Land use and settlement in Ballycroy National Park,
County Mayo

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Additionally, on a par with the National Parks and Wildlife Service contribution to this study, this research would not have been fulfilled properly without the assistance and knowledge of the local people, especially the farmers involved in this study. I have grown, through the course of this study, to admire them for their hardiness, skills and resourcefulness. The farmers (custodians) of this land gave me inspiration to gather as much geographical history as I could in a two and a half year framework. Finally, thanks to my family and friends for their continuous love and support.
Abstract

The settlement patterns and land use designs from the end of the eighteenth century to the beginning of the twentieth century in Ballycroy National Park, County Mayo are the concerns of this study. The geography, history, archaeology and ruins of seven case study sites are discussed in this study. The literature relevant to this study was reviewed and a number of key issues highlighted. These include the lack of scholarly attention devoted to these remote mountainous townlands (Nephin Beg mountain range) and the lack of scholarly documents relating to the townlands studied in this research. Generally, this applies to the whole of the Erris region, with the exception of the work of Dr. Séamus Caulfield in the Céide Fields project of north Mayo. A number of methodologies are utilised in this study, including architectural surveys of ruined buildings and comparative analysis. Original primary source material was integrated into this study, although the deficiency in written sources for the Erris region in Ireland (which includes the Ballycroy region) is noted. This study has revealed a wealth of vernacular buildings for the Ballycroy region of Erris as well as farm buildings and techniques used within field system designs along river courses in blanket bog landscapes. The three main components involved in this study are firstly to examine the topography of the landscape within and around Ballycroy National Park, County Mayo. Secondly, to investigate the history of settlement in the area, this is to investigate the social, political and economic circumstances of local people through the time-period involved in this study. Thirdly, to record the human interaction with the landscape by using a GPS (global positioning satellite) device.
CHAPTER ONE

THE INTRODUCTION
INTRODUCTION

This study is based in Ballycroy National Park in County Mayo. It evolved from two previous studies undertaken by the researcher in this district of north-west Mayo. The two studies preceding this one are The Bangor Trail – Baseline Survey and Assessment of the Bangor Trail (Malone and Kiely, 2005) and Access and Recreation in Ballycroy National Park (Kiely, 2006). It was during these studies that the researcher noted ruined buildings and expansive field systems in some of the remotest regions of this part of north-west Mayo. Consequently, the historical geography of this region was investigated over a two and a half year period.

As Glassie (1982 p. 325) says, “one’s way is more than a personality, it carries an aura and a memory, a sense of fortune – and the collective pattern, an existential pattern, a principled coordination of local tradition and local conditions built out of history for the future”. This research aims to explore the history of land use and settlement in the area of Ballycroy National Park, County Mayo. This study took place over a two and half year period and investigated certain techniques of the landscape in the Ballycroy region. These include the archaeology of the area, the architecture of relic buildings in specific townlands, the geology of the locality and land use. The history of human settlement in the Ballycroy/Nephin Beg district reflects a community of people living in an economically marginal environment since the Neolithic Period some 6,000 years ago. The topography of this area of north-west Mayo is that of blanket bog, the soils and climate of which presented many challenges to the traditional inventive people of this locality. This study’s objective is to record remaining ruins of buildings and associated field-systems in certain townlands within Ballycroy National Park, County Mayo and to examine the social, economic and political history associated with these attributes of this blanket bog landscape.
The three main components of this thesis will deal with the history of settlement in the area, the topography of the landscape and the recording of human interaction with the landscape.

Plate 1 - Tarsaghaun river and townlands looking west from Corslieve mountain.
Croaghaun townland is in the Coillte forested area to the right of the river as it runs downstream to the Atlantic Ocean.

Ballycroy National Park is in the Owenduff complex. The Owenduff is a locale and comes from the Irish words ‘abhainn dubh’ ('black river', the colour of the river water being black because it runs off acidic bog terrain). It is referred to as a complex as it incorporates several townlands, spread out over hectares of blanket bog and various habitats from upland blanket bog habitats to fresh water habitats. This westerly corner of
Mayo is strikingly remote with outstanding panoramic scenic views unique to Ireland’s heritage. This vast assortment of habitats from blanket bogs to rivers, lakes, conifer plantations, mountains, the Atlantic Ocean, shore-line habitats and off-shore islands exemplifies this distinctive west of Ireland terrain. Ballycroy National Park comprises a large portion of the Nephin Beg Mountain range in the barony of Erris, the parish of Kilcommon (Erris) in north-west Mayo. The park contains blanket bog to the west of the mountain range as well as its associated river systems cascading from the heights of the Nephin Beg Mountains. The most extensive river system is that of the Owenduff River with its tributaries. The peaks and ridges of the Nephin Beg mountain range extend from Mulranny in the south to Bangor Erris in the north and reach altitudes of 400-700 metres at their highest points. This land of high rainfall, severe gales and infertile acidic soils presented huge challenges to its people who settled here over time. Although this area has very few inhabitants, the natural and built environment of the area communicates its origin, character, people and places that bring civilisations and localities in particular to their present state.

Plate 2 - Owenduff land use and settlement structures.

Ballycroy National Park covers an area of 11,779 hectares, over one third of the Owenduff/Nephin Complex of 26,033 hectares. The Owenduff/Nephin Complex is an SAC (Special Area of Conservation) protected under the EU Habitats Directive (DEHLG,
NPWS, 2005). The National Park and Wildlife Service (NPWS), which is governed by The Department of the Environment, Heritage and Local Government (DEHLG), manages Ballycroy National Park under the State Property Act of 1954. Ballycroy National Park is Ireland’s newest national park and was established in November 1998. There are five other national parks in Ireland, Killarney National Park, Co. Kerry, Glenveagh National Park, Co. Donegal, Connemara National Park, Co. Galway, Wicklow National Park, Co. Wicklow and The Burren National Park, Co. Clare each offering their own unique opportunities.

This research seeks to enhance the story of this unique region of County Mayo. For the purpose of this research human activity in its natural habitat, the blanket bog, was recorded. This study will examine the regional, national and international influences that shaped the development of this region. For example, Britain’s activities in Europe against France in the nineteenth century influenced the economic and political circumstances of locals in Ireland. Grains (wheat, barley, oats) were exported to Britain to feed the soldiers in Europe, this led to harder economic times for the Irish. Changes in settlement patterns and land-use are reflected in the landscape through the ages by designs, living communal systems and the vernacular architecture of a region. These changes are investigated and discussed in this research. As Glassie (1982) mentions, human action upon the land provides the great experience from which ideas are taken and gain statement. More general research questions address the social, economic and political circumstances governing this locality over time.

This study draws from the disciplines of geography, archaeology, sociology, history, folklore and community development in addition to studies of architecture over centuries thus displaying the multidisciplinarity that is characteristic of the wide field of heritage studies. The application of combining secondary sources (written sources) and primary (original fieldwork) data in a new synthesis aims to contribute to each of these subjects individually and to the broader arena of Irish heritage. This research deals with topographical findings in each townland surveyed and clarifies the details of their context.
in terms of historical and architectural developments that influenced their foundation and growth over time.

The townlands explored for this study are geographically located in some of the remotest mountainous areas of Mayo County so much so that they are only accessible on foot. The Bangor trail that bisects the park and provides access into the mountains and the Owenduff Complex was of vital importance to the researcher for accessing these secluded areas. Following river courses downstream allowed the researcher to survey the other sites. The rivers and streams draining this blanket bog landscape provided water and food for those living along its banks. This study reflects the strength of character, ability and resourcefulness of past inhabitants of these townlands.

The importance and value of this research is evident on a number of levels. Firstly, the last topographical study of this area was in 1838 when the British did the first Ordnance Survey of Ireland. Secondly, the local human history of the area and the locals' interaction with their landscape are things that should not be preserved or conserved but understood, appreciated, encouraged and valued. Thirdly, the severe weather of this region and violent river spates erode river edges over time so most of the topographical evidence will be washed downstream over time and vegetation growth will cover up other topographical evidence too. Fourthly, the stone used in the construction of all the different types of buildings in these townlands might be reused somewhere else thus losing the history of settlement in the area. The additional evidence provided by adopting a multidisciplinary perspective adds to the validity of this study.

This chapter is followed by a review of the literature pertaining to this research, which expresses views on the nature of the topic and how it is investigated. In addition, chapter two evaluates the source material relevant to this study. The theoretical basis of this research is assessed as part of the literature review. The literature review delves into certain themes arising from the study, such as the social, political and economic circumstances of its people over time. These themes will integrate with the primary or original data carried out over two summers to determine the overall position of Ballycroy
National Park’s people. The methodology utilised in this study is outlined in chapter three and this will show the appropriateness of the techniques used to gather data and the approaches employed in this study. Chapter four will present the findings of two and a half years’ work and chapters five and six will discuss the results.

Plate 3 - View north over the Owenduff from Glennamong mountain range.
CHAPTER TWO

THE LITERATURE REVIEW
LITERATURE REVIEW

This chapter aims to discuss the various themes relevant to this research. There are three major subject matters reviewed in this chapter. These include, firstly, the historical geography of the region over time from the end of the 1700s to the beginning of the twentieth century. Secondly, the socio-economic circumstances of Ballycroy National Park's people and the political arena in which people lived and worked during this period in history. This process involves investigating the economic, social and political arena in which the local community operated during this period in time. Thirdly, the indigenous architecture of the ruined dwellings present in the townlands studied for this research. This research has these main components involved in it incorporating many heritage subjects such as history, archaeology and vernacular architecture. These topics are reflected in the literature consulted in this chapter and reveal the extent to which authors address these matters when dealing with Irish settlement patterns through the ages.

To begin the discussion on local landscapes Broiméil and Hooper (2008) affirm, “a given landscape retains and presents the evidences of history that come to enter its generous embrace; more exactly, it both withholds these evidences and renders them visible” (Broiméil and Hooper, 2008 p. 12). Glassie (1982) reminds those involved in cultural studies that one's way is more than a personality; it carries an aura and a memory, a sense of fortune and the collective pattern. Benatti (2008) writes about the commencing of publications of periodicals in Ireland in the early 1800s from Dublin. Scientific disciplines such as archaeology were labelled as 'antiquities' at this period in time and different scientific research methods were being discussed amongst scholars. The framework for archaeological, biological and cultural research was only commencing as a field of study. Over 150 periodicals (journals) began publishing in Ireland from Dublin between 1800 and 1848. Benatti (2008) recognises Petrie and Otway as the main instigators of collecting information relating to all of Ireland and Irish identity at this time in history. These periodicals provided readers with a framework for interpreting Ireland and Irish identity in the early 1800s.
Benatti (2008) mentions how Petrie had no correspondents from Connaught to contribute to the periodicals on their region and how there were also no literary contributors for the periodicals from Connaught in the 1800s. In fact, at this time in Irish history it was non-nationals like Knight (1836), a state engineer, who were reporting from Connaught on the disparaging state of Irish life on the west coast of Ireland from Connaught. Other contributors like O'Donovan (1838), Pococke (1891), Maxwell (1832 and 1859), Otway (1837 and 1839), McParlan (1802), Hancock (1880), Foster (1846), Fox (1880) and Hall (1841-3) perceive the Irish with the disdain of the colonial mindset. However, all their work does provide researchers with invaluable information on the state of Ireland in the 1800s.

A contemporary author on the Irish landscape, Whelan (1986), recounts himself that the eighteenth century is a silent one in historical geography discourse for the west of Ireland. His focus is sharply on the interrelationship between society and settlement especially as both are revealed in the landscape. He views settlement as "medium and message, site and symbol, terrain and text" (Whelan, 1986 p. 187). Additionally, Whelan mentions that the west coast of Ireland had known continuous intensive settlement prior to the eighteenth century in areas like Corca Dhuibhne (Dingle), the head of Galway Bay and in the Burren in County Clare as archaeological evidence has revealed. As Whelan (1986) says himself, the "old" west formed part of the Atlantic western seaboard, which was believed to be full of native savages or rebels fighting amongst themselves in wild and difficult terrain prior to the eighteenth century (Whelan, 1986 p. 198).

Another contemporary writer, Doherty (2000), discusses the earliest examinations of settlement sites in Ireland. Since the east and north east coasts were the first counties to be colonised by the English, these earliest investigations into settlement patterns originate from Counties Antrim and Down. Doherty (2000) discusses Proudfoot's excavation work in Murphystown in County Down between 1956 and 1958. Proudfoot (1958) points out that the most important general aspect to emerge from such settlement studies is the flexible nature of Irish settlement forms. Proudfoot (1958), Buchanan (1958 and 1959) and Johnson (1959) suggest that many forms of settlement co-existed with the raths in
early Irish settlement forms and that these were open clusters of settlement. Simms (2000) comments on E.E. Evans and T. Jones Hughes who both shaped the foundation years of Irish historic settlement studies. Their research focused on rural settlement and society, while T.W. Freeman was primarily a population geographer whose work on pre-Famine Ireland is an important contribution to the historical geography of early nineteenth-century Ireland. Nearly “half of the population of Ireland at this time lived in one-roomed, mud-walled cabins with no windows and 45% of farm holdings were between 1 and 5 acres” (Freeman, 1989 p. 244).

Another non-national pioneering researcher, Welsh geographer, E. E. Evans (1942) believed there are two habitation types that existed side by side in settlement forms in Ireland’s early landscape, the nucleated clachan and the single farmstead. Evans’s work was based on fieldwork, written documents played little in his research but then there were very few documents available to him as contemporary writer Whelan (1986) points out. Evans’s research focused on Ireland’s ancient ancestry with his work on ‘clachans’ and the ‘rundale’ in north Donegal. Those scholars who followed in Evans’s footsteps when researching traditional rural settlement patterns and house-types along the north-western Atlantic fringe of Ireland were R.H. Buchanan, D. McCourt and B. Proudfoot.

In these early days of settlement studies in the landscape a second strand of research was investigated by T. Jones Hughes. Jones Hughes’s (1986) research explored nineteenth century documentary evidence focusing on questions of power in society as mediated through land-holding. Jones Hughes’s main interest belonged to the agrarian society of nineteenth-century Ireland and his sources are the nation-wide government surveys of the nineteenth-century which include population census figures (taken every ten years after 1800), the Griffith Valuation (1849-65) and the first 6 inch to 1 mile Ordnance Survey Maps (1833-46) which were produced for the whole country. Hughes took a great interest in regional variations expressed through place-names and personal names where he deciphered an explanation for the different ethnic origins of Irish people. Jones Hughes (1986) showed that place-name studies make a real contribution towards a better understanding of the settlement history of Ireland. The study by S. Ó Catháin and
P. O'Flanagan on place-names in a remote townland in Erris County Mayo published in 1975 under the title *The Living Landscape* demonstrates the cultural and socio-economic significance of place-names, with place-names relating to historical events, people and the landscape that influenced a living local landscape through time. Some of those scholars who emulated Jones Hughes's methods of research are W.J Smyth, P. Duffy, W. Nolan, K. Whelan and P. O'Connor, all who focus on institutions, written documents and cultural factors for the formation of the Irish landscape.

In addition, Simms (2000) mentions Glasscock who put emphasis on the recording and mapping of relict features of former settlements in the landscape and some of his students, B. Graham, G. Barrett and T. Barry were trained in the method of reconstructing medieval settlement in Ireland with the focus on surviving structures in the field. Barry's work is based on the identification and mapping of medieval settlement structures and their explanation in a historical context. Barrett brought air photographs to her studies and so succeeded in extending our knowledge of known historic settlement sites. For the townlands studied in this settlement study the focus is on two interdisciplinary approaches for providing a framework for studying ruined settlements in this region of Erris in north-west Mayo. One is the original fieldwork gathered and mapping section and the second is the study of written documents and authors who have written on landscape studies over time.

A major issue relating to the question of cultural identity is that of continuity and change in the Irish landscape. There was a period when major changes in the history of Irish settlement were attributed solely to "immigrants from abroad from the Neolithic period onwards via the Vikings, Anglo-Normans to the English" (Simms, 2000 p. 238). McCourt (1971) saw the word 'baile' as referring to 'clachan' settlements but it also meant a unit of land, the townland, and that it need not necessarily mean a clustered settlement. The upland site investigated by McCourt (1971) in County Antrim was interpreted as a transhumance village dating from the mid-first millennium A.D. It contained three large enclosures with associated curvilinear fields and several round houses. Doherty (2000) mentions the detailed research studies of Duffy in 1981 and the
survey work of Thomas McErlean in 1983 which placed the study of the Irish townland on a new plane. Their work demonstrates that a uniform system of land division lies behind the townland unit throughout Ireland, well adapted by regional and local variations by the 1100s.

As Duffy (2000) mentions at any time the settlement landscape which envelops people is a legacy of relict and evolving features. Yager’s work in the 1970s on settlement and environmental history is predominantly based on documentary evidence. He combined University of Würzburg work with colleagues in University College Dublin and set up the Dublin Historic Settlement Group and the Department of Medieval History in University College Dublin, which provided a framework for the inter-disciplinary approach to settlement studies in the Dublin area. In 1976 he studied settlement patterns in Faulmore townland on the Belmullet peninsula in Erris County Mayo, one of the few townlands researched in the Erris region in local landscape studies still in north-west Mayo. The townlands studied for this research are so remote they are not even featured in Samuel Lewis’s Topographical Survey of Ireland (1837), which is supposed to include all the townlands in Ireland. The earliest written documentary evidence pertaining to the townlands studied in this research are from Newport’s estate records in the manuscript’s department in the National Library dating from 1777 to 1828, after which Freeman’s townland Census figures are necessary.

Yager (2002) concludes from his studies in Erris that in the early nineteenth century most of Erris’s communities held their land in common, casting lots every three or four years to reassign family plots. He mentions the family was the unit of production and that the Ri, who was freely elected to represent them, decided measurements (collops) of land to each family and collected rent communally. Yager (2002) mentions that work was organised communally within the rundale and clachan systems of settlement. Kelly (1998) reaffirms the origins of these settlement patterns as dating from our indigenous Gaelic past. European writers verify this, Stalley (1977) mentions a Spanish visitor to Donegal who wrote about his time in Ireland in 1397-98 in which he made some interesting comments about food, which bring out the pastoral nature of Irish life.
“They sow no grain, and gather no wine, but their food is of beef, and the great lords drink milk, and they have excellent butter, since all their meats are of oxen and cows and good horses” (Stalley, 1977 p. 95). Campbell (1935) refers to Ireland’s whole landscape being pasture based in its early history and discloses that only a fraction of the land was talamh rámhainne (spade-land), “the whole landscape is one formed by the cattle-rearing industry, pasture predominating over crop-cultivation” (Campbell, 1935 p. 64).

Trained oxen (castrated males) were highly prized, in the 9th century gloss on Bechbretha, where they are classed along with milch cows as “noble dignitaries of livestock” (Kelly, 1998 p. 48). The wisdom-texts and annals also bear testimony to the social and economic importance of the cow in society. Furthermore, cattle are prominent in early Irish mythology and are associated with archaeological monuments like ring-forts. For example, the tale of Táin Bó Fraích, tells of twelve white reared cattle, which came from an archaeological mound. The tale Táin Bó Cúailnge involves Queen Maeve and the brown bull which sparked a military war between Connaught and Ulster (Kelly, 1998). Some texts refer to the existence of strong bonds between people and their herd, for example, in the prose of the Dindshenchas, we are told of a certain landowner who raised “each year’s calf under his roof until May and as a result, his cattle loved him. When the farmer died, the cattle mourned for three days and three nights around his body” (Kelly, 1998 p. 29).

Hammond (1994) records that the world’s first farmers originated in the Middle East some 9,000 B.C. years ago and Irish archaeological evidence reveals Ireland’s first farmers date from the Neolithic period (4,000 B.C.) as proven by professor Séamus Caulfield of the Céide Fields in North Mayo. Kelly (1998) refers to our Bos Taurus that was the wild ox with long horns. The bulls are black, the cows red and smaller, similar to Kerry cattle today. At this time in geological terms Ireland had wild oxen, deer, bears, wolves and boar but to name a few species. These species became extinct from our shores over time but what has remained are the foundations of a pastoral society.
According to McCourt (1950), 78% of Connaught families were engaged in agricultural practices during the 1800s. Tending to livestock, tillage cultivation and booleying practices were the vital customs within the clachan and rundale systems of settlement. Features of these early settlement patterns in Ireland include the ‘rundale’ and ‘clachan’ systems of settlement combined with ‘booleying’ or transhumance practices. These terms derive from the Irish words, ‘roinn dâil’ (rundale), ‘clochan’ (clachans or stone cottages) and ‘buailf’ (booleying or transhumance) (Yager, 2002 pp. 162,163). The fourth component to these early settlement patterns is the presence of commonage land. This is land held by several owners (land in common) in the local community for grazing livestock, usually rough wasteland or wild land outside of the clachan (village or town) settlement area, where transhumance (or booleying) occurred during the spring and summer months. Booleying and commonage are characteristics to this study. McCourt states that, “hardly a stretch of lowland settlement is without access to former booley grounds”, (McCourt, 1950 p. 225). Since the townlands in this study are at the foothills of the Nephin Beg Mountains in north-west Mayo in isolated localities, there is no evidence of rundale or clachan settlement patterns. However, these facets to early settlement design would be in the nearest town or village in today’s landscape, i.e. at Ballycroy or
Srahnamanragh village where clusters of housing exist in the landscape today. Dowling (1999) shows these systems of settlement surviving into the nineteenth century in the Glens of Antrim, in remote parts of Cavan and Fermanagh, in the Omeath peninsula of County Louth and high in the Sperrin mountains in Counties Tyrone and Derry. In fact Dowling (1999) mentions that these types of settlement patterns dominated the landscape in most London based company estate records of the nineteenth century. Yager’s (2002) work in Erris County Mayo points out that these practices were still common in 1906 on the Inishkea Islands off the coastline of Faulmore townland on the Belmullet peninsula in County Mayo. Additionally, recent research by Coughlan (2006) reveals widespread rundale, clachan and booleying settlements on Achill Island County Mayo up until the Kirkintilloch tragedy of 1937 in Scotland, where many Achill Island men died in a fire where they seasonally migrated to Scotland to labour on the farms there for money.

McCourt’s (1950) research in Ulster mentions how only in places where English settlements east of Enniskillen were heavy did early settlement characteristics no longer exist. McCourt (1950) identifies both the transformation of nucleated settlements into clachans and the reverse process of dissolution of clachans into nucleated settlements concluding that opposing types of settlement practices took place on a continual basis with varying regional and local adaptations.

Yager (2002) comments on similar settlement patterns and practises in Spain in the Tudanca mountain village and on Tory Island off the Donegal coast and Buchanan (1973) says that communal land system practices were common throughout Europe in the Middle Ages, the period from about 1000 A.D. to the fifteenth century. McCourt (1950) refers to Arthur Young’s work in County Antrim near Ballymoney and the Giant’s Causeway as well as in the Castle Town Roche district of County Cork and in the Barony of Murrisk County Mayo where communal rundale patterns of settlement existed in the nineteenth century. Additionally, McCourt’s (1950) work mentions Wakefield’s work in County Donegal where communal systems of settlement occurred in the nineteenth century as well as in Strokestown County Roscommon. Other national examples that McCourt (1950) mentions where early communal settlement practices occur at this time
in history include, County Fermanagh, Rathlin Island, Achill Island, the Dublin hills (Glencullen townland), Counties Londonderry, Antrim and Tyrone, the Ox mountains near Foxford in County Mayo, Long Island in County Cork, the Comeragh and Knockmealdown mountains in County Waterford, the Galtee mountains of Limerick and Tipperary, Callan in County Clare, Aughty in south County Galway, Boleykeagh in the lowlands of County Wexford, Ballyboley in County Monaghan, Boley in Lough Derg in County Galway, Ballynaboley in County Carlow, Cloghbolie in south west Donegal and Killorglin and Sneem in County Kerry. As McCourt (1950) mentions most obviously where the place-name refers to ‘clachan’ or ‘booley’ derivatives is evidence of our early Gaelic pastoral settlement patterns in Ireland. In the mountainous regions mentioned and in lowland townlands, transhumance occurred on wasteland or wild land spaces as previously mentioned (McCourt, 1950). International examples with similar settlement features and practises have been investigated in Denmark, Norway, Iceland, Holland, South Germany, Spain, Portugal, the Faros and Brittany in France to the Pyrenees (McCourt, 1950). Transhumance or ‘booleying’ in Ireland is still widespread throughout Europe and is practised in the Swiss Alps, France and Italy and throughout the world today, some other countries include Scandinavia, Caucasus, Morocco, Lebanon, Romania, Bulgaria, Greece, Spain, Turkey, the Republic of Macedonia, India, Switzerland, Georgia and Lesotho. The general representation of transhumance is “as a means of reducing grazing pressure on the land near the homestead farm during the summer months, enabling a village to cultivate crops” (Kelly, 1998 p. 427).

O’Sullivan and Downey (2003) comment on the fact that the booleying tradition is an important archaeological resource in the Irish landscape today which has barely been studied. They view it “as remarkable that we probably know more archaeologically about Bronze Age farm activity in some regions than we do about the farming activity of recent centuries” (O’Sullivan and Downey, 2003 p. 35). Dooley (2007) also mentions that Ireland was predominantly a rural and un-industrialised economy at the beginning of the nineteenth century where a rapidly expanding population was almost exclusively dependent upon the land for survival. “For the period from the Act of Union in 1800 to independence in 1922 to the 1980s when the Irish Land Commission was dismantled one
needs to remain constantly aware of the local anomalies not always identified in broad national generalizations” (Dooley, 2007 p. 11).

In relation to this study area, Stout (1997), Aalen (1997), Mitchell (1986) and Duffy (2007) relate to regional variations within Ireland, where the parliament and state resided in Dublin, thus, the Pale region and the east coast regions were the first to be colonised. There is documentary evidence for this, Pococke (1891) who writes about travelling around Mayo in 1752 mentions staying in a travel type lodge (a stone cottage) in the Owenduff townland of this study area. Pococke (1891) says that the locals were not used to seeing strangers in this remote townland and were very wary of his presence. However, they were generous with their food (eggs, milk, oatcakes) and offered him shelter on the floor with a woollen blanket. He travelled on what is now known as ‘the Bangor Trail’ but which was once the only road from Mulranny village to Bangor town as John Browne of the Neale’s map illustrates (1584). This is the earliest map of Erris in County Mayo on historical record. Maxwell (1832) mentions herds of wild red deer in the Nephin Beg Mountain region of this study area as well as cattle with their shepherds taking shelter in rock crevices in bad weather and if a river rose and was too dangerous to cross. Maxwell (1832) also recounts plenty of wild fowl (grouse), hares and wild salmon in this district of north-west Mayo as well as many other wildlife species. Maxwell (1832) says that the Erris region of Mayo was a wilderness area not penetrated by colonial forces until post 1798. In that year of the French in Killala County Mayo, some French forces landed to join forces with the Irish in combating colonial domination and suppression but were defeated. O’Hara (1982) writes that over 600 people were killed in the battle for Killala during this period. From that point on in history, Maxwell (1832) points out that Erris was no longer viewed by the Crown as a wilderness area but seen as a potential threat to colonial powers as it had sea access far removed from the eastern centres of power based in Dublin. In the 1790s, there was also the threat of Napoleon attacking England from Ireland’s west coast. He also mentions how wilderness areas were areas where ‘outlaws’ and ‘loose people’ took refuge from colonial forces (Maxwell, 1832 p. 315).
The nineteenth century brought massive changes economically, politically and socially to local populations regionally. Colonial domination and suppression governed the daily lives of local communities and this combined with market forces meant life became intolerable. Local Irish populations were forced to live on tiny patches of land and the Gaelic sub-division of land between male sons in the family meant overpopulation on tiny strips of land. “In 1822, the Irish foundation of professional constabulary (the police force) was established and new institutions become instruments of colonial control in Ireland” (McCabe, 1991 p. 4). Lagduff townland, site 3 in this study area, had land, a barracks and an office worth £15.10s.0d on 419 acres, listed in Griffith’s Valuation of Several Tenements in the Union of Belmullet in 1855 (Mayo County Library, 2009).

By mid-nineteenth century, communal concerns and customs were replaced with maximizing produce output and profits. According to McCabe (1991) landlord ‘improvements’ meant; a) the joining of communal rundale holdings, b) the abolishing of clachan settlements resulting in individual farm holdings, c) intensive farming methods replace ecologically sound agricultural practices, d) the enclosure of bigger fields for tillage crops, thus, less livestock, e) agricultural practices shift to produce products that yield maximum prices for the market and f) the building of infrastructure like roads, railways, piers etc.

Hindess and Hirst (1977) also express the processes of change that led to colonial domination in the 1800s in Connaught. They say that the first process separates the direct producer (the tenant farmer) from the means of production (the landlord). The second process incorporates the direct producer under feudal exploitative relationships. In other words, the tenants were structurally dependent on the personal whims of their particular landlord (Hindess and Hirst, 1977). They mention that Strokestown estate in County Roscommon actually encouraged and paid tenants to emigrate abroad, Strokestown estate actually booked their tenants on ships to America paying them to leave the land. This feudalization of the rundale system and its practices involved not only a process of physical enclosure but also the imposition of feudal landlord-tenant relationships. Fundamentally, it was the technical and physical re-organisation of land for maximum
profit with no concern for the welfare of those working on the land, for those doing the hard labour. Whelan (1994 and 1999) from his work on Clare Island in County Mayo, realizes the same processes of change and transformation in agricultural practices post and prior to 1844-48/9. He mentions that the demographic explosion in western Connnaught was a direct result from the subdivision of land. He views it as the intensive subdivision of land and the expansion of people into previously unsettled areas like mountain booleyng areas and wasteland. Land reclamation was encouraged by landlordism also.

Plate 5 – Owenduff townland.

Castlebar Campus
Kelly (1998), Evans (1942, 1957), Glassie (1982), Whelan (1999), Yager (2002), Almquist (1950), Coughlan (2006), McCourt (1977) and McCabe (1991) and other writers all attest to the ‘booleying’ tradition in Ireland as being one of the oldest agricultural practices in the country. Chapter Five of this study continues on with the discussion of these features of settlement and land use practices in the Ballycroy region and the Nephin Beg Mountain region of north-west Mayo in the nineteenth and early twentieth centuries. Chapter Four, the findings chapter, gives examples, photographs, maps, location and floor-plan sketches of the vernacular architecture of this region in north-west Mayo. Regional variations exist within the vernacular architecture of a region but the traditional stone cottage of Ireland has a universal theme in that they are mostly two-roomed, one-storey high, of rectangular shape with a thatch roof. Danaher (1975), Evans (1942 and 1957), Glassie (1982), Aalen (1997), Stout (1997), Ryan (1994), Collins (1994), Dooley (2007), Whelan (1997) and Kingston (1990) have documented some of the vernacular architecture of Ireland.

For the purpose of this study, the vernacular architecture of this research has been put into three functions, domestic, agricultural and ritual buildings (cairns). Since everybody needs a home, the first category is the most prevalent combined with the agricultural buildings. Aalen, Whelan and Stout (1997) mention how the Swedish folklife scholar, Åke Campbell, viewed the Irish vernacular house, it “never stands out in bold relief against its background but melts into it even as a tree or a rock” (Aalen, 1997 p. 147). Agricultural buildings are all those in the farmstead outside of the dwelling house, the outhouses, isolated buildings in the fields and limekilns. These features to the landscape are recorded in this study and floor plans were achieved. A representative sample of the different types of houses, outhouses and agricultural buildings is given in Chapter Four as well as functioning local vernacular buildings with thatch for comparison purposes. Chapter Five examines these characteristics of settlement patterns in the Ballycroy region of north-west Mayo in more detail.
Plate 6 – Lagduff townland, site 3 in this study.

Plate 7 - The Owenduff townland looking south.
CHAPTER THREE

THE METHODOLOGY
METHODOLOGY

This research originated from studies undertaken by the researcher in the summer of 2005 on the Bangor trail in Ballycroy National Park, County Mayo. The researcher observed substantial field-systems and dwellings in extremely remote mountainous locations along the Bangor Trail. This present study involved the investigations of these topographical features in Ballycroy National Park in this wild part of north-west Mayo. These topographical investigations were carried out over two summers, in the summer of 2007 and in the summer of 2008. Initially, it was thought that five sites were involved in this research but as the first summer’s investigations commenced it became obvious that there were many more topographical features in each townland than previously anticipated. For example, Tarsaghaunmore and Tarsaghaunbeg townland investigations took most of the summer of 2007 because at every bend in the river there were field-systems and man-made structures. The researcher covered as much ground as was physically possible to investigate the 10 areas researched for this study (the eighth area being the townland Croaghaun and thatch structures near the village of Ballycroy, the ninth area being Corslieve Mountain and the tenth area being Corryloughaphuill Lough). There are still plenty more topographical features left to be investigated and recorded in other townlands within the area, such as Letterkeen and Maumaratta. The next chapter, chapter four reveals the topographical findings recorded in this study.

This chapter explains the various methods of research undertaken for this study. A study of this kind inherently involves investigating qualitative and quantitative research methods. The primary research involves the direct experience of collecting the fieldwork data. The secondary data research involves the use and analysis of written documents. The data collection techniques that were used in this study are outlined in this chapter. The appropriateness and suitability of these techniques are also discussed in this chapter.
The Fieldwork (primary research)

The primary research involved in this study was the fieldwork research. The primary research entailed the fieldwork study of human settlement and land use in eight townlands in Ballycroy National Park and surrounding townlands. This fieldwork data was collected in the summers of 2007 and 2008. The fieldwork study of 2007 and 2008 in Ballycroy's landscape involved certain processes. A baseline survey and an assessment of the physical condition of ruined buildings were carried out in the National Park (ground truthing). Field-systems and walls were also surveyed and recorded, as were any imprints in the topography of the landscape within the townlands surveyed. Figures 1, 2, 3 and 4 in Chapter Four show more details on the position of these townlands. The aims and objectives of this study are to examine the topography of the area taking into account river processes and their influences on farming activities and livelihoods. River dynamics affect how land was used, enclosed and managed.

Another aspect of this research concerns built structures, which include weirs, river crossings, houses, outhouses, shelters, archaeology, wayside cairns and enclosures. For the purpose of this study these features of Ballycroy National Park are recorded in 10 townlands within and around the park area. These townlands include Corslieve Mountain, Tarsaghaunmore, Tarsaghaunbeg, Croaghaun, Lagduff, Sheeanmore, Owenduff, Scardaun, Bellagarvaun and Corryloughaphuill Lough. The location of these places within the National Park can be seen in Figures 2 and 3 in Chapter Four. The data collected from these 10 sites is examined in more detail in Chapters Four and Five of this study. Most of the townlands surveyed took at least a two and half hour hike to get to after which the topographical features were recorded. Tarsaghaunmore, Scardaun, Corslieve, Owenduff and Corryloughaphuill were the most inaccessible locations studied.

A GPS (global positioning system) was used to record these buildings, walls and field-systems. This computerised device was vital to this primary research as it provides the researcher with the capability of knowing their exact location in any region of the world, as used by explorers and navigators. This capability is vital for fieldwork in remote
wilderness areas. Chapter Four reveals the precision of these readings in providing the researcher with a tool for mapping topographical attributes in this locale. Each GPS reading was located on a map using the Arc View Geographical Information System (G.I.S) 3.2. This specialised integrated computer hardware and software system is available at G.M.I.T Castlebar and in Ballycroy National Park office at Lagduff More, Ballycroy, County Mayo. This computerised system enabled the researcher to indicate on a map the exact location of these GPS readings by inputting the GPS readings into Arc View software and superimposing the readings on an OS Discovery Series map (2005). Thus, the GPS readings shape the basis for forming the topographical picture of fieldsystems, walls, drainage and the vernacular architecture within a townland. See the next chapter for locating these GPS readings.

These GPS readings were then incorporated into Irfan View Graphical Information System 4.23. By inputting the GPS readings a picture emerges using Irfan View software. This paint-picture format of the findings can be viewed in the next chapter of this study and looks like a painting. Irfan View was the first Windows graphic viewer (worldwide) with Animated-GIF Support. Irfan View is a very fast, compact and innovative FREEWARE image. Irfan View is fast and small, with extremely low system resources requirements.

Houses, outhouses and any other vernacular features such as lime-kilns were measured using measuring tape internally and externally, width and height of walls were measured. The main dwelling houses and outhouses found in this study are sketched to scale in the next chapter. The Ordnance Survey Discovery Series Maps 31 and 23 were regularly consulted for locating the townlands in this study and for navigating the course of rivers in this study. The townlands in this study are too remote to investigate without the Ordnance Survey Discovery Series maps for use as a reference. Photographs were taken of all elements relevant to this study. A one-meter stick was used in the photographs to provide a scale for the recordings. The supervisor of this study provided the one-meter stick.
In the summers of 2007 and 2008, local farmers were interviewed on the farming traditions of the area. Podge McHugh, a local livestock farmer from Tarsaghaunbeg, joined the researcher on several excursions, pointing out various features in the field that the researcher would otherwise have missed, e.g. lime kilns, way-side cairns and hay-stack structures. Additionally, Mr. McHugh was a great local source for place-names and stories. In addition, Paddy Ginty and John Cleary (100 years old) were invaluable informants on the agricultural practices of the area.

General observations were noted which might be relevant in the future. Such notes include the Congested Districts Board (CDB) house types within the study areas located beside older houses and outhouses. Manual river/ford crossings, stream crossings were also noted and recorded.

Plate 8 - Hay-stack structure in Tarsaghauunmore townland.
The Documentary Research (secondary research)

The secondary research required for this study was the use and analysis of documents. These relate to the topics covered in the literature review chapter of this study and can also furnish quantitative data such as rates, tithes, rents, census figures etc. Secondary data analysis can entail original research as it gives an insight into data already assimilated, for instance a gap in the literature available on the townlands studied in this research is evident.

The manuscript department in the National Library has approximately one million items in its collections spanning a thousand years. They are mostly manuscripts relating to the island of Ireland or written by Irish people in Ireland or abroad. The date range for these documents range from the earliest item (eleventh century documents) to early twentieth century documents. Other documents consulted in the National Library Manuscripts department include documents such as the ‘Compossicion Booke of Conought’, ‘The Strafford Inquisition of County Mayo’, ‘The Transplantation of Connacht 1654-58’ and printed maps in ‘The Atlases of Great Britain and Ireland 1579-1870’. Land records and the books of survey and distribution proved vital to understanding the landscape of Ballycroy National Park today. Land-ownership is recorded parish by parish in these books with information on the size and extent of holdings and the number of unprofitable land in acres assessed. This was of crucial meaning to the soldiers of war and merchant adventurers receiving the land abroad and to this day, to the researcher of historical geography in a locality. These books also present the main colonial surnames to arrive on this island with the landed estate gentry.

In addition, the Newport estate manuscripts (dating from the end of eighteenth century) were of vital importance to the researcher as they are the earliest documents on record to mention the remote townlands studied in this research. Some of the main indigenous surnames feature as tenants in these manuscripts also such as Conway, Gallagher, O’Malley, etc. The landlord estate records were of immense importance in providing an overview of what went on in a locality or townland with a series of lists of tenants’
names, rents being paid, improvements being carried out and policy relating to the estate. For instance, in Ballycroy National Park, this was land under the O’Donel estate of Newport, which was responsible for the upkeep of the Bangor Trail and the building of new roads and infrastructure. Typically, landlords were giving leases for town plots as early as the 1720s in Newport town and these leases were for three lives and renewable forever (999 years). One of the oldest leases mentioned in the O’Donel estate papers of Newport dates from the seventeenth century. Through the covenants in the lease, the landlord could control developments in the area and town and land developments. It provided a regular income over decades to the landlord and votes for political patronage. These documents provide specific descriptive information relating to the isolated townlands in this study from the end of the 1700s through to the mid 1800s. From the manuscript sources in this study, arrears were added on yearly as payments due to the landlord. Some tenant farmers, or farm labourers as they were referred to in these landlord estate records, were in arrears for up to five years before eventually being evicted or forced to emigrate abroad permanently. The origins of the Gaelic booleying tradition, the communal system of land division and the communal pasturage of land are evident from these records. Today, commonage land still exists within the National Park territory of the Owenduff Complex as Figure 2 shows in the next chapter.

County Mayo Library census documents from the National Library of Ireland were very useful in this study too. They are very useful for local population figures in each townland from the mid 1800s to 1911. They also have other information like the occupation of a family and the size of a family within a single household in a single townland. Thus, census figures can be compared and evaluated accordingly from one census to the next. For instance, the 1901 census can be compared with the 1911 census to highlight mass emigration in a townland or for continuity of occupancy or change in family size and circumstance. Earlier census records for 1821-51 and 1861-1891 were destroyed in the Irish civil war of June 1922.

Other sources consulted in County Mayo’s Library were valuation records. Griffith’s Valuation Records were the primary valuation of rateable property in Ireland. In 1852,
the government resolved to complete the valuation of the whole country on a uniformed plan. The new figures were printed and published in books containing names of every occupier of land and building, the name of the leaser and a brief description of the tenement (domestic or agricultural). House types, improvements made to the holding and extensions to its value are mentioned in these documents. Earlier eighteenth century records of land valuation and occupancy were assessed in the manuscripts section of the archives in the National Library to give landlord-tenant rental history over centuries. The six-inch Ordnance Survey maps of 1838 are an important source for locating individual townlands within a landlord’s estate. These surveys are the first accurate topographical surveys on record for the country until new town and rural maps were made in recent years using the metric scale system.

The Ordnance Survey (OS) Field Name books also provide important details relevant to townlands, as they are the notebooks used by the surveyors compiling the first six-inch OS maps of Mayo in 1838. Each townland is arranged alphabetically by civil parish. The townland name in Irish and English is given in them, the derivation of the name, the location within the parish, the landlord’s name and other specific comments relating to the townland. Lewis’s Topographical Dictionary of Ireland (1837) was useful as civil parishes, major towns, seaports and many villages are alphabetically arranged for viewing. For each it provides a brief account of local history, social and economic conditions of its people and major landowners. Both Catholic and non-Catholic divisions and churches are described. However, the remote townlands researched in this study are not in Lewis’s Topographical Dictionary of Ireland (1837).

The Tithe Composition Applotment books also provide a detailed account of the occupiers of land with the extent and value of their individual holdings or farms at a point within the period 1823-1837. Simington (1956) himself stated that the origin of these books resides in the Act of Parliament of July 1823, providing for the substitution of a money payment in respect of tithes. It uniformly shows the denominations of land in acres, comprising each townland and in turn each barony and parish. The areas of farmland, their valuations and the proportion of future tithe payable was evaluated and
rent accrued accordingly. Overall, good descriptions are given of houses, livestock numbers, number of buildings in holding, occupation of tenants and number of people in the household as well as languages spoken.

In addition, media documents were examined. Many different journals, magazines and newspapers relating to the historical geography and archaeology of the Ballycroy region were examined for this study. This was to highlight any precise applicable facts to this region of north-west Mayo. For example, the reference to salt being made in the vicinity of Ballycroy is one from the *Ballycroy Parish Annual* journal and in the folklore collection from the folklore journal, *Béaloideas*, the story of women tending livestock in the mountains of Ballycroy (the Owenduff catchment) is given.

Finally, the utilisation of all these sources resulted in this comprehensive local landscape study. The limitations to this project were its inaccessibility. The remotest townlands of Scardaun, the Owenduff, Corslieve, Tarsaghaunmore and Corryloughaphuill Lough took a certain amount of fitness and agility as it involved crossing rivers, fords and hairy blanket bog terrain with bog holes. Needless to say, none of this work could take place in bad wet weather. However, the fieldwork data and ruins of dwellings in remote mountainous terrain verify mountain pasturage and agriculture at the foothills of the Nephin Beg Mountain range. The landlord estate records reveal rising rents and arrears that further demonstrates challenging economic, social and political times plus mass emigration from the end of the nineteenth century through to the beginning of the twentieth century. In addition, the census figures add further evidence to mass emigration as whole townlands became deserted in the early 1900s. The lack of heritage-based research in this region of the west of Ireland is evident too from the lack of historical written documents available in the townlands studied for this research.

To conclude this chapter, linked investigations were compiled on a local scale, having the geographical unit of the National Park as its basis. This study is primarily based on sites along the Bangor Trail and the Owenduff river systems within Ballycroy National Park, County Mayo. The sites excavated for investigation reveal the characteristics of this
locale. Integrated into these characteristics of the area are the settlement and land use patterns over time. Using the methods of research outlined in this chapter enabled the researcher to compile a comprehensive heritage study of the area.

Plate 9 – Owenduff, view south-west over the Owenduff bog from the Bangor trail.
CHAPTER FOUR

THE FINDINGS
4.1 THE NATURAL ENVIRONMENT

Ballycroy National Park comprises a large portion of the Nephin Beg mountain range in the barony of Erris, north-west Mayo. The park consists of extensive tracts of blanket bog to the west of the mountain range incorporating several river catchments. The most extensive river system in the Owenduff complex is that of the Owenduff River and its tributaries.

The peaks and ridges of the Nephin Beg range extend from Mulranny in the south to Bangor-Erris in the north. The mountain range typically reaches altitudes of 400-700 metres at its highest points. Traces of the last Ice-Age (10,000 years ago) are ubiquitously etched into this blanket bog landscape where evidence of glaciation hugs riverbanks and corrie lakes. Mountain corries at Glennamong and at Corslieve are specific glacial features to the park and the Owenduff and its tributary river Tarsaghaunmore are rivers with wide valley floors commencing at altitudes of 200 meters continuing to sea level.

The rivers drain the blanket bog, which contains many locháns characteristic of this ‘flow’ country. The peat deposits are a source of domestic fuel for the local population and traditionally the peat layers contain timber stumps of trees of ancient pine or ‘bog deal’ in them. Following the last Ice-Age in Ireland this blanket bog landscape was deciduous woodland with native deciduous species of trees such as oak, mountain ash and Scots pine, the traces of which are in blanket bog terrains. Foreign tree species such as rhododendron, commercial forestry plantations and species of rowan and willow have colonized upper lake areas and stream margins.
The river systems in this region are a distinctive characteristic of this blanket bog landscape. In this area of high rainfall, severe winds and unstable terrain, the rivers are noted for their frequent fluctuations in water levels. The absence of lakes on these river courses means there is no 'holding up' the water as flood water proceeds downstream thus leaving the land vulnerable to flooding. At any time of year, substantial falls of rain can produce violent spates that have dynamic effects on the river courses and their flood plains.

The rivers erode both the peaty deposits washed downstream and the glacial drift underlying the bog. These layers of glacial drift and deposits release large quantities of sand and gravel that are subsequently deposited downstream as gravel banks and sandy areas. See plates 11 and 12 overleaf for examples of this. This deposition of sand and gravel has created ground conditions that are distinct from the blanket bog terrain. The effects of river flooding have allowed agriculture to become established in an area of blanket bog that would otherwise have offered few opportunities for farming. These flood deposits have allowed grassland turf to flourish along riverbanks, thus enabling livestock to graze safely as grassland turf drains easily compared to waterlogged blanket bog.
Another advantage to this ecosystem is that this grassland turf is suitable for arable crops as well. Land can be drained, shaped and fertilized. This landscape of high rainfall, severe winds and acidic soils presented considerable challenges to the people who settled here in historical times.

Plate 11 - Peat layer and underlying glacial drift deposit being eroded.

Plate 12 - Sandy river deposit supporting grassland turf.
Blanket bog habitats involve a cover on the land, similar to a blanket but of bog or peat. Feehan and O'Donovan (1996) derive the word ‘bog’ from the Irish word ‘bogach’ meaning ‘soft’. Blanket bogs are ombrotrophic (the bog receives water only by precipitation), forming a continuous ‘blanket’ across the high-rainfall terrains where they occur. Bog is made up of a type of soil that contains the remains of dead organic matter that once grew in and around the lakes of Ireland and in very wet previously forested regions. Over millennia this dead matter has built up to form present day bog landscapes. O’ Connell (2001) summarizes what bog actually is, in its natural form bog consists of 90% water and 10% solid material (dead plants and animals). Thus, bog landscapes are like flooded landscapes with dead plant and animal matter suspended in water.

There are two main types of blanket bog within the Owenduff/Nephin Complex, these are lowland and upland blanket bogs. The low-lying areas are covered by continuous rolling bog vegetation dominated by specific flora species. In certain locations the surface deviates into a microtopography of hummocks and wet hollows, these are characterized by patterns of mounds, hollows and pools in the low-lying blanket bog landscape, see plates 13 and 14 overleaf for these traits. There are also mineral rich flushes flecked throughout bog landscapes and these are recognized in the bog by field-green areas in otherwise a brown landscape. Re-claimed land along the river courses is also easily identifiable as these are field-green areas too. An upwelling of certain specific minerals from the bedrock to the soil forms mineral-rich flushes and they have other plant species not generally found on blanket bog habitats. These mineral flushes occur throughout blanket bog landscapes. Additionally Ballycroy’s lowland blanket bog is flecked with small dystrophic (organic matter suspended in water) lakes that are shallow dark brown lakes. There are larger oligotrophic (deep, nutrient poor and low in primary productivity) lakes too that are low in dissolved minerals and can support limited plant growth except for around the margins of the lakes where a range of flora species flourish. In the upland regions there are a number of different habitats such as upland mountain habitats.
Plate 13 - Bog pools.

Plate 14 - The Marsh Saxifrage (protected species).
4.2 SITES STUDIED

In this section of the findings chapter the topographical features studied in each townland are mapped, first in Arc View format with a scale and orientation marker and then in picture format using Irfan View software. Each townland is marked in Figures 3 and 4 of this chapter, for example site 1 of this research is Tarsaghaunmore townland. This section of the study plots the findings in map form so the reader can view them easily. Figure 1 shows the location of Ballycroy National Park nationally and Figure 2 shows the National Park territory and the commonage territory within the Owenduff Complex of County Mayo. Figure 3 illustrates all the townlands in County Mayo with Figure 4 indicating the townlands in this study.

Aerial photographs of the townlands studied in this research were examined for use in this study but when zooming in on the townlands in this study, the resolution became blurred and illegible. Therefore, the use of the aerial photographs for this study was not appropriate. The six-inch Ordnance Survey maps of 1838 were also examined but as any geographer will know the land has moved since the 1800s. Wherever there are rivers and water present, seasonal changes to the landscape occur, thus the landscape has changed since 1838. The present findings were cross-examined against the 1838 six-inch maps but did not correspond exactly to present findings as water has shifted and reshaped the landscape over the course of 170 years.

The pink lines in the Arc View maps represent all the Global Positioning Satellite (GPS) readings of this research. These include all earthen works, stones cottages, stone-walls (banks), Congested Districts Board houses, outhouses, cultivation ridges, livestock enclosures, weirs and lime-kilns. In Arc View, the Global Positioning Satellite readings are recorded, marked and labeled by these pink lines, illustrated in Figures 5 to 28 (including the Irfan View maps) of this findings chapter. The Global Information Satellite (G.I.S) form of mapping in Arc View enabled the researcher to use the Irfan View maps to show the reader a paint-like picture of the landscape in each townland's findings. The Irfan View maps give a picture of the recordings. The Irfan View maps make a painting style picture of the Arc View recordings. Figures 5 to 28 show these findings to this research.
In these Irfan View maps the main river and tributary streams are marked blue, stone walls or field boundaries or banks are shown in grey, field-systems are shown in green (turf-grassland), cultivated areas are shown in yellow, houses are shown in red, outhouses and earthen structures are shown in purple, roads are shown in dark brown, blanket bog is shown in light brown, lime-kilns and circular hay stack structures are shown in white.

In addition, following each Arc View and Irfan View map in this chapter, a brief description of the terrain and its associated aspects are given, providing the reader with as much detail as possible on the lay of the land.
Figure 1 – Ballycroy National Park’s location in Ireland.
Figure 2 - Ballycroy National Park, County Mayo.

[Map of Ballycroy National Park with layers marked as follows:
- Ballycroy national park shares.shp
- Ballycroy national park land.shp]
Figure 3 - All the townlands of Mayo. The townlands studied in this research are marked in red.
Figure 4 - The seven townlands studied in this research. These are marked in red.

Site 1 – Tarsaghaunmore
Site 2 – Tarsaghaunbeg
Site 3 – Lagduff
Lagduffmore, Lagduffbeg and Croaghaun (northern townland)
Site 4 – Sheeanmore
Site 5 – Bellagarvaun
Site 6 – Scardaun
Site 7 - Owenduff
Figure 5 - site 1, Tarsaghaunmore.

A = Outhouses
B = Earthen structures
C = Lazy beds
D = House
E = Earthen structure
F = Outhouse
Figures 5 and 6

Figures 5 and 6 illustrate the course of the Tarsaghaun River from the base of Corslieve Mountain in the townland of Tarsaghaunmore, site 1 of the study area at the foothills of the Nephin Beg Mountain range. Figures 5 and 6 show the extent of land use for agricultural purposes alongside the course of the river with a series of earthen works, modified constructions, houses and outhouses as well as cultivated areas and field systems. The house is beside the river for a fresh water supply and an old house with a hearth in it is modified for livestock. See plates 16 and 17 overleaf. There are no roads into this townland. Accessing this townland is done by using the Bangor Trail or following the river upstream from the nearest public road in the townland of Croaghaun (Coillte woodland). Figure 29 (house) and Figure 41 (outhouse) in this chapter (section 4.4.1.2) display some of the features to the vernacular architecture of this region with settlement and land use designs.

Plate 15 – Tarsaghaun river starting at Tarsaghaunmore townland stretching to the Atlantic.
Plate 16 – House and outhouse at Tarzaghaunmore, site 1, in Figure 5.

Plate 17 – Shows the proximity of houses, outhouses and stone walls to the rivers edge at site 1.
Figure 7 - site 1, Tarsaghaunmore.

A = Outhouse
B = Lazy beds
C = Lime kiln in wall
D = Earthen structure
E = Lazy beds
F = Earthen structure
G = Outhouse or livestock pen
H = Outhouse
I = Livestock enclosure

0.07 0 0.07 Miles

Gps readings.shp
Line.shp
Figure 8

Blanket Bog
Figures 7 and 8

Figures 7 and 8 are also at site 1, Tarsaghaunmore townland. They show the extent to which this townland was used for agricultural purposes. There are many earthen works, outhouses and livestock enclosures in this section of the townland with cultivated areas and a lime-kiln incorporated into the stone wall and field-systems. The tributary streams indicate the potential of flooding to these fields in this townland. Figure 43 in section 4.4.2 of this chapter shows one of the largest livestock enclosures recorded in this study. Plate 20 overleaf shows Figure 43. It is one of two big livestock enclosures recorded in this research, the other one being Figure 44 in section 4.4.2 of this chapter in the Owenduff townland, site 7 in this study area.

Plate 18 – Earthen structure at site 1, Tarsaghaunmore.
Plate 19 – Podge McHugh and Seán Lysaght at the lime-kiln in Figure 7.

Plate 20 – Livestock enclosure at Tarsaghaunmore, (site 1).
Plate 21 – Livestock enclosure with outhouse in the background at site 1, Tarsaghaunmore.
Figure 9 - site 1, Tarsaghaunmore

A = outhouse and lazy beds
B = Earthen structure
C = Hay stack structure (circular)
D = River Weir crossing
E = Earthen structures (2)

gps readings.shp

0.07 0 0.07 0.14 Miles
Figure 10

Blanket Bog
Figures 9 and 10

Figures 9 and 10 are still at site 1, Tarsaghaunmore townland. In these figures a number of earthen works exist alongside some cultivated ridges. There is a haystack structure in this field also which was used for stacking cut hay into a pile or haystack. The weir crossing here is near a calm pool in the river, a good fishing spot. View plates 22 and 23 overleaf.

Plate 22 – Weir crossing in Figure 9.
Plate 23 – Circular haystack structure in Figure 9, Tarsaghaun townland.
Figure 11 - site 2, Tarsaghaunbeg.

A = Outhouse
B = Lazy beds
C = Livestock enclosure
D = House
E = Livestock enclosure beside river
F = House and outhouse
G = Earthen structure
H = Lazy beds
**Figures 11 and 12**

Figures 11 and 12 are in site 2, Tarsaghaunbeg townland, the location is downstream from the footbridge along the Bangor trail (the walking trail that bisects the National Park). See plate 25 overleaf for a picture of this footbridge. Figures 30 and 31 in section 4.4.1.2 of this chapter are the two houses recorded in this townland. Field-systems and drainage channels as well as earthen structures, cultivated areas, outhouses and livestock enclosures accompany these two houses. These recordings will soon be lost downstream in a river spate (river flood) as erosion and the drainage channels break up the field-systems. This is visible from Figure 12 above. There is evidence of agricultural activity along every bend of this meandering river.

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Plate 24 – Earthen structure at site 2, Tarsaghaunbeg townland.
Plate 25 – The footbridge at site 2, Tarsaghaunbeg.

Plate 26 - House at Tarsaghaunbeg. Figure 31 in section 4.4.1.2. Croaghauin townland is in the Coillte woodland behind this house, on the other side of the river. Figure 32 in section 4.4.1.2 of this chapter shows a sketch of Croaghauin house.
Plate 27 – Note that the drainage channels around the field-systems here indicated by a white arrow.

Plate 28 – Livestock enclosure at Tarsaghaunbeg.

Plate 29 – Livestock enclosure beside the river at Tarsaghaunbeg. According to Podge McHugh this was a sheep pen that was used for herding sheep when the river flooded and could not be crossed (’07).
Plate 30 – The black lines indicate cultivation ridges in this field at site 2, Tarsaghaunbeg. Note ridge and furrow cultivation throughout field. This is how the researcher recognized cultivated areas in a field.

Plate 31 – Lazy bed cultivation, 1m wide ridges with white arrows.
Plate 32 – Earthen structure (or outhouse) in a corner of a field at Tarsaghaunbeg. This type of structure represents a typical outhouse recorded in this study. See Figures 40-43 in section 4.4.1.2 of this chapter for sketches of the most prevalent types of outhouse in this research.

The wooden walking stick is one meter high and used as a meter stick indicator for this photograph.
Figure 13 - site 3, Lagduff.

A = Cement bridge crossing leading to a road on either side of river.
B = Lime kiln in wall
C = Earthen structure
D = River weir crossing
E = House and outhouses (2) with earthen structure outside wall. Platform structure opposite house, like a flat platform for stacking cut turf.
F = Lazy beds beside road.
Figure 14

Blanket Bog
Figures 13 and 14

Figures 13, 14 are at site 3, Lagduff townland of this research. Figures 13 and 14 illustrate a house, outhouse, earthen structures, cultivation area and a lime-kiln as well as a flat platform type structure (south of the house) like a turf-stacking area. This platform is shown in a lighter purple colour to the south of the house and is rectangular in shape in Figure 14. Figure 33 in section 4.4.1.2 of this chapter shows this house in sketched format at Ladguff, site 3 of this study. Plate 33 below is a photograph of the house looking east. At site 3 there is a weir crossing as well as a cement bridge river crossing. The weir crossing is downstream from the house and the cement bridge is south at the end of the field-systems where the two tributary rivers of the Owenduff River meet.

Plate 33 – Lagduff house. Figure 33 in section 4.4.1.2 of this chapter.
Plate 34 – Lagduff house and outhouse.

Plate 35 – Central hearth in house at site 3 with keeping holes in walls. The entrance into the second west room has infill (underneath the lintel stone indicated by white arrow), a later modification from the original structure.
Plate 36 – Earthen structure north-east of the house at site 3, Lagduff.

Plate 37 – Weir crossing at site 3.
Plate 38 – Lime-kiln at site 3, Lagduff.

Plate 39 – Lime-kiln at Lagduff.

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Plate 40 – The road in Figure 13, Lagduff townland. The white arrow indicates the house.
Figure 15 - site 4, Sheeannmore.

A = Lazy beds
B = House (modifications to original structure, infill)
C = Lime kiln in wall
**Figures 15 and 16**

Figures 15 and 16 are at site 4, Sheeanmore townland. This stretch of the river leads to Shean Fishing Lodge where people stay to fish the rivers in this district. The famous painter Paul Henry who painted scenes of Achill Island in County Mayo stayed there. Although this stretch of the river is not in the National Park territory but just outside the park boundary to the west, the researcher felt obliged to record the ruins here as local farmers were using and moving the stone elsewhere. This is a conservation issue and the Mayo County Council have done nothing in this area for protecting our indigenous structures. Figures 34 and 35 in section 4.4.1.2 of this chapter display sketches of the houses recorded in this townland. Figure 34 in this chapter (4.4.1.2) is the house in plate 41 below at site 4, Sheeanmore. This house has been modified from the original structure. A lime-kiln is built into the wall here too alongside the stream south of the house.

![Plate 41 - House in Sheeanmore townland, Figure 34 in section 4.4.1.2.](image-url)
Plate 42 – Interior of house at Sheeanmore (site 4), Figure 34 in section 4.4.1.2.

Plate 43 – The lime-kiln in Figure 15 at Sheeanmore townland.
Plate 44 – The lime-kiln at Sheeanmore in Figure 15.

Plate 45 – The house in Figure 15.
Plate 46 – Note the modifications (windows infill and extension to east gable) to original house structure indicated by white arrows.
Figure 17 - site 4, Sheeanmore.

A = House
B = Lazy beds
C = Field within larger field-system. Could have been livestock enclosure, walls just remain.
Figures 17 and 18

Figures 17 and 18 are at site 4, Sheeanmore townlands in this study. Figure 35 in this chapter (4.4.1.2) is the house in plates 47 and 48 overleaf. Rhododendron plants are invading space here and taking over from other plant species.

Plate 47 – The house at Sheeanmore townland indicated by the white arrow.
Plate 48 - Figure 35 (in section 4.4.1.2) looking north at site 4, Sheanmore townland.

Plate 49 – Keeping hole in east gable wall of house and central hearth (infill). These features are indicated by the white arrows.
Plate 50 – Figure 35 in section 4.4.1.2. Note the keeping holes in walls indicated by the white arrows.
Figure 19 - site 4, Sheeanmore.

A = Congested Districts
Board House
B = Outhouses (2)
C = Earthen strucure in wall
D = Lazy beds
E = Livestock enclosure or earthen structure.
Figure 20

Blanket Bog
Figures 19 and 20

Figures 19 and 20 are at site 4, Sheeanmore townland. East of the Congested Districts Board house are two outhouses which most likely was the older house and outhouse before the Congested Districts Board house was built in the early 1900s. This Congested Districts Board house is typical of all the ones recorded in this study. They have bigger windows than the traditional cottages, a square porch and slate roof. They are more square in shape overall. This area is overgrown with Rhododendron shrubs of tree height so it was very difficult to find field boundaries and other features. There is evidence of a structure next to the cultivated areas, which could have been a livestock enclosure or house.
Plate 52 – Looking north from where the two outhouses are in Figure 19.

Plate 53 – The researcher using the GPS standing on the outhouses east of the Congested Districts Board house in Figure 19. Note the Rhododendron shrubs invading this townland area, this shrub is indicated by the white arrows.
Figure 21 - site 5, Bellagarvaun.

A = Lazy beds
B = House
C = Lazy beds
D = Livestock enclosures
   Sheep pens
E = Congested Districts
   Board House

0.1 0 0.1 Miles

Gps readings.ahp
Line.ahp

87
Figure 22

Blanket Bog
Figures 21 and 22

Figures 21 and 22 are at site 5, Bellagarvaun-Srahduiggaun townlands. This area leads to the Owenduff Complex or the Owenduff blanket bog landscape that is Ballycroy National Park. There are many cultivation areas in these field-systems. The sheep enclosures beside the Congested Districts Board house in Figures 21 and 22 indicate many sheep being here at one time. See plate 54 overleaf to view the sheep dip pen enclosures in Figures 21 and 22. There is access to Corryloughaphuill Lake (the dam) and the Glennamong Mountains from here also. In addition, the brown line in Figure 22 is an old path or road that leads to the Bangor Trail, often flooded in a river spate now and very hard and dangerous to follow through the blanket bog to the Bangor Trail. Figure 36 in this chapter (4.4.1.2) is the house at Bellagarvaun in Figures 21 and 22. It has several modifications to it but it would seem that this was a byre-dwelling originally, meaning livestock lived with the people under one roof at one time in early Irish settlement history. The field-systems here are going to be washed downstream also because of the all water running off the mountains to the Atlantic Ocean, for instance, the road that was here is water-logged, being eroded and overgrown with Rhododendron shrubs. Rhododendron shrubs are taking over the fields here also.
Plate 54 – The house (Figure 36 in section 4.4.1.2) at site 5, Bellagarvaun townland.

Plate 55 – The interior of the house (Figure 36 in section 4.4.1.2), note the central hearth and keeping holes in wall.
Plate 56 – Central hearth (infill) of the house indicated by white arrow.

Plate 57 – The Congested Districts Board house at site 5.
Plate 58 – Cultivation ridges in field systems indicated by black lines at site 5, Bellagarvaun townland. The Congested Districts Board house is indicated by white arrow.

Plate 59 – Sheep dip enclosure at site 5, Bellagarvaun townland.
Figure 23 - site 6, Scardaun.

A = Lazy beds
B = Turf stacking structure
C = House and outhouse in field
D = Hay meadow field and other field systems along river's edge.
Figure 24

Blanket Bog
Figures 23 and 24

Figures 23 and 24 are at site 6, Scardaun townland. This townland is in the heart of the Owenduff Complex and is extremely remote. It takes at least a two and half hour hike to get to this townland. Figure 38 in section 4.4.1.2 of this chapter is the house in this remote townland. The house has buttressed walls on the north side for reinforcement and on the south side the walls of the house are sheltered from roaming livestock by the natural earthen bank. The west gable is altered or modified from the original structure. As Figures 23 and 24 illustrate, the field-systems and house area of this townland are lying on the river's edge. The cultivation area is partly overgrown with ferns and briars so it was difficult to make out the ridges. However, further downstream from these findings are still some further evidence of cultivation. The researcher did not have time to explore further downstream from here in this study. The area of blanket bog around site 6 of this townland is cut significantly with no vegetation left on the surface (recent over-grazing).

Plate 60 – The house at Scardaun townland (Figure 38 in section 4.4.1.2).
Plate 61 – Scardaun house with the Nephin Beg Mountain range in the background. The buttressed north wall is recognisable and the west gable has been modified with a doorway, as the entrance from the kitchen has been filled in.

Plate 62 – The interior of Scardaun house. Note the central hearth and keeping hole indicated by white arrows and doorway to second room has been modified (infill).
Plate 63 – The buttressed wall (double wall) of Scardaun house indicated by white arrow.

Plate 64 – The researcher in hay meadow field at Scardaun townland, site 6.
Figure 25 - site 7, Owenduff.

A = Earthen structures (2)
B = House and outhouse (buttressed outhouse).
C = Lazy beds
D = Field systems
Figure 27 - site 7, Owenduff.

A = Livestock Enclosure
B = Lazy beds
C = Lazy beds (2m)
Figure 28

Blanket Bog
Figures 25, 26, 27 and 28

Figures 25, 26, 27 and 28 are at site 7, the Owenduff townland. Similar to the last site, site 6 (Scardaun), the Owenduff is also one of the remotest townlands researched in this study. The Bangor Trail tracks alongside these findings and is the dark brown line in Figures 26 and 28. Mayo County Council has erected a metal shelter in the traditional stone cottage of site 7 for walkers accessing the Bangor Trail. See plate 65 overleaf to show this metal shelter in the original house structure. This metal rudimentary shelter is not adequate for 2010 and future generations accessing this townland and the Bangor Trail. There are two earthen structures in the fields around the house as well as a buttressed outhouse. There are also field-systems, cultivation areas, a haggard and a possible hen house as well as a buttressed outhouse, a house and livestock enclosure recorded in Figures 25 to 28 of this townland. The field-systems here at site 7, the Owenduff townland, are some of the largest recorded in this study. They all slope downhill from the walking trail. See Figures 25-28 for this evidence. The cultivation ridges in some of the fields in Figures 27 and 28 are 2m wide. These are the largest ridge and furrow cultivation areas in this study. They were mostly 1m wide ridges in the other townlands. Figures 27 and 28 reveal a livestock enclosure (Figure 44 in section 4.4.2 of this chapter). Figure 42 in this chapter shows the buttressed outhouse in plates 67/68 overleaf. This livestock enclosure reveals gable ends of a house in its structure indicating to the original structure being modified over time.
Plate 65 – The Owenduff house (Figure 39 in section 4.4.1.2).

Plate 66 – The south facing front of the Owenduff house.
Plate 67 – Podge McHugh (a local farmer from Tarsaghaunbeg) stands beside the buttressed outhouse at site 7, Owenduff townland.

Plate 68 – The buttressed outhouse at site 7, Owenduff (Figure 42 in section 4.4.1.2).
Plate 69 – The Bangor trail and hay meadow field of the Owenduff townland indicated by the white arrows.

Plate 70 – Podge McHugh and Seán Lysaght walking south along the Bangor trail. Note the large field-systems and livestock enclosure indicated by the white arrow in Figures 27 and 28.
Plate 71 – The livestock enclosure at site 7, Figure 44 in section 4.4.2.

Plate 72 – The east gable wall in livestock enclosure at site 7 with central hearth indicated by white arrows. The white meter stick is used to give scale to the structure (supervisor’s meter stick).
4.3 LAND USE AND AGRICULTURE

As the findings maps reveal, there are extensive field-systems visible throughout the Owenduff Complex in Ballycroy National Park, County Mayo. These traits in the bog suggest widespread farming. The previous section, 4.2 of this findings chapter, illustrates these attributes of the area. Banks, ditches, drains and cultivation ridges or lazy-beds indicate fields, tillage plots and ridge and furrow cultivation. In many instances, the enclosed field surface is higher than the area outside the embankment. It would appear that the enclosed field level was artificially raised with sand and seaweed annually to improve soil fertility, which could also explain the raised level of fields.

The creation of field boundaries by the construction of banks could serve a number of purposes. Firstly, they could have been used to establish the limits of ownership. Secondly to organize the apportioning of land to different uses such as one field for cultivation and another for holding livestock. Thirdly to prevent cattle, sheep and other livestock from entering the cultivated areas and destroying crops or escaping and roaming the hills. Roaming livestock are hard to find and time consuming. Livestock can be trapped in bog holes too. Fourthly to protect crops and pasture from the effects of flooding and grazing. Fifthly to provide shelter belts from severe weather and river flooding.

While periodical flooding allowed the creation of a soil favourable to agriculture along the river margins, the same process was also a threat. Large floods could ruin hay and arable crops and they could cause hardship by flooding houses and animal shelters. A notable feature of these river catchments is the embankments that have been constructed in order to protect households, fields and livelihoods. In many cases, these embankments are reinforced with dry-stone facing. In the absence of wire and post fencing and in an environment unsuitable to hedgerow banks, stone embankments were the usual barriers to prevent cattle and sheep from entering fields. In the upper Owenduff catchments, at Scardaun and Owenduff townlands, a field has been created and enclosed with such a bank where there is less of a threat to it flooding. See plates 73 and 74 overleaf to view fields or hay meadows. By denying cattle access to a field, it served as a grassland hay meadow instead.
Plate 73 - Remains of embankment enclosing field at site 2, Tarsaghaunbeg.

Plate 74 - Hay meadow field with raised bank at site 6, Scardaun, indicated by white arrow.
The importance of preventing livestock from entering certain zones is illustrated below on plate 75. At Owenduff a combined bank and wall structure meet to protect the haggard from incursion. The haggard is an outdoor crop storage area, covered in stone and bedded with straw, to prevent livestock from eating harvested crops.

Plate 75 - Haggard boundary at site 7, Owenduff townland.

A haggard was a small-fabricated stone walled square roofless structure that protected harvested crops, mostly vegetables, from grazing animals. The harvested crops were buried in sand pits surrounded by stonewalls and covered over with stones and rushes to preserve the crops and protect them from being eaten by livestock. This is further evidence of arable farming at site 7 in the Owenduff townland as Figures 25 to 28 reveal, see plate 76 overleaf for this agricultural evidence. The presence of ridge and furrow cultivation at every household holding and shown in 4.2 section of this findings chapter adds more testimony to substantial agricultural activity in the area.
Plate 76 – 2m wide lazy bed ridges at site 7, Owenduff, indicated by black arrows.

Plate 77 – Embankments around house at Sheeanmore townland (site 4).
4.4 THE BUILT ENVIRONMENT

Section 4.2 of this chapter revealed substantial findings in each townland recorded for this study. Given the scale and intensity of farming activity and settlement in the area, it is not surprising to find the remains of many earthen structures, houses, outhouses and other manmade structures. The variety of structures supporting people and livestock epitomises the diversity of a traditional rural economy. An examination of the ruins of structures and topographical human imprints in the landscape provides some evidence of how this rural community evolved. At the same time, the interpretation of many sites offers considerable challenges to the researcher until archaeological and other forensic techniques are applied to the area.

For the purpose of this study, all manmade structures are chronologically organized and arranged accordingly. When arranging something chronologically (usually objects or items), it means that there is a list or an arrangement of events in order of occurrence. For the purpose of this study, the built environment or manmade buildings are arranged in chronological order. For this study, first in chronological order are the earthen structures recorded in each townland. Second in line in chronological order are the stone cottages and stone outhouses. Third in chronological order are the Congested Districts Board (CDB) houses. So, in all, the built environment findings are chronologically categorized into three stages or phases of development and building. The exact function of each building is uncertain, however, the houses and outhouses were easiest to identify because of their specific characteristics such as lintel stones in fireplaces, doors and windows. Dáithí’s cairn on the summit of Corslieve Mountain dates from the Neolithic period (4,000 B.C) and the Céide Fields archaeological results reveals Neolithic farmers in Erris from this period, but for the purpose of the fieldwork findings in this study this Neolithic timeline is not included when organising the findings chronologically just the other three phases of development. 1) Earthen structures 2) Stone cottages and outhouses 3) Congested Districts Board houses.
4.4.1 Houses and Shelters

The sequence of historical geography settlement patterns in this study starts with the earthen structures recorded and mapped in this chapter. The first in chronological order for the houses and shelters section of this research are the earthen structures. The second phase of settlement and land use patterns in this district, in chronological order, are the stone cottages and stone outhouses. The third and final historical phase of construction in this study, in chronological order, are the Congested Districts Board house types, mostly located within sight of the older traditional stone cottage as can be seen in the maps provided in this chapter (section 4.2). Duffy (2000) testifies to this third phase of settlement and reorganization of land designed by the Congested Districts Board in the 1890s.

4.4.1.1 Earthen Structures

There are many earthen structures recorded in this study as section 4.2 of this chapter reveals. These findings reveal the extent to which this landscape was utilized in the past. For chronological reasons, the earthen structures are deemed some of the oldest manmade structures in this study along with the pagan Neolithic sites such as Corslieve cairn or Dáithí's cairn. To arrange the findings in this chapter, earthen structures are listed first in chronological order. The types of earthen structures present in this landscape study vary in shape and size throughout the study but are still substantial in quantity. View Figures 5 to 28 in section 4.2 of this chapter for more details on the exact location of these earthen structures in each finding. See plates 78 to 81 overleaf to view these different features to the earthen structure finds. Subsequent archaeological investigations might reveal the functions and period of these earthen structures. The function of these earthen structures must have varied but some could have been fowl huts, hen houses, outhouses and shelters for farmers in bad weather.

There are also traces of ephemeral shelters that may relate to periods of destitution in this region of north-west Mayo when overcrowding, poverty, vagrancy and eviction forced people to
become impoverished. Other small structures associated with field-systems may have served as shelters for newborn animals or seasonal shelters for herdsmen during bad weather and nights if herdsmen were caught by river flooding. See plates 78, 79 below for photographs of these earthen structures. Plates 80 and 81 overleaf show more earthen structures.

Plate 78 - Rudimentary shelter at the foot of Corslieve Mountain.

Plate 79 – Earthen structure at site 1, Tarsaghaunmore townland.
Plate 80 – Earthen structure at site 5, Bellagarvaun townland.

Plate 81 - Small circular earthen structure at site 3, Lagduff townland.
4.4.1.2 Stone Cottages and Outhouses

Next in chronological order are the stone cottages and stone outhouses. In their original construction, the stone cottages recorded in this study were permanent settlements. Local people remember the surnames of the last occupants of these derelict homes, which support the permanent settlement interpretation. Floor plans of the ten stone cottages recorded in this study are sketched to scale in this section of the findings chapter, see Figures 29 to 39 for sketches of the houses and Figures 40 to 44 for sketches of the stone outhouses and livestock enclosures in this study. The sketches in this study are measured in meters to scale. These holdings and houses were occupied up until approximately the 1950s when most people emigrated from the area for an urban lifestyle. Electricity did not come to this district until 1964.

As Figures 29 to 39 reveal, the typical stone cottage of this district of north-west Mayo was a two-roomed stone structure with thatched roof. There were two central hearths in all houses recorded, a central kitchen hearth (with cast iron rods in it for holding cooking pots in some) and another central hearth in the bedroom. Three houses, Figures 31, 33 and 34 had a cailleach (a bed area or paved platform area beside kitchen hearth usually where grandparents could sleep).

A substantial feature to these stone cottages was the use of lintel stones. These lintel stones supported window frames, all the central hearths frames and doorway frames. Without these lintel stones in the built environment section of this research, it would have been much harder to record precise details relating to the houses recorded in this study. For example, Figures 29, 34 and 35 were in the worst condition for recording but the presence of the lintel stones indicated to doorways, hearths and windows, specific features to the built environment in this study. See plate 82 overleaf for examples of lintel stones in the built environment.
Plate 82 - Lintel stones indicated by white arrows reveal central hearths, windows and doorways where built structures are falling into ruins, Tarsaghaunbeg townland (Figure 30 in this chapter).

Most of the gable ends of the houses face the prevailing westerly wind. Some of the houses have no doorways on the north face of the house. This is not surprising, as northerly winds are very cold, especially in winter. Figures 29, 30, 31, 37, and 39 have doorways in their structure on the south facing side of the house, whereas, in Figures 32, 33, 34, 35, 36 and 38 the two doors face opposite each other in the walls of the house where the kitchen room (central hearth in main room) is. There is more discussion on the traditional vernacular Irish stone cottage and its related features in the next chapter of this study. See Figures 29-39 overleaf for the attributes to the built environment houses in Ballycroy National Park, County Mayo.
Figure 29 - Tarsaghaunmore House

Scale: | ___ | ___ | ___ |
0m  2m  4m  6m
Figure 30 – Tarsaghaunbeg House

Scale: |___|___|___|___|
0m   2m   4m   6m
Figure 31 – Tarsaghaunbeg House

Scale: |____|____|____|
0m 2m 4m 6m
Figure 32 – Croaghaun House (in Coillte Woodland)
Figure 33 – Lagduff House

Scale: |____|____|____|____|
0m 2m 4m 6m
Figure 34 – Sheeanmore House

Scale: |   |   |   |
0m 2m 4m 6m
Figure 35 – Sheeanmore House

Scale: | _____ | _____ | _____ |
      0m   2m   4m   6m
Figure 36 – Bellagarvaun House
Figure 37 – Ballycroy Thatched House (byre dwelling)
Figure 38 – Scardaun House (remote location)
Figure 39 – Owenduff House (remote location)
Figures 32 and 37 are not in section 4.2 of this chapter. The researcher came across these buildings on the Ballycroy road and recorded them with the owner’s permission to use for a reference to the type of thatching that would have been on all the buildings recorded in this study. Additionally, the house structures themselves were recorded because of the good condition they were in for comparison purposes. Figure 32 was in Croaghaun townland (in the Coillte woodland) next to Tarsaghaunbeg townland. This house was known as the ‘Céilí house’ of the area. The kitchen is a big room with a flag-stoned floor good for set dancing. Figure 37 is near the village of Ballycroy. This structure is still in use today and was a byre-dwelling at one time. It has a rush straw type thatch on it and is a representative of the type of thatching that would have been used in all the stone cottages and stone outhouses recorded for this study.

In these houses recorded for this study, two tiny south facing windows are typically positioned in the walls for light. All of the kitchen hearths have a wrought-iron crane in their chimney frame. From the crane hangs the iron pot. The pot-hanger hooks on to the arm of the crane and the height can be adjusted. Evans (1957) reveals that wrought-iron cranes are typical of stone cottages, where bog-oak cranes were also used in earlier wattle huts. Evans (1957) refers to the three-legged cast iron pot as originating from the Bronze Age. An example of a cast-iron pot used in this area can be seen in plate 29 below. In some of the houses, in Figures 36, 37 and 38 keeping holes were in the walls beside the central hearth. Evans (1957) mentions the old belief about the keeping-hole, the left-hand keeping hole belongs to the woman for her knitting and the right-hand one to the man of the house for his clay pipe. Figures 30, 33, 34, 36, 37 and 38 have modifications to their original structure. Figure 38 is one of the remotest houses in this study and has a buttressed wall for extra support so livestock would not knock it down. Figure 37 (Ballycroy stone cottage) has an extension on the north gable wall of the house but is not sketched to plan onto the original structure of the house for this study.
Plate 83 – Small three-legged cast iron pot at site 4, Sheeanmore townland.

Plate 84 - Iron crane in kitchen or central hearth at Croaghaun townland (Figure 32).
Walling was dry-stoned with traces of a sand shell mortar, mica-schist shines from the sand mortar indicating it is the glacial deposit sand from the river sand mixed with shells from the beach. This glacial sand was mixed with shell mortar. A second layer of mortar was on the exterior of Figure 32 (Croaghaun) house, a thicker more pebbly mortar was layered over a sandy mortar. See plate 87 overleaf to view this thicker pebbly mortar. Cockle and mussel shells are in the sandy mortar of the walls in nearly all the cottages and outhouses recorded in this study. See plates 85 and 86 below to illustrate this.

Plate 85 – Shell mortar in the stone walls of the stone cottages (Figure 31).

Plate 86 - Cockle and mussel shells in the sand mortar of the stone cottage (Figure 30).
Plate 87 - Illustrates erosion and plaster thickness on the exterior of the stone cottage at Croaghaun townland (Figure 3). Note the two types of mortar on the exterior of house, the sandy limy mortar first on the stone, then the thicker more pebbly mortar orange in colour. Erosion is slowly stripping both these mortar layers to reveal the stone-work underneath.

While no traditional thatching survives on the houses within the National Park and the Owenduff Complex, the researcher recorded a house and outhouse with thatch still on it in the summer of 2007, Figure 37 near Ballycroy village and an outhouse on the Ballycroy to Bangor road. Both premises are near the town of Ballycroy. Figure 37 is a thatch-byre dwelling. The outhouse is also a thatch-byre outhouse. These recordings disclose the living conditions of the local people for this research. These buildings are a representative of the thatching style in the vicinity. The local people of this townland spoke of a couple living in this house (Figure 37) about 150 years ago and the Congested Districts Board house built near it was built for their children in the 1920s. These buildings echo the style and materials used for all the structures recorded for this study. See plates 88-90 overleaf for a photograph of the rush-style thatching which originally would have been on all the stone cottages and outhouses of this study.
Plate 88 - Close up of rush thatching in Figure 37.

Plate 89 – South facing gable with byre visible beside meter stick (Figure 37).

Plate 90 – Note the tiny windows for light and extension on the north gable, a modification for present farming practices.
Connected to the traditional stone cottage of this locale are stone outhouses. Five different size outhouses are sketched to scale overleaf in Figures 40 to 44. Figure 42 has buttressed walls that indicate to livestock in the locale. The buttressed outhouse means that livestock could not knock down the structure when moving around. Figure 40 is a representative of the standard type of outhouse connected with every farm holding and house in this research. As Figure 40 indicates, the orientation and size of this outhouse can vary throughout this study. Figure 41 is a two-roomed outhouse. In this research, an evolution of uses of structures was adapted to suit certain generations of people. Some of the two-roomed outhouses were modified at some point in history. For example, an old two-roomed house became an outhouse if a new house was built. See plate 91 below for a photograph of this.

Plate 91 – A central hearth in an outhouse shows that this was a house before it was modified for farming use to an outhouse (Tarsaghaunmore townland).
Figure 40 – Standard Outhouse
Figure 41 – Tarsaghaunmore Outhouse

Scale: | 0m | 2m | 4m | 6m |
Figure 42 – Owenduff Outhouse
Plate 92 – House and outhouse at Tarsaghaunmore, site 1.

Plate 93 – Outhouse with nettles in it located beside house at Lagduff townland, site 3.
4.4.1.3 Congested Districts Board Houses

The Congested Districts Board houses have definite features that characterize and define them. These features are porches and bigger windows than in the stone cottages. They have slate roofs and are squarer in shape as opposed to the rectangular shape of the traditional Irish cottage. See plate 94 below. See Figures 5 to 28 again in this chapter for the location of the other Congested Districts Board houses.

Plate 94 – Traditional older byre stone cottage and Congested Districts Board house in the background indicated by white arrow.

Plate 95 – The white arrows indicate to the Congested Districts Board house and outhouse.
The next chapter discusses in more detail the social, economic and political circumstances of Ballycroy’s people over centuries of change and adaptation. This is chronicled into three sections in this findings chapter by identifying the earthen structures as some of the oldest structures present in this landscape study. The second phase of development, in chronological order, is the stone cottages and stone outhouses and the date or time-line associated with these structures is from the end of the eighteenth century through to the end of the nineteenth century with the building of the Congested Districts Board houses. The third and final phase of development in this study area is the most recent phase of construction, the Congested Districts Board houses of the early twentieth century and the end of the nineteenth century. Whelan (1999) verifies this third phase of development too on Clare Island, County Mayo, where traditional farming methods prevailed up until the developments of the Congested Districts Board in the 1890s and early 1900s.

Plate 96 – The Congested Districts Board house at site 4, Sheeanmore townland.
4.4.2 Livestock Enclosures

Given the importance of cattle in early Irish history and sheep in the eighteenth, nineteenth and twentieth centuries, it is natural that some significant structures relate to the housing and handling of livestock. Cattle and sheep had to be housed at various times of the year and they had to be herded into enclosures for handling. For instance, sheep are sheared in the summer and their wool dipped. Figures 43 and 44 overleaf represent two of the largest livestock enclosures recorded in this study. Figure 43 is a livestock enclosure at site 1, Tarsaghaunmore townland and Figure 44 is in the Owenduff townland in the mountains of Ballycroy. Figure 44 livestock enclosure was modified for more recent farming practices as there are gable ends of a house in its structure. Podge McHugh (interviewed in 2007) mentioned it was modified for sheep herding in the twentieth century. See plates 97 and 98 for photographs of these livestock enclosures.

The practice of seasonal pasturage of cattle (booleying) is well attested in north-west Mayo by various authors mentioned in Chapters Two and Five of this study. The subject of booleying is a rich field of study in itself and is widely attested in Ireland. It has survived longer in the western mountainous regions of Ireland than in the eastern regions because booleying practices in remote mountainous areas are miles away from any village or town. Coughlan (2006) researched the deserted village at Slievemore in Achill County Mayo that was in use as a booley village up until the 1940s.

Traditionally, areas that were initially summer seasonal pastures in the mountains in the 1600s and 1700s became permanent settlements under the new landlord system in the 1800s and early 1900s. The dynamics of these changes are complex and relate to population pressures, economic fluctuations and changes in land ownership and management systems. The next chapter, Chapter Five of this study delves into these topics in more detail.
Figure 43 – Tarsaghaunmore Livestock Enclosure

Scale: |_____|_____|_____|
0m 2m 4m 6m
Figure 44 – Owenduff Livestock Enclosure
Plate 97 - Livestock enclosure at site 1, Tarsaghaunmore townland (Figure 43).

Plate 98 – Livestock enclosure at site 7, Owenduff townland (Figure 44). The researcher is standing inside the west gable of a house in its original structure.
4.4.3 Weirs and River Crossings

The people of this region relied on fabricated structures in order to cross rivers safely during floods or when river levels were high. A number of weirs and stepping stones survive on the river courses of this study area. Some of these structures may have served as fish trap areas also allowing people to catch salmon and sea trout more easily. These weir-like structures are still visible in some of the larger pools today where fish tend to congregate. The line of stones shown in plate 99 below illustrates a line of stones set at a diagonal angle suggesting they were designed to channel fish towards a narrow opening where they could be caught using a net or cage.

Plate 99 - Former salmon trap at Casadh Na Leice, Tarsagahaunmore River (site 1).

Plate 100 - Crossing point and salmon weir, Owenduff River.
In addition a dam was erected by the landlord Clive at Corryloughaphuill Lake in the Glennamong mountain range, where after 1868 Edward H. Clive took over the estate making further agricultural and infrastructural improvements to his estate. One such improvement is a lake dam at Corryloughaphuill Lake. View plate 102 overleaf to see what remains of the dam. The dam was used for fishing. Instead of waiting for rain for fish to run up the river from the Atlantic, the dam was opened to bring on a run of fish.
Plate 102 – Dam at Corryloughaphuill Lake.

Plate 103 – A view west over Corryloughaphuill Lake.
4.4.4 Limekilns

There are three significant lime-kilns recorded in this study and they are plotted in Figures 5 to 28 of this findings chapter. The researcher found two other kilns at site 2 and 5 of the study areas but did not have time to record them as they were some distance away from the field-systems recorded in those areas. Of the three recorded, one is at site 1 of this study area, another is at site 3 and the third is at site 4. The circular stone-lined bowl of the kiln is dug into a sloping bank and the horizontal stem or flue emerges lower down the sloping bank, at the base of the bank. All the kilns recorded in this study are located beside a fresh water supply too, beside a stream or the main river. At site 3, Ladduff townland, a turf-stacking area is beside the stone-lined kiln, which was the fuel used to fire these kilns.

Podge McHugh was a great help to the researcher in pointing out these features, as they are all overgrown and very hard to locate. Lime-kilns were vital for fertilizing the acidic soil of bog landscapes. They also assisted in reaping arable crops as well as used for white-washing houses. Turf was used to fire the kilns and in some cases poteen would have been made using these styles of kilns also. See plate 104 overleaf to view one of the lime-kilns recorded in this study.
Plate 104 - Lime-kiln at site 3, Lagduff townland.
4.4.5 Corslieve Cairn and Way-side Death Cairns

There is a cairn on the summit of Corslieve Mountain. This cairn is associated with a pagan king, Dáithí Bán. The summit is littered with rocks and stones also suggesting displaced stone from maybe another structure or bigger cairn. It must be noted that archaeological evidence reveals an Iron Age fort on the summit of Croagh Patrick, County Mayo, so archaeological investigations of Corslieve summit may reveal similar findings. For more information on Dáithí Bán see Appendix II for the Irish folklore translation stories on this area.

Plate 105 - Dáithí’s Cairn on the summit of Corslieve Mountain.

The figure of Dáithí Bán is not yet extinct in the folklore of the area. In other accounts, his earlier form as a giant or ogre of pagan antiquity has undergone change to become a bandit who preyed on travellers on the Bangor Trail, the old route through the National Park from Bangor to Newport. Traditions about giants were strong in the Erris region generally: there are other giants in local folklore associated with the megalithic tomb at Castlehill, near Ballycroy and with the low ridge of Glencastle Hill north of the Bangor-Belmullet road. These giants appear to be distinct from the traditions relating to Crom Dubh, the pagan deity celebrated at the hilltop festivals of Lughnasa.
There is no evidence of a Lughnasa festival on Corslieve so we have no way of relating Dáithí Bán to the more familiar figure of Crom Dubh. Other folk material from the area is preserved in the archives of the Schools Scheme of the late 1930s, where primary schools throughout the country were enlisted to collect folklore from their locality. These collections are written in the Irish language and show a high standard of Irish in Ballycroy's primary schools. One story mentioned in these collections involves the herding of cattle from Bangor along the Bangor trail to Newport. These collections are in Mayo County Library in Castlebar, County Mayo.

Wayside death cairns traditionally mark the spot where a death has occurred. Heaps of stones, twigs or grass was used traditionally to mark the spot where it occurred. This practice is widely known in the west of Ireland, including the Erris region. An example of such a cairn was discovered within the study area on the Bangor trail at Gleann Na nGintribh, south of the townland of Tarsaghaunmore, where a woman is reputed to have been murdered (Grid reference F883 133).
CHAPTER FIVE

THE DISCUSSION
DISCUSSION

The visible remains of human settlement and land use in Ballycroy National Park are part of the record of an exceptional people, some of whose descendants still live in this region. In the face of severe political and social challenges coupled with a harsh demanding physical environment the people of this region have developed techniques to sustain a viable rural economy. This section of the research discloses the relevance of the findings of this study in this region of north-west Mayo now known as Ballycroy National Park. This unique physical terrain is under state protection for conservation purposes under the EU Habitats Directive.

In this discussion chapter the themes of the study are explored in more detail. These themes involve the political, social and economic conditions local people experienced from the end of the eighteenth century through to the beginning of the twentieth century. To remind the reader of the different influences affecting local populations in each townland examined in this study over this period of time a quick recap is necessary, firstly, to discuss the historical geography of the region over the time-period mentioned already. Secondly, to discuss the socio-economic events of Ballycroy National Park’s people and the political arena in which people lived and worked during this period in history. Finally, to discuss the indigenous architecture of the ruined buildings recorded in Chapter Four of this research for land use and settlement in Ballycroy National Park over this time-period.

This chapter entails analysing the processes of territorialisation, naming places (townland names), settling landscapes, land ownership and management and administrative landscapes. All these processes impact on the order and arrangement of land and produce distinctive designs and textures through time. For example, our colonial history has left three fishing lodges in this area of Ballycroy, which govern fishing rights to the rivers in this region of north-west Mayo. Noone (1991) remarks how there were six bailiffs in this region of Ballycroy towards the end of the nineteenth century. Local
people living along the river courses were summoned to court and fined for poaching salmon to feed their families in the nineteenth and early twentieth centuries while a company called ‘Days’ was exporting 13 tons of salmon per day abroad from the Bangor and Ballycroy districts. As Shubin (2007) remarks, involvement in the social, cultural, political and economic systems of a locality determines the success or failure of its systems and participation should never involve exclusion. Gillespie (1998) outlines the three major organising principles that historians use in presenting the past – people, place and time. As Duffy (2007) remarks settlement patterns, land-use systems, the social, political and economic circumstance of a race of people evolve through time and generations and continue to do so in today’s climate.

As previously mentioned the chronological order of the findings is listed in three categories. Firstly, the earthen structures recorded, secondly, the stone cottages and stone outhouses recorded and thirdly the Congested Districts Board houses. Each phase of land use and settlement growth revealed chronologically is discussed where documentary evidence for pre-1700s is non-existent for the Erris region of north-west County Mayo. An important attribute to each phase of settlement and land use evolution, discussed chronologically in this chapter, is the processes engaged in local systems administration and management of people and place (land).
For the purpose of this chapter, the sequence of settlement patterns for this study begins with Corslieve cairn on the summit of Corslieve Mountain. Corslieve cairn dates from the Neolithic period, an era of Ireland’s first settled farmers. The fact that a Neolithic cairn exists on the summit of Corslieve Mountain is evidence of Neolithic settlement in this area of Ballycroy in north-west Mayo. Following on in chronological order from this Neolithic period in time are the earthen structures recorded in this study. Figures 5 to 28 in the last chapter reveal the extent to which these earthen structures exist in the field today. The remotest townlands of Tarsaghaunmore, Tarsaghaunbeg, Scardaun, Owenduff and Bellagarvaun reveal several earthen structures indicating earlier settlement patterns. The exact date for these earthen structures is unknown and only archaeological investigations and excavations would reveal the exact time-line for these earthen structures. However, it can be deciphered that the date for these earthen structures predates the stone cottages and stone outhouses in this study. Historical academic documents do not exist for this locale pre-1700s not to mention from the Neolithic period (4,000 B.C.) on. The only academic evidence that dates from the Neolithic period for the Erris region is from Dr. Séamus Caulfield’s work. He archaeologically investigated and discovered the Céide Fields in north-west Mayo, field patterns and settlement designs that represent Ireland’s first settled farming communities.

Next in sequence in chronological order are the stone cottages and stone outhouses. The vernacular architecture of these stone cottages reveals that these structures are the traditional thatch central hearth types dating from the eighteenth and nineteenth centuries and continued in use until the establishment of the Congested Districts Board and the Land Commission in the 1890s. However, in this remote region of north-west Mayo improvements to housing were not made until about the 1920s as it took services longer to reach western counties.
The other elements of the findings chapter in this study, such as the livestock enclosures, lime-kilns, ridge and furrow cultivation areas, weirs and river crossings fit into the same category chronologically as the stone cottages and stone outhouses. The livestock enclosures are linked to the people living in the stone cottages. Finally, last in chronological order in this study are the Congested District Board houses which brings the time-line of this research to an end in the 1920s. The stone cottages and stone outhouses in this study did not have electricity as electricity did not reach the townlands in this area until 1964 (Cleary, interviewed in 2008). Section 5.5.1.1, 5.5.1.2 and 5.5.1.3 of this chapter talk more about the earthen structures, the stone cottages and stone outhouses and finally the Congested Districts Board houses of this study. Section 5.5.1.2.1 of this chapter explores the processes of change in land tenure and land holding practices that evolved in Connaught and Erris through the nineteenth century where market forces decided the best cash crops to grow to make increasing rent payments to colonial landlords.

5.5.1.1 Corslieve Cairn and Earthen Structures

Archaeological investigations reveal traces of this region's earliest people dating back to the Neolithic Period some 6,000 years ago. Arising from this research there is no doubt that blanket bog landscapes are irreplaceable eco-systems that sustain many forms of life. Their inimitable attributes offer a locale and community a wide range of habitats to live from dating back to the Neolithic people (4,000 B.C.). From lakes and rivers to the shoreline and sea to corrie mountain lakes and brown trout, the people of this area have understood their natural habitat for generations.

Dáithí's cairn on Corslieve Mountain is a substantial size and one of the oldest monuments in this study. This Neolithic cairn is the first in chronological order in this chapter with the earthen structures next in chronological order. The significance of mountain cairns and earthen structures are discussed briefly in this section of Chapter Five.
Circular mounds or cairns of rounded profile vary in size greatly from county to county. They are generally burial mounds covered with stones but may cover any one of a number of different types of Neolithic burials (i.e. passage, wedge or court tombs). In accordance with the Office of Public Works field monuments book (1991) the burials in these tombs can be either cremated or unburnt accompanied with decorated pottery urns. The burial can be placed in a cist or not (cists are box-like structures made of big stone slabs). The number of burials per cist can vary from one individual to several individuals. Archaeological excavations could reveal whether Dáithí is buried here or not or whether it is indeed a tomb. There are other Megalithic tombs in the area too near Ballycroy village and the shore, further evidence of Neolithic occupation in the area.

In many cases and especially in cities, for example in Dublin, Cork and Waterford where archaeological excavations reveal Viking settlement patterns and artefacts, new structures overlay earlier historic structures, field systems and arable cultivation ridges as the findings in the Céide fields archaeological project of north Mayo also reveals. This study is in a blanket bog landscape like the Céide fields. Earthen structures dot the landscape and field-systems in each townland recorded in this study. These earthen structures are some of the oldest in these field-systems of this historical geography landscape study. As the findings chapter reveals, older houses became outhouses when new houses were built. To remind the reader see Figures 5 to 28 again and sketches of buildings (Figures 29 to 44) which reveal the continuation and modification of original buildings through time. All of the earthen structures in chapter four, the findings chapter, reveal continuous use of land for agricultural purposes through generations of activity. Archaeological investigations and excavations would reveal the exact date for these earthen structures but it can be surmised that they pre-date the stone cottages and outhouses.
5.5.1.2 Stone Cottages and Outhouses

Next in chronological order for this study are the stone cottages and stone outhouses. As the findings reveal, a continuous use of built structures was practised through time in this study. Shelter from the forces of nature and the elements are a basic human necessity to survive. Food and shelter are the most basic needs in order for any animal to survive. As a result, buildings are constructed for a purpose. As Duffy (2007) mentions in Irish history there is a greater amount of documented information available for buildings erected from the eighteenth century with the establishment of a new system of living, the landlord-estate-tenant management system coinciding with town development systems. For example, in regards to this research, new businesses (merchants) and trades sprung up in Newport, Belmullet, Westport and Bangor in the eighteenth and nineteenth centuries. This was the beginning of a more ordered and artificial system of land management and division. In quantitative and spatial terms, the most recognisable buildings of this time are urban. Cities, towns and villages signify concentrated sites of construction and building dating to certain periods in time, i.e. the Georgian architecture in Dublin, Cork and Limerick.

In rural sites, the concentration of buildings is more diffused and dispersed through what is perceived as a natural landscape, although in reality it has been intensely fabricated for at least the last two hundred years. The concentration and quantity of houses and commercial buildings erected in the last ten years is as much an evolutionary landscape change as any. Anyone would know looking at these new ‘housing parks’ that cash became abundantly available somehow. This is something the country had not experienced in centuries, if ever. It literally took Ireland 150 years to recover from the Irish famine of the 1840s in this process of change and transformation.

Buildings can vary from century to century with adaptive forms, styles, materials and objectives. Aalen (1997) refers to the Irish traditional vernacular house or cottage as originating from the ‘clachan style’ of earlier settlement forms. The Irish traditional vernacular house is a cottage and is a very simple and practical construction. More
information on the ‘clachan system’ of living is in section 5.5.3 of this chapter when discussing the origins of the large livestock enclosures (the booleying tradition).

When referring to vernacular buildings regional variations and adaptations occur so the term specifies a local area’s characteristics in building types. This is true for every county in Ireland and every country in the world. Often the edifice present in a locality is unique to that area or reflects a more worldly connection unifying the economic, political, environmental and social circumstance of its inhabitants. For instance, in this study a byre-thatch dwelling was recorded in Ballycroy village with a byre-thatch outhouse. These two structures with thatching intact are a representative of the stone cottages and stone outhouses recorded in this research. They share similar specific built environment features like stone walling, thatch roofing, keeping holes, byres, central floor hearths with cast iron rods and cooking equipment and the cottages are two-roomed like the majority of the stone cottages recorded in this research. See Figures 29 to 44 in chapter four for sketches of all the stone cottages and stone outhouses recorded in the built environment section of this research.

The term ‘vernacular architecture’ is applied to a broad mass of buildings connected to specific styles that have evolved as adaptations to a local environment and economy with distinctive forms transmitted onto the landscape representing a communal pattern, design or characteristic. Aalen and Whelan (1997) attest that the same principles apply to field system designs and land management. Aalen (1997) confirms that the vernacular house in Ireland is the thatched cottage or modest thatch building, one storey high in a rectangular shape or foundation plan. Structurally the houses are uncomplicated with no more than one room in width and each room opens into the next without a passage or central hall. Gable ends face the prevailing wind, entrances and windows are positioned on the sides rather than gable walls. Aalen (1997) refers to the western house types and the roof being supported by the wall and not by internal posts or pillars. He also mentions that it was the local materials or the local natural resources available that determined the types of constructions possible. Local materials were availed of to construct the houses; stone and mud for walls. He refers to stone being used as the main material in building houses as
early as the eighteenth century. Timber, bog and mud were used also as building material at this time but these disintegrate very quickly if not maintained seasonally. Otway's (1841) sketches show some of the local people living in bog huts on the sides of the roads in nineteenth century Erris County Mayo, an extremely impoverished portrayal of life for locals at this time in history.

Evans (1942) who was one of the first scholars to record Irish vernacular building types in Ireland says that the circular stone bee-hive shaped shelters were early habitation sites for locals before stone cottages. Cereal straw or a rush straw was used for thatch where rush straw grows abundantly in wet water-logged bog terrain. For those stone cottages on the shore-line it was most likely long marram grass was used for thatching. It all depends on what is growing locally or what naturally flourishes without seed planting and is naturally durable. Aalen (1997) confirms that rushes or tough marram grasses were used in mountainous coastal areas of the north-west and west that includes Ballycroy National Park and the Ballycroy region.

In the Ballycroy region of Mayo the method of securing the thatch is by pinning the straw to the scraws with scallops — scraws are wooden pegs made into thin rods of briar, bog deal, hazel or mountain ash. Scraws are used to hold down the thatch to the houses and outhouses. According to Aalen (1997) this type of thatching is known as tie-beam thatching. Figure 37 (plate 107 overleaf) has scraws in its thatching which is a representative of the stone cottages recorded in this study. Due to the prevailing wild westerly winds in this region of north-west Mayo, the thatched roof is held in place by a rope or a net thrown across the roof structure and thatch and tied down to the house by pegs (scraws) in the house walls. A row of stones running along the width of the walls can also be used as weights to hold down the thatch in gale force winds (seen by the researcher on the Belmullet peninsula). Roof support in the north-west and western regions was a couple truss resting on top of the walls. Aalen (1997) refers to the type of roofing frame in the Ballycroy region of north-west Mayo as tie-beam or collar-beam truss with through purlins. Glassie (1982) gives the life span of a new thatched roof, anything from six to fifteen years depending on the type of straw used in the thatch. Oat,
corn or barley straw was used for thatching as were reeds, rushes and marram grass. Stone cottages and stone outhouses with these traditional features can be seen throughout Erris, one of the very few places left in the country still upholding these ancient traditional practices.

Plate 107 – Figure 37 in section 4.4.1.2 of chapter four. Tie-beam thatching. Note the scraws and rope on the thatch of this byre-dwelling near Ballycroy village. The stone cottages and stone outhouses recorded in this study (Figures 29-42) would have been thatched in the same way. There are only one or two traditional thatchers left in the locality.
Plate 108 – The tie-beam couple truss roof structure of Ballycroy’s traditional stone cottage (Figure 37).

Plate 109 – Note the different types of wood used in the rafters.
Aalen (1997), Evans (1942), Duffy (2007) and many other writers on the vernacular point out regional variations in Ireland’s vernacular houses not to mention local adaptations as well. They have termed the vernacular houses in the west as ‘western houses’ (personified as direct-entry houses or gable-end hearth houses). The kitchen was central to the rectangular plan of the house with flanking bedrooms or byre-room. Ethnologists such as Evans (1942) and Glassie (1982) suggest that these long houses evolved from outmoded structures of earlier generations with oval or circular plans, resembling the dome-shaped structure of stone clocháns that one can see on the Dingle Peninsula, the Blasket Islands, Skellig Michael Island and on Inish Murray Island in Co. Sligo to name but a few. They are also present in the stone cashels or ring-forts of earlier times and generations. These vernacular house types incorporated both byre and dwelling in one space until the end of the 19th century in this local region when the open fire was some distance from the gable wall on the floor.
Almquist (1977), McCabe (1991), McCourt (1971), Yager (2002) and Coughlan (2006) all attest to the vernacular traditions lasting longer in the mountainous wilderness regions of Erris in County Mayo where many Gaelic traditions lasted until the beginning of the twentieth century and even up until the mid-twentieth century. Whelan (1999) also confirms the same traditional practices occurring on Clare Island off the Mayo coast until the end of the nineteenth century or the beginning of the twentieth century. In remote landscapes tradition, custom and practice last longer because of their isolated location.

At this time, animals and humans lived under one roof. With the introduction of the hearth chimney flue above the open fireplace in the 19th century, room extensions evolved and internal partitioning walls divided the kitchen from the bedrooms or byre section if livestock were still in the house. Some of the houses had an alcove or recess near the fireplace or ‘cailleach’ (Irish for ‘hag’) as its called as it was often where the grandparents slept. Its features are a bed-outshoot protruding out from the wall beside the fireplace. Three cailleachs are recorded in this study in Figures 31, 33 and 34 but not with bed-outshoots in the wall, instead, flagstone paving. See plate 111 below to view flagstone paving in a house at this time in history.

Plate 111 – Flagstone paving (Figure 37).
Slate replaced thatch at the beginning of the 20th century, the evidence of which is in the Congested Districts Board houses of the 1890s to 1920s. In the farm outhouses corrugated iron sheets took preference to thatch in some localities as plate 112 below shows the older thatch byre stone cottage with corrugated iron sheets on modification of the original house structure. Note the Congested Districts Board house with slate roof in the background of this photograph.

Plate 112 – Thatched byre stone cottage with modified corrugated iron sheets on north gable.

The haggard is another feature to vernacular buildings of this region as every farmstead had one. It was an unroofed open outdoor storage area for crops, usually the potatoes and vegetables. Glassie (1982) remarks on how it was usually behind the house in a transitional area between fields and house. The fresh produce of vegetables, turf and hay was stored on a stone-lined foundation. Vegetable haggards had a bed of straw and stone over them to prevent the vegetables from rotting in damp weather or be eaten by roaming livestock. Haggards are recorded in the townlands of Croaghaun, Sheeanmore and the Owenduff located behind the house near bank walls. Plate 113 overleaf illustrates a haggard at the Owenduff townland located behind the main house (Figure 39), north of the buttressed outhouse (Figure 42).
Later developments on vernacular housing in this country are the two-storied farmhouse that was a progression on the lobby entrance/central hearth model. The elongation of the rectangular house is another practical feature of the traditional vernacular house by attaching byres, sheds and outhouses to the sides of the gables. Figure 37 has that exact modified feature, see plate 112 again for evidence of this in the field. An outhouse section with corrugated iron sheet is attached to the north gable. The big estate homes and landed gentry style architecture had their own style which Dooley (2007) refers to as the ‘landed estates of Ireland’ variety. Bricks were not used until the beginning of the 20th century and were mostly confined to landlord estate buildings and town buildings as bricks cost money.

A feature of the fireplace in some of the buildings recorded for this study are the keeping-holes in the walls of houses that Evans (1942) refers to as a storing area. See plate 114 overleaf which illustrates keeping holes. Figures 36, 37 and 38 (4.4.1.2 of chapter four) have keeping holes in their structures. View section 4.4.1.2 of the findings chapter to see where these keeping holes are in some of the stone cottages recorded in this study. Evans (1942) says the resting place of honour in the Irish house was a seat beside the fireplace, the table being the place of honour in an English house. Another feature of the vernacular Irish house is the round bottomed three-legged iron pot of various sizes. Evans (1942) reveals that these cooking pots are descended forms from the
Bronze Age, examples of which can be seen in the National Museum of Ireland, ranging in date from 700 B.C. to 1700 A.D. The adjustable pot hook over the fire in the fireplace where the pot hangs for cooking was fitted into the fireplace and was a common feature of vernacular style kitchens. The iron crook simply hung from a bar placed across the chimney. View plate 114 below to see the iron crook in the central hearth framework. Figure 32 reveals these cooking pot features and iron crook. The iron crooks of the hearths in the other stone cottages could have been removed from the stone-walling for other purposes through time.

Plate 114 – Iron crook in central kitchen hearth indicated by white arrow at Croaghaun townland. Figure 32 of this study. Note erosion stripping plaster to expose stone underneath indicated by white arrow.
Evans (1942 p. 72) refers to the use of wooden utensils in Mayo, “of Mayo in the last century we read that all their vessels were of wood, most of them cut out of solid timber. These included not only platters, spoons and ladles but also methers or drinking cups of various sizes”. In this area of blanket bog, bogdeal was collected for various functions. The buried trunks of scots pine are located in winter by seeking frost-free patches on the bogs surface or on summer mornings by noting where the dew lies thinnest. Their size and soundness are tested with an iron probing rod or bog auger and if satisfactory the trunks are then dug out. This wood had a variety of purposes, used especially in the roofing of buildings as it weathered well in damp climates. Ginty (1992), Sweeney (1992) and Cleary (interviewed in 2008) verify that in most homes a spinning wheel was present to make yarn for the knitting of stockings and gansies for all family members.

The stone outhouses coincide with improved agricultural practices of the nineteenth century. They were erected only for functional purposes such as the storage of farming equipment. Later in history, barns were constructed for housing silage, hay and young livestock and for feeding and housing cattle and livestock in the winter months. Land use and the built environment encompass the basis for this study. All of the findings reveal a
wealth of cultural heritage to Ballycroy National Park. The built environment in this research was one of the most interesting and abundant areas of research in local historical studies. The legacy of fabricated structures of all shapes and sizes embodies one of the most characteristic components to local landscape studies. Political, economic and social events are reflected in building cycles of a given time in history. Duffy (2006) remarks that with raised awareness of local heritage, increasing attention can be paid to historical data on this most material aspect of our surrounding landscape. Much of today’s modern morphology of transport and communications infrastructure has only been in existence in this remote region of Erris in north-west Mayo since the early 1900s, only 100 years ago.

5.5.1.3 Congested District Board Houses

In the second half of the 19th century, colonial landlords were encouraged to improve their holdings making them more productive. As previously mentioned, the Napoleonic and North American wars of Britain left the colonial empire in debt and in need of food supplies and cash. The Irish had no option but to adhere to these political, economic and social challenges and pressures imposed on them by the English, i.e. rising rents and the possibility of eviction. With these ‘improving landlords’, (as they became known, because some landlords improved their estate’s agricultural output and others did not), new field arrangements, field enclosures, land drainage systems, planned towns, roads, bridges, piers and houses were designed.

Whelan (1999) remarks on the Congested District Board developments of the 1890s. In 1909, the Irish Land Act provided the Congested Districts Board with compulsory purchasing powers. This entitled the Board to buy any landed estate (landlord estate land) that they defined as being in an overpopulated or congested area. By 1922 (May) the Board completed the purchase of all four of Achill’s landed estates, this included the O’Donel estate of Newport (the townlands studied in this research). The purpose of this was to redistribute people from crowded overpopulated localities to new localities with better land or else to just provide better housing, resulting in the Congested District
Board houses which are architecturally recognisable. With the assistance of the Board, improved living conditions for families was ensured with separate accommodation for livestock. The old byre dwelling house became the outhouse for livestock and farm equipment while the new Congested District Board house became the home. See Figures 15-22 again for the location of these types of houses in this study in section 4.2 of Chapter Four. At sites 4 and 5 of this study, in the townlands of Sheeanmore and Bellagarvaun, Congested District Board houses are recorded. The Congested District Board houses are architecturally recognisable as they have bigger windows, are more square in shape overall than the traditional vernacular stone cottage and have porches and slate roofs. The Congested District Board house has its own character and shape different from the traditional rectangular thatch cottage of the indigenous Irish. As Figures 15 to 22 show, these houses are in close proximity to the traditional thatch stone cottage of this study. These findings show that in these two townlands, Sheeanmore and Bellagarvaun, families were either moved off the land to another location (relocated) because of overpopulation or a family was given a new ‘improved’ house (a Congested District Board one).

Under the Congested District Board, the Land Commission introduced a system of lower rents on the holdings purchased by individual tenants. Locals paid for their new acreages by repaying the Congested District Board over time (several years). The old clachan system of housing was abandoned and new housing either dispersed or linear was supplied for tenants by the Congested District Board. John Cleary (interviewed in 2008) recalls how farmers got £5 an acre annually to cultivate bogland that had not been sown before, by doing half an acre a year people were able to add to the size of their farm increasing output and profit and that is what they did. The Gaelic communal system of living, the rundale, clachan and booleying systems (the booleying system is included as this study area is in a mountainous location) was completely remodelled by the Congested District Board in the 1890s combined with seashore and mountain grazing rights. Whelan (1999) mentions how the ‘ladder farm’ model or ‘Congested District Board model’ replaced the clachan system of living with stone walls now segregating land and houses now situated beside new roads. Each farm holding and household was re-shaped at his
time in history into a more square form with box like field-systems and houses. By the
1930s the Congested District Board and Land Commission re-housed people in slate-
roofed Congested District Board houses giving them £180 to erect new dwellings of slate
(i.e. slate outhouses or slate on the old vernacular stone cottage).

Whelan (1999) writes extensively on the reshaping of landholdings at this time in
history. He mentions that the making of field boundaries and enclosures reflects a shift
away from communal partnerships and kin-groups to a more individualistic capitalist
private ownership of inherited land. Aalen and Whelan (1997) attest to the reorganization
of field systems on landlord estates that occurred in the 1890s and early 1900s, initially
through improving landlord’s techniques then through the Congested District Board and
the Land Commission. The Congested District Board mission was for land reform and
land reorganization, the traditional farm structures and clachan towns with intermixed
land holdings were removed and replaced with ‘ladder farms’. Whelan (1999) refers to
the traces of these ladder farms that speckle the rural landscape today. Under the
Congested District Board all land was rearranged into blocks of narrow parallel strips
running down hill on slopes with the farmsteads presented in lines along new roads.
Infrastructural developments like the building of roads, railways, piers, harbours,
domestic industries, fishing and agricultural improvements coincided with these other
ordered improvements, resulting in the standardised Congested District Board houses,
piers, bridges, etc. infrastructural characteristics of the Congested District Board and
Land Commission. For the townlands in this study, the slight rise in demographic figures
for the beginning of the twentieth century coincides with the building of these Congested
District Board houses.
5.5.2 Livestock Enclosures (land use and agriculture)

All of the historians writing about Ireland's earliest agricultural imprint on the landscape refer to the rundale, clachan and booleying systems of communal living. These systems of living are associated with the findings of this study. Duffy (2007) explains the rundale settlements of the nineteenth century as a continuation of older settlement patterns and civilizations. As maintained by O'Sullivan and Downey (2008) the 'clachan system' of settlement was based on subsistence farming and a mutual interdependence within a community and stock rearing. The clachan system of settlement is pastoral where clusters of houses/buildings are in close proximity to each other. The layout of the buildings can be organized or random with lanes or roads connecting them. The 'clachan system' was the housing system or baile (townland or town). It involved a core group of houses or cluster of houses and farmhouses situated beside each other with gable ends facing the prevailing winds in a locality. According to O'Sullivan and Downey (2008) the fields around the clachans (houses) may be laid out in a regular, ladder or fan pattern and the rundale system is involved in field-system distribution between the occupants of the houses. Archaeological evidence and old Irish Gaelic texts like the Crith Gablach (dating from 700 A.D.) further demonstrate that cattle occupied a central position in Ireland's earliest settled communities. The archaeological finds in early Christian sites include "antler and bovine bone combs, bone pins, needles, spindle-whorls and decorated carvings of bovine bones" (Kelly, 1998 p. 56). As well as hides, fur, bone, milk, meat, cattle could work the plough for the tillage of the land. "Our domestic cattle (Bos Taurus) belong to the breed Bovidae and are related to the European and American bison, the wild buffaloes of Asia and Africa, the Yak of Tibet, the humped cattle of Asia and Africa and various other Asian species" (Kelly, 1998 p. 29).

McCourt (1971) and McCabe (1991) deem that the 'clachan system' in west Connacht continued in use until the Famine period (1844-48) when whole townlands emigrated. McCourt (1971) mentions that the Ordnance Survey of Ireland by the British from 1832 to 1840, when the Irish population reached its peak, illustrated clusters of clachans all along the seaboard and hill margins of the north, west and south-west of Ireland. Aspects
to the ‘clachan system’ of living are the ‘rundale system’, the ‘booleying system’ in mountainous localities and the ‘commonage system’. In all, there are four features associated with the pastoral Gaelic indigenous customs and practices, two of which are in this study, the booleying system and commonage system.

The ‘rundale system’ is the apportioning of land to people so every household in this communal system of living had enough land to live from i.e. enough tillage plots to feed a family. Evans (1942) mentions that within this communal life-style, the freely elected Irish Rí (King) was accountable for the dividing of the land into individual family plots. Buchanan (1973) and Whelan (1997) remark the amount of land allocated a family was a measured size, ‘sums’, ‘collops’ or ‘cumals’ (old Gaelic measurements) and depended on the size of the family and corresponded to the amount of grass needed to feed a cow, with suitable equivalents for other livestock. Evans (1957) also mentions that the dimensions of a holding may be of one, two or three ‘cows grass’. This system of measurement is based on the amount of pasturage a cow will need, thus “a sum equals three parts of a horse, four sheep, eight goats or twenty geese” (Evans, 1957 p. 36). Buchanan (1973) describes how the land involved in a rundale holding lay within a townland and if the townland was large it was divided among several rundale groups each holding its land separate from the others. O’Sullivan and Downey (2008) mention that the farmers themselves regulated the rundale and clachan systems in a townland or between townlands as it involved extensive kinship ties. Consequently, by the beginning of the 19th century communities rarely exceeded more than ten farmers and several farmers held land jointly.

Many rundale settlements appeared to have grown into large villages by a process of organic expansion from an initial couple of houses, where holdings were subdivided and new houses erected beside the original. Ballycroy town would have developed on the same principles but because the townlands in this study are in remote mountainous regions they fell prey to emigration as opposed to development. The rundale system of settlement was the most practical form of settlement and more easily able to withstand external ecological, economical and social threats. Yager (2002) mentions how even
under the landlord system of the eighteenth and nineteenth centuries farmers worked cooperatively and were responsible for the joint rent of the holding to their landlord. For instance, all the rundale groups in a large townland could divide the rent between them and pay it in bulk not individually. Thus, local farmers pulled together to help each other out in paying the rent to the landlord in bulk. This way, individual farmers with less acreage, were saved from early eviction off their land.

In this study, the Owenduff townland has several owners listed on it in the rental book for 1810 (National Library of Ireland, Ms 5743). The tenant on the Owenduff townland in 1810 is Healy but under Healy’s plot is listed Gibbon’s plot, McLoughlin’s plot, Kilroy’s plot, all with different quantities of land and different rent rates (National Library of Ireland, Ms 5743). According to Almquist (1977), partners held 40% of the whole O’Donel estate. This meant that nearly half of the estate’s tenants shared land communally between them, a rundale settlement feature. Almquist (1977) mentions how the rent rolls in estate documents present problems because surviving rent rolls give only the rent and not the acreage for any rental denominations. Thus, it is not possible to extract an average per acre rent for any given year that might be used in comparison over time and with other countries. However, there are other entries in the estate documents that give clues to settlement and land use patterns over time in the nineteenth century (1828) like “Hogarty and Philbin paid for taking care of watching cattle landed for rents and sent to Glenhest Mountains”, “Walsh and Sweeney keepers on several villages”, “Hoban for agreement forms to serve tenants”, “Kilcoyne paid (£1.12s.0d) for 16 days keeping and watching cattle and crops and pound” and finally “Boyle paid (£23.15s.0d) for 95 days of attendance laying out drains and narrow roads on Newport estate to enable the Parochial committee to expand belief in labor on the estate by which several miles of new road have been made and other improvements is effected” (National Library of Ireland, Ms 5744). Browne (1895) states that in the Ballycroy region the holdings averaged at four and half acres under tillage. Most of the mountain or moorland was in the Landlord’s hands and let out for grazing at this time in the nineteenth century, another rundale settlement feature. In 1891, there were 76 holdings worth between £4 and £10 valuation, 289 holdings worth £2 and under £4 and 96 holdings under £2 (Browne, 1895).
Since the average rent for the poorer tenants at this time in settlement history was £2, this documentary evidence proves that the majority of holdings were held by the impoverished. This evidence corresponds with the census figures of 1841 when 73% of Mayo’s landholders held land of less than five acres. 22% held land of between 5 and 15 acres and only 5% of landholders held over 15 acres. Thus, the majority of the Mayo population were small farmers or had small land holdings of less than five acres in the nineteenth century and into the beginning of the twentieth century.

Some features of the rundale settlement patterns are the infield-outfield fields. The infield is a field beside the cluster of houses. The outfield is a field outside the cluster of houses and away from the infield. The infield was used for tillage farming with each family attending their allocated plots. The outfield was used for livestock grazing, originally cattle grazing. In townlands near mountainous land, the infield and outfield were cultivated during the summer months from the 17th of March (St. Patrick’s Day) to the 31st of October (Halloween) when livestock grazed in the mountain pastures, a custom known as ‘booleying’. In this study, Figures 5 to 28 are at the foothills of the Nephin Beg Mountain range and reveal the extent to which this region was involved in agricultural practices at this time in history. Figures 43 and 44 in this research are livestock enclosures and were most probably used for this booleying practice in the nineteenth century. Figure 43 in section 4.4.2 of the findings chapter, chapter four, reveals a livestock enclosure of substantial size. This livestock enclosure was used for herding livestock together and a number of earthen structures co-exist alongside this structure. See Figures 7 and 8 again in section 4.2 of chapter four for the location of this livestock enclosure. Figure 44 is in the Owenduff townland of this study area and is in Figures 25 to 28 of section 4.2 of this study. This was most likely another booleying location as the field systems and findings reveal. Scardaun and Bellagarvaun are two other townlands in this study at the foothills of the Nephin Beg Mountain range and house several livestock houses listed as ‘cow sheds’ in Griffith Valuation Records of the nineteenth century. In the Owenduff townland (Figure 42), the outhouse with buttressed walls indicates livestock present at one time in history. In addition, the Scardaun house (Figure 38) has
buttressed walls also, a further indicator of livestock present over time in these remote
mountainous localities.

According to O'Sullivan and Downey (2007) regional variations in booley hut types
and other buildings exist. They say that the structures that are presumed to be the remains
of booley huts are circular, oval, rectangular or square enclosures, measuring 2-5m across
in West Cork and even more elsewhere. They are often visible as wall footings, usually
one or two courses high but occasionally as much as 1m or more in height. Those
consisting of low platforms or barely visible banks or walls may date from earlier times,
i.e. like the earthen structures in this study. “Booley huts tend to occur singly or in
clusters on patches of better-drained mountain pasture near small streams or springs, and
are often sited on grassy knolls or small, naturally occurring terraces” (O'Sullivan and
Downey, 2007 p. 35). This sort of archaeological evidence mirrors the findings in this
study. The occurrence of these huts on patches of especially green grass, often noticeable
from a distance, may be significant as this greenness might be the result of cattle
droppings (a natural fertiliser) over many generations. The archaeological excavations of
O’Sullivan and Downey’s (2007) findings reveal hut sites of various shapes extensively
scattered throughout the Caha Mountains in West Cork and in other parts of West Cork
as well as throughout the Dingle Peninsula, Achill Island, Fehanagh area and many other
regional and international locations already mentioned in chapter two of this study.

Whelan (1997) mentions the connection between old Gaelic Ireland’s traditions and
booleying in that these features originate from pre-service days that is the service
functions of shops, church, pub, school and hospital. Knight (1836) mentions that the
building of new roads will gradually wear down the old system if no more vigorous or
decided mode is taken by the proprietors or the government. Evans (1942) refers to the
Goodland huts in the windswept north County Antrim coast as a ‘most interesting and
extensive collection of booleys’, leading to its description in the Northern Ireland Sites
and Monuments Record as ‘a classic booley settlement’ related to the seasonal
transhumance of livestock into the mountains. According to Horning and Brannon (2004)
documented booley villages share certain characteristics, they include settlements of less
than a dozen houses situated in upland locations adjacent to a fresh water supply and pasturage. There is evidence of this characteristic from this study where the findings are at the base of the Nephin Beg Mountain range in Ballycroy National Park, County Mayo adjacent to a fresh water supply and a settlement pattern of less than a dozen houses. Furthermore, these townlands, Tarsaghaun, Owenduff, Scardaun and Bellagarvaun are adjacent to a fresh water supply and pasturage, known booleying characteristics. See Figure 5 to 28 in section 4.2 of the findings chapter for these booleying characteristics. Freeman (1989) acknowledges that the 1841 population figures of Ireland were 8,175,124 with only 20% of people living in settlements of more than twenty houses. This means that the remaining population of Ireland, which was 80% at this time, lived in settlements of less than twenty houses.

According to Homing and Brannon (2004) if a booley site is situated next to a series of cultivation ridges then it is more suggestive of permanent occupation than seasonal transhumance. There is evidence of this in the findings of this research at the Tarsaghaun, Owenduff, Bellagarvaun and Scardaun townlands. In addition, this supports the seasonal migration and permanent emigration evidence too. Browne (1895) mentions that the locals of Ballycroy were pastoralists with grazing rights to mountain pastures and that sea fishing was practised by only a portion of the people. Browne (1895) also mentions that the men go to Scotland and England for migratory work in the summer months and the women and children attend to crops and livestock while they are gone, he even gives a figure of approximately 130 men from Ballycroy who seasonally migrated for wages.

Evans (1942) mentions that in Ulster the advancement of the incoming planters or merchants in the seventeenth century meant that the transhumants permanently withdrew themselves to the mountains where they lived an aboriginal nomadism until the Irish Famine of the 1840s after which they had to permanently emigrate abroad or permanently live in isolated mountainous locations in order to survive. McDonald (2006) gives another Mayo example of this where seasonal transhumance settlements transformed into permanent settlements during the nineteenth century. The former inhabitants of Slievemore townland, now living in Dooagh townland, began to practise an inverted form
of transhumance. Slievemore was used as a booley village, while the former booley village at Dooagh became a permanent settlement, indicating that many of today’s successful villages probably overlie earlier settlements (McDonald, 2006). These features to this study are the traditions and devices used to make the most efficient use of local landscapes. Such seasonal summer grazing farming activities resolved an important vitamin deficiency for stock in the lower grazing lands. Dry cattle were also out-wintered on mountains and Whelan (1999) mentions that on Achill and Clare Island booleying and rundale systems flourished up until the end of the nineteenth century. On Achill Island, Coughlan (2006) recounts booleying and rundale traditions in use until the middle of the 20th century (the 1940s). Section 5.5.4 on nineteenth century trends reveals more information on migration and emigration.

Whelan (1999), Coughlan (2006) and Duffy (2000) all attest to this evolutionary settlement pattern. New structures overlay old foundations or older bases of older structures. Coughlan (2006) mentions this ancient Gaelic type of settlement system, the clachan system of settlement within the rundale, to date from the Neolithic period (6,000 years ago). In this study, large fields and livestock enclosures in the Tarsaghaun townlands, Owenduff and Scardaun reveal booleying characteristics. Figure 44 (the livestock enclosure in the Owenduff townland) has large field-systems in it, some of which were used for tillage at one time in history. The ridges in these fields are 2m wide, see Figures 27 and 28 again. The local farmers of the area insist that oats were grown in these fields to feed all the livestock during the winter months, the cattle, sheep, donkeys and horses. Oats provide sufficient nutrition and energy to feed both families and livestock. Chickens and fowl eat oats too. Whelan (1999) mentions that sheep were not herded on mountain pastures until the turn of the twentieth century when wool superseded cattle in financial terms. In fact, Knight (1836) reveals the amount of cattle in the region at this period in time in the nineteenth century to be roughly 2000, one in every fifteen Irish acres. He states how the local people took their cattle into the mountains in the summer to graze, establishing ‘bowlys’ and temporary huts where they live for the summer months.
The Kylow and Galloway breed of cattle of the region and later in history the mountain sheep and goats would have required oats as feed in winter. The ridge and furrow cultivation and open-fields of the Owenduff and Scardaun townlands suggest this. See Figures 21 to 28 again for this evidence. John Cleary (interviewed in 2008) mentions the sale of cattle from this region at the fairs in Bangor or Mulranny. The big cattle would go to Westport to the November fair as only by November would the cattle be in saleable condition. Figures 5 to 28 verify wide-spread agricultural practice in the Nephin Beg Mountain range of Ballycroy and Figures 43 and 44 are substantial livestock enclosures for herding livestock. Cleary (interview in 2008) also attests to the amount of oats needed to feed livestock and fowl. Griffith’s Valuation Records and reports mention grains and potatoes being the stable diet of the locals as well as cattle-rearing providing the main occupation of households during the nineteenth century and into the twentieth century. Knight (1836) also reveals that up until the 1800s Erris consumed its own grain crops as opposed to selling it at the markets, as they had to do later in history to get an income to pay rents and survive on their land. The scale and volume of enclosures, earthen structures, houses, outhouses and field-systems within the Owenduff, Tarsaghaun and Scardaun townlands is further evidence of the booleying tradition associated with mountain pasturage.

O’Sullivan and Downey (2007) mention that the booleying tradition decline transpired because of many factors. One of the factors O’Sullivan and Downey (2007) mention is the agrarian revolution of the eighteenth century already in existence in eastern parts of Ireland and in Europe at this time in history. Another factor they mention was the land enclosure movement and the break-up of the rundale village systems of settlement and land use. The economic maximization by colonial landlords was the driving force behind the enclosure process that converted communally regulated land into private property. O’Sullivan and Downey (2007) also mention the reclamation and cultivation of hilly land as the population expanded and the increasing prevalence of sheep farming on hilly land as factors involved in the decline of the booleying and rundale systems of land management. As Duffy (2007) knows the processes that changed this landscape to its
present settlement shape of many ruins, land use patterns, designs, and field-systems occurred over hundreds of years.

McCourt (1950) also gives several factors that contributed to the decline of the booleying traditions and customs, one he mentions is the collapse in agricultural prices following the end of hostilities in 1815 as well as evictions from land in tillage areas. Another factor was the Catholic Emancipation Act of 1829 which meant that land holdings could not be consolidated further by estate landlords, most especially in Erris where the majority of farmers were smallholding farmers. A third factor McCourt (1950) attests to was the widespread use of the potato to feed whole families and livestock. A reliance on this one crop was not an advantage to local populations as the crop failed regularly from blight and most especially in the 1840s, the Famine period. Overcrowding on small strips of land from the Gaelic system of land inheritance was another contributing factor to Famine, disease, emigration or death. Finally, McCourt (1950) points out that the increased attention to the growth of wheat and corn (Foster's Corn Law 1784 and the repeal of the Corn Laws) had a similar effect: by necessitating sowing in autumn it interfered with the grazing rights on the outfield and traditional tillage and pastoral skills. Appendix I shows that tonnes of grain crops were exported abroad in the early nineteenth century while the local populations starved to death or emigrated permanently abroad.

5.5.3 Limekilns and Ridge and Furrow Cultivation

Limekilns

There are three limekilns recorded in this study. They are located in Figures 7 and 8, 13 and 14 and 15 and 16 in section 4.2 of the findings chapter. This built structure was obviously of vital importance for soil fertilization in this blanket bog landscape and for white-washing cottages. Rickett (1975) defines any kiln as a structure specifically designed, built and originally used for the drying of some commodity. Few kilns have
been excavated archaeologically and analysed archaeobotanically in Ireland before the 1970s let alone in this locality but the kilns recorded for this research were most likely limekilns. Corn-kilns were used for drying corn grains (for flour) and the germinated grain intended for malting is used in the process of poteen making. Cleary (interviewed in 2008) mentions that kilns were also used in this district for poteen making. In some built environment structures, seashore shells, like cockles and mussels remain in the mortar of buildings, the residuals of which can be seen in plate 115 below. Figure 31, the stone cottage, at site 2, Tarsaghaunbeg, has cockles and mussels in its mortar mix in the walls.

Plate 116 – Shell mortar in the stone-walls of the stone cottages in Figure 31 of this study.

According to Monk and Kelleher (2005) the different types of kilns are identified by their plan in shape. The most familiar being the classic keyhole kiln, the name derived from its shape which has the appearance of a tobacco pipe. Knox (1907) derives this description from the fact that its superstructure was still in use up until the twentieth century. According to Rickett (1975) all identifiable kilns would have three parts, a firing/hearth or stoking area, a flue (to conduct the heat from the firing area) and a drying chamber or bowl. For this research, the bowl was always circular in structure connected
to the flue and attached to a bank or wall. The kilns recorded in this research were stone-lined throughout and there is evidence of lintel stones used throughout also.

According to Conway (1992), at the bottom of the kiln, a layer of turf was placed followed by a layer of broken limestone and shells, alternative layers were placed in the kiln until the kiln was full. At the base of the kiln a fire was started where there was a flue fire draught. The heat of the burning turf in a confined space loosened the stone, which was further reduced (the stone) by sprinkling water over it. Nestor (2006) says that the furnaces in a kiln operates at temperatures as high as 1,000°C to produce lime from limestone. All of the kilns recorded in this research are encompassed into the bank walls of the field systems near the stone cottages and outhouses.

The location of these limekilns was in a bank wall of a field beside fresh running water (a stream or river). To see the location of the three limekilns recorded in this research go to Figures 8 and 9, 13 and 14 and 15 and 16 again in section 4.2 of the findings chapter. The kilns recorded in this study are small farm kilns that were used to produce lime for a farmer’s own needs. Monk and Kelleher (2005) remark on the orientation of the kilns and the location of the chamber relative to the firing area which would have been key factors in terms of its efficiency through the control of draught and the movement of hot air along the flue. The specific choice of location or orientation would have depended on local factors, not least topography and settlement. For the most part the structural evidence in this research indicates the presence of buildings close to the kilns rather than the kilns being located within buildings. Nestor (2006) alludes to the fact that all types of kilns were in use in the early 1900s in this region of Mayo until the Congested Districts Board reorganized farm frameworks into their present state. Knight (1836) refers to the same prospect for kilns in the early 1900s.

However, according to Nestor (2006), O’Sullivan and Downey (2005) the origins of lime burning date from pagan times (pre-Christianity). Nestor (2006) refers to a keyhole-shaped kiln in the bank of a ringfort at Rathbeg, County Antrim. In this study, the keyhole-shaped kilns are in the banks of the field-systems as opposed to in the banks of
the stone cottages and outhouses. At site 3, Lagduff townland, there seems to be a turf-stacking platform beside the house and beside the limekiln area, however the platform by the house is a rectangular shape while the one beside the limekiln is circular in shape. Reclaimed bog needs to be heavily fertilized in order for crops to grow and there is no shortage of fuel for the fire in bog landscapes. Griffith’s Valuation Records mention locals using sand and fertilizers to improve the land for cultivation. Besides this, Knight (1836) mentions how those living on the shoreline would come upstream by boat to deliver seaweed, coral, shells and sand. Knight (1836) refers to boats from the Ballycroy region trading in goods with Newport and Westport and how locals would float masses of seaweed directed with poles to where it was needed upstream. Knight (1836) recalls, locals transporting sea-weed from one part of these sheltered shores to another, either for burning into kelp or for manure, in large masses, without any other means than a man standing on a heap, and pushing it forward with a long pole, is a very common practice, and hundreds of these may be seen floating with the tide up or down the Sound of Achil or on the Ballycroy shores, in the fine summer days, while a single man sits quietly on the heap, roasting his potatoes an limpits or other shell fish for his evening meal, carried forward towards his destination without any trouble or exertion from him until the tide slackens, to that he is obliged to pole it forwards, in some parts, against the current (Knight, 1836 p. 99).

Specific reference is made by Knight (1836) in relation to limestone being brought to Ballycroy by boat from the islands in Clew Bay in return for turf or seaweed from Ballycroy. Conway (1992) makes reference to the use of oyster shells for making lime as well as limestone being brought into Tallagh pier by hookers and from there being distributed in small lumps ready for burning by horse and cart. There is carboniferous limestone in Newport bay, Clew bay and Killala bay (Geological Map of Ireland, 1985). At this period in time lime was an essential commodity used in agricultural (for land reclamation) and construction industries (white washing or lime washing and mortar). Conway (1992) mentions how the lime was measured in small wooden boxes about one foot square which cost six old pence in earliest memory. Campbell (1935) refers to potato ridges being built up by sand, limestone, seaweed and soil. Knight (1836) reveals how Lord Headly wanted improvements to be made to the land so that the ‘wild and savage’
locals became 'well clothed, orderly, and industrious, and as well conducted as you see in a country village in England'.

Nestor (2006) explains the science behind the burning of limestone - burning limestone (calcium carbonate) presents quicklime (calcium oxide) which is mixed with water to produce slaked lime (calcium hydroxide). When slaked lime or quicklime was added to land its acidic pH levels would reduce, improving the soil's fecundity. In addition, slaked lime was used as lime putty (paste) for buildings and as a whitewash on houses, outhouses. When slaked lime was mixed, it absorbed carbon dioxide (CO2) from the atmosphere. With time the putty hardened like mortar reverting it back to calcium limestone upholding its magnitude in the construction and agricultural industries. Nestor (2006) also reveals how Charles O'Malley of Clare Island recalls lime being mixed with sand for plaster for houses and mortar. This exact lime mix is in all the buildings recorded in this study.

Ridge and Furrow Cultivation

O'Sullivan and Downey (2007) say that originally field-systems or field-scapes derive from rundale and clachan systems of living later evolving into colonial estate management of land and field-systems. They say the making of field boundaries and of maps depicting them reflects a shift away the collectivism of earlier settlement systems that characterised open-field farming to a more capitalist measured society. This transformation in land management systems or landscape management systems involved "the recognition of land as private property, the status of which was secured by enclosure" (O'Sullivan and Downey, 2007 p. 35). Whelan (1994) mentions that it was not until the 17th century that the lazybed cultivation on land replaced the harvesting of native wild cereal crops like oats. Archaeobotanical evidence would reveal the cereal species grown in this area in the past. However, the export ledgers reveal the main cereal crops grown in the nineteenth century were oats and barley. Examples of this can be found in the export produce going abroad from the nearby market towns of Newport, Bangor, Belmullet and Westport, see Appendix I for this evidence. The extent of cultivation
ridges in the townlands recorded is substantial. See Figures 5 to 28 again to view the locations of all the cultivation ridges at each recording site in this study.

Campbell (1935) mentions that in certain districts or regions it was customary to help one another out on a voluntary basis at turning the sod into ridges in spring. He mentions that this term was called ‘meitheala’, derived from the Irish word ‘meitheal’, meaning ‘gang of workmen’ and teams of help consisted of “8 to 10 men working together” at backbreaking jobs in farming activities (Campbell, 1935 p. 64).

In crop-rotation hay growing and cattle-grazing predominate, while the growing of corn or potatoes appers only on a very small scale. The fields and field-systems Campbell (1935) studied he categorized into five areas. One was the ‘cnoc’ or ‘hilly or rough pasture’ for cattle grazing, second was the ‘garraithe’ or ‘potatoe fields’ which totalled half an acre, third was the ‘guirt’ or ‘cornfields’, fourth was the ‘pairceanna feir’ or ‘hay pasture for oats’ and the fifth was hay-growing and grazing on the meadows alternate (Campbell, 1935 p. 61-62).

According to Campbell (1935), this fifth field was for cattle that were allowed to graze on the hay-growing fields except when they were specially closed from February onwards for producing hay in summer. He also mentions that it is wrong to distinguish only one field-system type in Ireland even though the squared field predominates. Ridges are made in Ireland with either the spade or the plough or a combination of both in some regions. As O’Sullivan and Downey (2007) comment on ridge size, the narrower 1-2m wide ridges were for potato cultivation and those ridges wider than 2m were associated with corn production.

The ridges recorded in this study did not exceed 2m, the largest ridges being 2m wide, located at site 7, the Owenduff townland. Bell (1984) refers to narrow ridges reflecting spade cultivation. Ridge construction varies from its topographical location to soil type, crops grown, rotation and harvesting methods. The higher and deeper the ridge and furrow the older the ridge. In Ireland, ridges and furrows can vary in quantity and size from locality to locality but in the West they are usually placed on south facing slopes, in some cases entirely occupying an enclosed field. This is exactly the case at site 7, the Owenduff townland, Figure 27 and 28 in section 4.2 of chapter four. Figures 5 to 28
reveal that all of the ridge and furrow (lazy-beds) cultivation areas in this study are on south facing slopes. Ridge and furrow cultivation was undertaken to aid drainage, by providing raised seedbeds that protected the seed and crop from excessive moisture, especially on soils that were poorly drained or subject to high levels of rainfall like in a blanket bog landscape like Ballycroy National Park. According to Bell (1984), long curvilinear ridges are associated with the medieval open-field tillage systems in Europe. At site 5, Bellagarvaun townland, some of the ridges are curvilinear, see Figures 21 and 22 again for evidence of this in the field.

5.5.4 Nineteenth Century Trends – Market Forces, Migration and Emigration, Commonage land, Townland to Parish, Bangor Town.

As previously mentioned the period for the construction of the stone cottage originates in the eighteenth century with earlier circular bee-hive style stone shelters originating much earlier in history. Likewise, all wattle, mud, bog and wood structures from earlier periods in history are long eroded and disintegrated in today’s landscape. Thus, it can be surmised that the stone cottages in this study date from the eighteenth century or nineteenth century, a time of political, social and economic uncertainty. As previously mentioned in Chapter Two of this study there are no documents available for studying the built environment (settlement) and land use practices in this mountainous region of northwest Mayo for the eighteenth century. Documentary evidence begins at the end of the eighteenth century, with the landlord estate records dating from 1777, to the nineteenth century and into the beginning of the twentieth century.

Jones Hughes (1986) writes about nineteenth century Ireland and concludes that the adoption of an alien agrarian system in colonial domination may not have been as revolutionary a development in terms of the formulation of new spatial orders and loyalties as is sometimes assumed by scholars. He distinguishes between regional
variations in agricultural practices stating that by 1876, two-thirds of the entire estates in Ireland were valued at over £20,000 with their core areas located in either Leinster or Ulster. Jones Hughes (1986) also mentions that Boyle in Connacht was the most successful of core colonial settlement by 1850, the other western seaboard counties were seen by the new powerhouses (the Crown), as poor sustainers of village and town life in colonial terms as local communities there adhered to their traditional pastoral practices of communal land holding. Coughlan (2006) recounts the effects of the English common law on the socio-political landscapes of Erris. The challenges and changes of the new political system altered the landscape and forced local people to live on land they would otherwise not, i.e. former seasonal booleying sites. Duffy (2007) mentions that as the English common law was enforced, enclosure became the central feature of landlord estate improvements through the processes of assarting (clearing land for cultivation) of land and the autocratic nature of estate organisation combined with scientific approaches of new husbandry.

In every society and at all times the continuity factor of settlement and land use is immensely important in the interpretation of human territorial patterns. In the north-west seaboard counties like Erris and Ballycroy the new parish networks in the nineteenth century were used as basic moulds for the redistribution and rearrangement of land for colonial purposes. New systems of land management and administration were forced on local communities without any consideration for their customs, beliefs, traditions and culture. As Jones Hughes (1986) says as a tool employed by colonists the estate system of land management was successful as the export ledgers prove. However, Hughes (1986) mentions that to the Gael, this period in time entailed enslavement on one’s own land coupled with political and cultural subjugation, deprivation and humiliation.

The objective of the fieldwork in this study was to investigate and understand how particular settlements had developed and acquired their present characteristics and functions. There is no doubt from the findings of this study that the Nephin Beg mountain range area of Ballycroy symbolises the strength and depth of our cultural pastoral traditions in Ireland. As Smyth (1986) mentions a cultural landscape is full of cultural
fossils and symbols of discontinuities through time. To bring the reader briefly back to the end of the eighteenth century, Whelan (1986 p. 191) remarks that "from County Mayo at the end of the eighteenth century, McParland observed that 'grazing drives the natives away from the fertile fields into the swamps and mountains'". He also mentions that the cattle fattening areas of Mayo, the mountainous (wilderness) areas, the grazier land holding became the foundation of leasing policy and therefore of settlement patterns, where the grazier held whole townlands on large grassland regions. Whelan (1986) recounts that a resident herdsman or shepherd looked after the livestock as leases were assigned by the grazier, townland or townlands. For the beginning of the nineteenth century and all through the next 100 years traditional land holding practices and leases were taken over by colonial forces.

**Market Forces**

For the beginning of the nineteenth century market and port towns were maturing under the British establishment. New colonial merchants located in towns all over Ireland were interested in purchasing goods from locals, especially produce that had good market prices abroad. In the first half of the 19th century domestic spinning and the sale of yarn and linen was a vital commodity to local tenants. Just like today, Almquist (1977) documents world market prices are variable and good prices for commodities fluctuate. Both spinning and potato cultivation were inherently unstable economic endeavours and Mayo tenants were economically too vulnerable to survive market fluctuations. Almquist (1977) remarks on one of the earliest towns to attain a patent for a market in Mayo, Cong (1604) and a year later Ballinrobe. Later market towns of Ballina, Castlebar, Foxford, Hollymount, Minola and Newport were the first to have regular sales of yarn and linen.

However, before these products came onto the market, cattle, grains or cereal crops were the main exports. Cereal crops, mainly oats and barley were exported through Killala, Ballina and Westport, see Table 1 in Appendix I for this evidence. The tonnage of grain leaving the ports of Killala, Westport and Ballina trebled between 1814 and 1824 indicating towards grain crops being grown in this district of Ballycroy. Achill Island was
a big producer of flax at this time and Almquist (1977) mentions that most Mayo yarn left the county for manufacturing or was sent to Ulster and woven there. Additionally, he remarks that the yarn spun in Mayo mostly generated from the Ballina-Hollymount region of east Mayo or west Sligo. According to Almquist (1977), Sligo's exports of yarn exceeded that of Newport and Castlebar and other neighbouring towns. Almquist (1977) mentions that in the Ballycroy region each household had a spinner or a neighbour who would spin wool. In Mayo in 1841, 58% of women spun with 13% spinning wool. Wool spinning persisted into the early 1900s in Mayo because of Mayo's vast expanse of mountain land and hand-spun wool that was made for home use in frieze, stockings and blankets (Almquist, 1977). The industrial revolution and the advent of factory-based spinning and weaving dislocated this agricultural practice in the middle of the 19th century. Whelan (1999) testifies that even when tenants were able to pay their rent, some landlords made it impossible for families to survive.

Smallholders (small land holders) of all descriptions were under the influence of market forces and after the cessation of the Napoleonic wars in Europe in 1815, the export of corn from Ireland outstripped that of linen and yarn in value. McCabe (1991) mentions that this region of Mayo (Ballycroy) was predominantly pastoral until the 1800s after which the locals responded to rising rent pressures by diversifying their produce for market sale prices. McCabe (1991) mentions how Mayo rents trebled from 1740 to 1776 so by 1812 export ledgers report exports of yarn, linen cloth, oats, wheat, barley, poitin, kelp, herring, salmon and wool stockings. McCabe (1991) also reports on hundreds of court cases in the Erris region relating to law and conflict in the region with locals poaching fowl and fish to feed their families. For example, locals faced a big fine, jail or eviction for stealing one chicken to feed their families, these court cases are discussed by McCabe (1991). In all, this was an extremely harsh time economically, socially and politically for the local inhabitants of this region. The sale of goods to meet the demands of rising rents and taxes could not be an activity detached from the rest of agricultural life. Almquist (1977) reveals how from 1841 to 1851 the population of Erris decreased by 26% and market forces combined with rising rates of rent encouraged people to emigrate on a more permanent basis.
In the townlands studied for this research, the rents accrued by the O'Donel estate in 1777 were £2,470.19s.8d (National Library of Ireland, Ms 5738). One lease dates from the end of the seventeenth century. In 1810 the amount of arrears payments owed to the landlord was £796.16s.10d (National Library of Ireland, Ms 5743) and 40% of the whole estate was held by partners. The Owenduff townland and Scardaun townland, two of the remotest townlands in this study area, had arrears accrued on them already in the year 1810. In June 1810, 15% of the estate’s tenants owed half a year’s rent valued at £490.0s.0d (National Library of Ireland, Ms 5743). Gillespie (1987) testifies to the fact that cattle were seized if rents were not paid and the cattle were held in pounds within a three mile radius and if arrears were not paid the land holding was seized and classified as ‘waste’ land. Agricultural production in the 1800s was market based as the export ledgers indicate, see Appendix I for this evidence. Gillespie (1987) mentions the commodities being exported from Newport town abroad as well for 1826. In that year, 1826, 1,283 tonnes of oats was exported but by 1835 it had decreased to 1000 tonnes for oats produce. By that time, 1835, barley reached a better market price so barley became the new valuable commodity to export instead of oats, barley exports increased by 3.5% for this period in time.

For this study, the Owenduff townland had rent payments listed on it valued at £17.0s.0d for 1794 (National Library of Ireland, Ms 5738). It also had the mercantile family names listed on it related to the businesses of Newport town, for instance, Weaver’s Row in Newport town had the surname Nixon listed as its tenant and Chapel plot was for Waldron etc. In the 1810 manuscripts, the Owenduff was known as Healy’s plot and had several tenants listed on it demonstrating communal land holding and communal payments of rents. In 1810, Healy’s plot had arrears on it at £3.18s.42d and 14% of the estate’s tenants owed half a year’s rent valued at £490.0s.0d (National Library of Ireland, Ms 5743). Tarsaghaunbeg, Scardaun, Owenduff, Lagduff and Letterkeen (near Newport but on the Bangor trail route) had half a year’s rent paid in 1810 (National Library of Ireland, Ms 5743). For that year the Kelp Shore and Fisheries produce was worth £225.0.0 and the land of the estate was classed as ‘generally arable and pasture’ (National Library of Ireland, Ms 5743). An increase in rent is mentioned in 1810 and an
account of cash received by the land agent and bailiff is made but this sum was illegible as this manuscript is in very poor condition (National Library of Ireland, Ms 5743). An account of potatoes sold in Newport town is mentioned and the cash received for them is mentioned too (National Library of Ireland, Ms 5743). Payments made to Sir Neal O’Donel because of raids made to Newport estate and Cong estates are mentioned but again the amount is illegible (National Library of Ireland, Ms 5743). By 1828, some of the leases for managing Newport estate were not yet perfected (National Library of Ireland, Ms 5744). All this information corresponds to the harsh treatment of locals by landlords in the Ballycroy and Nephin Beg Mountain areas of County Mayo from the end of the eighteenth century through to the establishment of an independent state in 1922.

From the manuscripts relating to estate management and activities to the census figures from 1841 to 1911, the townlands researched in this study were engaged in arable and pastoral activities for the timeline covered in this study. Up until the 1911 census, all the inhabitants of the townlands researched in this study were engaged in agricultural practices listing their occupations as either farmer, herder, shepherd, farm labourer, general labourer or farm servant. Almquist (1977) mentions that between 1841 and 1851 the population of Mayo dropped from 388,887 to 274,499 a decline of 30% (Almquist, 1977 p. 239). Although the population figures dropped dramatically for all townlands mentioned in this study from 1841 to 1851 because of the Famine (1844-1848/9), they recovered slightly again by 1911 but never to the full scale of the pre-Famine era. For instance, Tarsaghaunmore had a population of 40 people in it with four houses in 1841, by 1851 there were only 11 people left living in the townland in two houses (census records). By 1891, there is no one living in the townland and only one house remains occupied. By 1911, the population is up to five again living in two houses. Thus, Tarsaghaun townland had a population of 53 in 1841 that was halved to 24 by 1851. By 1891, it had a population of 17. All through the nineteenth century in this region of County Mayo, rural depopulation occurred and continued into the twentieth century with a slight recovery at the beginning of the twentieth century. Lagduff townland fared the best from the census figures for this townland but by 1911, a gamekeeper was living in Scardaun townland and a barracks and office occupied Lagduff townland, both features
of colonial administration and land management. Scardaun townland had no inhabitants in 1851 but ten years previously had a population of three. In 1841, the Owenduff townland, one of the remotest townlands in this study, had a population of 21 people but by 1911 this was reduced to a population of three people.

Luckily, for Mayo inhabitants, towards the end of the 19th century, the egg economy provided local tenants with cash for rent again. Poultry rearing in Mayo during the latter half of the 19th century conveyed a great connection to domestic spinning in the first half of the 19th century. It involved little initial investment or capital and substituted the decline in other markets. The egg economy was valuable at this time and eggs were exported to Britain. Besides women working in the fields and tending the livestock they were also involved in poultry. Almquist (1977) gives one account of a destitute woman seeking her egg sales,

I know of three, two, and even one egg, being brought to Westport from a distance of two miles. I saw a girl take her seat in the market with five eggs, worth one penny halfpenny; and she had walked an Irish mile and a half to bring them to market (Almquist, 1977 p. 254).

This gives a good description of how impoverished local tenants were at this time in history.

From market towns where distance and travel became a disadvantage, carrier-women served as middle-men between producers and buyers. Almquist (1977) gives an account from a folklore collector working in the mountainous region of Ballycroy who describes these women as ‘creeleen women’, ‘carrier-women’.

These women of whom there were half dozen in Rossport, engaged in this occupation, carried small creels or baskets strapped to their backs, walked to and from Belmullet once a week, and carried in their rather small ‘creels’ light goods, such as tea, sugar, tobacco, soap, loaves, etc., and next day and following days proceeded into the mountain villages and out-of-the-way hamlets, which were not approached by roads, and there disposed of their goods to the mountainy people who hailed their coming with pleasure. The goods were already made up in packets and the process of weighing was thus dispensed with. In payment for the goods the carrier
women accepted eggs, knitted stockings, chickens and any other portable merchandise which availed, as well as money. They disposed of the eggs and other bartered articles at the shop of Mr. Paddy Cafferky near Barnatra on the road to Belmullet, on their next journey there for fresh supplies, to be followed by their customary trek to the mountains (Almquist, 1977 p. 255-256).

Maxwell (1832) comments on the locals in the Ballycroy region drinking from egg shells as glass was hard to come by in this remote area. Maxwell (1832) himself stayed in the Owenduff house (Figure 39) to hunt for grouse and when he had to leave the Nephin Beg mountain range in Ballycroy National Park he said:

And I shall leave this hut and these hills with sincere regret. Palled with the pleasures of the world, I found here that rude, but real happiness, which for years before I had sought in vain. Here I associated with a new order of beings. I compared them with the artificial society I had consorted with, and found among them some traces of natural virtues, which ultra civilization has banished from the rest of mankind (Maxwell, 1832 p. 67).

Additionally, Pococke (1891) mentions eggs being eaten in the Owenduff townland of Ballycroy National Park where he lodged when travelling along the Bangor Trail from Newport to Bangor. According to Almquist (1977) there was a large number of women who called themselves egg-dealers between 1841 and 1851, the Famine years. The numbers in this region of Mayo went from 124 women in 1841 to 298 in 1851, an increase of 42%, with a small number of men in this business. Browne (1895) indicates that Mayo was supposedly the largest egg exporting region in Ireland with Ballina serving as the primary exporting town of this produce, he specifically mentions Ballycroy as an area where most of this produce came from. Chickens ate potatoes, oats and maize and they provided an annual income for rural households, enough for paying the rent for smallholder tenants. Almquist (1977) estimates that 40 chickens in a household produced 4,400 eggs annually, yielding £8.10s, a valuable income for tenant farmers.

McCabe’s (1991) unpublished PhD ‘Law, Conflict and Social Order: County Mayo 1820-1845’, gives an insight into local politics at the beginning of the nineteenth century up until The Great Famine period (1844-48). He mentions that the West differed culturally to the rest of the country up until the 1820s because it rarely suffered the
militarization of local societies in response to agrarian crime, as happened elsewhere in the country like in Munster or in the Midlands. McCabe (1991) mentions the new institutions of state and the spread of legal literacy (courts and legislation) undermined traditional authority, which altered local relationships within the peasantry and between peasants/tenants and landlord. At this time in history in the nineteenth century, the rapid expansion of the market economy severely affected prevailing cultural values and agricultural practices. McCabe (1991) recognizes that economic changes from 1750 to 1845 in market prices dictated the quality of life for the indigenous locals of western Connacht. Pastoral economies divert to textile industries and market forces. The Ballycroy region of north-west Mayo and the Nephin Beg Mountain regions are traditionally pastoral, livestock and tillage based. These traditional activities continued until the Congested Districts Board and the Land Commission re-organised individual land holdings at the end of the nineteenth century and the beginning of the twentieth century.

Under this new system of land management (tenant and landlord), seasonal migration became a necessity in order to obtain cash income to pay rent to the landlord and avoid eviction off one’s ancestral land. Locals responded by working together to pay rent to their respective landlords. Commencing as the rundale system of agriculture each townland or clachan settlement was able to rent arable land from its landlord under a tenancy in common. The rent was then divided amongst all the inhabitants of one townland or village permitting the land to be passed on from one generation to the next. Before the Famine, Almquist (1977) mentions that three quarters of Mayo’s tenanted holdings were under five acres so tenants had to diversify produce to gain an income to pay rents and taxes. Coughlan (2006) remarks that by 1841 Mayo and the Ballycroy region had 335 people per square mile of arable land and Achill Island had 445 people per square mile of arable land. In the Tarsaghaunmore townland of Ballycroy, the population of this townland went from 40 in 1841 to 3 by 1901 and 0 in 1891. In the Owenduff townland, the population census reveals that the population went from 21 in 1841 to 3 by 1901 and none since the 1950s.
Migration to Emigration

Whelan (1999) comments on how the dexterous tenant in arrears was able to dodge eviction or his cattle being seized and impounded by driving cattle from his fields into the fields of him who has paid. The Ordnance Survey Name Books for 1838 record that all rent was paid by the bulk, mirroring the old Gaelic rundale traditions of communal living. The Gaelic system of land management and settlement meant the communal sharing of land so now local communities in townlands paid rent to the new colonial landlord communally, among several tenants. The ancestral Gaelic inheritance of land management meant that all land was divided equally among sons in a single family. Almquist (1977) mentions that would have naturally lead to a demographic explosion on smallholdings or tiny stretches of land, most especially in Erris where two thirds of smallholders (small tenant farmers) lived on land holdings of less than five acres during this period in time. The Famine period and post-Famine period saw hundreds of thousands of Irish people emigrate abroad permanently and for those survivors it commenced the beginning of seasonal migration abroad to Britain and Scotland.

Kingston (1990) claims that post-famine seasonal migration now replaced Gaelic traditions (and the booleying tradition), resulting in permanent emigration abroad. The seasonal reliance of families on migratory work abroad during the summer months became a primary source of income for those left behind holding the fort. While the males in a family seasonally migrated to Britain and Scotland to labour on farms there, the women and children tended the farms and livestock back in Ireland and did what they could to survive economically and politically. Almquist (1977) remarks how towards the end of the 19th century over half of the male seasonal migrants from all of Ireland to Britain were from County Mayo. With thousands of Mayo men travelling abroad for annual work, the women increasingly took over agricultural tasks and laboured at economic pursuits. A folklore collection from Drummin in Westport describes exactly what it was like for most rural people living in Mayo in the early 1900s.
Yes, several of Mr. Mckeown's relatives emigrated in 1880-1890-1900, and after. The majority were boys and girls, whose ages ranged from sixteen to twenty-four years – unmarried. They had no particular occupation (the majority). They assisted in tilling the soil, sowing & reaping, tending cattle and sheep on a small scale and girls assisted their mothers in the home, cooking, mending, carding, spinning, & knitting & making flannels. They decided to emigrate because of lack of employment, poverty and eviction – encouraged from friends, brothers and sisters who in most cases paid their passage. Letters from America, and occasional American cheques too had their influence on young people. In some cases, there were large families, and virtually nothing to support them, therefore it was a God send when some relative paid one of the elder children’s passages; They could now assist their poverty stricken parents to pay debts & especially to keep the Bailiff from the door (Almquist, 1977 p. 270).

Maxwell (1832) mentions that the locals had been driven by landlordism from the lowlands of the Ballycroy region to settle in the wild valley region of Ballycroy where they erected clay walls on an already existing ruined cottage. He also mentions the booleying tradition in this locality where young girls and women herded the livestock into the mountains and tended to crops in the summer and autumn seasons.

According to the usual leases granted by the landlord to the tenant in this wild country, villages in the lowlands, or on the coast, have a reserved right of pasturage on particular portions of the adjacent hills: and in some cases the distance from the tenant’s habitation to this mountain pasturage will exceed a dozen miles. Hence, it is impossible to pay the requisite attention to the cattle, without residing on the spot; and a part of the family, generally the young girls, are detached to bivouac in the hills, and attend to the herding and milking of cows (Maxwell, 1832 p. 314).

McCabe (1991) mentions that from the 1820s in Mayo landlord-tenant relations were transformed by economic, political and social processes. The political processes were the laws enforced in favour of colonial domination and establishment of the various institutions. The economic processes were the production of cash-crops for cash to pay rents and taxes to the Crown. Some of the social processes included the banning of our native language, custom and dress. The end of the eighteenth century and the beginning of the nineteenth century saw increases in rent for Irish peasant tenants as Britain was in
debt and had no food to feed its soldiers post the Napoleonic wars in Europe in the 1790s. This meant that tillage crops gained a better market price, as Appendix 1 indicates, for the years 1796 to 1823 (National Library of Ireland, Ms 363-375). McCabe (1991) mentions that by the 1830s booley locations or localities were permanently inhabited all the year around. Even in the 1830s in Mayo land on estates was held communally and laboured on by several tenants working together to pay rising rents and taxes (McCabe, 1991). Land held communally and laboured on in this way are the relicts of rundale and clachan systems of settlement, which include the booleying tradition. Additionally, Chambers and Mingay (1975) mention that there were over 4,000 Acts of Parliament relating to land enclosure rights and eviction notice rights in favour of the landlord between 1750 and 1880 (a life-span of 130 years), none of which provided any advantages for the local population.

One of the very few authors on the Erris region of north-west Mayo in the twentieth century is Almquist, who recognises the same principles of change locally in social, economic and political terms for the nineteenth century. Almquist’s (1977) research work is one of the only academic documentary sources that relates directly to Ballycroy and the Nephin Beg Mountain region. Almquist (1977) recognizes the Landed Property Improvement Act in 1848, which involved the following processes of change to land arrangements and land management. Firstly, it involved the breaking up of the system of tenancy in common, thus, the breaking up of traditional rundale and clachan style settlements with booleying practices. Almquist (1977) comments that the sharing of upland mountain land, the pooling together of rent, the communal allocation of peat for fuel and seaweed for fertilizer and co-operative work groups were all seen as backward farming methods to the new landed landlords. Secondly, the peasantry throughout Ireland were thought to be generally ignorant of the principles of agriculture but were viewed as excellent with the spade by the colonial settlers so the use of the plough was encouraged resulting in bigger fields for maximum production. Thirdly, the rundale system of land management was viewed as a failing system of land management and a contributor to the non-payment of rents. Complaints by landlords to the Crown about commonage land ownership and rights were constant. Landlords wanted “to abolish all previous traditional
"customs" as they were viewed as being 'barbarian' or 'backward' and ran counter to the growing manifest destiny of English economic individualism" (Almquist, 1977 p. 106). Fourthly, "remote mountain farms were the last to be 'modernized' as farms closer to the towns and villages were the first to be modernized" (Almquist, 1977 p. 106-111). Almquist (1977) observes that these factors are consistent with general principles of location theory and economic rent, thus, referring to regional and local variations or adaptations for political, social and economic circumstances.

Whelan (1999) and other contemporary writers comment on the fact that most men went abroad for seasonal migratory work for six months of the year in the summer so that more cash was earned to pay annual rents and any further rent-in-arrears or taxes. Coughlan's (2006) research work on Achill Island in County Mayo reveals the same migratory process in which the women of the household were responsible for all domestic matters with extra financial assistance arriving from men doing migratory work too especially in the nineteenth century through to the beginning of the twentieth century. Coughlan (2006) recounts that by the 1930s the tattie-hokers were assured of a steady income from picking potatoes in Scotland. He also mentions that economic circumstances meant children went to Scotland too even before finishing school (14 years old). Seasonal migration replaced earlier seasonal booleying customs as was the case for all of Mayo and the western seaboard counties. Coughlan (2006) mentions that two fifths of the island's population relied on migratory work abroad to survive until 1937 when the Kirkintilloch tragedy occurred after which families started emigrating abroad permanently. In addition, Coughlan (2006) says that the clachan, rundale and booleying systems were in operation until the 1890s in some form or other.

During the 1800s the Gaelic sub-division of land between families (sons) forced the Irish to overpopulate on strips of land in the rundale system of communal living. Thus, people were forced to demographically explode on ecologically vulnerable systems, i.e. a field can only yield a maximum level of output (produce) before it has to be replenished with lost nutrients. Thus, overpopulation on rundale strips of land is not ecologically sustainable but more like a means to an end, a survival technique. Most of the writers
previously mentioned in this study attest to this survival technique also. Arising from the colonial era, a segregated capitalist economy substituted the authentic communal Gaelic customs. Additionally, Whelan (1999) confirms these facts in his discussion on landscape and society on Clare Island from 1700 to 1900. He mentions how the indigenous population explosion of this period was based on the potato, lazy-bed, rundale and clachan systems of living. Whelan (1999) mentions how Clare Island retained a functioning rundale system up until the end of the nineteenth century maintained within the townland structure.

**Commonage Land**

One of the features of the rundale system of living in this study is the presence of commonage land. Commonage land is a portion of land with shared ownership amongst many or a few farmers. The Ordnance Survey Field Book notes for the 1850s demonstrate that all grazing rights to land in Erris were held in common, a certain number of sums being allocated to each tenant in conjunction with a fraction of the rental. Almquist (1977) comments on the fact that seaweed, seashells, sand and the shoreline was held in common too providing equal access to fertilizer from the shores. Commonage landowners part-share land together for a common purpose, i.e. grazing livestock, so all share a portion of land together or rent of that land together for a common purpose. Whelan (1997) too remarks on commonage land, saying that it lay beyond the outfield to prevent overgrazing and the amount of land each farmer got was limited. Knight (1836) mentions that in the mountains of Ballycroy, cattle rearing and cattle feeding were the main occupation of mountainous regions. He says that the rearing of young cattle, and selling them out at two to three or four years old, is the chief occupation. The mountains are suitable for this activity, which provides an income to the farmer, allowing him to pay his rent.

Almquist (1977) comments on commonage or common land tenure practices which originate from the rundale system of agriculture and lasted until the latter half of the 19th
century in parts of Mayo. He says how it enabled local communities to maintain small farm economies under the new colonial system. Most persistent were common grazing rights to mountain upland. This is still true today in many remote rural locations in Ireland and in Ballycroy National Park. There is commonage land within Ballycroy National Park today, see Figure 2 for this evidence in section 4.2 of chapter four, the findings chapter, for the location of this commonage land in Ballycroy National Park, County Mayo. Duffy (2007) mentions that these general thematic models of open-field systems used in the rundale and clachan systems of living gradually gave way to enclosed landscapes with the coming of the new colonial landlord systems. Mayo’s resolve is such that its landlords never successfully enclosed small-scale tenant cultivators despite continual attempts to do so by various notorious landlords like Bingham and the works of the Congested Districts Board in the early 1900s.

Evans (1942) refers to the fact that there were no roads in the hilly districts of Donegal in 1837, where all carrying depended on the slide car or creel (basket) with donkey or pony. Similar attributes were in the Ballycroy region as Paddy Ginty (interviewed in 2007) and John Cleary (interviewed in 2008) of Bunmore verify. They remark on the use of the donkey for transporting goods to people living in remote areas of the Ballycroy region like in the mountainous townlands studied in this research. In 1932 Paddy Ginty was paid £1 a week to build a new road into the Tarsaghaun Beg townland area. The researcher to access this townland and the Bangor Trail used this road. So even in 1932 new roads were still being constructed to long existing townlands in this wilderness region of north-west Mayo. As Evans (1942) specifies, it was not until land entitlement became an issue that the rundale system of living came into decline. He makes the point that in remote coastal west of Ireland regions booleying survived until the end of the 19th century with the establishment of the Congested Districts Board in the 1890s.

Many better features of the rundale and clachan systems of living have survived the test of time. One of these is the presence of commonage land throughout the western seaboard counties especially in existing rural communities and in Ballycroy National Park. Another is the co-operation between neighbours and friends in farm work in rural
Ireland and in the community spirit of some towns and villages throughout Ireland. Podge McHugh (interviewed in 2007) recalls the hospitable Shevlin’s home in Croaghaun townland (Figure 32 in this study) as one where people gathered in the long winters evenings for ‘céilís’ as their flag-stoned kitchen floor was suitable for set dancing. From this study, the researcher has observed that if the political, social and economic history of a town or village is not good, it is reflected in the community. In other words, sociology is a huge factor in the success or failure of settlement patterns. Ballycroy National Park should be aware of this in their dealings with the community and public. Respect works both ways. As Putnam (1993) and Coleman (1997) remark, it is within a space that the availability of networked resources depends on inclusion in mutual support networks. Our ancient ancestral heritage is the pastoral heritage, a testament to Ballycroy’s agricultural landscape. Even in today’s landscape the Erris region of north-west Mayo is an agriculturally viable region with cattle and livestock occupying many livelihoods.

**Townland to Parish**

This landscape divulges a rich plethora of habitats and species as well as a culturally traditional landscape. The wide-ranging patterns of settlement and land use in the townlands studied for this research reveal collective ethnic patterns to Ballycroy National Park. This collective pattern forms a community living in a local landscape. The community patterns are reflected in the landscape in buildings and in the shaping and use of the landscape. Glassie (1982) reveals that the County Fermanagh way of going on is an existential pattern, a principled coordination of local tradition and local conditions built out of history for the future. His studies in County Fermanagh reveal that the district’s people derive principles from experience and that new things form around old ideas. In addition, he comments on human action upon the land from which ideas are taken and easily gain statement. Therefore, in his view, “the community is precisely the space linking hearths” (Glassie, 1982 p. 342).
In investigating the Irish landscape there is an historic territorial hierarchy of townland, parish, barony and county (units which have evolved from pagan clan times to ecclesiastical times) and were systematically recorded in seventeenth century surveys and maps. One of Mayo’s oldest maps dates from 1584 (John Browne’s Map of Mayo) and shows the Bangor Trail as the main road from Newport to Bangor. The origins of all townland names in Ireland originate from the clan times, where tribal clans ruled a townland or a community of people. Some family clans governed several townlands or a province depending on how powerful and wealthy they were. Therefore, townland names developed from either a clan name or a topographical feature specific to a local landscape. O’Hara (1982) recounts Mayo’s early territorial hierarchy of land division and land settlement. He says that ancient Gaelic Ireland was divided into small tribal areas, known as ‘tuaths’ initially with its first settlers. Later post-Norman invasion in the sixteenth century meant that the land became known as ‘baronies’ with the same land division and denominations as tuaths. Nine baronies formed County Mayo in the sixteenth century, i.e. Burrishoole, Carra, Clanmorris, Costello, Erris, Gallen, Kilmaine, Murrisk and Tirawley.

The next process of change or evolution in the settlement history of the region is related to religion, Christianity. The ecclesiastical parishes were formally constituted during the twelfth century, after the Synod of Rath Breasail in 1111 and the Synod of Kells in 1152 (before which priests, abbots and bishops could marry). These newly named ‘units of land’ were now termed ‘parishes’ which are based on pre-existing townland boundaries. These new parish units of land holding were determined by the politico-ecclesiastical and demographic considerations obtaining to all aspects of life at that time. These are the same townland boundaries fixed by surveyors and the like from the seventeenth century on (O’Hara, 1982).

O’Hara (1982) also mentions some early Gaelic settlement names associated with Connacht derived from the The Annals of Connacht (A.D. 1224-1544). In the early Christian period in Connacht the province was ruled by a dynasty called the Uí Fiachrach (Uí Fiachrach ‘Muaide’, ‘of the river Moy’), claiming descents from one Fiachra
Foltsnathach, an elder brother of Niall Noígiallach (from ‘Niall of the Nine Hostages’), an early fifth century King of Tara. Uí Briúin (O’Brien), O’Conor and O’Dowd are some of the descendent surnames from this same clan.

From the twelfth century to the fifteenth century Gaelic Chiefs and Hiberno-Norman Lords were brought together under the Crown, giving legal titles to their estates under English Law and setting out the terms under which their tenants could hold land for them but this was only in the initial stages of the sixteenth century. The ‘Compossicion Booke of Conought’ signified an increase in the authority and influence of the Crown west of the Shannon as transportation, plantation and transplantation of people and communities took place from the end of the sixteenth century on. Thus, townland names, local surnames, field and settlement systems are responses to variations in land tenure, local economies, technologies and the nature of settlement and land use in an area.

The townland names in this research are translated here to show their real meaning, all of which are directly related to the local landscape. The townland name ‘Tarsaghaun’ derives from the Irish word ‘tairseach’ translated as ‘threshold’. This threshold is a reference to the river and the Owenduff blanket bog landscape that is now Ballycroy National Park. The name ‘Owenduff’ derives from the Irish words ‘abhainn dubh’ translated as ‘black river’. The name ‘Lagduff’ derives from the Irish words ‘linn dubh’ translated as ‘black pool’. Bog water is black in colour because of all the dissolved organic material in it. The name ‘Croaghaun’ derives from the Irish word ‘cnocach’ translated as ‘hilly’. The name ‘Sheeanmore’ derives from the Irish words ‘sióg mór’ translated as ‘big fairy hill’. The name ‘Bellagarvaun’ derives from the Irish words ‘béal Garvan’ translated as ‘mouth of Garvan’s ford’. The name ‘Scardaun’ derives from the Irish words ‘scoith deán’ translated as ‘pass of the small cascade’. Ballycroy (Baile Cruaich) - the town of turf or hay stacks.
Bangor Town

Noone (1991) mentions that in the nineteenth century in Bangor new industries grew with the establishment of the new colonial landlord-tenant systems of living and land management. Before that era, the town was very well known for its fairs and famous cattle and according to Noone (1991), people travelled especially to ‘Kennedy’s Wood’ to buy a good breed of cattle, no doubt a sturdy mountainous breed. Noone (1991) mentions that before Bangor’s colonial history, the town was named ‘Doire Choinaadaigh’, ‘the wood of Kennedy’ until the notorious landlord, Bingham, renamed the town ‘Bangor’.

Flax growing ridges are greater than 2m wide and according to Noone (1991) the mill in the town of Bangor (in the parish of Kiltane) was a woollen mill not a linen (flax) mill. Noone (1991) says that there was a corn mill too in Bangor town in the nineteenth century. The woollen and corn mills in Bangor were in existence until 1900 (Noone, 1991). Noone (1991) mentions that throughout Erris the native manufacture of coarse wool cloth, frieze, was widely made as most people wore clothing made of frieze. John Cleary (interviewed in 2008) testifies to this too where his wife made his clothing from frieze still at the beginning of the twentieth century. Noone (1991) mentions how the Neary family in Bangor had the cloth presser, which was needed for the final phase of manufacturing frieze cloth. The flannel (soft wool) was either thickened or shrunk through the milling process and then it was pressed.

Duffy (2007) mentions how territorial structures, their associated place-names and the arrangement of working landscapes of fields, settlements and estates echo society, civilisation or people through time. Over centuries, local communities have left their cultural symbolism etched in the Irish landscape mirroring the political, economic and social customs of the day. In exploring the history and heritage of the Ballycroy region the findings discussion concludes to a rich repository of narratives of settlement and land use in the countryside for thousands of years but primarily for the past few centuries of the modern era.
CHAPTER SIX

THE CONCLUSION AND RECOMMENDATIONS
CONCLUSION AND RECOMMENDATIONS

This heritage landscape study took place in a mountainous west of Ireland blanket bog landscape known as Ballycroy National Park in County Mayo. The approaches made for this research include a variety of approaches. The scientific approach included examining past landscapes and the use of a GPS for recording the built environment. The artistic approach included investigating poetry, paintings, artistic etchings, writing and folklore of many different people. Another author Maxwell (1832) stayed in Sheean Fishing Lodge during his visit of Mayo in the nineteenth century recounting local events, people and place. The internationally recognized painter of Achill Island scenes, Paul Henry, lodged in Sheean Fishing Lodge too (located in the townland of Sheeanmore in this area) when painting his scenes of Achill Island at the beginning of the twentieth century from 1910 to 1919. Otway’s (1841) ‘Sketches in Erris’, portray the state of the Irish in the 1800s. Thus, historical landscape studies rely on combing the work of many researchers, authors and artists in terms of sources and case studies.

Attitudes by current generations to their local inheritance have a significant impact on the shape and fate of this heritage. It is hoped that from this study a better understanding of the local area will evolve for all the people living and working in it. As Waterton (2005) reveals heritage-based sites should not be viewed solely for the privilege of the experts but should be for all, most importantly, its local inhabitants. Attitudes by current generations to their locale and inheritance have a noteworthy impact on the shape and fate of this heritage. This relatively new National Park should occur within these parameters of awareness. Thus, the general rise in environmental or landscape heritage consciousness has had profound implications for the most recent phase of settlement history-in-the-making. The wealth of knowledge in this area rests in the people with their own unique land use practices and vernacular architecture.

Within the Mayo County Development Plan 2008-2014 there is the County Mayo Heritage Plan. The key objectives of the County Mayo Heritage Plan for 2006 to 2011 is
to raise awareness of our heritage, collect and disseminate heritage information and promote best practice in heritage management in the County. The Plan contains 90 actions, categorised under the three themes mentioned.

The objectives for the County Mayo Heritage Plan 2006-2011 relating to this study are: to host regular public heritage information seminars, talks and exhibitions to highlight and raise awareness of heritage issues, to develop annual County heritage awards scheme, to produce an annual heritage newsletter, to produce a series of heritage leaflets on various aspects of the built, natural and cultural heritage environment of the County and to develop a County Mayo Heritage Forum logo. Some actions remaining include: to develop a County Heritage Network, to produce a protected structure information pack, to produce and distribute heritage education packs for primary and secondary schools, to develop an education and awareness campaign in relation to the destruction caused by alien invasive plant species in local environments, to develop and promote 'Birds in the Schoolyard' and Birdwatch Ireland Countryside Bird Survey, to compile a detailed database of current positive actions for the protection and conservation of heritage resources within the county, to produce an inventory of significant tree specimens in the county, to commence a habitat survey of the county, identify and highlight habitats and species of special significance in Mayo, with a view to publication, to conduct a survey of vernacular architecture in the county, to compile an inventory of thatched buildings in the county, to compile an inventory of historic bridges and Mayo's railway heritage and to carry out pilot studies of the geographic distribution of the various stone walls in the county.

The County Mayo Heritage Plan is a countrywide plan with many partners responsible for its implementation, such as the National Parks and Wildlife Service, Irish Wildlife Trust, NUIG National University of Ireland, Galway and GMIT Galway-Mayo Institute of Technology etc. While Mayo County Council is a key partner and the Heritage Officer within the Council acts as coordinator for the projects, the Heritage Forum seeks the participation of key partners in implementing the actions identified in the Heritage Plan. Even though there is only one year left to this present heritage plan it is in no way near
achieving the completion of its plans or achieving its objectives. One Heritage Officer is not enough for the whole county to coordinate all these projects.

A few more objectives that will benefit this county and culture in heritage management plans by Mayo County Council relating to this study include: to produce a Register of Skills for the county, to include traditional building skills and craft practitioners, to support the preparation of a walking strategy for the county, to develop a scheme to enable communities to develop local heritage trails and walks and to provide in-house training for local authority engineers and planners in all aspects of heritage conservation. Some more objectives related to this study include: to provide and promote training opportunities for the public, community groups, contractors and local authority staff in traditional skills such as dry-stone walling, stone cutting, thatching, lime rendering, hedgerow establishment and management, to establish Mayo place names committee to advise Mayo local authorities on the naming of new developments, to promote the use of the Irish language on townland signs and in the names of new developments and to promote the planting of native species and preferably Irish seeds sources and local provenances in developments, amenity projects and along roads. Finally, to ensure that provision is made through conditions attached to the development control process for the protection and where possible enhancement of heritage (Mayo County Library). Even in the course of this study no vernacular architecture buildings are protected within the Newport, Ballycroy or Bangor regions not to mention even restored or conserved for posterity. In Mayo’s protected structures list for Newport town and Mulranny area only bridges, hotels, churches and colonial houses are protected buildings in these townlands, a very limited range list that does not represent our indigenous heritage.

From this two and half year heritage based study, it is evident that topographical evidence of settlement and land use patterns through the ages is revealed in this study. The fieldwork data findings in chapters four and five reveal a wealth of traditional west of Ireland vernacular settlement forms and agricultural buildings as well as earlier earthen structures. From this study, the presence of cultivation ridges, limekilns, field systems, drainage systems, livestock enclosures, turf and fresh water systems indicates to a self-
sufficient network of people linked to a townland (community) and the rundale and clachan traditions of settlement and land use. Subsequent archaeological and archaeobotanical investigations at the sites researched in this study would further add to this research. Maumaratta (Grid reference F909 083) and Letterkeen (Grid reference F951 090) townlands are two townlands that can be added to this study's findings by another G.M.I.T student for example.

Whelan (1999) also refers to links within a community. The discussion of the findings revealed in chapters four and five depicts a tremendous amount of local activity between seashore, river and mountain communities. Everyone in the community had access to a variety of environmental resources from seashore to mountain grazing. The evidence of this is in the built environment structures of this study in livestock enclosures, stone houses and outhouses, earthen structures and limekilns. Relating to this research alone, other townlands have yet to be investigated, these include Srahmore, Tawnynahulty, Altnabrocky, Uggool and Muingaghel to name but a few. Some of these townlands are not in Ballycroy National Park area but are on the periphery in the Owenduff complex. Community projects and research projects in Ballycroy National Park can be linked with other communities nationally and internationally as could links with G.M.I.T Castlebar, Turlough National Museum of Country Life, the Céide Fields centre in Belderig North Mayo, civic trusts, primary and secondary schools, school tours, tour operators, adventure centres, wildlife groups and heritage groups. In reality, the whole of the Erris region has a wealth of traditional heritage aspects to it yet to be researched, recorded, utilised and valued. As previously mentioned in the literature review chapter of this study, there is a great shortage of written sources available relating to landscape studies in the Erris region. This was the most restrictive aspect to this study.

Educationally, the National Park can influence the next generation in how it operates and functions with local communities in today's landscape. Court cases and local prosecutions are not the way forward and in fact mirror the past mistakes of our colonial ancestry in that they fuel local opposition to projects instead of local cooperation. The Owenduff Complex and now Ballycroy National Park has an opportunity in reviving
some of the old Gaelic practices, customs and traditions of the area. For instance, an annual summer festival could reнакt some traditional scenes of the past, i.e. the booleying tradition, the thatching tradition, the stone masonry tradition, the Céilí tradition combined with local activities or events like the gathering of kelp at the seashore in summer could occur in the future. Local, national and international musicians, folklore and sean-nós singing, dancing and story-telling is another opportunity for the local community. Experience based eco-tourism through activities, involvement and learning is the way forward as all tourism bodies worldwide now realise. Obviously, the National Park could coordinate such events with Turlough Museum and colleges nationally and internationally. Heritage based reenactment scenes influence and enhance the actual experience for the visitor or participant when exploring a living local landscape or culture. Spinning and weaving could also be incorporated into the activities with local crafts and trade. Local crafts and trades should be encouraged as this area had its own dress-maker, tailor, seamstress etc. already in the past. Crafts such as knitting, spinning and weaving should be started again with the co-operation of the community and the National Park. The possibilities are extremely educational and beneficial for future generations as they realise the wealth of knowledge that exists in their culture.

The National Park could also restore some of the traditional vernacular stone cottages in the park, maybe the ones in the Owenduff townland and Scardaun townlands. These restored stone cottages could be lodgings for walkers on the Bangor Trail in Ballycroy’s National Park. There is the possibility of cooking at the traditional hearths too. A conservation plan for indigenous structures should be included in County Mayo’s Heritage Plan list for ‘protected structures’. There is none on the list so far for this area of north-west Mayo. The only buildings designated for conservation or listed as ‘protected structures’ in this region of north-west Mayo in the County Mayo Heritage Plan are the Fishing Lodges, for instance Rockfleet Lodge and Srahmore Lodge. This is typical for the rest of Ireland too where colonial structures are deemed more valuable to those in control of them.
Ballycroy’s people are a resilient, hardy, tough, admirable people living in this region of Mayo for thousands of years even after political, economic and social upheavals in its quite recent geographical history. Ballycroy’s people are a neighbourly self-sufficient people as their Gaelic ancestry and landscape has thought them. Glassie (1982) mentions that if people are deprived of the ability to manipulate truth, to make their own things and their own history, they lose the capacity to learn for themselves and their culture cannot advance or defend. Therefore, the ideas we share as humans enable our survival.

Hopefully, Ballycroy National Park are aware of the sensitivities in dealing with the local people and carry out their duties accordingly, primarily keeping local interests at heart. Too often in our global capitalist economies local people are neglected or not even recognised. A return to the ‘meitheal’ or ‘le chéile’ way of working (working together) would ensure the future success of the area and local communities. The challenges have shaped one of the most admirable, resilient and industrious people of this country. It is remarkable indeed that so much of our ancient history, culture and tradition have survived through all the generations.

Plate 117 - The researcher with locals. Paddy Ginty pictured on the left of picture, farmed Tarsaghaunmore and Tarsaghaunbeg in his youth and brought cattle from these townlands along the Bangor trail to the markets at Westport.
APPENDIX I
Exports (A) to England and Scotland from Newport-Pratt (B) and Sligo (C) 1796-1823

<table>
<thead>
<tr>
<th>Year</th>
<th>Bacon</th>
<th>Beef</th>
<th>Pork</th>
<th>Untanned</th>
<th>Butter</th>
<th>Salmon</th>
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<td>Bars</td>
<td>Hides</td>
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Source: Import and Export Ledgers, NLI. Ms. 363-375

A – excluding linen, cloth and yarn
B – Newport-Pratt includes Westport
C – Sligo included (until 1847) the ports of Killala and Ballina
D – in addition 1328 bars. Oats sent to Portugal
APPENDIX II

As related by Seán Mac Meanamain of Tawnagh (four miles east of Bangor Erris) to Liam Mac Coisdealbha.

**Dáithí Bán**

There was a great hero in this past at one time whom they called Dáithí Bán and there was no way of describing him for his speed, his strength, and his valour. It was said that he made a fortress for himself on Corslieve at the place they called Coire na nGaru, and since that time no-one has managed to go as far as the door of that fort. There are strong metal shutters at the front and it’s no lie to say that it’s constructed famously and that it can’t be opened. People went down there with ropes, down with another crowd of people, and they put iron stakes in the ground above for fear that they’d lose their grip on the ropes – and I’d say it’s how the ropes they had weren’t poor ones. And they couldn’t manage to open the door. There must be some door or other inside in the fort that would take a lot of toil and sweat to penetrate, if it could be done. It was said that those were some of his works. The remains of that work can still be seen, whatever it was for and whoever did it. They say that it must have been him.

I believe he used to go back to the sea for his health – to get the sea breezes. And there are three sea rocks, as they call them, from the point at Ballycroy graveyard at Fahy over as far as Doohooma Head. The same distance is between three of them and each of them is two miles apart, and those were the sea rocks he had for stepping stones. And he must have been an awfully big strong man to say that he was able to go from stone to stone.

Anyway, having said that, if you could still get help, I think it would be worth digging out the fort on Corslieve to see what’s inside it.
He came down from Corslieve one time, whatever had happened to bring him down, he came down onto one level ground. I believe he wasn’t very fond of bogs, of swampland bogs – but he was exhausted after the journey. He was put astray by a group of monks who were letting on that they were heroes themselves, so that he had to go into the lake at Dooleag. (A place two miles east of Bellacorick). There was no sound footing in the lake. A lot of it was just peat and mud and some rough stones in places. And he got such a soaking in the lake, anyway, that he drowned there. And the name they give to the lake since then is Lough Dáithí Bán. (Dáithí is buried on an island in the lake).
Barr Sleibhe/Mountain Land

In bygone days here in county Mayo before the English gentry arrived there were Irish Chieftains – every parish and every estate belonged to them. Then when the Dalys came to Newport it was they had Ballycroy, they had Achill, and a big territory in Mayo belonged to them.

And the way the land was divided at that time was this – the tenants had every village, and there were two men in the village - and the lease of the village was theirs, and when those men died, the came to an end and a fresh lease would be drawn up for the village and there would be a fresh division of the land. In those days every village went from the lower shore to the top of the mountain. Every village had its mountain top, and there was mountain land going with every village, and a piece of the shore with it, and a piece of soft bog with every village; and the tenants were allowed to divide the village into thirds or halves or quarters, and that’s the way the village was divided. And whoever was in every village or a third of a village – had the right to divide the village. Every bit of land used to be in two portions or in three portions or something like that.

The shorelines were divided – every year or every two years. And they all had (a portion of) the mountain land according to how much they paid in rent or taxes. And the village cattle would be on the mountain land in the summer and in the autumn while the crops and the hay were growing in the village.

They used to have huts on those mountains, every village had them in their own part of the mountain.
Every house in the village would have its own hut, on the mountain, that is – and the
women were there and they milked the animal at night. They had a place for keeping milk
and for the storing of cream in these little houses, every night until the end of the week,
until the vessels were full of cream. Then they sent it home to have it churned, and maybe
they’d go to the towns to sell the butter. They put jars of butter into the bogs down maybe
four feet or five feet and leave it there until the butter was a year or two years or three
years in the bog, and then they believed it was strongly flavoured and that it was very
good for people to eat. It was women mostly who were on the mountain land looking
after cattle. The men would be working in the village with turf and with everything else
they had planted in the village.
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F. Photograph Sources

All of the photographs in this study are the researcher’s with the exception of a few from Cameron Clotworthy of the National Parks and Wildlife Service and Seán Lysaght.