and, in all societies, personhood emerges from the constant
reconciling of one with the other. In some contexts, like modern Europe, individual features are accentuated, while in others, like contemporary Melanesia, dividual features are accentuated – but these are dominant features, not factors which completely repress or override the other (ibid., 34).

So, how can these places be termed as personalities? First of all, a personality in the landscape can move away from the idea of an artificial basis for a monument. As we have seen, although a natural feature may be described as a monument, this is not the case in archaeological discourses. Indeed, Tilley (2005, 33), commenting on the menhirs of Breton states “these stones were the first culturally fixed and enduring points in the landscape and are closely associated with its post-Mesolithic transformation”, and he raises the critical question of “why were huge ancient trees, wooden posts, rock outcrops or the large stones that would have served as physical markers of place and identity during the Mesolithic deemed no longer sufficient?” From this we can get a sense that archaeologists make a division between the ‘natural’ rock and the ‘artificial’ monument implicitly and explicitly.

Second, to see them as personalities in the landscape can highlight – again related to the context of the binary opposition of the natural and cultural – as bridging the gap between humans and the environment: the constructions that the Mesolithic communities undertook were part of themselves as much as they were part of the landscape. These were persistent places; they were elaborated over time. These were renowned locales, named places – this is spot A of the children of B; or this is spot C of the heron.

Third, as personalities in the landscape, these can be viewed as having altered their meanings over time. These personalities in the landscape were probably contested locales. As generations passed, differing groups with differing agendas appropriated these in their own ways. Not only altering them materially, but also altering them in the context of their placement in the landscape, as this changed over the generations.

Therefore, by describing sites and locales as personalities, we can see people situated in an intimate landscape, a landscape of persistent use and understanding – a thought-out landscape whether consciously or unconsciously. The personalities built by Mesolithic communities included themselves in the construction. They were
mnemonic devices in the landscape, and as persistent elements, if only visible seasonally, they enabled a manner of use of the landscape. Therefore, these personalities were involved in the social reproduction of the communities. They presented places for the dynamic traditionalism (*sensu* Gosden 1994, 31) of the communities to elaborate. Objections to the use of this term for what could otherwise be called monuments might be that yet another boundary between the Mesolithic and Neolithic is probably unhelpful. However, the term personality in the landscape can also be applied to the Neolithic constructions, not just to precursors of monumental constructions.

One other example of a personality in the landscape that is apparent especially along the Shannon system, as well as the Corrib and in Clare, is the mushroom stone (Dunne and Feehan 2003). These distinctive wave-cut stones consist of dissolved limestone blocks and many are taken to be signatures of the early post-glacial lake levels, and in the 2003 publication they recorded 63 such stones. In my fieldwork I noted some more along Lough Cullin, Co. Mayo, Lough Inchquin and Lough Cullaun, Co. Clare, and also some more along the River Corrib, Co. Galway (plate 4.1.). These are clearly not monuments in the sense of artificial constructions, but they are personalities in the landscape, landmarks that would have been noted and talked about, part of the mythopoesis of the landscape. These stones were just one facet of the landscape that we can discuss. In terms of sacred places, Bradley (2000, 23) has listed “mountains, promontories, caves, trees, groves, lakes, rivers, springs and the sea” – from this list one has the sense of what was not sacred in the landscape.

This ties in to the concept of the taskscape. The difficulty for investigating taskscapes and landscapes is that we are trained to look for cultural clues, rather than seeing the landscape as a continuum of built and unbuilt features. Is that a monument, or is it natural? Is that a glacial erratic, or was it moved 50 yards and placed there? We need answers, we need empirical proof. We need a division between the cultural and the natural. If there is not a checklist of telltale signs of an object being cultural, it can be written off the map. A lot of landscape studies that focus on the monuments in the landscape end up describing a series of points in the landscape, and leave out the landscape in between. As Warren (2001, 24) has commented, ritual landscapes so described are not really landscapes as such, but rather “just networks of highly visible
sites”. Bradley (2000, 42-3) has written on the dilemma of how to treat the ‘natural’ landscape. He was critical of Tilley’s 1994 approach, commenting that the ‘unbuilt’ landscape features such as rocks, mountains and rivers enter his interpretation only because of their relationship to these buildings [i.e. monuments]…Tilley accounts for the placing of these particular tombs through a kind of retrospection: such
structures must have been built there because those natural features were already important in the experience of local hunter gatherers (ibid.).

He then poses the question: “is it possible to discuss the role of entirely unaltered features of the natural landscape”? (ibid.). Interestingly, his case studies that follow leave the Mesolithic behind and start in the Neolithic.

In his earlier publication, *The significance of monuments*, Bradley (1998, 10) commented on the incongruence of studying aspects other than monuments: “although sites of many different kinds may contain the new styles of artefacts adopted during the Neolithic, there seems little prospect of using this evidence to interpret the patterns of everyday life”. Warren (2001, 24) has highlighted the danger of such a stance: “such a statement is of deep concern for it implies that we must interpret Neolithic life in terms derived from monuments alone. By extension it also suggests that we will not be able to provide any kind of interpretive account of the Mesolithic”. Moreover, what happens when researchers work in areas in Ireland where there was a non-megalithic Neolithic? Equally pressing, I would argue, is Bergh’s (1995) comment (noted in chapter 2) that although we have a picture of monuments in the landscape, what was happening in the middle, where and how these people lived and worked is exceedingly unclear. I would concur with Warren that, contra Bradley, focusing solely on the monumental aspects of prehistory will not reveal these integral aspects of the lifestyles in the Neolithic.

I maintain that the taskscape can be a useful approach to studying prehistoric peoples, whereby our analysis immediately situates both us and the communities under scrutiny in the landscape, not divorced from the immediate physical reality of existence. At the same time, the taskscape allows us to see both natural and artefactual evidence on a continuum as opposed to bracketed off into two separate spheres of investigation. As Ingold (2000) has said, the taskscape is unending, and the landscape is never complete, it is perpetually under construction, and reinterpretation. Critically, the taskscape entails that sociality can be seen as the lynchpin of our analysis of material culture; to see aspects of the landscape such as natural features and constructed platforms as personalities, the sociality of the landscape is again centred upon in our investigations.
5. Fieldwork and museum collection review

5.1. Introduction

After the initial review of the literature concerning the early prehistory in the west of Ireland, the research was in two main parts. The first involved five weeks spent in the National Museum undertaking a detailed study of the material culture housed there. This entailed a search in the museum archives and then an examination of all the prehistoric lithics (Mesolithic and post-Mesolithic), ceramics, and organic material that came from non-excavated contexts that are provenanced to the six counties under review. The archives for the adjoining counties were also inspected and a selection of material from these counties was looked at. Due to time constraints it was decided from the onset to only initially review material from non-excavated contexts, but a selection of material from excavated contexts was also looked at; also due to time constraints not all of the axes were examined and also as it was hoped that the Stone Axe Database (2006) would be of help in the review. In addition to the museum work, time was spent tracing Mesolithic material that was apparent in the literature, but that had not been housed in the National Museum.

The second part of the research involved using the information gathered from the museum and literature review to undertake sixteen weeks of fieldwalking. This initially involved formulating a series of case study areas to act as platforms into the landscape to survey. Lough Corrib, Co.’s Galway and Mayo and Lough Urlaur, Co. Mayo were chosen as case studies for the Mesolithic and the Tawin/Maree area, Co. Galway for the Mesolithic and Mesolithic-Neolithic transition. These case study areas were chosen for a number of reasons. The first was the pragmatic reason of their being in proximity to Galway City. This was a key consideration due to the fact that as this survey was to be undertaken as a solo effort, time was limited. The second reason for the case study areas was that these areas had in some instances previous finds going back nearly 150 years but had had no extensive, systematic fieldwalking carried out. It was hoped, therefore, that this survey’s fieldwork could augment the material record, and clarify the character of these areas to a degree not undertaken.
previously. A third reason for the choice of areas was that both coastal, near coastal, and inland areas could be covered by these three.

Fig. 5.1. Case study areas and additional fieldwork areas.
Fig. 5.2. Possible Mesolithic findspots cited in previous literature.
The fieldwork for these three focused case study areas was to be undertaken along with visits to, where possible, all of the known findspots of Mesolithic material to ascertain the character of the area and to develop strategies for further, longer term research. This involved site visitations, and, where suitable, fieldwalking was carried out. Fig. 5.1 shows the case study areas as well as the areas where additional fieldwork was carried out, while Fig 5.2 shows the distribution of possible Mesolithic sites cited in the literature prior to this thesis.

The first section of this chapter will detail the terminology used in this thesis with consideration to the lithics. This is warranted as lithic terminology can be variable between researchers, and it is helpful to outline this thesis’ use in the first instance. This section will also clarify terms that will be used such as the divisions of material between “Mesolithic”, “post-Mesolithic”, and “axes”. The second section will then outline the fieldwork carried out in the three case areas, with the third section dealing with the additional areas where fieldwork was carried out. The last section will deal with the remaining Mesolithic findspots which were subject to fieldwork. This section will also elaborate to a certain extent on the museum research that was undertaken that does not directly relate to the early prehistoric period.

5.2. Terminologies and conventions

“To dictate definition is to wield cultural power”
(Livingstone 1992, 304).

The following definitions of terminology are not outlined to attempt what the above quote highlights, but rather to state succinctly how the various terms will be used in this thesis. For example, in the literature the Later Mesolithic people in Ireland are characterised by their use of “Bann flakes”. The classic “Bann flake” arrived at its name due to the plethora of broad, leaf-shaped flakes found in the Bann Valley. This term was, and is, often used as a short hand for Later Mesolithic lithics, and used to describe any Later Mesolithic material, whether or not it is a Bann type of flake, or even a flake for that matter (e.g. Fredengren 2002; Gibbons et al. 2006). Therefore, this term often masks the variability of the lithics used. Woodman and Johnson (1996, 173) have suggested that this term should be reserved for “large, leaf-
shaped forms, 4cm or more in breadth, where retouch at the proximal end is very light”. Another example pertains to the use of the term “debitage” (e.g. Fredengren 2002; Woodman and Johnson 1996). According to Inizan et al. (1999) “debitage” means the act of knapping, while “debitage products” are the result of knapping, i.e. flakes, blades, and waste products: the waste products are called “debris”. However, Woodman and Johnson (1996) appear to use the terms “debitage” and “debris” interchangeably as meaning the same thing.

What follows are explanations of terms used in describing lithics. Further explanations of the abbreviations used in the catalogue of this survey’s finds appear in the appendices section, before Appendix 1.

**Blade:** Irish Later Mesolithic lithics are often described as blade-like flakes, as true blades are often meant to be parallel sided. This thesis has used, following Inizan et al. (1999, 130-1) the length: width ratio instead of parallelism to define a blade. Therefore, the term blade is used to denote a flake which has a length at least twice its width.

**Debris:** this term is used to denote shapeless fragments which cannot be described as flakes or blades, as there are no characteristic fracture marks visible, but none the less do not appear to be “natural” fragments of material (ibid., 138).

**Flake:** the term flake is used in its widest sense to include any piece that has been removed from a core, except when this can be described as a blade (ibid., 141-2). This analysis of the material has not broken the material down into types of flakes (i.e. preparation flakes, platform rejuvenation flakes etc.).

**Ret/wm blade, ret/wm flake, or ret/wm core:** “ret/wm” is an abbreviation for “retouch/wear mark” and is a broad category used to describe a piece that has telltale signs of having been retouched or signs of wear marks. As these two different kinds of marks can sometimes be similar, it was decided from the outset to label all lithics with either kind of signature marks under the one category, rather than having a number of categories of degrees of either retouch or wear marks.

**Worked piece:** this term is used to denote a piece, which cannot be described as either a flake or blade, but has signs of retouch or wear marks on the piece and therefore is not considered to be “debris”.

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The conventions used to describe the different types of cores and diagnostic tools follow Woodman and Johnson’s (1996) descriptions of Irish types. When discussing the lithics three broad categories are used; Mesolithic, post-Mesolithic, and axes. When Mesolithic and post-Mesolithic are used, this is to denote diagnostic lithics that can be assigned to either period. With lithics in general, it can be difficult on a piece by piece level to ascertain which category it falls into, as the technique of stone working can invariably produce similar looking lithics, whether it was a Mesolithic or post-Mesolithic person that made them. Rather than strict rules, there are tendencies in the different periods knapping techniques. Therefore, diagnostic pieces are relied on, but these are not as common as undiagnostic flakes and blades. This also applies to cores, which can often be similar, for example between the Early Mesolithic and Neolithic (Woodman, pers. comm.). In terms of the axes, these items, which form a substantial part of the lithics record, were used from the Early Mesolithic into the Bronze Age and later. The difficulty is in figuring out a methodology for ascribing an axe to a particular period (Woodman et al. (1999) has discussed this issue at length). Axes made from, for example, porcellanite, are arguably post-Mesolithic. However, these account for less than 8% of the axes in the west of Ireland, with the clear majority being shale, which was used in the Mesolithic and post-Mesolithic. Therefore, in order to retain the axes as period-spanning objects, of which there are almost 1800 provenanced to the six counties of the west, I have treated them as a separate group.

In the maps that follow, the convention “possible early-type monuments” is used: this is a short hand to describe a group of monuments, namely passage tombs, court tombs, and portal tombs, and also including undiagnostic “megalithic structures” and “megalithic tombs” (as defined by the SMR). These monuments have been included on the maps to give a general sense of the Neolithic transition and how it relates to Mesolithic material in the landscape, so only possible early types of monuments are included. The two latter categories of undiagnostic types could be early or later, but have nevertheless been included. Cairns, which some are possibly early types, have been left off the maps as they are probably for the most part later in date than the Early Neolithic. This probably is a dangerous compromise, as many early type monuments may well be omitted, but if the reader so wishes they may compare the maps presented against the SMR maps.
5.3. Case studies

5.3.1. Lough Corrib and its environs, Co.’s Galway & Mayo

As the evidence for Mesolithic is predominantly found near waterways it is important to outline as clearly as possible how these areas have changed over the years. It is critical to our understanding of the early prehistoric landscapes to assess how dramatically the landscape has changed, not only in prehistory, but especially in modern times with the series of drainage works undertaken. What we see as a stable landscape, with seasonal flooding, is fundamentally different to how the landscape appeared millennia ago. Indeed, it is fundamentally different to how it appeared a few centuries ago before the drainage works. Of key consideration is the lake levels themselves as these have apparently changed dramatically, which has a serious impact on not only the habitation and use of the landscape in prehistory, but also on the availability of evidence for us to analyse.

The three lakes, the Corrib, Mask, and Carra, lie on the mid-western edge of the central lowlands, with the Connemara and Partry mountains to their west (Fig 5.1). As part of the lowlands the geology of the lakes is karstified limestone, with igneous and metamorphic rocks on the western edge of Lough Mask and upper Lough Corrib (Aalen et al. 1997, 331). The karstic, or partly karstified, nature of the underlying limestone – which underlies 50% of Ireland (Coxon and Drew 2000, 81) – entails that the drainage pattern of the lakes is complex; the limestone is characterised by underground streams, swallow holes, springs, with turloughs present in many places (Coxon and Coxon 1994). One dramatic example of the karstic landscape apparent on the River Corrib is the phenomena of the river drying in both summer and winter. This is due to an underground river which ran to the east of the over-ground course – the river would change course and flow underground into the sea at Lough Athalia, near the present day railway station in Galway. This underground passage was blocked in 1851 by the Board of Works (Wilde 1867, 13). This drying of the river seemingly occurred periodically as it is noted at least twice in the medieval annals (Rynne 1983-4, 5-6).
The loughs Corrib, Mask, and Carra form the Corrib catchment area, which drains an area of approx. 3100 km² (Connolly and McCarthy 1993, 58) – the Shannon catchment drains about 10400 km² (Cabot 1999, 178) (Fig 5.3). The Corrib system drains to the sea by the Corrib River, which runs for approx. 6 km. Drainage works over the years have considerably altered the watercourses of the catchment area. For example the Clare River, whose source is close to Lough Urlaur in Co. Mayo and the largest river to flow into Lough Corrib, originally was an underground river for a small section of its lower run – it came out as a spring near the village of Claregalway from where it then shortly entered the lake (OPW maps). Numerous turloughs which had been isolated were channelled to connect to river systems as well (Drew et al. 1998, 56). Moreover, the karstified landscape entails that present day rivers and streams may not have been present in the early prehistoric landscape and vice versa. For example, the Clare River mentioned above may well have originally been an over-ground river for its entire course to the lake.

Fig. 5.3. The catchment areas of the Corrib and Shannon systems highlighted.

In terms of the River and Lough Corrib themselves, drainage works starting in the 19th century included the building of a weir and system of canals in Galway city (Semple 1984, 80). While the water level of the lake was lowered in the mid-19th century (Wilde 1867, 21), the main effect of the drainage schemes was to stabilise the
lake level over the seasonal extremes of low and high levels, allowing access by boats in summer and the mitigation of winter flooding (Semple 1984, 80). However, Mooney (1990, 115) has suggested that there are contradictions in the 19th century literature as to what exactly happened to the lake levels at the time. The Corrib River was channelled, and earlier a new exit point, the Friar’s Cut, was created from the lake, bypassing the old river course which lies 2 km to the west. On the original 19th OS, and older, maps another river emptied the lake to the east and came out at Menlough – this has since almost completely closed over (see Figs 5.4 & 5.5).

As noted in the previous chapter, some mushroom stones are apparent on the east side of the lake and the River Corrib. These are suggested as evidence of the lake levels in post-glacial times. One of the questions about the stones is the timing of the dropping of the water: did this happen synchronically across Ireland, and was the cause a dropping of the water table, or isostatic uplift (Dunne and Feehan 2003, 7)? If a similar timing can be posited for the Corrib as at Lough Boora, we can estimate that in the Early Mesolithic the level of the lake and river were some meters higher, meaning that much of today’s river would have been a part of the lake and that much of present day Galway City would have been under water, with the few higher tips as islands. Research by Mooney (1990, 118) (who analysed cores from the area) has shown that after the initial post-glacial high level of the lake, at some stage later the lake level fell to a much lower level than at present. Then, prior to c. 6100 BP the lake level began to rise once again. From this we can see that the landscape of the lake and river changed dramatically over the course of the early prehistoric period.

In terms of the changes of the river course in the modern period, it is clear from a perusal of the earliest maps of the River Corrib, while allowing for differing cartographic conventions and accuracies, that the river course had changed substantially in last few hundred years (Figs 5.4 & 5.5). Moving downstream towards the bay, through what is today the weir and a series of canals, would also have presented itself as clusters of islands in the early prehistoric period.
Fig. 5.4. Map of Corrib River with old watercourses highlighted.

Fig. 5.5. River Corrib area’s present watercourses.
PhD work by Bingham, Dept. Botany, NUI, Galway, on the palaeoenvironment of the Lower Corrib basin is currently being undertaken, with the raised bog beside the lake and Clare River being cored (pers. comm.). This project also involves pollen analysis from a core from the main lake itself – these are the first pollen cores to be taken in the area, and will give both a regional and local picture of the flora, as well as hopefully a more detailed picture of the extent of the palaeolake.

Previously, the closest core taken to Lough Corrib was at Mayo Abbey which lies 15km to the northeast of Lough Mask (Fuller and O’Connell 1998). The authors commented that this core’s early Holocene data suggested a typical succession of grasses and shrubs for the period. Hazel, pine, oak and elm then expanded to form a mixed woodland of tall canopy trees; elm was represented to a greater degree in comparison with other west of Ireland cores with the authors suggesting that the fertile soils in the area probably account for this (ibid, 45). Later, the woodland composition was dominated by alder, hazel and oak. This was followed by the elm decline, and indications of Neolithic pastoral farming (ibid.).

How this relates to the woodland around Lough Corrib is uncertain, especially considering that given the size and topography of the area around the lake a variety of ecological niches which would have had a varied vegetation history. Furthermore, Currie (1996, 48) has noted that the relatively thin soils in the eastern part of the area may not have provided enough anchorage for dense oak woodland. Today, the largely treeless landscape around the lake is dominated by pasture, with blanket bog on the hills to the west and an expanse of raised bog defining the east shore of the lower lake, where the Clare River enters. The greatest expanses of trees, besides the plantations of conifers, are the pockets of woodlands usually centred on the old estates. The difference in topography between the east and west of the lake is stark as can be seen from the two photographs below (Pl.s 5.1 & 5.2) – as one walks northwards on the upper part of the lake the Connemara Mountains begin to rise in the distance, while behind to the south and east is the vast undulating land stretching into the midlands.
5.3.1.1. Previous research/finds

As mentioned in chapter 2, the reputed hundreds of Mesolithic finds from the River Corrib were reported in various papers since the 1980’s by Gibbons and Higgins (Higgins and Gibbons 1988; Gibbons et al. 2004; Gibbons et al. 2005). These finds had been recovered by divers in the 1980’s from the river bed from around the bend of the river just north of Menlough Castle, down to Jordan’s Island. The authors have called this a Mesolithic ‘hyper-site’ (ibid., 51), and “potentially…one of the most extensive Stone Age sites in Ireland” (Higgins 2006, 3) and commented that this
material had never been assessed. After extensive searching I found out that this material had never made it to the National Museum even though it had been given a museum registration number, as reported by Rynne (1983-4, 9). The staff of the National Museum, in particular Mary Cahill, have been of considerable help in trying to trace this material, and I am grateful for their assistance. As this collection material has had a complicated history, and has been described as a substantial body of material, I will take time to try and set the record straight as to what the collection contains as it stands at present. This will then be followed by a discussion on the Mesolithic, post-Mesolithic, and axe finds from the area.

**River Corrib divers collection**

After discovering that this material was not in the National Museum, I contacted O’Dowd who was one of the divers at the time, and who Gibbons and Higgins had referenced (as a personal communication) in their article. O’Dowd (pers. comm.) maintains that the authors misrepresented him about the nature of the material – not all the material was lithics and what the ‘hundreds’ consisted of as well was pieces of organic material. Therefore, from the outset the amount of lithics was overestimated.

With the help of J. Higgins (one of the aforementioned authors) I traced some of the lithics to the Galway City Museum, where they were found in a plastic bag after I had put in a request to look for them. This amounted to a few items: 10 axes and 9 lithics, 2 hammerstones, and 1 triangular piece of stone. J. Higgins (pers. comm.) maintains this is all that was ever received by the Galway Museum. I contacted Gibbons (the second author) and he maintains that he saw a “sack full” of material that came from the river (pers. comm.). In talking with Professor Woodman, Gibbons said to him that he saw polished stone axes in the ‘sack’ (Woodman, pers. comm.). However, when I later pressed Gibbons as to the exact details of what he saw in the sack, he simply stated “stone artefacts” (Gibbons, pers. comm.). It is indeed extremely unclear what was actually seen at the time.

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1 Murtagh (1998) undertook a thesis cataloguing the finds for all periods from the river, but did not see the material presented to me by Noel Higgins. Moreover, she states that ‘microliths’ were present in the collection (ibid., 64), but she seems to have mistaken small bits of lithics for microliths as no other person involved has suggested an Early Mesolithic presence in the collection.
I have been in touch with another of the divers, N. Higgins, who presented me with some of the lithics found at the time – he was eventually giving these to the new Galway City Museum when it opened. He says that unfortunately some material has been lost, and that some of the divers gave some of the lithics away, especially the more ‘eye-pleasing’ Neolithic arrowheads – but what he gave me was the bulk of the lithic finds (N. Higgins, pers. comm.).

From photographs taken of material at the time a number of the axes can be identified as missing. In a photocopy of a photograph in the National Museum archives, which shows 24 items, 8 are positively identified as being presently in the museum – the whereabouts of the remainder are unknown. From this photocopy 5 axes, two round stones, 1 core, and 8 possible lithics are apparent but unaccounted for. The identified items are from both the collection that came from the Galway Museum once I had requested the material, and from N. Higgins, highlighting that these two collections were once all together. Therefore, we can say that at the very least, 16 items are missing. What has been traced of the material is listed in Appendix 1.

While it is clear that this material, for various reasons, was not appropriately catalogued and secured at the time, it would seem that the actual quantity was misconstrued in the 1988 Higgins and Gibbons article, and that the lithics did not run into the many hundreds that they have written about: from this they repeated this misunderstanding in their more recent articles. Clearly, this is more of a hyperbolic site, than a hyper-site. Indeed, since the authors have mentioned Lough Gara which has produced thousands of Mesolithic artefacts, it is unclear why they have not called the findspots there ‘hyper-sites’. To state that this is potentially Ireland’s most extensive Stone Age site seems to be foolhardy – the area may well hold unseen evidence for extensive prehistoric occupation, but holding that line of argument would mean that any area in Ireland with a few recorded finds could be Ireland’s most extensive Stone Age site.
Mesolithic finds

The Mesolithic material from the River and Lough Corrib comes from four areas (Fig. 5.6) (Appendix 2). A ground (slate or mudstone) point was found while digging in a garden close to the eastern shore of the upper lake\(^2\) at Ballycurrin Demesne, Co. Mayo. Almost directly across the lake on the western shore a fragment of a flint distally trimmed flake was found on River Island, Co. Galway at the mouth of the Owenriff River; a fragment of a flint butt trimmed flake was found in Townparks, Galway City, from beside the River Corrib. The diagnostically Mesolithic lithics from the divers’ collection are a siltstone bar form, a chert butt trimmed flake, a flint butt trimmed blade, and a flint end of blade scraper. From around the same area a ground stone point is one of the 19\(^{th}\) century river finds from Menlough.

Post-Mesolithic finds

There have been few post-Mesolithic lithics recorded for the area (Fig. 5.6) (Appendix 3) – two arrowheads from the east side of the lake, a fragment of an undiagnostic quartz point from the western shore, and a sandstone spearhead was found in the river along with axes in the nineteenth century. A flint scraper and a “piece of waste worked flint” were found on River Island on the west shore, and in Galway City one possibly “worked” piece of chert was found close to the river (Gibbons et al. 2004, 5-6). Other possible post-Mesolithic material includes some of the undiagnostic blades and flakes, and two undiagnostic cores collected by the divers from the river. As mentioned, these three latter findspots had Mesolithic material. A small number of undiagnostic flakes were also uncovered during excavations in Galway city (McCarton et al. 2004, 535).

Axes

The first early prehistoric finds date back to the 19\(^{th}\) century drainage works near Menlough and these were predominantly axes. From the proximity of the lake – proximity being a relative term taken here to mean about 2km – there are 30 axes

\(^{2}\) Lough Corrib is divided into the lower lake and upper lake.
The previous finds presented as dots are for the most part provenanced only to a townland, so are not necessarily exact findspots. To see if they are exact, proximate or townland only locations see relevant appendix or interactive map. This survey's finds are exact locations.

Fig. 5.6. Lough Corrib Survey area and previous finds. Please note the dots do not necessarily represent single finds.
recorded\(^3\), while there have been 46 axes found in proximity to the River Corrib (see Appendices 1 & 4). As well as the finds mentioned and shown on the map (Fig. 5.6), 2 axes have been found while digging on the east side of the lake near Annaghdown (Newman, pers. comm.), and another axe has been found on the surface uphill from the Corrib River’s east bank near Menlough Castle (Kelly 2006, 35). There are also reports that a good number of axes have been found at Menlough graveyard, beside the River Corrib, over the years, and these are in private possession (Bergh, pers. comm.). Three axes were also uncovered during excavations in Galway city (McCarton et al. 2004, 532).

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unidentified</td>
<td>26</td>
<td>Jadite</td>
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</tr>
<tr>
<td>Shale</td>
<td>25</td>
<td>Dolerite</td>
<td>1</td>
</tr>
<tr>
<td>Clay Ironstone</td>
<td>7</td>
<td>Rhyolite</td>
<td>1</td>
</tr>
<tr>
<td>Mudstone</td>
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<td>Basalt</td>
<td>1</td>
</tr>
<tr>
<td>Pelite</td>
<td>1</td>
<td>Igneous type</td>
<td>1</td>
</tr>
<tr>
<td>Schist</td>
<td>1</td>
<td>Chert</td>
<td>2</td>
</tr>
<tr>
<td>Porcellanite</td>
<td>7</td>
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</tbody>
</table>

Table 5.1. Material of axes from near Lough and River Corrib.\(^4\)

<table>
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<th>Find context</th>
<th>Quantity</th>
<th>Find context</th>
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<td>Drainage</td>
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<tr>
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<td>20</td>
<td>Surface</td>
<td>4</td>
</tr>
<tr>
<td>Digging(^5)</td>
<td>7</td>
<td>Tillage</td>
<td>2</td>
</tr>
<tr>
<td>Bog</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.2. Find contexts for Corrib axes.

In terms of the finds from further away, along the rivers flowing into the Corrib, a distinct pattern emerges of axes found in townlands adjacent to the Clare and its tributaries, as can be seen in Fig 5.7. About 30% of the axes found along these rivers were retrieved out of bogs. However, it should be noted that a bias in the distribution of this material may be at play here. The home of Costello, the antiquarian mentioned earlier, was Tuam, and a good number of these finds are related to his collection. Moreover, even if some of these finds are later than his collecting, having someone in an area who had raised an awareness of prehistoric material, and an awareness of

\(^3\) 10 of these may be dubiously provenanced near the lake – 8 were bought by Costello – a major collector in the Galway area in the early 20th century – from an artefact dealer in Oughterard and another 2, along with 4 of Costello’s collection are provenanced to “near Oughterard”.

\(^4\) Excluding axes from Galway city excavations, Annaghdown, recent find from Menlough Castle, and reported axes from Menlough graveyard.

\(^5\) Digging is a general term used including agricultural as well as construction digging.
reporting these to the museum, invariably means that these areas will produce more finds recorded in the museum archives. While this will not account for all the noted findspots it certainly adds to the perceived density in an area.
5.3.1.2. Survey

Methodology

The fieldwalking of the Lough Corrib area was undertaken by walking the shoreline and intensively examining the exposed shoreline, covering where possible at least 60-70% of the shore, and with an aim at covering 100% at all times. Rather than aiming for a sample of a smaller percentage of a wider area, it was decided that a more intensive search would be better approach considering that the Mesolithic findspots can often be characterised by single finds. Therefore the chosen shorelines were walked in a number of passes, depending on how wide the particular exposed shoreline was. If exposed shorelines were particularly wide, the amount covered was reduced to about 60-70%, but for the most part the exposed shoreline around the Corrib was not extensive, entailing that full coverage was achieved. Whereas in some surveys the approach is to examine an area, then walk a few paces, and then examine another, this approach was not used here, and all ground was intensively searched. As well as examining the exposed shoreline, all erosion scars near the shore and in adjacent fields were also examined for material.

The main criteria for the choice of where to fieldwalk was accessibility and shoreline visibility: with much of the shore covered in reeds, marsh, or bog, many places were inaccessible. This was especially the case for the mouths of rivers, usually seen as areas where Mesolithic evidence is apparent. Numerous river mouths were visited, but these proved futile areas to attempt to survey due to the lack of shoreline accessibility. Therefore, this survey was biased towards areas with rocky, gravelly, or sandy shores, as well as areas which had pasture extending to the lake, and biased against areas which have since prehistory become engulfed with bog, reeds, and fen. A second criterion was to examine areas around the previous findspots to ascertain whether there was more material apparent in these locations. Areas with no previous finds were also chosen to assess the general distribution of the material.
Survey

Approximately 70 km of the lake and river shoreline was surveyed (Fig. 5.6). The only area where lithics were found was on the east bank of the River Corrib (Fig 5.8) (Appendix 5). Here a retouched chert blade was found in cattle poached ground close to the river bank near Menlough graveyard (the northerly of the three findspots on the map); an axe – possibly shale – was found on the grounds of Menlough Castle again by the river bank (the middle of the three findspots), and the main lithic scatter of 30 lithics was found eroding from a small ridge (c. 2m high) about 10m from the river bank parallel to Jordan’s Island: the erosion scar runs intermittently for approx. 30m. It is uncertain if this latter material is being eroded out from an in situ context, but it would seem possible. This scatter consisted of undiagnostic lithics, mostly small flakes of chert and flint with the notable exception of a quartzite flake – the quartzite is provenanced to the Connemara Mountains. The 5 pieces of flint exhibited 3 different types of patination, white, grey, and orange, possibly suggesting different sources for the flint.

Fig. 5.8. River Corrib area survey.

6 Material identified by Williams, Geology dept., NUI, Galway.
5.3.1.3. Discussion

The survey work carried out on the lake and river unfortunately did not identify any diagnostic Mesolithic material in the area. Indeed, the intensive fieldwalking did not find evidence for material from any period, apart from along the river. One of the difficulties in tackling Ireland’s second largest lake single-handed is that invariably only a small portion can be surveyed: at 70 km of shoreline surveyed, this is only the beginning of a full survey of the lake and environs, which should be continued, especially to include fieldwork on the multitude of islands on the lake, which were not investigated, apart from River Island, where one of the previous Mesolithic finds is from. Nevertheless the lack of finds in the areas surveyed is a result in its own way. It is possibly suggesting that the low level of visibility has to do with the lake level itself. Without more recent drainage schemes exposing the foreshore, material is possibly being masked. It is possible that when the level was dropped 150 years ago, a survey may have produced different results. However, as noted, it is unclear to what extent the lake level dropped at that time. Another possible reason for the lack of finds may have to do with the extent to which the shoreline’s stones are very often encrusted with marl, which could mean that lithics are being rendered invisible.

N. Higgins (pers. comm.), one of the divers who collected the material from the river, noted that some of the material collected was from a stretch of raised river bed in the middle of the river which the dredger’s bucket had missed and left behind intact. If the interpretation of the lake as having been lower in the Later Mesolithic is correct, this would make sense as possibly being signs that the river ran along a number of channels with islands in the middle of the river. Indeed, even if the lake level was not so much lower, this may have been a dry spot in the river during summer months at the time. What this does suggest is that a close inspection of the remaining terrace under the river is undoubtedly of importance. Other areas such as the stretch of river bed of the old river course at the head of the river are also critical areas to survey as these have not been dived to the extent that the lower stretch of the river has (N. Higgins, pers. comm.). As a result of the querying of this material Mary Cahill (pers. comm.) of the National Museum has put in a request to the Dept. of the Environment for an underwater survey of the river bed. With the possibility of
retrieving prehistoric organic remains along with lithics this will hopefully add to our understandings of the locale.

While all of the finds were from the east bank of the river it is unclear to what extent alluvium is masking more material there. Commenting on their Bally Lough Survey, Zvelebil et al. (1996, 36) caution “against interpreting low frequencies of artefact recovery in a riparian context simply as reflecting an archaeologically ‘empty’ landscape and underlines the necessity of incorporating vertical investigations with the traditional surface-based field survey in an alleviated landscape”. This suggests that a useful project would be to investigate selected areas of the river in a similar manner to develop our understandings of the area.

The Tables 5.3 & 5.4, of this thesis’ collection and the divers’ collection from the river, show that chert accounts for ¾’s of the lithics, and flint accounts for almost 1/5, with 1 quartzite and 3 siltstone lithics. As noted previously, the Mesolithic finds from River Island and Townparks were also flint. The source of the chert is more than likely local, with, contra Higgins (2006, 4), an abundance of high quality chert in the area (see Section 5.3.3). The source of the flint is more problematic, with the traditional idea that all flint is Northern flint debatable. McCarton et al. (2004, 535) has commented on the flints that have been excavated from various sites in Galway City, suggesting that a glacially deposited source may be out in the bay with some

<table>
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<td>Class</td>
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</tr>
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<td>Axe</td>
<td>Shale/siltstone</td>
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</tr>
<tr>
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<td>Ret/wm blade</td>
<td>Chert</td>
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</tr>
<tr>
<td>Terryland</td>
<td>Multiplatform core</td>
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<td>Core fragment</td>
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<td>Flake</td>
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<td></td>
<td></td>
<td>Quartzite</td>
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<tr>
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<td>Ret/wm flake</td>
<td>Chert</td>
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</tr>
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<td>Worked piece</td>
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</tr>
<tr>
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<td>Chert</td>
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<tr>
<td>Bar form</td>
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<td>Table 5.4. Materials from Divers’ collection.</td>
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</table>
Pl. 5.3. River Corrib, looking upstream at Jordan’s Island on left, and erosion scar marked with arrow.

Pl. 5.4. Siltstone bar form found by divers in River Corrib.

Pl. 5.5. Flint butt trimmed blade found in River Corrib.

Pl. 5.6. C05:1:802; Axe, Menlough.

Pl. 5.7. C05:1:804-5;810;814; flakes, Terryland.
material being washed up. However, this thesis’ fieldwork on the Inner Galway Bay area produced 800 chert lithics and only 1 flint, suggesting that either this source was not used at all by the communities there, or else it was not readily available (see Section 5.3.3). Therefore it seems likely that the flint was brought in from elsewhere outside of the region. However, the different types of patination on the small flints collected in this survey may indicate the use of beach flint (Bergh, pers. comm.).

The use of siltstone in the Mesolithic is a recurring pattern, with a number of areas producing evidence for this: Ferriter’s Cove (Woodman et al. 1999), Lough Allen and Lough Gara (see below, Sections 5.4.1 & 5.5.10), and Belderrig (Warren, pers. comm.). The siltstone from the River Corrib has been identified as being sourced from the Lough Mask area, but the glacial movement of material creates a problem in saying that the actual Mesolithic source was there. However, in the case of the Belderrig siltstone, the source of the raw material does not make sense as a glacially moved material (as the glaciers did not move in that direction) (Warren, pers. comm.), so one can argue that either the raw material was brought there, or else a finished lithic was brought there. Therefore one could argue that the glacial movement of material does not have to account for the Corrib siltstone and that Mesolithic communities were involved in this, through actual movement of people or exchange relations between communities in the area. In terms of the undiagnostic quartzite flake collected, the evidence for glacial or human movement is equivocal: but human movement of the material does not need to be discounted.
5.3.2. Lough Urlaur and its environs, Co. Mayo

Lough Urlaur lies towards the northwestern end of the central lowlands, and the topography is characterised by eskers and long, low drumlins with limestone as the underlying bedrock (Meehan 2003, 38-9). The glacial deposits are thicker here in comparison to a much of the Lough Corrib region, with outcrop rare, apart from the summit of the Boleyboy escarpment which lies a few km to the southeast of the lake (ibid). Today, the landscape is divided between pasture on the upper slopes and summits of the drumlins and eskers and raised bog in the troughs in between.

Lough Urlaur and its two adjoining lakes, Roe and Nanoge, are one of the sources of the Shannon and are situated within 3 km of a number of rivers and lakes that are the sources for: 1) the Moy River which meets the ocean at Killala Bay on the north coast of Mayo; 2) the Clare River which flows into Lough Corrib and Galway Bay (Fig. 5.1). These three water systems, the Shannon, the Moy, and the Corrib are the main systems in the west marking out this area as an interesting vantage point for movement in the region. Indeed, there is a marked concentration of Neolithic and Bronze Age sites on the hills 2 km to the southwest of Lough Urlaur: these hills are at the centre of the sources of these three watercourses.

Unlike the previous case study area this area has not been the focus of palaeoenvironmental research. However, the Mayo Abbey pollen core described in the previous section is probably more generally applicable to this area than to the Corrib area. Again, there would have been a distinct difference in the vegetation between the peaks and troughs of the drumlins and eskers. The drainage operations that were undertaken on the Shannon that lowered the levels of Lough Gara which lies about 16km downstream did not reach up as far as Lough Urlaur, but stopped short of these lakes (OPW maps).
Lough Urlaur area survey

Fig. 5.9. Lough Urlaur area and previous finds.

The previous finds presented as dots are for the most part provenanced only to a townland, so are not necessarily exact findspots. To see if they are exact, proximate or townland only locations see relevant appendix or interactive map. This survey’s finds are exact locations.
5.3.2.1. Previous research/finds

The first Mesolithic find from this area was discovered in the 1940’s. This was a tanged flint flake discovered while clearing stones in a tilled field. While Fredengren (2002, 114) and Gibbons et al. (2005, 44) have stated that this find was from the lake itself, the MNI files make it clear that the flake came from a mile from the lake on the eastern edge of the townland of Urlaur but not from Lough Urlaur itself (MNI file 1948:307) (Appendix 6). The finder gives accurate distances to two separate points, which suggests that the findspot mentioned is accurate. The eastern edge of Urlaur is defined by a small stream – as mentioned previously with the growth and encroachment of bog this may well have been a more substantial river in the Mesolithic. Little else has been found in the surrounding area (Appendix 6). The closest finds are from a few kilometres away – these are some axes and Bronze Age arrowheads, and no survey work appears to have been carried out in the area. The lack of finds stands in contrast to the extensive evidence of prehistoric monuments in the area.

5.3.2.2. Survey

Methodology

The same methodology was used at these lakes as in the Lough Corrib survey area, of intensive fieldwalking the lakeshores and examination of adjacent erosion scars.

Survey

The lakes Urlaur, Nanoge, Roe, and Cloonagh were surveyed (Fig. 5.9). As the previous Mesolithic item was found away from the lake, the general area of the findspot – the eastern end of the townland – was also fieldwalked. There, a sand quarry extending for many hectares is currently being worked. This has created a lengthy scar for examination, but produced no finds. As parts of this scar were 15m high not all of it could be examined.
During the survey 5 lithics were collected, all from Lough Urlaur (Table 5.5; Appendix 7). The first two findspots from were from the north side of the lake, to the east of Urlaur Priory. These came from an erosion scar from the base of an esker a few metres from the shoreline – at this point the esker runs close to the shore. The second find was from the eastern end of the lake, towards the river outlet. This was found on gravelly mud amongst thinly growing reeds. These five finds consisted of undiagnostic lithics. The survey of the rest of the lake and other lakes did not produce any finds. Not all of Loughs Nanoge, Roe, or Cloonagh were walked as parts of these were bog fringed with no exposed shore.
5.3.2.3. Discussion

It is over sixty years since a Mesolithic presence was noted here, but unfortunately this survey did not help in developing the evidence any more, beyond one possible Mesolithic, but undiagnostic, chert blade. What is possibly of significance is that the original single find of the tanged flake would seem to be quite different to the lithics from the large collection of Mesolithic material from downstream at Lough Gara (Section 5.5.10), and also from the lithics collected during this survey at Lough Allen (Section 5.4.1). In these two areas there was no signs of heavily tanged flakes like the Urlaur find – Woodman (1978, 84) has commented that the tanged type of flake is earlier in the Newferry sequence.

As was the case at Lough Corrib, a lack of lowered lake levels may be a reason for the difficulty in identifying finds. Again, what is needed is further survey work, especially in order to carefully comb the erosion scars of the surrounding fields, especially higher up on the hills, more than time allowed in this survey. This, along with geophysical surveying and test pitting is needed if we wish to move beyond the faint signs we have of the Mesolithic presence in this area.

<table>
<thead>
<tr>
<th>Urlaur survey</th>
<th>Townland</th>
<th>Class</th>
<th>Material</th>
<th>Total</th>
</tr>
</thead>
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<td>Single platform core</td>
<td>Chert</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Blade</td>
<td>Chert?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flake</td>
<td>Chert</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debris</td>
<td>Flint</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.5. Urlaur survey finds.

Pl. 5.8. Flint tanged flake from Urlaur (MNI 1948:307).
5.3.3. Tawin/Maree area, Co. Galway

The Tawin/Maree area, in the Parish of Ballynacourty, lies on the eastern end of Galway Bay on a headland between Oranmore and Clarinbridge, and the parish covers just over 2500 ha. The western end of the parish consists of a collection of islands, the largest being Tawin Island which is separated from the mainland by a 70m stretch of sea at high tide. The southern end of the parish is defined by Dunbulcaun Bay into which the Clarinbridge and Kilcolgan Rivers flow. The parish is a continuation of the Irish central lowlands, which continues eastwards to the Irish Sea; the land is low lying, with the highest peaks being approx. 25m OD, with the topography being formed by glacial movement into drumlinised ribbed moraines.
Fig. 5.11. Tawin/Maree survey area with previous axe finds highlighted.
From most vantage points the Burren hills to the southwest dominate the horizon; looking east from the highest peaks the horizon is the expanse of the lowlands. There are no substantial rivers running through the parish, with only a few small rivers and streams, and with two turloughs in the adjacent parish to the east. The underlying bedrock is limestone and in many places the karstic bedrock crops out. The present landscape is dominated by pasture interspersed with tillage, with a small stand of woods on an estate close to the sea.

5.3.3.1. Previous research/finds

Starting from the 1930’s, 139 axes were reported to the National Museum from this parish, which accounts for about 33% of the axes for Co. Galway from an area that is only a miniscule fraction of Co. Galway’s landmass (for list of axes see Appendix 8). However, no other lithics were recorded from the area. What follows is an extended discussion of the history of the reporting of the axes, as this highlights perspicuously how parts of the collection in the National Museum has been built over the years, thus revealing how biases in the collecting and reporting of finds can considerably alter our perceptions of prehistoric habitation of the landscape.

The first axe to be reported to the National Museum from this area was in 1931, with a find from Mweeloon. The local school teacher, Ua Rioghardain, whose school was in Maree (which is not a townland or parish name but the general area’s name), was one of the locals involved in the reporting to the museum of the finds. This seems to have started when the Ordnance Survey was in the area, and O’Shea of the Ordnance Survey was shown the axes and presumably encouraged the locals to report them to the National Museum. The axes were being recovered during tillage, mostly from potato plots. This piqued the interest of Mahr, the Director of the National Museum from 1933, as it was apparent that this was what was called a ‘Riverford Culture’ type axe. Mahr was in the midst of formulating ideas on these types of artefacts, and he eventually outlined these thoughts in his presidential address to the Prehistoric Society (1937).
Over the next few years there was a flurry of activity with dozens of axes found and sent up from the area. The initial price given for an axe was 15 shillings. So many axes were being discovered from this area that (S.P.) O’Roirdain was sent down by Mahr from the museum to investigate the area in 1933. In a letter about the impending visit, Ua Rioghardaín, the school teacher, wrote to Mahr outlining his views on the axes:

There is no doubt that there were primitive colonists in large numbers here and they did not go far inland as they confined themselves to the head of Galway Bay where this parish is situated…I have had at least a dozen of those small broken stone-axes from time to time. Of course they are of very little importance and I give them away to any interested antiquarians, only keeping three or four to show the children. Personally I am of the opinion that we will get very little in the way of ‘finds’ and at the same time I must confess that the area has not been scientifically studied…Of course I shall be only too happy to show your assistant (Mr. O’Riordain) any thing that he thinks will yield a ‘find’. I wish that all credit for the local stone-axes be given to Mr. John Brady of Mweelook who gave J. O’Shea [of the Ordnance Survey] a splendid stone axe three years ago…Mr. Brady tells me that he has a splendid specimen buried in the ground in front of his house ‘lest he be tempted to give it away’ but he would not be opposed to getting it dug up again if we approach him properly…Yours very sincerely,

Domhnall Ua Rioghardaín. (MNI File 1933:1275).

It was suggested at the time that there may have been an axe factory there, akin to Fisherstreet, Co. Clare (MNI File 1933:583). O’Riordain visited the area, and in a hand drawn map by him, he showed where axes had been dumped into the sea before it was realised what they were – and that people in Dublin paid good money for them. Soon after the visit another letter arrived to Mahr from Ua Rioghardaín on behalf of a finder. Here he commented that the finder “would have dumped it into the sea with the other stones but had heard that the school-master was sending them away and getting money for them”; Ua Rioghadain further commented “please remember us to Mr. S.P. O’Riordain, who taught us a very nice German song and ‘Heil Hitler’” (MNI FILE 1933:1275). This should be remembered in light of Mahr’s membership of the Nazi party, and reputed spying activities in the lead up to World War II (Evans 1996, 216-7).
However, by 1939 the museum had grown weary of the Tawin axes and a sender received the following reply from the museum:

Dear Mr. Holland,

As you are probably aware, I have practically given up collecting these stone axes from your district which repeat themselves with such monotony and have long ago ceased to be of any scientific or archaeological interest except that, naturally, they continue to be of some purely local interest” (MNI File 1939:158).

Not surprisingly, the flow of axes dries up for the most part after this point. So we can see that the museum actively discouraged further axes being sent, and the true number of axes is under-recorded. In another correspondence Mahr chides them for sending mere stones, and tells them to stop wasting their money and his time sending stones unless they are absolutely sure they are axes; he mentions that there is a big pile of stones somewhere in Dublin where all the dubious ones were dumped (MNI File 1939: 158). An interesting horde for future archaeologists. So, the axes had begun to lose their initial appeal by the mid 30’s, and the price dropped down to 5 shillings. Clearly outraged, by the price drop and the lack of interest, in Mahr received the following letter:

Dear Dr. Mahr,

I was shocked to receive the stone axe back and according to your letter you abuse it very badly. There can be no doubt it is not (sic) an axe as I have the decision of experts on the matter. I am afraid my interest is beginning to fade away… Even though you are not an Irishman, or personal owner of the museum I would like you to treat me better. I do not endeavour to undervalue you but as I myself am just as much entitled to be co-operator as anyone else (MNI File 1936:1972).

I think he meant to say that it was an axe, and the last sentence I think possibly means that he has as much a right to the museum as a foreigner has.

Therefore we have a third of Co. Galway’s axes coming from here which is quite a concentration considering the size of the area. As mentioned, nothing else was recovered from the area, except for one clay pipe and a grindstone. I would suggest that a strong possibility as to why nothing else was found has got to do with visibility. The area around Tawin is covered in chert, a lot of it high quality, dark-blue to black chert. With so much background noise of chert as it were it would not be surprising that any worked pieces were over-looked. Moreover, when the axes were found it was in the process of clearing stones, and therefore the only ones they were picking up
were the larger ones they had to clear. The axes tend to jump out at you when walking the ploughed fields, and smaller items would be ignored, especially if you are not actively looking for worked chert. So the material was there, but there was no clear direction in the 1930’s from the National Museum towards walking the fields when so much was under tillage – and there was apparently no mention in the correspondence at the time of looking for material other than axes, such as chert.

From this we can see bluntly some of the biases at play in the distribution of material. As mentioned about the concentration of material around the Tuam area (p.136), if you have a person in the locality out looking for this material and raising an awareness of it, not to mention the value of it, you are going to find greater concentrations in these areas. And of course you have the other side of the coin – after a while the National Museum discouraged the sending of more axes to the museum.

After the initial reporting of the axes in the 1930’s, over the years there have been some more sporadic finds from the area, and since I began my fieldwork in the area, J. Higgins (pers. comm.) has informed me that in past years he has walked ploughed fields in the area, but did not find any material. However, he did not mention this in his recent articles where he mentions the Tawin/Maree collection.

5.3.3.2. Survey

The Tawin/Maree area was chosen as the third case study to be used as a case study to look at the Mesolithic and Mesolithic-Neolithic transition. In this small, well-defined area there were a number of possible early-type megalithic tombs and an abundance of axes some of which Woodman et al. (1999, 78) had suggested may be Mesolithic, but with no other finds reported. As the fieldwalking strategy changed in this area, both will be described in sequence.
Initial fieldwalking Methodology

Initially, the area was to be surveyed in a similar fashion to the previous two case study areas: the difference being that this was a coastal location as opposed to a lakescape. Therefore, the initial phase of fieldwalking involved an intensive, systematic inspection of the eroding cliff faces, which was to be carried out along with an examination of erosion scars in adjoining fields.

Initial fieldwork

The initial survey started on Tawin Island with an inspection of the eroding cliff faces. Here, I immediately found a chert bipolar core eroding out of a low cliff face in Tawin West on the extreme western end of the island. Over the next few hundred metres a further five flakes were found eroding from the cliff face which oscillated from about 1m in height to over 10m in height. I then spent a number of days walking the shores of various townlands carefully inspecting all of the cliff faces, but with no other finds apparent. However, in many places the cliff faces were quite high, making them impossible to inspect. Initially it was decided to fieldwalk various areas inland, examining all erosion scars available. However, as there were ploughed fields available in the area, it was decided to change strategies and to focus on various fields where the land was under tillage, and to walk these areas systematically.

Fig. 5.12. Cliff face finds from Tawin West.
Ploughed fields fieldwalking Methodology

Regional surveys such as the Bally Lough Project (Zvelebil et al. 1992) and the Lough Swilly Survey (Kimball 2000A) have surveyed large areas, with the latter sampling an area of 300 km² (which entailed walking 430ha). The Bally Lough Project states that they “as a rule” (Zvelebil et al. 1992, 201) walked in 5m intervals, and “approximately” 5m intervals” (Zvelebil et al. 1992, 208), suggesting that they had a coverage of 40% for each field walked. However, they do not explicitly state this. The Lough Swilly Survey – designed to compare results with the former – states clearly that they maintained a coverage of 20%, using the traverse and stint method, implying that they invariably covered more than 20% when a possible sizable scatter was found (Kimball 2000A, 15). For both surveys, one of the reasons for the regional scale was to look at differing geomorphological locations, and to sample these for comparative purposes.

However, this thesis’ aims were different – the main aim was to ascertain whether the axes that had been found over the years were the sole type of find in the area or was a more varied range of types there at the time but overlooked; a second aim was to ascertain whether a Mesolithic and an Early Neolithic presence could be detected. As I was the sole surveyor involved, by necessity the area covered would be comparatively small. The parish of Ballynacourty is a little less than 23 km², with a small percentage of the land under tillage. This had previously been a much greater part of farming life here, but has become all but uneconomic in the last generation. It was decided to survey the fields to a greater degree than the previously mentioned surveys – most fields were walked at a coverage of 66.6%, with three walked at 100% coverage as a sample. Arguably, a lesser coverage could have been chosen, and more fields walked, but it was decided to look at a smaller area more carefully as the main issue was lithic visibility as opposed to deducing socio-economic-ecologic positioning in the landscape.

That being said, the choice of fields was also decided on to look at a range of topographical locations, such as hilltops, lowlands, and fields that were directly coastal and estuarine. However, the choice of fields is in the first instance dictated by the land under tillage in any given year. The choice of fields to survey was also decided by first targeting townlands which had previous finds of axes; secondly, two
townlands with no previous finds were chosen to be surveyed: Knockawuddy, and Stradbally West. Stradbally West is a townland in a neighbouring parish which lies to the south across the bay overlooking Ballynacourty Parish (see Pl.5.10); the choice of this townland was also because the field was in an estuarine location, as a good candidate for Mesolithic evidence.

The finds were not located precisely in each field, but rather collected together, with the field divided into separate strips, depending on the size of the field. Any concentrated clusterings of material were to be noted on a sketch map.

In the following descriptions of the fieldwalking, a number of relative terms are used:

**Clustering:** an ambiguous, relative term, used to denote how the lithics were noted in a particular field. A “cluster” of lithics consisted of five or more than finds collected within a diameter of approximately 10m.

**“Moderately stony”, “stony”, “very stony”, “extremely stony”**: again, a relative term depending on what part of the country you are in: the stony, grey fields of Monaghan are different from a stony field in Laois. Here, this term is used to describe the ratio of soil to stone visible – a “stony” field means that stones appear as often as soil, “very stony” means that stones appear to dominate in comparison to the soil”, and “extremely stony” means that the soil is minimal in comparison to the stones. “Moderately stony” means not as stony as “stony”. The description of the stoniness of the field is included as this invariably affects how easy it is to spot lithics.

Each field surveyed was given an individual field number. At the beginning of each of the following descriptions of the fields, the following information is provided: 1) the field number, 2) the field’s owner, 3) size of the field, 4) the survey coverage of the field (i.e. either 66% or 100%), 5) the total finds from the field, 6) the average amount of finds per hectare, and 7) if the field was walked at 100% coverage, an average finds per hectare adjusted to 66% for comparative purposes between all the fields. A second table accompanies each field listing the finds types and quantities per field. A description of the adjoining fields is given, along with the inter-visibility of other fields and landscape features. A complete catalogue of the finds appears in
Appendix 9. Table 5.6. lists the townlands of Ballynacourty Parish with those with previous axe finds indicated.

<table>
<thead>
<tr>
<th>Townland</th>
<th>Ha</th>
<th>Townland</th>
<th>Ha</th>
<th>Townland</th>
<th>Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahapouleen*</td>
<td>75.7</td>
<td>Cregganna Beg</td>
<td>131.1</td>
<td>Marshallspark</td>
<td>10.5</td>
</tr>
<tr>
<td>Ardfry*</td>
<td>58.7</td>
<td>Cregganna More</td>
<td>132.7</td>
<td>Mweenish Island*</td>
<td>21.5</td>
</tr>
<tr>
<td>Ballynacloghy*</td>
<td>149.7</td>
<td>Derry</td>
<td>84.2</td>
<td>Mweenish Island*</td>
<td>21.5</td>
</tr>
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<td>Ballynacourty*</td>
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<td>Garraun Lower*</td>
<td>86.6</td>
<td>Prospecthill*</td>
<td>114.1</td>
</tr>
<tr>
<td>Ballynamanagh East*</td>
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<td>Garraun Upper*</td>
<td>70.4</td>
<td>Seafield</td>
<td>34.4</td>
</tr>
<tr>
<td>Ballynamanagh West*</td>
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<td>Goose Island</td>
<td>1.2</td>
<td>Tawin East*</td>
<td>72.4</td>
</tr>
<tr>
<td>Bush Island</td>
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<td>Inishcorra</td>
<td>17</td>
<td>Tawin West*</td>
<td>87.8</td>
</tr>
<tr>
<td>Carrowmore*</td>
<td>139.6</td>
<td>Kilcaimin</td>
<td>14.6</td>
<td>Tonroe</td>
<td>276</td>
</tr>
<tr>
<td>Coolsraha</td>
<td>69.6</td>
<td>Knockawuddy</td>
<td>27.1</td>
<td>Treanlaur*</td>
<td>72.4</td>
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<td>66.3</td>
<td>Lahardaun</td>
<td>24.7</td>
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</tbody>
</table>

Table 5.6. Townlands of Ballynacourty Parish. *indicates townlands with previous finds of axes.

Survey

Townland: Ballynacloghy

Field number: BCY1

Owner: Eamon Finn

Field size: 0.75 ha

Coverage: 66%

Total finds: 22

Av. finds per ha: 29.33

In Ballynacloghy I walked 2 fields which were 400 m apart. Field BCY1 (Fig. 5.13) was on the crest of a low lying hill (15m to 20m OD), which sloped gently to moderately to the south and southwest; the peak of the hill (25m OD) is 400m to the northeast. To the north, the ploughed field of Prospecthill (PL) was visible, as was the portal tomb which lay in the valley basin between the hills of Ballynacloghy and Prospecthill; to the west, Field 2 of Ballynacloghy (BCY2) was visible, with the Clare
Hills in the background. To the south, the land undulated down to Dunbulcaun Bay into which the Clarinbridge and Kilcolgan Rivers flow. The field was bordered by a road on the south and west sides, and pasture on the north and east. The field was very to extremely stony, with chert in abundance – in places chert was the dominant stone visible. There was no sense of clustering of lithics in the field.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
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<tbody>
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</tr>
<tr>
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<td>Single platform core</td>
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</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>8</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ret/wm blade</td>
<td>1</td>
</tr>
<tr>
<td>Scraper</td>
<td>Convex scraper</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
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<td>5</td>
</tr>
<tr>
<td></td>
<td>BCY2 Total</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 5.8. BCY2 finds.

BCY2 is on the crest of a hill (15m to 19m OD) which undulates gently to the south and more sharply to the north after the boundary wall (Fig. 5.13). To the east, BCY1 of Ballynacloghy is visible, as is the portal tomb and the ploughed field of Prospecthill (PL); to the northwest the house which sits beside the fields of Mweeloon (MW1 & MW2) is visible, and to the west one looks over Tawin Island. To the south the land gently undulates down to Loughnahulla Bay and Duncalbaun Bay beyond. The Clare Hills again dominate the view to the south and southwest. Field BCY2 is bordered on all sides by pasture. The ploughed field was not in furrows, and was moderately stony, with less chert than in previous fields. No sense of clustering.
I walked two adjacent fields in Mweeloon (MW1 & MW2), (both 3m to 10m OD). The top of MW1 was relatively flat, and then quickly sloped moderately to steeply and then levelled out towards the bottom of the field to the sea, sloping west and northwest – the shore was 10 m away (Fig. 5.13). From the top of the field, Tawin Island lay ahead to the west, and the skyline was dominated by the Clare Hills to the southwest, and to the north by Galway City and environs and the Connemara Mountains behind. This sub-rectangular field was bordered to the east by pasture, to the south by a modern house, to the west by marshy intertidal flats, and to the north by Field MW2. Field MW1 was stony, and in places very stony, with chert in abundance. The field had three clusters: in the middle; 10 m from the top of the hill; and on the north end towards the middle.
Field MW2 lay directly to the north of Field MW1 and sloped in a similar fashion, this time to the shore to the northwest (Fig. 5.13). To the east it is bordered by a ploughed field, to the west by intertidal flats, to the west by shoreline, and to the south by Field MW1. This was also stony to very stony with chert in abundance. Field MW2 had a cluster towards the west corner.

**Townland:** Prospecthill

**Field number:** PL

**Owner:** Michael Irwin

**Field size:** 2.3 ha

**Coverage:** 100%

**Total finds:** 175

**Av. finds per ha:** 76.1

**(Adjusted av.):** (50.7)

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<td>Flake</td>
<td>Flake</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>17</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
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</tr>
<tr>
<td></td>
<td>Ret/wm blade</td>
<td>2</td>
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<td></td>
<td>Retouched point</td>
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<td>Scraper</td>
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<td>Convex scraper</td>
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<td>Worked piece</td>
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<td>Debris</td>
<td>31</td>
</tr>
<tr>
<td><strong>PL Total</strong></td>
<td></td>
<td>175</td>
</tr>
</tbody>
</table>

Table 5.11. PL finds.

This field lies on the crest of a low hill (12m to 16m OD) in undulating land, and slopes gently westwards, and more steeply to the north and south (Fig. 5.13). From this field one overlooks, 200 m to the south, a portal tomb in the valley basin, with the high tide mark about 200 m from the tomb. The two fields of Ballynacloghy (BCY1 & BCY2) are visible to the south and southwest. To the north the shoreline is 500 m away. Looking south and west, the skyline is dominated by the Clare hills across the bay. This sub-rectangular field has a ruined farmhouse in the southwest corner; the southern border of the field is defined by a road – the other bordering fields are pasture, with a modern house in the field to the west. The field was stony to very stony with chert in abundance. The only sense of clustering in this field was on the south slope 20 m from east wall, and 30 m from south wall in an area about 30 m by 30 m. Otherwise it appeared as an even spread over the field.
Fig. 5.13. Highlighted fields: MW1, MW2, PL, BCY1, BCY2.

Townland: Ballynacourty

Field number: BTY1

Owner: David Ford

Field size: 2 ha

Coverage: 66%

Total finds: 35

Av. finds per ha: 17.5

<table>
<thead>
<tr>
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</tr>
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<td>Multiplatform core</td>
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<tr>
<td></td>
<td>Single platform core</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>7</td>
</tr>
<tr>
<td>Blade</td>
<td>Ret/wm blade</td>
<td>1</td>
</tr>
<tr>
<td>Scraper</td>
<td>Concave scraper</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Scraper</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
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<tr>
<td>BTY1 Total</td>
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</tbody>
</table>

Table 5.12. BTY1 finds.

The two fields in Ballynacourty (BTY1 & BTY2) are 1 km apart. Field BTY1 is a long, thin rectangular field (13m to 18m OD), which undulates gently, sloping north, then rising, then sloping more sharply north again (Fig. 5.14). The field of Knockawuddy (KW) is visible to the north. The field is bordered to the north by a
road, and by pasture on the other three sides. There is a standing stone in the adjacent field to the west. The first 30m of the northern end of the field turned up lithics, with nothing for another 100m; a second collection continued sporadically for the next 70m. The field continued for another 300m northwards but due to bad weather I did not finish the field. In all the field would have been 5 ha, but I walked 2 ha of this. The field was stony with a lot of chert.

**Townland:** Ballynacourty

**Field number:** BTY1

**Owner:** David Ford

**Field size:** 2.5 ha

**Coverage:** 66%

**Total finds:** 60

**Av. finds per ha:** 24

<table>
<thead>
<tr>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axe</td>
<td>1</td>
</tr>
<tr>
<td>Bipolar core</td>
<td>1</td>
</tr>
<tr>
<td>Dual alternate core</td>
<td>1</td>
</tr>
<tr>
<td>Dual opposed core</td>
<td>1</td>
</tr>
<tr>
<td>Multiplatform core</td>
<td>2</td>
</tr>
<tr>
<td>Single platform core</td>
<td>2</td>
</tr>
<tr>
<td>Flake</td>
<td>25</td>
</tr>
<tr>
<td>Ret/wm flake</td>
<td>5</td>
</tr>
<tr>
<td>Ret/wm blade</td>
<td>1</td>
</tr>
<tr>
<td>Convex scraper</td>
<td>5</td>
</tr>
<tr>
<td>Scraper</td>
<td>4</td>
</tr>
<tr>
<td>Worked piece</td>
<td>7</td>
</tr>
<tr>
<td>Debris</td>
<td>5</td>
</tr>
<tr>
<td><strong>BTY2 Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**Table 5.13. BTY2 finds.**

Field BTY2 is squarish field, with a bulge on the west side and with a farm building in the northeast corner (Fig. 5.14). The field (9m to 20m OD) is steeply to moderately to gently undulating southwards, and ends at the cliff on the shore of Duncalbaun Bay. Across the Bay to the south the fields of Stradbally West (SW1-3) are visible, and to the east the estuaries of the Kilcolgan and Clarinbridge Rivers, with the Clare Hills to the southwest. The field is surrounded by pasture, except for the south which is the sea. Along the southern border a shell midden (predominantly, it would seem, oyster) is being eroded out of the cliff face. This is a registered monument (GA103:38). The shell midden is at places approx. 60cm thick, and it lies approx. 80-90cm below the topsoil at the point where I checked it. At the bottom of the ploughed field some shell is apparent, but it would seem that the ploughing has either not gone deep enough to disturb it, or else the ploughing has not gone close enough to the edge. It is unclear how far in the midden extends, or indeed how much has been eroded away. According to the SMR map, the midden extends for c. 600m along the cliff, but as ivy etc. covers much of it now, it was unclear as to its extent.
**Townland:** Ballynamanagh West

**Field number:** BW

**Owner:** James Grealy

**Field size:** 1 ha

**Coverage:** 66%

**Total finds:** 16

**Av. finds per ha:** 16

The field in Ballynamanagh West (10m OD) is gently undulating, sloping northwest, with a well in the northwest corner (Fig. 5.14). From the south end one looks over fields towards Dunbulcaun Bay and Stradbally to the southwest, with the Clare Hills on the horizon. To the west and north the land undulates towards the west end of the parish. The field is surrounded by pasture and also tillage fields to the north, with a stream a short distance to the east.

---

**Townland:** Knockawuddy

**Field number:** KW

**Owner:** James Grealy

**Field size:** 2 ha

**Coverage:** 66%

**Total finds:** 28

**Av. finds per ha:** 14

This field (10m to 23m OD) sloped moderately to steeply to the south, and levelled out towards the end of the field (Fig. 5.14). To the south, Field BTY1 of Ballynacourty is visible on the horizon, with the Clare Hills in the background. The north of the field is bordered by a road, to the east a modern house is in the field, to the west is pasture, and to the south is another ploughed field. The field was stony, with a lot of the stones having a dark greyish-blackish, pungent residue on them. Chert is not as common as in other fields.
Fig. 5.14. Highlighted fields: KW, BW, BTY1, BTY2, SW1, SW2, SW3.

**Townland:** Tawin West

**Field number:** TW1

**Owner:** Paddy Cunniffe

**Field size:** 1.2 ha

**Coverage:** 100%

**Total finds:** 28

**Av. finds per ha:** 23.3

(Adjusted av.): (15.5)

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>15</td>
</tr>
<tr>
<td>Ret/wm flake</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>1</td>
</tr>
<tr>
<td>Scraper</td>
<td>Concave scraper</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Convex scraper</td>
<td>3</td>
</tr>
<tr>
<td>Worked piece</td>
<td>Worked piece</td>
<td>1</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TW1 Total</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 5.16. TW1 finds.

I walked two fields (TW1 & TW3) (both 1m to 3m OD), which were 60 m from each other. Field TW1 was a long, narrow rectangular field, and was flat to gently undulating, and terminated on the southern end close at the intertidal flats (Fig.5.15). Between TW1 and TW3 was a ploughed field (TW2), and a lane to the north.
separated them from more pasture. The skyline was dominated by the Clare Hills to the south. The field was stony with chert in abundance. No sense of clustering.

Note: TW1 was initially walked by Stefan Bergh, Archaeology Dept., NUI, Galway, and myself during the first season, this has been labelled TW1(1). We walked one furrow each and collected 18 finds. TW2 (0.5 ha) was also walked that day, again a furrow each, collecting 20 finds.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Bipolar core</td>
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</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>1</td>
</tr>
<tr>
<td>Worked piece</td>
<td>Worked piece</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>TW1(1) Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 5.17. TW1(1) finds.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>4</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>1</td>
</tr>
<tr>
<td>Worked piece</td>
<td>Worked piece</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TW2 Total</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 5.18. TW2 finds.

Townland: Tawin West

Field number: TW3

Owner: Paddy Cunniffe

Field size: 0.5 ha

Coverage: 100%

Total finds: 38

Av. finds per ha: 76

(Adjusted av.): (50.6)

Field TW3 was wider and shorter than TW1, and was flat to gently undulating, and terminated on the southern end close at the intertidal flats. Between these fields was a ploughed field (TW2). The skyline was dominated by the Clare Hills to the south. Both fields were stony with chert in abundance. No sense of clustering.
Townland: Treanlaur

Field number: TR1

Owner: Eamon Finn

Field size: 1.2 ha

Coverage: 66%

Total finds: 14

Av. finds per ha: 11.6

Table 5.20. TR1 finds.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Single platform core</td>
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<tr>
<td>Flake</td>
<td>Flake</td>
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</tr>
<tr>
<td>Ret/wm flake</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Scraper</td>
<td>Convex scraper</td>
<td>1</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TR1 Total</td>
<td>14</td>
</tr>
</tbody>
</table>

The two fields in Treanlaur (TR1 & TR2) are 100m apart. Field TR1 is a sub-rectangular field on a gently to moderately undulating south slope (10m to 13m OD) (Fig. 5.16). On all sides it is bordered by pasture, with a modern house in the field to the east and a farmhouse to the southwest. The land slopes gently towards a small bay.
to the south. TR1 was ploughed roughly, with the sod barely turned in places, with patches unturned altogether. The ground was stony, with abundant chert, slightly different to the black siliceous chert in other fields visited. No sense of clustering.

**Townland:** Treanlaur

**Field number:** TR2

**Owner:** Eamon Finn

**Field size:** 2 ha

**Coverage:** 66%

**Total finds:** 49

**Av. finds per ha:** 24.5

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
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</thead>
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<td>Arrowhead</td>
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<tr>
<td>Core</td>
<td>Bipolar core</td>
<td>1</td>
</tr>
<tr>
<td>Core</td>
<td>Core fragment</td>
<td>1</td>
</tr>
<tr>
<td>Core</td>
<td>Multiplatform core</td>
<td>1</td>
</tr>
<tr>
<td>Core</td>
<td>Single platform core</td>
<td>2</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>9</td>
</tr>
<tr>
<td>Scraper</td>
<td>Convex scraper</td>
<td>5</td>
</tr>
<tr>
<td>Scraper</td>
<td>Scraper</td>
<td>3</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>TR2 Total</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 5.21. TR2 finds.

Field TR2 is a trapezoidal-shaped field (18m to 22m OD), sitting on the crest of a flat-topped hill (22.15m OD) overlooking Field TR1 which lies to the south (Fig. 5.16). Much of the field, which sits on the crest of the hill, is flat, and at the eastern end the field slopes steeply southwards; from the middle of the field, the field slopes gently westwards. The crest of the hill gives views eastwards across the undulating lands towards the central lowlands of Ireland, to the north over the bay to Galway City, to the west and southwest over the bay to Clare, and to the south, the destroyed megaliths of Prospecthill and over the Parish of Ballynacourty in general. The ploughing was rough here, with some sod barely turned. A clear cluster of material was apparent in the southwest corner, about 25-30m from the extreme southwest corner, in an area of steep sloping.
Fig. 5.16. Highlighted fields: TR1, TR2.

**Table 5.22. SW1 finds.**

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Bipolar core</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dual opposed core</td>
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<tr>
<td></td>
<td>Single platform core</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>2</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>1</td>
</tr>
<tr>
<td>Worked piece</td>
<td>Worked piece</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>7</td>
</tr>
<tr>
<td><strong>SW1 Total</strong></td>
<td></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

These two adjacent fields (SW1 & SW2) (both 7m to 13m OD) lie across Duncalbaun Bay from the Parish of Ballynacourty, close to the estuary of the Kilcolgan River. Field SW1 slopes moderately to the sea to the north (Fig. 5.14). To the south, the field is bordered by a c. 4 ha ploughed field (SW3) which sits on the crest of a wide flat-topped hill which has a cairn (modern?) in the middle of it. To the west lies more pasture, with Galway Bay and the Clare Hills beyond. To the north, the field is bordered by the sea, and across the Duncalbaun Bay, Field BTY2 of
Ballynacourty is visible, and to the east, the estuaries of the Clarinbridge and Kilcolgan Rivers. Field SW1 is bordered to the east by Field SW2. Field SW1 was stony, with a lot of chert. No sense of clustering.

**Townland:** Stradbally West

**Field number:** SW2

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
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</tr>
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<tbody>
<tr>
<td>Core</td>
<td>Core fragment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Multiplatform core</td>
<td>4</td>
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<tr>
<td></td>
<td>Single platform core</td>
<td>2</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>9</td>
</tr>
<tr>
<td>Worked piece</td>
<td>Worked piece</td>
<td>3</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>6</td>
</tr>
</tbody>
</table>

**Field size:** 3 ha

**Coverage:** 66%

**Total finds:** 39

**Av. finds per ha:** 13

Table 5.23. SW2 finds

Field SW2 (Fig. 5.14) slopes gently to moderately north and east, with similar views, and is bordered to the south by pasture, to the north by a strip of land adjacent to the sea, to the west by field SW1 and to the east by pasture. Field SW2 was stony, to very stony, with a lot of chert as well. No sense of clustering.

**Townland:** Stradbally West

**Field number:** SW3

<table>
<thead>
<tr>
<th>Type</th>
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</tr>
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<tbody>
<tr>
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<td>Bipolar core</td>
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</tr>
<tr>
<td></td>
<td>Dual opposed core</td>
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<tr>
<td>Flake</td>
<td>Flake</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>2</td>
</tr>
<tr>
<td>Scraper</td>
<td>Convex scraper</td>
<td>1</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total finds:** 8

Table 5.24. SW3 finds.

This field was at the time of survey covered in a thin spread of slurry, making it impossible to survey (Fig. 5.14). After my survey, Carleton Jones, Archaeology Dept. NUI,Galway, who lives in the area, presented me with some lithics he found in SW3 while out walking. He also found some lithics in SW2, and I have simply added these to my finds collection for that field.
Pl. 5.11. C05:1:246-59; retouched flakes Mweeloon (MW1).

Pl. 5.12. Stone walls with chert, Tawin Island.
Pl. 5.13. C05:1:502; retouched point Prospecthill (PL).

Pl. 5.14. C05:1:776; arrowhead Treanlaur (TR2).

Pl. 5.15. C05:1:786; scraper Treanlaur (TR2).

Pl. 5.16. C05:1:18; scraper Ballynacloghy (BCY1).

Pl. 5.17. C05:1:129; scraper Ballynacourty (BTY2).

Pl. 5.18. C05:1:198; bipolar core Mweeloon (MW1).

Pl. 5.19. C05:1:150; multiplatform core Ballynamanagh West (BW).
5.3.3.3. Discussion

In total 24.4 ha were surveyed, with 795 lithics collected (Appendix 9). A further
six were collected in the initial survey of the eroding cliffs along the coast. One
diagnostic Later Mesolithic retouched point was recovered in Prospecthill (PL); a few
other flakes may well be Later Mesolithic, but are not diagnostic. The lithics do not
suggest much signs of Early or Middle Neolithic activity. None of Woodman’s early-
type Neolithic lithics are present, and the classic Middle Neolithic Irish hollow scraper
is conspicuous by its absence. The assemblage is broadly comparable with an
assemblage excavated a few miles to the northeast at Oranmore; here Finlay (n.d.)
suggested a Late Neolithic/Early Bronze Age date for the material. Jones,
Archaeology Dept., NUI, Galway, had a brief look at a sample of the material
collected during this survey, and suggested that it was comparable to the Late
Neolithic/Early Bronze Age lithics he has excavated from Roughan Hill in Co. Clare
(Jones, pers. comm.).

The lithics were almost exclusively chert, apart for one flint scraper, one possible
quartz core, and 3 shale axes. The chert used was for the most part a high quality dark
blue to black chert. This chert can be seen imbedded in the limestone in the field
walls in the area, and also in many places on the beach, especially the shores of Tawin
Island. Some of the flakes exhibited signs that material from the beach may have been
used, but it would seem likely that the majority was not. What was taken as signs of
beach chert being used may also indicate the use of glacially rolled chunks of chert.
Whether the other material had been quarried from an outcrop in the area is
unanswered. Our understandings of lithic quarries are weak at present, with the first
(non-axe) Neolithic quarry site only recently being identified. This site is on the
slopes of Knocknarea, Co. Sligo (Bergh, pers. comm.).

The average finds per ha was 29 at 66.6% coverage. In comparison, the Lough
Swilly Survey had an average of 5 finds per ha at an adjusted rate of 66.6% coverage.
The lowest average per ha was 11.6 in Treanlaur (TR1) and 12 in Ballynamanagh
West (BW), while the fields with the highest number per ha were the adjoining fields
of Mweeloon which had 91 (MW1) and 76.4 per ha (MW2).
From Fig. 5.17 you can see that almost half the finds were unmodified flakes, with the ratio of flakes to retouch/wearmark flakes being almost 3:1. The majority of the flakes were small, ranging between 2 and 3 cm long; while the retouched flakes were similar in length, a larger ratio of them tended to be over 3 cm in length in comparison
to the unmodified flakes. The assemblage is dominated by flakes, with only 15 blades present, of which 33% had retouch/wearmarks. The three main core types were single platform, multiplatform and bipolar cores (Fig. 5.18). The technique used was a hard hammer technique, with no signs of platform preparation on the flakes– all the platforms were flat, with no signs of facetting.

The two fields in Mweeloon showed the greatest concentration of material. The graph below (Fig. 5.19) highlights that while MW1 had slightly less cores it had more debris, and while it had more flakes than MW2 it had less retouched flakes, scrapers, and worked pieces. As these fields were adjacent the assemblages from both could probably be considered as a single group.

![Mweeloon fields MW1 & MW2](image)

*Fig. 5.19. Mweeloon fields MW1 & MW2.*
Fig. 5.20 considers the two Mweeloon fields (MW1 & MW2) as a unit, which together have an average of 81 finds per ha. Fig. 5.21 shows the lithics from Prospecthill (PL), a field slightly larger (2.3 ha) than the Mweeloon unit (2.1 ha), and surveyed at 100% coverage, with an adjusted average of 51 finds per ha. What is apparent is that while the Mweeloon has slightly more cores than Prospecthill,
Prospecthill has a far greater amount of unmodified flakes, and slightly more debris. It also has a greater range of types, such as retouch/wear mark blades, concave scrapers, and axes, as well as the Later Mesolithic retouched point. However this wider range of types may be down to the fact that this field was walked at 100%, therefore creating a better chance of selecting the range in the field at the time.

This survey of the ploughed fields in the Tawin/Maree area set out to answer two questions:

1) Was there more material than axes in the landscape?
2) Was there any diagnostic Mesolithic and Early Neolithic material?

The first question can be answered with an unequivocal yes. In all fields surveyed, prehistoric activity was in evidence, with some fields showing extensive evidence. The second question is more equivocal. On the one hand a diagnostic Later Mesolithic retouched point was found, highlighting a Mesolithic presence, but this was a single find from a number of fields in different locations. The fields of Stradbally West were chosen as probable good candidates for Later Mesolithic activity, but these did not return any evidence of such. These fields were within metres of the sea, and close to the estuary of two rivers. However, in the Mesolithic and Early Neolithic it would seem likely that a lower relative sea level would entail that this was not an estuarine locale, but riverine. In terms of the Early Neolithic presence, no material was found indicating a presence in the Early of Middle Neolithic. The difficulty is of course that the majority of the material is undiagnostic flakes, with many of the scrapers being undiagnostic as well.

From this a number of questions can be asked. How are we to understand the early-type monuments in the landscape here, if the lithics do not appear early? Are these early-type monuments not as early as suspected? How can the chronologies of monuments and lithics be understood together? Is the apparent Late Neolithic appearance of the assemblage masking a much older history of Neolithic activity in the area? Were the fields chosen representative of the prehistoric use of the landscape in the Mesolithic and Early Neolithic, or did the survey miss out on key evidence.
5.4. Further fieldwork

The fieldwork in the three case study areas was undertaken along with further fieldwork investigating areas with previous Mesolithic finds, to assess whether they were conducive for further more intensive fieldwalking (Fig. 5.2). Two areas with no previous Mesolithic finds were also fieldwalked. Lough Inchquin, Co. Clare was surveyed by Lynch (2002); however, he had recovered no finds and appeared not to have surveyed the entire lake so it was decided to fieldwalk this area, as well as another nearby lake, Lough Atedaun. A section of Lough Cullin, Co. Mayo, was also surveyed. Warren (pers. comm.) informed me that a UCD student had found some possible lithics on Lough Conn, which is connected to Lough Cullin; it was decided to fieldwalk a section of Lough Cullin to assess the conditions of the lakeshore.

What follows is a description of the fieldwalking undertaken in each area. In these areas a full survey was not undertaken as in the previous case studies. In other words, adjacent erosion scars were not investigated, but rather the survey was limited to an intensive survey of the findspots, and lakeshores. The extent walked for each area is outlined in the individual area’s descriptions below.

5.4.1. Lough Allen, Co.’s Leitrim & Roscommon

After Lough Gara, the biggest grouping of Mesolithic material in the west of Ireland comes from Lough Allen, Co.’s Leitrim and Roscommon. In the literature two Lough Allen findspots are usually mentioned (e.g. Fredengren 2002, 114; Gibbons et al. 2004, 5; O’Sullivan 1998, 55), while there are in fact six findspots recorded in the museum archives. Similarly to Lough Gara, Lough Allen’s lake level was dropped. Raftery, who surveyed Lough Gara at the time, also did a quick survey of Lough Allen and noted 20 examples of the crannogs or platforms, what were described as metalling sites (O’Sullivan 1998, 54). Raftery did not appear to examine these sites in any detail, and it is uncertain as to whether any lithics were apparent on these as on some in Lough Gara.
Today, the low level of the lake exposes large areas of submerged forests, presumably of early prehistoric date. The tree trunks from this submerged forest are visible at nearly all spots of the lake visited, except where the shore is stony. In a number of places, possible traces of stone platforms are visible, but these did not appear to contain any lithics. In the southwest section of the lake, a cut away bog shows the growth of trees at various levels in the bog’s history.

The initial fieldwork agenda to be carried out at Lough Allen was to visit the old findspots to ascertain whether more material was apparent. The first two days of fieldwalking was undertaken with the help of Dag Hammar. With positive results it was decided to extend the survey of the lake by a few days to include stretches of the shore with no previous finds. Only the shoreline itself was fieldwalked, with no examination of the surrounding fields, except when they were passed through for access, at which time any erosion scars were checked. It is important to also note that not all of the shorelines walked were examined fully. In places the summer water level exposes up to 140m of shoreline from the winter level, making it impossible to survey these areas fully with the limited time available. The strategy in these places was to either crisscross an area to search both the lower and upper shoreline, or else to look out for patches that might hold material. This therefore is a random, ad hoc random strategy, done to quickly scan the shoreline. However, this unsystematic approach is justifiable as this survey should be taken as a preliminary research guide for further more extensive and intensive survey work of the area.

**Note:** For this survey a scatter was considered to be 2 or more lithics within 10m of each other. This is of course an arbitrary decision on what constitutes a scatter, and is used in order to simplify the grouping of the material as opposed to implying a close spatial relationship between them.
Fig. 5.22. Lough Allen townlands.
**Annagh Lower**

**Previous finds/research:**
Mitchell found a number of lithics on the river bed of the Shannon during a very dry summer in 1968 (MNI 1984: 194-7) (For all previous Lough Allen finds see Appendix 10). These were a fragment of a flint core, a retouched leaf-shaped flake, and three flakes. Besides the flint, the rest may be chert. It is unclear where the exact findspot was as Mitchell only provenanced these lithics to the townland.

**Survey:**
As the river was high no other lithics were noted along the stretch of river walked (Fig. 5.23).

**Kilgarriff**

**Previous Research/finds:** No previous finds

**Survey:**
A short stretch of the east bank of the River Shannon was walked along Annagh Lower, giving access to Kilgarriff, and the top of Lough Allen (Fig. 5.23). The summer level of the lake exposed a flat, sandy, gravelly, muddy expanse of a few ha – evidence of submerged tree trunks were visible throughout. A few lithics were found at the beginning of the lake near the river, with scattered spots of fire cracked stones, plus an old trackway/pier also apparent (for all Lough Allen survey finds, see Appendix 11). A small wooded island lies a short distance due south.

<table>
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<th>Type</th>
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<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Butt trimmed flake</td>
<td>Volcanic?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Flake</td>
<td>Chert</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>Flint</td>
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<td>Blade</td>
<td>Blade</td>
<td>Chert</td>
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<td></td>
<td></td>
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</tr>
<tr>
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<td>Worked piece</td>
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<td><strong>Kilgarriff</strong></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
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</table>

*Table 5.25. Kilgarriff finds.*

181
Fahy

Previous Research/finds: No previous finds

Survey:

On the northeast shore, we quickly checked the area at the north mouth of the river, by the graveyard (Fig. 5.24). This was a large expanse of a stony, gravelly shoreline. Two flakes were from further north near the grassy higher, winter shoreline. As these finds gave a positive indication of prehistoric activity in the area, the area was not examined more extensively.

<table>
<thead>
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<tr>
<td>Fahy</td>
<td>Total</td>
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<td>2</td>
</tr>
</tbody>
</table>

Table 5.26. Fahy finds.
Cleighran More & Cornamuck

Previous Research/finds: No previous finds

Survey:

A few km south of Fahy a c. 2km stretch of shoreline of two townlands was surveyed (Fig. 5.24). However, this area produced no finds: however a possible stone platform was noted in Cornamuck. Much of this stretch of shore was rocky.

Fig. 5.24. Fahy finds, with Cleighran More, Cornamuck.
Cormongan

Previous research/finds:
A group consisting of 2 cores, 1 flake axe, 1 retouched flake, and 6 flakes were found on the shore (MNI 1978: 48-57). The lithics are heavily patinated to a chocolate brown colour, making the identification of the material difficult. Of the lithics that could be identified these were tuff, with one possible chert.

Survey:
The survey started at the pier at the southern end of the townland (Fig. 5.25). At this point the shoreline was a gravelly stretch, with the lower levels exposing 30-40m of shoreline. The first section to the bend at Guberusheen had frequent isolated finds, with a possible platform feature consisting of a circular spread of white stones a few metres in diameter. At the bend at Guberrusheen, there was a break in the finds for c. 100m, with more isolated finds starting up again, and with 1 scatter of 4 lithics found close to the water.

The isolated finds continued until reaching the sandy stretch of the shore. Here, the low water level exposed a shore of c. 50-60m. At this point – close to the outlet of a small stream with a sand bank and cluster of willow trees – was the densest concentration of material. This outlet was overlooked from the southeast by a bluff. Here, 51 of the 92 finds from the townland were collected. However, one reason for this density in collecting is that a possible Early Mesolithic core axe and some possible Early Mesolithic cores were collected, leading us to investigate the area closely for microliths. That being said, this area nevertheless a clear concentration of material.
<table>
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<tr>
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<td>Dual opposed core</td>
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<td></td>
<td>Chert</td>
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<tr>
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<td>Chert</td>
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<td>Single platform core</td>
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<td>Blade</td>
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</tr>
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<td>Butt trimmed blade</td>
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</tr>
<tr>
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<td>Scraper</td>
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<td>?</td>
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</tr>
<tr>
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<td></td>
<td>Siltstone</td>
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</tr>
</tbody>
</table>

**Cormongan**  
**Grand Total** 92

Table 5.27. Cormongan finds.
Cornashamsoge

**Previous research/finds:** No previous finds.

**Survey:**

The shoreline of Cornashamsoge is a southern continuation of the shoreline from Cormongan (Fig. 5.25). Two scatters were from close to the start of the survey, with an isolated find c. 80m away, and another c. 200m away. The shoreline then became rocky and there was a break of c. 500m until the next finds. This next group was a series of six scatters close to each other, with the last being close to a small stream.

After this small stream, the shoreline opened up to a large boggy, gravely expanse which connected to a rocky winter island. Here, two scatters and four isolated finds were spread out over a large area.

<table>
<thead>
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<tr>
<td></td>
<td></td>
<td>Chert?</td>
<td>1</td>
</tr>
<tr>
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<td>Multiplatform core</td>
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</tr>
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<td>Flint</td>
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<td>Non-carb. chert</td>
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<td></td>
<td>Tuff</td>
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<td>Single platform core</td>
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<td>Chert?</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td>Tuff</td>
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</tr>
<tr>
<td></td>
<td>Butt trimmed flake</td>
<td>Flint</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>Chert?</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>Siltstone</td>
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</tbody>
</table>

**Cornashamsoge**

Table 5.28. Cornashamsoge finds.
Fig. 5.25. Cormongan and Cornashamsoge finds.
Mahanagh

Previous research/finds:
A flake was found on the lake bed near the shore by fishermen (MNI 1942:1). This was the first reported find from Lough Allen. In the Lough Gara collection a number of items are also provenanced to Lough Allen: Raftery found one worked stone in Mahanagh (MNI E20:3758), while another flake is provenanced to Lough Allen, but no townland is mentioned (MNI E20:3676). A collection of 1 distally trimmed flake, 2 butt trimmed flakes, 17 flakes, and 2 stones was handed to Raftery by the Shannon navigation workers (E20:3824): while this is not provenanced to a townland it would seem that this material came from beside Mahanagh as this is where they were working. The material of these lithics is unidentified.

Survey:

The survey started at the outlet of the Shannon River on the east bank at the weir (Fig. 5.26). Here, there is a small peninsula with the Shannon running along the west, and Lough Allen continuing southwards on the east. The peninsula is a low hill of c. 150 m wide, with the shoreline stony and gravelly. The beginning of the survey found a few small pieces, up to an area with fire cracked rocks and charcoal. After the fire cracked rocks area, began a dense cluster of worked chert, with hundreds of lithics. A few sample pieces were collected. At this point the lithics can be seen to be eroding out of the grassy winter level shoreline.

The lithic scatter was less dense once we rounded the bend of the peninsula, but with a definite sense of clustering. On the east side of the peninsula, the quantity of lithics picked up with scattered smaller clusters, but these were not as great as on the west side. The scatters picked up again in quantity and density towards the end of the peninsula; these continued for a few hundred metres with the distance between the scatters becoming greater. After the peninsula the fields close to the shoreline become boggier and flatter. A possible stone platform was noted on the southwest end of the survey.
<table>
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<th>Type</th>
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<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

Table 5.29. Mahanagh finds.
**Derrynadoey**

**Previous research/finds:** No previous finds.

**Survey:**

Derrynadoey is on the western shore of the Shannon and Allen, opposite to Mahanagh (Fig. 5.26.). Here, the land is low lying and boggy beside the river and start of the lake, and northwards the townland juts out eastwards into the lake forming a narrow, humped, tree covered peninsula. The first c. 500m surveyed produced no finds, with two scatters close by near a rise in the land at the southwestern start of the peninsula. There was another break of c. 600m until the next series of an isolated find and two scatters, one of which was on the southeastern tip of the peninsula.

Around the bend of the peninsula the shore was rocky, with no finds for c. 600m until an isolated find which was c. 80m due north of the previous series on the opposite side of the peninsula. The remaining c. 800m of shoreline produced no finds.

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</table>

*Table 5.30. Derrynadoey finds.*
Fig. 5.26. Mahanagh and Derrynadoey finds.
Curraghs South & Mullaghfadda

Previous research/finds: Two large pick-like implements were found on the shoreline of Curraghs South (MNI 1968:226-227).

Survey:

The shorelines of the adjacent townlands of Curraghs South and Mullaghfadda on the west shore of Lough Allen were walked together (Fig. 5.27). For the most part the shoreline was rocky, with a gravelly, sandy, boggy patch towards to the south of Mullaghfadda. In all c. 2km of the shoreline was walked with only two isolated finds noted, with both of these in Mullaghfadda.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Multiplatform core</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>Tuff</td>
<td>1</td>
</tr>
<tr>
<td>Mullaghfadda</td>
<td>Total</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5.31. Mullaghfadda finds.

Derrynahinch

Previous research/finds: No previous finds.

Survey:

From the harbour we walked southwest towards Corry Island – connected to the mainland during the summer – with no finds until we neared the island (Fig. 5.27). On the island there was a circle of stones which produced two finds, with three more close by. Another scatter was to the west on the southwest shore of the island.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Dual opposed core</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Flake</td>
<td>Chert</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>Chert</td>
<td>2</td>
</tr>
<tr>
<td>Pick</td>
<td>Pick</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td>Derrynahinch</td>
<td>Total</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Table 5.32. Derrynahinch finds.
Fig. 5.27. Derrynahinch and Mullaghfadda finds, and Curraghs South.
Drummans Lower & Drummans Upper

Previous research/finds: A blade was found on the dried lake bed of Drummans Lower (MNI 1984:110), and Mitchell collected in the same townland 41 lithics consisting of 2 cores, 1 butt trimmed flake and flakes and blades, of which 10 are retouched (E114:3-34). Mitchell only provenanced this material to the townland. The material used was tuff, chert, and flint, with most of them not identifiable.

Survey:

Drummans Lower and Drummans Upper are on the northwestern corner of Lough Allen, with the Owengar River’s inlet to the lake forming the northern boundary of Drummans Lower (Fig. 5.28). Drummans Island is connected to the mainland during the summer by a grassy, gravelly strip, creating a peninsula of the wooded island.

The shore at the top of the lake was a gravelly, muddy expanse, with the two largest scatters in the area starting c. 100m southeast from the river mouth. Further scatters and isolated finds were collected close to the water, along the north side of the seasonal peninsula. The perimeter of the peninsula (island) was walked with no finds for c. 500m until we came back on the south side close to the previous finds. The southern shore was then walked with no finds for c. 400m. At this point the summer shore is a c. 90m muddy expanse. A further c. 1.3km of shoreline was walked southwards with no finds, with much of this shoreline rocky.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
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<td>Shale</td>
<td>1</td>
</tr>
<tr>
<td>Core</td>
<td>Core fragment</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Single platform core</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>?</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chert</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flint?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuff</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ret/wm flake</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>?</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chert</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flint</td>
<td>1</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td>Pebble</td>
<td>Pebble</td>
<td>Quartz</td>
<td>1</td>
</tr>
<tr>
<td>Drummans Lr.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Table 5.33. Drummans Lr. finds.
Derrinvorey Lower

Previous research/finds: No previous finds

Survey:

Derrinvorey Lower is the western portion of Lough Allen’s northern shore, with Drummans Lower adjacent to the south, separated by the Owengar River (Fig. 5.28). Here, the exposed shore was at a maximum c. 140m wide, narrowing in places to c. 50m. This shore was rocky in pockets, but mostly muddy, and sandy and gravely towards the higher shoreline. The first finds were three isolated finds from a stony patch towards the higher shoreline near the car park. The next c. 1km of shore produced no finds. The next group produced five isolated finds and one scatter. These were all found within c. 70m of each other, and were c. 130m from the river mouth.

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axe</td>
<td>Axe</td>
<td>Basalt</td>
<td>1</td>
</tr>
<tr>
<td>Core</td>
<td>Dual opposed core</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>Chert</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flint</td>
<td>1</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>?</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flint</td>
<td>1</td>
</tr>
<tr>
<td><strong>Derrinvorey Lr.</strong></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Table 5.34. Derrinvorey Lr. finds.

Ross More & Ross Beg Glebe

Previous research/finds: No previous finds. Woodman has informed me that he and Fredengren walked a stretch of this shore, but with no lithics found (pers. comm.).

Survey:

These adjoining townlands are on the opposite bank of the Shannon and Allen to Kilgariff (Fig. 5.23). A c. 2.5km stretch of the shore was walked, but with no finds. Approximately half of the shoreline is rocky.
Fig. 5.28. Drummans Lr. and Derrinvorey finds, and Drummans Upper.
Pl. 5.20. C05:1:922 Cormongan, single platform core.


Pl. 5.22. C05:1:1034 Mahanagh, dual opposed core.

Pl. 5.23. C05:1:1007 Mahanagh, single platform core.

Pl. 5.24. C05:1:1032 Mahanagh, single platform core.

Pl. 5.25. C05:1:965 Cornashamsoge, single platform core.

Pl. 5.27. C05:1:918,945,954 Cormongan, blades.

Pl. 5.28. C05:1:985 Cormongan, blade.

Pl. 5.29. C05:1:968 Cornashamsoge, butt trimmed flake.

Pl. 5.30. C05:1:1085 Mahanagh, ret/wm blade.
Pl. 5.31. C05:1:1075,1076,1081,1083 Mahanagh, blades.

Pl. 5.32. C05:1:872 Cormongan, core axe.

Pl. 5.33. C05:1:1110,1151,1152 Mahanagh, flakes.
Discussion

The survey of Lough Allen collected a total of 436 lithics along eleven stretches of the lake, with two of these stretches producing no finds. 51 of these finds were isolated finds, with a further 46 scatters recorded. Half of these scatters were scatters of two to three lithics, while a quarter were scatters of four to nine. The largest scatters were found in Mahanagh. For some of these scatters only a sample of the lithics was collected due to the extensive nature of them. While the overall count for Derrynadoey, beside Mahanagh, was not great, the size of the scatters there would seem more extensive than in other areas surveyed.

Areas of rocky shoreline tended to produce no finds – whether this is because it is harder to see lithics in between the rocks or whether the lithics could be found higher up and parallel to the rocky shoreline, under what is now grass or trees and bushes, is uncertain, but would seem to be a distinct pattern.

The lack of finds from Ross More and Ross Beg Glebe is peculiar as, while half the shore was rocky, the remainder is the type of shore where other lithics have been found – muddy, gravelly, sandy – including finds from Kilgariff, which is just across the river. Therefore this blank spot in finds stands out, all the more as this area had previously been walked by Woodman and Fredengren with no finds, suggesting a pattern beyond bad luck on the day.

In comparison to the lithics collected during the Tawin/Maree survey the assemblage from Lough Allen contains a substantially higher ratio of blades to flakes. In the Tawin/Maree assemblage there were only 15 blades and over 500 flakes, whereas at Lough Allen the ratio was 1:3 blades to flakes. Overall the flakes and blades tended to be larger than the Tawin/Maree assemblage, being for the most part between 3cm and 6cm in length.

In terms of the cores what is apparent in comparison with the Tawin/Maree survey is the lack of the bipolar technique being used in the cores collected. The single platform technique is more prevalent with some of these single platform cores being examples of the classic Later Mesolithic uniplane core. However, the Ferriter’s Cove
excavations (Woodman et al. 1999) highlighted that a lack of classic uniplane cores does not imply post-Mesolithic activity, and that the uniplane core is an artefact of the flint rich northeast, as opposed to a strict template to be followed.

As mentioned, three possible Early Mesolithic cores (C05:1:919, 921-2) were collected in Cormongan, along with a possible Early Mesolithic core axe (C05:1:872). Another possible Early Mesolithic core was collected on the north shore at Derrinvorey Lower (C05:1:1274). One of these cores was a single platform core, while the other three are dual opposed cores. The difficulty with identifying these as Early Mesolithic is that in the Neolithic they also worked cores in a similar fashion. Therefore these remain questionable until further work can assess whether there is indeed an Early Mesolithic presence.

The clear majority of the assemblage appears to be Later Mesolithic in date. As mentioned in the last paragraph a few of the cores may be Neolithic, as well as some others (e.g. C05:1:1226). A bifacially retouched flint flake can be considered post-Mesolithic (C05:1:859), as probably can the two scrapers (C05:1:867 C05:1:982).
the majority of the lithics are undiagnostic, the post-Mesolithic element may be slightly more substantial.

![Lough Allen tools](image)

Fig. 5.30. Lough Allen finds, excluding unmodified flakes, blades, cores, and debris.

The graph above shows the survey’s finds, excluding unmodified flakes, blades, cores and debris. The amount of retouched types is considerably smaller than the Tawin/Maree collection, but given the water rolled nature of the material this is not surprising.

In terms of the raw materials used one of the difficulties has been identifying the material. In the collection of material in the National museum the lithics were all called chert, apart from the flint. However, it is apparent that they are not all chert. Parkes, geologist at the Natural History Museum, has looked at some of the Lough Gara lithics in the museum for me and has identified some as tuff. A selection of this survey’s lithics has been examined by Williams, Geology Dept., NUI, Galway, and this has again shown the use of tuff, other unspecific volcanic types, siltstone/mudstone, as well as non-carboniferous chert, flint, and chert; an axe of shale and one of basalt were also identified. Unfortunately half of the survey’s collection remains unidentified, and this may well highlight other raw materials, but a pattern does emerge of the predominance of chert, followed by tuff and other volcanic material.
While the diagnostic post-Mesolithic collection is small, what is apparent is that the use of raw materials seems to be more restricted than in the Later Mesolithic, with the lithics only in either flint or chert. This pattern is also apparent in the Lough Gara collection, where in the Later Mesolithic a range of materials was used, with again only chert or flint used later (apart from the materials for axes). Of course, in the Neolithic and Bronze Age they used other materials such as quartz, jasper, mudstone, and soapstone, but nevertheless this pattern seems to hold for these two areas and also seems apparent in the collection of material from the Bally Lough Project (Kador, pers. comm.).

5.4.2. Tully, Co. Leitrim

Previous finds/research

Three flakes, three retouched flakes, and an axe were found on the banks of the Shannon (MNI 1974:19-25). More recently, surveyors for the Discovery Programme looking at the crannogs in the area collected 32 lithics, including a core and two retouched flakes, the rest being flakes and blades (these have been assessed by Woodman (n.d)). These were found from around the same area as the finds in the 1970’s, along the north shore of the Shannon, but over a wider area (Appendix 12).

Survey:

As the Discovery programme’s finds had not made it to the museum at the time of this survey I was unaware of this collection of material. Therefore, this survey’s intention was to visit the original findspot, and to assess the area for further work. The original findspot at Tully is at a point in the Shannon where the river widens dramatically to become in effect a lake (Fig. 5.31). The river then travels east, snaking around a hill, and then continues southwards. Three discreet scatters were found: the first was as we started walking about 100m south of the weir; we continued downstream and the next scatter was about 150m away as we neared the bend in the river and the open out onto the lake; the third scatter was about 250m around the bend (Appendix 13). With these positive results of a number of finds, and the recognition of this as a suitable venue for further more extensive survey, we did not continue the survey further along the shore that evening.
<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Dual opposed core</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Multiplatform core</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Single platform core</td>
<td>1</td>
</tr>
<tr>
<td>Flake</td>
<td>Flake</td>
<td>14</td>
</tr>
<tr>
<td>Blade</td>
<td>Blade</td>
<td>2</td>
</tr>
<tr>
<td>Debris</td>
<td>Debris</td>
<td>3</td>
</tr>
<tr>
<td>Tully</td>
<td>Total</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 5.35. Tully finds.

Fig. 5.31. Tully finds.
5.4.3. Lough Inchquin & Lough Atedaun, Co. Clare

Previous finds/research:
43 axes have been found on the shores of Inchquin, with the majority of these being shale – one is dolerite and another is porcellanite. 12 other axes have been found within 2km of the lake, again nearly all shale. A chert flake was found 1km south on the banks of the Fergus, and a local reported to me that he found a chert arrowhead on Lough Inchquin at the outlet of the Fergus (Appendix 14). As mentioned, Lynch (2002) surveyed part of Lough Inchquin as part of his thesis. However, as he appeared to have not surveyed the whole shore of the lake it was decided to survey the shore of the lake, as well as Lough Atedaun (an area with no previous finds), into which the River Fergus flows after leaving Lough Inchquin.

Survey
The whole shore of the Inchquin was surveyed, including some erosion scars in the adjacent fields (Fig. 5.30). Three of the axes found were on the lake shore itself, while the fourth was in cattle poached ground about 15m from the southern shore. The flint core and chert flake were found in cattle poached ground on the grounds of the castle on the eastern shore; the former about 80m from the lake and the latter on a ridge 15m from the lake (Appendix 15).

<table>
<thead>
<tr>
<th>Townland</th>
<th>Class</th>
<th>Material</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baunkyle</td>
<td>Axe</td>
<td>Shale?</td>
<td>1</td>
</tr>
<tr>
<td>Crossard</td>
<td>Axe</td>
<td>Shale?</td>
<td>1</td>
</tr>
<tr>
<td>Noonan</td>
<td>Axe</td>
<td>Shale?</td>
<td>1</td>
</tr>
<tr>
<td>Inchquin</td>
<td>Axe</td>
<td>Shale?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Flake</td>
<td>Chert</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Single platform core</td>
<td>Flint</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Table 5.36. Lough Inchquin finds.

The shore of Lough Atedaun was also surveyed but with no finds. Much of this lake’s shore is bleached white with marl, which encrusts the surface almost entirely. As well as this the lake surface is carpeted thickly in dried vegetation, which masks the shoreline entirely. This was also apparent on Inchquin, but to a lesser extent.

1 This was handed over to an archaeologist, but appears not to have made it to the National Museum.
Indeed, the axe found on the shore near the castle at Lough Inchquin was almost completely covered in marl, making it a fortuitous find.

Discussion

The core and flake found at Inchquin are unfortunately undiagnostic and therefore do not help us identify a Mesolithic presence in the Burren. That being said they are finds none the less in an area that is for the most part devoid of surface finds altogether. One aspect of Lynch’s (2002) research that was noted was that he suggested that no chert from the area was big enough to be used for large flakes. While surveying around Lough Inchquin a number of large pieces of what seemed like good quality chert that would have been suitable were noted. This would seem to suggest that chert was present in the area.
5.4.4. Streamstown, Co. Galway

Previous finds/research:

A small flint flake and a flint butt trimmed blade (2002:225-6) (Appendix 16) were found after topsoil was removed ahead of the construction of a farm building – the top soil was removed a few miles away to a garden, and the two lithics were noticed while spreading the topsoil. Gibbons et al. (2005) mentioned this blade but did not mention the flake accompanying it. While the flake is undiagnostic, the raw material for both of the lithics is identical, so we can surmise that the flake is also Mesolithic. There are no other prehistoric finds recorded for the area, apart from two shale axes from a few km west along the north shore of the bay in Cushatrough td.

Survey:

The original Mesolithic findspot was located on a terrace overlooking the long, narrow Streamstown Bay to the south. The terrace is close to the present day shore (approx. 20m OD). The ground falls sharply to the sea from the terrace; behind the terrace, the hill rises very steeply to a peak of 78m OD, and then dipping and further rising to a peak of 200m OD about 2km away to the NE. As one moves west along the north and south shore of the bay, the hills lessen in height; 3km from the mouth, the bay narrows to a strait, and at the mouth of the bay, the bay is approx. 100m wide, while at the widest, close to the findspot, it is almost 1km wide. A number of small streams drain into the bay, with one stream flowing into the bay about 300m to the east of the findspot; this stream drains a number of small lakes to the east.

The site was visited and the erosion scars, both at the site and on the way to the site, were checked for further material. No finds were noted - but there is a large shed where the probable findspot is! The land in the area is not conducive to simple field survey – bog and rough grazing, therefore not much further research can be carried out, apart from with more elaborate techniques such as test pitting. Along the north side of the bay a series of similar terraces sit above the water, and these may well be good places to investigate. Excavated lithic assemblages from Connemara are few and far between, and there have been few prehistoric stray finds; some of these have been flint (i.e. MNI Cleggan 1966:103; MNI Errisbeg West 2002:203). Considering the dearth of stray finds, it is highly fortuitous that Mesolithic material was noticed in the area. One nagging question with this findspot concerns the use of quartz. The
visit to the site made it clear that quartz is abundant in the area; it seems likely that this raw material had been used. The difficulty is that while the two flints found probably stood out while spreading the topsoil, possible quartz lithics would have blended into the background noise of stones, therefore being overlooked.

Fig. 5.33. Streamstown.

Pl. 5.34. Looking south over findspot (under shed), with Streamstown Bay below.
5.4.5. Big Island, Co. Galway

Previous finds/research

Across the Shannon in Lehinch, Tipperary, a ground slate point was found on the banks of the Shannon (MNI 1999:79). In the 1930’s ESB works dug up three flint scrapers on Big Island. Close by, 6 axes were found during drainage works in the nineteenth century and in the 1930’s – these included porcellanite and IPC Group VI tuff polished axes (Appendix 16).

Survey

The banks of the Shannon around Big Island were surveyed with no finds noted (Fig. 5.34).

5.4.6. Skehanagh, Co. Galway

Previous finds/research: no previous finds

Survey

On the way to Big Island, I drove past numerous ploughed fields. I briefly walked one at random to see whether any material was present (Fig. 5.33). I walked two furrows for approx. 100m and found a chert bipolar core and a chert flake (Appendix 17). This part of Galway has no recorded prehistoric lithic finds, the nearest being 6 km away (a barbed and tanged arrowhead: MNI 1943: 312) (Appendix 16). This rapid 20 minute survey highlights the pressing need for more surveying of ploughed fields in the west.
Fig. 5.34. Skehanagh and Big Island.
5.4.7. Clonnaragh, Co. Roscommon

Previous finds/research:

A group of lithics were collected during ploughing in fields a few hundred metres apart and the finder marked the exact fields on a map (MNI 1968:208-12) (Appendix 16). The Mesolithic items were a volcanic ash butt trimmed flake and a ground stone point. Along with these were one flint and one porcellanite axe, a flint lancehead, a spearhead, and a burnisher. Another axe in private possession is provenanced to close by.

Survey

The findspot is near to a small stream that runs down to Lough Derg to the east (Fig. 5.35). The fields where the finds were recorded to were visited but the area is under pasture, with no erosion scars present, hence no finds noted.

Fig. 5.35. Clonnaragh.
5.4.8. Turloughnaroyey, Co. Galway

Previous finds/research:

Gibbons et al. (2005) have recorded a ‘chert Bann flake’ from beside a turlough which was found after the construction of a bird hide on a small knoll overlooking the turlough (Appendix 16). Unfortunately this item is missing and therefore the veracity of their statement can not be verified. One of the only Early Neolithic lithics identified in this thesis’ research that has been reported as a non-excavated find in the National Museum comes from the neighbouring townland of Claretuam (MNI 1962:261) (Appendix 16). Here a flint leaf shaped arrowhead was found while digging in a sand pit. This was discovered along with cremated human remains in a short-cist (SMR 043:40). As this was found in a cist it is uncertain if the arrowhead is in fact not an early type, or was an inclusion of a relic in a later burial. However, the arrowhead would appear to be an Early Neolithic type (Bergh, pers. comm.).

Survey

Turloughnaroyey lies approx. 3 km to the west of the Clare River, and falls in the shadow of the sister hill to Knockmaa (Fig. 5.36). These two hills are the highest peaks in an otherwise undulating landscape. Knockmaa has a series of cairns on its summit, with the possibility that some of these may be passage tombs (Dowling 2001, 44). The turlough was visited and the erosion scars present were searched, however no further finds were noted.

5.4.9. Lough Cullin, Co. Mayo

Previous finds/research: No previous finds.

Survey:

Approximately 2km of the northeast shoreline of Lough Cullin was fieldwalked (Fig. 5.1). This did not produce any finds.
Fig. 5.36. Turloughnaroyey.

The previous finds presented as dots are for the most part provenanced only to a townland, so are not necessarily exact findspots. To see if they are exact, proximate or townland only locations see appendix or interactive map. This survey’s finds are exact locations.
5.5. Museum research

5.5.1. Introduction

The museum research consisted of a thorough search of the topographical files, followed by an examination of all the prehistoric lithics, ceramics, and organic material which came from non-excavated contexts for the six counties under review. This search and examination also involved looking the files and material which came from the counties that are bordered by the Shannon River, with a focus on possible Mesolithic finds. There were two main reasons for this extensive search of the archives and material. The first was to examine and assess the collection for Mesolithic and Early Neolithic material, and to look for any material that had not been mentioned in the previous literature. The second reason was to familiarise myself with prehistoric material culture that is provenanced to the west of Ireland.

As part of the museum work, further work was undertaken in tracking down material that had been mentioned in the literature, but was not housed in the National Museum. This proved a hard, exhaustive task, considering it only related to a few finds. Nevertheless, the tracing of this material was felt to have been important in order to have a considered review of the evidence for the Mesolithic in the west.

This section will detail the remaining Mesolithic findspots in the west that were not visited, but noted in the museum’s collection or in the previous literature. This will be followed by a brief discussion on the research of the post-Mesolithic material.
Fig. 5.37. Locations covered in section 5.5.2-5.5.12.
5.5.2.  Burrishoole Parish, Co. Mayo

Burrishoole is located on the north-east corner of Clew Bay, close to the L. Feagh and Furness river system (Fig. 5.37). Gibbons et al. have stated that “a Bann flake has been found close to the tidal reaches of this important river and lake system” (2004, 5, emphasis added). This seems to imply that a lithic has been found some time in the somewhat recent past, near the tide marks. However, the relevant files for this flake contradict what Gibbons et al. have stated: the retouched flint flake in question (MNI 1935:421) was given to the museum in the 1930’s as part of a bigger collection of lithics (13 other flints which included flakes, scrapers, one arrowhead, and an axe (MNI 1933:571-7; 1935:417-22)) that had been used previously as charms, for healing people and animals (Appendix 16). This would seem a common occurrence for lithics and should be treated as part of the life history of these items. Arguably, it is important when discussing finds to state the actual circumstances in which they were discovered, as well as what else was discovered with them. Context would seem to be the key.

The authors fail to mention the context of this find and it is unclear how they can state that it was found near the tide mark, as there is no mention of this in the MNI files. Indeed, the files state clearly that the lithics in question had been used for generations as charms and originally came from somewhere in the parish of Burrishoole, not the townland.

5.5.3.  Mallaranny, Co. Mayo

In relation to the Burrishoole Parish find, there is another find of a flint butt trimmed flake from Mallaranny, which the authors fail to mention (MNI 1943:190); Mallaranny is 12 kilometres due west of Burrishoole along Clew Bay (Fig. 5.37). Again, this find had been used for healing purposes, and was given to the museum as part of a collection of healing stones, which included flint and chert flakes and a stone axe (MNI 1943:191-194) (Appendix 16). Therefore, while we can say that these two
Mesolithic artefacts possibly came from the vicinity of mid-west Mayo, we definitely cannot pin one of them down to the tidal reaches of a river system.

5.5.4. Lough Lannagh, Co. Mayo

Gibbons et al. (2005) have stated that a “Bann flake”, of unknown material, was seen by the authors in a newspaper photograph some years ago. However, when pressed on the details of this find, they were unable to give me more specifics. I have been unable to trace the photograph, so this artefact and findspot therefore remains unverified (Fig. 5.37) (Appendix 16).

5.5.5. O’Briensbridge, Co. Clare

A ground slate point (MNI 1945:152) was recovered from a bog near the Shannon (Fig. 5.37) (Appendix 16). This is one of the few non-excavated lithics from the area besides the axes. Hundreds of axes have been found along this stretch of the Shannon, with the vast majority coming from drainage works at Killaloe, but with a
number also having been found on land while digging and ploughing or in bogs. Recently the extensive Mesolithic activity in the area has been confirmed during excavations a few km to the south at Hermitage which have been discussed in chapter 3.

5.5.6. **Inishmore Island, Lough Arrow, Co. Sligo**

A ground stone point (MNI 1999:14) was discovered on the shore of Inishmore Island in Lough Arrow, which drains via the Unshin River to Ballysadare Bay (Fig. 5.37) (Appendix 16). This is the first discovery of Mesolithic material in Sligo that is not connected to the Shannon system; Lough Arrow lies to northeast of Lough Gara and is less than 3 km from Lough Key, one of the Shannon lakes.

5.5.7. **Oranmore, Co. Galway**

Gibbons *et al.* have stated that a “half of a butt trimmed honey flint Bann flake” was discovered during excavations (by one of the authors) during the Oranmore sewerage scheme (2005) (Fig. 5.37). However, this would seem to have been misidentified – the flake in question (98E0375:0:0:226) is not butt trimmed, indeed its butt is not present as it is a distal fragment of a flint flake. This flake is an undiagnostic fragment, and has been taken as so by the lithics specialist who prepared the report on the excavation’s assemblage (Finlay n.d., 19). Therefore this find can be discounted.

5.5.8. **Belderrig, Co. Mayo**

Excavations have been under way on a Mesolithic quartz scatter over the last few years on the north coast of Mayo (Fig. 5.37). This was the first research excavation of a Mesolithic site in the west of Ireland, and as mentioned in chapter 2, this site has
uncovered a Mesolithic site with predominantly quartz lithics, as well as organic remains.

5.5.9. Leedaun, Co. Mayo

Contract excavations which uncovered a Bronze Age site also found a fragment of a butt trimmed flint flake (Walsh, pers. comm.) (Fig. 5.37) (Appendix 16). There have been no non-excavated finds, Mesolithic or post-Mesolithic, from close to this area apart from a gabbro polished axe (MNI 1940:850) found near by and a polished shale axe (MNI 1973:200) from a few km to the east.

5.5.10. Lough Gara, Co.’s Sligo & Roscommon

Introduction

The Lough Gara collection is the largest Mesolithic assemblage in the west of Ireland and Fredengren (2002) has covered a number of aspects about this material. In describing the material, Fredengren used the generic term “Bann flake”; she presumably did this due to the fact that as this material was collected in the 1950’s that was the term used to loosely describe flakes, and appears regularly in the archives of the material. However, it was apparent that many of the Lough Gara lithics described as “Bann flakes” do not fall into that category, and that Bann flakes – sensu Woodman and Johnson (1996) – make up only a small fraction of the Mesolithic finds.

It also became apparent that no one had assessed this collection in its entirety since it had arrived in the museum, beginning in the 1950’s. This thesis therefore decided to do a preliminary assessment of the lithics, with the aim of doing a straightforward headcount, and assessing the Post-Mesolithic lithics presence in the collection. The lithics that came from the excavations were not examined, so this only includes non-excavated finds.

As Fredengren (ibid.) only looked at a small sample of the material, she underestimated the size of the collection. For example, while she states that “over 300
lithics” came from Tawnymucklagh and Lomcloon and “over 100 lithics” from Inch, in fact the final count for these townlands according to this assessment is 729 and 199 respectively (ibid., 123-4).

There were a number of obstacles to be overcome in attempting to assess the Lough Gara collection. One of these was the fact that a number of the files are not present in the museum: E22, which is one of Raftery’s non-excavated finds collection prefixes does not have any paperwork with it, and these lithics were noted in the drawers, but not in the initial archive search. In September 2006, I noted that Fredengren’s appendix III (which is not in the book but on the accompanying CD-ROM), which lists some of the finds from Lough Gara has completely different provenances for the E22 material in comparison to what is written on the labels of the lithics in the museum. Presumably Fredengren had access to the E22 files, and they have gone missing in the mean time.

Another difficulty was that E21 is Raftery’s excavation prefix, but some of the excavated material is under E20, which was supposed to be a non-excavated finds prefix. Another issue concerns the numbering related to the E119 (Mitchell) collection: Fredengren (ibid., 124, 301) noted that this collection was provenance to Inch Island but she saw that some of the lithics in the box had Tawnymucklagh tags on them. What apparently happened is that the E119 collection number was used for both the Inch Island and Tawnymucklagh collections, therefore creating this confusion.

Another difficulty with the material that was only noted at a very late stage in this thesis was that axes recorded by the Irish Stone Axe Database appeared to have more detailed provenances than the files which I had access to in the museum. For example thirteen axes provenanced to “Lough Gara” generally were provenanced to a townland in the axe database. I made contact with Emmet Byrnes who had examined the axes from Lough Gara, and he explained (pers. comm.) that he also noted this at the time, and the more detailed files were in the personal possession of Prof. Raftery. Unfortunately there was no time to review these other files, so some material provenanced to “Lough Gara” may well have more specific provenances.
Another issue with the provenance of the material lies in the inaccurate reporting of the findspots: in the files for Emlagh (MNI 1955: 139-155) the finder recorded the material as coming from a particular spot, but the museum wrote back querying the findspot with the finder then admitting that he had been wrong. In this instance the museum spotted the inaccuracy, but in others they may not have been as cognisant of the error. In another instance (noted by Fredengren (2002, 153)) a series of arrowheads and a scraper were provenanced to a crannog in Tawnymucklagh, but this finder stored finds from different places in a jar together so the provenance is more than likely dubious (these, however, are provenanced to the townland only in the museum archives). This finder’s collection totalled 350 lithics, all provenanced to Tawnymucklagh; therefore this townland’s count of material may be overrepresented.

As for the Corrib River and lake, one of the considerations of this area is to what extent the lake and river levels rose and fell during the early prehistoric period. From Fig 3.3 in chapter 3 which shows the postulated post-glacial lake levels, the lake was clearly substantially higher, but it is unclear as to whether the Lough Gara experienced a considerable fall in levels witnessed at Lough Corrib.

Fig.5.38. Lough Gara townlands and areas with finds on lake and river.
In total, 2955 lithics from non-excavated contexts are contained in the Lough Gara collection (Fig. 5.39) (Appendices 18, 19 & 20). Of these 66 are stone discs which are possibly medieval in date, while 53 of the lithics are diagnostically Neolithic or Bronze Age. 157 are stone axes, which date to the Mesolithic or later; 3 other axes have come from a couple of km away from the lake, as well as an axe from the Drumanone portal tomb excavations. Of these 161 axes, the raw material for 77 of them is unidentified; of the identified axes, over 80% are shale or mudstone.

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<tr>
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<td>Greywacke</td>
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<td>Sandstone</td>
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<td>Schist</td>
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<tr>
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<td>Flint</td>
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<td>Porcellanite</td>
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<tr>
<td>Gabbro</td>
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Table 5.37. L. Gara axe material.

2679 of these lithics are possible Mesolithic, with some of these probably also being post-Mesolithic, but for the most part the lithics are characteristic of Later Mesolithic stone working; added to these, is the butt trimmed flint flake that was uncovered during the excavation of the Drumanone portal tomb; this was in the top soil a few metres away from the monument. Of the 2679, just over 2000 are unmodified flakes and blades\(^1\), but the amount of retouched pieces (265) may be underestimated due to the degradation of the material from being in water. As well being water rolled and degraded, many have an iron encrustation on their edges, masking possible retouching. There are 48 cores in this collection which gives a ratio of about 1:37 of cores to flakes and blades, suggesting that cores are underrepresented. As mentioned previously, this thesis' collection of material from Lough Allen collected 65 cores compared to 374 flakes and blades, giving a ratio of almost 1:6. While Fredengren’s (2002, 125-6) suggestion that the movement of different parts of debitage products around the lake by communities in prehistory has created this incongruence in the distribution of material is perfectly valid and probably correct to a degree, I would suggest that one cannot assess this idea based on stray finds collected by different people over different years. This incongruence probably has more to do

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\(^1\) As this was a preliminary headcount of the material, the lithics were not measured, meaning that the proportion of flakes to blades was not assessed as this invariably relies on measurement, especially as the Later Mesolithic is characterised by using blade-like flakes to great extent (Inizan et al. 1999, 130-1).
with the collection strategies of the finders. Indeed, a more likely explanation has to do with material recognition as opposed to collecting strategies, as flakes and blades are more immediately recognisable than cores. In the case of this thesis’ collection, I was actively looking for cores as well as flakes at Lough Allen, which invariably meant that I found them in greater numbers than the collectors at Lough Gara.

Another example of the incongruence in the collecting can be seen if one compares the findspots for the hammerstones compared to the cores, which in an ideal world would usually go together. There are 18 reputed hammerstones in the collection. From the map below (Fig. 5.40) you can see that almost half of them were found close together in a small section of the now river, and again nearly half of them were provenanced to crannogs, suggesting that when found these were called hammerstones to explain their presence there.

Fig. 5.39. Lough Gara townland totals.
Material

The clear majority of the lithics are of chert. A geologist who looked at material for Fredengren (2002, 123) noted that the range of cherts assessed by him are available locally. Fredengren (ibid.) has used colour to determine different types of chert, but a problem with this is that an apparently brown chert can be shown to be black or dark grey if a fresh break is available on the piece, as the exterior colour is often a patination. Therefore, the colour coding of the material is fraught with difficulties. It was apparent from viewing the material that there seemed to be other rock types used, but these had been labelled chert in the archives. Parkes, the geologist mentioned previously, examined a selection of the lithics, and from this he noted turbiditic greywacke (51), siltstone (18), sandstone (5), mudstone (1), limestone (6), jasper (1), rhyolite (2), volcanic types (6), and schist (10). As well as these, there was one possible quartz lithic as well as 65 flint (this does not include the diagnostically post-Mesolithic material). Unfortunately, only a small amount of lithics were examined so what remains labelled as chert in appendix 18 probably also contains a range of different material as well. As noted previously, the diagnostically
post-Mesolithic items are invariably made from either chert or flint as was the case in Lough Allen.

One jasper blade was noted in the collection. For the prehistoric lithics generally from the west only two other collections contained jasper. A single find of a barbed and tanged jasper arrowhead was found in Laurelea, Co. Mayo (MNI 1938:8561), and a collection of scrapers, flakes, and a bipolar core from Glennagevlagh, Co. Galway, which is near Killary Harbour (MNI 1929:1230-85). However, while looking material from east of the Shannon, at the assemblage from Lough Kinale (see above p. 67), a jasper core was noted that had been found as a surface find after the drainage works there. These two items, which are clearly quite rare in the Museum collection at least, suggest some sort of relations between these two lakes which are 70 km apart as the crow flies, and about double this length by water along the Shannon system.

The turbiditic greywacke is also sourced from the area around Lough Kinale, or more specifically the Longford-Down hills to the northeast of Kinale. This again suggests a movement of material between these two areas. Of course, as mentioned earlier, one always has the spectre of the glacial movement of material to contend with when attempting to assess the movement of material. It is unclear if the turbiditic greywacke type of stone was used more frequently in early prehistory; firstly because so few sites are known, and secondly because as in the case of Lough Gara they may have been labelled chert. The one project that has examined the petrology of lithics, the Irish Stone Axe Project (2006), noted numerous examples of greywackes: this may suggest that this material was used more extensively for non-axe lithics than previously reported.

**Organic material**

There are a number of finds of bone pins and points, as well as boar tusks which would need to be dated to ascertain as to whether they date to the Mesolithic.

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2 Williams has noted that a source of jasper is close-by to there (pers. comm.). This collection is also one of the only groups of materials to come from mountain tops. Here, a jasper scraper and bipolar core were found along with chert scrapers: these were found along with 50 “flakes” which are unfortunately lost, so it was unclear if some of these were also jasper
Crannogs

As noted by Fredengren, hundreds of crannogs were revealed when the Gara lake levels were dropped: these were mapped by various people, with numbers ranging from 145 to 360 (Fredengren 2002, 77). At the time, one of the questions was to what extent some of these represented Stone Age crannogs. While much of Raftery’s collections are provenanced to specific locations, Mitchell generally only provenanced material to the townland (as he did in the case of Lough Allen and other places). Therefore, to what extent Mitchell’s material also derived from crannogs is unknown.

58 individual crannogs produced evidence for lithics (Fig. 5.41), with further groups of crannogs also mentioned, such as “crannogs 128-137” (Drumanone) to which 21 lithics are provenanced, “crannogs 114-126” (Tivannagh) to which 40 are provenanced, and “crannogs 38-41” (Derrymaquirk) to which 1 mudstone axe is provenanced. This suggests that up to 24 other crannogs may have held lithics (another large group of material is provenanced to either “crannog 61 or Ardsorreen”). Of the 58 individual crannogs listed, 22 of these produced only 1 lithic find, with five of these being single axe finds, while 9 crannogs had 10 or more lithics found on them. Only one crannog (crannog 141, Drumanone) produced a post-Mesolithic find but no Mesolithic finds as well.3 42 of these 58 crannogs are along the stretch of river leading out of Lough Gara. The two crannogs with the largest collection of material were crannogs 7 & 9 in Coolnagranshy, which are about 130m apart (Fig. 5.42). Crannog 7 produced 503 possible Mesolithic lithics, 10 post-Mesolithic lithics, 4 axes, and a bone pin, while crannog 9 produced 127 lithics, but no axes or diagnostically post-Mesolithic lithics. However, while crannog 7 produced hundreds of lithics, from retouched pieces down to debris, only two cores were collected. This would seem to go against my surmising earlier about the non-recognition of cores, as it would seem that all material was collected from here, including debris. However, an added difficulty is that part of the Coolnagranshy assemblage was collected by Mitchell, and this included four cores (half of the cores provenanced to the townland). As mentioned, Mitchell did not provenance material to specific areas, so it remains unknown where these came from.

3 Fredengren’s (2002, 231) excavation of a medieval crannog also produced post-Mesolithic lithics but not Mesolithic.
Fig. 5.41 Lough Gara material provenanced to crannogs.

Fig. 5.42. Lough Gara material provenance to crannogs along R. Boyle.
Places around the lake

From Fig. 5.39, the general distribution of the material can be seen to fall into three general areas: the first on the stretch of river leading out of the lake; the second around the outlet and Inch Island; and the third at the townlands of Lomcloon and Tawnymucklagh.

The first group begins on the Boyle River and is spread out for about 4km to the mouth of Lough Gara, and includes the townlands of Ardsallagh, Tinacarra, Drumanone, Coolnagranshy, Tivannagh, Kiltybrannock, and Derrymaquirk: about half of the Lough Gara collection comes from this 4km stretch. This stretch takes in the small lake at Coolnagranshy, and the pre-drainage shoreline highlights that this stretch of the river was once substantially wider, with the lake here having been twice its present size: 2/3’s of this stretch’s material came from the lake at Coolnagranshy itself.

The second group’s finds are for the most part from Inch Island. There are few finds from the north shore at the outlet, and very few from the entire north part of the lake. Only once you get down to Sroove, close to Tawnymucklagh, on the southwest of the lake do the lithics become more apparent.

The adjoining townlands of Lomcloon and Tawnymucklagh on the southern shore of the main lake have the largest amount of lithics provenanced to them after Coolnagranshy: excluding diagnostic post-Mesolithic material and axes, Lomcloon has 256 lithics, Tawnymucklagh has 436 lithics, while Coolnagranshy has 823 lithics. There are eight cores assigned to Coolnagranshy, two to Lomcloon and nineteen to Tawnymucklagh. Therefore, while the ratio of cores to non-cores is roughly similar for Coolnagranshy and Lomcloon (about 1:103-1:125), the ratio for Tawnymucklagh is drastically different (1:22). A possible explanation for this is that twelve of these cores are part of the Tawnymucklagh collection mentioned above, which the finder may have mixed up and given an after the fact provenance to the material. A peculiar aspect of the Lomcloon assemblage is that it is the only area with a substantial amount of lithics that had no axes present. However, as 20% of the axes from the lake are unprovenanced to a townland, some may well be from Lomcloon.
Fredengren has suggested that the positioning of the lithics represent signatures of movement, in that most can be shown to represent a movement upstream, and that the material can be interpreted from a “journey perspective” (2002, 119). One of the difficulties with this interpretation is that it treats movement on the waters like a conveyor belt: the supposed movement on the waters is unidirectional, with no comments on how people returned, or what they did with lithics on their way back. What would seem to be more apparent is that there is a distinct difference in the quantity of lithics and axes between the north and south shores of both the lakes and rivers, with much less material from shores that faces southwards: the material tends to be of shores facing north. While Fredengren (2002, 154) noted this pattern in terms of the axes, she did not relate this to the other lithics. As she has suggested that these axes are Neolithic, and therefore saw this in relation to the distribution of monuments, she did not see that the patterns of distribution of the lithics and axes are remarkably similar, even allowing for the post-depositional movement of the material. However, it is arguable that these are not solely Neolithic, and also, the Mesolithic material would seem to follow this pattern as well. What this is telling us about the Mesolithic communities is unclear. However, it would suggest that it is more than a pattern of unidirectional movement upstream.

5.5.11. Lough Scur, Co. Leitrim

While Lough Scur is not a part of the Shannon system I have included these finds as they are in Co. Leitrim, and this collection has been overlooked as they were part of Raftery’s Lough Gara collection number – Fredengren (2002, 114) did not include these finds on her map showing Mesolithic material. Lough Scur is part of the Erne system, and lies 6 km southeast of Lough Allen. Here, five flakes (MNI E20:3794) were found along with a polished shale axe (MNI E20:3793), a dolerite axe roughout (MNI E20:3792), and a piece of leather under a dugout canoe (Appendix 16). While in the archives two of the flakes are labelled butt trimmed, all five are unmodified flakes, but would appear to be Mesolithic. This is one of the few non-excavated Mesolithic finds that has been found with organic remains, and it would be useful to have the leather and the canoe dated to ascertain as to whether they are also Mesolithic in date.
5.5.12. Discussion

The examination of the material culture in the National Museum and the tracing of material elsewhere have shown that Gibbons et al. (2005) have made some arguably erroneous statements about the Mesolithic material. According to the museum archives, they appear to have no grounds for stating that the Burrishoole Parish find came from the tidal reaches of the Furness River, and they failed to mention that this lithic had been used for generations as a healing charm. They also failed to mention a similar find from nearby at Mallaranny. Their reported find from L. Lannagh remains a mystery, as it never made it to the museum, and they never actually carried out a detailed inspected of the lithic in question. In relation to the lithic from the Oranmore excavation, they ignored the analysis of the lithic specialist and called it a half of a butt trimmed Bann flake even though the butt was not even present, as it is a distal flake fragment.

The Mesolithic finds from Mallaranny, Lough Arrow, and Lough Scur are three areas where findspots had not been mentioned in the previous literature, and the Lough Gara collection has shown to be larger than had been noted by Fredengren. One of the difficulties with the Lough Gara material has been with the archives – some of the archives are missing from the museum, and it was noted at a very late stage that the archives in the museum are not as detailed as those viewed by the Stone Axe Database researchers, which are located in Raftery’s house.
5.5.13. Post-Mesolithic material

In order to ascertain the extent of the Mesolithic and Early Neolithic material housed in the National Museum, all of the prehistoric finds from non-excavated contexts was examined. As well as this, most of the finds from excavations that are housed in the museum were also examined. A large collection (the Triton Collection) was being archived during this thesis – I did not inspect the material itself, but only the archives. This collection is mainly from Sligo, and includes material from middens collected over the years by the Sligo field Club. In the proceeding map, the finds from this collection are not included. As the main purpose of this assessment of the material was to identify Mesolithic and Early Neolithic, a detailed examination of the hundreds of post-Mesolithic material was not conducted, beyond a cursory assessment and a recording of the details. For instance, the categories given on the labels, such as javelin head or spearhead, were retained as given. Only in some cases where a category was clearly incorrect, was the category changed. Of note in this context are the examples of bipolar cores and flakes that had been labelled otherwise, as the bipolar technique was not noted at the time as a reduction strategy.

There are a few hundred findspots of material from non-excavated contexts provenanced to the six counties, with most of these being single finds (Fig. 5.43). While on a sheer quantity basis there is more Mesolithic material in the area, the post-Mesolithic material shows a much wider distribution; while the post-Mesolithic material are found away from the waters edge to a greater degree than the Mesolithic material, they are almost all located within 2 km of water. While excavations in the west reveal that chert was the dominant material used in the area, it is more common for flint artefacts than chert to be noted and sent to the museum; Fig. 5.44 shows the finds identified as chert of flint, while other material types (as well as where it is unclear whether they are chert of flint) have been excluded. As mentioned in the section 5.5.10, two findspots have produced jasper lithics. Other material in the collection includes quartz, greenstone, and sandstone, with a number of lithics’ material not identified. These materials other than chert and flint are very few. This would seem to have more to do with modern identification of lithics of other material as opposed to a lack of such use in prehistory. In terms of organic material, there are a
number of bone needles and points, as well as a wooden dagger, a wooden spearhead, and a bone spearhead, and there is very little pottery recorded.

Fig. 5.43. Post-Mesolithic findspots, with arrowheads (javelin heads, spearheads) and scrapers highlighted.
The majority of the lithics recorded are projectiles – arrowheads, javelin heads and so forth – with the next largest type being scrapers. Few flakes, blades, cores, or debris are recorded. This would probably be down to the fact that these are more recognisable than flakes and cores. As mentioned, there is very little Early Neolithic material, with one possible Early Neolithic arrowhead from Belclare, Co. Galway.

Fig. 5.44. Post-Mesolithic lithics made from flint and chert.
6. Mesolithic communities
in the west

6.1. Introduction

In chapter 5, the evidence from the museum research and fieldwalking was presented for each location individually. In this chapter I will gather together these findings and suggest how we can understand early prehistoric communities’ inhabitation in the west of Ireland. To begin, in section 6.2 I will discuss the general distribution of Mesolithic material in the west, looking at the find contexts of the material, and discuss the distribution of axes. In section 6.3 I will look at the evidence for the Early Mesolithic in the west, with a focus on Hermitage, as this site represents the clearest evidence to date for the earliest communities in the area. In section 6.4 I will then move onto the Later Mesolithic, and will discuss the taskscapes on the waters and in the woods, human-animal relations, and the related questions of regionality and mobility. In section 6.5 I will consider the Mesolithic-Neolithic transition in the west.

6.2. Distribution in the landscape

In this section I will discuss the general distribution of the Mesolithic evidence in the west, discussing the find contexts of the material, and look at the distribution of the stone axes.

The distribution of the evidence for the Mesolithic communities in the west consists of a widely scattered series of findspots – often of a single find – with two extensive concentrations of lithics on the lakes of Allen and Gara, and a third, smaller concentration at Tully, Co. Leitrim on the River Shannon downstream from these two lakes. Considering the presumed importance of the coast as a resource during the Mesolithic, a striking aspect of the distribution map (Fig. 6.1) is that while there appears to be six coastal sites, there is in fact only four definite findspots for over
Fig. 6.1. Distribution of Mesolithic evidence in the west of Ireland.

1000 km of coast: the other two sites of Burrishoole and Mallaranny, Co. Mayo, are, as mentioned, not definitively related to the coast, and may well be inland Mayo sites, if not from further away. Three of the four definite coastal sites’ finds are also possibly not from a directly coastal location in the Mesolithic; the find from Prospecthill, Co. Galway today lies about 700m from the coastline, but in the Mesolithic a lower relative sea-level of 3-6m would entail that the find was from 2-3
km from the coast – in other words from the interior of the woods. Similarly, the find from Townparks, Co. Galway could be considered to be an estuarine find, but with lower relative sea-levels this may have been from a riverine location, with the coast 2 km away. The findspot from Streamstown, Co. Galway, is today from beside a bay, but which may have been a freshwater lake in the Mesolithic, meaning that the find would be from about 7 km from the coast. Therefore, the only site in a direct coastal location is at Belderrig, Co. Mayo.

The Belderrig site was first noted as lithics were being eroded out of a cliff face. Caulfield¹ happened to live nearby; therefore this eroding site was brought to the attention of the archaeological community. This site has been excavated over the past three years, and is the first Mesolithic site to be excavated in the west of Ireland, and so far has revealed an extensive lithic scatter – dominated by the use of quartz – along with organic evidence (Warren, pers. comm.). To an even greater degree than at Ferriter’s Cove, the Belderrig site stands in utter isolation in the known Mesolithic landscape (Fig. 6.1) – there are no other known Mesolithic sites for a long distance. If Caulfield had not spotted this material, the entire coastline of Mayo would be another blank spot on the distribution map.

What must be borne in mind when looking at the distribution map for coastal sites along the 1000 km stretch of coastline is, firstly, the lack of research in these areas, and secondly, the fact that the Mesolithic site at Ferriter’s Cove was initially noted by a find of a Neolithic artefact. Therefore, we must be wary of seeing these as blank areas in Mesolithic occupation of the landscape. What should be considered is that Mesolithic communities were all along the coast, but we are as of yet unable to identify this inhabitation of the coastline. What also has to be contended with is that the rise in relative sea-levels over the period of 4000 years will have buried many coastal sites. But, as at Belderrig, those higher up on the shore can be identified with time and perseverance – and some luck.

Looking at the context of the finds from the west (Fig. 6.2), we can see that archaeological excavations have produced few finds: Hermitage, Co. Limerick,

¹ Caulfield, mentioned previously, who has spent decades investigating the pre-bog field systems in North Mayo.
Leedaun, Co. Mayo, and outside of the portal tomb at Drumanone, Co. Roscommon: as mentioned, the lithic from the excavation at Oranmore, Co. Galway was misidentified as being Mesolithic. Fredengren’s (2002) excavations at Lough Gara have produced dates of Early and Later Mesolithic material (not included on the map). Looking at material that has come from surface finds, we have seen that the excavations at Belderrig were initiated as material was being eroded out of a cliff face (and have been marked as a surface find on map); we can see that a number of surface
finds have been found along the Shannon River banks: at Annagh Lr. and Tully, Co. Leitrim and Lehinch, Co. Tipperary. The possible Mesolithic find from Turloughnaroyey, Co. Galway was a surface find, and the finds from River Island, Co. Galway and Inishmore, Co. Sligo were both surface finds on islands in lakes, while the finds from Clonnaragh, Co. Roscommon were either surface finds or possibly tillage finds (the owner of the adjoining fields I talked with never remembers the fields being ploughed). The other tillage finds are from Urlaur, Co. Mayo and Prospecthill.

Finds collected while digging or during construction work came from Ballycurrin Demesne, Co. Mayo, Townparks, and Streamstown, with the one find from a bog coming from O’Briensbridge, Co. Clare. Dredging produced finds from Lough Allen and the River Corrib, while divers have collected material from this river as well. While there was one find from the lake bed at Lough Allen, the remaining finds, from Lough Gara and Lough Allen, were collected after the lowering of the water level on the lakes.

Therefore, we can see that tillage has played a minor role in uncovering evidence, that surface finds are thin on the ground, and the majority of evidence has been produced from the lowered lake levels exposing the shoreline of Lough Allen and Lough Gara. On these two lakes over two hundred separate lithic scatters have been identified. At Lough Allen, the previous recent literature had usually noted only two findspots coming from the lake (Fredengren 2002, 114; Gibbons et al. 2004, 5; O’Sullivan 1998, 55), with no fieldwalking having been carried undertaken in the area for decades. This thesis’ fieldwalking has shown the Mesolithic communities’ presence there to be far greater than previously acknowledged, with 97 findspots of either single finds or lithic scatters identified. What should be remembered is that only a small portion of the lakeshore was fieldwalked, therefore the remaining shoreline and hinterland of the lake remains to be investigated.

As at Lough Gara, when the lake levels were lowered on Lough Allen, numerous crannogs or platforms were noted by Raftery during a rapid survey of Lough Allen which he described as metalling sites. However, for the twenty such sites on Lough Allen, Raftery did not mention any lithics being recovered from them, and during this fieldwalking a few of these platforms did not appear to contain any lithics. At Lough Gara, which saw a much greater intensity of fieldwork in the 1950’s, numerous
platforms were identified as containing lithics. A number of lithics were provenanced to groups of crannogs, while 58 individual crannogs are cited as containing lithics. Of these 58, 22 had a single find of a lithic, whereas one crannog had over 500 lithics; most of these crannogs are not on Lough Gara itself, but along the Boyle River, as it exits Lough Gara. Here, a number of the crannogs are located where the river widens to form another small lake at Coolnagranshy. Over half of the lithics from Lough Gara come from this 4 km stretch of river, with most of them from the shores of the small lake. As was shown in Fig. 5.39, the distribution of lithics on Lough Gara itself shows a concentration around Inch Island and on the south shore at Tawnymucklagh and Lomcloon. What is unclear is to what extent and degree the entire shore of the lake was examined for material. Therefore, it is uncertain if the intensity of finds from the River Boyle represents the collecting strategies in the twentieth century as opposed to the taskscapes in prehistory. However, a pattern does emerge of finds being more abundant from the shores of the river and lake that face northwards when looking at the water.

While Gibbons et al. (2005) have suggested that the River Corrib finds are from a similar location to that of Coolnagranshy, this notion would seem difficult to sustain. Both before and after the drainage works on Lough Gara, the River Boyle becomes a lake at Coolnagranshy (Fig. 5.42), and this would appear to be distinctly different to the character of the River Corrib at the point where the Mesolithic lithics have been found. A more appropriate comparison with the River Corrib finds would probably be upstream on the River Boyle at Derrymaquirk, which is closer to the outlet of the lake, where the river is narrower. The lithics collected by the divers from the river bed of the Corrib came from a two km stretch of the river, from the fording point at Menlough, down to close to Jordan’s Island. Further Mesolithic material has been collected from close to the sea, on what would have been an island in the River Corrib. Up on Lough Corrib itself, two findspots have been located, one on the western shore at River Island, and one directly across on the eastern shore at Ballycurrin Demesne.
Axes

Lough Gara and the River Corrib hold the biggest concentrations of axes in the six counties after Killaloe, Co. Clare, the Tawin/Maree area, Co. Galway, and Lough Inchquin, Co. Galway. In all these areas, shale and mudstone are the predominant raw materials used. For the latter three areas, almost all of the recorded finds from them have been axes, and in the case of the Tawin/Maree area, axes were the only finds recorded. However, as this survey’s fieldwalking of ploughed fields in the Tawin/Maree area has shown, where previously only axes had been found, this survey was able to collect 800 lithics. This suggests that when looking at a distribution map of the finds of axes (Fig. 6.3), what we are looking at is the collection of an obvious stone tool, and that the lack of other finds from the area does not imply that only axes are to be found there. The other main point about looking at the map of the distribution of axes is that amongst these finds are Mesolithic axes, which have invariably been attributed to the Neolithic. As mentioned earlier, this attributing of polished axes to the Neolithic stems from the entrenched tradition that the Neolithic heralded a new era of technological and ritual advances, including the polishing of axes to clear forests, and performing ritual acts. This is highlighted by the comments of the excavators of the site at Hermitage, before the Early Mesolithic radiocarbon dates were returned:

Although in use since the Mesolithic, the stone axe is a diagnostic tool of the Neolithic, essential to large-scale forest clearance…The polishing of stone axes is a time consuming business. It takes a long time to polish the entire surface of an axe. It may be no accident that the adoption of the polished axe happens alongside decorated pottery and the building of complex monuments. They are not simply work tools (Collins and Hayes 2001, 88-9, emphasis added).

These comments are mirrored by a report on an axe find from the River Corrib:

Polished stone axes are considered to be characteristic of the early farmers of the Neolithic…but many ground…axeheads were being manufactured from as early as the late Mesolithic…There appears to be no purpose to the polishing of the surface other than aesthetic and this may indicate the increase in emphasis on the decoration of implements and a shift towards the use of tools in a ritual context (Kelly 2006, 35, emphasis added).

These two quotations highlight the erroneous view of Mesolithic communities as being essentially less cultured people – indeed uncultured people – than the supposedly more sophisticated Neolithic farmers. They were so busy scrounging for food, they had no time to concern themselves with anything else, especially not
Fig. 6.3. Distribution of axes in the west.

non-pragmatic, ritual acts, or aesthetics. While researchers investigating the Neolithic acknowledge the symbolic and aesthetic value embedded in an axe and looked at the ritual aspects of their deposition, for the Mesolithic it is presumed to have been strictly a work tool, devoid of meaning and value beyond its purpose of woodworking. This engrained view of the Mesolithic stems from an evolutionary perspective which relegated hunter-gatherers – past and present – to a lower rung on the evolutionary
ladder. The ubiquity of ground and polished axes on Mesolithic sites suggests that this artefact must be considered as integral part of the material culture for the period. By omitting the polished axes from discussions on the taskscapes of the Mesolithic communities – and by omitting the social aspects of the creation, distribution, use, and deposition of ground and polished axes – we are immediately missing a vital piece of the story of the communities that inhabited Ireland for four millennia.

There are almost 1800 axes provenanced to the six counties, with over 700 of these coming from Killaloe alone. Woodman et al. (1999, 78) have commented that in the Mesolithic the axes tend to be formed from pebbles which required minimal shaping to create an axe. What the deposition of a finely crafted polished mudstone axe from the cremation pit A at Hermitage tells us is that we can consider well crafted axes as being from the Mesolithic as well as the more natural, fortuitously shaped axes. Woodman et al. (1999, 80) have also suggested that axes found in riverine and lacustrine contexts should not be assumed to be Neolithic instead of Mesolithic. While in agreement with this, I suggest that we should bring it even further and argue that even away from these areas, it should also not be assumed that they are Neolithic. As this survey’s fieldwalking in Prospecthill has shown, a Mesolithic retouched point was found in a field with two other axes at least 2 km away from a riverine context, in an area which produced dozens of axes in the 1930’s. Of course, it would seem doubtful that all these axes are Mesolithic, considering that 800 post-Mesolithic artefacts were also found during this survey (including a few more axes). But it does suggest that a number of them may be Mesolithic, and that further Mesolithic lithics are to be found in the area, if enough time is devoted to investigating the area.
6.3. Taskscapes in the Early Mesolithic

In this section I will discuss the evidence we have for the Early Mesolithic in the west. Lough Allen and Lough Gara have possible evidence for Early Mesolithic activity, but these areas need further work to define more clearly the Early Mesolithic presence: the remaining part of the west away from the Shannon has yet to turn up evidence for early occupation. I will then discuss the site at Hermitage. I will also discuss Lough Boora, which is on an eastward tributary of the River Shannon, and how this relates to Hermitage.

The first line of possible evidence for the Early Mesolithic comes from Lough Gara, where some possible early-type cores have been identified by Finlay (pers. comm.): however, as noted, Sternke (pers. comm.) did not find any of these during her review of some of the lithics. This thesis’ review of the Lough Gara material noted two possible early-type cores; one from Tawnymucklagh (E115:1-42 [T33/55]), and one from Inch Island (E119:36) – a piece of brushwood from Inch Island was dated to 7330-7050 BC (Fredengren 2002, 120), but it is unclear if this is a date of humanly modified, or naturally occurring, material. Further up the Shannon, on Lough Allen, this thesis’ fieldwalking found possible evidence for Early Mesolithic activity – three cores and a core axe at Cormongan on the east shore of the lake, a core from the north shore of the lake at Derrinvorey Lower. However, further work is needed to assess this possible Early Mesolithic presence. Therefore, we can see that the definitive and possible Early Mesolithic material found so far has been found along the Shannon and its tributaries, with a blank spot of some 20,000 km² for the rest of the region.

Ironically, considering the dearth of evidence in the west, the clearest signs we have for the Early Mesolithic in the west is not the usual ephemeral lithic scatter that signifies a prehistoric inhabitation of an area, but the series of cremations at Hermitage on the banks of the Shannon. The three cremations here dated from the mid-eighth millennium to the mid-seventh millennium: the latest date may represent a Later Mesolithic cremation, depending on how one dates the beginning of the Later Mesolithic.

The oldest cremation (7530-7320 cal. BC) excavated contained an above average weight of bone than is usually found in excavated cremations, suggesting that the bones were carefully collected from the funeral pyre and deposited in the pit. The cremated remains were placed around a post that has been interpreted as a grave.
marker, and placed against this post was a polished shale axe; eight chert (two of which be natural chert or limestone pieces) and nine flint lithics were also in the pit (Collins and Hayes 2001; Lynch 2001; Woodman 2001). It is more than likely that not every person who died was treated in this manner. While this could suggest that this was the funeral of a man or woman who was considered of significance to the community for whatever reasons, it could also be indicative of a significant event in which the cremation of this person was deemed to be appropriate or necessary. Indeed, while the cremated remains in this pit were taken to represent a single individual, and hence could be seen – and in a later prehistoric context probably would be seen – in the context of the rise of the importance of the individual in society, the understanding of different concepts of personhood discussed earlier in chapter 4 suggest that what we see as an individual would have been perceived differently in the past.

The funeral rites of this cremation were performed by mindful communities of practice (sensu Dobres 2000), and members of the community would have had their own roles to play in these rites, whether actively or passively, as participants or spectators. Funeral rites are considered key arenas in which the social values of a community are not only reflected but are also arenas instrumental in the social reproduction of the communities (Thomas 1991, 129). However, while doing this, the rituals can be open to ambiguity, subversion, and contestation (Cooney 2000, 89). Furthermore, Howe (2000, 63) has noted that an element of ritual that is often overlooked is that of risk: the risk of the incorrect performance of the ritual, or the inability to control the (supernatural) forces being contended with.

The process of cremation is not a particularly practical method of the disposal of the dead and was ultimately tied up in the cosmology and world view of the community involved. In cremation, the transformative power of fire is given a central place in metamorphosing the body, and a large fire is a highly visual way of disposing with a body, seen from close by and also from afar from the rising smoke. Ingold (1986, 246) and Zvelebil (1997, 37) have noted that the world view of hunter-gatherers is often typified by a tripartite division of layers: sky, earth, and water, which are “linked by a ‘cosmic pillar’, or ‘cosmic river’, symbolised in the shaman’s turu, or a tree often placed in the centre of the shaman’s tent”. At this cremation we
see these three layers converging: the body ascending into the sky through the flames and smoke; the remains being deposited in the earth (with bone embedded in burnt clay), and these actions being carried out beside the river.

The commitment to cremate the body of this person necessitated a considerable undertaking in time and effort for a community. The process of this burial rite may have been carried out over days, weeks, or even longer. This would have involved at least the following steps, not necessarily all in this order:

a) the preparing of the body for cremation;
b) the gathering of the various materials for the pyre;
c) the lighting of the pyre;
d) the maintenance of the pyre to thoroughly burn the bones;
e) the cooling of the fire;
f) the inspection of the pyre’s remains for bones (and other material added?);
g) the collection of the bones and other material into containers;
h) the post-cremation alteration/preparation of the bones (pounding/ grinding);
i) the digging of the pit;
j) the forming of the grave marker (this may have been a feature already there);
k) the deposition of the bones and lithics, and possibly other organic material – all the while as people, mourned, ate, slept, talked, played, took care of infants. All these processes involved differing communities of practice, and necessitated the negotiating and asserting of the power relations involved in the community: whose place was it to do step a), or who was excluded from doing step i). These communities of practice would have involved the socialisation of children into the processes, from observing the activities and the older peoples’ interactions, to active exclusion or initiation in the processes involved. A key consideration of this cremation concerns the relations that the community involved had with the landscape – the gathering of wood for the fire was not a matter of resource exploitation, but would have been tied up in their understandings of the animacy of the woodland (Ingold 2000, 144); the gathering of the mudstone, chert, and flint lithics again brought different parts of the animate landscape together with the wood and the person.
The next evidence for burial at this site came between fifteen to twenty five generations later (7090-7030 cal BC). Here, the circumstances were different in that it is suggested that there is the possibility that only selected parts of the body were cremated, or only a partial amount of the cremated remains were deposited in this pit. The deposition of lithics in this pit was different from the first in that they were almost exclusively chert, and nearly half were taken to be naturally fractured pieces as opposed to flakes or blades; there was also cremated fish bone present in the pit. The next evidence for cremation dates to about twenty to thirty generations after the
second (6610-6370 cal BC): this consisted of a minute amount of bone – not identified as human – which was deposited with six flakes and blades (one flint, two chert or limestone, and the rest chert), and three small stones.

For the second pit at Hermitage, it is suggested that disarticulation of the body took place, with only some of the remains cremated, or deposited in the pit. Evidence for disarticulation may also be found in regards to the Early and Later Mesolithic humans remains from the rest of Ireland, as shown in Chapter 3. The disarticulation and movement of body parts around the landscape would seem to be a recurring theme in the European Mesolithic in general (Conneller 2006, 159).

The burials at Hermitage represent evidence for burial beside the river intermittently over a period of between thirty five to fifty five generations. This represents a persistent place in the landscape, a bend of the River Shannon where communities returned to over the generations. It has been suggested that this was a fording point on the river, suggesting that there were two axes of movement here – the crossing point of the river between east and west, and the movement up and down on the river, from the sea into the interior of the island. While we have here a persistent place in the landscape, we must be cognisant of both the continuity and change in the communities over this period. Indeed, depending on how one views the transition to the Later Mesolithic, this time frame could represent both Early and Later Mesolithic cremations. Moreover, the landscape would have undergone considerable changes over this length of time, in terms of the changing water levels, and with the development and alteration of the composition of the woodlands.

With only a small strip of the river bank excavated, it is unclear what further evidence there is for the Early Mesolithic in the area. The closest other material is, as mentioned in chapter 3, the Early Mesolithic human remains from Killuragh Cave, Co. Limerick by an eastern tributary of the Shannon, which were found with a range of lithics (Woodman and O'Shaughnessey 2003). Following the Shannon north, the next evidence for the Early Mesolithic is at Lough Boora, Co. Offaly about 100km from Hermitage, connected to the Shannon via the River Brosna. While at Hermitage we have explicit ritual behaviour in the form of burials and artefact deposition, at Lough Boora the site is traditionally viewed in economic terms as a temporary
hunting/fishing site. However, as discussed in chapter 3, Finlay’s (2003A) reading of the site suggests that the burnt lithics found there represent more than simple discard – she has suggested that the high level of burning of the lithics, which altered their appearance similarly to bone, represents purposeful acts; she suggests that the lithics were being metamorphosed. Therefore, what this highlights is that we are not dealing with two ‘type-sites’: a ritual and a profane. Lough Boora is not simply an economic campsite, a convenient stopping place in a seasonal round. Rather, the tasks at Lough Boora were carried out in landscape infused with ritual: the taskscape is a ritual taskscape. This is not to suggest that the landscape was simply a homogenous spread of ritual locations, without special places acknowledged and demarcated. But rather, that the tasks carried out at, and the perception of, ‘mundane’ sites such as Boora were enmeshed in the world view of the communities who visited and stayed at them. Indeed, the use of the term “ritual” is problematical in that it creates a binary division between the ritual world of religious or spiritual actions and the mundane world of setting up camp, hunting, gathering, lighting a fire, disposing of “waste”, where these are inextricable fractions of life. In terms of the revisiting and reuse of locales, such as witnessed at Hermitage, what is interesting is that while the bog encroached the site at Lough Boora and altered its topography and ecology, Later Mesolithic material was found in the peat during excavations, suggesting a reoccurrence of activity here at a much later stage when the place have physically changed. Is this a fortuitous find, simply because this area happened to be excavated, or does it signify something more about the re-visitation of this locale?
6.4. Taskscapes in the Later Mesolithic

In this section I will discuss Mesolithic taskscapes by the waters, primarily using the evidence from Lough Allen as an example. I will then look away from the waters, to discuss the taskscapes in the woods, and then follow with a discussion on human-animal relations. I will conclude with a discussion on the question of regionality and mobility.

Taskscapes by the waters

Lough Allen has produced the second largest assemblage of Mesolithic material in the west. Here, as at Lough Gara, the drainage schemes have lowered the water levels, enabling submerged shorelines to expose material. In all 98 scatters were found during this thesis’ fieldwalking survey around the lake, with the largest scatter – and the largest concentration of scatters – from the southwest of the lake at the outlet of the Shannon River at Mahanagh. Here, a low knoll forms a peninsula with the river along the north side, and the lower part of Lough Allen along the other. The majority of the lithics were found along the strip of shore where the Shannon exits. Here, hundreds of lithics are apparent along the shore, and visibly eroding out of the bank.
On the opposite side of the river bank, there is a lack of lithic scatters, with these only starting once you leave the river behind and approach the next peninsula to the north. Similarly, on the north shore of the lake, where the Shannon enters, there are lithic scatters apparent on the east shore (Kilgarriff and Annagh Lr.), where the river runs to the left, but on the opposite side (Ross Beg Glebe) there is a distinct lack of lithic scatters. So, for both of these areas, the lithics are concentrated where the river is running from right to left as you face it from the shore. However, at the outlet of the smaller river at Drummans Lr. and Derrinvorey, a different pattern is apparent,
with finds from both sides of the river, but from further away from the outlet, along the lake shore itself.

Previously (p. 109), I suggested that Gibbons et al.’s comparison of the River Island findspot to that of Cormongan did not make as much sense as a comparison with the Drumman’s Lr. or Annagh Lr. findspots. I suggested that these areas – of findspots at the mouths of rivers – can be seen in terms of communities’ movement in the landscape, with the river mouths as focal points of arrival and departure: as socially construed nodes in the landscape. What is interesting about the Cormongan and Cornashamsoge survey is that the two areas within these townlands’ stretches with the densest concentration of finds are by two very small streams that run down a short stretch the adjacent mountain. How does this relate to my suggestion of social nodes in the landscape? While clearly not access points for movement away from the lake as in the case of the previous two, they could nonetheless be considered as landmarks on the lake itself.

While there would seem to be an emphasis on the mouths of watercourses, it is clear that a lot of the material does not come from these locales, but rather from the shoreline in general. These range from single finds to discreet scatters of lithics. The conventional reading of these finds would be that they represent either a) the casual discard of tools, b) the remnants of knapping episodes on the shore, or c) the erosion of caches of material. However, these pragmatic, naturalistic explanations may not be considering the complexity of the deposition of material – a complexity not fully understood but usually glossed in terms of subsistence activities. This complexity of lithic deposition was undoubtedly tied in to the world view, and ritual practices, of the communities involved. For a long time archaeologists dismissed this aspect of lithics:

To make a D scraper, collect a flint nodule (1) at full moon, (2) after fasting all day, (3) address him politely with “words of power”, (4)… strike him thus with a hammerstone, (5) smeared with the blood of a sacrificed mouse …Technical and scientific progress has of course just been discovering that (1), (2), (3), and (5) are quite irrelevant to the success of the operation prescribed in (4). These acts were futile accessories, expressive of ideological delusions. It is just these errors that have been erased from the archaeological record (Childe, cited in Lucas 2001, 93).
While the asperity of Childe’s remark probably stems somewhat from his general iconoclasm, it mainly follows from the dominant modern belief that the making and use of things can be stripped of their social context: that technology can be analysed in terms of its use in subsistence and the economy with the social side of life analysed separately. In the same vein, Hawke’s ladder of inference maintained that technology is on a low rung of the ladder and hence a straightforward topic to analyse and describe. Childe’s comments suggest that the “futile accessories” – or what he would regard as the epiphenomenal aspects of technology – have been erased from the record. However, it can be argued that they have actively shaped the patterning of the archaeological record: for example, in the caching of lithics in Mesolithic Ireland (Finlay 2003B; Warren 2006). The interpretation of this caching of material highlights the opposing views on technology: whereas Woodman et al. (1999, 79) have suggested that the cache of axes found at Ferriter’s Cove represents the economic, embedded procurement strategies of the community, Warren (2006, 27) has suggested that this, and other, caches represents the community’s relationship with the stone working material, their relationship with the landscape, and their relationships with one another. In a Neolithic context, O’Sullivan’s discovery of a lithic scatter along with human remains, floral and faunal remains, as well as a basket highlights that these ephemeral lithic scatters must be considered in a more holistic sense than in pure subsistence terms. The sense of a ritualistic taskscape, being played out in a ritual landscape, should be considered on equal terms to the economy to which it is intimately fused. Therefore, these scatters that we find on Lough Allen and elsewhere may have a more complex history of deposition rather than casual discard, or economically motivated caching. Indeed, the difficulty with using a term like casual discard is highlighted in the instances outlined in Chapter 3, where we have evidence for Mesolithic activity, but no lithics.
The sorts of knowledge, understandings, and awareness that derive from one’s encounters with their material world are neither neutral nor “merely” practical; they also reconfirm one’s understanding of the world and how it should be worked. Technological knowledge, then, has both a transformative and political potential. Technology always has the possibility of being about relations of power…Technological practice…is not simply the activities and physical actions of artifact [sic] production and use, but the unfolding of sensuous, engaged, mediated, meaningful, and materially grounded experience that makes individuals and collectives comprehend and act in the world as they do (Dobres 2000, 5).

In contradistinction to the views of a disembodied technology, this quote from Dobres highlights the grounding of technology in the social arena – whereas Hawke’s ladder analogy separates social relations and technology, and Childe divorces production from its social context, it can be countered that these are in fact ineluctably fused. Indeed, Ingold (2000, 314) has stated polemically that “there is no such thing as technology in pre-modern societies”. By this he refers to the fact that, as the modern concept of technology stands – as a sphere of activity separated from social relations, and as a means of mastery over, and distance from, nature – it did not exist until relatively recently. Rather, the remains of lithic technology we find as scatters of stones were a part of the communities’ relations with the world and with themselves. How they used and deposited the stones was contingent on their understandings of their world view, rather than an ahistorical, pragmatism. The difficulty is in relating the patterning available to us to a historically contingent society.

The material used by the communities on Lough Allen in their stone working was dominated by chert. It would appear that the chert, siltstone, and volcanic types were available locally. However, it should be cautioned this identification of the material was based on a rapid assessment of the material by the geologist, and what is needed is a careful scrutiny of the material to assess their provenance. In terms of the volcanic types used, while some has been identified as tuff, the rest is unspecified as volcanic. It is unclear whether all of this was derived locally. Therefore, while we can for now say in a vague, general sense, that the chert, siltstone, and volcanic rocks are “local”, this is probably masking a considerable difference in the provenance of the lithics, which ultimately has consequences on our understanding of the movement of material across the landscape. This movement of material is predicated on the differing activities of the communities in question – from the actual sourcing of the
material from its original place in the landscape, to the various relations of exchange between different groups in an area.

The provenance of the “local” chert at Lough Allen is also problematical. There appears to be a number of different kinds of chert in the assemblage, including banded and striated chert, with colours ranging from light grey to dark grey, and from dark blue to black, with these different colours also being dull to glossy chert. One of the difficulties is that a single outcrop of chert can reveal a wide variation in the appearance of chert. According to the OSI maps there is a chert outcrop a few km to the southwest of the lake, and another two a few km further again to the west. These may well be the source of some of the chert. If this is the case, the chert may have been removed in blocks from the outcrop, and brought to the various locations on the lake in the form of cores, and then worked into blades and so forth. However, it is unclear to what extent chert was available closer to the actual working areas.

A flake and a core of a non-local, non-carboniferous chert were identified in two of the scatters from Lough Allen: both were from the eastern side of the lake at Cormongan and Cornashamsoge, and found 1.2km apart; it is unknown from where this material originated. The flint from Lough Allen is also non-local, and almost half of the flint artefacts came from, again, Cormongan and Cornashamsoge, even though these areas had only a quarter of the total finds. Mahanagh, the largest collection from the lake, had only four flint pieces, which included one core. Therefore, this shows us the convergence of taskscapes and communities of practice on the lakeshore. While we have locally derived stone being collected, worked, and used at various locales dotted around the lake, we also have the arrival of distantly derived material to the same areas.

We can suggest that the non-local material arrived at the lakeside through different methods. For arguments sake, we could say that the flint core, C05:1:1090, originated in Antrim.2 The possible exchange relations for this core to arrive at Lough Allen could have involved a convoluted route from the northeast of the island, rather than a direct, utilitarian, trading route. This core may have passed through various communities on its way, and its value may have waxed and weaned along the course:

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2 Acknowledging, as mentioned before, that the simplistic label of all flint being Antrim flint is perilous.
an entangled object’s (*sensu* N. Thomas 1991) net worth as a material is socially constituted to a greater extent than its straightforward utilitarian value. The core may have been a part of exchanges used to foster an alliance, resolve a dispute, as an act of magnanimous kindness, or a debt of gratitude. The convergence of the local and non-local stone at Lough Allen brings different nodes of the landscape together – the stone is not just extracted from its source to then become a reified commodity, but probably brought with it the personality or qualities of its source (Bradley 2000, 41), or at least the stories told of the source. This sense of the personality of the source can be manifested sensuously: when cracking open a core collected from the beach, the smell of the sea wafts out with each hit.

The communities of practice who received this flint core at Lough Allen then proceeded to work the core, alongside others working the local stone. The sound resonating from the flint core as it was being knapped would have been distinctly different to the local material’s sound. The different material would have called for subtle changes in the technique used to perform the task at hand. The core C05:1:1090 does not show signs of quality knapping, and may in fact be a fragment of an exhausted core. The flaking appears to be opportunistic knapping of the core, as opposed to the more structured approach to the piece seen on other cores from the same scatter. Could this be a signature of a child’s knapping of the flint; did this young knapper – with more experience working local material – pick up an exhausted core of his or her elder sibling or parent, and proceeded to flake off some corners of the core, using the techniques that he or she watched the elders using on the material usually available? Was this child given this core, told stories of who brought it to the lake, and from where the flint came? The value of this core would have shifted from its initial collection, to its end point on the shore of Lough Allen, where its value again differed between the older and younger knapper.

From Lough Gara, two cores may be representative of novice, or children, knappers: both of these chert cores (MNI Coolnagranshy E118:22 and MNI Tawnymucklagh E115:1-42 [T 19/55]) exhibit what can be described as the “football syndrome” (Hammar, pers. comm.). The football syndrome is where the novice knapper removes flakes ineffectually, so the core becomes so rounded that it is
difficult to remove any more flakes, leading to the abandonment of the ball-shaped core.

Pl. 6.3. Flint core C05:1:1090, from Mahanagh, Lough Allen.

However, after suggesting how we can look at the communities of practice at these two lakes as having actively involved children, Finlay’s (1997, 205-6) cautioning should be remembered: she has argued that it can be erroneous to identify crudely crafted lithics with children for two reasons; for one, a novice does not necessarily have to be a child, and two, that an individual can lose as well as acquire skill during their lifetime. While I have attempted to introduce children into the taskscapes by the waters it is difficult in identifying them in the archaeological record as such. We implicitly know they must have been there, and at any given time a sizable part of the population. But as archaeological research is practiced by adults, it is easy to forget, or dismiss as less important, that children make up a substantial sector of a community. Children actively shaped the archaeological record, both directly and tangentially, therefore attempts must be made to allow them to be present in our research.
While we have noted that the distribution of lithics around the lake reflect the taskscapes of the communities, the excavation of the Mesolithic fishing traps, weirs, and brushwood platforms on the Liffey, Co. Dublin discussed in chapter 3 remind us that stone is simply the slim remains of activities: there was only one lithic found during the excavations at this site, even though there was clearly extensive Mesolithic activity here over hundreds of years, and this single burnt flint blade was found away from all of the structures (Boyd forthcoming). Therefore, where there are no lithics in an area does not indicate a blank spot of inhabitation in the prehistoric landscape, but rather, a blank spot in our identification of the landscape use. The importance placed by us on lithics, while arguably important in the Mesolithic considering the movement of stone around the landscape that is apparent on Mesolithic sites, must be tempered with the realisation that stone was just one spectrum of the material culture used in early prehistory. This aspect has been highlighted by Lozovski (2005): having excavated a site near Moscow containing 20,000 stone, antler, and bone tools, his paper titled “Mesolithic man – does he belong to the Stone Age or the Bone Age” noted that the lithics were worked lazily, while the fine work and attention to detail was instead lavished on the bone tools, and he argued that the use of bone and antler as tools was preferred to the use of stone.

There has been little evidence of bone or other organic tools on Irish Mesolithic sites, with the acidic nature of soil and bedrock not conducive to preservation (Woodman 1974, 3). The additional problem is also that researchers generally presume that organic material is post-Mesolithic, and hence material may have gone unrecognised. Little (2005, 83) has suggested this may be the case for worked bone and a wooden pin found in context with lithics in Co. Westmeath that she noted in the National Museum archives. The same may also be true of a few bone points and pins found at Lough Gara (Coolnagranshy E20:3817; Coolnagranshy [no reg. no.’s]; Rathinaun E20:549-50). As mentioned earlier, along with the lithics recovered from the River Corrib, the divers collected organic material that they thought may have been wattling, or fishing traps (N. Higgins, pers. comm.), but only lithics were regarded as Mesolithic finds by Gibbons et al. (2005). The excavation of the Mesolithic material from the Liffey, dating to as far back as 6090-5890 cal BC, suggests that this overlooked material from the River Corrib could well be Mesolithic in date, with a re-examination and dating programme needed to assess this speculation.
Another interesting find of lithic and organic material together came from Lough Scur, Co. Leitrim, on the Erne water system. Here, five flakes were found with piece of leather under a dugout canoe (Lough Scur E20: 3794): however, the leather and canoe are not dated, so again remain speculative as to their dating to the Mesolithic.

**Taskscapes in the woods**

At Lough Allen, I have shown the taskscapes by the water’s edge. What is important to acknowledge is that the evidence used is based upon the identification of lithic scatters along the exposed shoreline, and that no fieldwork has been carried out in the surrounding landscape away from the waters. What we have is a jaundiced view of the taskscapes in the area, which is biased against the woodlands that surrounded the lake.

The Mesolithic period has long been linked with the development of the post-glacial forests – the communities were called “Forest folk” (Childe 1957, 44), with the forest seen as a “problem” to the communities (Hawkes and Hawkes 1947, 19), rather than their home. While it is clear that the Mesolithic communities in Ireland were in fact woodland dwellers, the woods have usually been treated as simply an *a priori* ecozone (Woodman 1978; Kimball 2000A) or an inhibiting factor of the inhabitants’ settlement (Lynch 2002; Mitchell and Ryan 2001), as opposed to a lived-in environment. Where researchers in Britain have looked at the forest in the Mesolithic, it has tended to be towards how the Mesolithic communities altered, or managed the woodlands for their economic benefit: Warren (2001, 127) has commented, that this “concept of management…was connected to a desire amongst researchers to identify Mesolithic populations that were actually *doing* something significant”, as opposed to simply dwelling.

As mentioned earlier in the context of Hermitage, we have to be cognisant of the changing aspect of the woods. As we are dealing with a time span of over 2000 years for the Later Mesolithic, the composition of the woodland would have changed dramatically at both a regional and local scale. It is often stated that the forest cover in Ireland consisted of a dense canopy, with no breaks apart from the big rivers and lakes (Mitchell and Ryan 2001, 117). However, Rackham (1988, 5) suggests that
considering the fact that the shrubs and trees here are shade intolerant, regular
clearings, primarily through tree-fall by various agencies, must have been present to
allow the trees to regenerate. He argues that the woodland was not a continuous
canopy, but rather intermittently interspersed by glades (ibid., 33). These glades were
not just humanly caused gaps in the forest, but rather, a natural part of the life cycle of
the ecosystem. As mentioned in Chapter 2, there is evidence for openings in the
woodland in Ireland (Preece et al. 1986; Molloy and O’Connell 2003). Furthermore,
Rackham (1996, 28) has argued that the description of the climax forest as being, for
instance, a “mixed oak forest” belies the complexity of the woodland composition; he
suggests that individual stands of trees would have differing compositions. Rackham
further argues that hazel should be considered a canopy tree as opposed to a tall shrub:
it has been undervalued in the canopy composition because it produces little pollen if
shaded by taller trees, whereas alder has been over represented due to the locations
where pollen cores are taken.

Mitchell and Ryan (2001) have noted that the trees left in the Irish landscape are
of a diminutive size compared to what would have grown at the time; for instance they
suggest that oaks would have reached 27m in height. These trees would have grown
for hundreds of years. This temporality of the woods is a critical aspect of the
relations people had with the environment. Whereas a human life can be measured in
the yearly cycle of a deciduous tree over the seasons, the fact that a tree would have
stood for generations of human life marks them out as different from animals and
other plants. On a smaller temporal scale, Brown (1997, 112-5) has commented that
whereas today’s floodplains are relatively free from debris and fallen trees, in a
forested landscape this would have been considerably different. Fallen trees and
organic material can dam rivers and alter the channels; the evolving channels lead to
the terrestrialisation of channels, and the creation of new ones. Brown (ibid., 124-5)
suggests that the floodplain forest on the River Lee, near Macroom, Co. Cork possibly
represents the best analogy of the Cool Temperate Mid-Holocene alluvial forests.
Here, the maze of anastomosing channels run through woodland, from the wet species
such as willow and alder on the wetter islands and margins to the dry species such as
oak and ash on the higher islands and islets. This small floodplain woodland has 20
species of trees, 83 species of flowering plants and ferns, and 62 species of moss and
liverwort (Brown 1999, 20). We can suggest that the Mesolithic communities living

Pl. 6.5. Jordan’s Island, River Corrib, showing treeless river banks (Google Earth 2006).
by the River Corrib and other rivers would have inhabited a similar landscape to this, in stark comparison to the almost treeless, channelled river of today (Pl.’s 6.2 and 6.3).

As we have seen, the evidence for the Later Mesolithic consists of lithics found along the north and west coast of the region, along the Shannon system, as well as in the interior of the region. However, the distribution of material is biased towards the two lakes of Lough Gara and Lough Allen, where drainage schemes have exposed lithics on the shoreline. The consistent pattern in the distribution of material is the dominance of waterside locations when compared to post-Mesolithic material. However, this patterning is sometimes misstated – for example, Fredengren (2000, 137) has suggested that “all recognisable human activity in the Mesolithic took place in the border zone between land and water”, and she argues that this was so due to the Mesolithic inhabitants’ cosmological relationship with water. This is would appear to be an erroneous reading of the distribution of Mesolithic material: while the Mesolithic material is undoubtedly gravitated towards water, the Bally Lough project (Zvelebil et al. 1996), the Lough Swilly Survey (Kimball 2000A), and material from the northeast (Woodman et al. 2006, 266-7) have shown that Mesolithic material is not restricted to the border zone alone. The known distribution of material from Lough Gara and Lough Allen has been created by the drainage schemes: the only areas investigated on these lakes have been the exposed shorelines, entailing that the distribution of material – both Mesolithic and post-Mesolithic – away from the lakes is almost unknown.

In terms of the west of Ireland, the finds mentioned in the previous chapter from Clonnaragh, Urlaur, Prospecthill, Streamstown, Leedaun, and Ballycurrin Demesne, are, while all found near water, not related to the border zone itself. Therefore, apart from the evidence produced from the drainage schemes of the two lakes, half of the findspots in the west are away from the land/water border zone. Indeed, the find of the retouched point from Prospecthill, Co. Galway (C05:1:501) highlights a find from inside the woodland itself – while today the findspot of this lithic is about 700m from the coast, in the Mesolithic a lower sea-level of 3-6m would mean that the coast was 2-3 km away, as the bay is shallow around this point. The closest river is also 2km away, highlighting that this lithic is not related to a waterside location, but rather deep in the interior of the woodland itself. Again, the two Mesolithic finds from
Clonnaragh, Co. Roscommon, are not directly related to water, but rather would have been in the interior of the woodland as well.

A key to the landscape perception of hunter-gatherers is suggested as being paths (Ingold 2000, 147; Tilley 1994, 27). Indeed, Ingold has commented that “the image of life as a trail or path is ubiquitous amongst…hunt[ers] and gather[ers]”. Obvious pathways in the landscape are the rivers, lakes, and sea, which were traversed using boats. But looking into the woods themselves, we can suggest that paths would have been of importance:

Some routes through the trees were long established – the track to the riverside from the tents themselves, or the route onto the floodplain for the large gatherings of the community. Other routes were trod once and once only. In a similar way old paths from a previous year’s visit towards good hunting grounds may still have been viable and could be retrodden. Possibly some spring and summer growth needed to be cut back in order to maintain important routes. Some people may have outlasted particular paths, whereas some paths had always been there. Treading the same paths as a now deceased parent, or an elder sibling now married, may have been an important part of the biography of particular individuals. Paths had differing durations and the scar of erosion created by the routines of labour may, in turn, have shaped the activity of those following. Particular routes through the trees created certain views and vistas – in a very subtle way structuring a community’s experience of the local world. Learning traditional paths, their names and the names of the features of the landscape visible from these routes were a vital part of socialisation (Warren 2005, 73-4)

This eloquent quote from Warren’s book on Mesolithic Scotland highlights the embedment of humans in the landscape, and the temporality of the landscape. The paths were not there simply as an access way to somewhere, but rather were an integral part of the community itself. The journey itself is as important as the destination. Looking back to the taskscapes at the water’s edge, we can see that the waters and the woods are not two diametrically opposed parts of the landscape. Rather, they were together the dwelling place of the communities. As I suggested in chapter 4, we can view the platforms by the waters as personalities in the landscape, so too can we suggest that the paths that connected these constructions to other nodes were also personalities.
It has been argued that the Later Mesolithic lithics were essentially a wood working kit (Woodman and Anderson 1990). From the excavations of the fishing traps on the Liffey, we have possible evidence of the coppicing of trees; there is also evidence for the selective use of hazel at the site, even though other suitable types of trees were available. In a wooded environment, we can suggest that the Mesolithic communities understood the woods intimately, in terms of both the physical and spiritual properties of the woods. As Ingold (2000, 145) has commented, the trees themselves would have been considered animate, spiritual beings, not just the animals.
that lived in the woods. In a similar vein, Bloch (1998, 40-1) has expanded on the ritualistic implications of plants, arguing that the importance of plant sacrifice has been neglected in ethnographic accounts, possibly because “it is a less spectacular subject for ethnographic films than the essential staple of animal sacrifice that characterises this form of entertainment”. He further argues that transformative potential is the central fact of ritual symbolism, and the “symbolic power of trees comes from the fact that they are good substitutes for humans” (ibid., 40). Maclean (1993, 2) outlined the possible range of edible flora available in Ireland, listing a minimum of 120 possible species available, with more available in restricted geographical areas. She comments that this is simply those possible as availability will not guarantee use – cultural factors also dictate what is considered acceptable for consumption (ibid., 6). In Zvelebil’s article (1994) he outlined evidence for plant use in the European Mesolithic, citing 71 sites (5 from Ireland) that produced evidence for edible plants, and he lists per site the variety of plants found there. He cites Lough Boora as producing evidence for hazelnuts. However, this is taking a minimal view of the possible plant use, with others available in the area, as O’Connell’s (1980) pollen analysis highlights. The use of plants went beyond food as well. Plants, lichen, and fungi would have been used for medicinal purposes (Allen 2004). It is arguable that the use of fauna and flora for food, medicine, clothing, and shelter, would have been understood on the basis of the mythopoesis of the landscape and all its constituents.

**Human-animal relations**

In looking at human-animal relations during the Mesolithic, I am reliant on evidence from outside of the west. With Belderrig the first site to be excavated, only now do we have definitive faunal remains in the west, the bone pins and boar tusks from Lough Gara notwithstanding.

Discussions of the subsistence practices, or hunting and gathering, of the Mesolithic communities in Ireland invariably comment on the impoverished nature of the flora and fauna on the island. However, it is arguable that impoverishment is a relative term. What was there was a bewildering array of foods that the Mesolithic communities could have obtained. As mentioned in chapter 3, on assessing the isotope readings for the Mesolithic human remains, Woodman et al. (1999, 143) asked could
the interior of Ireland have supported Mesolithic people without a reliance on salmon. Clearly, it would seem that it could. When looking at the faunal subsistence of the Mesolithic communities, an important point to bear in mind is that we are not looking at just how people survived by eating, but rather at the relations people had with their neighbours—the animals—in the woods and the waters, as well as with themselves: as Jordan (2006, 92) has put it, subsistence involves a symbolic and cosmological dimension, and as well as social negotiation. He argues that material signatures of these are visible in the archaeological record, but usually glossed over in the hunt for economic and ecological questionings (ibid., 96). Looking at the Irish context, and taking into consideration the poor preservation rate of bone, an interesting omission from the faunal record on Mesolithic sites is the bear. The bear is universally singled out as a special animal, due to their human-like appearance, footprints, excrement, and omnivorous diet, as well as because they are “manifestly intelligent” (Ingold 1986, 258). The lack of bear remains on Mesolithic sites in Ireland does not necessarily indicate a taboo with eating them or killing them for their hides due to these anthropomorphic qualities (ibid.). Rather, Jordan’s (2006, 97) example from Siberia highlights that there, the bones of the bears were treated in very specific ways, and not discarded or deposited in a similar fashion to other faunal remains.

As mentioned previously, while Woodman (1985, 75) interpreted the goshawk bones from Mt. Sandel as being present as the bird would have been attracted by bird traps set while hunting for pigs. Mitchell and Ryan (2001, 115) have commented on the possibility of the Goshawk from Mt. Sandel and Dalkey Island having been used in falconry. Although the skills of falconry have traditionally been viewed as an arrival from the east, and as “definitely the product of an advanced civilisation” (Epstein 1943, 497), this stems from a belief in diffusion as the sole means of invention, and also a disbelief in the skills of ‘primitive’ peoples as surmised by Epstein (ibid.): “only a wealth of leisure, great patience, sensitivity and ingenuity, not ordinarily shown with regard to animals by primitive peoples, will make a successful falconer”. While of course this prehistoric falconry aspect remains a speculation, I argue it is a useful speculation as the goshawk is renowned as the favoured bird for falconry, especially suited to hunting with dogs (Falconry 2006).
This idea of the tamed bird of prey, as opposed to the domesticated bird is also interesting in that it opens up questions as to the nature of the domestication of animals, and peoples relationships with animals. A number of authors have suggested that we should – due to the lack of evidence for a suitably timed land bridge – probably be surmising that the Mesolithic communities may have introduced wild boar onto the island of Ireland, just as the wild deer were introduced in the Neolithic period (Green and Zvelebil 1990, 86; Woodman and McCarthy 2003, 37). To these can be added Lynch’s comments on the possible human introduction of badgers and pine martins mentioned in chapter 3. This thesis is similar to that of the ‘transported landscape’ discussed in the context of the hunter-gatherers in the Pacific islands; this idea of transported landscapes also includes flora (Gosden 1994, 25). While these were not domesticated animals per se this notion opens up the whole question of human-animal relations to a greater extent, rather than the dichotomous relationship between the domesticated and the wild such as developed by Hodder (1990).

Commenting on the Achaur Indians and other Amazonian groups, Descola (1993, 131) highlights how, although they are horticulturalists, they have not attempted to domesticate animals even though they do tame animals. He comments that this should not be seen as a failing as such on their part – a lack of technical know-how – as they are adept at handling and domesticating plants. Rather, it is due to their understanding of the world. He surmises that “along with the Achaur, many Amazonian tribes regard the beasts of the forest as subject to the spirits that protect them; accordingly they are already domesticated as they possibly can be” (ibid.). Around their houses, they very often have tamed animals, usually the young of animals hunted, with Descola noting that some of their houses “resemble positive Noah’s Ark”, and once tamed they are never eaten (ibid., 130).

Zvelebil (2005) has discussed this issue of the taming of animals, suggesting that it has its origins in the Palaeolithic, which intensifies in the Mesolithic. In Ireland the one domesticated species was the dog, and in the Scandinavian Mesolithic the numerous dog burials at Skateholm attest to the special relationship this animal played in the communities (Larsson 1993, 52-3). One of the richest graves in terms of grave goods was that of a dog, with the animal buried with a deer antler along its spine, flint blades at its hip, and a decorated antler hammer at its chest – the antler and the blades
were placed in the same manner as male human burials. Again, as in the human burials, red ochre was used. It was suggested that at Skateholm I, 6 of the 8 dogs’ burials were placed in a delimited area. This was taken as possibly meaning that the dogs were treated similarly yet differently (ibid.). However, dogs were also buried with humans, and it was suggested that the placement of decapitated dogs in human burials is signs of sacrificial rites. One difference between human and dog burials is that dogs were never placed with animal teeth, whereas humans often were (Larsson 1990).

Looking at the question of human-animal relations and the fluidity of the boundaries between humans and animals, Conneller (2006, 161) has suggested that unless the specific conditions at play in the Mesolithic are investigated, the pronouncements “run the risk of adding to the list of ‘banal phenomenological truisms’ that have become common in many ‘post-processual’ Mesolithic narratives”. She adds that her work showed that deer remains were treated differently at Star Carr. However, this would seem to miss the important point that human-animal relations are not solely centred one species of animal. Rather, as Ingold (2000, 50-1) has outlined, the distinction between the modern western view of organisms – with their essential nature as pre-specified prior to entry into the life process – is fundamentally different to hunter-gatherers. Using the example of the Cree, Ingold shows that for them life is not pre-specified, but is described as continuous birth: “to be alive is to be situated within a field of relations which, as it unfolds, actively and ceaselessly brings form into being” (ibid., 51). Therefore, personhood is as much a part of non-human animals and plants as it is for humans. This suggests that even though we may see special treatment of certain animals, such as Conneller has suggested for deer at Star Carr, this does not mean that the communities there did not view all animals as open to personhood, but rather that they were treated differently for another reason.

What is curious about the possible Mesolithic transport of fauna to Ireland is that they seem to have forgotten to bring deer. As Finlay (2000, 68-9) has commented, the deer, and deer hunting, are prominent motifs in Mesolithic studies. The discovery of deer frontlets at Star Carr that may have been used as a headdress, has entrenched the economic and symbolic importance of deer, so much so that Fredengren (2002, 113)
has suggested that the antlers of extinct giant deer found at Lough Gara may have been used in a similar fashion. However, it could be argued that the Mesolithic communities would have been more involved with their more contemporary companions, the boar. Rather than imagining the communities at the time donning massive antlers, it may be more apt to regard the tusks of boars, which have also been found at Lough Gara, as more suitable apparel. It is noted that the Irish Mesolithic hunter-gatherers have been described as fisher-hunter-gatherers. Looking at the relations that people had with fish, the idea of appearing like a salmon or an eel would not seem to have the same romantic image as much as the shamanic practices of wearing deer frontlets. However, the stone carvings from Lepenski Vir have been suggested to represent half human half fish beings (Mithen 1994, 129), suggesting that the relations people had with animals were not restricted to those on terra firma.

What these aspects of human-animal relations highlight is that analyses based on optimal foraging strategies, or resource maximisation (e.g. Kimball 2000A) must be tempered with the understanding that subsistence is not a straightforward research agenda. Moreover, peoples’ relations with animals did not begin and end with the animals that they either ate or killed for hides. Just as the flora in the landscape was not just a repository of resources to be exploited, the animals were more than just provisions waiting to be used.

Regionality

It is argued that the lithic technology of the Mesolithic communities in Ireland does not exhibit any degree of regionality, with this suggesting sustained contact of the communities throughout the island (Cooney and Grogan 1999, 25) – this is seen in contrast to the perceived regionality of the Neolithic period. However, it is important to note that the sense of regionality in the Neolithic discussed by researchers does not usually discuss Neolithic lithics as showing signs of regionality, therefore the comparison with the Mesolithic is not comparing like with like. Woodman et al.’s (1999) excavation at Ferriter’s Cove suggested that a degree of diversity in the lithic repertoire is apparent in comparison to other Later Mesolithic sites, and they regarded this as an artefact of the raw materials used. Nevertheless, this degree of variability
can be seen in a social context rather than in a strict technological sense. For example, Petrequin (1993, 52) has highlighted that the use of a different raw material for the production of axes in an area of the Jura Mountains by Neolithic communities was constrained by the traditional techniques used: when a particular type of hard rock was no longer as readily available through exchange, the communities began to extract a local, softer rock; this softer rock required a change in technique to form the axe, but they continued for some generations to use their traditional – culturally defined – technique that was suitable for the imported hard rock. Eventually, their technique became modified to suit the new material, and this new technique continued even after the raw material reverted back to the original hard rock. This highlights that a raw material alone will not dictate how it will be worked, but that the technological choices are dependent on the cultural understandings of the “right” way to work material. Therefore, a careful scrutiny of the lithics in Ireland can show a less homogenous Mesolithic than is sometimes pronounced, and the heterogeneity may not be due solely to the raw material utilised, but rather how the differing communities approached the material.

In this thesis, I have been treating the six counties under consideration as a “region”; however, this is an artificial, convenient region as opposed to something meaningful. From a biogeographical position, it has been noted that the six counties under consideration fall broadly into two main regions: the western Atlantic fringe, and the central and south-east Ireland region (Mitchell and Ryan 2001). These two biogeographical regions are probably more suitable aspects of regionality than the block of six counties. This is not a fall back to environmental determinism, but rather, an explicit approach of a social archaeology of the period. A key understanding of the nature of humans’ inhabitation of the landscape is the sensuous materiality of their dwelling – a pine-dominated woodland will be a significantly different place to an oak-dominated woodland, and this sense of place is integral to people’s identity of themselves and their place in the world.

As we saw in chapter 4, Tilley’s (1994) account of a phenomenology of landscape treated the topography – the bare bones – of the landscape as all-important, and the flora as epiphenomenal. This would seem to be the antithesis of a phenomenological approach to the landscape. Using Bird-David’s (1994, 591) quote again, she
highlights what hunter-gatherers talk about; they discuss the vegetation, not the bare bones: she comments
occasionally, people gather, passing time together. Normally, they sit all facing the same direction...talking about the common view (e.g., commenting on a flower which blossomed over night) or about common impersonal matters (e.g., the fruit season which has just ended).

Tied up in these discussions of regionality and uniformity of lithic technology are the overarching questions of mobility in the Mesolithic. There is no consensus as to what area a single community occupied over a year, or over a generation, let alone how this area changed as generations passed, and how this may have differed between communities throughout Ireland. As discussed previously in chapters 3 and 4, the settlement patterns of the Later Mesolithic can be seen to be either mobile or highly mobile, or possibly sedentary or semi-sedentary – clearly these terms do not help much in understanding the use of the landscape in early prehistory. What is important to bear in mind is that the patterning of Later Mesolithic findspots in the landscape does not necessarily imply a mobile society, but rather, the lack of an excavated base camp such as Mt. Sandel for the Later Mesolithic implies this. Equally, if a Mesolithic base camp was excavated, for instance, on the banks of the River Corrib tomorrow, this would not mean that the Later Mesolithic communities there were not mobile. As Engelstad (1990) suggested, to be settled, or sedentary, in an habitual landscape does not entail staying in one place for a given period of time, but rather one’s sense of being settled in a landscape. Again, as mentioned in chapter 4, Gibbons et al. (2005) maintain that a Mesolithic base camp on the Corrib would have been economically and ecologically advantageous as there would have been no need to move. However, movement in the landscape may have been an important part of the Mesolithic communities’ lives, rather than a burden to overcome, or a rung of the evolutionary ladder to surpass. This movement may have been carried out on different spatial and temporal scales, by both individuals and mindful communities of practice; for daily movement in the landscape, close to a camp site; a further journey to a neighbouring community; a journey to a gathering point for various communities at certain times of the year.
6.5. The Mesolithic-Neolithic transition

The west of Ireland holds two key areas where the debates on the transition from the Mesolithic to the Neolithic in Ireland have been based: the Ceide fields, and the megaliths of Sligo. Two very different prehistoric landscapes have been suggested for these remarkably similar areas which are 60 km apart. At the Ceide fields, the burial of the field systems, houses, and megaliths under blanket bog have provided Caulfield (1983) with a frozen picture of a highly organised, sedentary Neolithic population, with a predilection for cattle. Whereas in Sligo, the passage tomb complex of Carrowmore, and the middens on the coast, provided Burenhult (1984) with a sedentary, socially complex hunting and gathering society, which gradually became more “Neolithic” over the generations by adopting cattle and cereal growing into their economy. While Caulfield’s model saw no Mesolithic people involved, indeed saw them as being actively being displaced or barely there in the first place, Burenhult’s model saw the Mesolithic people becoming Neolithic, as they were already on the road there. They adopted cattle and pottery from farmers from the east of the country, but Burenhult did not suggest what had happened to the hunter-gatherers there or where those farmers had originally come from, and he failed to show a Mesolithic presence in the region where he argued that Mesolithic communities built the megaliths.3

As we saw in Chapters 2 and 3, two interpretations have been put forward as to where the arriving farmers came from: Sheridan (2003C) and, to a lesser extent Bergh (1995), have argued for a continental arrival of farmers with a fixed cultural repertoire in train, and Woodman (1993) has suggested that the lithic repertoire has affinities with Britain. A key aspect in the change between the Mesolithic and the Neolithic in terms of the identification of lithics, is that the post-Mesolithic evidence becomes more dispersed in the landscape, with a move away from being focused on the rivers and lakes. This was picked up on by the Bally Lough Project, who suggested that while this suggested a shift in the location, this did not imply a change in population. Rather, they saw this as cultural continuity, but a change in subsistence practices over

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3 It is ironic that in north Mayo where Caulfield saw no Mesolithic participation in the Neolithic we now have evidence for Mesolithic communities, but in north Sligo where Burenhult argued for a Mesolithic hand in the Neolithic transition, we still have no evidence of Mesolithic communities.
time led to the use of a more widespread landscape. Woodman *et al.* (1999) rightly countered that using the same ecological niche is irrelevant to continuity in the population, as it only shows that farmers also used floodplains and the coast. This is something that continues to this day, and therefore not peculiar to Neolithic farmers, or a type of forager-farmer. Kimball (2000A) argued that his survey in Lough Swilly saw no continuity of population over the transitional period, as the lithic raw material procurement changed, from a use of non-local flint, to the use of local flint. However, a change in the collection of raw material does not necessarily mean that different people were collecting this material. All this means is that over the period, changes in the societal structure – due to an alteration in social relations brought on by a shift in food procurement, landscape use, and so forth – meant that their raw material procurement also changed. One does not need to posit an actual population change when looking at shifts in raw material procurement strategies. Indeed, in contemplating what happened to the Mesolithic communities that were there, Kimball (2000A, 72) suggested, in a similar vein to Caulfield, that the Mesolithic communities had possibly left that area, in other words the land was a *tabula rasa*.

Looking at the dating for the transitional period, there are no Mesolithic sites that postdate the 4000 BC watershed. But this should be remembered in light of the dearth of dated Mesolithic sites in Ireland. The latest dates for a Mesolithic site come from Ferriter’s Cove, with a phase of activity around the 4000 cal. BC mark, with a much earlier date returned for a cattle bone from there, which has been used in the debates on the interaction between farmers and hunter-gatherers. In both the Mesolithic and Neolithic the disarticulation and movement of bones around the landscape would seem to be a common occurrence, but in the case of the cattle bone from Ferriter’s Cove this idea would seem to have been overlooked. It is usually surmised that the cow bone there represents either a full, live animal that was brought there, or else a joint of meat. However, it may well be that all that was brought there was the bone. The bone itself may have been the important item, and not the calorific content of the flesh attached to it. As the Mesolithic communities would have been expert butchers and anatomists, and have known the skeletal structure of the fauna intimately, this cattle bone would have appeared distinctly different to them compared to the other bones they would have been familiar with.
The dates from Burenhult’s (1984) excavations in Sligo were used to show an early construction phase of monuments there. Bergh (1995, 100-2) undertook a critical review of the dating of passage tombs and outlined the difficulties in dating the construction of a stone structure, and the timing of the deposition of dateable organic material within the monument. He suggested that the 6th millennium date from Croaghau can be dismissed as intrusive old charcoal, and that the dates (from charcoal) of 4718-4469 cal. BC from Carrowmore and 4675-4460 cal. BC from Croaghau, should be regarded as *terminus ante quem* dates for the construction of monuments. There is a possibility that these charcoal deposits represent pre-monument activity, or the deposition of charcoal from some other location (*ibid.*, 107). O’Connell and Molloy (2001) have noted a forest clearance episode at c. 4350 cal. BC, at Lough Sheeauns, Co. Galway. This date suggests that the cattle bone from Ferriter’s Cove, and the latter two *terminus ante quem* dates from Carrowmore and Croaghau are not anomalously early, but may represent signs of the earliest Neolithic.

In terms of the evidence for the Early Neolithic away from Carrowmore and north Mayo, the research in the museum collection undertaken for this thesis failed to reveal much evidence for an Early Neolithic lithic assemblage as defined by Woodman (1994). Indeed, only one item, a flint leaf-shaped arrowhead from Belclare, Co. Galway was noted, and this came from a cist grave accompanying cremated human remains. The fieldwalking in the Tawin/Maree area also did not show any material that could be described as Early or Middle Neolithic. The excavations at Poulnabrone, Co. Clare produced evidence of human remains from the Early Neolithic, but it would seem that these represent a redeposition of bones in a monument of a significantly late date (Cooney 2000). As of yet there is no evidence of an Early Neolithic presence in the area, so it is unclear from where these remains came. Looking at the other human remains dating to the transitional period from the west, we have the bog body from Stoney Island, Co. Galway (O’Floinn 1995) and the fragment of bone from Srahmore Cave, Co. Leitrim (O’Dowd, pers. comm.). With no material culture associated with these bones, it is impossible to tell whether they are what we would call Mesolithic or Neolithic. As mentioned, Woodman *et al.* (1999) suggested that the isotope reading of the Stoney Island body suggested a Neolithic diet as it returned a terrestrial signal, mirroring Schulting’s thesis on the Neolithic society having slighted the sea. However, as discussed in Chapter 3, in the case of Ireland this evidence for a switch in
the diet from being marine-based to terrestrial-based must be tempered with the
evidence for a terrestrial signature on some human remains from both the Early and
Later Mesolithic.

The dating of the Neolithic houses has suggested that these large structures are not
evidence of the earliest Neolithic activity in Ireland. As mentioned in Chapter 3,
McSparron’s (2003) review of the dates suggested that they begin after 3800 cal. BC.
Cooney (2000) noted that the houses seem to suggest an established tradition of
building. What this does suggest is that the large structures that have been excavated
are not indicative of the earliest evidence of Neolithic settlement in Ireland, but rather
are a signature of a development over time. The intriguing question is what form the
earliest houses took, and what caused what appears to be a distinct period of building
of large structures at a later stage in the Early Neolithic. I suggest that an important
point to bear in mind when considering these houses is that the term house must be
used in a very wide, loose sense. These large structures, while undoubtedly dwellings,
should be regarded as communal centres in the taskscape – what we must consider as
well is that dwellings in the Neolithic also consisted of temporary structures such as at
Knocknarea (Bergh 1995, 56).

One of the difficulties with archaeological practice is that its tools – typology,
stratigraphy and radiocarbon dating – are extremely blunt chronological tools when
looking at changes in societies which occurred over decades. The time frames that are
more suitable to talk about are centuries. This time frame is not helpful when
attempting to ascertain what occurred in a transitional period such as the Mesolithic-
Neolithic transition. To complicate matters more, Woodman has noted that what is
possibly a key time period, of 4200-4000 BC, witnessed considerable fluctuations of
the 14C levels in the atmosphere, entailing that radiocarbon dates around this time are
difficult to analyse. Archaeology is good at seeing the end results of a transition
rather than the idiosyncrasies of the transition itself. These idiosyncrasies are what
Zvelebil and Rowley-Conwy (1986) attempted to address in their availability and
substitution model. They used this model to suggest that in Ireland, long distance
contacts with the continent allowed the communities to choose to adopt farming
practices, and, in a neat piece of reverse colonisation, which they then introduced to British hunter-gatherers.

The difficulty with understanding the transition is that it is hard not to view it teleologically: we are a farming society, farming prevailed. Our ancestors, the farmers, built monuments and cleared the land. Looking at the Early Neolithic in north Mayo, Caulfield (1983) implied that even if hunter-gatherers had been there, they did not utilise the land efficiently, therefore the colonists took over the land and put it to good use. This thesis of a barren, wasteful part of the country that was tamed into productivity for the Neolithic society is a predominant ideological underpinning of the colonialist agenda. What this failed to address is that Mesolithic communities had occupied that area. The excavations at Belderrig can now show a definitive Mesolithic presence there. This landscape was not simply an underutilised wildwoods, but rather home to Mesolithic communities, possibly for millennia. It was not a matter of Neolithic colonists arriving to the area and setting up home.

Taking the example of Belderrig harbour itself where the Mesolithic site is located, Belderrig translates as Red Mouth, due to the iron staining which produces the red colour. Taking the farmers as our ancestors, we could suggest that this name is of great ancestry, going back to the first settlers in the Neolithic. But what if the name is of greater antiquity? Could this name be the Mesolithic community’s name for this harbour? The point is that this locale was not a tabula rasa in the Neolithic. What is clear is that the landscape eventually changed utterly from the Mesolithic to the Neolithic when it witnessed large scale woodland clearance, and the construction of field walls. It could be argued that the Mesolithic communities only hugged the coast, with the remaining interior being a void of uncultured woods. However, as in the case of Prospecthill, with a lithic away from the coast, it would seem erroneous to regard the woods at Belderrig as being a vacuous entity in the Mesolithic.
It seems likely that the transitional period in Ireland was a protracted affair, covering many centuries. The trajectories of the transition – in terms of time frames and conditions – may have been decidedly different in various parts of the island. Small scale colonisations (Cooney 2000) may have occurred in a number of areas at different times. If we regard the Neolithic period in this area as having involved an influx of new people, clearly we must regard this influx as having negotiated with the communities that already were there. These negotiations could have been played out over generations, not just at the first instance of contact. As the historian Foster (2001, 214) has commented, the most interesting history is not that of what happened, and the eventual end result, but of the expectations that people had that failed to materialise and the unintended consequences of people’s actions. Looking at a transitional period such as the Mesolithic-Neolithic, this should be borne in mind – it was the negotiations during the period that mattered to the communities as much as the end result – but these are beyond the survey of archaeologists. These negotiations did not involve a choice of remaining a hunter-gatherer or becoming a farmer – as Cronin (1983) has pointed out, in the northeast of America at the time of the arrival of the Europeans both Native American horticulturalists and hunter-gatherers were occupying the same area, but with different uses of the landscape. There, it was not a choice of either farming or hunting and gathering, but rather both these ways of living were carried out in the same landscape. Therefore, the progressivist notion of farming naturally supplanting hunting and gathering has to be tempered with the realisation that the choice of livelihood is a cultural choice, and not the inevitability of history.
7. Conclusion

This thesis sought to review the evidence we have for the Mesolithic communities who inhabited the west of Ireland for approximately 4000 years. The aims of this thesis were to understand the character of the early prehistoric period in the six counties west of the Shannon; to understand how people inhabited and utilised the landscape; to establish any degree of variability between the coast and the interior; and to establish any degree of regionality in the material culture. The overall intention was to interpret the evidence in terms of a social archaeology of the period.

The evidence gathered from both the museum research and the fieldwalking programmes have shown that evidence for the Mesolithic in the west has gone unrecognised. A belief in the paucity of the archaeological record for the period can easily become a self-fulfilling prophesy – as no one is out there investigating the period it is left unknown. In areas such as Lough Gara and Lough Allen, this thesis has shown that the extent of the available evidence has been overlooked, while the fieldwork in Lough Allen has shown that there is extensive evidence available to be researched. What these two lakes also highlight is the serious bias at play in the known distribution of the evidence. Where lakes have been drained, much evidence can be found, but this creates a bias against areas away from the shores, such as the hinterland of the lakes as well as against lakes where no drainage has taken place. As is a commonplace, the bias towards the northeast has a lot to do with the extensive diatomite cutting that has been carried out there. Looking at the distribution of coastal sites compared to inland sites, it is clear that only the tip of the iceberg of coastal sites has been realised. Looking at the issue of regionality of the material culture, a careful analysis of the assemblages from Lough Allen, Lough Gara, and Belderrig can help in teasing out such issues.

This thesis has argued that a landscape approach is a useful way of understanding early prehistoric communities. By adopting a dwelling perspective, we can situate the communities in the landscape, and understand that these communities had complex relations with the world around them. The evidence of the platforms suggest that these communities were actively engaged with the landscape, and actively
transforming the landscape. Rather than seeing the landscape as a backdrop to activities, the idea of the taskscape unites the communities with the plants, animals, and the topography with the temporality of the landscape. While we do not need to argue that the Mesolithic communities were clearing large patches of woodland (why would they have needed to?), the evidence suggests that there was more involved than skirting along the woodland edges. These were a people at home in the woodlands. Indeed, the woodland was their home.

The ephemeral single finds and lithic scatters that make up the evidence for the Mesolithic – which are usually glossed in economic terms – show us evidence of these tasksapes and belie the complexity of the societal structures of the Mesolithic. As the recent site of the fishing traps, weirs, and platform has shown, a single blade found at a locale may represent many generations of activity in the area, and that we can’t expect the Mesolithic communities to have been like Hansel and Gretel with their lithic deposition – leaving a trail to follow. Rather, the deposition of lithics ultimately rested on the complex world view of the hunter-gatherers. Again, the sites which have produced Mesolithic radiocarbon dates but no lithics forces us to acknowledge that we are blinkered by our inevitable lithic gaze.

In terms of further research in the six counties, clearly much more remains to be done. This thesis was only able to spend four months in total of actual fieldwalking time. In all areas surveyed, further work is necessary. In terms of surveying ploughed fields, this has been utterly neglected in the west. This thesis’ fieldwalking programme in the Tawin/Maree area is, as far as I am aware, the first such project in the west of Ireland. As the amount of land under tillage is rapidly declining in the west, I suggest that much work must be carried out in order to use this convenient access into the prehistoric landscape. In areas where no tillage is carried out, such as near the Streamstown finds and Lough Urlaur, test pitting and geophysical surveying of a wide area could be carried out. This may not produce evidence quickly, but is a start if we wish to move beyond our current finds.
Bibliography

Abbreviations

JGAHS: Journal of the Galway Archaeological and Historical Society
JIA: Journal of Irish Archaeology
JRSAI: Journal of the Royal Society of Antiquaries of Ireland
PPS: Proceedings of the Prehistoric Society
PRIA: Proceedings of the Royal Irish Academy
UJA: Ulster Journal of Archaeology


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Abbreviations used in catalogue

C: C: County
   C: Clare
   G: Galway
   L: Leitrim
   LK: Limerick
   M: Mayo
   R: Roscommon
   S: Sligo

Colour:
   B: Black
   B(D): Dull black
   B(G): Glossy black
   B(M): Mottled black
   Discl.: Discoloured
   DB: Dark blue
   DG: Dark grey
   G: Grey
   Gr: Green
   G(L): Light grey
   GB: Grey-blue
   G: Grey
   O: Orange
   T: Tan
   W: White
   -b: banded
   -mb: milky bands
   -ms: milky spots
   -msp: milky splotches
   -mst: milky streaks
   -str: striations
   -mv: milky vein
   -qi: quartz inclusion
   -sp: speckled

Cn: Condition
   F: Fresh
   W: Weathered
   WR: Water rolled

Div: Field division
   D: Distal
   LE: Left edge
   M: Medial
   P: Proximal
   RE: Right edge

Frag?: Fragment?
   D: Distal
   LE: Left edge
   M: Medial
   P: Proximal
   RE: Right edge

L: Length
   M th: Maximum thickness

NMI Reg.: Museum registration
   Pol?: Polished?
      N: No
      N/A: Not available
      Y: Yes

P type: Platform type
   D: Damaged
   F: Flat
   R: Removed

P th: Platform thickness
P w: Platform width
Qty: Quantity
R/w?: Retouch/wear mark?
   N: No
   Y: Yes
   P: Possible

R/w type: Retouch/wear mark type
   Delineation:
   C: Concave
   Cx: Convex
   Ind: Inverse nose
   N: Notch
   Nd: Nose
   R: Rectilinear
   S: Shoulder
   T: Tongue

Position:
   Sc #: Scatter number
   Se: Stage
   P: Primary
   S: Secondary
   T: Tertiary

Strat: Reduction strategy
   Bi: Bipolar
   H.M.: Hard hammer

Term: Termination
   D: Damaged
   F: Feather
   H: Hinge
   P: Plunge
   S: Step

Td ttl: Townland total

W: Width