ScARF Scottish Archaeological Research Framework

Regional Archaeological Research Framework for Argyll

Chapter 10. Early Modern and Modern



Aerial view of Campbeltown Harbour ©HES

10. Early Modern Period (AD 1600 – AD 1900) and Modern in Argyll (AD 1900 – Present)

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Brief Summary

The present Argyll landscape has seen profound changes since 1600. Early in the period Argyll was a predominantly rural population where multiple families in joint tenancy farms practiced subsistence farming. This then changed to single ownership farms and state-owned forests, with the majority of people living in villages and small towns. In the 17th century the clan system was still very strong and conflicts would have had a huge effect on local communities, the economy and settlement patterns.

There was a vast increase in material culture from 17th – 19th centuries. This can be seen in the types and numbers of artefacts, the architectural styles of the period and the creation of gardens and designed landscapes. The first signs of commercialism and capitalism can be seen prior to 1600 in the form of droving and fishing but by the 17th century this manifested itself in agricultural improvements which, in part, led on to the infamous clearances. Other examples of commercial speculation and capital investment can also be seen with the number of industrial sites from this period. This was also a time of improved communications and transport links with drover's ways, military ways, roads, and canals being put in place which connected people and places and allowed increased and better access to raw materials and industry.

Although there is a mass of information for this period, a considerable amount of multidisciplinary research is still needed to fill the gaps and to synthesise all the important work that has already been undertaken.

10.1 Archaeology Introduction

The archaeological resources of the early modern and modern periods in Argyll are rich, complex, and understudied. As has often been the case, study of the last five hundred years has been hampered by the misperception that the existence of documentary records negates the need to study, explore, and preserve the built and material heritage. It is notable, for example, that Graham Ritchie's (1997) *Archaeology of Argyll* stops at the end of the Norse period, implying that later periods are out with the purview of archaeology. The significance of the last five hundred years in the history of the region, and of Scotland more broadly, cannot be overstated. The events and material transformations of the period provide the foundation for understanding the contemporary landscape and have considerable value for local community identity as well as sustainability. We are surrounded by the material traces of processes including European expansion, the rise of capitalism, Improvement, industrialisation, and globalisation, yet these traces are, more often than not, under-appreciated and under threat. This research framework, therefore, argues for the importance of addressing the wealth of the heritage of the recent past, while setting out a series of themes to help guide decision-making and research agendas.

Explorations of the character of Argyll's early modern and modern archaeology should be situated within the broader disciplines of post-medieval/ historical archaeology. Archaeological approaches to the period 1600–1900 have developed in disparate fashions in different parts of the world. In the British Isles, the period is generally referred to as the 'post-medieval' and until recently, post-medieval archaeology tended to concentrate upon the period before 1750, with later sites perceived to be the remit of industrial archaeology (Mytum 2016; Horning and Palmer 2009). Over the last 10–15 years however, there has been a broadening of the discipline and a relaxation of firm boundaries between periods, as reflected in the ScARF Research Agenda: Modern Scotland: Archaeology, the Modern past and the Modern present (Hall and Price 2012) and the ScARF Marine and Maritime Panel report (Atkinson and Hale 2012). The ScARF panel report clearly states that archaeology 'Is the study of the relationship between people and their material environment … [as such] how could we hope to understand the history of modern life without

the archaeological perspective?' (Hall and Price 2012, iii).

Moving beyond the British Isles, on a global scale, the study of the last five hundred years falls within the remit of the discipline of historical archaeology. Initially developed in North America and primarily focused upon tracing the material correlates of European expansion, the field has expanded to address all aspects of human experience from roughly 1550 to the present day. Historical archaeology has also expanded globally, with particularly flourishing research communities established in Australasia (Lawrence and Davies 2010) the Caribbean (Armstrong 2013), South America (especially Brazil, see Funari 1997), Scandinavia (Naum and Nordin 2013), and the Iberian Peninsula (Gomez and Casimiro 2013), with important work taking places in a range of African countries (eg Jopela and Fredriksen 2015, Pikirayi 2013).

Wherever research is taking place, the challenges of pursuing historical archaeology are myriad. The wealth of source materials available is both the key advantage and disadvantage for the field. For the last half century, scholars on both sides of the Atlantic have worked to demonstrate the value of a multi-source approach to the relatively recent past. The best research in historical archaeology recognises that no one source can provide a complete picture of past experience. Documentary sources, material sources, and ethnographic sources are sometimes complementary, but more often either talk past one another, or are actively contradictory. It is in those spaces that some of the most interesting stories can emerge. Documentary sources for the period in question are dominated by official records and the writings of a very limited sector of society. As such, they often tell us very little at all about the experiences of the majority of people. As documentary sources are themselves the creation of individuals, even if acting on behalf of an institution, inevitably they contain biases. Rather than accepting that historical records provide us with the facts that archaeology can perhaps illuminate, we should consider what Napoleon once said, 'What is history, but a fable agreed on'. Documents are not objective records, but neither are material sources. All sources are capable of being misread or misunderstood in the present. Similarly, oral histories and oral traditions, while of considerable value to the study of the period, cannot be taken at face value. So while the early modern and modern period in Argyll may be blest with a wealth of sources, interrogating those sources is not straightforward.

In addition to wrangling over how best to balance source materials, the historiography of post-medieval/historical archaeology is replete with discourses over the temporal scope of the discipline. Exactly what is modern, and when does the so-called modern period begin? Clearly individuals did not wake up one day and declare themselves to be post-medieval or modern. Such divisions are heuristic devices employed by scholars. The impacts of processes like capitalism were not uniformly felt around the globe, nor even uniformly experienced within the same region. So it should be understood at the outset in bracketing the period under study as that time period from 1600 onwards, this research framework explicitly does not argue for any notable break in human experience in the year 1600. This is merely a division of convenience in keeping with standard practice.

10.2 The Environment

The departure of the Vikings from Scotland in the 13th century coincided with a marked change in Scotland's weather and climate. The period of Medieval warmth was succeeded by a complex change to the colder conditions of the so-called 'Little Ice Age'. Although this period of cold climate is normally associated with deterioration in climate that culminated during the 18th and 19th centuries, we can trace this change to colder conditions as far back as the middle of the 13th century (Lamb 1977).

10.2.1 Changes in solar output

One of the most important climate events that took place over recent centuries is a marked decline in solar radiation between the 17th and 19th century. The most marked decline, represented by a decrease in the number of sunspots on the Sun's surface, is known as the Maunder minimum that culminated between c 1640–1720 AD. The consequences of this sustained decline in solar output on global atmospheric circulation is not known, although it may be surmised with some confidence that a consequence of decreased insolation with an average lowering of global air temperature.

10.2.2 Change in northern hemisphere circulation

Analysis of stable isotopes and the chemistry of Greenland (GISP2) ice cores (Meeker and Mayewski et al. 2002) showed that a marked change in the circulation of the northern hemisphere took place around 1400–1420 AD. The change, represented by increases in the concentration of sea salt sodium and non- sea salt potassium in the ice cores, indicates that after c 1420 AD there was a sustained increase in storminess across the North Atlantic region (Na+ ice core chronology) that took place at the same time as a strengthening of the winter Siberian anticyclone (K+ ice core chronology). By contrast, during the Viking era winter storminess was relatively low with higher-than-average air temperatures and reduced rainfall.

10.2.3 Changes in sea ice cover

Historical records for sea ice cover across the northern North Atlantic region begin with the Icelandic and Greenland sagas with the first indirect evidence for an expanded sea ice cover being the first observations of polar bears in northern Iceland during the 1250s, these requiring passage across sea ice between South East Greenland and North West Iceland. Thereafter, records of sea ice occurrence increase in frequency with the periods of maximum cover having occurred during the 1690s and 1880s. The latter date is significant in the sense of the most extensive cover not having occurred until the last two decades of the 19th century. Indeed, during the winter of 1881–82, sea ice occurred off the coastline of the Faroe Islands with contemporary observers describing looking out to sea from the hill above Torshavn, the capital, and not being able to see the sea because of the widespread occurrence of sea ice (Lamb 1977). Extensive sea ice cover is also attributed as a key reason why sailing ships could not reach Greenland during much of the 16th–19th century. A change to a greatly diminished sea ice cover, decreased winter storminess and increased air temperatures during the late 1890s and the early 1900s marks the end of the Little Ice Age and the start of 20th century warming.

Just exactly how these changing conditions affected life in Argyll we can only estimate from fragmentary historical records, but Oram and Adderley (2008) and Oram (2014) have discussed possible climatic stresses on upland pastoralism and the links between weather extremes and the introduction of the Black Death (see also Campbell 2016). But there are some clear indicators of what life was like. We know that the exceptional cold of many periods of the Little Ice Age was associated with increased snowfall. Indeed, the many snowdrifts faced by representatives of the MacDonalds in trying to reach Inverary on time during that fateful winter at the end of the 17th century set a chain of events in motion that led to the Massacre of Glencoe. From what we can tell from documentary records, periods of prolonged snow cover appear to have been a characteristic of the 18th century compared to the 19th century which was stormier and wetter. During lengthy periods of the 18th century, Scotland was affected many times by cold East, North-East and North air flow during winter. When snow had fallen, it tended to stay on the ground for long periods, for example during the 1740s, 1770s and 1780s. As a result, ploughing of ground often occurred late into

spring (sometimes as late as April or even May) with harvests and planting often interrupted by an early start of winter. By contrast, much of the 19th century appears to have been dominated by more tempestuous weather. Summer storms were not uncommon while winters were characterised by sequences of cyclones coming in from the Atlantic.

It has long been argued that a more extensive cover of sea ice during the Little Ice Age led to a steeper meridional (north-south) temperature gradient across the North Atlantic and thereby more intense and more frequent winter storms (see above). With the storms came much greater rainfall (together with snowfall) with damaging consequences for crop growth and the cutting of peat for winter fuel. Wet summers and autumns, together with increased rainfall during summer is known to have damaged crops of oats and bere (the early form of barley), as well as ruining potato crops and making peat too wet to be cut for fuel. Consideration of all of these impacts on land use makes it very clear that crofters and cottars across the Highlands and Islands endured great hardship throughout most of the period between the 1500s through to the late 1800s. If one adds political and social turmoil linked to oppressive landlords and tacksmen, one can easily understand why this period of Scottish history is associated with such high levels of emigration (both forced and voluntary) to the New World.

A side-effect of the cold conditions characteristic of the 17th–19th centuries was decreased ocean temperatures. This had the effect of changing fisheries with numerous species migrating southward in response to decreased ocean temperatures. Perhaps the greatest visible change was the arrival of shoals of herring and it is no coincidence that the boom in herring fishing took place throughout the 19th century when ocean temperatures were low. One may infer from this that during the 17th–19th century, that coastal communities in Argyll found plenty of fish to eat but found it difficult to crop potatoes, oats and barley. The history of the Highlands and Islands for the 17-19th century is punctuated by years of dearth and famine. Particularly severe were the dearths and famines of the 1620s, the 1690s (known infamously as the 'Dear Years of King William') and the 1780s. These and other times of hardship made life for ordinary working folk almost unbearable.

10.3 Existing Research Agendas

This research framework takes cognisance of relevant research agendas including the Scottish Archaeological Research Framework (ScARF) and that for the Island of Bute (Duffy 2012), while being tailored specifically to Argyll. The ScARF Modern Panel Report (ScARF 2012) has included eight themes – 1) Reformations, 2) Global Localities (including Reformation, industrialisation, the Enlightenment, Improvement, global capitalism, colonialism and Empire), 3) the Modern Person, 4) Nation and State, 5) People and Things, 6) People and Places, 7) People and Landscapes and finally 8) Modern Past, Modern Present. The agenda emphasises the need for collaborative as well as multi-disciplinary research, the need to be relevant to modern society and to enable scholars to challenge existing ideas about the past. Duffy has included six themes for the Island of Bute – 1) Power and Prestige, 2) Religion and Burial, 3) Agriculture, 4) Resourceful Bute (natural resources), 5) Landscapes and Living and finally 6) Being Brandane (Bute identity) (Duffy 2012).

The themes suggested in this framework are intended to be specific enough to inspire and guide research, but not so specific as to be proscriptive or to suggest that topics not included here are not worthy of research. Perhaps even more than for other periods, as noted above, there is a problem of an overabundance of information, sites and possible processes that have created the Argyll that we see today. Some aspects of Argyll's early modern and modern heritage are well served by individual clubs and societies dealing with specific site types of localities, but overall, there is a lack of any synthetic treatment or means to unite the study

of the period itself.

This research framework for Argyll deals with the area under the administrative control of Argyll and Bute Council which has undergone changes in the recent past. For instance, Helensburgh and Lomond districts of the former Dumbarton District Council joined Argyll only in 1996 after Strathclyde Regional Council was reorganised. Like the temporal divide, it is recognised that the boundaries of the study area are therefore in part boundaries of convenience. It is also recognised that the contemporary landscape has been shaped by a plethora of actions working on different scales, from the individual act of one person to the repeated everyday actions of a community over generations.

10.3.1 Change and continuity

A consideration in addressing the archaeology of Argyll from c 1600 up to the present is the issue of change and continuity. Contemporary perspectives on Argyll often romantically view the region as somehow more pristine and traditional than other, more developed parts of Scotland, given the overwhelmingly rural, sparsely populated nature of the region. There is an understandable desire to seek and find continuities with the medieval and earlier pasts, in terms of both physical landscape and cultural characteristics. But fact needs to be separated from fiction. The extant archaeological heritage clearly contradicts notions of a static Highland society remaining untouched by outside forces. The canals and ports of Argyll connected the region to the globe, while Argyll's natural resources were intensively exploited.

We propose five key themes for the Argyll early Modern and Modern research framework:

1. Society
2. Material culture and buildings
3. Land and economy
4. Institutions
5. Argyll in Scotland and the Empire

10.3.2 Historiography and overview of work to date

Notwithstanding the dearth of holistic archaeological study of Argyll, there is an extensive corpus of historical studies of the period that are extremely useful. These sources range from antiquarian reports that shed light particularly on rural community life; cartographic sources that are part and parcel of improvement efforts to control and demarcate lands, resources, and people; clan archives; artistic and photographic representations; and literature. The below section of the framework outlines these sources, and is then followed by a detailed consideration of relevant archaeological, architectural, and geographical studies.

10.4 Antiquarian Interest

The 17th-century writer Martin Martin (1999) was one of the earliest travellers to the west coast of Scotland and he provided a glimpse of contemporary life and descriptions of the islands, through the sympathetic eye of a Skye native and Gaelic speaker. A Welsh Celtic scholar from the Ashmolean Museum Oxford, Edward Lhuyd, visited Kintyre, Knapdale, Lorn, Mull and Iona in 1699 seeking information on 'Highland rites and Customs' (Campbell and Thomson 1963; Campbell 1975). Lhuyd was fascinated by the details of Highland life and recorded information he gleaned about folklore, local practices, houses and second sight as well as natural history, geology, history, archaeology and philology of the Celtic countries. Another Welsh gentleman Thomas Pennant undertook his second tour of Scotland in 1772 visiting Bute, Arran, Mull, Kintyre, Jura, Colonsay and Jura. His descriptions of the scenery, customs and superstitions of the inhabitants were accompanied by drawings including a well-known image of the shieling bothies on Jura and cottages on Islay (Pennant 1772). James Boswell and Samuel Johnson published accounts of their journey through the Hebrides (including Coll

and Mull) in 1773 (RCAHMS vol 3 1980, 230–31; Johnston 1775; Boswell 1785).

Interest in the history of Argyll prompted the Duke of Argyll to sponsor the collection of oral history from the west coast of Scotland in the 19th century and these were published as the Dewer Manuscripts (Dewar 1964). As travel became safer and easier in the later 18th century, poets and writers joined those venturing to the west of Scotland including the Scottish poet Robert Burns, who visited Inveraray in 1787 and Dorothy Wordsworth who toured with her brother William and Coleridge in September 1803. Dorothy was a picturesque travel writer and she travelled through Argyll up Loch Lomond visiting Arrochar, Loch Awe and the planned village at Inveraray (Parry and Slater 1980, 241). The published works of writers such as these resulted in a burgeoning interest in Highland culture and landscape which were seen as very different from the Scottish Lowlands and England.

10.5 Early mapping and data collection

After the defeat of the Jacobites at Culloden in 1745, the need for proper maps of the countryside was recognised and this resulted in the Military Survey of Scotland (1747–55) by the surveyor and map maker William Roy.

'The cartographic imperatives behind the Roy map can be seen to reflect growing Enlightenment aspirations for greater geometrical accuracy and standardisation, as well as a desire to discover empirical truth, and to control and order geographical space through reconnaissance and survey'

The maps recorded significant settlements, streams, hills, woods and other features in the contemporary landscape. Proper mapping was seen as essential for 'good science and the public good' (National Library of Scotland) and eventually, the Ordnance Survey completed their survey of Argyll between 1862–77, producing the first edition OS maps at a scale of 6 inch to the mile. These were the most detailed,



Extract from Roy Military Survey of Scotland, 1747-52 (National Library of Scotland)



Extract from 1st edition Ordnance Survey 6-inch to the mile map, 1874 (National Library of Scotland)

accurate maps to be produced at the time and remain a great source of information on place-names and features. They were accompanied by 'Object Name Books' which listed place-names and the authority that provided them.

The spirit of the Enlightenment was behind the collection of empirical data that helped to measure and describe the world. Useful information on contemporary life which covers the whole country by parish is therefore provided by the *First Statistical Accounts* (1791–99) complied by the local ministers (Sinclair 1792). These accounts describe the main characteristics of the parishes and the people and reveal contemporary views of the clergy on social issues of the day including emigration, the introduction of sheep farms and absentee landlords. The accounts were updated in the 19th century with the *Second Statistical Account* (1834–45) which covered a wide range of information including natural history, population, architecture, agriculture, industry, education and emigration (General Assembly of the Church of Scotland 1834).

10.6 Clan papers

The abundance of documentary evidence for this period reflects the increased use of legal charters, letters and other documents by the government, landlords, and businesses to record their activities. Clan archives, where they survive, provide a rich source of contemporary information, especially when landlords were undertaking Improvements to their estates. The Campbell papers held in Inveraray Castle belong to one of the most significant archives for Argyll. These are currently being catalogued and hopefully will be available for research in the near future. The renowned Scottish antiquarian, William McFarlane (1699-1767) made an extensive collection of papers relating to the MacFarlane clan from the 14th century onwards and these are now held in the Advocates Library Glasgow (Johnson-Smith 2002). The Malcolm of Poltalloch Papers held in the Lochgilphead archives includes a survey of the estate in Mid-Argyll by Neil Malcolm. He had recently acquired the estate from the bankrupt Campbells at the end of the 18th century and wanted to know what was the state of the tenants' houses. The papers also relate to the restorations and

alterations to the estate properties that he undertook after 1796 (RCAHMS 1992, 277). These papers have been so far subject to only one study (Macinnes 1998). There are likely to be more family archives and papers in private hands which have yet to be subject to study. Their very survival may be in question unless funds are made available for their conservation, however, we do not know the extent of the problem.



Photograph taken by Erskine Beveridge in 1882 showing St Moluag's Cathedral, Lismore ©HES

Other early documents include the 'Account of the Depredations committed on the Clan Campbell and their followers, during the years 1685 and 1686 …' (Anon 1816). This anonymous document, a potential insurance claim, was apparently a transcription from a 'lost' original. It lists the losses that were suffered by the Campbell clan members (and their allies) at the hands of their enemies following the Campbell rebellion (Lochgilphead Archives Ref 941.423 L.C.). The document lists place-names, tenants and the goods that were claimed to have been taken away and so provides some indication of the size of the farms and their possessions and stock in the late 17th century. Using this document is not without its problems, in that it is written anonymously and being an 'insurance claim' possibly contains some inflated sums. However, it can be seen as a reasonably accurate list of settlement place names and who the occupants were. Further documentary research could perhaps verify its content. The transcription of sasines and genealogical records from earlier handwritten documents was undertaken in the early quarter of the 20th century (Campbell 1915–1922, 1933 and 1934) and this has made these early documents much more accessible for research than they would have been.

10.7 Early photography and art

The invention of photography is probably one of the most significant contributions to archaeology in the 19th century. The leading exponent working in Argyll was Erskine Beveridge (1851–1920). He travelled on the west coast of Scotland (including Coll, Tiree, Lismore, Staffa and Iona) in 1882 and 1883 photographing harbours, townships, cottages, hotels, lighthouses, fishing boats, bridges and churches (Beveridge 1903). His photographs, along with many other photographers, are held in the National Monuments Record of Scotland (NMRS; Fergusson 2009). Other visual forms such as etchings and paintings are useful, although 'poetic license' might have resulted in exaggerated scale and perspective in order to render an impressively picturesque landscape.

10.8 Architecture

At the end of the 19th century the architects David MacGibbon and Thomas Ross published their work on 'castellated and domestic architecture' and 'The ecclesiastical architecture of Scotland' which included black and white drawings and written descriptions revealing the condition of buildings at the time (MacGibbon and Ross 1887–92; MacGibbon and Ross 1897).

The work of the RCAHMS Inventories has probably been the most significant contribution to Argyll archaeology in the 20th century. The initial 1707 date restriction on RCAHMS survey work had been lifted in 1948 and so by the 1960s their remit included the 'more modern architecture'. There followed a series of seven volumes dealing with different geographical areas of Argyll with ever increasing detail and numbers

of sites included. The first Argyll Inventory was published in 1971 and covered Kintyre, soon followed by Lorn in 1975 and Mull, Tiree, Coll and Northern Argyll in 1980 (RCAHMS 1971; RCAHMS 1975; RCAHMS 1980; RCAHMS 1982; RCAHMS 1984; RCAHMS 1988; RCAHMS 1992). The key words here are 'inventory', i.e. a list, and 'architecture' which deals with upstanding structures. The 'post-medieval' buildings were described from an architect's point of view and there was little concern about how they were used, how people moved around them or how buildings sat within the landscape. The buildings of the early modern period were dealt with in less than 15% of the gazetteer. Post-medieval alterations and re-use of medieval castles was highlighted in the RCAHMS volumes along with a summary of what was known historically.

These volumes brought together archive material, photography, plans and sections, aerial photography and written descriptions. The monuments were grouped as 'domestic architecture from the 17th to the 19th century', 'farms, townships and shielings', and 'industrial and engineering works including quarries'. This latter group contained a plethora of 19th- and 20th-century industrial and other buildings which are perhaps a surprise considering the rural nature of Argyll today. The industrial sites included blast furnaces, charcoal burning stances, gunpowder works, slate quarries, bridges, lighthouses, wells, distilleries, mills and illicit stills. In addition, there were descriptions of military roads, architectural fragments, carved stones and sundials, plus the burghs of Campbelltown and Oban and the town of Tobermory.

Because they were so numerous in the landscape, the deserted farms and townships were described only in general terms and were illustrated with a small number of examples. In the later Argyll volumes, the number of 'types' of sites increased to include kelp burning kilns, fish traps, harbours and piers. The final two volumes dealt with Mid-Argyll and the emphasis on the post-medieval period was greatly increased. This reflected the richness of Mid-Argyll (dominated as it is by Inveraray Castle, its estate and nearby town), but also a recognition that the later monuments were deserving of attention (RCAHMS 1992). However, by then the Inventory style was seen as 'impractical and out-moded' (Dalglish 2009, 234) and were replaced by a much more synthetic approach, as used in the first Perthshire volume (RCAHMS 1990).

The work of the RCAHMS did continue with the Argyll Castles volume which brought together all the documentary references and architectural details for each castle and a consideration of the later periods of their use (RCAHMS 1997). For example, Duntrune is an example of a castle that was built originally in the medieval period, and has been occupied, if not continuously, since then.



View of Duntrune Castle from the northeast ©HES

There is a detailed description of the tower-house built within the castle in about 1600 for a member of the Campbell clan including alterations that took place in the later-18th and mid-20th centuries (RCAHMS 1992, 276–82). The historical records described how the castle had been garrisoned against Alastair MacColla in the 17th century and was used again during the 9th Earl of Argyll's rebellion. In 1796 the estate was acquired by Neil Malcolm of Poltalloch and undertook repairs and building works (Poltalloch Papers, Lochgilphead Archives). Duntrune

remained the main house of the Malcolm's until the construction of Callton Mor (Poltalloch) in 1853, but when this large mansion house was abandoned in the 1950s, Duntrune was modernised and extended and remains in use as the Malcolm family home.

10.9 Industry

Concentrating specifically on Industrial archaeology, John Hume published his *Industrial Archaeology of Scotland* in 1977. In a similar manner to the Inventory he provided brief descriptions of many industrial sites in Argyll with grid references and photographs. Hume highlighted the 18th-century charcoal-iron industry in Argyll and the dominance there of distilling, mining and quarrying (Hume 1977, 146). He noted that the once flourishing herring industry had declined, although Oban, Campbelltown and Tarbet were still significant fishing ports. There are descriptions of a wide variety of structures including the Crinan canal, bridges, railway stations, ironworks, coach houses, mines, harbours, piers, lighthouses, bonded warehouses, water wheels, horse-gins, mills and quarries. At one time Argyll was at the forefront of industrial technology as the Kinlochleven Aluminium works, built in 1905–09, was powered by the largest hydro-electric power station of its day, but closed in 1996 (Hume 1977, 157). Hume often visited these sites shortly after they had become derelict and so photographed machinery still in place, often just before the buildings were demolished or renovated. In the late 20th century the archive of the Scottish Industrial Archaeology Survey (formerly in the University of Strathclyde) and the Scottish Office aerial photographic unit collections were both transferred to RCAHMS, thus bringing these resources under one roof.

Industries also include kelp burning, water power/wind, iron works (Bonawe, Glen Kinglass), distilling (eg Kinloch, Hunter Blair 2011, 576), quarrying, (slate on Easdale), marble on Iona), mining (Strontian and Lurga lead mines), gunpowder works (Melfort), boat building, textiles, spinning and weaving.

10.10 Archaeology

The 20th century saw a great increase in the level and range of work being undertaken in Argyll. However, archaeologists were still primarily concerned with the prehistoric and medieval periods. A field survey of archaeological monuments in Argyll by Marion Campbell of Kilberry and Mary Sandeman (Campbell and Sandeman 1961) described the many historic and prehistoric monuments, but there are also many additional comments on the later use of such sites. For example, there is a record that a cave at Tiretigan (CANMORE ID 70955) that had been used by outlawed MacGregors in the 17th century was 'recently' used by tramps and was known locally as the 'Frenchman's' or 'Smuggler's cave' which indicates a much more widespread use of caves in the modern period that might otherwise be acknowledged (ibid, 7). Campbell and Sandeman planned, but never published, a paper on the deserted settlements of the area, and so their archive (now held by Kilmartin House Museum) should contain much useful unpublished information on this topic.

Archaeological excavations on sites belonging to the early modern period were initially almost accidental, as the main aim of excavators was generally to reveal the earlier prehistoric deposits beneath. Exceptions to this include the excavations at Castle Sween (CANMORE ID 39028) (the earliest medieval castle in Argyll) where two phases of activity dating to the 16th to 20th centuries were recorded and it was noted that neither of these phases were reflected in the architectural fabric (Ewart and Triscott 1996). The presence of kilns, forges and associated buildings suggested that the site was used as a military depot rather than a lordly residence in the early 17th century (RCAHMS 1997, 90). The castle was abandoned in the mid-17th century after an attack by Alastair MacColla and it became overgrown, as discovered by MacGibbon

and Ross in the early 19th century. A final 19th- and 20th-century phase involved clearance and consolidation works by the Ministry of Works, some detail of which might appear in the Ministry of Works records.

Only small scale excavations have taken place inside the 16th/17th tower house of Carnasserie Castle (CANMORE ID 22835) to allow for drainage works. This revealed little of significance (Murray 1998) despite it being garrisoned against Alastair MacColla in 1644, garrisoned again in 1685, burned in 1690 and left in ruins (RCAHMS 1992, 214–26). The castles of Argyll are famous and yet few have been excavated because of their Scheduled status.

An excavation was carried out in the 1960s at Eilean Dearg (CANMORE ID 40448), Kyles of Bute (RCAHMS 1992, 282–83) and revealed that the use of island refuges continued (mistakenly because of the increasing use of artillery) beyond the medieval period. This island was used to store gunpowder by the 9th Earl of Argyll during his rebellion in the 17th century and as a base for his fleet. The excavations retrieved numerous finds of 17th century date, including musket flints and balls, slate gaming counters, navigational dividers and 14th–17th century pottery (Miller 1971). The remains provided evidence that the island had been blown up by government forces. Subsequently a timber dancing platform was erected on the island for the entertainment of Victorian steamship parties (Miller 1971, 578–9).

Archaeological excavations on industrial sites are also rare. Work was undertaken at the Bonawe furnace (CANMORE ID 23523) and at Glen Kinglass (CANMORE ID 23486) which revealed that both of these early modern enterprises were of varying success, which the excavator linked to climate change (Lewis 1984). Lewis suggested that the drought in the early 18th century was a possible contributing factor to the failure of some furnaces in Argyll.



General view of Lorn Furnace showing tapping arch and charging house ©HES

Research into charcoal burning platforms has been undertaken by Betty Rennie and others in order to show that 'the Lorn and Argyll furnaces were not responsible for denuding the Scottish hillsides of timber' in the mid-19th century (Lyndsay 1975; Rennie 1997). Rennie surveyed and mapped the sites and excavated about ten recessed platforms, some of which were shown to be originally prehistoric hut circles that had been reused as charcoal burning platforms. She included an assessment of charcoal burners practices and traditions and observed that the late-medieval technique of burning wood in pits was replaced by the above ground clamp kiln.

The Scottish Bloomeries Project involved an assessment of a late medieval bloomery and smithing hearth at Allt na Ceardaich (CANMORE ID 40845), Argyll. The study involved geophysics, topographic survey, excavation of the early ironworks and associated settlement and metallurgical analysis with the aim of characterising medieval and post-medieval bloomery technology in the Highlands (Atkinson 1996, Atkinson and Photos-Jones 1999).

Excavation of deserted rural settlements are also few in number despite these types of sites being numerous in the landscape. One example is an excavation on the island of Gunna (CANMORE ID 141630) (between Coll and Tiree) undertaken in 1998 (James 1998a and 1998b). The evidence suggests that the settlement dated from the late medieval to the 18th century when the island was under the control of the lairds of Coll and used for transhumance. The pottery assemblage included a particularly large collection of early modern hand-made pottery known as 'craggan ware' as well as glazed medieval pottery, mammal and fish bone. This site has unfortunately remained unpublished although the mammal bone is currently the subject of research at the University of Aberdeen.

As part of doctoral research into medieval settlement in Argyll two sites were excavated which turned out to date from the late-medieval and modern period, an 18th century lairds house at Glennan (CANMORE ID 152206) (James 2004b, 2005a, 2005b) and 17th-century farmstead at Bàrr Mór (CANMORE ID 273094) (James 2004a). At Glennan near Ford, Kilmartin, the excavation revealed buildings with substantial stone foundations occupied in the 19th century in the vicinity of an 18th-century laird's house. The place-name could be traced back to the medieval period but nothing of that date was found at this site.

The majority of recent archaeological work undertaken in Argyll has been prompted by commercial development responding to planning applications for windfarms, cemetery extensions and hydroelectric schemes (for example Ellis 2011a, Ellis 2011b, Lewis 2011) although not always uncovering any significant archaeology. Other professional surveys have responded to forestry schemes such as at Bridge of Orchy (Birch 2011a), the Isle of Ulva (Birch 2011b, Birch 2012), or other reasons eg Toward Lime kiln (Nisbet 2012) and Taynish Mill (Regan 2012). Excavations in 2015 at Tigh Mor, for the MacGregor Clan revealed a bloomery site which dates to the pre-1611 period (pers. comm. Peta Glew). Often post-medieval material is found while looking for archaeology of the earlier periods eg excavations at Ellan Vow (Baker 2012) and an aerial photographic survey of North Mull by the Morvern Maritime Centre (Martin 2012).

A reminder of the importance of shipping comes from the discovery of the wreck of the Swan (CANMORE ID 80637) and its excavation by Colin Martin. The ship had been sent by Oliver Cromwell in 1653 to attack Duart Castle (CANMORE ID 22662) on Mull, but had sank off Duart Point after a storm (Martin 2017).

10.11 Architectural Standing Building Survey

Standing Building surveys have increasingly become a part of the suite of work requested by planning authority prior to development. Such surveys include the Old Quay in Campbeltown

(CANMORE ID 38826) on behalf of West of Scotland Water in 1999 where a 6m stretch of the original curved quay shown on the 1835 harbour plan was noted and recorded with a written description, survey and video, backed up with documentary and cartographic research (Speller 1999; RCAHMS 1971). Many of the standing building surveys remain as grey literature, which can be hard to obtain, It is worth scrutinising PastMap [http://www.pastmap.org.uk], CANMORE [https://canmore.org.uk], the West of Scotland Archaeology Service Historic Environment Record [http://www.wosas.net] and the Archaeology Data Service [http://archaeologydataservice.ac.uk/archsearch] to find what work has taken place and whether the associated report is available online. Three examples undertaken by Heather James in Argyll include an 18th-century laird's house at Glennan (CANMORE ID 152206), an unfinished mansion house at Poltalloch and a farmstead at Ardnaw (James 2005a, 2005c, 2006). Although prolific, the Scottish Vernacular Building Working Group have published very few articles on structures in Argyll, which perhaps reflects a bias because most contributors live outside of the region. One article which related to Argyll was on 19th-century sheep folds (Kehane 1985) and another described a corrugated iron building and hooded fireplace on Mull (Callander 1995).

The significant architecture of Argyll has been published in the Buildings of Scotland series (Walker 2000) which includes religious, industrial, nautical and domestic sites (Walker 2000, 484-87). Several standing building surveys have been carried out on buildings of more local interest at the request of the planning authority prior to development or demolition (eg Bailie 2011 and Shaw 2012) or by the National Trust for Scotland (Lelong 2014; Morrison 2011), the Forestry Commission (James 2005c) and the Auchendrain Trust (Regan 2011a). Synthetic papers are rare (but see Parkinson 2004).

10.12 Historical Geography and Folk Life

Running parallel with the Royal Commission Inventories was scholarly research into Highland folk life, such as that carried out by Sandy Fenton (1976; reprinted 1999), Horace Fairhurst (1960, 1963), Isabel Grant (1961; reprinted 1995, 2007), Eric Cregeen (1959, 1963, 1964, 1970) and Donald Meek (1995). Much of this work is relevant to Argyll. Rural settlement studies in Argyll, in particular, were led by Sinclair (1953) and Gailey (1960; 1962a, 1962b) and Bil's work on shielings is also relevant (Bil 1990). The School of Scottish Studies has been particularly productive as its archives are now over 60 years old and contain the results of their collection and archiving of material relating to the cultural life, folklore and traditional arts of Scotland and in particular contains numerous oral histories collected on Tiree.

As the 20th century progressed, the work of historians and geographers has increasingly contributed to our understanding of the archaeology especially of capitalism, rural settlement and the Clearances in the early modern period. Notable sources include the work of Dodgshon (1980; 1988; 1993; 1998), Devine (1994; 1999) and Macinnes (1996; 1998). Particular themes in Scottish history have been the subject of research, such as Stevenson's book on Alasdair MacColla's invasion of Argyll in the 17th century (1980) and Phillipson and Mitchison's *Scotland in the Age of Improvement* (1970).

Clan histories have long been of interest and by the late 20th century some researchers were undertaking original research such as that on the family archives of the Mactavishes of Dunardry (Bradford 1991). Sources included old photographs and letters which revealed their colonial links to Jamaica and with emigrants to Canada and to the USA. There have been several books published on the history of Argyll from the clans' point of view, including *A History of Clan Campbell*, *Volume 3, From the Restoration to the Present Day* (Campbell 2004). Other books on the history of Argyll include *Argyll 1730–1850* by Robert McGeachy (2005); Marion Pallister's *Lost Argyll* (2005) and *Argyll*



Aerial view of Campbeltown Harbour ©HES

Land of Blood and Beauty by Mary McGrigor with photographs by Gordon Ross Thomson (2000). Also published is *Argyll and Bute: The Buildings of Scotland* by Frank Arneil Walker (Buildings of Scotland Trust 2000). *The Argyll Book* (Ormand 2004) utilises a themed approach by a range of authors and includes a chapter on rural settlement (from an archaeological viewpoint by the late Alex Morrison who had done so much work at Auchindrain Township (CANMORE ID 23412) (see Auchindrain: Case Study). There are also chapters on industries, modern Argyll, oral traditions and folklore, Gaelic language and Literature, place-names of Argyll, and communications. *Lost Argyll: Argyll's Lost Heritage* is a review of many different types of sites including the gunpowder mills, and is a reminder that much of Argyll's architectural heritage from the 19th century has already been destroyed (Pallister 2005).

Recent local histories such as *Islay, Jura and Colonsay : A Historical Guide* by David Caldwell (2001) provide an excellent overview of the islands including a list of post-medieval sites on the islands (including fortifications, dwelling houses and shielings), early modern sites (farmsteads, estate houses, working farms, villages, industrial sites) and modern and miscellaneous sites. Another excellent interdisciplinary work is *The Secret Island: Towards a History of Tiree* by the Islands Book Trust (2014). While these two books are not advertised as archaeology books as such, they reference the physical remains and are essential reading for any archaeology project in these areas.

Local amateur archaeologist Allan Begg researched and published his work on the deserted settlements of two parishes; Kilmartin (in 1999) and Glassary (in 2002). His books are a delightful 'journal of personal observation' which contained photographs, rentals, stories and living memories of the occupants of the deserted settlements in these two parishes. These works are particularly useful for researchers as they provide a level of local knowledge, although they lack grid references

for the sites discussed. Local museums, often run by local charities, societies and volunteers, are important repositories of artefacts, photographs and oral histories relevant to the early modern period eg Auchindrain Township, Inveraray Jail, An Iodhlann (Tiree) or provide an online archive of material for example, Arrochar, Tarbet and Ardlui Heritage Group.

10.13 Contemporary Research

Doctoral research on early modern and modern Argyll has been limited. The most significant study was that produced by Chris Dalglish. His PhD was published as *Rural Society in the Age of Reason* (2003) and used the Southern Scottish highlands (Kilfinnan and Kintyre) as the research area. He dealt with the emergence of modern society and rural settlement with considerations of capitalism and land rights, using an interdisciplinary approach drawing on theoretical models from archaeology and incorporated historical geography, ethnology, folk life studies and history. Chris developed the landscape approach further in a paper published in 2009 titled *Understanding Landscape: Inter-disciplinary Dialogue and the Post-medieval Countryside*. His case study in that piece is the Campbells of Glenorchy, (neighbouring Argyll). He considers what evolutionary landscape history (the RCAHMS approach), environmental history, and the experiential approach can contribute.

Extremely useful historical research has also been undertaken by DJ Johnston-Smith in his University of Glasgow MA in 2002. Entitled *'Barbarous, and yet mixed with some shew of civilitie': The Clan MacFarlane of North Loch Lomondside c 1570–1800*, this research brought the MacFarlane archives held in the Glasgow Procurators Library to light and has provided an excellent history of the MacFarlanes and the activities of the laird and antiquarian, Walter Macfarlane, in the 18th century. More general history books which are relevant to Argyll in the early-modern period include *Clearance and Improvement: Land Power and people in Scotland 1700–1900* (Devine 2006).

It is also worth mentioning the research of Jo McKenzie at the University of Stirling and her study *Deep anthropogenic topsoils in Scotland: a geoarchaeological and historical investigation into distribution, character, and conservation under modern land cover* (2006) which includes an example from Tiree.

The RCAHMS continue their work with the Historic Landscape Characterisation Project which is a management tool providing a historic dimension to landscape character assessment and a more specialised review of railway signal boxes in Scotland a few examples of which are located in Argyll (Historic Scotland 2012).

Research into the medieval rural settlement of Argyll also explored the post-medieval or early-modern landscape in the hope that this would help to explain why the medieval sites were so hard to identify (James 2009). Two chapters, 'Power, politics and rebellion the Campbell Earls of Argyll in the 16th and 17th centuries' and 'Economy and society in the 18th and 19th centuries' followed a multi-disciplinary approach utilising historic maps, aerial photographs, documentary evidence, place-names analysis and consideration of climate change. A multi-scalar approach was also utilised, ranging from an extensive landscape of North Knapdale to individual 'sites'.

Research has also been carried out by the University of Reading over three seasons on Islay, at Airigh Ghuaidhre (CANMORE ID 82928; Mariečević, Mithen and Wicks 2011 & 2012). This work included a survey, geophysics and very limited excavation around a 19th-century township and a chapel enclosure, although the main focus for the research was a possible Neolithic burial mound. A collaborative project between Kilmartin Museum, Ulster University, Queen's University Belfast, and the National Trust of Scotland with the Colonsay and Oransay Heritage Trust explored a series of post-medieval sites on Colonsay, including a late medieval,

early post-medieval settlement at Ardskenish (Horning & Forsythe 2013) and a 19th-century cottage at Port Mor (Horning and Breen 2013).

From further afield, the German Archaeological Institute, Department Rome, has undertaken research on prehistoric copper mining in Kilmartin, which also revealed more recent activity, such as clay mining in Kilmartin (Steiniger 2011a; Steiniger 2011b). Other research excavations have included Dun Mhuirich (Regan 2013) and a drovers' inn at Tigh Caol, Strathlachan (Bailie 2014). A recent excavation of a charcoal builders' platform at Lochan Taynish was sponsored by Scottish Natural Heritage who wanted to reconstruct a charcoal burning hearth so that it could be viewed by the public as part of a local heritage trail. The platform was found to be probably of late 18th or early 19th century date (Sneddon 2003).

The Association of Certificated Field Archaeologists (ACFA) have produced prolific surveys, many of which have taken place in Argyll, eg the Royal Society for the Preservation of Birds reserve on Coll (Henry 1998). ACFA members are holders of the University of Glasgow Certificate in Field Archaeology and they undertake field survey and record cultural heritage of all periods. On Coll they visited the known archaeological remains as included in the 1980 Inventory and identified additional remains. Four new sites were included in the report and the author concluded that the RCAHMS inventory had not paid much attention to the post-medieval vernacular structures.

The Scotland's Rural Past (SRP) Project (RCAHMS) encouraged a large number of surveys of deserted settlements to be carried out by non-professional archaeologists. This



Aerial view showing the remains of Airigh Ghuaidhre township ©HES

work includes very detailed surveys which add to the body of knowledge (eg Dorren and Henry DES 2012a, 2012b; Mull Historical Interest Group (eg Clare 2011). Two SRP inspired projects, the High Morlaggan Project (Regan 2010, Regan 2011b) and The Hidden Heritage Landscape Project (James 2014) went further, undertaking excavation in order to put the observed remains into their wider archaeological and historical perspective. These showed that there was huge local interest in the remains of the recent past and that little previous professional research had been done in this area. As a result of this project George Haggarty suggested that research into the introduction of industrial pottery wares into the west of Scotland was a vital area for research.

National and local Interest groups, such as the Scottish Industrial Heritage Society, aimed to bring together people interested in discovering and understanding Scotland's past. The SIHS in particular, raised awareness of industrial heritage and provided a focus for those with an interest across a very wide spectrum. It is not clear from their web site how active they still are.

No study of Argyll can go without a mention of *The Kist*, the publication of the Natural History and Antiquarian Society of Mid-Argyll which has been going for many years. This publication contains numerous notes and articles about Argyll from the prehistoric to the modern period. There is an article on Marion Campbell and Mary Sandeman's Mid-Argyll survey by Grahame Ritchie which provides some background to the survey and the contribution of Eric Cregeen, Resident Tutor in Adult Education in Argyll and then tutor for the Glagow Extra-Mural Department (Ritchie 2005). The mid Argyll group planned to record the deserted settlements of Argyll with sound recordings. This was never published but there may be notes within the Marion Campbell archives held in Kilmartin Museum. Industrial sites such as Taynish Mill (built 1724) were recorded and published in *The Kist* by members of the society (Clark 2002). In the same edition there is an article on 'North Knapdale Woods in the 18th century' which has used the Inverneill Estate papers and the Poltalloch estate papers (Rymer 2002).

The web also provides access to many other sources eg the 2012 annual Angus 'Ease' MacLeod lecture held in 2012 on the Isle of Lewis by Professor Donald E Meek. His title is 'Charging at an Open Door? An Alternative View of Crofting History and Highland Development since 1930 from the Gaelic writings of the Rev. T M Murchison (1907–1984)' and begins in Gaelic (see the YouTube video). The web also provides a different format for presenting and disseminating research. Cross-disciplinary work is being done by the National Trust for Scotland for example their Changing Landscapes project on Iona. The 2015 Changing Landscapes project was on the theme of 'Working the Land and Sea' and involved the ranger service, staff and pupils from Oban High's School of Traditional Music and music tutors.

10.14 Main themes for the Modern period 1600 – 2016

The present Argyll landscape has been influenced by rapid technological, economic and social changes over the past four centuries which have interacted in various and complex ways. Alongside these changes there is also evidence of continuity where some aspects of life remained relatively unchanged. The following suggested themes are all interlinked and it is not suggested here that change has been linear or steady. Five main themes have been suggested here with some potential sub-themes which could be developed further.

1. Society

- Identity
- Clans
- Gaelic Renaissance
- Reformation and church
- Recreation

2. Material culture and buildings

- Folk life and beliefs (how reflected in objects and structures)
- Museum and private collections of objects
- Archaeological excavations
- Architecture

3. Land and economy

- Capitalism and enlightenment
- Agricultural improvements
- Transhumance
- Landownership and clearances
- Industrialisation and de-industrialisation
- Gardens and designed landscapes
- Forestry and fishing

4. Institutions

- Church and education
- Government and the law
- Military

5. Argyll, Scotland and Empire

- Battlefields and wartime
- Communications
- Trade

10.14.1 Society

There have been some profound changes in society since 1600. From a predominantly rural population where multiple families lived in joint tenancy farms practicing subsistence farming there are now single owner farms and state-owned forests with the majority of the population living in small towns and villages occupied in tourism, forestry and farming. And yet there is continuity in land ownership; for example, the largest landowners in the present day are descendants of the aristocratic and tacksman class of the past centuries.

What we consider to be the traditional nuclear family is a relatively new phenomena. An important question to ask is how was 'family' understood in the 17th and 18th century? How did this relate to the operation of joint tenancy farms and the clan system? Related to these questions is the recognition that gender roles, and particularly the experiences of women, are underplayed in the historical records- making archaeological sources crucial to developing a better understanding.

Does Argyll have its own identity? From its origin in the kingdom of Dal Riata with its links with Ireland to the Lordship of the Isles, to the formation of the modern region, Argyll has had several incarnations with differing boundaries and ethnic makeup. In the 17th century the clan system was still strong although already being affected capitalism and agricultural improvements. In Argyll the Campbell clan were dominant since the medieval period and their chief was the Earls and then Dukes of Argyll who were the main providers of security and justice. The Campbells were Protestant and were on the side of the Crown during the Jacobite Rebellion. These religious and political loyalties were shared by their many septs and lesser clans that sought the protection of the powerful Campbells. The history of Argyll is dominated by stories of clan conflict as the Campbells spread their landownership beyond their traditional clan lands.

As Protestants, the Campbells took a different stance during political uprisings from Catholic Highlanders and the island clans. In the 17th century the effect of the invasion by Cromwell's and later MacColla's troops are little dealt with in the histories, as it is the successful rise of the Campbells after the Restoration that has provided the main narrative. The burning of 18 Argyll parishes by the forces of MacCollas army in 1644/5 (see MacColla in 1644/5: case Study) (Stevenson 1980) will have had a profound effect on society and settlement and will certainly have influenced the nature of rural settlement and its survival. The inclusion of Kintyre into Campbell ownership affected the make-up of the tenantry as the Campbells only let lands to their own

supporters rather than to the traditional clan members.

10.14.2 Material culture and buildings

Material culture of this period consists of almost anything from basic agricultural tools and implements, early farm machinery, wood working tools, furniture, textiles, clothes, to household items such as glass bottles, industrially produced ceramics, bone spoons and clay pipes. The vast increase in the amount of material culture available between the 17th century to the 19th is shown by the contrast between the seven individual items found on the site of Barr Mor (CANMORE ID 273094) (14th–17th century) and the seven boxes of items from Glennan (19th century) (CANMORE ID 152206). Material culture belonging to the Modern period is just as likely to be found in antique shops as museums and, therefore, their loss to Scotland is threatened as items are bought up and exported. This comes back to identity as it is members of the diaspora who are the buyers of these items wishing to connect with their past. Dunollie Castle has a significant collection of textiles and clothing relating to the MacDougal clan chiefs. Other private attics could also could contain items relevant to this period which if left unprotected could suffer damage or loss. Compounding the issue is the sheer volume of material culture produced and consumed in this period.

By the 17th century the display of social status through architecture had resulted in the construction of many stone castles by clan chiefs and continued with tower houses, less defensive country seats and lesser lairds' dwellings, for which Argyll is famous. The castles are dominated by the Campbell seat at Inveraray (CANMORE ID 23349) but other examples would warrant much more study. The lesser houses in particular, belonging to the bonnet lairds, can be found re-used as barns and outhouses, their architectural value unrealised, or converted and original features lost.



View of Inveraray Castle ©HES

10.14.3 Land and Economy

The first signs of commercialisation and capitalism in Argyll were seen prior to 1600 and were developed initially through droving and fishing by the Campbells and their followers. This has been dealt with in some way in the history of the Campbells (Campbell 2004) but less so for other parts of Argyll. Drove roads have been dealt with in general terms (Haldane 1997) and in recent research undertaken by Donald Adamson at the University of Glasgow (Adamson and Bailie 2015a and 2015b). The agricultural Improvements were initially attempts to increase the financial contribution of estates through drainage, enclosure, crop rotation and stock breeding. This saw improvements in the construction of houses, stone field walls, and an increase in the amount of cultivated land. As population numbers peaked, landowners preferred to turn joint tenancy farms into sheep runs and either allowed leases to lapse or enforced clearance.

One notorious example can be found in the 1848 forced eviction of the Poltalloch Estate occupants of Arichonan, on the slopes of Gleann a' Ghaolbhan near Tayvallich. The violence of the encounter prompted much contemporary publicity and resulted in the incarceration of several protesting tenants (see NR79SE23; McFarlane 2004). The site of the former township itself was surveyed by RCAHMS in 1985 and incorporates a range of structures relevant to the history of rural life and the impacts of capitalist-driven improvement, including substantial standing remains of ten buildings, accompanied by sheep fanks and a series of stone-walled enclosures and laneways. A slab lined bridge and a rock-built spring well survive in good condition. Additionally, there are traces of earlier buildings, possibly of 17th-century date, which appear to have been partially robbed for the renovation and rebuilding of later structures. The most substantial remains on the site are of a later 19th-century cottage interpreted as the home of a shepherd. This is an aspirational piece of Improvement architecture incorporating schist window sills, door jambs, and fireplaces. Arichonan is notable for the survival of elements of vernacular architectural tradition, particularly evidence for the use of raised crucks (RCAHMS 1992).

The story of individual settlements vary greatly and examples of sudden eviction are perhaps less than is thought, but given the narrative of clearance, eviction and emigration (within Scotland and with the rest of the world) this could be looked at in more detail. It has been suggested in Kilmartin parish that most people leaving the land did not go far and thus led to the expansion of small towns and villages.

The nature of agriculture was traditionally self-sufficient and a mix of stock rearing and crop cultivation. This depended on the practice of transhumance where animals were taken to summer grazing in the hills, away from the growing crops. Shielings are the temporary shelters used by people in the summer while away from the main farm. The landscape is littered with evidence for this practice in the form of shielings, enclosures, areas of cultivation and tracks into the hills. Perhaps because of their ubiquity and paucity of material culture, the shieling sites have not been very popular subjects of study. While people have been encouraged in some areas to record shielings and deserted settlements through the Scotland's Rural Past Project, there has been little overall synthesis or analysis of the results. The General Enclosure Act of 1801 allowed landlords to join the land of the small tenant farmers to make larger cattle or sheep farms which often meant evicting the small-scale tenant farmers. Joint tenancy farming, although sustainable if grazing levels were controlled, was seen as inefficient and old fashioned. In the absence of a political revolution as experienced in France, the alternatives to clearing people off the land were not explored at the time, but there is the opportunity now to consider the agricultural sustainability of these sites.

Such an effort is that being made by Kimberley Noble (AHRC-funded Collaborative Doctoral

Award with UHI (Archaeology Institute at Orkney College) and RCAHMS. Her PhD is looking at aspects of the sustainability of pre-Improvement townships in the Highlands. There are three research questions which focus on aspects of the sustainability of the pre-Improvement townships; how the Improvements altered aspects of rural settlement dynamics; and an evaluation of the effectiveness of non-intrusive methods in understanding aspects of settlement. There are two main methodological approaches: one will be to consider sustainability through an examination of aspects of township ecology with a particular focus on the archaeological evidence but utilising documentary sources as well. The second approach is to gain an in-depth understanding of the wider landscape in which the case-study sites are situated. She hopes to do this using GIS to create maps with multiple layers of evidence and to discuss township siting and distribution patterns in relation to a variety of 'natural' and 'social' factors including topography, geology, route-ways, administrative and service-centres etc

It is perhaps surprising how many old industrial sites are to be found in the landscape. These are the results of capitalist investments or landowner speculation (see Bonawe: Case Study). The fact that these areas are now de-industrialised is as interesting as the process of industrialisation. Such 'failure' could be the result of running out of raw materials, changes elsewhere making the industry uneconomic (see Pollphail Village: Case Study), climate change or bad management. But they are tangible evidence of the non-successful evolutionary lines, study of which might still have benefits. Not all industrial sites have become neglected. The Crinan canal, for instance, still provides yachts with a very welcome shortcut, and the whisky Industry is still thriving. The construction of the West Highland Railway was a massive earth moving project that disrupted roads, farms and crossed property boundaries and is still carrying trains to and from the cities to the west coast. The forestry 'Industry' has thrived since the Second World War bringing some land into state ownership, but evidence suggests the woods have been managed for far longer. More detailed woodland studies are required to understand the extent and nature of the local practices.

The Gardens and Designed Landscape Inventory (Historic Environment Scotland) includes many of the major examples in Argyll including the extensive designed landscape at Inveraray (see Inveraray – The Birth and Development of a Planned Town in Argyll: Case Study), and the smaller Ardchatten Priory Gardens. The only modern Argyll example of a lost garden in Scotland's Lost Gardens is that of Carnasserie Castle in Argyll (Brown 2012, 340). However, there are many smaller or less significant examples in the landscape as shown by the recent discovery of a designed landscape at Inverioch or New Tarbet in Arrochar, despite it being clearly depicted on Roy's Military Map (James 2014). The Glorious Gardens Project, which is being piloted in Falkirk and the Clyde and Avon Valley, is an example where local volunteers undertake site visits and recording of gardens and this could be extended to all areas of Scotland.

10.14.4 Institutions

The military is an example of continuity although in very different forms. From the Gallowglass (or Gall Gaeil) mercenaries of the medieval period to armed forces of modern day, Argyll has played a significant role in British military history and politics. During the unrest of the 17th century the local chiefs needed to keep the peace by maintaining their own armed forces.

At the University of Glasgow, Jenny Novotny is currently researching the general Jacobite-era and the material culture from several key collections (National Museums Scotland, Inverness Museum and Art Gallery, etc). Her overarching research theme is the material culture of modern conflict, specifically the ways in which artefacts help us to negotiate uncomfortable topics like war and violence.

10.14.5 Argyll, Scotland and Empire

Improved communication has been one of the boons of the modern period connecting people and places, raw materials and industry. As such, communications and transport networks possess a material legacy. Central to understanding the Gaelic cattle economy is an understanding of how animals were moved to and from pasture and to markets. Donald Adamson recently completed his PhD on droving using Argyll and Bute as a case study (University of Glasgow), highlighting the survival of these features and their potential for addressing wider research questions (Adamson 2014).

Road-building projects were initiated to facilitate troops along the Military Way after the Jacobite Rebellion, followed by improvements made to Toll Roads including the very recent improvements by Pulpit rock on Loch Lomond. Roads brought change and new faces, but also exposure which led initially to some resistance and violence. Just as roads began to connect people and markets, so too did canals. Canal building started at the end of the 18th century with the Crinan canal (Rennie 1792) and the West Highland Railway. Similarly, improvements to harbours assisted the fishing industry and contributed to the development of planned towns. Later there were airfields and airports established especially during the Second World War.

10.15 Research Recommendations

- Data collection has been and continues to be carried out on a few very particular aspects of recent heritage in Argyll, such as deserted settlements and railway signal boxes, but there have been few attempts to fill the gaps since the RCAHMS Argyll volumes. There is a need to identify new areas of research and attract funding.
- There has been no synthesis to put the above data collection work into context (for example, see Rathlin Island by Forsythe and McConkey 2012). A synthesis of this work needs to be put in place for Argyll.
- Interrogation of survey field notes for descriptions of Modern Period features and sites (for example Campbell and Sandeman's field survey notes)
- The extent of private archives is not well known so there is the potential for material to be currently unavailable to researchers. The value of archives could be better advertised and attract more attention and funding.
- The condition of private archives is also unknown. Private archives could contain items important and relevant to this period, which if left unprotected could suffer damage or loss.
- Encourage more collaborative and interdisciplinary research, for example, climate change involves geology, geomorphology, archaeology, history and archaeobotany.
- Attract funding by showing the relevance of research to modern society (for example, sustainable food production, traditional technology, history and politics, cultural connections with Ireland).
- Adopt more of a landscape approach to survey work
- Promote the application of modern digital techniques, for example GIS and LIDAR, to landscape studies.
- How was material culture used to display clan membership and loyalties?
- How was 'family' understood in the 17th and 18th century and how did this relate to the operation of joint tenancy farms and the clan system?
- How were women recognised during this period and what were their experiences?
- What factors led to the de-Industrialisation of Argyll.
- Explore the introduction of Industrial pottery to the west of Scotland.
- Pull together what we know of the marine and maritime evidence we have for this period and identify gaps for further research.

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A

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